1. Introduction

- Niuean and Tongan are closely related members of the Tongic branch of Polynesian (Austronesian > Malayo-Polynesian), spoken primarily in the South Pacific Islands of Niue, Tonga and New Zealand.

(1) Abbreviated family tree

```
Austronesian... Polynesian
    Tongic
        Tongan
        Niuean
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- Nuclear Polynesian
  - Samoic-Outlier...
  - Eastern Polynesian...

- Both are verb-initial (V1), with an ergative-absolutive case pattern.

(2) TRANSITIVE CLAUSES IN TONGAN (a) AND NIUEAN (b)

a. Na’e kai ‘e Sione ‘a e mango.
   PST eat ERG Sione ABS DEF mango
   ‘Sione ate the mango.’
   (Otsuka 2000: 50)

b. Ne kai he pusí ia e moa.
   PST eat ERG dog DEM ABS chicken
   ‘The cat ate the chicken.’
   (Seiter 1980: 29)

- In this talk, we discuss two ways in which these languages vary: (in)ability of the ergative argument to undergo A-bar movement (‘syntactic ergativity’), and postverbal word order.

(3) DIFFERENCES BETWEEN NIUEAN AND TONGAN

<table>
<thead>
<tr>
<th></th>
<th>Syntactic ergativity</th>
<th>Transitive word order</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tongan</td>
<td>Yes</td>
<td>VSO/VOS</td>
</tr>
<tr>
<td>Niuean</td>
<td>No</td>
<td>VSO/*VOS</td>
</tr>
</tbody>
</table>

* We would like to thank Jessica Coon, Diane Massam, Yuko Otsuka, Maria Polinsky, Kara Tukuitonga for helpful conversation about the data and analysis we present here. Thanks also to LAGB 2016 and NELS 47 reviewers for useful feedback. All errors are our own.
We argue that these differences both result from the locus of absolutive case assignment.

- We adopt an absolutive inversion approach to case assignment (Campana 1992; Bittner & Hale 1996; Aldridge 2004; Coon et al. 2014; a.o), where ABS is assigned low in Niuean, but high in Tongan.

- Finally, we show how the lack of parallel movement asymmetries in nominative-accusative languages may be accounted for by this approach to syntactic ergativity.

2. Morphological and Syntactic Ergativity

- Morphologically ergativity: transitive subjects are marked distinctly from intransitive subjects/transitive objects: both Niuean and Tongan are morphologically ergative.

- Beginning with Tongan, the subject of intransitive clauses and the object of transitive clauses is marked ‘a, while the subject of transitive clauses is marked ‘e.

(4) TONGAN INTRANSITIVE (a) AND TRANSITIVE (b) CLAUSES
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)

- Turning to Niuean, the subject of intransitive clauses and the object of transitive clauses is marked e (common nouns) or a (proper nouns, pronouns), while the subject of transitive clauses is marked he (common nouns) and e (proper nouns, pronouns).

(5) NIUEAN INTRANSITIVE (a) AND TRANSITIVE (b) CLAUSES
a. Ne fano e tehina haaku.  
PST go ABS brother POSS  
‘My little brother went.’
b. Ne kai he pusi ia e moa.  
PST eat ERG dog DEM ABS chicken  
‘The cat ate the chicken.’ (Seiter 1980: 28-29)

- Syntactic ergativity: in a subset of morphologically ergative languages, ergative subjects are unable to undergo A-bar movement (e.g. relativization, wh questions, focus). While Tongan is syntactically ergative, Niuean is not.

- Beginning with Tongan, only absolutive arguments relativize with a gap; ergative arguments require a resumptive pronoun (e.g. Otsuka 2000); (6). Furthermore, ergative arguments are unable to undergo raising (7a); while absolutive arguments face no such restrictions (7b).
(6) **Tongan Absolutive (a) and Ergative (b) Relativization**

a. e fefinei ['oku 'ofa'i 'e Sione __].
   DEF woman PRS love ERG Sione
   'The woman whom Sione loves.'

b. e fefinei ['oku 'ofa'i \((\text{ne}_i)\) 'a Sione ].
   DEF woman PRS love RP ABS Sione
   'The woman who loves Sione.'  

(Otsuka 2000: 116)

(7) **Tongan Raising**

a. *'Oku totonu 'a e faiako [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.'

b. 'Oku totonu 'a e tamaiki pau'u [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.'  

(Otsuka, 2000)

- Turning to **Niuean**, both ergative and absolutive arguments relativize with a gap (e.g. Seiter 1980, Longenbaugh and Polinsky *to appear*); (8). Furthermore, unlike in Tongan, ergative arguments are able to raise (9).\(^1\)

(8) **Niuean Absolutive (a) and Ergative (b) Relativization**

a. e tagata [ ne moto e koe __].
   ABS person NFT punch ERG 2SG
   'The person who you punched'

b. e tagata [ka kai __i e talo].
   ABS person FUT eat ABS taro
   'The person who will eat the taro.'  

(approx. Seiter 1980: 94)

(9) **Niuean Ergative Raising**

a. To nākai toka e au e pusi [ke kai __i e ika ]. \(\rightarrow\) compare (7a)
   FUT not let ERG 1SG ABS cat COMP eat ABS fish
   'I won’t let the cat eat the fish.'

b. To nākai toka e au e ika [ke kai he pusi __i].
   FUT not let ERG 1SG ABS fish COMP eat ERG cat
   'I won’t let the cat eat the fish.'  

(Seiter, 1980; Massam, 1985)

---

\(^1\) Absolutive arguments are able to raise in both Tongan and Niuean.
3. Accounting for Syntactic Ergativity

- We assume ergative to be an inherent case (Woolford, 1997; et seq.), assigned by Voice⁰ to the external argument.²

(10) INHERENT ERGATIVE

- We adopt an ‘Absolutive Inversion’ approach to ABS case assignment for Tongan (Campana 1992; Bittner & Hale 1996; Aldridge 2004, a.o.).
  - ABS is assigned by T⁰ (i.e., ABS = NOM) (see 13 below).
  - The object must move into a local configuration with T⁰ (the vP phase edge) – past the intervening ERG subject (see 13 below).
  - The movement of the ABS argument traps the ERG argument (see §6 for details).

- Coon et al. (2014) use this approach to account for the covariance of syntactic ergativity and the ‘high’ absolutive marker in Mayan languages.

- In Mayan languages like Q’anjob’al, ABS is assigned ‘high’ by T⁰; the ABS agreement marker precedes the ERG agreement marker (11a).
  - Movement of the absolutive argument traps the ERG argument; on their account, the phase has only one escape hatch (the ABS argument can freely extract). Thus, the language is syntactically ergative (11b).

(11) Q’ANJOB’AL: HIGH ABSOLUTIVE = SYNTACTIC ERGATIVITY (cf. Tada, 1993; Coon et al., 2014)

  a. Max-ach y-il-a’.
     ASP-2ABS ⁴ERG-see-TV
     ‘She saw you.’
  b. *Maktxel: max-∅ y-il[-a’] i ix ix?
     who ASP-3ABS ⁴ERG-see-TV CLF woman
     Intended: ‘Who saw the woman?’ (Coon et al., 2014)

² See also Assmann et al. (2015) for a similar analysis, in which ergative is assigned under a specifier-head relationship (10), but is not associated with any particular theta role (i.e., as a structural case, via Spec-head Agree). Unergative subjects are always marked absolutive in both Niuean and Tongan; we follow Massam (2012), who argues that unergative subjects are base-generated lower than transitive subjects (e.g. in a lower VoiceP).
In Mayan languages like Ch’ol, ABS is assigned ‘low’ by Voice$^0$ (Legate, 2002; Aldridge, 2004); the ABS marker follows the ERG marker (12a).

- The ergative argument is available for extraction (as is the absolutive) and thus the language does not display syntactic ergativity.

(12) CH’OL: LOW ABSOLUTIVE = NO SYNTACTIC ERGATIVITY (cf. Tada, 1993; Coon et al., 2014)

a. Tyi y-il-ä-yety.
   ASP 3ERG-see-TV-2ABS
   ‘She saw you.’

b. Maxki, tyi y-il-ä-yety __?i?
   who ASP 3ERG-see-TV-2ABS
   ‘Who saw you?’ (Coon et al., 2014)

- Applying this analysis to Tongic, we claim that the locus of ABS in Tongan is high (T$^0$).
  - Movement of the ABS argument into a case licensing position (the vP phase edge) traps the ergative argument in its base position (again see §6 for details).

(13) TONGAN HIGH ABS (cf. Q’anjob’al)

- In contrast, absolutive case is assigned low in Niuean, by Voice$^0$ (cf. Massam 2006).
  - The ABS argument does not move; both core arguments freely extract.

\[\text{\textsuperscript{3} We do not discuss the verb’s clause-initial position. See Otsuka (2005) for V$^0$-raising account of Tongan.}\]

\[\text{\textsuperscript{4} Coon et al. propose that Ch’ol ABS is a morphological default for two structural cases (Legate, 2002; Aldridge, 2004): nominative (assigned by T$^0$ to intransitive subjects), and accusative (assigned by Voice$^0$ to objects). We remain agonistic as to whether Niuean also has two sources for ABS.}\]
4. Word Order Variation

- Our primary reason to adopt the approach to case assignment and syntactic ergativity outlined above comes from word order differences in these two closely related languages.

- Beginning with Tongan, in transitive clauses with two DP arguments, both VSO (15a) and VOS (15b) order is allowed.

(15) TONGAN WORD ORDER IN TRANSITIVE CLAUSES
a. Na’e ‘ave ‘e Sione ‘a Mele. (VSO)
   PST take ERG Sione ABS Mele
   ‘Sione took Mele.’

b. Na’e ‘ave ‘a Mele ‘e Sione. (VOS)
   PST take ABS Mele ERG Sione
   ‘Sione took Mele.’

- Turning to Niuean, the word order of transitive clauses with two DP arguments is strictly VSO (compare 16a to 16b).

(16) NIUEAN WORD ORDER IN TRANSITIVE CLAUSES
a. Kua kai he tama e niu. (VSO)
   PFV eat ERG child ABS coconut
   ‘The child ate the coconut.’

5 We do not discuss the verb’s clause-initial position. For Niuean, see Massam (2001) for VP-(remnant)-raising account Clemens (2014) for V⁰-raising account.
b. *Kua kai e niu he tama. (*VOS) \(\rightarrow\) compare (15b)

\[
P F V \text{ eat ABS coconut ERG child}
\]

Intended: ‘The child ate the coconut.’

- Otsuka (2005) proposes that Tongan VOS is \textit{A-scrambling}: VOS constructions show properties associated with A-movement, as opposed to A-bar movement: No Weak Crossover Effects arise (17), and binding relations are altered – the subject cannot bind the object in the VOS order (18).

(17) Na’e fili ‘a e taha kotoa\textsubscript{t} ‘e he’ene\textsubscript{t} tamai ___i

\[
\text{PST choose ABS DEF one every ERG his father}
\]

‘His\textsubscript{t} father chose everyone\textsubscript{t}.’

(18) Na’e fili ‘a ia\textsubscript{i} pē ‘e Sione\textsubscript{ij} ___i

\[
\text{PST choose ABS 3SG only ERG Sione}
\]

‘Sione chose him/*himself.’

- We propose that object A-movement in Tongan VOS is a reflex of ABS case assignment: the base position of the Tongan object follows the subject, while the case position precedes it.
  - As in (19), the object can be pronounced in either syntactic position and the choice is governed by pragmatic factors (i.e. movement is covert in VSO clauses).\textsuperscript{6}
  - In Niuean (20), the ABS object \textit{only} has the low option; VSO is therefore obligatory.

(19) \textit{Tongan high ABS; VSO and VOS}

\begin{center}
\begin{tikzpicture}
  \node (CP) {CP};
  \node (C) [below of=CP] {C\textsuperscript{0}};
  \node (TP) [right of=C] {TP};
  \node (T) [below of=TP] {T\textsuperscript{0}};
  \node (vP) [right of=T] {};\node (ABS) [below of=vP] {ABS};
  \node (OBJ in VOS) [below of=ABS] {OBJ in VOS};\node (Vo) [below of=OBJ in VOS] {Voice\textsuperscript{0}};
  \node (SUBJ) [above of=Vo] {SUBJ};\node (VP) [right of=SUBJ] {};\node (v) [left of=SUBJ] {v};
  \node (VoiceP) [below of=SUBJ] {VoiceP};\node (V) [right of=V] {V};
  \node (VP in VSO) [right of=V] {OBJ in VSO};\node (<V>) [above of=VP in VSO] {<V>};
  \draw (CP) -- (C);
  \draw (C) -- (TP);
  \draw (TP) -- (ABS);
  \draw (ABS) -- (OBJ in VOS);
  \draw (OBJ in VOS) -- (Vo);
  \draw (Vo) -- (SUBJ);
  \draw (SUBJ) -- (VoiceP);
  \draw (VoiceP) -- (VP);
  \draw (VP) -- (V);
  \draw (V) -- (VP in VSO);
\end{tikzpicture}
\end{center}

\textsuperscript{6} This predicts that Tongan should show no WCO effects in object \textit{wh} questions. As pointed out by a NELS 47 reviewer, WCO \textit{is} observed (Otsuka 2005); this is a fact which we are currently working to explain.
5. Tongan Coordination

- Tongan has two types of coordination: *pea* and *mo* (Otsuka, 2000 & 2010).

- Starting with *mo*, we find an accusative coordination pattern. When all participants are *not* overtly expressed…
  
  - The overt subject of the first conjunct (either an intransitive ABS subject or a transitive ERG subject) and the unexpressed participant in the second conjunct must be the same.
  
  - Furthermore, the unexpressed participant in the second conjunct can only be the subject of its clause (intransitive ABS or transitive ERG).

(21) TONGAN *mo*-COORDINATION

a. Na’e tangi ‘a Hina mo taa’i (__) ‘a/*’e Mele.
   PST cry ABS Hina and hit ABS/*ERG Mele
   ‘Hina cried and (she) hit Mele.’
   Not: ‘…..and Mele hit (her).’

b. 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.’ (Otsuka, 2000)

- Turning to *pea*, we find a syntactically ergative coordination pattern (cf. Dixon, 1994 for Dyirbal). When all participants are *not* overtly expressed…
If an argument in the second conjunct contains an unexpressed participant, the unexpressed participant must correspond to an overt participant in the first conjunct marked with a matching case.

An overt ergative argument in the first conjunct can be coindexed with an unexpressed ergative argument in the second conjunct.

An overt absolutive argument (either intransitive subject or transitive object) in the first conjunct can be coindexed with an unexpressed absolutive argument (either intransitive subject or transitive object) in the second conjunct.

(22) **Tongan pea-coordination**

a. *Na’e* tangi ‘a* Hina* pea taa’i ‘e/*’a* Mele (___).\[\] \(\rightarrow\) compare (21a)

\[\begin{align*}
\text{PST} & \quad \text{cry} & \text{ABS} & \text{Hina} & \text{and} & \text{hit} & \text{ERG}/\text{ABS} & \text{Mele} \\
\text{‘Hina cried and Mele hit (her).’}
\end{align*}\]

Not: ‘…..and (she) hit Mele.’

b. *Na’e* taa’i ‘e Hina ‘a* Mele pea (___) tangi. \(\rightarrow\) compare (21b)

\[\begin{align*}
\text{PST} & \quad \text{hit} & \text{ERG} & \text{Hina} & \text{ABS} & \text{Mele} & \text{and} & \text{cry} \\
\text{‘Hina hit Mele and (*Hina/Mele) cried.’} \\
\end{align*}\]

(Otsuka, 2000)

- In addition to demonstrating the accusative pattern of *mo* and the ergative pattern of *pea*, Otsuka (2010) argues that *pea* and *mo* coordinate XPs of different sizes.
  - *Pea* may be followed by a tense marker or a clausal conjunction. *Mo*, however, cannot (see 23a-b below).
  - This suggests that *pea* coordinates XPs at least as big as TP, while *mo* coordinates smaller XPs (e.g. *vP*, *VoiceP*, *AdjP*, *DP*).

(23) **Pea vs mo coordination**

a. [Na’e kai lahi ‘a Sione] *pea/*mo [na’e inu lahi ‘a Pita.]

\[\begin{align*}
\text{PST} & \quad \text{eat} & \text{much} & \text{ABS} & \text{Sione} & \text{and} & \text{PST} & \quad \text{drink} & \text{much} & \text{ABS} & \text{Pita} \\
\text{‘Sione ate a lot and Pita drank a lot’} \\
\end{align*}\]

(Churchward, 1953, via Otsuka, 2010: 323)

b. *Pea/*mo [kapau kuo ‘osi ‘a e ngaué.]

\[\begin{align*}
\text{and} & \quad \text{PERF} & \quad \text{finished} & \text{ABS} & \text{DEF} & \text{work} \\
\text{‘and if the work has been done…..’} \\
\end{align*}\] 

(Churchward, 1953, via Otsuka, 2010: 323)

- In sum: an ergative pattern arises when TP/CPs are coordinated with *pea*, but not when smaller XPs are coordinated with *mo*.

Note that the presence of T₀ triggers a syntactically ergative coordination pattern, which is expected under an analysis that ties syntactic ergativity to a high-ABS assigning T₀.\(^7\)

- According to Otsuka (2010), the distribution and interpretation of unexpressed arguments in clauses coordinated by *pea* is determined by case matching; in those coordinated by *mo* it is determined by structural position (for Otsuka the specifier of *vP*).\(^7\)

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\(^7\) We have yet to fully explore coordination possibilities in Niuean; however, based on our observations thus far, it appears that coordination in Niuean is less complex as compared with Tongan. Niuean does not have a *pea*-equivalent. Niuean *mo* is also used in coordination contexts; however its behaviour is less restricted.
A concern for Otsuka (2010) is that ‘scrambled’ objects (VOS) like in situ objects (VSO) cannot be unexpressed (or coindexed with an unexpressed argument) under mo-coordination even though they are ostensibly higher than the subject in the specifier of vP.

- However, if movement of the object to the specifier of vP is triggered by merging T⁰ (as opposed to an EPP feature on v⁰), this fact is no longer problematic.
- Mo coordinates XPs which do not contain T⁰, so at the point of coordination, ABS movement has not taken place. Even objects that will be realized as VOS objects are lower than the subject at the point in the derivation where mo-coordination takes place.
- In mo-coordination we propose that Case is eventually assigned to the ABS arguments in both conjuncts via multidominance, whereby both conjuncts are equidistant to T⁰ (Williams, 1978).

6. Blocking ERG movement

- A crucial question: why does movement of the ABS argument to the vP phase edge block movement of the ERG argument?
  - Superiority (e.g., Aldridge, 2004)?
  - Single vP escape hatch (e.g., Coon et al., 2014)?

- Appealing to superiority or a ban on multiple vP specifiers predicts that accusative objects in NOM-ACC languages should be at least equally as impervious to A-bar movement as ergative subjects in ERG-ABS languages (see discussion in Assmann et al., 2015 a.o.).
  - Just as high ABS blocks ERG movement, so should (high) NOM block ACC movement.⁸

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⁸ Tollan (2016) observes that syntactic ergativity is indeed far more prevalent than syntactic accusativity, (which is extremely rare) based upon typological data from 32 ergative languages surveyed by Polinsky (2015), and 44 accusative languages surveyed by Keenan and Comrie (1977).
• Assmann et al. (2015) seize upon this issue to argue against absolutive inversion as a means of explaining syntactic ergativity.
  o Following Tollan (2016), we suggest that the culprit in cases of syntactic ergativity – at least, in Tongic Polynesian (and possibly Mayan) – is the trajectory of movement.

• **Constraint on Crossing Dependencies “CCD”** (Kuno & Robinson, 1972; Steedman, 1984): movement which results in nested dependencies (25a) is preferred to movement which results in crossed dependencies (25b).
  o Steedman (1984) – no language has *only* crossing dependencies.

(25) a. The violini that I wonder which sonatasj to play __i on __j

  b. *The sonatasi that I wonder which violinj to play __j on __i (Steedman, 1984)

• Returning to an absolutive inversion account of syntactic ergativity, the asymmetries between the attested restrictions on ergative extraction as compared to the unattested restrictions on accusative extraction can be captured by the CCD.
  o Syntactic ergativity manifests as ban on A-bar movement of the ergative argument across the absolutive arguments A-movement path.

(26) **NESTED VS. CROSSING DEPENDENCIES**

  a. *Movement of ACC
     Nested dependency

  b. *Movement of ERG
     Crossing dependency

• This type of explanation makes a number of predictions, including…
  o In nominative-accusative languages, the nominative argument may move to the specifier of TP and the object should still be able to undergo A-bar movement.
  o Goal arguments (generated below direct objects) should A-bar move in high ABS languages, because they would not cross the path of the absolutive (cf. Assman et al.’s concern about the phase-based and superiority accounts’ ability to deal with the fact that absolutes *and* goal arguments can undergo A-bar movement in Kaqchikel).
6. Conclusion

- Our goal in this talk was to connect variation in syntactic ergativity in Tongic Polynesian languages (i.e. Niuean and Tongan) to differences in post-verbal word order.
  - Niuean = VSO/*VOS; ERG argument freely displaced
  - Tongan = VSO/VOS; ERG displacement restricted.

- To explain these differences, we adopt the position that syntactic ergativity is the result of Absolutive Inversion (i.e. A-movement of the ABS argument past the ERG argument for case-licensing), much in the spirit of Coon et al. (2014) who account for covariance of syntactic ergativity and the position of the ABS marker in Mayan.
  - Tongan = high ABS assigned by T⁰
  - Niuean = low ABS assigned by Voice⁰

- We tie the locus of ABS into Otsuka’s (2010) account of mo and pea coordination in Tongan.
  - If syntactic ergativity is connected to T⁰ assigning ABS, syntactically ergative patterns should only arise in constructions involving T⁰ (e.g. pea- but not mo-coordination).
  - An account of mo-coordination based on structural height is more viable if the object does not move to the specifier of vP until T⁰ enters the derivation.

- Finally, we evaluate the Absolutive Inversion approach in view of the typological rarity of syntactic accusativity, suggesting that the ban on ERG movement is tied to the prior movement of the ABS around the ERG argument, rather than superiority or a phase-based movement per se.
7. References


