The typology of nominal licensing in Austronesian voice system languages*

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Austronesian Formal Linguistics Association 26

1 Introduction

Today we discuss the typology of Austronesian voice system <u>languages</u> and develop a new understanding of the attested range of variation.

(1) Squliq Atayal:

a. Cyux **p**-hapuy sehuy sa knobuy qu *Yuraw*.

AUX **AV.IRR**-cook taro(ACC) LOC kitchen NOM *Yuraw*'Yuraw cooks taro in the kitchen.'

Actor Voice (AV)

b. Puy-**un** na Yuraw qu sehuy. cook-**pv** gen Yuraw nom taro 'Yuraw cooked taro.'

University of Western Ontario, May 2019

Patient Voice (PV)

c. Hpuy-an na Yuraw sehuy qu *knobuy*. cook-tv GEN Yuraw taro(ACC) NOM *kitchen* 'Yuraw cooks taro in the kitchen.'

Locative Voice (LV)

(2) Agent extraction ⇒ AV:1

- a. *Ima* wal **m**-aniq sehuy qasa? who PAST **AV**-eat taro that 'Who ate that taro?'
- b. *Ima wal niq-un qu sehuy qasa? who past eat-pv qu taro that

Patient extraction \Rightarrow PV:

- a. *Nanu wal **m**-aniq qu Y? what PAST **AV**-eat NOM Y
- b. Nanu wal niq-un na Y? what PAST eat-PV GEN Y 'What did Yuraw eat?'
- ▶ But voice system languages can also look pretty different...

(4) Balinese:

a. Actor Voice (AV):

Polisi ng-ejuk Nyoman.
police AV-arrest Nyoman
'A policeman arrested N.'

b. Patient Voice (PV):

Nyoman Ø-ejuk polisi.

Nyoman PV-arrest police
'A policeman arrested N.'

¹We use the terms "agent" and "actor" interchangeably. We apologize for any confusion.

- (5) Agent extraction ⇒ AV:

 Nyen ng/*Ø-alih ci?

 who av/*rv-search you

 'Who looked for you?'
- (6) Patient extraction ⇒ PV:

 Apa *ng/Ø-alih ci?

 what *av/rv-search you

 'What did you look for?'
- Voice systems can have case or not, and have more or less strict word orders.
- What do voice system languages have in common?

(7) Characteristics of AN-type voice systems: (based on ELvU 2017: 376²)

- a. A privileged argument: One argument is designated the "subject," and is realized in a particular morphological form and/or structural position, regardless of its original grammatical function.
- Articulated voice morphology: Morphology on the verb varies with the choice of subject, [often] including options for taking certain oblique arguments as subjects.
- c. Extraction restriction: A-extraction (*wh*-movement, relativization, topicalization, etc.) is limited to the subject argument.
- d. Marking of non-subject agents: Non-subject agents are morphologically marked, often coinciding with the form of possessors (i.e. genitive case), [or limited in their surface position].

► How do we understand the range of variation observed across different Austronesian(-type) voice systems?

Today: We zoom in on (7-d) and propose *two parameters of nominal (Case) licensing* for non-subject arguments:

- 1. the availability or unavailability of **structural accusative**;
- 2. two options for **last-resort licensing**: case-insertion and adjacency.

Together, these two parameters lead to a predicted — and attested! — four-way typology for voice system languages.

Roadmap §2 Background and theory §3 Proposal §4 Typology §5 Extensions

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^{*}This work is part of our ongoing work on the syntax of Austronesian-type voice systems within Austronesian and beyond. We thank Edith Aldridge, Mark Baker, TC Chen, Julie Legate, David Pesetsky, Masha Polinsky, Norvin Richards, and Lisa Travis for comments on this overarching project, and colleagues at LSA 2018. Errors are each other's.

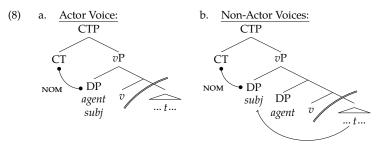
²In ELvU, we referred to the privileged argument as the "pivot"; in other work, it has also been called "focus," "topic," "trigger"... See Blust 2002, Ross and Teng 2005, Blust 2013 sec. 7.1 for discussion of these terms. Other additions to (7) are in [square brackets].

2 Background: A theory of voice systems (ELvU 2015, 2017)

Previously at AFLA...3

- The subject argument receives structural nominative case from a high functional head.
 - Nominative may be assigned to a nominal which already has a case value, overriding its realization (see Chen 2018 on Amis; Richards 2013; Levin 2017 for other examples).
- 2. The subject is uniquely positioned to be **Agreed with by an** Ā**-probe** e.g. is highest in the lower phase (Aldridge, 2004; Rackowski and Richards, 2005; Van Urk and Richards, 2015 and many others) or always **in a high** Ā**-position ☆** (Richards, 2000; Pearson, 2005).
- ▶ So the subject is associated with mixed A/ \overline{A} properties (Van Urk, 2015).
 - The functional head(s) associated with the subject's A- and A-properties may in fact be a single head, bundling features traditionally associated with C and T. We call this CT (Legate, 2011; Aldridge, 2017; Erlewine, 2018; see also Martinović, 2015).
- 3. Every nominal requires licensing (e.g. Case).

Note: "Licensing" is not morphological case value determination (Marantz, 1991).



The fact that non-subject agents are also at the phase edge predicts that — under the right circumstances — they may also be accessible for probing/attraction from above. See Erlewine and Levin 2018 and Erlewine and Lim 2018 for precisely such evidence.

- A language may choose to regularly move the subject to Spec,CTP.
 - This may yield descriptively SVO word order, as in a number of Malay/ Indonesian-type languages.
 - Following Pearson 2001, Aldridge 2004 a.o., this may be followed by vP-fronting to yield a fixed sentence-final subject position, as in Malagasy, Seediq, Atayal, Tsou, Pazeh (see e.g. Chen, 2017: 181ff).
- Constituents in *v*P are subject to scrambling. All linearizations of *v*P with the verb (*v*+V) as the leftmost constituent can be generated. (See Erlewine, 2018: 673, Erlewine and Lim, 2018, and references there.)
 - Some of these resulting word orders will be filtered out below (for Toba Batak and Bikol), due to considerations of nominal licensing.

3 Proposal

► How do non-subject arguments get licensed? The theory in §2 leaves this underspecified.

Three ways nominals can get licensed:

- **O** Structural Case requires a particular *structural* configuration.
- Licensing by adjacency under linear adjacency with the verb (Baker, 1988, 2014; Levin, 2015). See Levin 2015 on the theory of licensing by adjacency.
- **9** Prepositional/oblique case-insertion adding a K/P head as a rescue strategy (Stowell, 1981; Halpert, 2012; Imanishi, 2014; Van Urk, 2015).

Austronesian voice system languages vary according to **two parameters**:

(9) Accusative parameter:

The language {does/does not} have structural accusative case. (Technically: v {can/cannot} assign accusative case downward.)

(10) Last-resort licensing parameter:

If a DP lacks a source for structural licensing, it can be licensed...

- a. under linear adjacency with the verb, or
- b. by insertion of a case-marker (genitive).

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³But on the relationship between voice morphology on the verb and the choice of subject argument, we currently feel less committed to thinking of this as "extraction marking" as we argued for in ELvU 2015, 2017.

4 A typology of voice systems

Our proposal in (9)–(10) predicts a **four-way typology** of voice system languages:

	-ACC		+ACC	
Adjacency: Case-insertion:	Toba Batak Nanwang Puyuma	0	Balinese Katipul Puyuma	§4.2 §4.4

Here we concentrate on the behavior of *core arguments*: agents and themes.

4.1 No accusative + adjacency = Toba Batak (following Erlewine, 2018)

There is *no* **source of structural licensing** for non-subject arguments, so **all non-subject core arguments must be licensed by adjacency** with the verb.

(11) Non-subjects must be immediately post-verbal:

- a. Man-jaha (*nantoari) buku (nantoari) si Poltak (nantoari).

 Av-read yesterday book yesterday PN Poltak yesterday
- b. Di-jaha {*nantoari} si Poltak {nantoari} buku {nantoari}.
 pv-read yesterday pn Poltak yesterday book yesterday 'Poltak read a book yesterday.'

See Erlewine 2018 for additional data which shows that post-verbal word order is free, with the one exception of the adjacency requirement on post-verbal non-subjects.

- This word order restriction applies symmetrically to non-subject agents and non-subject themes.
- The verb and post-verbal non-subject form a phonological or intonational unit for the purposes of main stress placement (Emmorey, 1984).
- Licensing by adjacency (Baker, 2014; Levin, 2015) requires *head-head adjacency* between V and the highest head of the nominal, imposing a **directionality restriction**. All nominals in Toba Batak are DPs and D heads are pre-nominal e.g. *si* for personal names so licensing by adjacency requires the DP to be *immediately post-verbal*; being immediately pre-verbal is insufficient.
- We predict that there are **no ditransitives with three DPs** in Toba Batak.
 - Why? Because licensing by adjacency with its directionality restriction can only license one non-subject DP.
 - This appears correct; all verbs elicited in Toba Batak have at most two DPs, with ditransitives taking an oblique (PP) goal; see Erlewine 2018: 678.

4.2 Accusative + adjacency = Balinese (following Levin, 2015)

Structural accusative can license non-subject themes, but not agents. **Non-subject agents** — but not non-subject themes — will require verb adjacency.

(12) Asymmetric adjacency restriction on non-subjects:

- a. Cicing ng-uber (ke jalan-e) siap-e. dog Av-chase into street-def chicken-def
- b. Siap-e Ø-uber (*ke jalan-e) cicing.
 chicken-def pv-chase into street-def dog
 'A dog chased the chicken (into the street).' (Wechsler and Arka, 1998)
- Nominals licensed under adjacency in Balinese can be NPs or DPs. D heads are post-nominal (=e), so DPs with nominal domains cannot be licensed by adjacency:
- (13) a. *I Wayan* ∅-gugut cicing.

 ART Wayan PV-bite dog
 'A dog bit Wayan.'
 - b. *I Wayan Ø-gugut cicing-e (ento).

 ART Wayan Pv-bite dog-def (that)

 'The dog bit Wayan.'
- In an NP, the highest head in the nominal functional sequence is N, so N
 must be adjacent to the verb. In this case, we yield a ban on pre-nominal
 adjectives:
- (14) a. {Liu} cicing {liu} n-ugut Nyoman. many dog many Av-bite Nyoman
 - b. Nyoman Ø-gugut [*liu] cicing [liu] .

 Nyoman PV-bite many dog many 'Many dogs bit Nyoman.'
- But this is not a definiteness restriction: Pronouns and proper names can be licensed under adjacency, unlike with pseudo-noun incorporation in Niuean (Massam, 2001).
- (15) a. Be-e Ø-daar ida. fish-def pv-eat 3sg '(S)he ate the fish.'
- b. *Be-e* Ø-daar <u>Nyoman.</u> fish-def pv-eat Nyoman 'Nyoman ate the fish.'

We can derive this if pronouns and proper names occupy D⁰ (e.g. Postal, 1966; Longobardi, 1994; Elbourne, 2001) and lack an NP, satisfying head-head adjacency.

4.3 No accusative + case-insertion = Nanwang Puyuma

There is *no* source of structural licensing for non-subject arguments — *just like in Toba Batak* — so they will all be licensed with the same last-resort prepositional/oblique case.

(16) Non-subjects are all marked with the same case series:4

- a. Tu=trakaw-aw na palridring kan Siber. Gen.3=steal-pv nom.def car Gen.sg Siber
- b. Trakaw i Siber kana palridring.

 Av-steal NOM.SG Siber GEN.DEF car

 'Siber stole the car.'

(Victoria Chen p.c.)

(17) Case markers in Nanwang Puyuma (Teng, 2009: 827):

	Personal name		Common noun	
	singular	plural	definite	indefinite
Subject	i	па	na	а
Non-subject agent	kan	kana	kana	dra
Non-subject theme	kan	kana	kana	dra

- We call this case *genitive* as it is the same as that on possessors (18) (although possessor and non-subject bound pronominal series differ).
 - (18) tu=tilrin **kana** sinsi GEN.3=book GEN.DEF⁵ teacher 'the teacher's book'

(Teng, 2009: 828)

- In Locative and Circumstantial Voices, there are two non-subject arguments, and they both receive genitive case:
- (19) Tu=trakaw-ay=ku dra <u>paisu</u> kan <u>isaw.</u>
 GEN.3=steal-Lv=NOM.1sg GEN.INDEF money GEN.SG Isaw
 'Isaw stole money from me.' (Teng, 2008: 147)

Genitive case from last-resort case-insertion predicts the availability of multiple genitives as in (19). Unlike licensing by adjacency above, case-insertion can rescue multiple nominals.⁶

▶ Post-verbal word order is free (Teng, 2008: 148, Chen, 2017: 18); i.e. there is no requirement for verb adjacency, nor any restriction on subject position.

4.4 Accusative + case-insertion = Katipul and Ulivelivek Puyuma

Structural accusative can license non-subject themes, but not agents — *just like in Balinese.* So non-subject agents alone will receive **last-resort (genitive) case**, distinct from accusative.

The more conservative Katipul and Ulivelivek dialects of Puyuma distinguish the case marking series for non-subject agents and non-subject themes:

(20) Case markers in Katipul Puyuma (Teng, 2009: 827):

	Personal name		Common noun	
	singular	plural	definite	indefinite
Subject	i	N/A	na	а
Non-subject agent	ni	N/A	nina	za
Non-subject theme	kani	kana	kana	za

The case marker series for non-subject agents is again equivalent to that for possessors.⁷

4.5 Summary

The four types of languages identified and highlighted here look on the surface to be quite different. For example...

- Puyuma has case markers; Toba Batak and Balinese do not.
- The Nanwang and Katipul varieties of Puyuma vary in the number of distinct case marking series.
- Balinese and Toba Batak both have restrictions on post-verbal word order, but they affect different arguments: Balinese requires non-subject agents alone to be immediately post-verbal, whereas Toba Batak requires all non-subject DPs to be immediately post-verbal.
- ➤ The two parameters for non-subject licensing in (9) and (10) help us productively understand and relate these superficially distinct classes of languages.
 - For example, the fact that Nanwang Puyuma and Toba Batak both treat all
 non-subjects in a symmetric fashion can be attributed to a lack of structural accusative despite these two languages looking quite different at
 first glance.

⁴However, a salient difference is that non-subject agents but not non-subject themes are obligatorily clitic-doubled on the verb, as seen in (16). See discussion in Erlewine and Levin 2018. ⁵Teng glosses this as OBL.

⁶This pattern could be derived through separate sources for the two case markers, but would then need to treat the surface forms as a case of accidental syncretism.

⁷There is, however, a distinction reported for definite common noun possessors vs non-subject agents for Ulivelivek but not Katipul; see Teng 2009: 827.

5 Discussion and extensions

Our proposed parameters successfully describe the key behaviors of a range of different Austronesian voice system languages. By way of conclusion, we consider a couple extensions.

5.1 No accusative + case-insertion (Nanwang P.) + specificity DOM = Tagalog

Like in Nanwang Puyuma, non-subject agents and themes in Tagalog bear the same, genitive case marking in many cases:

(21) Non-subject agents and themes in genitive case: (Schachter, 1996)

a. B<um>ili ang babae ng tela.

Av-bought NOM woman GEN cloth
'The woman bought some cloth.'

*'the cloth'

- b. B<in>ili **ng** <u>babae</u> ang *tela*.

 PV-bought GEN WOMAN NOM cloth
 'A/The woman bought the cloth.'
- ▶ But notice that there is an interaction with the theme's specificity, with the genitive non-subject theme in (21-a) necessarily being non-specific. Instead, specific non-subject themes are oblique, as in (22).8

(Schachter and Otanes, 1972; McFarland, 1978; Sabbagh, 2016; a.o.)

- (22) Sino ang b<um>aril sa ibon? who nom av-shot obl bird 'Who shot the bird?'
- ► Tagalog has no accusative for non-specific non-subject themes, but *can assign* (*obl.*) *case to specific non-subject themes* (see e.g. Sabbagh, 2016).
 - With non-specific themes, Tagalog resembles Nanwang Puyuma; with specific themes, Tagalog resembles Katipul and Ulivelivek Puyuma!

(McFarland, 1978: 149)

5.2 Accusative + licensing by adjacency (Balinese) + -ny = Malagasy

(23) Non-subject agents must be adjacent to the verb: (Pearson, 2005)

- a. Nohanin' <u>ny gidro</u> haingana *ny voankazo* omaly.

 PST.PV.eat DET lemur quickly DET fruit yesterday

 'The lemur ate the fruit quickly yesterday.'
- b. *Nohanin(a) haingana ny gidro ny voankazo omaly.
- c. *Nohanin(a) omaly ny gidro haingana ny voankazo.

The post-verbal non-subject agent forms a tight phonological unit with the verb, which for pronouns and names results in being written as a single word, with word-internal phonological processes applying:

(24) "N-bonding" (Keenan, 2000):

(exx Pearson, 2005)

- a. Vonoiko [vono-in-**ny** + -<u>ko</u>] amin'ny antsy *ny akoho*.

 Pv.kill.1s [kill-Pv-lnk 1sG] with-det knife det chicken 'I am killing the chickens with the knife.'
- b. Vonoin-dRamatoa [vono-in-ny + Ramatoa] amin'ny antsy ny akoho.

 Pv.kill-Ramatoa [kill-pv-lnk Ramatoa] with-det knife det chicken 'Ramatoa is killing the chickens with the knife.'
- ► But notice that a linker (-ny) appears in these contexts as well. What is -ny doing?
 - One idea: Malgasy D heads expect to be valued for a morphological case feature specification. But in the absence of such a specification, the head is realized as =ny.
 - It is not unusual for the *absence* of feature specifications or the most unmarked feature specification — to result in overt morphology: Consider English third singular -s.

5.3 [Your language here]

► Where does your language fit in?

Thank you!

⁸The unavailability of the specific theme interpretation in (22-a) could be described as due to the availability of the competing form in (21-b). When the PV form is blocked, for example by the extraction restriction, a specific theme interpretation becomes available:

⁽i) Sino ang b<um>aril ng ibon? who nom av-shot gen bird 'Who shot a/the bird?'

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