

# **Morphological and Syntactic Ergativity in Polynesian**

**Molly Rolf**

**MA by Research**

**University of York**

**Language and Linguistic Science**

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## **Abstract**

Alignment in the Polynesian language family varies widely despite the many shared phonological, morphological and lexical features. It is therefore contentious whether ergativity or accusativity should be reconstructed, and what the reconstruction of Proto-Polynesian should look like. Syntactic ergativity and its synchronic and diachronic relationship with morphological ergativity in the PN languages is not widely understood or discussed in the literature. This paper selects three languages (Māori, Samoan and Tongan), one from each of the three subgroups of Polynesian. Their case marking and pronominal systems are examined and compared synchronically, and accounts of various reconstructions are reviewed. Predictions of the future of the morphological alignment of these languages are made. Two proposals of syntactic ergativity are also reviewed, before four syntactic processes in the three languages are studied for the presence or absence of syntactic ergativity. Based on the findings, the author agrees with an accusative reconstruction of Proto-Polynesian and details a predicted drift towards ergativity within Polynesian, with syntactic ergativity possibly following suit.

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## Abbreviations

1, 2, 3	First, second, third person
4	4 fourth person (Inuit anaphoric form)
A	article
ABS	absolutive
ACC	accusative
AGT	agent
ART	article
CAUS	causative
-Cia	-Cia
COMP	complementiser
DEF	definite
DET	determiner
DIR	directional particle
DU	dual
EMP	emphatic
ERG	ergative
FARGOAL	far goal
FUT	future
GEN	genitive
IMPV	imperative
INA	<i>-ina</i>
INCP	inceptive
IND	indicative
INDF	indefinite
INS	instrumental
INTR	intransitive
KO	<i>ko</i>
LOC	locative
NEG	negative
NMLZ	nominalisation
NOM	nominative
NONTIME	non-time
NONPST	non-past
NONPERS	non-personal
OBJ	object marker
PART	participle
PASS	passive
PERS	personal
PL	plural
+PRPR	proper

PRED	predicate
PREP	preposition
PRF	perfect
PRO	pronominal article
PROG	progressive
Prog	progressive auxiliary
PRON	pronominal copy
PROP	proper article
PRS	present
PST	past
REL	relative
RP	resumptive pronoun
SBJ	subjunctive
SF	support form
SG	singular
STAT	stative
SUFF	derivational suffix
T	tense marker
T/A	tense/aspect marker
TERM	terminalis case
TOP	topic
TR	transitive
UNS	unspecified tense-aspect-mood



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## **Declaration**

*I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.*

## Introduction

The Polynesian languages are a subgroup of closely related languages spoken on the central Pacific Ocean islands making up Polynesia. The subgroup, despite sharing many phonological, morphological and lexical features, includes examples of both the accusative and the ergative type of case assignment via marking on the full noun phrase (NP), and also exhibits alignment in its pronominal systems. The current morphological alignments of the Polynesian languages are not particularly contentious in the literature, however the alignments of the shared ancestor Proto-Polynesian (PPN) and older ancestors in both the full NPs and pronouns are. That is, it is controversial in the historical PN literature whether accusativity or ergativity should be reconstructed, and therefore how the current situation arose. Such questions have been discussed over the decades, with linguists generally either claiming that the PN languages with accusatively aligned NPs underwent the change from ergatively-aligned NPs, or that the PN languages exhibiting ergatively aligned NPs group changed from accusativity.

The arguments for each shall be explored below in section 4, following an examination of three aspects of alignment in the PN languages. Three languages, one from each of the three subgroups of Polynesian, are focussed on. Section 1 explores the forms, distribution, function and reconstruction of the NP case markers. Section 2 likewise analyses the nature of the verbal '-Cia' suffix. Section 3 shifts the focus onto the second morphological mode of expressing alignment; the PN pronominal systems, considering their forms, functions and relationship with NPs concerning alignment. Each chapter moreover aims to compare the situation of the features between the three languages/subgroups and deliberate over how these situations might develop in the future.

The data concerning syntactic ergativity and the PN languages is limited compared to the discussion on morphological ergativity, and the phenomenon of syntactic ergativity is the subsequent topic of Sections 5 and 6, the former introducing it and the latter delving into four (or three) syntactic processes with regard to syntactic ergativity within the PN languages. These are WH-questions, relativisation, raising and binding. Having examined and explored both morphological and syntactic features of alignment within three chosen PN languages, the research questions below can be more readily answered:

How do the morphological and syntactic alignments of the subfamilies of Polynesian compare synchronically?

What do these findings suggest about the diachrony of ergativity and the relationship between morphological and syntactic ergativity?

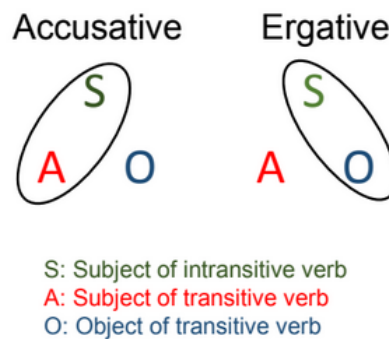
## **Polynesian subgrouping**

The PN languages are grouped consistently into three groups by many of the linguists using Pawley's (1966) subgrouping – the Tongic group, consisting of just Tongan and Niuean, the Samoic-Outlier group (including Samoan, Pukapukan, Kapingamarangi and more) and the East Polynesian group (including Tahitian, Hawaiian, Māori and more). The Central Eastern Polynesian group includes all the East Polynesian languages except Easter Island, by Clark's (1975) grouping. These groupings appear to be geographically and linguistically natural; in terms of case-marking, the East Polynesian (EP) group is overwhelmingly accusative and the other two ergative or partially ergative. I will be using these subgroupings in the following discussion of morphological and syntactic ergativity.

## 1. Case markers

In this chapter, the forms and functions of case markers shall be explored with regard to morphological ergativity within Māori, Samoan and Tongan. The forms and case marking patterns in which the case markers occur are introduced in section 1.1. Section 1.2 describes the distribution of the case markers and what function they appear to serve within clauses with regard to the morphological alignment of the three languages. Section 1.3 addresses the reconstruction of the markers with an aim to explain their various functions and predictions for the future of the case markers. I will be using the notations S, A and O (as in figure 1) in this discussion of alignment.

Figure 1- The accusative and ergative alignments



As figure 1 suggests, when a language morphologically or syntactically treats its intransitive and transitive subjects alike, it has accusative alignment. When the intransitive subject and the object are treated alike, there is ergative alignment. In terms of morphological ergativity, accusative alignment often involves the nominative and accusative cases, and the ergative alignment usually involves the absolutive and ergative cases; each alignment is named here after the case of the argument treated differently from the other two.

### 1.1 Forms of the case markers

The case markers in the Polynesian language family mark case on full NPs in the PN languages, which have three types of clauses: intransitive, canonical transitive and middle. The definitions of these are as follows:

Intransitive clause- a clause lacking a syntactic object

Canonically transitive clause- a clause in which the syntactic object is semantically directly affected (e.g. physically)

Middle clause- a clause in which the object is semantically indirectly affected (e.g. emotionally)

Middle clauses are defined by Otsuka (2006) as being semantically transitive (they have semantic objects) but syntactically intransitive (they lack syntactic objects). This implies that middle clause constructions contain only marking of the intransitive subject, however this is arguably not the case, as this chapter discussing case markers will show.

Two of the case markers occur in the three main case-marking patterns of the PN family, as does the -Cia suffix. The third case marker appears only in Tongan. These case-marking patterns are given below:

The three case-marking patterns labelled as in Clark (1976):

<b>Pattern I:</b>	<b>V</b>	<b>S</b>	<b>i/ki</b>	<b>O</b>
<b>Pattern II:</b>	<b>V-Cia</b>	<b>e S</b>		<b>O</b>
<b>Pattern III:</b>	<b>V</b>	<b>e S</b>		<b>O</b>

Pattern I can be described as accusative, as the object argument (the O argument) is specially marked accusatively by the *i* or *ki* particle case markers, and the intransitive and transitive subjects (the S and A arguments) are marked nominatively via zero-marking. Unsurprisingly, this pattern can be found in the accusative PN languages, such as Māori.

1i) Hura rawa ake te wahine rā i tana umu  
 Uncover Emp up the woman that ACC her oven  
 'The woman uncovered her oven.' Māori (Orbell, 1968 in Chung, 1978)

Pattern II in accusative languages is called the passive, in which the direct object is promoted to the subject and the subject turned into an oblique NP marked by particle *e*. The verb also gains a suffix, which is some version of the -Cia suffix (see chapter 2). The passive pattern can also be seen in Māori:

1ii) Ka tuku-a e Paowa te waka  
 UNS leave-PASS AGT Paowa the canoe  
 'Paowa left the canoe.' Māori (Orbell, 1968 in Chung, 1978)

Here, the direct object NP *te waka* ('the canoe') has been promoted to subject, and so is not marked by any case marker, and the subject *Paowa* is marked as an oblique with the particle *e*, glossed sometimes as the 'agentive marker'. As Chung points out, the translation of many clauses exhibiting Pattern II in Māori do not translate to the passive in English – in other words, it is the common pattern used for semantically transitive clauses (as opposed to Pattern I).

Pattern II can also be found in the ergative PN languages:

**1iii)** Sā 'āmata-ina e lātou le pese  
 PST begin -TR ERG they the song  
 'They began the song.'

Samoan, Chung (1978)

The transitive clause in (1iii) does not have a passive reading, and case marker *e* is now glossed as an ergative marker of the surface subject *lātou* ('they'). The alternative readings of Pattern II clauses are due to the various glossings of *e* (as agentive or ergative) and *-Cia* (as a passive or transitive suffix), and will be discussed in 1.2.

Pattern III, the 'ergative' pattern, is found in the ergative PN languages, appearing morphologically identical to Pattern II minus the *-Cia* suffix:

**1iv)** E iloa 'uma e ia tali  
 UNS know all ERG he answer  
 'He knows all the answers.'

Samoan, Chung (1978)

Just like in Pattern II in the ergative languages, *e* is glossed here as an ergative marker and marks the A argument (the surface transitive subject) of the clause, *ia* ('he'). The S and O arguments are treated alike in these languages; either they are unmarked by case markers (as the O argument in (1iv) *tali*) or are marked with 'a, as in Tongan. The A argument is specially treated, and an ergative alignment occurs.

The third case marker 'a occurs in Tongan's Patterns II and III as well as intransitive clauses, marking the absolutive case (the transitive object and intransitive subject arguments), exemplified in (1v) and (vi) respectively. The absolutive case is sometimes called the nominative case.

**1v)** Na'e taa'i 'e Mele 'a Sione.  
 PST hit ERG Mary ABS John  
 'Mary hit John.'

Tongan (Chung, 1978)

**1vi)** 'Oku lolotonga puna ('a) e vakapuna  
 PROG Prog fly ABS the airplane  
 'An airplane is flying.'

Tongan (Chung, 1978)

(1i-vi) exhibit the three case markers used in the PN family to mark case on full NPs. The distribution and function however of these case markers (*i/ki*, *e* and *a*) differ within Māori, Samoan and Tongan, mostly reflecting the languages' respective alignments. Their functions especially are in some cases even controversial.

## 1.2 Distribution and function of *i/ki, e and 'a*

(1i) above exemplifies *i* as a case marker of the accusative case in the accusatively-aligned Māori, marking NP *tana umu*. Indeed, *i* or *ki* is found in pattern I in the accusative languages. More specifically, Chung (1978) details that *i* marks accusative case of the O argument in canonical transitive clauses in Māori, and *i* or *ki* can mark accusative case of the same argument in middle clauses. While both dyadic predicates, canonical transitive verbs directly affect the object of the clause, and middle verbs do not, as mentioned previously. She argues that the choice between *i* and *ki* in middle clauses therefore depends upon the degree to which the O NP is affected by the verb among other factors, and identifies the markers as either accusative or obliques. In (1vii) below, *ki* marks the O NP *te pepehā tika* of middle verb *hiahia* ('want') but is glossed as preposition 'to'.

**1vii)** Ka hiahia au **ki** te pepehā tika  
 UNS want I to the proverb right  
 'I want the right proverb.' Māori (Mark, 1970 in Chung, 1978)

Hohepa (1967) details the contexts in which *i* and *ki* occur in Māori, a lot of which are prepositional. He claims that *i* can be translated as 'along', 'to', 'from', 'at', 'on', 'in', and *ki* as 'to', 'onto', 'into', 'at', 'upon' among others. Interestingly, he also claims that there can be ambiguity concerning *ki* as to whether it is instrumental or locative:

**1viii)** ka patu-a te tanata **ki** te raakau  
 INCP.NONTIME hit-PASS the.SG.NONPERS man (ki) the.SG.NONPERS tree  
 'The man was hit with the tree (or stick) OR  
 'The man was hit at the tree.' OR  
 'The man was hit towards the tree.' Māori (Hohepa, 1967)

Harawira (1997) lists similar prepositional meanings of *i* in Māori such as 'by, with', 'by reason of', 'at the time of', 'from', 'in possession of', 'in company with', 'at, in, on' and 'in comparison of':

**1ix)** Kua pau nga kai **i** a Rupe – 'the food has been consumed **by** Rupe'  
**1x)** Kahore ia e haere **i** te wehi – 'he will not go **for reason of** his fear'  
 Māori (Harawira, 1997)

The *i* marker seems to play less of a role in Samoan and Tongan, only appearing to mark the O argument in middle clauses, not canonical transitive clauses. These two languages therefore only exhibit Pattern I for middle clauses. There is also a choice between form variants in Samoan of *i* and *'i*, determined according to Chung by animacy of the O argument and newness of discourse. The examples below from Collins (2013) demonstrate the oblique preposition use of *i*, which marks the locative and instrumental case in (1xi) and (1xii)



respectively. This would indicate that *i* can either mark accusative case on the O argument or oblique cases in other NPs (unlike in Māori, in which *i/ki* appears to be able to mark the O NP but act as a preposition). The *i* marker in (1xi) and (1xii) does not mark the O NP:

**1xi)** 'Ua tiga manava i [le 'ai na'o pota]  
 PRF hurt stomachs LOC the eat only starch  
 'Their stomachs hurt because of eating only starch.'

Samoan (Tapasā, in Collins 2013)

**1xii)** le fafaga o le pepe i le fagu susu  
 The feed GEN the baby INS the bottle milk  
 'The feeding of the baby with the milk bottle'

Samoan (Mosel and Hovdhaugen, 1992 in Collins, 2013)

Although confusing Samoan for a morphologically accusative language, Neffgen (1918) agrees with the examples above that Samoan's *i* has a variety of prepositional functions including 'to', 'towards', 'on' and 'up'.

Lynch (1972) briefly mentions the various functions of particle *i* within ergatively aligned Tongan. It has been labelled an object marker previously, but can function as a location marker (1xiii) or a 'cause-marker' (1xiv). Lynch also describes *i* as able to mark a near goal and *ki* a far goal (1xv):

**1xiii)** 'Oku ou lolotonga nofo/i he fale  
 PRS 1SG now live LOC the house  
 'I now live in the house.'

Tongan (Lynch, 1972)

**1xiv)** Na'e ma-hua 'a e vai/ 'i a Sione  
 PST STAT-spill NOM the water CAUS PERS John  
 'The water was spilled because of John.'

Tongan (Lynch, 1972)

**1xv)** 'E faka-lavea 'a e hele/ ki a Sione  
 FUT CAUS-hurt NOM the knife FARGOAL PERS John  
 'The knife is dangerous to John.'

Lit: 'The knife will cause John to be hurt.'

Tongan (Lynch, 1972)

Churchward (1953) similarly labels *i/ki* in Tongan as 'locative' and as describing direction.

It seems that the particle *i* has many different functions, which can be summarised into two: an accusative marker of the O argument, or an oblique preposition. Māori exhibits *i/ki* as an accusative O marker in both canonical transitive and middle clauses and as a preposition, and Samoan and Tongan utilise the marker as an accusative O marker in middle clauses only, and as a preposition generally. Whether these two functions actually entail two distinct



marking is optional for the S argument in Tongan (1vi) and obligatory for the O argument (1v). Whether an NP or pronominal is marked with ‘a depends on the type of noun or pronominal and whether or not there is also a demonstrative or possessive pronoun (Chung, 1978). The subject NP *Sione* in the middle clause in (1xvii) is also marked absolutely. None of the middle clause arguments in Chung’s examples however are marked with the ‘a, and instead are unmarked – subject argument *ia* (‘he’) in (1xviii) below has no preceding particle. This indicates that the marking of the subject in middle clauses is also optional.

**1xvii)** Na’e tokoni ‘a Sione ki he faiako  
 PST help ABS Sione to DEF teacher  
 ‘Sione helped the teacher.’  
 Lit. ‘Sione helped to the teacher.’ Tongan (Otsuka, 2006)

**1xviii)** ‘Oku manako ia ‘i he ta’ahiné<sup>1</sup>  
 Prog like he at the girl.DEF  
 ‘He likes the girl.’ Tongan (Chung, 1978)

Tongan therefore makes use of ‘a to mark the absolutive case in intransitives (1xix) and II (1xx) as Lynch further exemplifies:

**1xix)** Na’e langa ‘a e tangata  
 PST build NOM the man  
 ‘The man was building.’ Tongan (Lynch, 1972)

**1xx)** Na’e langa-‘i ‘a e fale  
 PST build-PASS NOM the house  
 ‘The house was built.’ Tongan (Lynch, 1972)

The ‘a marker marks absolutive case (glossed nominatively) on the sole argument of the intransitive sentence in (1xix), the S NP *e tangata* (‘the man’), and on the surface S NP (the underlying object) of the passive sentence in (1xx) *e fale* (‘the house’). As mentioned above, Churchward (1953) notes that *e* marks the transitive subject in Tongan and that ‘a can mark the intransitive subject, but does not call the cases these mark ‘ergative’ and ‘absolutive’. He also notes that ‘a can mark the object, especially with common definite articles, and sometimes with demonstrative and cardinal pronouns. The ‘a marker does not feature in either Māori or Samoan.

Table 1 below summarises the use of distribution and function of *i*, *e* and ‘a in Māori, Samoan and Tongan:

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<sup>1</sup> The acute accent here in Tongan is the definitive accent.

Table 1 – The distribution and function of the case markers in Māori, Samoan and Tongan

	<b>Māori</b>	<b>Samoan</b>	<b>Tongan</b>
<i>i</i>	Canonical and middle O, prepositional	Middle O (or 'i), prepositional	Middle O, prepositional
<i>ki</i>	Middle O, prepositional	Middle O, prepositional	Middle O, prepositional
<i>e</i>	agentive	A, agentive	A, agentive
'a	-	-	S/O

### 1.3 Origins and reconstructions of *i*, *e* and 'a

Possible reconstructions and origins of the three case markers can be used as evidence to determine whether the three languages' shared ancestor, Proto-Polynesian (and even more previous ancestors), featured an accusative or ergative case-marking alignment. Whether the prepositional and the case-marking functions of *i* and *e* are indeed functions of the same marker or of two separate ones, for instance, can also be examined in this way.

Chung (1978) offers a reconstruction of Proto-Polynesian's case-marking system, including reconstructions of Patterns I, II and III and the case markers. She reconstructs an accusative system for PPN:

<b>V</b>	<b>S</b>		Intransitives
<b>V</b>	<b>A</b>	<i>i</i> <b>O</b>	Transitives
<b>V</b>	<b>A</b>	<i>i/ki</i> <b>O</b>	Middle
<b>V-Cia</b>	<b>e Agent</b>	<b>Patient</b>	Passive

As can be seen, this reconstruction of PPN shares its case marking system with Māori, making use of *i/ki* to mark O arguments, and *e* as an agentive marker. PPN is therefore postulated to use Patterns I and II. Consequently, the use of *i/ki* only as markers of the O argument in middle clauses and use of *e* as an ergative marker in the currently ergatively aligned PN languages are seen as innovations by Chung.

*i*

Chung argues that the particle *i* marked all direct objects of transitive clauses in PPN, and not just middle clauses as she notes for the ergative PN languages today. The particle is coincidentally homophonous with the often locative preposition *i*. This is to say that the two functions noted above for the *i* particle belong to two separate, homophonous markers.

Chung uses evidence from ergative PN language Rennellese to distinguish the two. Rennellese has two clefting strategies, called 'chopping' (affecting S and O arguments) and 'copying' (affecting all NPs with oblique case marking). The existence of clauses with chopped *i*-marked O arguments indicates that the case marker *i* and the oblique preposition *i* are separate, otherwise the copying strategy would have taken effect. Furthermore, in Tokelauan, *i* only marks the S or O argument when that argument is pronominal and separated from the verb by another NP. This indicates that when the O argument is separated from the verb by the A argument (and is pronominal), it is marked by *i*. In other words, in canonical transitive clauses. Chung finds this restriction strange enough to be the mark of a relic in Tokelauan, and argues that *i* was a direct object marker.

Ball (2007) also gives a reconstruction of Pattern I and *i/ki* in Proto-Polynesian. He suggests that the marker derives from a locative marker, as most if not all current PN languages have a locative reading in *i*. It is postulated that the marker *i* began marking solely atypical patients such as proper names or places, before generalising to mark other types of direct objects. Rennellese appears to be in the former stage of differential object marking, as seen in (1xx) below:

**1xx)** Ma te sa'u e 'Iti'iti i-a Ekeitehua  
And DET bring ERG (name) ACC-PERS (name)  
'And 'Iti'iti picked up Ekeitahua.' Rennellese (Chung, 1978)

Rennellese exclusively marks proper noun and pronoun direct objects with *i*; the proper noun *Ekeitehua* in (1xx) is marked with *i*. Other types of NP are unmarked. Whilst this might be taken as evidence that Rennellese will mark all direct objects with *i* in the future (and adopt an accusative marking system), Ball argues instead that this is an example of a language that did not generalise to marking every direct object with *i*.

The locative marker > direct object direction of change has also developed in other language families such as the Romance family, as Ball points out.

## e

Chung reconstructs the *e* case marker as an oblique marker, which is unsurprising given her reconstruction of the PPN system. She uses evidence for this from nominalisations and possessor marking in Māori and Samoan. The possessor marking rule marks an NP associated with the nominalised verb with possessive particles *a* or *o*, which are the same particles used to mark possessors of lexical nouns.

**1xxi)** le omai o misionare  
The come.PL of missionary  
'The coming of missionaries'

**1xxii)** le sau a le ta'avale a leoleo  
The come of the car of police  
'The coming of the police car.'

Samoan (Chung, 1978)

The nominalisations in (1xxi) and (1xxii) have undergone the possessor marking rule, where *o* marks NP *misionare* in (1xxi), and *a* marks NP *le ta'avale* in (1xxii). Chung continues: 'the possessor preposing rule optionally moves possessors to the immediate right of the specificity article and incorporates them with it to form possessive pronouns'. In (1xxiii) below, the possessor *na* 'her' has been moved and incorporated with the *o* and the specificity article *t-*:

**1xxiii)** t- o- na puta-nga mai ki waho  
The-of-her come-NMLZ here to outside  
'Her coming outside.'

Māori (Chung, 1978)

Almost as an opposite to the possessor preposing rule, in Māori the subject can undergo agent postposing, which turns it into an oblique, marks it with *e* and optionally moves it to the right. If this has happened, possessor marking (of *a* or *o*) can't occur.

**1xxiv)** te epa-nga i te kupenga e te tangata  
The throw-NMLZ ACC the net AGT the man  
'The throwing the net by the man.'

Māori (Chung, 1978)

In (1xxiv), the possessor of the nominalisation *te tangata* is marked with *e*, glossed agentive, and has been moved to the right. A similar situation arises in Samoan. It appears that the possessor marking rule can apply to S/A or O, and not to NPs marked with *e*. Chung suggests this is because *e* was an oblique preposition historically.

Chung claims 'a derives from the pronominal-proper article in Proto-Polynesian.

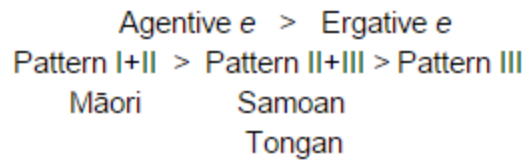
From Table 1 in section 1.2, it can be gleaned that Māori exhibits accusative morphological alignment through its use of the *i/ki* marker; this marker is used to mark the accusative case on the O argument in both canonical transitive and middle clauses, leaving the S and A arguments unmarked for case. Although frequently labelled a morphologically ergative language in the literature, Samoan also utilises *i/ki* as a case marker on the O arguments of its middle clauses. One could state on this basis that Samoan's middle clauses express accusative alignment, as the O argument is case marked and the S and A are not. Samoan's canonical transitive clauses are clearly ergative. Tongan likewise utilises *i/ki* in middle clauses as a case marker, leaving the A argument unmarked and the S argument either unmarked or marked by 'a. Again, one can argue that Tongan's canonical transitive clauses exhibit ergative alignment (like in Samoan) but its middle clauses express accusative alignment. The

various postulated origins and reconstructions account for the various case marking and oblique prepositional functions of *i/ki* and *e*. Chung and Ball both recognise the two functions of *i/ki*, with the former suggesting that the two belong to separate markers, and the latter suggesting that the direct object marker is derived from the locative marker. The link between oblique preposition and case marker I think is also clear in Chung's reconstruction of *e*. Such a link highlights the fact that on the surface, there is no difference between some passive and transitive Pattern II clauses, and that the choice of labelling them as one or the other can be quite arbitrary. There does not appear to be much discussion on the origins of Tongan's 'a in the literature, which perhaps reflects the marker's clear reconstruction and the fact that the marker does not play a part in the question of shifting alignment in the PN languages. This shift is examined in more detail in sections 2.3 and chapter 4, though some predictions regarding the future of the case markers in Māori, Samoan and Tongan can be made based on the information in this chapter.

Māori's case marking system includes the use of *e* as an agentive marker in Pattern II, whilst the systems in Samoan and Tongan both use *e* as an agentive marker and ergative marker in Patterns II and III. The shift in meaning from preposition 'by' to the marking of a subject seems simple, logical as well as likely in my opinion. The pathway of preposition > case marker is common cross-linguistically. This would imply that Māori's agentive *e* has yet to make the shift to subject marker (or ergative marker) and that Samoan and Tongan are in the middle of this shift (as they use *e* in both ways). In this way, I predict Māori to adopt the use of *e* as an ergative marker (and therefore the use of Pattern III) in its canonical transitive clauses in the way that Samoan and Tongan have. This would give Māori a system like that of Samoan and Tongan; a system lacking Pattern I for canonical transitives. Case marker *i/ki* would also then only appear in prepositional functions in canonical transitive clauses. Samoan and Tongan, in this vein of thinking, would drop all instances of agentive *e* (Pattern II) in the canonical transitive clauses and only exhibit ergative *e* (Pattern III).

The systems of the middle clauses in the PN languages seem more conservative within this prediction; i.e. middle clauses still exhibit Pattern I in Samoan and Tongan, whereas the canonical transitive clauses exhibit Patterns II and III. I therefore expect middle clauses within each language to shift after the canonical transitive clauses; to always be a stage behind. For Māori's middle clauses, this means the same adoption of the ergative *e* and Pattern III as gone through by its canonical transitives in this prediction. Formerly object-marking particle *i/ki* at this stage would be completely lost. Samoan and Tongan's middle clauses will likewise adopt ergative *e* and Pattern III and lose Pattern I. As both canonical transitive and middle clauses in Samoan and Tongan shift towards exclusively using Pattern III, the -Cia suffix is also lost, following reanalysis as a transitive marker. The postulated shift of *e* is illustrated in figure 2 below, picturing the current positions of the languages' canonical transitive clauses:

Figure 2- The postulated shift of e.



This prediction clearly builds on Chung's reconstruction of PPN as an accusative language with a case marking system like Māori's. Further predictions made in 2.3 concerning the -Cia suffix adds to the ones here and reflect upon the accusative-to-ergative or ergative-to-accusative debate discussed in chapter 4. Quite clearly, the predictions of the future of the case markers agree with the idea of innovation of ergativity in the PN languages.



## 2. The -Cia suffix

In this chapter, the distribution, forms, function and origins of the so-called -Cia suffix shall be explored and discussed in the same way as in chapter 1. Section 2.1 lists the various forms the suffix takes and section 2.2 examines the distribution and function of the suffix in the three languages. Section 2.3 analyses postulated reconstructions of the suffix and makes predictions regarding the form, distribution and function of the suffix. These predictions lead on from those made in section 1.3 and introduce the discussion of whether ergativity is innovative in PN (chapter 4).

The verbal suffix -Cia is generally seen as a hallmark of transitivity, or underlying transitivity, as it is referred to as a transitive marker and a passive marker in various languages and glosses.

### 2.1 Forms of the -Cia suffix

The -Cia suffix is so-called because it consists of one of many optional consonants, an optional *-i* and *-a*. There are therefore many variations of this used in Māori, Samoan and Tongan.

Maunsell (1862) lists the following as variations of -Cia appearing in Māori: *-ia*, *-kia*, *-hia*, *-tia*, *-gia*, *-na*, *-mia*, *-kina*, *-hina*, *-ma*, *-a*, *-ria*, *-ngia* and *-atia*. The latter two suffixes appear to break the form rule of -(C)(i)a, and Maunsell notes that different forms of -Cia can appear on the same verb depending on the area. To Maunsell's list, Harawira (1997) adds the suffixes *-whia*, *-na*, *-ina* and *-whina*. Harlow (1996) states that there are seventeen allomorphs of -Cia in Māori, with three being default allomorphs: *-tia*, *-ngia*, and *-hia*. An illustration of the high number of suffix forms in Māori is given in Aitchison (2001). As she explains, the active forms of verbs used to have final consonants, e.g. *maur* ('to carry') and *hopuk* ('to catch') which were preserved before the suffix *-ia* when lost in the active form. Speakers therefore reanalysed these consonants as part of the suffix and not the stem (*maur-ia* became *mau-ria* 'to be carried'). Now speakers must simply learn which form of the suffix a particular verb takes, although *-tia* seems to be becoming the general suffix used on borrowed verbs or just when in doubt. Harawira also adds that euphony and phonological rules play a role in determining choice of suffix form.

For the suffix -Cia in Samoan, Marsack (1962) in a 'teach yourself' book details *-ina* as the most common variant to appear, though like Māori, Samoan also has multiple variants. These include: *-a*, *-gia*, *-mia*, *-tia*, *-ia*, *-na*, *-lia*, *-sia* and *-fia* (the latter two seemingly not arising in Māori). The author emphasises that there seems to be no rule for which verb employs which suffix; at least no rule that would concern and be useful to a learner of Samoan.

Tongan again has multiple variants of the -Cia suffix: *-a*, *-fia*, *-hia*, *-ngia*, *-‘ia*, *-ina*, *-kina*, *-mia* and *-sia* are given by Churchward. Morton (1962) also has a list of example ‘transitivising suffixes’: *-i*, *-fi*, *-si*, *-ni*, *-hi*, *-mi*, *-ki*, *ŋi*, *-‘i*, claiming that every consonant except for *t* and *p* can occur with *-i* to form this suffix. He contemplates the reason behind the different consonants and the semantic differences minimal pairs of them create, and calls the consonants derivational suffixes and the *-i* a transitivising suffix. There are many mentions of these transitivising suffixes by Morton, though he briefly mentions the affixes *-ia*, *-fia*, *-mia*, *-sia*, *-‘ia*, *-hia*, *-kia* and *-ŋia*, describing these as transitive affixes also. He says that they ‘evidence the terminative aspect (i.e., emphasise action upon a goal rather than action by an actor)’. What this means for the function of the -Cia suffix for Tongan and whether the transitivising suffix is separate will be discussed in section 2.2.

## 2.2 Distribution and function of the -Cia suffix in the PN family

The case-marking patterns exemplified in 1.1 showcase a lot of the distribution of the -Cia suffix. It occurs with Pattern II, as seen in (1ii) and (1iii) repeated below, as well as with ‘intransitive’ passives (passives lacking an agent). The suffix is attached to verbs *tuku* (‘leave’) and *‘amata* (‘begin’), surfaces as *-a* and *-ina* respectively and co-occurs with marker *e* in both examples. In (1ii), it is glossed as a passive marker, and the clause is read actively, whereas in (1iii) the suffix is glossed as a transitive marker and the reading is active.

**1ii)** Ka *tuku-a* e Paowa te waka  
 UNS leave-PASS AGT Paowa the canoe  
 ‘Paowa left the canoe.’ Māori (Orbell, 1968 in Chung, 1978)

**1iii)** Sa ‘*amata-ina* e latou le pese  
 PST begin-TR ERG they the song  
 ‘They began the song.’ Samoan (Chung, 1978)

In (2i) and (2ii), the suffix (arising as *-ina* and *-gia*) is glossed as a passive marker and both readings are passive:

**2i)** Na‘e ‘*ofe-ina* ‘e ø Sione ‘a ø Mele  
 PST love-PASS AGT person John NOM person Mary  
 ‘Mary is loved by John.’ Tongan (Hohepa, 1969)

**2ii)** E *alofa-gia* le *fafine* e le *tamaaloa*  
 PST love-PASS the.SG woman AGT the.SG man  
 ‘The woman is loved by the man.’ Samoan (Hohepa, 1969)

-Cia therefore does not occur as part of Pattern I (with case marker *i/ki*) or Pattern III, the latter of which is characterised in form solely by the lack of the suffix. It is evident that the

suffix can be found in Māori, Samoan and Tongan as part of Pattern II, but there is no one to one mapping between the gloss of the -Cia suffix, its function and the voice of the clause.

Chung calls -Cia in Māori a passive marker, noting also that Pattern II in Māori is more frequent than the active and on the rise, occurring in clauses which would not translate to passive sentences in English. (1ii) above exemplifies -Cia glossed as passive but giving an active reading. Maunsell (1862), Harawira (1997) and Hohepa (1965) label and describe the environment of the marker similarly, for instance in imperative clauses. The distribution of the passive within Māori is postulated by Chung to roughly correlate with how affected the object of a clause is, as outlined below:

Reflexive and cognate objects – not at all  
 Direct objects of middle verbs (2iii) – affected indirectly if at all  
 Direct objects of imperatives (2iv) – affected in part  
 Direct objects of canonical transitive verbs– completely affected (Chung, 1978)

This may also influence how likely it is that a linguist treats a Pattern II clause as passive or transitive.

**2iii)** Ka rango-**na** e ia te haruru o ngā mano rā  
 UNS hear-PASS AGT him the sound of the.PL men that  
 'He heard the sound of all the men.' Māori (Chung, 1978)

**2iv)** Tua-**ina** te rākau  
 Fell-PASS the tree  
 'Fell the tree!' Māori (Orbell, 1968 in Chung, 1978)

According to Chung, the more affected an object is, the more likely that the passive -Cia will apply. Harlow (1996) adds that the -Cia suffix is not normally used if the tense/aspect particle is *me*, nor with the particular verbs *waiho* ('leave'), *hōmai* ('give (to me)') and *hoatu* ('give away'). It can even be used on nouns resulting in the meaning 'become [noun]' (2v) and on names and whole phrases (2vi):

**2v)** I kōhatu-**ngia** a Pānia  
 T/A stone-PASS person Pānia  
 'Pania turned into stone.' Māori (Harlow, 1996)

**2vi)** Mā te matapihi-**tia** mai  
 PREP DET window-PASS dir  
 'Pass (it, the corpse) in through the window.' Māori (Harlow, 1996)

The suffixes in (2v) and (2vi) are glossed as passive suffixes but the clauses are translated actively; perhaps this is due to the unusual use of the suffix on nouns. Harlow also postulates

that the -Cia suffix in Māori is more likely to occur in narrative texts, and when the S/A and O arguments are both definite, accessible and known.

When discussing Samoan, Chung states that the -Cia suffix is labelled as a transitive marker because it only appears in canonical transitive clauses (eg; (1iii)) and optionally attaches to such canonical transitive verbs. Clark (1975) points out that middle verb *alofa* ('love') can appear with the suffix, however. Although labelled a passive suffix by some, Chung argues that in Samoan, like in Māori, the suffix denotes that the A argument has been extracted via a syntactic rule. Removal or movement of transitive subjects via clitic placement, relativisation or clefting can trigger the -Cia suffix on the verb, as can generic subjects. Examples (2vii-2ix) below exemplify these various movements. Marsack (1962) adds also that the passive is often used when the active would be used in English, as with Māori.

**2vii)** O ni is inuu e vaafaatau uma alii e fai-a le taua  
 PRED some.PL other village UNS messenger all chief [UNS do-TR the war]  
 'In other villages all the chiefs who made war were messengers (to the spirits).  
 Samoan (Stuebel 1896, in Chung 1978)

**2viii)** 'O le 'afā sā fa'aleaga-ina fale  
 PRED the storm PST destroy-TR house  
 'It was the storm that destroyed the house.'  
 Samoan (Stuebel, 1896 in Chung, 1978)

**2ix)** Sā 'ou asiasi 'i-āte 'i lātou 'a'o fa'amanatu-ina le aso tū to'atasi  
 PST I visit to-PRO PL them when celebrate-TR the day stand alone  
 'I visited them while Independence Day was being celebrated.'  
 Samoan (Stuebel, 1896 in Chung, 1978)

The -Cia suffix surfaces as *-a* and *-ina* in (2vii) and (2viii) respectively, marking the relativisation of the A argument *uma alii* and the clefting of A argument *le 'afā*. The transitive subject in (2ix), whoever was celebrating Independence Day, is generic and not overt. In each case, the transitive subject has either been moved or deleted; Chung thinks the suffix -Cia marks the presence of these subjects in Samoan. The embedded clause *'a'o fa'amanatu-ina le aso tū to'atasi* is translated passively, suggesting that the -Cia in Samoan too marks the passive relation; however as (2vii) and (2viii) indicate, -Cia appears in active clauses too. Chung rejects the notion that -Cia marks the perfective aspect with several examples of -Cia in imperfective clauses, including negative imperatives and negative generic statements:

**2x)** 'Aua lē lafo -(ina) 'i ai se tusi  
 IMPV not send-TR to PRO a letter  
 'Don't send them a letter!' Samoan (Chung, 1978)

**2xi)** E lē loka-\*(ina) e leoleo tagata gaoi  
 UNS not lock-TR ERG police person steal  
 ‘Policemen do not arrest burglars.’ Samoan (Chung, 1978)

(2x) and (2xi) are both ungrammatical without the -Cia suffix, suggesting that -Cia is not a perfective marker, nor that it *only* appears with deleted or moved A arguments; *e leoleo* in (2xi) is overt and not moved via any syntactic rule. Chung therefore calls -Cia in Samoan a transitive suffix, noting that it may also secondarily mark unrealised clauses.

Chung also discusses a ‘transitivising suffix’ in Samoan, -Cia, with regards to middle clauses, indicating that there are two separate -Cia suffixes (with different functions). She argues that some middle clauses can undergo transitivity via this transitivity suffix and become syntactically transitive clauses:

**2xii)** ‘Ua ‘alo-fia a’u e tagata  
 PRF dodge-SUFF me ERG person  
 ‘People ignored me.’ Samoan (Milner, 1966 in Chung, 1978)

The middle verb ‘*alo*’ (‘dodge’) in (2xii) is suffixed with the transitivity suffix -Cia according to Chung, and therefore has become a transitive clause of Pattern II. The semantics of the transitivity suffix are exemplified below:

**2xiii)** ‘E te lavā-tia le ‘āvega lea?  
 You UNS able-SUFF the load that  
 ‘Can you manage this load?’ Samoan (Milner, 1966, in Chung, 1978)

**2xiv)** ‘Ua alofa-gia ‘i-tātou e le nu’u  
 PRF love-SUFF PL-us ERG the village  
 ‘We are well-treated by the village.’ Samoan (Milner, 1966, in Chung, 1978)

**2xv)** ‘Ua mana’o-mia ‘oe (e le fale-fa’amasino)  
 PRF want-SUFF you ERG the house-investigate  
 ‘You are wanted (by the court).’ Samoan (Chung, 1978)

The -Cia suffix in (2xiii) is said to highlight the completion of the event, -*gia* in (2xiv) the duration of the action and -*mia* in (2xv) the lack of agency in the action. Interestingly, *e* in (2xiv) and (2xv) is glossed as an ergative marker, but both clauses are translated passively. This again highlights the negligible difference between transitive and passive treatment of pattern II.

Whether the two functions (transitive marker and transitivity suffix) of -Cia can be said to belong to the same sole -Cia suffix is explored by Chung via reconstruction (see section 2.3)

The distribution and function of -Cia within Samoan and Māori therefore vary vastly for Chung.

Hohepa (1969) conversely labels the Samoan -Cia as a passive marker, not a transitive marker. He agrees with Chung however that it does not mark the perfective aspect, as Milner (1962, in Hohepa, 1969) believed. Hohepa gives examples of transitive clauses lacking the -Cia marker in order to give evidence that the suffix cannot be called a transitive marker (though as mentioned, Chung notes that the suffix optionally attaches to canonical transitive verbs):

**2xvi)** 'Ua va'ai le teine 'i le pua'a  
 PRF see the.SG girl ACC the.SG pig  
 'The girl saw the pig.' Samoan (Hohepa, 1969)

**2xvii)** E mana'o le tamaaloa 'i ni 'upega  
 NONPST want the.SG man ACC INDF.ART.PL net  
 'The man wants some nets.' Samoan (Hohepa, 1969)

Both sentences in (2xvi) and (2xvii) leave their A arguments *le teine* and *le tamaaloa* unmarked and mark their O arguments *'i le pua'a* and *'i ni 'upega* with the accusative case marker *'i*. The verbs *va'ai* ('see') and *mana'o* ('want') are middle verbs with Samoan's most common middle verb case marking system (Pattern I). As stated above, Chung labels Samoan -Cia a transitive marker because it appears most often in *canonical* transitive clauses, and not middle ones. It is clear that canonical transitive and middle verbs have to be treated separately in terms of both case markers and the -Cia suffix. Hohepa however does ultimately agree with Chung that the -Cia marker is undergoing deletion in Samoan, citing sentences whose meaning does not alter because of the -Cia marker. This deletion results in an increase of ergative structures— he merely labels the -Cia marker differently.

The semantics of the -Cia verbs in Tongan according to Chung can be summarised as encapsulating completion, duration and lack of agency. Syntactically, the majority of -Cia verbs are intransitive (and the stems transitive) leaving the S of the clause as the semantic patient. As Churchward (1953) notes, Tongan often uses a passive (intransitive) verb where English would not, as in (2xxi) below. It can also occur in canonical transitive sentences, as (2xix) and (2xx) show. The suffix often functions very similarly to the passive function, and is labelled the passive suffix, even when the translation is active. Clauses with -Cia in Tongan can translate to the passive however, and Tongan can furthermore express the passive without the use of the suffix (Churchward, 1953). The examples below exemplify the varying semantics and syntax of -Cia verbs in Tongan:

**2xviii)** Na'a ne kapa -sia au mei hoku ngaahi filí  
 PST he protect-SUFF me from my PL enemy.DEF  
 'He protected me (successfully) from my enemies.' Tongan (Chung, 1978)

- 2xix)** 'Oku tostitosi-a 'a e mounú 'e he iká  
 PROG peck-SUFF ABS the bait.DEF ERG the fish.DEF  
 'The fish kept nibbling at the bait.' Tongan (Churchward, 1959 in Chung, 1978)
- 2xx)** Na'e fangu -na au 'e he nanamu 'o e kakalá  
 PST awaken-SUFF me ERG the smell of the flower.DEF  
 'I was awakened by the smell of the flower.'  
 Tongan (Churchward, 1959 in Chung, 1978)
- 2xxi)** Na'a ku afuhi-a 'i he 'uhá  
 PST I spray-SUFF CAUS the rain.DEF  
 'I was sprinkled by the rain.' Tongan (Churchward, 1959 in Chung, 1978)

The derivative -Cia verb in (2xxi), *kapa-sia* indicates the completion of the action— that the male in question successfully completed the action of protecting the speaker. *Tositosi-a* in (2xix) denotes the durative sense of the action, and *fangu-na* in (2xx) indicates the lack of agency.

The -Cia marker is present alongside ergative marker 'e in transitive clause (2xix) and passive clause (2xx), where the latter marks the A arguments *he iká* and *he nanamu 'o e kakalá*. (2xx) is translated passively, and (2xix) actively. (2xxi) consists of the suffix in a passive clause with an adjunct introduced by oblique causative marker, 'i. The suffix attaches to syntactically transitive verb<sup>2</sup> stem *ahui* ('to spray (something)') to produce passive verb *ahui-a*, indicating that *ku* ('I') is the S argument of a passive verb, not the surface subject (A argument) of a transitive verb and the semantic patient. The clauses in (2xx) and (2xxi) therefore are translated identically in English, yet one is passive and the other transitive in Tongan. The preposition 'by' is used in translating both 'i, glossed a causative marker, and 'e, glossed as an ergative marker. Chung describes -Cia as able to attach to transitive verb stems and derive verbs of varying transitivity, as these two examples highlight. The passive in Tongan can equate to a transitive active sentence, as we have seen in (2xix) and with the blurring of the functions of e and the identical morphological treatment of S/O in ergative languages. The question concerning the -Cia suffix is why it derives intransitive verbs from some transitive verbs, and transitive verbs from other transitive verbs. In 2.3, Chung's reconstruction of Tongan's -Cia suffix is examined.

Hohepa believes the -Cia suffix to be on its way out in Tongan, and that it will be reinterpreted in the future as an 'abstract marker' as opposed to a passive marker. This is roughly equivalent to how Chung describes Samoan's transitive marker. In clauses with the abstract marker -Cia, there is an active reading. As with Māori and Samoan, Tongan also has

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<sup>2</sup> I use 'transitive verb' throughout the thesis in the syntactic sense, to mean a verb that appears with a syntactic direct object.

the tendency to use the passive where in English an active verb would be used (Churchward, 1953). In this sense, one could gloss the suffix as passive and read the clause actively – Hohepa simply labels the suffix as an abstract marker in these cases. In (2xxii) for example (which is not glossed directly by Hohepa) Hohepa labels the -Cia suffixes as abstract markers and indicates that the readings are active: ‘He stared at the woman.’, ‘He watched the woman closely.’ and ‘He saw the woman in a pensive kind of way.’ for *-i*, *-fi* and *-fia* respectively. Context would appear to play a great role in deciding whether to treat/translate a clause passively or transitively.

**2xxii)** Na’a ne                      sio-‘i/fi/fia ‘a e fefine                      Tongan (Hohepa, 1969)

As Hohepa believes the -Cia suffix is now short-lived, he offers a theory of extinction via deletion for the suffix. -Cia is said to be undergoing deletion of the *a* from the right, resulting in the -Ci suffix (*-fi*, *-mi*, *-gi* etc), and also ‘collapse of consonantal conjugations on the left’, obviously resulting in the loss of the consonant. These processes would make *-fia* the oldest suffix, followed by *fi* and then *i* in the examples in (2xxii). A zero marker ultimately replaces -Cia, giving Pattern III (the ergative, active Pattern). It is interesting to note the slight postulated differences in meaning between the three forms of the suffix (though all are active). As mentioned above, Morton (1962) mentions ‘transitivising suffixes’ with the -(C)i form as well as suffixes of the normal -(C)ia form. He clearly describes the latter as transitive (as for him, *-i* is the transitive morpheme) but hints that they denote the passive as well; ‘emphasise action upon a goal rather than action by an actor’. More explicitly, he labels suffix *-a* as ‘transitive passive verbal suffix’. Morton indeed gives some examples of verbs with what would appear to be the -Cia suffix with active or passive readings:

**2xxiii)** *fola* – to spread or be spread  
*kona* – to be poison or poisonous  
*konehia* – to be poisoned or drunken  
*tarji* – to cry  
*terjihia* – to cry over, to mourn                      Tongan (Morton, 1962)

In Morton’s discussion of the morphology in Tongan then, he breaks down -Cia into a derivational suffix (the consonant), a transitivising suffix (*-i*) and a transitive passive suffix (*-a*). The result of all three morphemes would fit with the function(s) described so far for the -Cia suffix in Tongan (and the other languages) in that -Cia clauses can be translated actively or passively. The breakdown of the suffix into the three morphemes and the description of the transitivising suffixes (see section 2.1) seem more unlikely. These transitivising suffixes do not appear to occur on middle verbs as Chung’s postulated transitivising suffixes do in Samoan; Morton (1962) gives the example verbs *alafi* (‘to reach out for and seize’) and *alasi* (‘to handle’), both from root *ala* (‘to touch’). The root already is a transitive verb without the ‘transitive forming’ suffix *-i*, and affects the object physically (and is therefore a canonical transitive verb). This *-i* suffix is not the same suffix as the one Chung postulates, nor does it have the same -Cia suffix form anyway. Just like in (2xxii), Morton here and in (2xxiii) is



describing slight differences in the semantics of the same verb with differing -Cia suffixes. It seems likely that the differing -Cia suffixes in (2xxii) is a reflection of the erosion of the suffix that Hohepa details, and that the 'transitivising suffixes' are simply the -Cia transitive/passive suffix having undergone deletion from the right. Clark (1976) however also distinguishes a transitivising suffix of the -*Ci* form in Tongan, giving examples such as *polosi-i* ('to brush') and *saifoni-ki* ('to siphon') plus an unproductive suffix of the form -*a*, though he argues that all three suffixes are distinct and the latter is a durational suffix, as opposed to a transitive passive suffix. The question of whether this transitivising suffix and the durational suffix is related to the -Cia marker is discussed in 2.3.

Lynch (1972) gives further examples of the passive reading in Tongan as in (2i), and agrees with Hohepa that the language is losing the -Cia suffix:

**2xxiv)** Na'e kai-'i        'a    e    ika  
                  PST eat-PASS NOM the fish  
                  'The fish was eaten.' Tongan (Lynch 1972)

The -Cia suffix surfaces as *'i* in (2xxiv) on the verb *kai* ('eat') and is glossed and read as passive. Like Hohepa, Lynch claims a zero marker is in the process of replacing -Cia in Tongan, meaning that Tongan currently exhibits both passive and ergative structures (Pattern II and III).

The goal of labelling the -Cia suffix universally across the Polynesian languages (and labelling whole Pattern II clauses) is clearly challenging if one is to capture the function of the suffix. Indeed I think the bid to do so is fruitless, as the function of the suffix is better captured as a continuum or scale. In Māori, the suffix seems to be getting more and more common, arguably weakening its original passive meaning. This is resulting in many active readings of clauses with the -Cia suffix. In Samoan and Tongan, it appears this suffix can function and originated as a passive marker, and is now undergoing deletion in favour of the ergative Pattern III. Perhaps Māori is further behind the change from passive marker-transitive marker, and it will also undergo semantic weakening and then deletion like Samoan and Tongan. The scale of change of function of the -Cia suffix seems to be passive to transitive (paralleling the change of function of *e* from agentive to ergative discussed in section 1.3). This feeds into the question of whether the ergativity found in Samoan and Tongan is innovative— Hohepa particularly attributes the postulated passive-ergative change in the PN languages to the loss of the -Cia suffix, which seems a natural and logical pathway of change in my opinion. The findings here indicate that the ergativity is indeed innovative. The predictions laid out in section 2.3 elaborate on the postulated shift to ergativity after considering the origins and reconstructions of -Cia.

## 2.3 Origins and reconstructions of the -Cia suffix

Hohepa does not give much explanation for the reinterpretation of passives as ergatives, but highlights the parallels between them. He surmises that the acc-to-erg process depends entirely on the initial function of the -Cia suffix in Proto-Polynesian being passive, and offers a change in form of the suffix to zero, or a change in function to account for its deletion. Hohepa mentions briefly the idea of rules and their ordering, suggesting deletion of the passive marker being obligatory for ergative languages following passivisation, but not (yet) for accusative or mixed languages. Chung (1978) develops this idea much more fully. Hohepa agrees with Chung that the -Cia suffix should be reconstructed as passive and that ergativity in Samoan and Tongan is innovative.

Chung reconstructs the -Cia suffix in Proto-Polynesian as a passive suffix, using several Samoic-Outlier and Tongic languages. In her book she therefore discusses the suffix generally, and the suffix in Samoan and Tongan. The passive origin of the suffix corresponds with the passive-transitive change via Pattern II occurring more and more often, losing its semantic properties and eventually undergoing reanalysis as transitive. The structure below is the reconstructed structure for PPN's distribution of the -Cia suffix, as part of Pattern II:

Verb-Cia (e NP) NP

As for the two -Cia suffixes mentioned in 2.2 for Samoan, Chung reconstructs both her so-called 'transitive suffix' (attaching to canonical transitives) and her 'transitivising suffix' (attaching to middle verbs) as a passive marker, due to the function of the transitive suffix marking a moved or removed transitive subject. Moreover, a few of the -Cia transitivising verbs are actually intransitive and take a semantic patient as their S argument, which Chung takes to indicate the passive:

**2xxv)** 'Ua 'ite-a mauga o Manu'a  
PRF see-SUFF hills of Manua  
'The hills of Manua are in sight.' Samoan (Milner, 1966 in Chung, 1978)

The transitivising suffix has here attached to middle verb *'ite* from verb *'iite* ('foresee') and forms an intransitive verb taking an intransitive subject *mauga o Manu'a*. This is clearly translated passively.

The semantics of the transitivising suffix (attached to middle verbs) including completion of an event, duration and lack of agency (see 2.2) are also similar to those in passive constructions. Both the transitive -Cia and the transitivising -Cia seem to originate as a passive marker in Samoan. I agree with this shared ancestry of the transitive and transitivising suffix; the coincidence of two suffixes with similar functions and the same form (albeit sometimes eroded) would be too great.

Chung reconstructs the -Cia suffix in Tongan as passive. She interestingly argues that until recently there were two distinct suffixes with the -Cia form in Tongan: one denoting the durative, now unproductive and unattested, and the other formative in three types of lexical derivation. The first suffix, -a, could occur in canonical transitive clauses. The latter can attach to nouns (e.g. in (2xxvi)), adjectives (e.g. in (2xxvii)), intransitive or transitive verbs derivationally:

**2xxvi)** Ha'u ki tu'a na'a ke 'ahu-ina  
 Come to outside lest you smoke-SUFF  
 'Come outside or you will be overpowered by the smoke.'  
 Tongan (Churchward, 1959 in Chung 1978)

**2xxvii)** 'Oku ou moko-sia  
 PROG I cold-SUFF  
 'I feel cold.'  
 Tongan (Chung, 1978)

-Cia suffix *-ina* in (2xxvi) attaches to noun 'ahu ('smoke') to form a derived stative verb, and to adjective *moko* ('cold') in (2xxvii) to form a derived adjective with an evaluative meaning. It is the third type of derivation in (2xxi) (repeated below), however, that according to Chung is both unproductive and relevant for the reconstruction of -Cia as a passive marker.

**2xxi)** Na'a ku afuhi-a 'i he 'uhá  
 PST I spray-SUFF CAUS the rain.DEF  
 'I was sprinkled by the rain.'  
 Tongan (Churchward, 1959 in Chung, 1978)

She argues for the reconstruction of the derivational lexical -Cia as opposed to the unproductive durational -a on the basis that the first has a synchronically ambiguous description of function, plus an arbitrary group of verbs to which it can attach. The functions of expressing completion, results of an event and a lack of agency, moreover, are typical semantic effects in passives (just like in the transitivising suffix in Samoan) to say nothing of the detransitivising effect -Cia has on certain transitive stems. As Samoan and Tongan are more similar to each other in alignment (and more generally) than Māori, I think it is very likely that their Cia suffixes in particular share a reconstruction.

Clark on the other hand believes that the ergativity in the Polynesian languages is not innovative and should be reconstructed at the level of Proto-Polynesian (PPN). This idea is therefore the opposite of Chung and Hohepa's ideas of the reanalysis of passive as ergative. He instead claims that an innovation of accusative case-marking took place in Proto-Eastern-Polynesian (PEP), the ancestor of the present day Eastern Polynesian languages, including Māori. Therefore, Clark (1976) agrees with and describes similarly the current case-marking patterns of Māori, Samoan and Tongan, but gives the following reconstruction for PPN:

I:	V	A	i/ki	O	(middle verbs)
II:	V-suff	e	A	O	(middle and canonical transitive verbs)
III:	V	e	A	O	(canonical transitive verbs)

This reconstruction is based on the ergative systems of Samoan and Tongan. Present day Tongan's system is given below:

I:	V	('a)	S	i/ki	O
Ila:	V-Ci	'e	S	('a)	O
IIb:	V-a	'e	S	('a)	O
III:	V	'e	S	('a)	O

Clark gives four patterns for Tongan, distinguishing between the *-Ci* suffix in Ila and the *-a* suffix in IIb. These two share the same property of Pattern II of canonical transitive and middle verbs making use of them. The 'a marker refers to the optional S/O argument in Tongan. Whereas Hohepa describes *-Ci* and *-a* as eroded versions of *-Cia*, Clark attributes different semantic and syntactic properties to *-Cia*, *-Ci* and *-a*, and lists them as three separate suffixes. He agrees with Chung on the synchronic properties of *-Cia* and *-a*, the unproductive durative suffix, however they disagree on the reconstruction of the suffix(es). Clark looks over to the Eastern Oceanic languages for his reconstruction of Proto-Central-Pacific (an ancestor of PPN and Fijian) which is based partly upon the *-Cia* suffixes found in the present day Fijian dialect Bauan. The following three suffixes are detailed for Bauan:

- Ci: proper transitive
- Ca: common transitive
- Ci: passive

The proper transitive suffix occurs with proper noun objects and pronominal objects in the sentence, and the common transitive when the object of the clause is either non-human, or human and non-proper and singular. This suffix is posited to derive from the Proto-Fijian \*-Cia, which Clark argues is the transitive suffix (*-Ci*) plus the 3rd person singular object pronoun (*-a*).

**2xxviii)** [era na vakarokorokota-ka] na luvequ  
they T reverence -Cia A my son  
'They will reverence my son.' Bauan (Matthews 1949, in Clark, 1976)

The suffix *-ka* in (2xxviii) is therefore glossed as a *-Cia* suffix, and marks the presence of a human, non-proper singular object in this case (*luvequ*). The third suffix *-Ci* occurs in passive constructions also, as according to Clark, passives are derived from active transitives which first get the transitive *-Ci* marking. Presumably if the transitive clause receives *-Cia* instead of

*-Ci*, (as in (2xxviii) the passive of the sentence (e.g. ‘My son will be revered.’) would also have the *-Cia* marking, though Clark gives no examples. As both transitive and passive clauses receive *-Ci* marking, the proper transitive and passive suffixes are the same suffix and are just labelled differently depending on the voice of the clause (i.e., it would be obtuse to label the suffix ‘passive’ in an active clause). Clark posits that this *-Ci* and common transitive marker *-Cia* are both derived from Proto-Eastern-Oceanic transitive marker *\*-Ci*, and that this suffix should be reconstructed for Proto-Central-Pacific. The transitive system for PCP is as follows (The square brackets indicate what Clark calls the ‘verb phrase’, and the round brackets the optional subject and object phrases outside of the ‘verb phrase’):

[S V] (Sub) i/ki OB  
 [S V-**Ci** O] (OB) (SUB) (for human objects)  
 [S V-**Ci-a**] (OB) (SUB) (for non-human objects)

The first pattern clearly resembles present day Pattern I and the second and third patterns Pattern II (without the *e* marker). As only the O argument in these patterns receives marking (outside of the ‘verb phrase’), this would appear to be an accusative system. Clark’s argument for the change in alignment throughout the Polynesian languages (and beyond) shall be considered in particular in section 4, but is mentioned here because the status of the *-Cia* suffix is plainly intertwined with alignment. From PCP to ergative PPN, Clark assumes a widening of scope of Pattern I to include most middle verbs, hinting that few middle verbs used Pattern I in PCP, and that many middle verbs continued using Pattern II (with the addition of *e*). This naturally fits with the argument that *-Ci* on middle verbs in the present day ergative PN languages is transitivity in function. It seems that canonical transitive verbs could have used any of the three PCP patterns, though were definitely restricted to present day patterns II and III in PPN and the ergative PN languages. Pattern III, Clark agrees, arose via the dropping of the *-Cia* suffix from Pattern II. For Clark then, the *-Cia* suffix in the Polynesian languages is reconstructed as the PCP transitive marker *-Ci*, and not as a passive marker.

The critical question concerning the reconstruction of the Polynesian *-Cia* suffix (and indeed the alignment of case marking systems in the PN languages) is whether it derives from a passive marker in PPN (as the acc-to-erg linguists believe) or a transitive suffix in PCP (as in Clark’s view). A related query is the nature of the relationships between various posited suffixes, such as between the canonical transitive *-Cia* and middle ‘transitivity’ *-Cia* in Samoan, and between these and the Tongan passive and transitivity *-Cias*. Having considered these questions and the change undergone by the *-Cia* suffix, I will lay out some predictions concerning its future in the three languages, continuing from the predictions in section 1.3.

Firstly, I believe the reconstruction of PN *-Cia* as passive suffix within an accusative PPN system to be stronger, simpler and less problematic than the transitive *\*-Ci* reconstruction in PCP— though this latter reconstruction is interesting. The current syntactic and semantic

properties of the -Cia suffix more likely point to a passive origin than a transitive one in my opinion, and the ongoing change from accusative to ergative among the PN languages since accusative Proto-Polynesian I think is clear. Clark himself has highlighted problems within his reconstruction, specifically to do with the different functions of \*-Ci, \*-a and \*-Cia that he has found. I agree with Chung that the two Samoan suffixes, which she labels 'transitive' and 'transitivising' are from the same PPN \*-Cia; moreover Clark notes that both canonical and middle clauses make use of Pattern II (his Patterns IIa and IIb). I therefore think it likely that the greatest difference between these two suffixes is the label. These labels are quite accurate in capturing the suffixes' functions; the transitive suffix mostly attaches to transitive verbs and the transitivising suffix to middle verbs, however I feel that these do not capture the history of the suffix nor the varying environments it can occur in. The labelling of the Tongan -Cia as passive clearly does reflect the history of the suffix, however the so-called 'transitivising' suffix Clark postulates is misleading in my opinion. It does not appear just on middle verbs as Chung's Samoan transitivising suffix does; therefore I believe it to have the same origin as the Samoan and Tongan -Cia. Having said this, it is fairly difficult to locate sentences in the three languages which one could use to define and therefore better understand the functions of -Cia. Further research would definitely be beneficial in this regard, perhaps involving grammaticality judgement as well as elicitation tasks.

Within the acc-to-erg narrative that I agree with, it is evident that the Māori -Cia is also reconstructed as PPN's \*-Cia, and has changed in function less than in Samoan and Tongan. In this way, although in some languages the -Cia suffix can be more accurately labelled otherwise now, I believe the passive suffix reconstruction to be common to the Māori, Samoan and Tongan -Cias.

Looking forward, a number of predictions can be made about the future of the -Cia suffix in canonical transitive and middle clauses, some stronger than others. It has already been suggested in the Hale-Hohepa-Hypothesis (HHH) (Hale, 1969 and Hohepa, 1969) that there is a drift towards ergativity present in the Polynesian languages, implying that Māori is shifting towards a system more like Samoan and Tongan. At present, by virtue of Māori's preference for the passive, Pattern II and the -Cia suffix are used very frequently in canonical transitive clauses. The pattern is rarer in middle clauses. A drift towards the ergative implies that because the suffix is used so much, its function of indicating the passive will be weakened and the suffix left redundant. This accounts for Māori's canonical transitive verbs beginning to use Pattern III as well as Pattern II, as predicted in 1.3. I have stated above that canonical transitive and middle verbs need to be treated separately in terms of the -Cia suffix as well as the case markers. I believe this to be the case because the middle verbs exhibit different synchronic patterns in the three languages to canonical transitive verbs, and appear to represent an earlier stage in the drift (just like Māori represents an earlier stage of the acc-to-erg drift than Samoan and Tongan). As explained in terms of the case markers in 1.3, middle verbs are mostly limited to Pattern I (accusative) in Māori and to Patterns I and II in Samoan and Tongan. Canonical transitives use Patterns I and II in Māori and II and III in Samoan and Tongan – canonical transitives therefore are a stage ahead of middle verbs in

this sense. I would expect middle verbs in Māori to increasingly use -Cia as part of Pattern II, as Samoan and Tongan does. In terms of form, I regard varieties of the suffix as due to different lexical stems (as Aitchison (2001) describes) and erosion. Hohepa's theory of erosion seems a perfectly reasonable process to occur in -Cia in both middle clauses as well as canonical transitives even in Māori, as the suffix is used so much in the latter clause type. As the frequency of the passive construction in Māori overtakes that of the active, its meaning weakens and there is less reason to even employ a suffix. The -Cia suffix is therefore the same suffix for both clauses, with middle clauses adopting the use suffix after the beginning of the erosion.

Tongan's -Cia also exhibits erosion, sometimes escalating to the total dropping of the -Cia suffix, and therefore the birth of Pattern III (ergative) alongside Pattern I (for middle clauses) and II (for middle and canonical transitive clauses). I regard it possible that Tongan is slightly behind Samoan in terms of the -Cia drift, and that in the future the so-called passive -Cia will be gradually reanalysed as a transitive marker (or at least relabelled in the literature) as in Samoan. Such a reanalysis supports Hohepa's idea of an eroding -Cia and would accelerate the process, in my opinion. Later generations of speakers who analyse the very frequently-occurring suffix as transitive would have even less reason to preserve the full form of the marker, as its function is so minimal. At present, both Tongan's -Cia suffix and Clark's postulated transitivising -Ci suffix are better captured by the label 'passive marker', because the former mostly forms intransitive verbs from transitive stems and the latter does not transitive middle verbs like Samoan's transitivising suffix does. In the future, a system more like Samoan looks likely for both the canonical transitive and middle verbs however; whereby -Cia attaches to transitive stems deriving transitive verbs more often (as well as intransitives) and to middle verbs also.

Samoan's system therefore includes a -Cia suffix labelled as a transitive marker when part of a canonical transitive clause, and a transitivising one when part of a middle one. Like with Tongan, one predicts the continued erosion and dropping of the -Cia suffix in canonical transitive clauses, and later in middle clauses too. If both canonical transitive verbs and middle verbs indeed continue drifting in this manner, Samoan (and theoretically Tongan and Māori eventually) will have a completely ergative system (only Pattern III) with the absence of the -Cia marker. My postulated life-cycle of the -Cia marker is displayed in figure 3 below:

*Figure 3- The postulated life-cycle of the -Cia marker*

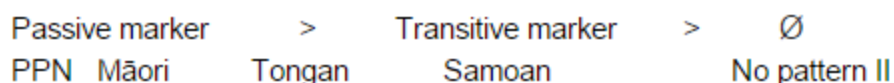


Figure 2- The shift of e

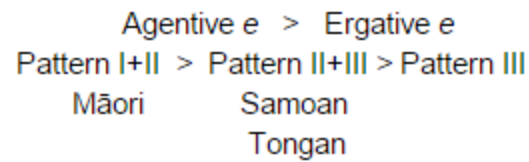


Figure 2 in section 1.3 (repeated above) and figure 3 together encapsulate my agreement with the oblique preposition and passive marker origins of e and -Cia, the origins and reanalysis of which are the crux of the accusative to ergative alignment argument in the PN languages. In both the life-cycle of e and -Cia, Māori is further behind in change than Samoan and Tongan (as pictured in the figures), and middle clauses in each language are behind in change than the canonical transitives in the same language. Essentially, this is in agreement with the drift theory of Hohepa (1969); that the PN languages are slowly all drifting towards ergativity in their case marking systems.



### 3. Pronominals

Sections 1 and 2 discussed the case marking system of full NPs in Māori, Samoan and Tongan and their respective alignments. Another area in which alignment can be expressed in these languages of course is the pronominal systems, which do not match that of the full NPs in every case. The synchronic pronominal systems and their forms and functions shall be examined in 3.1, followed by a review of different reconstructions in the literature in 3.2.

#### 3.1 Synchronic pronominal systems

Māori's personal pronouns are set out in table 2 below:

*Table 2 – Personal pronouns in Māori*

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	-	tāua	tātou
<b>1st exclusive</b>	au, ahau	māua	mātou
<b>2nd</b>	koe	kōrua	koutou
<b>3rd</b>	ia	rāua	rātou

The personal pronouns feature three numbers and three persons as described by Harlow (1996) and Maunsell (Harawira includes most of the pronoun forms also), including a distinction of clusivity in the first person dual and plural. Hohepa lists a further three pronouns, which Harlow details as allomorphs which occur after possessive prepositions. These are first person singular *-ku* (e.g. in *nōku*), second person *-u* in *māu* and 3rd person singular *-na* in *āna* ('belongs to me', 'for you' and 'for him/her' respectively). From the table it is surmised that there is no morphological contrast with regards to alignment, giving Māori a neutral system in this way. That is to say, each pronoun in the table can be used in place of an S, A or O NP. Crucially, Māori and the other Eastern PN languages lack the separate subject clitic pronouns that are present in the other PN languages (see below).

Neffgen sets out the personal pronouns of Samoan in table 3 below:

Table 3 – Neffgen’s personal pronouns in Samoan

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	a’u, <b>o’u</b> , ta	tāua, <b>tā</b>	tātou
<b>1st exclusive</b>	-	māua, <b>mā</b>	mātou
<b>2nd</b>	’oe	’oulua	’outou
<b>3rd</b>	ia	lāua, <b>lā</b>	lātou

As with Māori, the pronominal system in Samoan feature three numbers and persons with a distinction of clusivity. Many of the forms are identical or at least bear a resemblance to those in Māori.

Hunkin (2009) and Mayer (1975) report the same pronoun forms as in the table, though the former adds *’ita* to the first person singular cell and the latter adds an apostrophe to *tāua*, *māua* and *lāua*. Hunkin also distinguishes between what I shall call the independent pronominals and the clitic pronominals. He names the clitics ‘shortened versions’, and these are set out in table 4. Neffgen includes some of these forms also, which are presented in bold in table 3.

Table 4 – Hunkin’s personal pronominal clitics in Samoan

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	’ou, <b>o’u-</b>	tā-	-
<b>1st exclusive</b>	-	mā-	-
<b>2nd</b>	’e-	-	tou-
<b>3rd</b>	na-	lā-	-

Hunkin describes the environment of the clitics; they occur when not with ‘o, when the pronoun occurs before the verb, and when the pronoun goes between the verb and tense marker. Marsack (1962) also distinguishes between Samoan’s independent and clitic pronominals.

Hohepa, Morton (1962), Churchward and Ball (2007) all give accounts of the same system of clitics occurring in Tongan. Morton’s list of clitics are included in Churchward’s fuller list (though Morton gives *-to* instead of *te* as the first person singular inclusive clitic) and are presented in bold in table 5 below. Both Churchward and Ball present the clitic forms as well as the independent pronouns, with Ball describing the clitics as pronominals that appear within the structural VP.

*Table 5 – Churchward’s personal pronominal clitics in Tongan*

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	te	ta	tau
<b>1st exclusive</b>	Ou, <b>ku</b> , u, kau	ma	mau
<b>2nd</b>	<b>ke</b>	mo	mou
<b>3rd</b>	<b>ne</b>	na	nau

Both Churchward and Ball present the clitic forms (in table 5, above, and 7, below) as well as the independent pronouns (tables 6 and 8 respectively) with Ball describing the clitics as pronominals that appear within the structural VP.

*Table 6 – Churchward’s independent pronominals in Tongan*

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	kita	kitaua	kitautolu
<b>1st exclusive</b>	au	kimaua	kimautolu
<b>2nd</b>	koe	kimoua	kimoutolu
<b>3rd</b>	ia	kinaua	kinautolu

*Table 7 – Ball’s pronominal clitics in Tongan*

	<b>Singular</b>	<b>Dual</b>	<b>Plural</b>
<b>1st inclusive</b>	Ou, u, ku	ta	tau
<b>1st exclusive</b>	-	ma	mau
<b>2nd</b>	ke	mo	mou
<b>3rd</b>	ne	na	nau

Table 8 – Ball’s independent pronominals in Tongan

	Singular	Dual	Plural
<b>1st inclusive</b>	au	kitaua	kitautolu
<b>1st exclusive</b>	-	kimaua	kimautolu
<b>2nd</b>	koe	kimoua	kimoutolu
<b>3rd</b>	ia	kinaua	kinautolu

Churchward labels the clitics in table 5 ‘preposed forms’ and the independent forms ‘postposed forms’, hinting at the surface word order of the two types of pronominals. There is a major difference in terms of the first person inclusive and exclusive forms between Churchward’s and Ball’s independent pronominal tables; Ball leaves the first person singular exclusive cell empty in both tables 7 and 8, whereas Churchward does not. The forms given for the first person singular inclusive in tables 7 and 8 moreover, are given in tables 5 and 6 as the first person singular *exclusive* forms. Churchward describes his exclusive forms as translating as ‘I’ and his inclusive forms as indefinite pronoun ‘one’, or ‘I’, when the speaker is being polite or humble. The lack of Samoan exclusive first person pronouns implies that most linguists believe ‘inclusive’ to be a more accurate description of the first person pronouns. As the meaning and form of Churchward’s exclusive and Ball’s inclusive first person pronouns are the same, I will consider the difference an inconsequential labelling one.

The examples below in (3i) (3ii) and (3iii) discussed by Ball provide an explanation of the contrasting environments in which clitics and independent pronouns are found in the PN languages:

- 3i)** Na’a **ku** sio ki he fo’i manupuna  
 PST 1SG look to DET one bird  
 ‘I saw a bird.’ Tongan (Chung, 1978)
- 3ii)** ‘Olo’o ‘**e** tautala lāmū  
 PROG 2SG speak soft  
 ‘You’re speaking softly.’ Samoan (Chung, 1978)
- 3iii)** Te **u** ‘ave **ia** ki kolo  
 FUT 1SG take 3SG to village  
 ‘I’ll take him to the village.’ Tongan (Kikusawa, 2002)

Tongan first person singular clitics *ku* and *u* in (3i) and (3iii) respectively both appear preverbally (though within the structural VP, according to Ball) and both express the A argument. Samoan second person singular clitic ‘e also appears preverbally, and expresses

the S argument. The Tongan third person singular independent pronoun *ia* in (3iii) however occurs postverbally and expresses the O argument. As Ball explains, the positioning and which arguments are expressed is exactly the difference between the two sets of pronouns in Samoan and Tongan: the clitics occur preverbally and can express the S or A argument, and the independent pronouns occur postverbally and can express the O argument. More specifically, clitics follow tense-aspect-mood markers, complementisers and conjunctions, and independent pronominals wholly replace the full NP, and are treated in the same fashion. In this way, Samoan and Tongan both exhibit accusative alignment in their pronominal systems, both formally and positionally in the sentence. This accusative system is typical of PN languages with clitics; moreover clitics are nearly exclusively found in languages with ergative NPs.

Table 9 below, however, shows that the question of alignment, at least in Samoan's pronominal system, is not actually quite so straightforward:

*Table 9 – Ball's 'Nominative pronominalisation in Samoan' (some headings changed)*

	<b>A</b>	<b>Sa</b>	<b>Sp</b>	<b>O</b>	<b>Alignment</b>
<b>1st</b>	yes	yes	yes	no	Acc
<b>2nd</b>	yes	yes	yes	no	Acc
<b>3rd plural</b>	yes	yes	no	no	Act
<b>3rd singular</b>	yes	no	no	no	Erg

For the first and second persons, the clitics express the S and A arguments but not the O argument as previously described – they have accusative alignment. The third person plural exhibits a 'split-S' or 'active' alignment, whereby the clitic can express unergative S arguments (Sa) but not unaccusative ones (Sp). That is, the intransitive subject, which is semantically an agent, can be pronominalised by the third person plural clitic, but the intransitive subject, which is semantically a patient, cannot. The third singular clitic actually exhibits ergative alignment, in that it pronominalises the A argument but nothing else.

Samoan's pronominal system is therefore not completely accusative, but includes the active and ergative types of alignment too. As Ball points out in his argument for the accusative reconstruction of the PN pronominal system, it also follows what Silverstein's (1976) animacy hierarchy predicts. First and second person pronouns are lower down on this implicational scale than third person pronouns, which means they are more likely to exhibit accusative alignment. Pronouns generally are lower down the scale than common nouns, capturing the situation in Samoan and Tongan whereby the case marking systems on (canonical transitive) nouns is ergative and the (clitic) pronominal systems are (mostly) accusative. The current situation of the alignment in Māori Samoan and Tongan concerning case marking and

pronominals is set out in table 10 below, summarising the synchronic findings of the first three chapters.

*Table 10- The alignments of the case marking and pronominal systems of Māori, Samoan and Tongan*

	Case marking		Pronominals
	Canonical transitive clauses	Middle clauses	
<b>Māori</b>	Acc	Acc	Neutral form, acc positioning
<b>Samoan</b>	Erg	Acc	Acc (1+2), Act (3 pl.), Erg (3 sg.), acc positioning
<b>Tongan</b>	Erg	Acc	Acc form, acc positioning

Therefore, Samoan and Tongan but not Māori have both independent pronouns and clitic pronouns, both occurring in certain environments in the sentence. Māori has accusative case marking and neutral pronominals. These pronominals exhibit accusative positioning in surface word order however; S/A independent pronominals appear preverbally, and O independent pronominals appear postverbally. Samoan and Tongan exhibit both ergative and accusative case marking, and (mostly) accusative clitic pronominals. These clitic pronominals are accusative in both form and position in the sentence. As discussed in section 4.2, Ball takes the presence of ergativity within Samoan’s pronominals as evidence of burgeoning ergativity post-PPN. Clearly, labelling any of the languages as either just accusative or ergative ignores the variation found when the languages are examined more closely.

The difference between the two types of pronominal system has a bearing on the discussion of the pronominal alignment in these languages generally and reconstruction of the systems.

### **3.2 Function and reconstruction of the PN pronominal systems**

Kikusawa (2009) and Ball both use evidence from the PN pronominal systems to strengthen their arguments on whether there was an accusative to ergative or ergative to accusative change within the PN languages generally. Both therefore comment on the current alignment of the pronominal systems and suggest reconstructions.

Kikusawa reconstructs an ergative pronominal system for PCP (and its ancestors) in her argument for a general erg-to-acc change from PCP to the current PN languages. After examining evidence from Western Fijian, Eastern Kadavu Fijian and Rotuman, she surmises that all three languages have a word order contrast with respect to the S/A (clitic) and O (independent) pronoun arguments, just as Ball notes for Tongan and Samoan. In the Fijian

dialects for instance, the S/A clitic pronouns *qu* in (3iv) and (3v) and *a* in (3vi) below precede the verb, whilst the O independent pronouns *ko* in (3v) and *au* in (3vi) follow:

**3iv) Qu=laka niyavi**  
1SG=go yesterday  
'I went yesterday.' Wayan Fijian (Pawley and Sayaba, 2003 in Kikusawa, 2009)

**3v) ...qu=saa vece ko**  
1SG=already tell 2SG  
'...that I told you' Wayan Fijian (Pawley and Sayaba, 2003 in Kikusawa, 2009)

**3vi) A=nei vecei au o Taina me**  
3SG=often tell 1SG.ACC +PRPR Taina that.3SG  
'Taina used to tell me that.'  
Wayan Fijian (Pawley and Sayaba, 2003 in Kikusawa, 2009)

These forms are easily comparable to the forms in 3.1. Kikusawa notes the morphological and word order contrast of Wayan's pronominal system: its clitic pronouns precede the verb and replace an S or A NP, and its independent pronouns follow the verb and replace an O NP.

Such an accusative morphological contrast however is not clear in all of the languages; moreover Kikusawa argues that no single set of pronouns is lexically reconstructable for the S/A nominative set from the Central Pacific family, as the forms vary too much. There seem to be two general different first person singular forms, *qu* and *au*, as she notes, reflecting and representing the clitic set and the independent set respectively. Though other linguists such as Pawley (1970) have offered reconstructions, Kikusawa believes reconstructing an accusative system to be the wrong reconstruction altogether.

As an alternative, Kikusawa searches for the ergative argument reconstruction, and lays out her methodology. After searching for relevant pronominal forms, she looked for possible cognates outside the language family in order to establish the pronouns' original syntactic function and formed a hypothesis. Kikusawa's (2009) theory includes reconstructions back to Proto-Extra-Formosan (PEF) (or Proto-Malayo-PN) and reconstructs two sets of pronouns for this ancestor. The so-called 'genitive' set of pronouns function as ergative when on the verb, and the 'nominative' set functions as absolutive when on the verb. The pronominal system of PEF was therefore postulated to be ergative. Table 11 below sets out reconstructions for current PN and Fijian and their ancestors Proto-Oceanic (PO), Pre-Proto-Oceanic (PPO) and Proto-Extra-Formosan (PEF):

Table 11 – Kikusawa’s reconstruction of the PN pronominal system

	1SG		2SG		3SG	
	GEN	NOM	GEN	NOM	GEN	NOM
Proto-Extra-Formosan (Blust 1977, LRC 2002)	*(n)i-ku *=ku	*=aku	*=mu	*i-kaSu *=kaw	*(y)a, *=ña	*si-ia *=ya
Pre-Proto-Oceanic (LRC 2002: 14)	*ku=	*au	*=mu	*=ko	*(y)a, =ña	*=i
Proto-Oceanic (LRC 2002)	*=ŋku, *=au		*=mu, *=koe		*=ña, *Ø, *=a	
Forms occurring in current Fijian languages	<i>qu</i> or <i>au</i> (V) = <i>qu</i> (N)		<i>(i)ko</i> (V) = <i>mu</i> (N)		Ø, <i>ile</i> (V) = <i>na</i> (N)	
Form occurring in current Polynesian languages	The reflex of either *kau/ou, or *au/o				The reflex of either *na or *Ø	

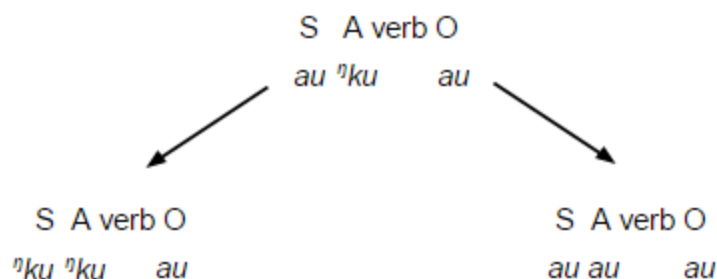
The ergative system of two subject pronouns (S and A) explains why there are also two subject pronouns present in some of the current PN languages. The current PN *qu* form (clitic, first person) is argued to be a reflex of the first person ‘genitive’ pronoun in PEF, and the other first person form *au* (first person, independent) is argued to be a reflex from the ‘nominative’ set. These forms may both function as the nominative (S/A) in systems today, but they are given in PEF as functioning within the same system as ergative (A) and absolutive (S/O) respectively.

Kikusawa (2009) reconstructs second and third person pronouns also, in the same way, to account for the high number of varying forms but the current accusative or neutral pronominal systems.<sup>3</sup> The ergative system of PEF and PPO clearly shifted to an accusative one in PO in the table, and Kikusawa accounts for this via suggestion of generalisation of either the ‘nominative’ set or the ‘genitive set’ and surface word order. She claims that PCP had an accusative word order concerning pronominals (as in Wayan) and ergative-alignment pronominals themselves (as just discussed). Her argument follows that if the S (‘nominative’) or the A (‘genitive’) pronoun generalised, then the ergative pattern would be lost. Figure 4 below represents the two options:

<sup>3</sup> One presumes that the 2SG current form cell is left empty because neither *mu* nor a similar form appears as a current 2SG form, and this fact undermines Kikusawa’s theory.



Figure 4 – Kikusawa’s generalisation of the S or A pronominals



The first option on the left is the result of the genitive A first person clitic pronoun *ʔku* generalised as the S and A pronoun, giving an accusative pronoun system. The second option, below on the right, is the result of the nominative S first person independent pronoun *au* generalising as the A pronoun as well as the S and O pronouns. This would clearly result in a neutral pronominal system as all the first person arguments are expressed by the same pronoun.

Western Fijian indeed seems to indicate that the genitive set generalised to express both S and A (not just A), as *ʔku* forms are found in Western Fijian. The Eastern Fijian languages indicate it was the nominative set that generalised (to include A as well as S) as it is the *au* form that is found in the Eastern Fijian languages. Kikusawa’s theory can therefore explain the current pronominal alignments of Māori, Samoan and Tongan. According to figure 4, the independent S nominative pronominal set generalised to give a neutral-alignment pronominal set in Māori. Māori only has an independent pronominal set, and the first person singular forms *au* and *ahau* are very similar in form to the reconstructed independent first person singular pronominal. Samoan and Tongan on the other hand currently exhibit accusative (or partially accusative) pronominal systems. They have chosen the left fork in figure 4, whereby the genitive A pronominal set (ergative) has generalised to give an accusative system; the *ʔku* forms express S/A and appear preverbally, and the remaining O pronoun *au* is the independent pronoun occurring post-verbally. The forms in the tables in 3.1 also clearly resemble the reconstructed forms in table 11. Kikusawa proceeds to argue that the generalisation occurring in Samoan and Tongan is not even that unexpected, given the ‘shared semantic property actor’ and shared word order position.

The pre-existing conditions for the massive-scale parallel development that has to have taken place to give all the current accusative forms include word order. Kikusawa (2009) discusses a change that took place which restricted the position in which the pronominals could occur (S and A clitics – preverbal, O independent pronouns – postverbal). Slowly, the positioning of the pronominals overtook the morphology in terms of alignment. The difference of positions of the pronominal forms in PEF depended on the existence of an auxiliary verb:

PEF – pronominal forms occurred as enclitics on the sentence initial verb (auxiliary verb if present, otherwise main verb)

PCP – S/A pronominal forms precede the main verb

Focussing on the relative position of the pronouns to the main verb (in PEF), the S and A pronouns could precede or follow the main verb. It seems as though a new system was incorporated later that fixed the position of these pronouns to preverbal, forming an accusative alignment which contrasted with the ergative alignment of the pronominal forms by this point. Kikusawa maintains that the morphology was influenced by this accusative alignment of word order, and followed suit, or in some cases was lost altogether. For once the S and A pronominals started necessarily occurring in the same position relative to the verb (and different from the O), the two morphological sets merged. Which of the reconstructed pronominal sets generalised and was retained depends on each language – an accusative morphological pattern would result if the genitive (ergative) set generalised, and a neutral morphological pattern would result if the nominative (absolute) set generalised. In this way, Kikusawa argues for the accusative innovation and an erg-to-acc change, rather than an ergative innovation and an acc-to-erg change. Ball is Kikusawa's main theoretical opposer, who casts doubt on an ergative reconstruction of the PN pronominal systems. Ball disagrees with Kikusawa's reconstruction in terms of the function of the pronominal forms, as opposed to their forms. The relation between the similar forms in the languages in table 12 below, for instance, seems difficult to deny:

Table 12 – Ball’s ‘Some formal similarities in Austronesian pronouns’

	PMP	Tagalog	Proto-Oceanic	Standard Fijian	Tongan
<b>1st singular</b>					
<b>A</b>	*ku	ko	*ku, *au	au~u	ou, u, ku
<b>Possessive</b>	*ku	ko	*ŋku	-ŋgu	-ku
<b>B</b>	*aku	ako	*au	au	au
<b>2nd singular</b>					
<b>A</b>	*mu	mo	*mu, *ko	o	ke
<b>Possessive</b>	*mu	mo	*mu	-mu	-u/-o
<b>B</b>	*kahu	ikaw/ka	*ko	iko	koe
<b>3rd singular</b>					
<b>A</b>	*ya	niya	*(y)a, *ña, *i	e	ne
<b>Possessive</b>	*ya	niya	*ña	-na	-ne
<b>B</b>	-	siya	*a	koya	ia

In table 12, set ‘A’ refers to Kikusawa’s ‘genitive’ (S/O) pronoun set, ‘possessive’ to the possessive pronominal forms in each language and set ‘B’ to Kikusawa’s ‘nominative’ (A) pronoun set. Ball highlights what Kikusawa does with regards to the two prominent forms for each person, and compares the set A forms with the possessive forms. Whereas Ball agrees with Kikusawa that the A set (S/A arguments) forms and the possessive forms of the current PN languages originated in PMP/PEF’s (Proto-Malayo-Polynesian = Proto-Extra-Formosan) genitive set, he does not think that ergativity continued into PCP from PMP. The various options for the reconstructed set A PO pronouns is cited as the reason for this belief, as it implies there are many alternative forms in the daughter languages and that some these languages had begun to generalise the B set – crucially, before PCP. The two authors discussed in this section, then, disagree regarding at which point in the reconstruction of the Austronesian language ergativity in the pronominal systems dies out. Kikusawa believes ergativity to continue into PCP, whilst Ball does not. As mentioned in sections 1 and 2, I agree with the idea of innovative ergativity, though I think Kikusawa’s theory accounting for the various forms of the pronominals is attractive and very believable. Ball’s and Kikusawa’s arguments are not only valuable in assembling an account of the reconstruction of the current

PN forms, their function and their alignment, but also in the question of whether the case marking system of Proto-Polynesian was accusative or ergative (see section 4).

## 4. Acc-to-erg or erg-to-acc?

The overlapping use and various functions of Pattern II, the -Cia suffix and the *i/ki* and *e* particles in the PN languages form evidence for both the ‘acc-to-erg’ and the ‘erg-to-acc’ arguments concerning the diachronic change of case assignment in PN. Each position shall be explored in this chapter, drawing evidence from chapters 1 and 2. The question of whether the pronominals should be reconstructed as ergative or not is also considered, drawing on the information in chapter 3. The acc-to-erg position shall be explored first.

### 4.1 The acc-to-erg position

The acc-to-erg position is the argument that a change occurred in the history of PN causing some of the languages to shift case marking alignments to ergative from accusative. The current accusative languages therefore are argued to have the same case marking system as a shared ancestor of the PN languages, and accusativity is reconstructed. This position is characterised by a reanalysis of passive clauses as ergative clauses (in line with the eventual loss of -Cia and agentive *e* to ergative *e*) and the existence of languages that are mid-change. The accounts of Hohepa, Lynch and Chung shall be examined arguing for this position.

Hohepa’s (1969) argument builds on the previous work of Hale (1968) on Australian languages. The hypothesis of the two concerning case assignment in PN is the HHH as mentioned above. The hypothesis postulates a strong ‘drift’ theory of accusative-to-ergative, maintaining that ‘all Polynesian languages, if they persist, will become ergative languages’. Hohepa is therefore of the belief that the current ergative languages were once accusative, and that the accusative ones are undergoing or will undergo the same shift. He lists and exemplifies Māori, Rarotongan, Hawaiian among others as such accusative languages, which make use of Patterns I and II (i.e., no ergative structures). Tongan is Hohepa’s example of a language that has nearly completed the change to ergative. Evidence for this is from the existence of Pattern II and III in Tongan (with active readings) rather than solely III; not all clauses have undergone deletion of the –Cia marker (see sections 1.2 and 2.2). Hohepa believes it is syntactic drift that is causing the increase of Pattern III clauses and the reinterpretation of -Cia as an ‘abstract’ marker. Tongan is compared with the other Tongic language Niuean, in which there is a total loss of the suffix, indicating to Hohepa that Niuean is ‘wholly ergative’. Samoan and Pukapukan are Hohepa’s examples of ‘mixed’ languages. Samoan can exhibit Pattern II with a passive reading as seen in (2ii), repeated below:

- 2ii) E alofa-gia le fafine e le tamaaloa  
PST love-PASS the.SG woman AGT the.SG man  
‘The woman is loved by the man.’ Samoan (Hohepa 1969)

In Pukapukan furthermore, there is a symmetry between the *i* marking the intransitive subject in intransitive clauses, and the patient (surface subject) in Pattern II:

- 4i) Yi-a koa i a Tonga e Maui Potiki  
 Fish-PASS immediately NOM PERS Tonga AGT Maui Potiki  
 'Tonga was fished up shortly by Maui Potiki' Pukapukan (Hohepa, 1969)

Particle *i* is glossed as a nominative marker on the surface subject NP *a Tonga* in this passive clause. The -Cia suffix surfaces as -a, glossed as a passive marker. Hohepa reports that Pukapukan also exhibits passive marker deletion to get ergative structures, and is also therefore currently a mixed accusative-ergative language.

As mentioned in section 2, Hohepa believes in the reinterpretation of passives as ergatives via the function of the -Cia suffix as the key to the acc-to-erg change. Hohepa mentions briefly the idea of rules and their ordering, suggesting deletion of the passive marker being obligatory for Niuean, for example, following passivisation, but not (yet) for the mixed languages. Chung (1978) develops this idea of rules much more fully.

Before continuing onto Chung however, Lynch's (1972) account of Tongan from section 2 in line with the HHH is another example of the drift to ergativity in process, and of the acc-to-erg argument. 2xxiv) and its eroded -Cia suffix are repeated below:

- 2xxiv) Na'e kai-'i 'a e ika  
 PST eat-PASS NOM the fish  
 'The fish was eaten.' Tongan (Lynch, 1972)

Like Hohepa, Lynch claims a zero marker is replacing the overt passive marker, fuelling a passive to ergative reinterpretation.

Chung's (1978) book defines and analyses many aspects of case-marking in the PN languages, drawing on much evidence mostly from five PN languages. She introduces the patterns discussed in chapters 1 and 2 for each of the languages before challenging the HHH and Clark's erg-to-acc position and ultimately postulating an acc-to-erg position, agreeing with Hohepa and Lynch. She therefore reviews the HHH and Clark's erg-to-acc position, critiquing the motivation behind a reanalysis of the passive as an obligatory rule in the ergative PN languages, and doubting the plausibility of the parallel development suggested by Clark (4.2). The new proposal does however include the reanalysis of the passive as ergative, and Chung reconstructs her accusative case marking system for Proto-Polynesian (repeated below):

V	S			<b>Intransitives</b>
V	A	i	O	<b>Transitives</b>
V	A	i/ki	O	<b>Middle</b>
V-Cia	e Agent		Patient	<b>Passive</b>

The patterns for transitive and middle clauses are clearly equal to Pattern I, and the passive pattern equal to Pattern II. Chung's claim is that the passive began applying more often than not to clauses, perhaps resulting in situations similar to Māori currently. She argues that the abundance of Pattern II would lead to passive clauses lacking semantic properties most associated with the passive, making the rule difficult to learn and the underlying (transitive) structure difficult to recover. In the ergative languages, this would lead to a reanalysis of these Pattern II passives as transitive, which is a small passive-marker-dropping-step away from Pattern III.

Chung's reconstructions of -Cia as a passive marker (2.3), *i* as a direct object marker and *e* as an oblique preposition (1.3) support her acc-to-erg argument also. These reconstructions are used to fuel Chung's argument of the passive to ergative reanalysis, where Pattern II in PPN was superficially passive derived from a passive rule.

In Chung's final chapter, the nature of syntactic change itself is explored with regards to PN languages and the passive to ergative reanalysis. Chung maintains that the reanalysis of passives as ergatives is broken down into steps of discrete rule changes, but that these are implemented gradually. This is so that mutual intelligibility between adjacent generations of speakers is not lost via their surface outputs, but their underlying structure can differ. Chung returns to the nature of rules to help explain how the discrete steps are implemented in a reanalysis:

'A new analysis is actualised first for the clauses that are less distorted by syntactic rules, where superficial rules distort the clause less than major rules do'.

Chung first tests Pukapukan with several subject-referring rules to try and determine whether clauses with the II or III patterns are superficially active or passive. It transpires that the surface subjects in these patterns are not always eligible for the subject-referring rules— that is, they are not always 'deep' or 'underlying' subjects (S or A). One would assume if the passive to ergative reanalysis has occurred, the clauses would be uniformly active, and if it has not, that the clauses would be uniformly passive. As neither is the case, Chung posits that only two competing synchronic analyses of the surface clauses can have this result, meaning that Pukapukan is in the middle of actualising the discrete steps of the reanalysis gradually. This is the process in which Chung argues Samoan and Tongan to be undertaking.

Throughout her book, Chung makes reference to 'major' or 'cyclic' rules and 'superficial' or 'postcyclic' rules, where Equi and Raising are major and Relativisation, Clefting, Question-Movement and Subject Preposing are superficial. She claims that the two types of rule may affect syntactic change in a principled way. For the sake of continuity of surface

forms of clauses (and mutual intelligibility), it is suggested that a change affects clauses with the least syntactic 'distortion' first, and other types of clauses only later. This would imply that the late ergative case assignment rule will interact with the clauses affected by no rules first, as they cause the least distortion within the syntax. These are followed by clauses which have undergone superficial rules, then lastly by clauses which have undergone major rules (rules affecting the grammatical relations of a clause). This explanation could account for the behaviour of the II and III patterned clauses in Pukapukan. NPs marked by *e* in passive clauses, for instance, were found to undergo the superficial rules as subjects more successfully than the major rules. The almost constant failure of the ergative NPs to undergo the major rules suggests that the ergative clauses are not transitive underlyingly, as they appear to be on the surface. Chung's discussion of how PN languages are changing in morphological alignment therefore introduces the topic of syntactic ergativity.

Although the phrase 'syntactic ergativity' is still not explicitly mentioned, it seems that Chung is edging towards a three-tier theory of morphosyntax. Her the first tier constitutes the morphological marking that chapters 1, 2 and 3 here are concerned with. The other two tiers would be affected by superficial and major rules; one labelled 'grammatical relations' by Chung (thematic structure), affected by 'major' rules, and another tier affected by 'superficial' rules. Chapter 5 highlights the similarity between this account and modern accounts of syntactic ergativity describing the patterns of relativisation, for example (one of Chung's 'superficial') rules. Either way, Chung's discussion of the interaction between grammatical relations and morphology and the theory of syntactic change is more detailed than any other account discussed so far, and this shall be explored further in section 5.

#### **4.2. The erg-to-acc position**

I move the discussion on now to the opposite position than that encountered in 4.1; the argument that the innovation in PN languages occurred within the accusative languages (mostly the East Polynesian subgroup) as opposed to the ergative ones. That is to say, linguists of this position believe in reconstructing an ergative case system for PPN (or even earlier), such as Clark (1975) and Kikusawa (2009).

Clark's (1975) account, as mentioned above, opposes the HHH and argues that the major innovation took place precisely in Proto-Eastern-Polynesian (PEP, an ancestor of Māori) to account for the accusative EP languages. Clark attacks the HHH, positing that the syntactic drift theory is too strong, yet he needs to account for why both Samoan and Tongan have developed such a system when they have been separate since PPN. Clark therefore surmises that PPN must have had a structural feature (inherited by its descendants) which would produce a tendency to favour the passive. For Proto-Samoic (ancestor of the Samoic-Outlier group, a group of mainly ergative languages) he reconstructs a system where transitive clauses use patterns II and III. This is the same in the Tongic family. For the Central Eastern Polynesian family, (a subgroup including all the Eastern PN languages except Easter Island), Clark maintains that Pattern III (ergative) does not exist, unsurprisingly. An ergative



system for PPN is reconstructed due to these reconstructions and Māori's preference for the passive. Clark then moves on to consider and compare clauses from Eastern Oceanic, and reconstructs the transitive sentence for Proto-Eastern-Oceanic with a modern counterpart from Tasiriki:

4ii) (SUBJ) [A V- Ci O] (OBJ)  
 Pita [i pai kei ta'v- i- au]  
 Woman she T NEG follow-Ci-me  
 'The woman will not follow me.' Tasiriki (Clark, 1975)

The A and O above are pronominal elements within the 'verb phrase' agreeing with the subject and object outside the 'verb phrase'. -Ci (the -Cia suffix) is labelled by Clark as a transitive suffix. Unlike PN languages, there is clearly no prepositional case marking on the subject or object. It is suggested therefore that the innovation concerning erg-to-acc occurred after Proto-Eastern-Oceanic.

Clark posits that the innovation in Proto-Central-Pacific is the movement of the subject to the final position, and that clauses undergo three rules:

- 1) **Transitivisation:** verbs with specified objects have the transitive suffix -Ci
- 2) **Subject formation:** when there is no specified subject, the object is promoted to the role of the subject
- 3) **Object insertion:** object markers are inserted within the 'verb phrase' following -Ci

This would result in active transitive sentences undergoing 1) and 3) and passives undergoing 2) and 3). The following are therefore reconstructed for PCP, ancestral to Pattern II, as mentioned in section 2.3.

[A V-Ci O] (Obj) (Subj) (for human objects)  
 [A Vi-Ci-a] (Obj) (Subj) (for non-human objects)

(The first -Ci suffix is argued to be a transitive one, and the second a passive one.)  
 Clark reconstructs a pattern for intransitives that marks the object with i/ki (reconstructing *i* with its locative function) and leaves the S unmarked. This pattern is ancestral to Pattern I.

Post-PCP, the -Ci suffix (transitive in Clark's view) became optional, leading to Pattern III in PPN and the ergative system of PPN. It is clear that Pattern I expanded its scope in Eastern Polynesian to include transitive clauses, as mentioned in 2.3. Māori's preference for the passive pattern is therefore seen as a reflection of the fact that Pattern I is an Eastern Polynesian innovation for the canonical transitive clauses.

As clear from my predictions for -Cia and the case marking patterns, I agree with the acc-to-erg argument. The origins of -Cia as a passive suffix, e as an oblique and the

reanalysis of passives as ergatives are more logical and well-argued for in the literature. The postulated ongoing drift towards ergativity I also think is clear in the PN languages. The reconstructions of PPN as accusative, as Clark argues, and -Cia as a transitive marker are less intuitive in my opinion.

Kikusawa also defends the erg-to-acc position, discussing pronominals, as we saw in section 3.2. She believes ergativity in the pronouns to die out after PCP, whereas Ball believes the shift to accusativity to have happened beforehand. The mixed alignment of Samoan's pronominal system is taken as evidence by Ball that ergativity arose after PPN, and that these pronouns aren't conserving the ergative PPN pattern as Kikusawa believes. He theorises that the 3rd singular pronominals were reanalysed in the fashion of NPs, and 3rd plural pronominals partly so, resulting in the ergative and active alignments. It is evidently challenging to discern at what point the pronominals began shifting in function and alignment as opposed to form. I think if the PPN pronominal system was ergative then there would be more relics than just the 3rd person clitics in Samoan (and the other Samoic-Outlier languages); moreover that these clitics are relics, and that ergativity is not on the rise in this fashion within the pronominal systems within PN. The ergative PN languages seem stable with accusative pronominal systems, though perhaps Māori's accusative alignment in the positioning of its pronominals will spread to the forms of the pronominals as Māori shifts towards ergativity.

Having considered the synchronic and diachronic nature of morphological ergativity in Māori, Samoan and Tongan, the phenomenon and comparison of syntactic ergativity in PN shall now be the focus of chapters 5 and 6.

## 5. Syntactic ergativity

Chung (1978) appears to be the first to offer a little insight with regards to the relationship between case marking and possible syntactic ergativity, which she explores via examining various subject-referring rules, and via the distinction between ‘superficial’ and ‘major’ rules (see section 4.1).

In chapter 3 of her book, Chung argues at length for the ‘independent position’ on whether case marking and grammatical relations are related at all. The independent position reflects the fact that a language can have ergative case marking but accusative organisation of grammatical relations (or syntax, with reference to ‘underlying’, ‘deep’ subjects/objects, or thematic roles). Chung provides plenty of evidence of the accusative organisation of morphologically ergative PN languages through subject-referring rules, and direct object (DO)-referring rules. These rules include Equi, Raising (subject-referring), and Passive (in Māori), Object incorporation (in Samoan) and Quantifier float (in Tongan) (DO-referring). The subject-referring rules are argued to be eligible for the S/A arguments of a clause only, and not to the O or any obliques, giving an accusative syntactic alignment. This is shown to be the case in both Māori and Samoan, indicating that grammatical relations (syntax) need not match in alignment to morphology (= case marking). Equi in Māori and Samoan is exemplified below:

- 5i) Ka whakaaro **au** ki te haere  
UNS think I COMP go  
‘I decided to go.’ Māori (Waititi, 1969 in Chung 1978)

One version of the Equi rule in Māori is the ‘ki te Equi’, whereby the complementiser *ki te* deletes a target in the embedded clause that is coreferential with the controller in the higher clause. This functions like Equi-NP deletion in English – the coreferential target in the translation of (5i) is also deleted. Here, the Equi rule is clearly targeting the S argument *au*. It can likewise apply to the A argument of clause, but crucially not the O argument (or obliques); it is a subject-referring rule. This is exemplified below:

- 5ii) \*E hiahia ana a **Hōne** ki te patu (**ai**) te kōtiro  
UNS want PROG PROP John COMP hit PRON the girl  
Intended: ‘John wants the girl to hit (him)’ Māori, Chung (1978)

In (5ii), the Equi rule cannot apply to the O argument *Hōne*; deletion of pronominal copy *ai* is ungrammatical. Māori would therefore seem to have accusative grammatical relations based on the evidence of Equi. The same situation is found in morphologically ergative Samoan:

- 5iii)** Ua manana'o 'i **matou** e male i le palota  
 PERF want.PL PL we UNS win in the election  
 'We want to win in the election.' Samoan (Chung, 1978)
- 5iv)** \***Matou** te le'i manana'o e maua e leoleo  
 We UNS not want.PL UNS catch ERG police  
 'We didn't want to be caught by the police.' Samoan (Chung, 1978)

Equi in Samoan can likewise apply to S and A arguments as in (5iii), but not to O arguments (or obliques) as in (5iv). The deletion of the pronominal copy is grammatical when corresponding to S argument *matou* in (5iii), and ungrammatical when corresponding to O argument *matou* in (5iv). Samoan would therefore seem to have the same grammatical relations alignment as Māori, despite the difference in morphological alignment. The existence of rules referring just to the S/A arguments or the O argument despite case assignment argues for the independent position. Chung takes this as evidence that grammatical relations might be cross-linguistically universal, and therefore does not mention the notion of 'syntactic ergativity' at this point. She does later hint that there may exist a middle layer of structure in between grammatical relations and morphology in her discussion of 'major' vs 'superficial' rules, but it is not explicit. The rest of this section discusses more modern accounts of syntactic ergativity.

## 5.1. Background

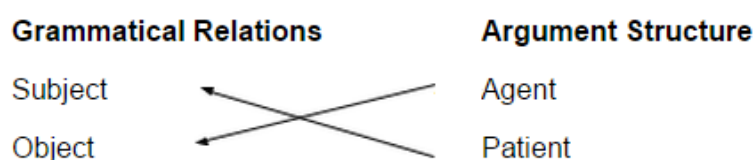
In their works, Manning (1994) and Polinsky (2016) both aim to define and describe syntactic ergativity based on their respective proposals. They are agreed on the notion of morphological ergativity, and so discuss this only quickly, before stating that the goal is to discover which characteristics a language must exhibit if it is to be labelled 'syntactically ergative'. It is through a closer inspection of various syntactic processes and their properties that the two authors provide their own definitions and subsequent typologies of syntactic ergativity, which are both unsurprisingly narrower than what was referred to as 'syntactic ergativity' in the literature before. Manning briefly considers other analyses of his so-called 'mixed-pivot' languages, and suggests how his proposal functions within various syntactic models, whereas Polinsky remains within the realm of minimalism throughout her book. Sections 5.2 and 5.3 outline each proposal and highlight how the two theories differ in terms of their definition of syntactic ergativity and the resulting theoretical typologies.

## 5.2 Manning: Ergativity: Argument Structure and Grammatical Relations

The crux of Manning's proposal is given in the title of his book. Manning tackles the issues of the notion of 'subject' in potential syntactically ergative languages by separating and assigning subject-like properties to two different 'subjects'— one sensitive to grammatical relations, and the other sensitive to the 'deeper' level of argument structure. He argues that this latter subject has cross-linguistically universal properties, and that the alignment of this level of structure is always accusative. That is, the intransitive subject (S) and the transitive subject

(A) are treated alike in syntactic processes sensitive to argument structure. This is also to say that argument structure can never align ergatively (with the S and the transitive object (O) treated equally). The level of grammatical relations, however, can align either way, meaning either the S and A or the S and O pattern together. Those languages that pattern S/O at the level of grammatical relations are the languages Manning refers to as syntactically ergative. He likewise calls them 'mixed pivot' languages, for they have the S/O pivot at the level of grammatical relations (the S displays the subject properties in intransitive sentences, and the O in transitive) and the S/A pivot at the level of argument structure. This treatment of mixed pivot/syntactically ergative languages is named the 'Inverse Analysis', depicted below. When a language displays a mapping between the agent thematic role at argument structure and the subject (S/A) at the grammatical relations level (and the patient maps on to the object), this is a direct mapping and the language is syntactically accusative. An inverse mapping occurs when the agent maps onto the object and the patient maps onto the subject, as in syntactically ergative languages. Subject properties are therefore split between the two levels of syntactic structure.

Figure 5 – Manning's Inverse Analysis



Manning moreover predicts that the existence of mixed pivot/syntactically ergative languages are predicted by this split of syntactic structure into two levels.

Inuit is given frequently by Manning as an example of a syntactically ergative language and of which syntactic processes are sensitive to which level of structure. Manning states that the 'more semantic' process of binding and the controllee of complement clauses are sensitive to argument structure, and other more structural processes such as relativisation and raising are sensitive to grammatical relations. The examples below of Inuit show clearly how S and O pattern alike in grammatical relations, and S and A are aligned in argument structure:

- 5v)**    nanuq    Piita-p    tuqu-ta-a  
           polar.bear Piita-ERG kill-TR.PART-3SG  
           'A polar bear killed by Piita' Inuit (Manning, 1994)
- 5vi)**    miiraq    kamat-tu-q  
           child.ABS angry-REL.INTR-SG  
           'The child that is angry' Inuit (Manning, 1994)
- 5vii)**    \*angut    aallaat    tigu-simaa-sa-a  
           man.ABS gun.ABS take-PRF-REL.TR-3SG.SG  
           \*'The man who took the gun' Inuit (Manning, 1994)

In (5v) and (5vi), it is the O and the S of the sentences respectively that are relativised (*nanuq* and *miiraq*). These are both grammatical, whereas the relativisation of the A argument in (5vii) (*angut*) is ungrammatical, suggesting that in Inuit, relativisation treats the S and O argument as one, and the A differently – in turn, implying an S/O pivot in Inuit grammatical relations, and syntactic ergativity. The sentences below indicate that Inuit indeed has the universal S/A pivot in its argument structure suggested by Manning.

- 5viii)** ataata-ni Juuna-p tatig(i-v)-a-a  
 father-4SG.ABS Juuna-ERG trust-IND-TR-3SG.3SG  
 ‘Juuna<sub>i</sub> trusts his<sub>i</sub> father.’ Inuit (Manning, 1994)
- 5ix)** Aani illu-mi-nut ingerla-vo-q  
 Anne.ABS house-4SG-TERM go-IND.INTR-3SG  
 ‘Anne<sub>i</sub> is going to her<sub>i</sub> house.’ Inuit (Manning, 1994)
- 5x)** \*Anaana-mi Piita nagligi-jaᅇa  
 Mother-4SG.ERG Piita.ABS love-3SG.3SG  
 \*‘His<sub>i</sub> mother loves Piita.’ Inuit (Manning, 1994)

The A and S arguments in (5viii) and (5ix) (*Juuna* and *Aani*) are able to bind possessive reflexives, but the O argument in (5x) is not.<sup>4</sup> Inuit therefore seems to display an S/A pivot with respect to argument structure, as predicted by Manning. A list of which syntactic processes are sensitive to which level of structure according to Manning is given below:

Table 13- Manning’s syntactic processes

Argument Structure	Grammatical Relations
Binding	Relativisation
Imperative addressee	Topicalisation
Controllee of adverbial and complement clauses	Focussing, cleft formation
	Wide scope
	Questions (WH)
	Quantifier float
	Coreferential omission in coordination
	Raising

<sup>4</sup> Examples (5v)-(5x) all follow Manning’s glossing.

As discussed in 4.1, Chung (1978) hinted at the possibility of such a three-tier system of morphosyntax, calling her ‘deepest’ tier ‘grammatical relations’, instead of the middle tier. Chung’s middle tier was postulated to be sensitive to the superficial rules of relativisation and question-movement, as is Manning’s middle tier in table 13. Chung does not, however, label raising as a superficial rule, but it is present as a grammatical relation for Manning. There are therefore some similarities between Chung and Manning’s ideas of levels, even if they are not identical.

Based on Manning’s proposal and discussion of syntactic ergativity, a typology of morphological and syntactic ergativity can be formed, laid out in table 14.

*Table 14- A typology of morphological and syntactic ergativity*

<b>Argument Structure</b>	<b>Grammatical Relations</b>	<b>Morphological</b>	<b>Attested</b>
Acc	Acc	Acc	Yes
Acc	Acc	Erg	Yes
Acc	Erg	Erg	Yes
Acc	Erg	Acc	No
Erg	Acc or erg	Acc or erg	No

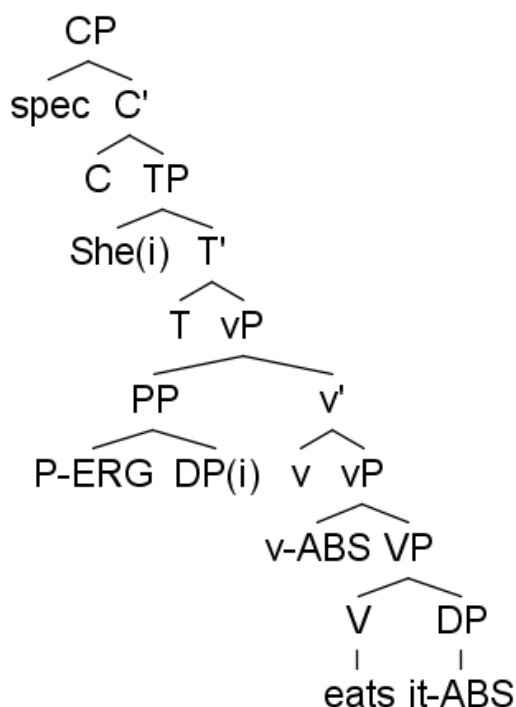
The logical possibility and attestation of the first three types of languages (completely accusative, morphologically ergative and syntactically ergative) follows from Manning’s discussion, as does the impossibility of a language with ergative argument structure. Manning, like many others, points out the interesting fact that there does not seem to be a language exhibiting syntactic ergativity and accusative morphological structure, though the focus of his discussion is not on this. Polinsky’s discussion of syntactic ergativity likewise generates a typology, which I will compare with Manning’s in the next section.

### **5.3 Polinsky: Deconstructing Ergativity: Two types of ergative languages and their features**

Polinsky’s proposal is that there are two types of ergative phrase which have their own sets of properties due to their structural differences. One is the DP-erg (determiner phrase) and the other PP-erg (prepositional phrase). It is one particular property of the PP-erg that defines syntactic ergativity for Polinsky, which is the inability of the PP-erg to undergo A-bar move whilst leaving a gap at the extraction site. She also argues that relativisation is the most reliable example of A-bar movement, though other processes including A-bar are of course attested in languages. Throughout her book, Polinsky discusses a wide range of correlated properties of the DP- and PP-erg, subsuming many of the processes included by Chung and Manning under A-bar and A-movement. This strongly indicates that Chung and Manning’s

earlier ideas of syntactic ergativity were insightful and in line with current thinking. The structure and case-assigning of the two types of ergative phrase are depicted in figure 6 below.

Figure 6- Polinsky's structure of the DP- and PP-ergative phrases



In the structure, the subject *she* is base-generated at the spec of vP and is said to inherently accept ergative case from the P (if English had PP-ergs; the use of English is only for clarity). The absolutive object at the complement of the verb gets its case from the functional head v. In the case of DP-erg languages, there is no PP at the spec of vP, and ergative case is licensed by the v(oice) functional head, here at the spec of v' position. Polinsky describes PP-ergs as inherently ergative, whilst DP-ergs only exhibit structural ergativity. She argues that it is because of the varying properties of PPs and DPs that there are two types of ergative, which behave in different ways. Only if a language cannot A-bar move its PP-erg with a gap can it have syntactic ergativity, meaning a DP-erg language cannot be syntactically ergative, nor can a PP-erg language with the ability to pied-pipe its overt P.

The comparison of English sentences (5xi) and (5xii) show the difference between relativising with and without an overt preposition:

- 5xi) \*the boy<sub>i</sub> [whom I gave t<sub>i</sub> a book]
- 5xii) the boy<sub>i</sub> [to whom<sub>i</sub> I gave a book t<sub>i</sub>] (own knowledge)

When relativising *the boy* from the sentence *I gave the boy a book* (no preposition), the grammaticality is at best questionable. Relativising *the boy* from the sentence *I gave a book to the boy* however, is grammatical, and preposition *to* is pied-piped. PP-erg languages with such overt prepositions may be able to pied-pipe also, meaning not all PP-erg languages



display syntactic ergativity. Polinsky shows how, often, a resumptive pronoun is needed when a PP-erg is extracted under A-bar movement. Similarly, she exemplifies how PP-ergs cannot undergo A-movement either, in processes such as raising. Polinsky argues that this behaviour is due to the PP-erg patterning like ‘normal’ prepositional phrases– that they do not participate in raising or control because they are not DPs. Her long list of features associated with PP-ergs and DP-ergs is given below:

*Table 15- Polinsky’s characteristics of PP- and DP-ergs*

<b>Property</b>	<b>PP-erg</b>	<b>DP-erg</b>
Ergative can A-bar move with a gap	No	Yes
Requires a resumptive	Yes	No
Ergative can serve as the pivot of a cleft	No	Yes
Ergative can bind dedicated anaphors	No	Yes
Ergative can determine agreement	Only if absolutive also can	Yes
Ergative is accessible to A-movement	No	Yes
Ergative can be subject of a control complement	No	Yes
Language has non-canonical subjects	No	No prediction
High incidence of verb-initial orders	Yes	No
Ergative can float quantifiers and licence depictives	No/dispreferred	Yes

If one were to compare the two proposals of syntactic ergativity, it seems that the equivalent of Manning’s mixed pivot language in Polinsky’s proposal would be a language with PP-ergs and syntactic ergativity, and a syntactically accusative language would be a language with PP-ergs and pied-piping, or a DP-erg language. There is therefore no straightforward mapping between the DP-erg properties and the grammatical relations processes on the one hand, and between PP-erg properties and the argument structure processes on the other hand. If PP-erg equalled syntactic ergativity in Polinsky’s definition (and not just a lack of A-bar movement), there might be a more direct mapping – that is, the list of grammatical

relations processes would be the same processes as the DP-erg can undergo/be a part of. Looking at the contents of the lists, a lot of the grammatical relations processes are A-bar and A-movement processes, both of which do not apply to the PP-erg and *do* apply to the DP-erg. The biggest difference now appears to be the presence of binding and control on Manning's argument structure processes list, and the fact that PP-ergs can at least not bind dedicated anaphors, nor be the subject of a control complement. It would seem from this comparison that such processes can in fact have an S/O pivot, leading to problems for Manning's proposal. The two ultimately, of course, differ as to what parts of their typology they label 'syntactically ergative' – hence the discrepancy previously mentioned.

Polinsky also discusses the current suggestions of the origins of PP-ergs and syntactic ergativity. In terms of her proposal, questions arise, such as how a language shifts from one type to another. She notes that her examples are of languages shifting from PP to DP, but that there is no reason why it cannot occur the other way around. Polinsky is cautious when exploring and ordering the stages in which the proposed shifting happens, implying the diachrony of PP-erg and syntactic ergativity is relatively unexplored. A greater knowledge and understanding of the nature in which a language can change in its syntactic alignment through further research would be very useful in accounting for and understanding languages that don't seem to fall neatly into one type (one which might be 'half-syntactically accusative' and 'half-syntactically ergative'). Moreover, it may provide answers as to why there seem to be correlates with certain types and why there seem to be no languages with syntactic ergativity and morphological accusativity.

The syntactic processes involved in the proposals of syntactic ergativity are the focus of chapter 6, specifically their nature in Māori, Samoan and Tongan. From the results, one should discover whether any of them are syntactically ergative by Manning or Polinsky's definitions.

## 6. Syntactic ergativity in Māori, Samoan and Tongan

In this section, I have chosen 4 features concerning syntactic ergativity to focus on researching within Māori, Samoan and Tongan: WH-questions, relativisation, raising and binding. The first two are processes of A-bar movement, and the latter two A-movement.

### 6.1 WH-questions

The following examples from Bauer (1997) demonstrate the extraction (or A-bar movement) of the surface subject (the S argument) of a passive sentence and of the A argument in Māori:

**6i)** He aha i muru-a e te tangata (\*he aha)  
what T plunder-PASS by the man  
'What was repossessed by the man?' Māori (Bauer, 1997)

**6ii)** Nā wai i here atu te kurī?  
belong who T/A tie away the dog  
'Who tied up the dog?' Māori (Bauer, 1997)

It appears that the S argument *he aha* in (6i) and A argument *nā wai* in (6ii) have successfully been extracted from their base-generated positions to an A-bar position (spec of CP) to form a WH-question. The ungrammaticality of *he aha* at the end of (6i) indicates that the S and A arguments must be A-bar moved with a gap, which by Polinsky's (2016) definition, does not constitute syntactic ergativity. Explicit examples of surface object A-bar extraction in WH-questions are yet to be found, hinting at a general lack of research into the nature of the syntactic processes in the Polynesian languages. Statements concerning alignment are often asserted without an abundance of exemplifying sentences. Having said this, the ability of Māori to extract both the S and the A arguments with a gap suggests that Māori is syntactically accusative. This is to be expected, as Māori of course does not exhibit any morphological ergativity via case marking or pronominal system (except in pronominal positioning).

Tongan, unlike Māori, does exhibit syntactic ergativity through the inability to A-bar move the ergative argument (A) and leave a gap in WH-questions (and through other phenomena):

**6iii)** Ko e haa<sub>i</sub> 'oku lava 'e Sione 'o omi t<sub>i</sub>?  
PRED DEF what PRS able ERG Sione and bring  
'What can Sione bring?' Tongan (Otsuka, 2006)  
(irrelevant parts omitted)

**6iv)** [<sub>PreDP</sub> Ko e há] [<sub>DP</sub>(e me'a) [<sub>CP</sub> 'oku ako'i (\*ai) 'e he faiako]]?  
 KO DET what.DEF DET thing PRS teach RP ERG DET teacher  
 'What is it that the teacher is teaching/teaches?' Tongan (Polinsky 2016)

**6v)** [<sub>PreDP</sub> Ko hai] [<sub>DP</sub>[<sub>CP</sub> 'oku \*(ne) ako'i 'a e lea faka-Tonga]]?  
 KO who PRS 3SG.CL teach ABS DET language Tongan  
 'Who is teaching/teaches the Tongan language?'  
 (lit. who is it that is teaching/teaches the Tongan language)  
 Tongan (Polinsky, 2016)

Starting with the O argument, (6iii) clearly illustrates the grammatical A-bar movement of the questioned absolutive O argument *e haa* from the underlying object position (the position of the trace). Polinsky (2016) details how WH-questions in Tongan involve relativisation via pseudo-clefts. She states that questioned absolutive arguments (S and O) can undergo A-bar movement with a gap, as seen previously and in (6iv) *e ha*. It is ungrammatical for these arguments to move and leave a resumptive pronoun such as *ai*. The ergative argument on the other hand (A) cannot A-bar move without leaving a resumptive element, specifically a subject clitic. This is exemplified in Polinsky's example (6v), in which the ergative argument *hai* cannot be A-bar moved without the resumptive *ne*.

Collins (2013) states that wherever the A is extracted via A-bar movement in Samoan, the verb takes a suffix *-a* or *-ina*.

**6vi)** ['o fafine lava ma teine] e fai-a togāufi  
 TOP woman EMP and girl PRS do-INA yam.garden  
 'It is those very women and the girls who tend to the yam garden.'  
 Samoan (Mosel and Hovdhaugen, 1992 in Collins, 2013)

The example in (6vi) is topicalisation, another A-bar movement, as no examples of Samoan WH-movement at all could be found. This possibly indicates that the extraction of the S and O arguments do not require the verb to take this predicate, meaning they are treated alike, and differently from the A argument. The A argument in (6vi) does seem to move with a gap, yet Collins calls this movement an ergative property. As will be seen in 6.2, there seems to be much more available data for relativisation in both Samoan and Tongan, which may be why data is scarce for WH-questions (as both employ the same, A-bar movement). Clearly, access to more (or any) examples of WH-movement in the PN languages would greatly aid the accuracy and predictive power of discussions such as this; one may assume that Samoan exhibits syntactic ergativity via WH-movement, however the evidence is very lacking.

## 6.2 Relativisation

Harlow (2007) gives a detailed description of each of the Māori relativisation strategies, each involving the same A-bar movement occurring in WH-questions. Which strategy is used

depends upon the ‘properties of the clause being used to modify the antecedent’ and the target of the relativisation. Like in English, the relative clause always follows the antecedent in Māori, however there are no such relative pronouns.

**6vii)** Koirā anake te waiata [e mōhio ana ia Ø]  
 There.is only DET song T/A know T/A 3SG OBJ.  
 ‘That’s the only song s/he knows.’ Māori (Harlow, 2007)

**6viii)** Tokomaha ngā tāngata [i tae mai ki te hui]  
 Many DET people T/A arrive DIR PREP DET meeting  
 ‘Many people came to the meeting’  
 (lit. The people who came to the meeting were many) Māori (Harlow, 2007)

The first strategy, ‘zero strategy’, is A-bar movement leaving a gap, and affects all subjects (S and A), sometimes the possessor of the subject of the clause and interestingly the object of a middle verb. The extraction of the latter is exemplified in (6vii), in which the O argument *te waiata* has moved from its original position (Ø) to the A-bar position spec of CP. Extraction of the S argument *nga tāngata* is shown in (6viii).

The ‘pronoun strategy’ occurs for indirect objects and also agents of actor emphatic predicates, and features the inclusion of the resumptive pronoun or the anaphoric locative pro-form *reira*. The ‘*ai* strategy’ affects passives, neuter verbs, adjuncts, locatives and agents of neuter verbs. The final strategy, ‘possessor strategy’, applies to direct objects (the O argument) and a range of oblique adjuncts (Chung, 2013). Chung adds that the nominative DP (S and A) can also be relativised in passives and actor-emphatic clauses. S and A arguments can therefore be relativised via A-bar movement with a gap, but O NPs must be relativised via a resumptive pronoun. In this way, Māori does not feature syntactic ergativity in its relativisation strategies, as with the WH-questions.

Otsuka (2006) gives examples of the relativisation of all three core arguments in Tongan. The pattern found for WH-questions follows, whereby the S and O arguments are able to A-bar move with a gap, and the A (ergative) is not.

**6ix)** e fefine [OP<sub>i</sub> na’e ‘alu t<sub>i</sub> ki Tonga]]  
 DEF woman PST go to Tonga  
 ‘The woman who went to Tonga’ Tongan (Otsuka, 2006)

**6x)** e fefine [OP<sub>i</sub> [‘oku ‘ofa’i ‘e Sione t<sub>i</sub>]]  
 DEF woman PRS love ERG Sione  
 ‘The woman whom Sione loves’ Tongan (Otsuka, 2006)

**6xi)** \*e siana [OP<sub>i</sub> [na'e langa t<sub>i</sub> 'a e fale]]  
 DEF man PST build ABS DEF house  
 Intended: 'The man who built the house' Tongan (Otsuka, 2006)

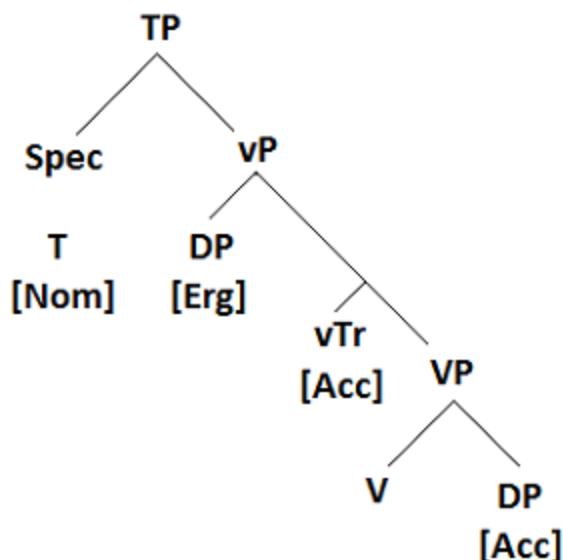
**6xii)** e siana [OP<sub>i</sub> [na'a ne<sub>i</sub> langa 'a e fale]]  
 DEF man PST 3SG build ABS DEF house  
 'The man who built the house' Tongan (Otsuka, 2006)

(6ix) and (6x) show the ability of Tongan to relativise its S and O arguments (respectively) leaving a trace, which is marked in the examples. The S argument in (6ix) *e fefine* has A-bar moved from its original post-verbal position (Tongan has basic VSO order) and the O argument in (6x) *e fefine* has likewise A-bar moved, this time from its original object position after the subject *Sione*. Ungrammatical (6xi) and grammatical (6xii) demonstrate the inability of the A (ergative) argument (*e siana* in both) to A-bar move with a gap; ergative DPs must leave behind a resumptive pronoun (*ne*). Locatives likewise cannot be relativised without a resumptive pronoun.

Although Samoan is well known as exhibiting syntactic ergativity like Tongan, there are few examples found so far in the literature (Chung (1978) includes some). It is perhaps the case that Tongan is treated as the token syntactically ergative language, and Tongan examples are therefore used to represent the state of affairs in both Tongan and Samoan. I can understand why this is less problematic in discussions that are not comparing the two, as I am attempting here.

The inclusion of verbal suffix *-ina* is of course relevant here again, as it supposedly surfaces whenever the A argument is extracted to the left of the verb (via relativisation as well as WH-movement), according to Collins (2013). In the same paper, Collins goes on to postulate that Samoan actually covertly displays three syntactic cases, as opposed to two. He argues that the morphological absolutive case (unmarked) on the S argument is actually syntactically nominative, and the same case (also unmarked) on the O argument is actually syntactically accusative. This gives a tripartite syntactic case system for Samoan, featuring the nominative, ergative and accusative. As this theory concerns the absolutive S and O arguments, and not the ergative A argument, it does not contradict Polinsky's proposal of syntactic ergativity. Figure 7 below shows the relative position of each of the structural cases:

Figure 7- Collins' (2013) position of the structural cases in Samoan



Tollan and Clemens (2016) believe that the ergative is an inherent case assigned by little *v* (voice) to the external argument at the spec of *vP*, and that the absolutive case is assigned by *T*. For the direct object, this means a movement into local configuration with the *T* from the comp of *VP* position (as in figure 7). An alternative explanation of why syntactic ergativity should occur follows. Some languages such as Tongan assign 'high absolutive' at *T* (the syntactic nominative in Collins), preceding the ergative marking further down the structure. The movement of the absolutive to get case at the *vP* phase edge traps the ergative argument, which is then unable to extract (A-bar move) freely to spec of *CP*. This is due to what would result in crossed dependencies – the ergative would have to cross the path of movement of the absolutive. Some languages assign 'low absolutive' after the ergative marking, meaning the ergative can freely extract to spec of *CP* without crossing the movement path of the absolutive lower down. The assigning of 'high absolutive' is therefore how syntactic ergativity arises in the opinion of Tollan and Clemens (and in the 'split absolutive' approach of Collins (2013)). This crossed dependency theory in my opinion is simple and satisfying, giving a structural reason for the otherwise strange or unsure definition of syntactic ergativity.

Though evidence of the A-bar movements WH-questions and relativisation is rather lacking, what data there are indicate that Māori does not exhibit syntactic ergativity in Polinsky's definition, and that Samoan and Tongan do. 6.3 and 6.4 examine raising and binding, two A-movement processes.





(6xvi) and (6xvii) below respectively demonstrate how Māori's raising rule cannot apply to the O argument nor agents in passive clauses:

**6xvi)** \*Kāhore (i) te poaka i patu ai a Hōne  
 Not ACC the pig PST kill PRON PROP John  
 Intended: 'John didn't kill the pig.' Māori (Chung, 1978)

**6xvii)** \*Kāhore (e) ngā tāngata kia kite-a (ai) rāua  
 Not AGT the.PL people SBJ see-PASS PRON they.DU  
 Intended: 'The people didn't see them.' Māori (Chung, 1978)

The accusative *te poaka* in (6xvi) cannot be raised, nor can the agent *ngā tāngata* in (6xviii). This indicates that raising is sensitive to the surface level of structure, grammatical relations, rather than argument structure. The rule, as with Māori's A-bar movement processes, clearly affects the surface S and A arguments but not the surface O argument. This rule therefore exhibits an accusative alignment in Māori.

Chung (1978) gives a similar overview for Tongan raising as the description detailed above for Māori, stating Tongan raising is also equal to English's subject-to-subject raising and employs modal verbs in the process such as *lava* 'be possible, able, manage'. The rule also only applies to the S and A arguments and not the O arguments, meaning there is not a one-to-one mapping between morphological case and syntactic case for Tongan. Polinsky discusses the differences between the English subject to subject raising rule and Tongan's. She argues that Tongan does not exhibit 'true raising', but only 'apparent raising', whereby the rule can skip clauses, target non-subject arguments of the complement clause and leave behind a pronominal copy. Furthermore, PP-ergs (found in syntactically ergative languages such as Tongan) by nature should not be able to undergo raising, in Polinsky's view. From (6xviii) to (6xix) below, the S argument *Sione* has undergone apparent raising:

**6xviii)** 'Oku totonu pē [ke 'alu 'a Sione.]  
 PRS be.advisable EMP SBJ go ABS John  
 'It is advisable that John go.' Tongan (Polinsky, 2016)

**6xix)** 'Oku totonu 'a Sione [ke 'alu (\*'a ia)].  
 PRS be.advisable ABS John SBV go ABS 3SG  
 'It is advisable that John go.'  
 (lit: John is advisable that go) Tongan (Polinsky, 2016)

(6xx) and (6xxi) indicate that the absolutive O argument can also undergo apparent raising in Tongan:

**6xx)** 'Oku mahu'inga [ke ako'i 'e he faiako 'a e lea faka-Tonga].  
 PRS be.important SBJV teach ERG DET teacher ABS det language Tongan  
 'It is important that the teacher teach the Tongan language.' Tongan (Polinsky, 2016)

**6xxi)** 'Oku mahu'inga 'a e lea faka-Tonga [ke ako'i] 'e he faiako  
 PRS be.important ABS DET language Tongan SBJV teach ERG DET teacher  
 (\*'a ia)]  
 ABS 3SG  
 'It is important that the teacher teach the Tongan language.'  
 Lit: the Tongan language it is important that the teacher teach  
 Tongan (Polinsky, 2016)

The O argument *e lea faka-Tonga* has raised to the subject position of the matrix clause in (6xxi) (which is not accepted by all speakers). (6xx) and (6xxi) also indicate that the raising of the S and O (absolute arguments) must leave a gap at the site of extraction, as opposed to a resumptive pronoun. It is ungrammatical therefore to leave behind the third person pronoun *ia* (with absolute case marking 'a) in both of these sentences. The ergative argument, however, must be raised and leave a resumptive pronoun:

**6xxii)** 'Oku mahu'inga 'a e faiako<sub>i</sub> [<sub>CP</sub> OP<sub>i</sub> ke ne<sub>i</sub> ako'i 'a e lea  
 PRS be.important ABS DET teacher SBJV 3SG.CL teach ABS DET language  
 faka-Tonga]  
 Tongan  
 'It is important that the teacher teach the Tongan language.'  
 Lit: the teacher is important that he teach the Tongan language  
 Tongan (Polinsky, 2016)

The ergative argument 'e *he faiako* is raised to the subject position of the matrix clause in (6xxii), and takes the absolute morphological marking. It has to leave behind the resumptive pronoun *ne* which is a subject clitic; it is ungrammatical without this resumption. In this way, the restriction on the ergative argument in terms of apparent raising in Tongan mirrors the restriction on it for A-bar movement despite being a traditional A-movement process.

Chung (1978) again states that Samoan's raising rule is equal to that of English's subject to subject raising rule, as were Māori's and Tongan's. She provides evidence for the availability of the S and A arguments to raise but not the O, indicating like Tongan that there is not a one to one mapping between morphological case and structural case. Polinsky (2013) refers to Mosel and Hovdhaugen (1992) who argue that Samoan's raising rule is copy-raising rather than true raising and also differs from the English rule.

## 6.4 Binding

Polinsky (2013) does not use binding as a feature to be considered when determining whether or not a language has syntactic ergativity. She postulates that the ergative DP should be able to bind anaphoric pronouns in the absolutive position, but the binding out of an ergative PP (which syntactically ergative languages employ) should not be possible as stated in Binding Theory.

**6xxiii)** I hoatu te tama o Hōne i te kai mā-na (anake)  
PST give the son of John ACC the food DAT-3SG SF  
'John's son<sub>i</sub> gave him<sub>i</sub> the food.'  
Māori (Finn, 2015)

**6xxiv)** I hoatu te tama o Hōne i te kai mā-na  
PST give the son of John ACC the food DAT-3SG  
'John's<sub>i</sub> son gave him<sub>i</sub> the food.'  
Māori (Finn, 2015)

(6xxiii) and (6xxiv) feature the Māori A arguments *te tama o Hōne* (and *Hōne*) binding pronouns and upholding Principle B of the Binding Principles: the antecedents are not local, nor do they c-command the pronouns (in either). From just these sentences, it would appear that Māori's binding obeys at least one of the principles of Binding Theory. It does also not contradict Polinsky's prediction concerning DPs and binding.

Tongan lacks overt anaphors, which immediately indicates that the Binding Principles do not accurately account for binding in this language (Dukes 1996). Polinsky (2016) details how Tongan uses the emphatic particle *pē* to indicate a reflexive interpretation, which is placed typically after the main verb (though sometimes after the demonstrative or pronoun that needs to be interpreted as coreferential with another expression):

**6xxv)** Na'e hifi pē 'e he tangata<sub>i</sub> ('a) ia<sub>(i/j)</sub>  
PST cut EMP ERG DET man ABS 3SG  
'The man cut himself.'  
'The man cut him.'  
'The man only cut him.'  
'The man cut only him.'  
Tongan (Polinsky, 2016)

The structure of (6xxv) can indicate a reflexive interpretation, but several other readings can be drawn from the same sentence (such as the man cutting someone else). Binding therefore seems sensitive to the linear order of the arguments as well as the hierarchical structure of the arguments:

**6xxvi)** Na'e hifi pē 'e ia 'a e tangata  
 PST cut EMP ERG 3SG ABS DET man  
 'He (only) cut the man.'  
 NOT 'The man cut himself.' Tongan (Polinsky, 2016)

The second reading, 'The man cut himself', cannot be drawn in (6xxvi) as the pronoun *ia* is preceding the would-be antecedent *'a e tangata*.

The emphatic particle *pē* isn't even necessary for a bound relationship to be inferred:

**6xxvii)** Na'e to'o 'e Mele<sub>i</sub> 'a e pa'anga meite ia<sub>(i<sub>j</sub>)</sub>  
 PST take ERG Mary ABS DET money from 3SG  
 'Mary took the money away from herself/from him/her.'  
 Tongan (Polinsky, 2016)

There is therefore no strict structural binding found in Tongan; bound readings can be established across clausal domains. According to Polinsky (2016), this indicates that such readings are determined by coreference rather than purely structural relations such as the Binding Principles.

Mosel and Hovdhaugen (1992) state that Samoan also lacks reflexive constructions or verbs. Instead, it makes use of lexically specified reflexives such as *ta'ele* ('battle') and causative verbs such as *fa'apa'ū* ('fell') or periphrastic expressions (Polinsky, 2016):

**6xxviii)** Na fa'a-pa'ū e le tamaloa ke lā'au  
 PST CAUS-fall ERG DET man DET tree  
 'The man felled the tree.'  
 Samoan (Mosel and Hovdhaugen, 1992 in Polinsky, 2016)

**6xxix)** Na fa'a-pa'ū le teine i le moega  
 PST CAUS-fall DET girl LOC DET bed  
 'The girl threw herself onto the bed.'  
 Samoan (Mosel and Hovdhaugen, 1992 in Polinsky, 2016)

The second, non-ergative sentence (6xxix) features a 'non-ergative' argument with a reflexive interpretation on the verb. Samoan would appear to lack anaphors ('herself') also. Though binding interpretive relations seem very free, as in Tongan, there are some restrictions according to Polinsky (2016). Non-anaphoric binding still obeys the structural hierarchy of the antecedent needing to be structurally superior. In such PP-erg languages as Tongan and Samoan, Polinsky maintains that binding theory is not violated, it just does not apply. The data on Tongan and Samoan binding do seem to agree with the assertion that PPs cannot be bound out of, but DPs can, leading to more interpretive/contextual reflexive readings as opposed to structural binding in syntactically ergative languages.

Neither raising nor binding appear to be very good points of comparison concerning Samoan and Tongan, as these languages do not employ true raising nor make use of the binding principles. The lack of adequate examples of each A-bar and A-movement in each of the three languages indicates to me a hole in our understanding of this area. Although the literature generally states, for instance, that Samoan and Tongan are syntactically ergative, specific examples may illustrate a more complex and interesting situation. Evidence may show that Samoan does not exhibit syntactic ergativity via WH-movement, for example, which would prompt the need to adapt current theories of syntactic ergativity. From the available examples nevertheless, it would seem that Māori exhibits no kind of syntactic ergativity, and that Samoan and Tongan do. This information is compared with the case marking and pronominal alignments discussed in chapters 1, 2 and 3 in the conclusion. Possible predictions of the future of the PN systems are postulated also.

## Conclusion

Throughout this thesis, the nature of ergativity and the current morphological and syntactic alignments of PN have been examined and reviewed. Māori represents the EP subgroup of PN in the discussion, Samoan the Samoic-Outlier subgroup and Tongan the Tongic subgroup.

Table 10 is repeated below, showing the current alignments of the case marking and pronominal systems of Māori, Samoan and Tongan (see chapters 1, 2 and 3).

	Case marking		Pronominals
	Canonical transitive clauses	Middle clauses	
<b>Māori</b>	Acc	Acc	Neutral form, acc positioning
<b>Samoan</b>	Erg	Acc	Acc (1+2), Act (3 pl.), Erg (3 sg.), acc positioning
<b>Tongan</b>	Erg	Acc	Acc form, acc positioning

Māori and the EP languages are said to be accusative in the literature, and this has been supported by the findings here. Both the canonical transitive and the middle clauses exhibit accusative alignment, as does the positioning of the pronominals. The forms however are not accusative, but neutral (meaning the same form is used for the S, A and O first person singular, for instance). Considering Samoan and Tongan both exhibit accusative pronominal forms, it would be possible for Māori and maybe the other EP languages to become even more morphologically accusative. Samoan and Tongan both exhibit ergative canonical transitive clauses and accusative middle clauses, as well as (mostly) accusative pronominal systems in form and positioning. Predictions based on these synchronic alignments are given in 1.3, 2.3 and 3.2.

The discussion of Manning's (1994) account of syntactic ergativity predicted Māori to show no syntactic ergativity, as languages with morphological accusativity and syntactic ergativity are not attested. Māori indeed showed a clear accusative alignment in chapter 6. Samoan and Tongan both exhibit syntactic ergativity in both Manning's (1994) and Polinsky's (2016) definitions due to the inability of the PP-ergative to A-bar move leaving a gap at the extraction site. Neither of these languages appear to employ true raising nor the binding principles as in English, though this does not detract from Polinsky's definition of syntactic ergativity. The lack of data or even discussion on the syntactic alignments of the PN languages indicates that more research needs to be conducted to explore the exact nature of A-bar and A-movement within PN.

In terms of the relationship between morphological and syntactic ergativity, I think it very likely that the two are linked. Chung's (1978) tests on Pukapukan suggest that a language can exhibit morphological ergativity but accusative grammatical relations. I agree that it seems plausible that in the change from accusativity to ergativity, morphology is affected first. The switch in morphology on the surface I believe can influence the shift in alignment of (deeper down) grammatical relations too, as Chung suggests this occurs gradually for the sake of mutual intelligibility. Samoan and Tongan are not fully morphologically ergative yet, as they still employ pattern I in middle clauses and Pattern II. As they continue to shift towards the ergative (in my predictions and in Hohepa's 1969 drift theory), the grammatical relations could well follow suit and shift towards the ergative too. Polinsky (2016) describes how the shift from DP-erg to PP-erg can occur, though Samoan and Tongan already seem to have PP-ergs. In this way, the prediction of a shift to ergative that the morphological reconstructions in 1.3, 2.3 and 3.2 predict could apply to the syntax of PN too.

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