One Language, Two 'Voice' Systems: Insights from Puyuma

Victoria Chen and Shin Fukuda

1. Introduction

'Voice' has been a controversial term. For some, it refers to a small set of oppositions (e.g. active, passive, middle) concerning the licensing of the external argument. For others, it constitutes a more inclusive category that subsumes also the encodings of various arguments and adjuncts, such as causative, antipassive, reflexive, applicative and benefative (e.g. Shibatani 2006). Since Kratzer (1994, 1996), 'Voice' has been standardly assumed to be a semi-functional verbal head responsible for the licensing of the external argument and structural case, which is distinct from, and higher than, *v*, the semi-functional head responsible for encoding event types (e.g. Pyllkänen 1999, 2002; Alexiadou *et al.* 2006; Harley 2009; 2013; Legate 2014).[1]

Much recent work has linked Kratzerian Voice to a typologically unusual voice system found in Western Austronesian. For these researchers, Voice, together with two flavors of applicative heads, enable a wide range of phrases to be promoted to the edge of VoiceP, giving rise to a crosslinguistically unusual four-way voice system (e.g. Maclachlan 1996; Aldridge 2004, 2012, 2017; see also Rackowski 2002, Rackowski and Richards 2005, and Erlewine and Levin to appear for a similar approach). In this view, Austronesian-type voice is essentially similar to the Indo-European-type active-passive alternation, with Voice being the core semi-functional head behind both types of systems.

In this paper, we argue instead that Austronesian-type 'voice' is fundamentally different from Kratzerian Voice: while the latter is the spell-out of a functional head hosted in the left periphery, the former marks Ā-agreement hosted in the C domain. Support for this claim comes from novel evidence from Puyuma, a Western Austronesian language that displays not only an Austronesian-type four-way voice system but also an understudied two-way voice contrast akin to the Indo-European-style active/passive alternation. We show that these two voice types can co-occur in a single language because each is hosted in a distinct functional projection. Accordingly, what has been termed *voice* in the literature does not form a homogeneous group.

This paper is organized as follows. In the next section, we lay out basic facts of Puyuma's two voice systems. Section 3 examines the locus of an Indo-European-style voice affix *u-* in Puyuma. Section 4 turns to Austronesian-type voice morphology, demonstrating that it is not the spell-out of Voice and is best analyzed as hosted in the C domain. Section 5 discusses how the current observations cast new light on a longstanding debate on the case alignment of Western Austronesian languages featured by a four-way voice system. Section 6 concludes.

*Victoria Chen, Victoria University of Wellington, victoria.chen@vuw.ac.nz. Shin Fukuda, University of Hawai'i at Mānoa, fukudash@hawaii.edu. This work was supported in part by a Chiang-ching Kuo Function grant (#RG021-A-16) to the second author. We thank Edith Aldridge, Lyle Campbell, William O'Grady, Matt Pearson, Yuko Otsuka, and Lisa Travis, as well as the audience at AFLA 24 and WCCFL 38 for helpful comments and feedback. We are grateful to the Puyuma community, especially Atrung Kagi, for sharing their language with us.

[1]List of abbreviations: CAU: causative; DF: definite; ID: indefinite; IMP: imperfective; IRR: irrealis; LOC: locative; LK: linker; OBL: oblique; PIV: pivot; PN: personal name; POSS: possessive; PRF: perfective; STAT: stative.

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2. Two voice systems in Puyuma

Puyuma (ISO 639-3 *pyu*) is a severely endangered language spoken in southeastern Taiwan with fewer than 1,000 fluent speakers. Like many other Western Austronesian languages, it is tenseless and possesses a four-way voice system known in the literature as *Austronesian-type voice* or *Philippine-type voice*. Except where otherwise indicated, the data presented in this paper comes from primary fieldwork on Nanwang Puyuma over a five-year period.

Examples (1a-d) illustrates Austronesian-type voice alternations in Puyuma. Similar to its better-known relatives such as Tagalog and Malagasy, in Puyuma, voice morphology on the verb indicates which phrase constitutes the sole constituent in the clause eligible for $\bar{A}$ extraction. This syntactically pivotal phrase carries a special marker (*na* for common nouns and *i* for personal names), labeled as PIV(OT) throughout this paper. As seen in (1), with voice morphology altering between *Actor Voice* (AV), *Patient Voice* (PV), *Locative Voice* (LV), and *Circumstantial Voice* (CV), the pivot marker appears on the external argument (1a), internal argument (1b), and two types of adjunct-like phrase (1c-d), respectively.

(1) *Austronesian-type voice alternation in Puyuma*

a. S⟨**em**⟩elap na walak kana ramaraman i dalran dra saselap.
sweep⟨**AV**⟩ DF.PIV child DF.ACC rubbish LOC road ID.OBL broom
'*The child* swept up the rubbish on the road with a broom.' (ACTOR VOICE)

b. Tu=selap-**aw** kana walak na ramaraman i dalran dra saselap.
3.NOM=sweep-**PV** DF.NOM child DF.PIV rubbish LOC road ID.OBL broom
'The child swept up *the rubbish* on the road with a broom.' (PATIENT VOICE)

c. Tu=selap-**ay** kana walak na dalran kana ramaraman dra saselap.
3.NOM=sweep-**LV** DF.NOM child DF.PIV road DF.ACC rubbish ID.OBL broom
'The child swept up the rubbish on *the road* with a broom.' (LOCATIVE VOICE)

d. Tu=selap-**anay** kana walak na saselap kana ramaraman i dalran.
3.NOM=sweep-**CV** DF.NOM child DF.PIV broom DF.ACC rubbish LOC road
'The child swept up the rubbish on the raod with *the broom*.' (CIRCUMSTANTIAL VOICE)

In addition to the four-way voice system above, Puyuma displays a voice alternation akin to the Indo-European-style active-passive alternation. As seen in (2), when a transitive verb bears AV morphology (2a), both the external and internal argument are obligatorily present. With an additional affix *u-*, however, the external argument must be absent (2b). The internal argument becomes the sole argument in the clause and carries the pivot-marking, as do unaccusative subjects (2c).

(2) *Indo-European-style voice alternation in Puyuma*

a. **M**-ekan **na** **walak** kana patraka.
AV-eat **DF.PIV child** DF.ACC meat
'The child ate the meat.' (Actor Voice; active)

b. **M-u**-ekan la **na** **patraka**.
AV-U-eat PRF **DF.PIV meat**
'The meat was eaten up.' (Actor Voice; *u*-marked detransitive)

c. **M**⟨in⟩atray **na** **ma'idrang**.
AV⟨PRF⟩die **DF.PIV old.person**
'The old person died.' (Actor Voice; unaccusative)

In what follows, we show that this *u*-marked agentless construction (*u*-construction hereafter) instantiates a crosslinguistically rare type of detransitive construction distinct from all four common types of derived intransitive: passive, middle, impersonal, and anticausative. We then look into the nature of the detransitivizing morpheme *u-* in section 3.

Unlike passives, which allow an optional agent-denoting PP (i.e. *by*-phrase) (3) and agent-oriented adverbs (4), the *u*-construction is compatible with neither, as seen in (5)-(6a). On the other hand, it occasionally allows an adjunct that embeds a cause (5), which is incompatible with passives (3).

(3) a. The window was closed (by John/*from the wind). (English)
b. Die Vase wurde (von Peter/*durch ein Erdbeben) zerbrochen. (German)
the vase was (by Peter/*through an earthquake) broken
'The vase was broken (by Peter/*through an earthquake).' (Alexiadou *et al*. 2006:184–5)

(4) a. The banana was eaten (*secretly*). (English)
b. Die Banane wurde (*heimlich*) gegessen. (German)

(5) a. **M-u**-sabsab na palridring {*kana/*dra} traw/*kan Isaw/✓dra udal.
AV-U-wash DF.PIV car {*DF.OBL/*ID.OBL} person/*PN.OBL Isaw/ID.OBL rain
'The car was washed *by the person/*by someone/*by Isaw/✓from the rain.'
b. **M-u**-deru na kuraw *kandrina traw/*dra traw/✓dra kadaw/✓dra karayag.
AV-U-cook DF.PIV fish *that.OBL person/*ID.OBL someone/ID.OBL sun/ID.OBL foehn
'The fish was cooked (*by that person/*by someone/from sunshine/from foehn).'

(6) a. ***Tremakatrakaw m-u**-ekan na kuraw.
secretly.AV **AV-U**-eat DF.PIV fish
'The fish was eaten *secretly.' (*u*-construction)
b. ✓**Tremakatrakaw m**-ekan na ngiyaw kana kuraw.
secretly.AV **AV**-eat DF.PIV cat DF.ACC fish
'The cat ate the fish secretly.' (active counterpart of (6a))

The *u*-construction is also not an anticausative. Anticausativization is known to be incompatible with agent-oriented verbs, and is commonly associated with verbs that involve a change of state (Haspelmath 1993; Levin & Rappaport Hovav 1995; Alexiadou *et al*. 2006). In contrast, the *u*-construction is compatible with a wide range of agent-oriented verbs that disallow an inchoative counterpart across languages, including 'bury,' 'carve,' 'catch,' 'cheat,' 'cleave,' 'collect,' 'comb,' 'cook,' 'cut,' 'eat,' 'fill,' 'fold,' 'lock,' 'pack,' 'sell,' 'take,' and 'wash.'

The *u*-construction is also distinct from impersonals. Impersonals are characterized by the absence of internal argument promotion, whereby the logical object remains in *in-situ* and carries accusative case-marking (e.g. Blevins 2003; Legate 2014). In contrast, the logical object in the *u*-construction obligatorily carries subject-marking, as seen in (7).

(7) M-**u**-aleb **{na/*kana}** **aleban**.
AV-U-close **{DF.PIV/*DF.ACC}** **door**
'The door was closed.'

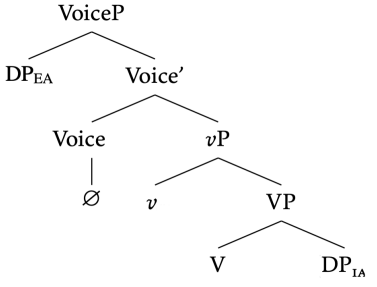
A middle analysis does not fit well with the *u*-construction, either. Middles usually lack a specific time reference and invoke a generic interpretation (e.g. Kemmer 1993; Kaufmann 2007). The *u*-construction, on the other hand, is usually episodic, denoting an event that took place before the speech time without perfective morphology, as seen in all examples above in (2b), (5a-b), and (7).

To sum up, the *u*-construction in Puyuma instantiates a rare type of derived intransitive that (i) does not allow an external argument to be syntactically realized, (ii) can be 'derived' from agentive transitive verbs, (iii) does not show characteristics of impersonal constructions, and (iv) is episodic. Accordingly, we assume the affix *u-* to mark a type of detransitivizing operation featuring the elimination of the external argument.

3. *u-* is the spell-out of Voice^0

We turn now to an examination of the locus of the detransitivizing affix *u-*. Following recent work that argues for the division of Voice and *v*, we assume that the functional projections of verb phrase contain three layers: Voice, which is the head that introduces the external argument and assigns accusative case; *v*, which verbalizes the root and encodes event types; V, which introduces and θ-licenses the internal argument (Kratzer 1994, 1996; Pyllkänen 1999, 2002; Alexiadou et al. 2006; Harley 2009, 2013; Legate 2014); we further assume that active Voice is phonologically null, as in (8).

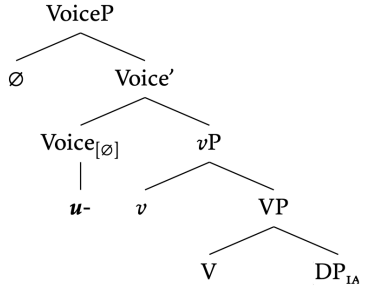
(8)



3.1. u- is the spell-out of Voice^0

As seen in section 2, descriptively, *u-* is a valency-decreasing affix whose presence correlates with the absence of the external argument. Following the assumption in (8), we propose accordingly that it is the spell-out of a defective Voice head that is incapable of introducing an external argument or case-licensing the internal argument, as in (9). Consequently, the *u*-construction lacks an external argument, and has no accusative case available to the internal argument (10a). The internal argument checks case with T, carrying the same argument-marking with unaccusative subjects (10b).

(9)



(10) a. **M-u**-sabana' la {**na/*kana**} **bangsaran**.
AV-U-cheat PRF {**DF.PIV/*DF.ACC**} **young.man**
'The young man was cheated.' (*u*-construction)

b. **M**-a-ladu' **na** **bangsaran** i takesian.
AV-STAT-slip **DF.PIV** **young.man** LOC school
'The young man slipped at the school.' (unaccusative)

3.2. u- is encoded in a projection below ASPECT^0 *and above v*

If *u-* is indeed the spell-out of defective Voice, there should be evidence that it is located immediately above *v* and below any functional projection outside of the core verbal projections, such as Aspect. In what follows, we show that this prediction is borne out with three independent observations.

Empirical support for *u-* as located above *v* comes first from its relative order with causative morphology. Assuming the Mirror Principle (11) holds, *u-* should be incorporated into morphology after that of V and *v* if this affix is the spell-out of Voice. This predicts the reflex of *v* would surface closer

to the lexical verb, with *u-* appearing at the left or right edge of the verbal complex (i.e. [Voice-*v*-V], or [V-*v*-Voice]).

(11) *The Mirror Principle* (Baker 1985:375; Harley 2013)
Morphological derivations must directly reflect syntactic derivations (and vice versa).

This prediction is borne out by the detransitivized causative examples (12a-b). As seen below, *u-* obligatorily surfaces to the left of causative morphology (reflex of v_{CAUS}) and the lexical verb (reflex of V), as predicted exactly by the Mirror Principle (11).

(12) a. M-**u-pa-resis** na raman *kandrina walak.
AV-U-CAU-intersperse DF.PIV weed *OBL.that child
'The weed was made interspersed *by that child.' (*u*-marked causative)

b. M-**u-pa-depe'** na tamaku *kandrina ma'idrang.
AV-U-CAU-inflame DF.PIV cigarette *OBL.that old.person
'The cigarette was made inflamed *by that old man.' (*u*-marked causative)

The second argument for *u-* as located above *v* comes from its unavailability in restructuring infinitives. As (13) shows, while the causative morphology affix *pa-* (i.e. spell-out of *v*) may freely appear in a restructuring infinitive, *u-* cannot. This constraint follows consistently from the current analysis of *u-* under the deficient size (bare *v*P) account of restructuring infinitives (Wurmbrand 2001 *et seq.*) – according to which restructuring infinitives lack a Voice layer.

(13) T⟨em⟩alam=ku *[$_{\text{INF}}$ adri (m-)**u**-sebana]/✓[$_{\text{INF}}$ **pa**-senay kan Senten].
try⟨AV⟩ =1SG.PIVOT *[$_{\text{INF}}$ NEG (AV)-**U**-cheat]/✓[$_{\text{INF}}$ **CAU**-sing PN.ACC Senten]
I tried (*not to be cheated)/to make Senten sing.

Finally, if *u-* is the spell-out of Voice, there should be evidence that it is located *below* Aspect. This prediction is again borne out by Puyuma-internal evidence. Progressive morphology in Puyuma surfaces as an infix ⟨*a*⟩ only when attached to vowel-initial stems, as in (14a). When attached to consonant-initial bases, it is encoded through the form of *Ca*-reduplication, namely, iteration of the onset consonant of the base following by an epenthesized vowel *a*, as seen in (14b) (Teng 2008:41).

(14)

a. VOWEL-INITIAL STEMS		b. CONSONANT-INITIAL STEMS	
u<*a*>arak	'be dancing'	*sa*-senay	'be singing'
i<*a*>natray	'going to die'	*da*-deru	'be cooking'
i<*a*>edreng	'be sleeping'	*ka*-kawang	'be walking'
i<*a*>walak	'being pregnant'	*ga*-garatr	'be biting'

Given the rule above, the fact that the progressive form of all *u*-marked detransiive verbs obligatorily employs the infix ⟨*a*⟩ and not Ca-reduplication even when its stem is consonant-initial (see (15a-b)) indicates that *u-* is encoded into morphology *before* the insertion of the progressive aspect, whereby [*u*+VERB] is treated as a vowel-initial stem, as in (14a). Assuming that the Mirror Principle holds, this suggests that *u-* is hosted in a projection *below* Aspect^0.

(15) a. m-u<a>disdis 'being torn'
b. m-u<a>drekelr 'be drinking'
c. m-u<a>ekan 'being eaten'
d. m-u<a>atel 'being falling'

We conclude accordingly that *u-* is best analyzed as the morphological realization of Voice.[2]

[2]See Chen (2020) for a discussion of similar detransitive constructions in other Philippine-type Formosan languages.

4. Austronesian-type 'voice' does not mark Voice^0

Having shown that the detransitivizing affix *u-* is the reflex of *Voice*, we turn now to the core question of this paper: does Austronesian-type voice instantiate Kratzerian Voice as claimed in previous work? We show that the answer is negative, as Austronesian-type voice is best analyzed as hosted in the C domain. Before we proceed, note that AV morphology in Puyuma surfaces as *m-* in pre-verbal environments, *me-* in pre-liquid environments, ⟨*en*⟩ in pre-bilabial environments, and ⟨*em*⟩ in pre-$C_{non\text{-}bilabial/liquid}$ environments.

Under the Mirror Principle, the fact that AV morphology surfaces to the left of the reflex of Voice (*u-*) and *v* (*pa-*) (see (16)) suggests that it is hosted in a projection higher than Voice and external to VoiceP.

(16) **M-u-pa**-depe' na tamaku.
AV-U-CAU-inflame DF.PIV cigarette
'The cigarette was made inflamed.'

Evidence from Puyuma's progressive verb forms reinforces the current proposal that AV morphology is hosted above Aspect. As seen in (17), AV morphology is obligatorily inserted into progressive morphology and not the verb stem. For verbs containing a consonant-initial base, the AV infix ⟨*em*⟩ must be inserted into progressive morphology (the first syllables in the examples in (17b)) and not the verb stem (i.e. the second syllables in the examples in (17b)).

(17)	a. AV FORM (DEFAULT)	b. AV FORM (PROGRESSIVE)	
	deru	da-deru	'cook'
	gisgis	ga-gisgis	'shave with a razor'
	karatr	ka-karatr	'bite'
	sabsab	sa-sabsab	'wash'

Following the Mirror Principle (11), this suggests that Austronesian-type Actor Voice is encoded into morphology *after* that of Aspect, indicating that it is hosted in a projection higher than Aspect. Since Puyuma is a tenseless language, this suggests that AV morphology is hosted in the left periphery.[3]

Further evidence for this proposal comes from the general design of Austronesian-type voice morphology. Like in many other conservative Western Austronesian languages, AV morphology in Puyuma inflects for mood. This is seen in (18a-b), whereby AV morphology surfaces as *m-* in realis and as zero in irrealis. The detransitivizer *u-*, on the other hand, does not inflect for mood, as seen also in (18a-b).

(18) a. **M**-u-sabana' la **i** **Akang**.
AV.REAL-U-cheat PRF **PN.PIVOT** **Akang**
'Akang was cheated.' (Realis AV morphology: *m-*)

b. ∅-u⟨a⟩sabana' **i** **Akang**.
AV.IRR-U⟨IMP⟩cheat **PN.PIVOT** **Akang**
'Akang will be cheated (someday in the future).' (Irrealis AV morphology: zero)

Given that Mood is standardly analyzed as belonging to the C domain (e.g. Rivero & Terzi 1995; Han 2001; Noonan 2007) , the fact that AV morphology inflects for mood but *u-* does not follows consistently from the current proposal that the former is encoded high in the left periphery, whereas the latter is hosted low within VoiceP.

[3]Like many other Western Austronesian languages, Puyuma does not have a grammatical category of tense and uses combinations of aspect and mood to establish time reference.

5. Against the Voice^0/Appl^0 analysis of Austronesian-type voice morphology

5.1. Austronesian-type voice as Ā agreement morphology

In what follows, we discuss how the current observations from Puyuma contribute to a central question in Austronesian syntax concerning the case alignment of languages with a similar voice system.

Previous accusative approaches to Philippine-type Austronesian languages have argued that the four-way voice constitutes *topic agreement* (or extraction morphology) that indexes an Agree relation between an Ā probe ([uTOP]) and its goal (Pearson 2001, 2005; Chen 2017, 2021; see also Chung 1994 for a similar claim). Setting aside differences in details, a consensus among these works is that AV morphology correlates with a *nominative subject* that agrees with an Ā probe ([uTOP] or [uRel/uwh]).

This approach is supported by Puyuma-internal facts. In Puyuma, the use of AV morphology is tied closely to the presence of a subject topic. In question-answer sequences that contain a clear discourse topic, AV morphology is obligatorily used when the discourse topic (e.g. *Pilay* in (19)) is the *subject* of the answer sentence, as in (19b). An answer not constructed with AV morphology is considered unnatural and improper, as seen in (19c).

(19) a. *Q: Discourse topic: Pilay*
Makakuda **i** **Pilay** uninan?
AV.what.happen **PN.PIVOT** **Pilay** today
'What did *Pilay* do today?'

b. *A1: The discourse topic (subject) is pivot-marked with AV morphology*
D⟨**em**⟩ eru **(pro)** dra abay.
⟨**AV**⟩cook **(3SG.PIVOT)** ID.ACC rice.ball
'*She* cooked rice balls'.

c. *A2: Answering with a non-AV clause with the topic not pivot-marked*
***T**u=deru-**aw** na abay.
3.NOM=cook-**PV** DF.PIV rice.ball
(intended: 'She cooked *rice balls*).'

This observation lends new support to the proposal that AV morphology marks topic agreement between [uTOP] and the subject (Pearson 2001, 2005; Chen 2017, 2021; see also Foley & Van Valin 1984; Shibatani 1998; Richards 2000 for a similar assumption). Crucially, it is in line with the observations earlier that AV morphology is located above Aspect and inflects for mood.

5.2. Against AV/PV morphology as the spell-out of Voice

In contrast, the ergative approach to the Austronesian-type voice system maintains that the four voice affixes constitute *valency-indicating morphology* hosted within VoiceP (e.g. Mithun 1994; Maclachlan 1996; Aldridge 2004, 2012, 2017). In this view, Austronesian-type voice is closely associated with Kratzerian Voice: AV and PV morphology is the spell-out of different flavors of Voice (intransitive vs. transitive); LV and CV affixes realize an applicative head that licenses an applied object in the highest internal argument position (Maclachlan 1996; Aldridge 2004, 2012, 2017; see Rackowski and Richards 2005 and Erlewine and Levin to appear for a similar treatment of LV/CV morphology). This analysis is outlined in (20).

(20) *The ergative approach to Austronesian-type voice*

a. ACTOR VOICE	intransitive Voice	
b. PATIENT VOICE	transitive Voice	
c. LOCATIVE VOICE	high APPL + (null) transitive Voice	
d. CIRCUMSTANTIAL VOICE	high APPL + (null) transitive Voice	(Aldridge 2004 *et seq.*)

Now, the fact that AV morphology is located *above* Aspect argues against analyzing it as the reflex of Voice. Moreover, its compatibility with the detransitivizer *u-* (reflex of Voice) (e.g. (21a)) casts further doubt on the claim that it is the spell-out of Voice. In addition, the compatibility of these two affixes challenges a key assumption under the ergative approach that two-place AV clauses such as (21b) are antipassive constructions with a (nonstructrually licensed) oblique object (e.g. Payne 1982; Mithun 1994; Aldridge 2004, 2012, 2017, a.o.).

(21) a. **M-u**-ekan la **na** bunga.
AV-U-eat PRF **DF.PIV** yam
'The yam was eaten up.' (detransitive version of (21a))
b. **M**-ekan **na** walak kana bunga.
AV-eat **DF.PIV** child "DF.OBL" yam
'The child ate the yam.' (bivalent AV clause (the alleged antipassive))

Now, the fact that the alleged derive intransitive allows detransitivization (21a) undermines the antipassive analysis of this construction – given that antipassivization and external argument detransitivization are crosslinguistically incompatible within the same clause.

Further evidence against AV morphology as the spell-out of Voice comes from its compatibility with unaccusatives. If the affix is indeed a Voice-indicating morpheme, it should be incompatible with constructions that lack a Voice layer, such as unaccusatives. As seen in (22), such constructions contain neither an external argument nor the detransitivizer *u-*. This suggests that constructions like (22) are best analyzed as structurally deficient without a Voice layer, rather than possessing a deficient Voice head (which should be spelled out as *u-*). The fact that AV morphology may occur in such constructions thus reinforces our current claim that the AV affix is *not* the reflex of Voice, and is hosted in a projection external to the core verbal domain.

(22) **Me**-redek na walak i takesian.
AV-arrive DF.PIV child LOC school
'The child arrived at the school.'

5.3. Against LV/CV morphology as the spell-out of an applicative head

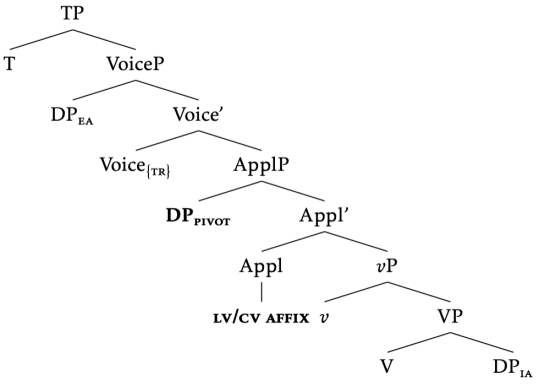
We turn now to the evidence against LV/CV morphology as the spell-out of an applicative head within VoiceP (20c-d). Similar to AV/PV morphology, Puyuma's LV/CV morphology inflects for mood, as does AV/PV morphology (23). As mood is standardly analyzed as belonging to the C domain (e.g. Rivero & Terzi 1995; Han2001; Noonan 2007), LV/CV morphology may also be hosted in the C domain, rather than applicative markers hosted within VoiceP.

(23)

	a. AV	b. PV	c. LV	d. CV	
REALIS	M-√	√-aw	√-ay	√-anay	(e.g. (1a-d))
IRREALIS	∅-Ca-√	Ca-√-i	Ca-√-i	Ca-√-an	
IMPERATIVE	∅-√	√-u	√-i	√-an	
NEGATIVE	M/K-√	√-i	√-i	√-an	

Further evidence against the applicative approach to LV/CV constructions comes from binding facts. As summarized earlier in (20), this analysis draws crucially on the assumption that the pivot phrase in LV/CV clauses is an applied object base-generated *higher* than the internal argument (Mithun 1994; Maclachlan 1996; Aldridge 2004, 2017). For this analysis to succeed, the pivot phrase in LV/CV clauses must be the highest argument below Voice, c-commanding any other internal arguments. This alleged binding relation is illustrated in (24).

(24)



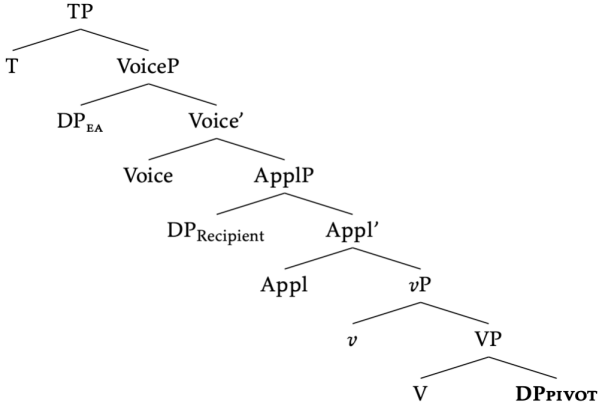
Contra this prediction, quantifier-variable binding tests show that the pivot in Puyuma's CV-marked ditransitive is c-commanded by the internal argument, but not vice versa. Consider (25a-b), where a non-pivot quantificational recipient asymmetrically bind the pivot theme.

(25) a. *CV-ditransitive:* pivot-marked theme as bound by the recipient
Ku=beray-**anay** **[tu=lribun]** [kan tinataw kana kiakarun driya].
1S.NOM=give-**CV** **[3.POSS.PIV=wages]** [DF.ACC 3S.POSS.mother LK laborer every]
'I gave every laborer's$_{\langle k \rangle}$ mother his/her$_{\langle j, k \rangle}$ wages.' (distributed reading available)

b. *CV-ditransitive:* recipient cannot be bound by the pivot-marked theme
Ku=beray-**anay** [kantu=walak] [tu=lribun kana kiabarun driya].
1S.NOM-give-**CV** [3.POSS.ACC=child] [**3.POSS.PIV**=WAGES LK laborer every]
'I gave his$_{\langle k \rangle}$ child every laborer's$_{\langle j/*k \rangle}$ wages.' (distributed reading unavailable)

This binding relation indicates that the recipient in (25a-b) asymmetrically c-commands the pivot theme, schematized in (26). This contradicts the baseline assumption of the applicative approach, indicating that the latter is *not* in the highest internal argument position eligible for object shift.

(26)



Finally, the fact that LV/CV affixes in Puyuma obligatorily cliticizes to the highest predicate of a clause (as does AV/PV morphology) casts further doubts on analyzing them as applicative markers. As (27)-(28) show, with the presence of an adverb preceding the main verb, LV/CV morphology must appear on the adverb, as seen in (27b) and (28b). This reinforces our current claim that these affixes behave like agreement morphology, and not the spell-out of functional head (i.e. applicative).

(27) a. Ku=beray-**ay** **na** **walak** kana aputr.
1S.NOM=give-**LV** **DF.PIV** **child** DF.ACC flower
'I gave the child the flowers.' (LV morphology on the lexical verb)

b. Ku=**trakatrakaw**-**ay** beray **na** **walak** kana aputr.
1S.NOM=**secretly**-**LV** give.DEFAULT **DF.PIV** **child** DF.PIV flower
'I ***secretly*** gave the child the flowers.' (LV morphology cliticized onto an adverb)

(28) a. Ku=beray-**anay** kana walak **na** **aputr**.
1S.NOM-give-**CV** DF.PIV child **DF.ACC** **flower**
'I gave the child the flowers.' (CV morphology on the lexical verb)

b. Ku=**trakatrakaw**-**anay** beray kana walak **na** **aputr**.
1S.NOM=**secretly**-**CV** give.DEFAULT DF.ACC child **DF.PIV** **flower**
'I ***secretly*** gave the child the flowers.' (CV morphology cliticized onto an adverb)

To conclude, neither AV/PV morphology nor LV/CV morphology behave like valency-indicating morphology in Puyuma. This conclusion argues against the ergative approach to this language, which hinges on an opposite assumption. It also casts doubts on an alternative case agreement approach to Austronesian-type voice (Rackowski 2002; Rackowski & Richards 2005), which also relies on a similar assumption for LV/CV constructions. This conclusion, along with independent evidence from Puyuma that Austronesian-type 'voice' affixes are hosted above aspect and inflects for mood, lends new empirical support to previous Ā agreement approaches to Austronesian-type 'voice' (Chung 1994; Pearson 2005; Chen 2017) and offers a simple account for its compatibility with true cases of voice morphology, such as the detransitivizer *u*-.

6. Conclusion

In this paper, we have demonstrated what is conventionally termed 'voice' in Western Austronesian is fundamentally different from *voice* in the traditional sense. Drawing on novel evidence from the Philippine-type Austronesian language Puyuma, where Austronesian-type voice co-occurs with an Indo-European-style two-way voice alternation, we showed that the former is best analyzed as Ā-agreement morphology located in the left periphery, rather than Voice/case-indicating morphology hosted within VoiceP (e.g. Aldridge 2004 *et seq.*; Rackowski & Richards 2005). It also indicates that what has been termed 'voice' in the literature does not form a homogeneous group, calling for a re-examination of a typology of voice systems in Western Austronesian and similar systems reported in other language families (e.g. Western Nilotic).

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