

Absolutive movement in Polynesian:

Syntactic ergativity and postverbal word order variation

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presenting joint work with

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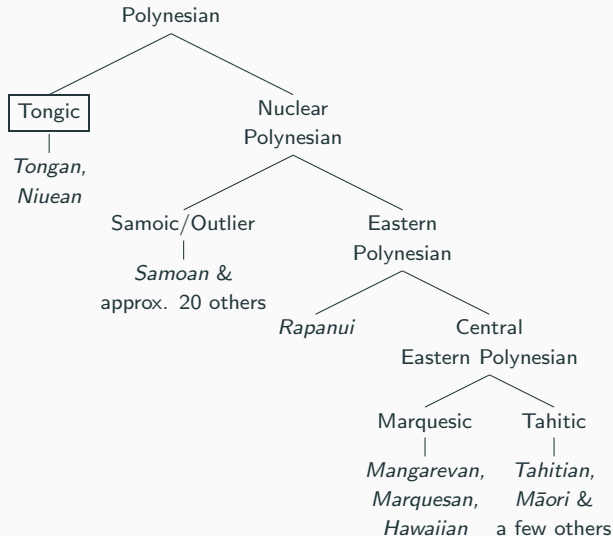
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Introduction

Tongic family

(1) Polynesian language family (based on Lynch et al. 2003)



(2) TONGIC extraction and word order patterns

	Syntactic ergativity	Word order variation
TONGAN	✓	✓
NIUEAN	✗	✗

Goals for today's talk

1. Argue that T^0 is the locus of ABS for Tongan while v^0 for Niuean (with new support from coordination)
2. Present an account of syntactic ergativity based on the grammaticalization of a (processing-based) preference for nested as compared to crossed dependencies (Tollan 2019; Tollan & Clemens 2020; Clemens & Tollan to appear)
3. Connect the location of ABS to the availability of VOS order

1. Introduction
2. Ergativity data
3. ERG extraction restrictions & ABS case
4. Ergativity and crossed dependencies
5. Word order and the locus of ABS
6. More on the locus of ABS
7. Conclusion

Ergativity data

(3) TONGIC case markers

		ABSOLUTIVE	ERGATIVE
PROTO-TONGIC		*a	*e
TONGAN		'a	'e
NIUEAN	common	e	he
	proper/pronoun	a	e

- (4) a. Na'e 'alu 'a Sione.
PST go ABS Sione
'Sione went.'
- b. Na'e kai 'e Sione 'a e mango.
PST eat ERG Sione ABS DEF mango
'Sione ate the mango.'

(Otsuka 2000:50)

Morphological ergativity: Niuean

(5) Common noun series

a. Ne fano e **tehina haaku.**

PST go ABS brother POSS

'My little brother went.'

b. Ne kai he puti ia e **moa.**

PST eat ERG cat DEM ABS chicken

'That cat ate the chicken.'

(Seiter 1980:29)

(6) Proper noun/pronoun series

a. Ne fano a **au.**

PST go ABS 1SG

'I went.'

b. Ne kitia e Sione a **koe.**

PST see ERG Sione ABS 2SG

'Sione saw you.'

fieldnotes

- In a subset of morphologically ergative languages, ergative subjects are unable to undergo one or more types of A'-movement
- These languages are described as syntactically ergative (see Deal 2016 and Polinsky 2017 for recent overviews on syntactic ergativity)
- The Tongic languages differ on this dimension:
 - Tongan has ergative subject extraction restrictions
 - Niuean does not

Only absolutive arguments relativize with a gap in Tongan (Otsuka 2000):

- (7) a. e fefine; [RC 'oku 'ofa'i 'e Sione ___i].
DEF woman PRS love ERG Sione
'the woman whom Sione loves'
- b. e fefine; [RC 'oku *(ne); 'ofa'i 'a Sione].
DEF woman PRS RP love ABS Sione
'the woman who loves Sione' (Otsuka 2000:116)

In Niuean, both absolutive and ergative arguments relativize with a gap (Seiter 1980, Longenbaugh & Polinsky 2018):

- (8) a. e tagata; [ne moto e koe ___;].
ABS person NFT punch ERG 2SG
'the person who you punched'
- b. e tagata; [ka kai ___; e talo].
ABS person FUT eat ABS taro
'the person who will eat the taro' (approx. Seiter 1980:94)

Additional indication that Tongan is a syntactically ergative language comes from Polynesian's so-called raising construction

- Important for our purposes is that this construction involves an argument that surfaces in one clause and is interpreted in another

- (9) a. 'oku totonu 'a e tamaiki pau'u_i [ke taa'i 'e he faiako _____i].
PRS advisable ABS children naughty COMP hit ERG teacher
'It is advisable that the teacher hit the naughty children.'
- b. *'oku totonu 'a e faiako_i [ke taa'i _____i 'a e tamaiki pau'u].
PRS advisable ABS teacher COMP hit ABS children naughty
Intended: It is advisable that the teacher hit the naughty children.
(approx. Otsuka 2000:183)

Unlike in Tongan, the Niuean raising construction does not differentiate between absolutive and ergative arguments

- (10) a. To maeke **e tama**_i [ke lagomatai he ekekafo ____i].
FUT possible ABS child SBJ help ERG doctor
'The doctor could help the child.'
- b. To maeke **e ekekafo**_i [ke lagomatai ____i **e tama**].
FUT possible ABS doctor SBJ help ABS child
'The doctor could help the child.' (Seiter 1980:158)

1. Tongan displays both morphological and syntactic ergativity
2. Niuean does not show any of the telltale signs of syntactic ergativity

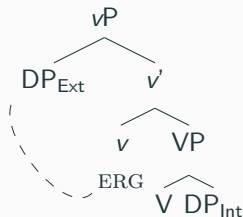
The next two sections develop an account of syntactic ergativity, which we will then extend to postverbal word order variation

ERG extraction restrictions & ABS case

Ergative case assignment applies uniformly for Tongan and Niuean

- Assigned by v^0 to the external argument (Woolford 1997; Legate 2002; 2008; Alridge 2004; Collins 2014; pace Otsuka 2010)

(11) Tongic ERG assignment



The locus of ABS is a point of cross-linguistic variation (Campana 1992; Bittner & Hale 1996; Aldridge 2004; Legate 2008; Coon et al. 2014; Coon et al. 2019):

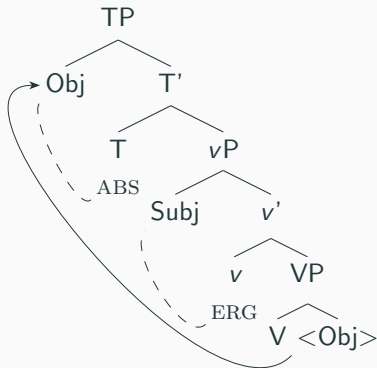
- For Tongan, the would-be ABS argument moves to T^0 for case
- For Niuean, ABS case is assigned *in situ* (Massam 2006)

Absolute case: Tongan

For Tongan, ABS is assigned locally by T^0 :

- DOs move past the ERG DP to be local with T^0 and get ABS case.
- **The ERG DP is now trapped in its base-generated position.**

(12) TONGAN ABS assignment



The position of the ABS argument relative to the ERG argument renders the ERG argument inaccessible:

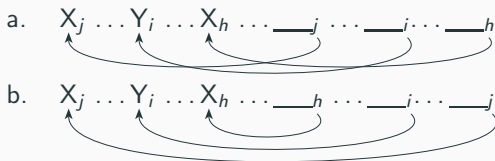
- Used to account for ergative extraction restrictions in a diverse range of unrelated ergative-absolutive languages e.g. Dyirbal (Bittner & Hale 1996); Seediq and Tagalog (Aldridge 2004); Mayan (Coon et al. 2014; Coon et al. 2019); West Circassian (Ershova 2019); a.o.
- Related proposals differ in terms of the specific constellation of facts they explain and the mechanisms they invoke

Ergativity and crossed dependencies

Nested vs. crossed dependencies

Many have noted that **nested dependencies are more common** cross-linguistically than crossed dependencies (Hays 1964; Shieber 1985; Kruijff 2003; Levy 2004; Ferrer 2018):

(13) crossed and nested dependencies



Explanations for typological trends

- **Processing literature:** evidence that crossed dependencies incur a greater cost when compared to nested dependencies (Fodor 1978; Frazier & Fodor 1978; Rochemont & Culicover 1990; Pickering & Barry 1991; pace Bach et al. 1986, see Tollan & Clemens 2020)
- **Pre-minimalist theories:** different configurational paths of movement (Kayne 1981; Pesetsky 1982) and the resulting surface outputs yielded by those paths (Hankamer 1973)
- One formalization with a lot traction is known as the CCD (Kuno & Robinson 1972; Steedman 1985) or the **CONSTRAINT ON CROSSING DEPENDENCIES**, which posits that no movement dependency may cross another movement dependency

We take this constraint to apply to the interaction between A- and A'-movement chains

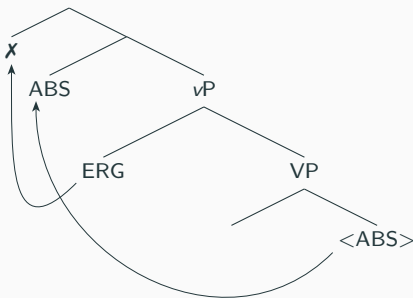
On our view, the CCD is a general processing constraint which presents differently in the context of the grammar of different languages

- Certain languages have a fully grammaticalized version of the CCD
- A subset are 'high' ABS, and in those languages, the extraction of the ERG argument would result in an ill-formed crossed dependency (Tollan 2019; Tollan & Clemens 2020; Clemens & Tollan to appear)

Blocking ergative extraction in high ABS languages

We can reduce ergative extraction restrictions in Tongan (and Mayan) to the grammaticalization of the CCD

- If the ABS argument moves past the ERG argument for case; A'-movement of the ERG argument would cross the A-movement path of the ABS argument
- As crossed dependencies are dispreferred; movement of the ERG argument is disallowed



Benefits of our approach

Our approach allows us to account for a wide range of typological observations including:

- The relative rarity of syntactic accusativity as compared to syntactic ergativity (Tollan 2019; see also Polinsky 2016)
- Restrictions on the extraction of high applicatives, as compared to the availability of prepositional object extraction in ditransitives in Mayan languages (Tollan & Clemens to appear)
- An asymmetry in the acceptability of *wh*-questions formed from double-object passives in nominative-accusative languages (Tollan & Clemens to appear; see Holmberg et al. 2018 for the data)

1. ABS assigned by v^0 in Niuean, but by T^0 in Tongan
2. Whether a language is subject to ergative extraction restrictions depends on how ABS case is assigned
3. If the ABS argument moves around the ERG argument, the ERG argument cannot then undergo extraction; doing so would result in a crossed dependency

Next, we develop an account of postverbal word order variability in Tongan and Niuean based on the variable position of ABS

Word order and the locus of ABS

For Tongan, in transitive clauses with two DP arguments, both VSO and VOS occur, although VSO is the more discourse-neutral option:

- (14) a. Na'e 'ave [s 'e Sione] [O 'a Mele].
PST take ERG Sione ABS Mele
'Sione took Mele.'
- b. Na'e 'ave [O 'a Mele] [s 'e Sione].
PST take ABS Mele ERG Sione
'Sione took Mele.'
- (Otsuka 2000:282)

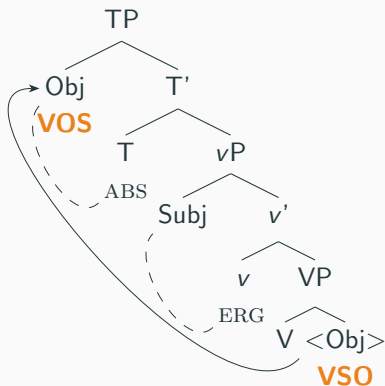
A-movement of the object in Tongan VOS is a reflex of ABS case assignment:

- The base position of the object (VP) follows the subject (vP), while the case position (TP) precedes it
- The object can be pronounced in either syntactic position
- The choice is governed by pragmatic factors

Analysis: Tongan

VSO = object in 'base' position; VOS = object in 'case' position

(15)



Other Tongan analyses: Otsuka

Otsuka (2005) argues that Tongan VOS is A-scrambling:

- No Weak Crossover Effects
- Binding relations are altered: the subject cannot bind the object in the VOS order

- (16) a. Na'e fili **'a e taha kotoa**_{*i*} 'e he'ene_{*i*} tamai _____{*i*}.
PST choose ABS DEF one every ERG his father
'His father_{*i*} chose everyone_{*i*}.'
- b. Na'e fili **'a ia**_{*i*} pe 'e Sione_{**i/j*} _____{*i*}.
PST choose ABS 3SG only ERG Sione.
'Sione chose him/*himself.'

(Otsuka 2005)

Polinsky and Potsdam (to appear) argue that VOS in Tongan involves a clause-final subject topic:

- Information-structural considerations support the existence of a right-side topic
- They argue for rightward movement on the basis of connectivity with respect to case and binding and the lack of clitic doubling
- Our account could co-exist with a base-generated right-side topic account (see Clemens and Coon 2018 for Mayan), but it is less clear how we could accommodate rightward movement of the subject

Turning to Niuean, the word order of transitive clauses with two DP arguments is strictly VSO (PNI constructions are a different story)

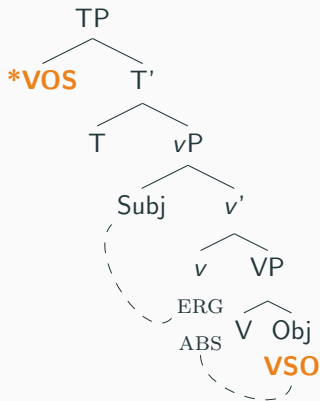
- (17) a. Kua kai [S he tama] [O e niu].
PFV eat ERG child ABS coconut
'The child ate coconut.'
- b. *Kua kai [O e niu] [S he tama].
PFV eat ABS coconut ERG child
'The child ate coconut.'

fieldnotes

Analysis: Niuean

VSO = object in 'base' position, which is also the 'case' position

(18)



1. In Tongan, ABS objects are associated with two positions: a low 'base' position and a 'high' case position; objects can be pronounced in either position rendering VSO and VOS order
2. In Niuean, ABS objects are associated with one position: the low 'base' position is also the case position; VSO is the only option

The variable position of ABS in Tongan and Niuean accounts for the presence (and absence) of extraction restrictions, the (un)availability of VOS, and now we turn to coordination

More on the locus of ABS

Data from coordination seem to support an analysis where ABS is high in Tongan and low in Niuean

- Both Tongan and Niuean have two types of coordination: 1) *mo* (Tongan); *mo (e)* (Niuean) and 2) *pea* (Tongan); *ti* (Niuean)
- *mo (e)* and *pea/ti* connectives coordinate phrases of different sizes (see Otsuka 2000 for Tongan)

In Tongan, *pea*, but not *mo*, can be followed by a tense marker or a clausal conjunction, suggesting that *pea* includes T^0 while *mo* does not:

(19) TONGAN *pea*- vs. *mo*-coordination

- a. [Na'e kai lahi 'a Sione] *pea/*mo* [na'e inu lahi 'a Pita].
PST each much ABS Sione and PST drink much ABS Pita
'Sione ate a lot and Pita drank a lot.' (Otsuka 2000:121)
- b. *Pea/*mo* [kapau kuo 'osi 'a e ngaué]
and if PERF finished ABS DEF work
'and if the work has been done...'
(Churchward 1953, via Otsuka 2010:323)

Niuean *ti*, like Tongan *pea*, can be followed by a tense marker or a clausal conjunction, while *mo* (*e*) cannot be; again, *pea* includes T⁰ while *mo* does not:

(20) NIUEAN *ti*- vs. *mo* (*e*)-coordination

- a. [Ne kai e Mele e apala] *ti/*mo* [kua kai e Sione e pea].
PFV eat ERG Mele ABS apple and PERF eat ERG Sione ABS pear
'Mele ate an apple and Sione ate a pear.'
- b. *ti/*mo e* [kaeke ke tutuli e Sione a Mele]
and if TNS chase ERG Sione ABS Mele
'...and if Sione chases Mele...'

fieldnotes

'Accusative' coordination: Niuean

If the second conjunct is missing a participant, it is necessarily interpreted as the subject of the first conjunct:

- (21) a. Ne tutuli e Sione a Mele **mo e** kata
PST chase ERG Sione ABS Mele and laugh
'Sione chased Mele and (Sione/*Mele) laughed.'
- b. Ne tutuli e Sione a Mele **ti** kata
PST chase ERG Sione ABS Mele and laugh
'Sione chased Mele and (Sione/*Mele) laughed.' *fieldnotes*

'Ergative' coordination: Tongan

If Conjunct 2 is missing a participant, the antecedent is the subject of Conjunct 1 with *mo*, but with *pea*, we find case-matching:

- (22) a. Na'e taa'i 'e Hina 'a Mele **mo** kata.
PST hit ERG Hina ABS Mele and laugh
'Hina hit Mele and (Hina/*Mele) laughed.'
- b. Na'e taa'i 'e Hina 'a Mele **pea** kata.
PST hit ERG Hina ABS Mele and laugh
'Hina hit Mele and (*Hina/Mele) laughed.' (Otsuka 2000)

'Ergative' coordination: Tongan

It is precisely when conjuncts that include T^0 are coordinated that we find a difference between Tongan and Niuean:

- Tongan T^0 is responsible for ABS case assignment; Niuean T^0 is not
- The syntactically ergative coordination pattern does not surface unless T^0 is involved, which is consistent with the idea that the syntactic ergativity is explained by the locus of ABS

'Ergative' coordination: Tongan

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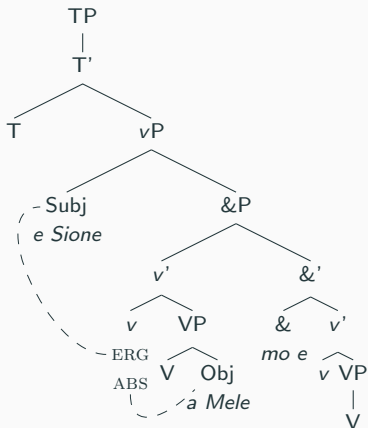
- Tongan T^0 is responsible for ABS case assignment; Niuean T^0 is not
- They syntactically ergative coordination pattern (Dixon 1994) does not surface unless T^0 is involved, which is consistent with the idea that ABS on T^0 is responsible for syntactic ergativity

The main components of the preliminary analysis are as follows:

- In *mo (e)* coordination, the external argument position is part of the material shared between the two conjuncts
- The coordinate structure constraint does not apply to A-movement (e.g. Johnson's gapping analysis)

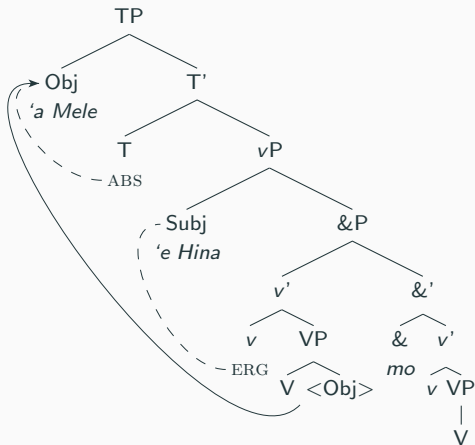
Coordination: mo (e) analysis Niuean

- (23) Ne tutuli e Sione a Mele **mo e** kata
PST chase ERG Sione ABS Mele and laugh
'Sione chased Mele and (Sione/*Mele) laughed.'



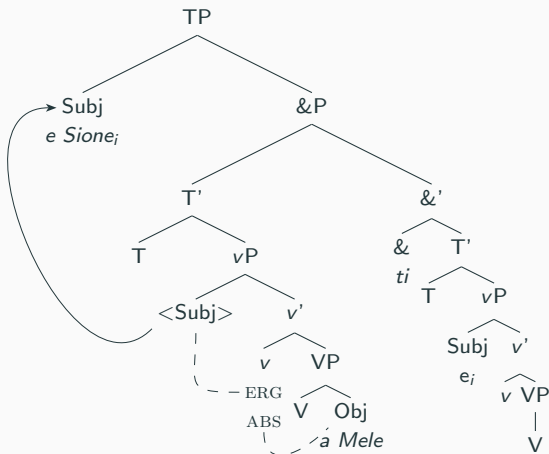
Coordination: mo (e) analysis Tongan

- (24) Na'e taa'i 'e Hina 'a Mele **mo** kata.
PST hit ERG Hina ABS Mele and laugh
'Hina hit Mele and (Hina/*Mele) laughed.'



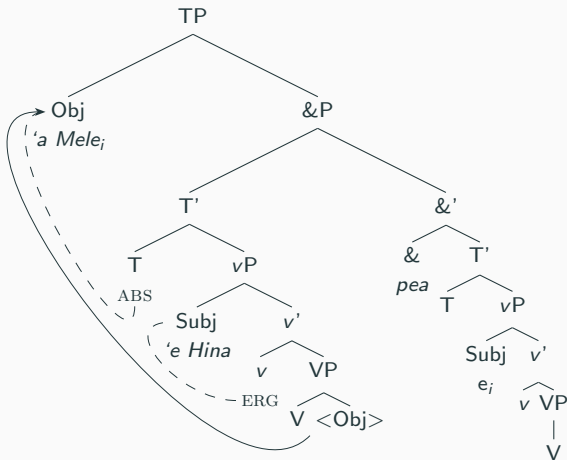
Coordination: ti analysis Niuean

- (25) Ne tutuli e Sione a Mele **ti** kata
PST chase ERG Sione ABS Mele and laugh
'Sione chased Mele and (Sione/*Mele) laughed.'



Coordination: pea analysis Tongan

- (26) Na'e taa'i 'e Hina 'a Mele **pea** kata.
 PST hit ERG Hina ABS Mele and laugh
 'Hina hit Mele and (*Hina/Mele) laughed.'



In many respects, this account of coordination is preliminary:

1. We need to know more about *pro*: for example, we predict that *mo (e)* and *ti/pea* are different with respect to whether they can host *pro* as an external argument
2. We need to know more about unaccusatives

Conclusion

We developed an account of morphological ergativity in Niuean and Tongan that we then extend to

- Ergative extraction restrictions
- Ergative coordination patterns
- Post-verbal word order variation

Concluding remarks

This project brings to light ways in which languages from within a single subfamily can exhibit micro-variation, and how seemingly unrelated phenomena, such as word order and movement restrictions, may be connected through a single parametric difference

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