# EXCEPTIONAL Ā-EXTRACTION IN AUSTRONESIAN INFORMS THEORIES OF VOICE SYSTEMS

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# 1 Overview



# 1.1 SETTING THE STAGE

- ► A lot of Austronesian languages have a **voice system** (1):
  - $\triangleright$  The verb can appear with various morphology (- $\alpha$ , - $\beta$ , - $\gamma$ , ...)
  - ▷ Correspondingly, one DP per clause is "special" in some way (boxed here)
    - Depending on the language, "special" could mean case (Tagalog, a.o.), a fixed linear position (Malagasy, a.o.), etc.

- ▷ I'll call this special DP the Voice-Selected Argument (VSA) (Næss 2015)
- ► Austronesian languages also notoriously show particular **restrictions on what can be** (Ā-)**extracted** from any given clause:
- (2) The extracted argument must be the VSA of its clause:

a. The girl [RC who 
$$\bigcirc \left\{ \begin{array}{l} \checkmark \text{ cooked.AV} \\ \varkappa \text{ cooked.uv} \end{array} \right\}$$
 the crab]

b. The crab [RC that the girl 
$$\left\{ \begin{array}{l} X \text{ cooked.AV} \\ \checkmark \text{ cooked.uv} \end{array} \right\}$$

- (3) Alternative framing: from each voice only the VSA can be extracted
  - a. [RC the girl cooked.Av the crab]
  - b. [RC the girl cooked.uv the crab]

- **▶** Theories of Austronesian voice/extraction restriction:
  - "the non-VSA argument(s) cannot be extracted..."
    - ▶ Phase-based theories: "... because it's trapped in the lower phase" (Rackowski & Richards 2005, Hsieh 2020, 2023, Erlewine & Lim 2023, a.o.)
    - ▶ Intervention-based theories: "... because the VSA intervenes" (Aldridge 2004, 2008, Erlewine 2018, Erlewine & Sommerlot 2023a,b, a.o.)

#### 1.2 Contribution

- ▶ Novel finding: in Äiwoo, some verbs only have one voice.
  - ▶ From these, either argument can be extracted:
- (4) UV-only verbs: no extraction restriction
  - a. ✓ the girl [RC who saw.uv the thief]
  - b.  $\checkmark$  the thief [RC that the girl saw.uv  $\bigcirc$
  - c. [RC the girl saw.uv the thief]
- ► I'll build a model of Äiwoo clauses and Ā-extraction patterns, making use of the tool of *goal-flagging* (Deal 2022, to appear)
- ► This will also make correct predictions about something seemingly very unrelated, i.e., the mixed A/Ā-character of the fronting to initial position in Äiwoo

Main Claim

- ✓ Supports an Ā-intervention theory of Austronesian extraction
  - **X** Against phase-based theories
  - X Against "highest DP-only" theories
- ✓ Correct predictions about mixed A/Ā-movement in the language

# 2 BACKGROUND ON ÄIWOO

#### 2.1 VOICE SYSTEM AND WORD ORDER

- ► Oceanic (< Austronesian); Solomon Islands; about 8 000 speakers (Ross & Næss 2007, Næss 2006, 2015, 2021, Roversi 2019, 2020, to appear, a.o.).
- ▶ Philippine-type voice system: Actor Voice, Undergoer Voice, Circumstantial Voice
  - ⊳ Fairly **rigid V2 word order** (similar to Dinka; van Urk 2015):

(5) Basic word orders:

- > X stands for the applied (DP) argument that CV introduces and promotes to pivot (locative, instrumental, etc.)
- ▷ "=TAM" stands for a template-y series of particles that cliticize to their left, and come in a fixed sequence. Includes TAM stuff, negation, and the CV marker

PIVOT V (S) =TAM (O) (PP)

- (6) [Anna]<sub>S</sub> i-vängä =kaa [sii]<sub>O</sub> [ngä täpilo enge]<sub>PP</sub>
  Anna ASP-eat.AV =FUT fish in bowl this
  'Anna will eat fish in this bowl'
- (7) [sii]<sub>O</sub> i-ngä [Anna]<sub>S</sub>=kaa [ngä täpilo enge]<sub>PP</sub> fish ASP-eat.UV Anna =FUT in bowl this 'Anna will eat the fish in this bowl'
- (8) [täpilo enge]<sub>X</sub> i-vängä/ngä [Anna]<sub>S</sub>=kaa=kä [sii]<sub>O</sub> bowl this ASP-eat.AV/UV Anna =FUT=CV fish 'Anna will eat (the) fish in this bowl'

# 2.2 Morphosyntactic correlates of voice

- ► Elsewhere in Austronesian, voice morphology = neatly segmentable affixes, usually
- (9) Voice morphology in Tagalog (Rackowski & Richards 2005: 566; glosses from Hsieh 2019: 528)
  - a.  $b(\langle um \rangle)$ ili ang bata ng tela sa palengke para sa nanay  $\langle AV.PFV \rangle$ buy NOM child GEN cloth OBL market for OBL mother 'The child bought cloth at the market for Mother'
  - b.  $b\langle in\rangle ili[-\varnothing]$  ng bata **ang tela** sa palengke para sa nanay  $\langle \text{PFV}\rangle \text{buy-PV}$  GEN child **NOM cloth** OBL market for OBL mother 'The child bought the cloth at the market for Mother'
  - c.  $b\langle in\rangle ilh(-an)$  ng bata ng tela ang palengke para sa nanay  $\langle pFV\rangle buy$ -LV GEN child GEN cloth NOM market for OBL mother 'The child bought cloth at the market for Mother'
  - d.  $i-b\langle in\rangle ili$  ng bata ng tela sa palengke ang nanay  $cv-\langle pFV\rangle buy$  gen child gen cloth obl market nom mother 'The child bought cloth at the market for Mother'

#### ► In Äiwoo: it's a mess.

- ▷ Voice morphology is highly idiosyncratic/suppletive.
- ▷ Essentially: every verb has two stems, one for AV and one for UV
- See also Næss (2015, 2021), and Roversi (2019: §3.2.2).

#### (10) Voice-based stem alternations in Äiwoo:

```
a. epavi 'cook.uv'; epave 'cook.av'

b. lââ 'build.uv'; lâwââ 'build.av'

c. tu 'bring.uv'; tou 'bring.av'

d. togulo 'hit.uv'; togo 'hit.av'

e. ngä 'eat.uv'; vängä 'eat.av'

f. lâbu 'cut.uv'; lâbonge 'cut.av'

g. kili 'dig.uv'; kei 'dig.av'

h. pââ 'steal.uv'; pä 'steal.av'

i. ve 'buy.uv'; veve 'buy.av'

j. kali 'sing.uv'; ekäi 'sing.av'

k. la 'give.uv'; lää 'give.av'

l. nu 'drink.uv'; nu 'drink.av'
```

#### ► So then, how do we know what voice we're in?

- $\triangleright$  Position of  $\varphi$ -marking

#### 1) WORD ORDER: VSA-INITIAL

- ► As we've seen, Äiwoo is rigidly **V2** and **VSA-initial** 
  - ▷ If you're in AV, you must get S V=TAM O
  - ▷ If you're in UV, you must get O V S=TAM
- (11) a. AV: S V=TAM O

  Anna ki-veve=kaa nuwopa
  Anna IPFV-buy.AV=FUT house
  'Anna will buy a house'

  b. UV: O V S=TAM

  nuwopa ki-ve Anna=kaa
  house IPFV-buy.UV Anna=FUT
  'Anna will buy the house'

#### 2) Voice concord on modifiers

- ▶ Äiwoo is very fond of stringing together adverbial-y modifiers onto a verb stem:
- (12) kuli eângâ ki-li-(ngoduwâ-mana-vesi)=kaa dog that IPFV-3AUG-shout-very-always=FUT 'Those dogs will always bark loudly'
  - ► These modifiers show voice concord (Roversi 2019, Næss 2021, Wu et al. 2023)
    - ▷ If the base stem is AV, nothing special happens
    - ▷ If the base stem is UV, every modifier must take a special suffix (here, -i):

(13) a. AV: no voice concord

i-ki-(lâwââ-päko-mana) = kaa nuwopa
1MIN-IPFV-build.AV-good-very=FUT house
'I will build a house/houses very well' (\*ikilâwââpäkoimanai=kaa)

b. UV: voice concord

nuwopa eângâ ki- lââ-päko-i-mana-i -no=ngaa house that IPFV-build.uv-good-uv-very-uv-1min=fut 'I will build that house/those houses very well' (\*kilââpäkomanano=ngaa)

#### 3) Position of φ-marking

- $\blacktriangleright$  In general, the φ-features of the subject (agent, external argument, ...) are marked on the verb with an affix. Where?
  - $\triangleright$  In AV, we get prefixes
  - ▷ In UV, we get suffixes
- (14) a. AV: prefixes

**de**-ki-**vängä**=kaa sii 12AUG-IPFV-eat.AV=FUT fish 'We will eat fish' b. UV: suffixes

sii ki-ngä de = ngaa fish IPFV-eat.UV-12AUG=FUT 'We will eat the fish'

- ▶ Questions for another day:
  - ▷ Are these agreement, are these clitics? Ask me!
  - ▷ Especially UV actually has a rather complex system, with the object being marked sometimes instead of the subject (and sometimes both!), all depending on a complex person/number hierarchy effect¹

# 3 Ā-EXTRACTION: THE CANONICAL PATTERN

- ▶ In other Austronesian languages, voice morphology famously correlates with what can be extracted from a given clause (Schachter 1976, Guilfoyle et al. 1992, Richards 2000, Pearson 2001, 2005, Rackowski 2002, Rackowski & Richards 2005, Aldridge 2004, 2008, 2017, Chen 2017, 2023, Chen & McDonnell 2019, Erlewine et al. 2017, Erlewine 2018, Erlewine & Lim 2023, Hsieh 2020, 2023, a.o.). How about Äiwoo?
- ▶ Äiwoo is well-behaved, offering us pretty much the standard Austronesian menu. Here's the canonical Austronesian extraction restriction:
  - ▷ (Relative clauses are null-marked, juxtaposed to the right of the head noun)
  - $\triangleright$  Shorthand notation: 'X  $\leftarrow$  Y' = "extraction of X from a Y-type clause"

<sup>1</sup> See Roversi 2020 for an analysis, although that work was actually based on a faulty empirical generalization. See Roversi (to appear: appendix B) for an amendment.

(15)	From AV you can only extract S:
	a. $\checkmark S \leftarrow AV$ :
	[ <b>pedevalili</b> [ ki-li- <b>vängä</b> =kaa sii] <sub>RC</sub> ]=kâ pelivano gisi children IPFV-3AUG- <b>eat</b> . <b>AV</b> =FUT fish=DIST children brother.1MIN 'The kids who will eat the fish are my brother's children'
	b. <b>✗</b> O ← AV:
	* [sii [pedevalili ki-li-vängä=kaa ] <sub>RC</sub> ]=kâ i-epavi-no fish children IPFV-3AUG-eat.AV=FUT =DIST ASP-cook.UV-1MIN Intended: 'I cooked the fish that the children will eat'
(16)	From UV you can only extract O:
	a. ✓ O←UV:
	[sii [ $ki$ - $ng\ddot{a}$ $pedevalili$ = $kaa$ ] $_{RC}$ ]= $k\hat{a}$ $i$ - $epavi$ - $no$ fish IPFV- $eat.uv$ children= $Fut$ = $DIST$ ASP- $cook.uv$ - $1min$ 'I cooked the fish that the children will eat'
	b. <b>✗</b> S ← <b>UV</b> :
	* [pedevalili [sii ki-ngä-i =laa] <sub>RC</sub> ]=kâ pelivano gisi

- ▶ Why only relativization? Easiest/most reliable.

  - ▶ Left-peripheral topics seem base-generated high, not movement-derived

Intended: 'The kids who will eat the fish are my brother's children'

# 4 Today's special: UV-only verbs

# 4.1 What are they, and what do they look like?

- ▶ So far we've seen verbs that alternate between the two voices.
- ▶ Äiwoo also has some verbs that just don't have AV at all.
- ► Since voice morphology is mostly done with stem suppletion, how can we actually be sure that they're always UV?
  - > Morphosyntactic correlates of voice: word order, voice concord morphology, position of φ-marking
  - ▷ (I put what could've been a possible AV version of te 'see.uv' in small caps. What I mean: there is no stem in the language that would give us this sentence)

# (17) Word order: only OVS, never SVO

- a. bugulo=kâ ginou ba i-te-kä Mary=gu yesterday=dist son.1MiN NEG ASP-see.UV-dir3 Mary=neg 'Yesterday Mary didn't see my son'
- b. \* bugulo=kâ Mary ba i-TE-kä=gu ginou yesterday=DIST Mary NEG ASP-SEE.AV-DIR3=NEG son.1MIN Intended: 'Yesterday Mary didn't see my son'

# (18) Always voice concord, always suffixal φ-marking:

- a. bulaape=kâ gino-mu ki-te-usi-kä-ngopu=waa tomorrow=DIST son-2MIN IPFV-see.uv-again.uv-DIR3-1Aug=FUT 'Tomorrow we will see your son again'
- b. \* bulaape=kâ me-ki-TE-ute-kä=kaa gino-mu tomorrow=DIST 1AUG-IPFV-SEE.AV-again.AV-DIR3=FUT son-1MIN Intended: 'Tomorrow we will see your son again'

#### ▶ What verbs are these?

- ▷ kää 'know', te 'see', lâwâle 'help', nyida 'love', wagu 'tell', luwa 'take, grab', tuwo 'hold, grasp'; possibly also weevä 'visit', komaa 'invite', potaa 'search, look for' (less clear)
- $\triangleright$  Any verbs built from an intransitive + the applicatives -ive or -i
- ► Contrast with **voice-syncretic verbs**: these exist in both voices, but the stem just happens to be the same.

#### (19) *Nu* 'drink' is voice-syncretic, not UV-only:

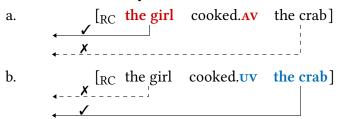
- a. AV: φ-prefixes, no voice concord, VO order de-ku-nu-mana=kaa nuwoi
   12AUG-IPFV-drink.AV-very=FUT water 'We will drink a lot of water'
- b. UV: φ-suffixes, voice concord, OV order nuwoi ku-nu-mana-i-de=ngaa water IPFV-drink.uv-very-uv-12AuG=FUT 'We will drink a lot of the water'

#### SUMMARY OF THE MORPHOSYNTACTIC PROPERTIES

- ► UV-only verbs are really only UV:
  - X Never SVO word order
  - **X** Never prefixal φ-marking
  - X Never absence of voice concord

## 4.2 UV-only verbs allow exceptional non-VSA extraction

- ► Remember: normally, **only VSA-extraction** is allowed
  - $\triangleright$  VSA-extraction:  $\checkmark$  S  $\leftarrow$  AV,  $\checkmark$  O  $\leftarrow$  UV
  - $\triangleright$  Non-VSA-extraction:  $X S \leftarrow UV$ ,  $X O \leftarrow AV$
- (20) Canonical cases: only the VSA can be extracted



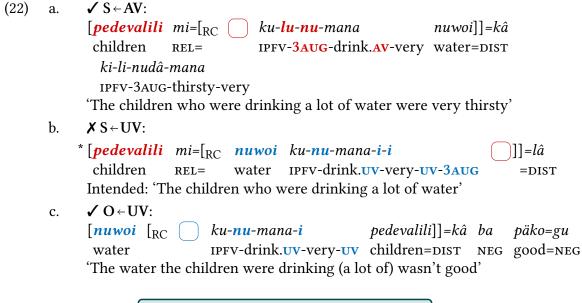
- ▶ But these verbs don't have an AV form, so... what now? If we want to extract the subject, what do we do?
- ▶ We just do it. Suddenly, non-VSA extraction is ok!
- (21) Extraction from te 'see.uv':

kokä polis=kä nä-li-eeu-kä go ... want police=cv irr-3aug-speak-dir3 to 'The police wants to talk to...'

a. O \( \cup UV \): unsurprisingly ok

[mekipä [RC i-te-usi-kä pesingedâ]] thief ASP-see.uv-again.uv-dir3 girls '... the thief that the girls saw again'

- ▷ See appendix for some more cases of non-VSA extraction from UV-only verbs, to convince you that it's not just an exceptional one-off thing
- ► Just to make sure: **voice-syncretic verbs don't do this**. If you do subject extraction, you must get the AV form and not UV



Summ	ARY (	F EX	TRACTIO	N PO	SSIBILITIES	: ]
		Can	onical	UV-	only	
		S	0	S	O	
	AV	✓	Х	_	_	
	UV	X	✓	✓	✓	

# 5 ACCOUNTING FOR THE EXCEPTIONS

#### 5.1 Theories of the Austronesian extraction restriction

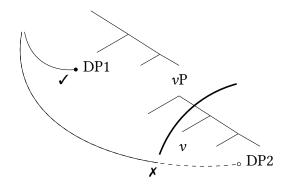
- ► General *explananda*:
  - (1) Voice morphology alternations on the verb correlating with one DP per sentence being "special" (the VSA)
  - (2) Only the special DP can be (Ā-)moved
- ► A theory of the Austronesian extraction restriction must explain (2), but it needs to say something about (1) too
- ► Two broad families of theories: "Only the VSA can be extracted because..."
  - (A) **Phase**-based theories:
    - "...because all other DPs are trapped in the lower phase"
      - Rackowski & Richards (2005), Hsieh (2020, 2023), Erlewine & Lim (2023), and others

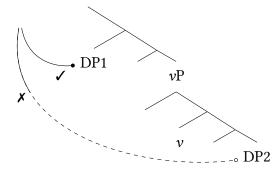
#### (B) Intervention-based theories:

- "... because being highest it intervenes for extracting the lower DPs"
  - ▷ Aldridge (2004, 2008), Erlewine (2018), Branan & Erlewine (2024), ...

# (23) a. Phase-based approaches:

# b. Intervention approaches:





# 5.2 Ruling out "Highest DP" Theories

- ▶ As for the intervention-based theories: *what kinds of intervention exactly*?
  - ▷ Intervention = Relativized Minimality (Rizzi 1990)
- ► Some say: "in these languages Ā-movement can only target the highest DP" (Aldridge 2004, 2008, Erlewine 2018, Branan & Erlewine 2024)
  - $\triangleright$  Concretely: the (Ā-)probe that's driving extraction is relativized to [D] or  $[\phi]$ , or at least some features that *all* DPs share
  - Mixed A/Ā-probing: Legate (2014), van Urk (2015), Baier (2018), Erlewine (2018), Ostrove (2018), Bossi & Diercks (2019), Colley & Privoznov (2020), D'Alessandro (2020), Scott (2021), Coon et al. (2021), Jarvis (2023), Jenks (2023), and Deal (2024b), and probably more
- ► This can't work for us:
  - ▷ Äiwoo is rigidly V2 and VSA-initial: very informative as to where DPs are!
  - ⊳ With UV-only verbs, we clearly *can* extract a lower DP across a higher one:
- (24) Extraction across a higher DP is conditioned by the type of verb:
  - a. With canonical verbs: X impossible

- ▶ We would have an inconsistency problem: some DPs intervenes, some don't
  - ▷ But whether they intervene or not has nothing to do with the DP itself, and only with the verb they're a complement of!

#### (25) Abstractly:

a. Canonical verbs: X S ← UV

\* head noun [RC object bring.uv = TAM ...]

b. UV-only verbs: ✓ S←UV

head noun [RC object see.uv =TAM ...]

#### 5.3 Ruling out phase-based theories

- ▶ **Phase**-based theories propose the extraction restriction is about *absolute* locality:
  - ▷ The VSA is high enough to be extracted
  - $\triangleright$  The non-VSA(s) are too low, regardless of intervention: they're stuck in the lower phase ( $\nu$ P)
- ► In some languages, this is a feature and not a bug! See a.o. Hsieh (2020, 2023) about non-pivot extraction in Tagalog, and Erlewine & Lim (2023) about Bikol
- ► Can these approaches help us with Äiwoo? No.

#### PROBLEM 1: NO DIFFERENCE BETWEEN CANONICAL VERBS AND UV-ONLY VERBS

- ► Under a phase-based theory:
  - ▷ If a DP can be extracted, it's above the phase boundary
  - ▷ If a DP can't be extracted, it's below the phase boundary
- ► Therefore, in Äiwoo we make these predictions:
  - Subjects of canonical UV verbs can't be extracted, so they must be below the
     phase boundary
  - Subjects of UV-only verbs can be extracted, so they must be above the phase boundary
- ▶ But they really seem to be in the same exact position! No clear differences (in a language where word order is rather strict)

- Same position with respect to negation and TAM marking, and adjuncts
- (26) a. iso ba ku-tu-kä John=to=gu=naa ngâ nuwopa mother.1min neg ipfv-bring.uv-dir3 John=tam=neg=fut P house 'John won't already have brought my mother home'
  - b. iso ba ki-te-kä John=to=gu=naa ngâ nuwopa mother.1min neg ipfv-see.uv-dir3 John=tam=neg=fut P house 'John won't already have seen my mother at home'

#### PROBLEM 2: IS ANY SUBJECTS IN THE LOWER PHASE TO BEGIN WITH?

- ► What phase boundary to we care about? Canonical assumption: vP (Chomsky 2001)
- $\blacktriangleright$  Objects of AV verbs can't be extracted: ok, they're plausibly in situ inside the  $\nu P$
- (27) Mary ki-epave=kaa nulei
  Mary IPFV-cook.AV=FUT crab
  'Mary won't cook crab(s)'
  - $\blacktriangleright$  More interestingly: can we really say that subjects in UV are inside the  $\nu P$  phase?
  - ► I argue that no, (UV) subjects are in spec,TP.
  - ► Evidence 1: UV subjects are to the left of TAM material
    - ⊳ By standard assumptions about the clausal spine (e.g. Ramchand & Svenonius 2014 and many others), this means that they are at least in the T/Infl region
  - ► We can also show that the TAM particles are not linearized according to some phonological principle(s), despite being monosyllabic/stressless/cliticizing.
    - ▷ Regardless of the size of the subject DP, these particles go in the same place
      - ⊳ (28a): floating nasal feature
      - ⊳ (28b): big chunky DP containing a RC
- (28) a. nuwopa enge ba ki-ve(-Ø<sup>n</sup>)=naa house this NEG IPFV-buy.uv-3MIN=FUT 'They.sg will buy this house'
  - b. ba ki-kää **me=[ki-tokoli-woli-mä ngä botu]**=gu=naa NEG IPFV-know.UV REL:person=IPFV-sit-down-DIR1 in boat=NEG=FUT 'The person sitting in the boat will not know (this)'
  - ► This should be sufficient to convince us that these UV subject DPs have moved up to the T/Infl region.
  - ► Evidence 2: UV subjects can sometimes surface in an exceptional low position, to the right of the TAM material

- $\triangleright$  This is when the verb carries object  $\phi$ -marking; ask me the how's and why's of these cases another time
- (29) a. ku-tu- $k\ddot{a}$ -gu-de =  $ng\ddot{a}$  skul IPFV-bring.UV-DIR3-GU-12AUG=FUT teacher P school 'The teacher will bring us to school'

  - ► I argue that this low position is the pre-movement one for subjects, aka where they are base-generated in spec, *v*P
    - ▶ Here, the object has exceptionally moved to spec,TP instead of the subject: only room for one DP!
  - ▶ Wrong predictions! Under a phase-based approach, UV subjects should all be extractable, also from canonical verbs, because they're in the higher phase

#### **INTERIM SUMMARY**

- ► Canonical UV vs. UV-only verbs:
  - ▷ Identical morphosyntax: word order, voice morphology, etc.
  - ▷ Difference in extractability of the subject: ✓ UV-only, ✗ canonical UV
- **X** Against "highest DP" approaches:
  - ▷ With UV-only verbs we can clearly extract across a higher DP
- **X** Against **phase-based** approaches:
  - ▷ No difference between the two verb types in where the arguments are
  - ▷ Subjects are not even in the lower phase to begin with, they're in spec,TP

#### 6 Analysis

- ► First: how do main clauses work?
- ► Then: how does extraction work?
- ► And also: why are UV-only verbs different?

# 6.1 A MODEL OF THE ÄIWOO CLAUSE

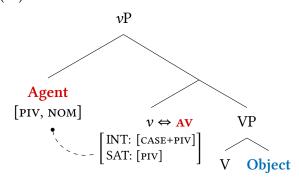
#### ► Framework-level assumptions:

- ▷ All movement is preceded by a step of agreement (notation: superscript <sup>M</sup> on the feature triggering movement)
- ▷ Agreement is modelled in the interaction/satisfaction framework Deal (2015, 2022, 2024a, to appear)
- ▶ Information is transferred from the goal to the probe (normal feature copying) but also from the probe to the goal: **goal-flagging** (Deal 2022, to appear)
  - ▷ Conceptual predecessors in Chomsky (2001) and Pesetsky & Torrego (2001)
- ▶ "Pivothood": one DP per sentence carries an Ā-feature [PIV] (Hsieh 2020, 2023)
  - > Syntactically free, chosen by the speaker depending on various information structural factors

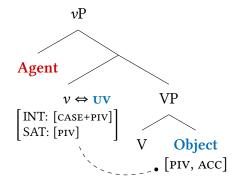
### ► Voice morphology:

- ▷ Internal to the stem, on the inside of aspect: by Mirror Principle logic, this happens *early*
- $\triangleright v$  looks for [PIV], and case-agrees with the DP bearing it
  - Case agreement/wh-agreement: Rackowski (2002), Rackowski & Richards (2005), and Hsieh (2020, 2023) for Tagalog, but also Chung (1994) (Chamorro), O'Herin (1993, 2002) and Arkadiev & Caponigro (2021) (Abaza), Ostrove (2018) (San Martín Peras Mixtec), D'Alessandro (2020) (Ripano), Colley & Privoznov (2020) (Khanty), Erlewine (2020) (Tibetan), dos Santos (2023) (Kawahíva)
- Unlike other analyses of Austronesian languages: nothing moves at this point

#### (30) a. Actor Voice:



## b. Undergoer Voice:



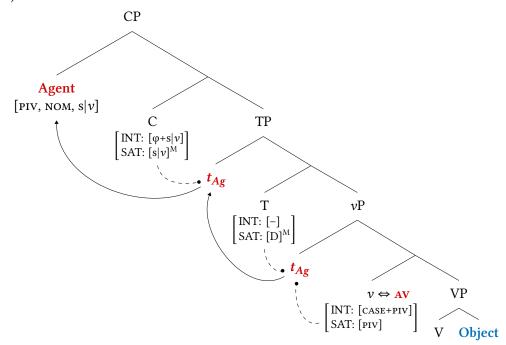
#### ► Subject movement to spec,TP:

- ▷ Completely standard local movement: T just consistently attracts the highestDP to its specifier = always the subject
- $\triangleright$  That's how we know that  $\nu$ P hasn't moved the object over the subject

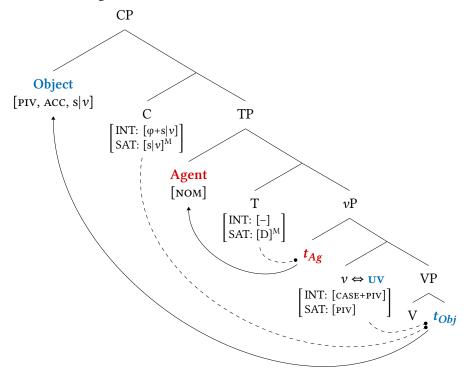
## ► VSA-fronting to spec,CP:

- ▷ C consistently agrees with/moves whatever *v* has agreed with
- ➤ Two logically possible ways:
  - ▷ v looks for [PIV]; C also looks for [PIV]
  - $\triangleright v$  looks for [PIV]; C looks for what has satisfied v (notation: [s|v])
- ▷ I use this notion of goal-flagging to model the behavior of UV-only verbs later
- $\triangleright$  We can show C also copies back  $\phi$ -features, but only expones them in certain contexts; ask me about this
- ▶ I assume the verb undergoes long head-movement to C (Roberts 1994, 2010, Embick & Izvorski 1997, Rezac 2008, Harizanov 2016, Harizanov & Gribanova 2019, Preminger 2019), skipping the TAM material in T (not drawn in the trees)
  - ▷ If long head-movement is unpalatable, we could also assume that the mono-syllabic TAM particles are all specifiers in Cinque-ian functional projections in the Infl region, whose heads are null; then we can do perfectly local head-movement
- ► Putting it all together:

#### (31) a. Actor Voice:



# b. Undergoer Voice:



#### DERIVING THE CLAUSE STRUCTURE

- $\blacktriangleright$  Voice morphology is case agreement between  $\nu$  and the DP bearing [PIV]
- ► The subject always moves to spec,TP
- $\triangleright$  C always fronts whatever  $\nu$  has agreed with (goal flagging)

# 6.2 Deriving the canonical extraction restriction

- ► Earlier, in trying to understand the Austronesian extraction restriction in its Äiwoo incarnation, we **excluded phase-based approaches** and **highest DP-approaches**
- ▶ Now we have a model of the clause where the highest DP, the VSA, consistently carries an Ā-feature [PIV]
- ightharpoonup The extraction restriction is an effect of  $\bar{A}$ -intervention!
  - $\triangleright$  Like the canonical *wh*-superiority effects, and also other  $\bar{A}$ -intervention effects (Abels 2012, Aravind 2017, a.o.)

- ⊳ Still Relativized Minimality, but relativized to Ā-features instead of to all DPs
- ▷ This will come in hand, since we know not all VSA DPs intervene...
- ► Concretely: let's model relativization with an Ā-feature [REL]
  - A high probe (above C) looks for [REL], but any other Ā-features count as an intervener (assuming some kind of feature geometry for Ā-features; Abels 2012, Aravind 2017)
- ▶ In the canonical extraction cases, the VSA (what v and C have agreed with) is also always the pivot (what carries the feature [PIV])
- ► Therefore, if [REL] is on a lower DP than the VSA/pivot, this will intervene, and relativization will be **blocked**:
- (32)  $X S \leftarrow UV$  due to  $\bar{A}$ -intervention:

```
[\begin{array}{cccc} probe_{\begin{subarray}{c} [INT: [REL]] \\ SAT: [\bar{A}] \end{subarray}} & [CP & \begin{subarray}{c} Obj_{\begin{subarray}{c} [PIV] \end{subarray}} & C & [TP & \begin{subarray}{c} Subj_{\begin{subarray}{c} [REL] \end{subarray}} & \dots \end{subarray}]]]
```

#### 6.3 Deriving exceptional extraction with UV-only verbs

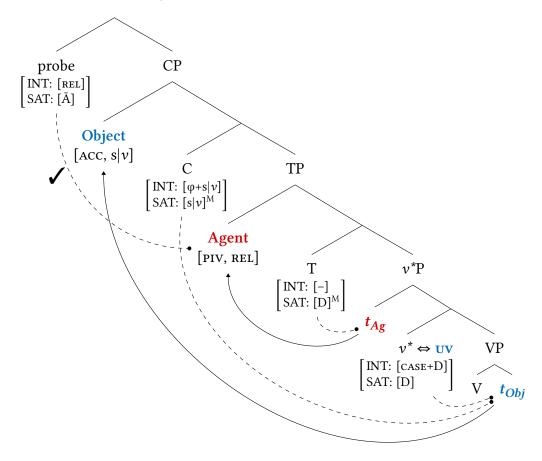
- ► We have established that the VSA-only extraction restriction we find with canonical verbs is an effect of Ā-intervention
- ► So why don't UV-only verbs have this? Reasoning backwards:
  - This would mean their VSA doesn't (have to) carry [PIV]
  - ▷ If the highest DP doesn't have [PIV], no intervention arises, and relativization is free (like in English)

  - For UV-only verbs, VSA ≠ pivot!
- $\triangleright$  Proposal: UV-only verbs lexically select a different v head, call it  $v^*$ 
  - $\triangleright$  Instead of looking for [PIV],  $v^*$  looks for [D]
  - $\triangleright$  At the time of its merge, the only DP in its c-command domain is the direct object, so  $v^*$  will always agree with the object (per normal cyclicity)  $\Longrightarrow$  always UV!
  - This is regardless of which DP carries [PIV]!
  - C doesn't really care about [PIV] either , it just wants whatever v has agreed with, so it will also always agree with the object
- ► Now we have a class of verbs that can create configurations where the highest DP doesn't necessarily carry an Ā-feature, and thereby it won't intervene

- ▶ Deriving the relevant case where subject extraction from UV is allowed:

  - $\triangleright$  But [PIV] is on the subject = no  $\bar{A}$ -intervention!

# (33) ✓ S←UV with UV-only verbs: non-Ā-marked VSA doesn't intervene



# 7 MOVEMENT TO SPEC, CP IS MIXED A/Ā-MOVEMENT

- ▶ We have posited a particular probe specification for C to model different extraction patterns (sometimes a high DP intervenes, sometimes it doesn't)
- $\blacktriangleright$  What type of movement is this? Classic differences in (34)–(35):

  - ▷ I don't know how parasitic gaps work, and I don't know if this movement creates new antecedents for anaphors; very hard to test for independent reasons)

# (34) A-properties:

(35) Ā-properties:

- a. Local
- b. ✓ Restricted to nominals
- c. ✓ No Condition C reconstruction
- d. ✓ No Weak Crossover

- a. ✓ Long-distance
- b. Not restricted to nominals
- c. Recontruction for Condition C
- d. Weak Crossover

# ► Under a featural approach to the A/Ā-distinction (van Urk 2015), we expect this:

- $\triangleright$  **A-type** profile for syntactic categories: C only targets nominals (because of  $[\varphi]$ , but also indirectly because v only targeted nominals in the first place)

# ► Interesting comparison: Äiwoo VSA-fronting vs Germanic V2-fronting

- $\,\rhd\,$  They look in principle very similar on the surface, but Germanic V2-fronting is more like pure Ā-movement

#### **CATEGORIAL RESTRICTIONS:**

# (36) Äiwoo pre-verbal position: ✓ DPs, X PPs, X AdvPs

- a. [George]<sub>DP</sub> ki-te-vesi-i-kâ-no ngä taun dâbu dâuwângâ George IPFV-see.uv-keep-uv-dir3-1min in town day every 'I see George in town every day'
- b.  ${}^*[ng\ddot{a}\ taun]_{\rm PP}$  ki-te-vesi-i- $k\hat{a}$ -no George  $d\hat{a}bu$   $d\hat{a}uw\hat{a}ng\hat{a}$  in town IPFV-see.uv-keep-uv-dir3-1min George day every
- c. \* [dâbu dâuwângâ]<sub>AdvP</sub> ki-te-vesi-i-kâ-no George ngä taun day every IPFV-see.uv-keep-uv-dir3-1min George in town

# (37) Norwegian pre-verbal position: ✓ DPs, ✓ PPs, ✓ AdvPs

- a.  $[Ana]_{DP}$  ser jeg i by-en hver dag Ana see I in city-def every day 'I see Ana in town every day'
- b.  $[i \quad by\text{-}en]_{PP}$  ser jeg Ana hver dag in city-def see I Ana every day
- c.  $[hver \ dag]_{AdvP}$  ser jeg Ana i by-en every day see I Ana in city-def

#### CONDITION C RECONSTRUCTION:

(38) a. Äiwoo pivot-fronting: no Condition C reconstruction

[poi no Pita]<sub>Obj</sub> i-dââ-Ø<sup>n</sup>=naa pig POSS Peter ASP-tie.uv-3MIN=FUT 'Peter; will tie his; pig'; lit. 'He; will tie Peter;'s pig'

b. Norwegian V2-fronting: reconstruction for Condition C

#### WEAK CROSSOVER:

(39) a. Äiwoo pivot-fronting: no Weak Crossover violation

**iie** ku-tu- $m\ddot{a}$   $tumw\ddot{a}$ - $\cancel{\varnothing}^{n}$ =naa? who IPFV-bring.UV-DIR1 father-3MIN=FUT 'Who are the individuals x such that x's father will bring x?' Lit. 'Who; will his/her; father bring?'

b. Norwegian *wh*-fronting: Weak Crossover violation

who will far-en his take with 'Who; will his;/\*i father bring?'

# 8 Conclusion

- ▶ Äiwoo shows something novel for Austronesian languages: UV-only verbs
  - ▶ With these, the standard extraction restriction doesn't hold
- ▶ We learn something about the interplay between syntactic "inversion" (one argument moving above another) and restrictions on extraction: they don't need to go together!
  - ▷ Classic explanations for syntactic ergativity (Deal 2016 and references therein)
  - ⊳ But not necessarily: one can have the one without the other (see Ershova 2019)
- ► Supports the idea that locality is probe-specific, and not determined globally

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# A More subject extraction from UV-only verbs:

(40)	kää 'know':
	[isä devalili [RC ile lopwâ enge i-kää-päko-i-i ]]
	women PROX story this ASP-know.uv-good-uv-3Aug
	,
	'[I've met some] women who know this story well'
	⊳ Constructed AV RC: *likääpäko ile lopwâ enge
(41)	wagu 'tell':
` /	[sime [RC lopwâ eângâ i-wagu-mä-i ]]]=lâ li-pe-Lende
	person story that ASP-tell.uv-dir1-3Aug =dist 3Aug-coll-S.Cruz
	'The people who told me that story were from Santa Cruz'
	▷ Constructed AV RC: *liwâgumä lopwâ eângâ=kâ
( )	
(42)	lâwâle 'help':
	[ $silaki$ [ $RC$ Jen $ki$ - $lawale$ - $vesi$ - $i$ - $k\ddot{a}$ - $\varnothing$ <sup><math>n</math></sup> = $naa$ ]]
	girl Jane ipfv-help.uv-always-uv-dir3-3min =fut
	'The girl who will always help Jane [is my daughter]'
	▷ Constructed AV RC: *kilâwâlevesikä=naa Jen

(43)	nyida 'love':								
	$[gilaki mi=[_{RC} is\ddot{a}-\varnothing^n ba ki-nyida-\varnothing^n =gu]]$								
	boy rel= mother-3min neg ipfv-love.uv-3min =neg								
	'A boy who doesn't love his mother [has bad manners]'								
	Constructed AV RC: *ba kinyida=gu isä								
(44)	te 'see':								
` /	[pesingedâ mi=[RC kuli no-mu ki-te-usi-kä-i =laa]								
	girls REL= dog POSS-2MIN IPFV-see.uv-again.uv-dir3-3Aug =FUT								
	'[I want to talk to] the girls who will see your dog again'								
	⊳ Constructed AV RC: *kiliteutekä=naa kuli nomu								
(45)	Applicative -i 'comitative':								
` /	[mikilitei [RC nubââ i-eâ-i-to-mä-i ]]=lâ								
	fishermen shark ASP-[paddle-com] <sub>IIV</sub> -in-DIR1-3AUG =DIST								
	'The fishermen who paddled back with the shark [are very strong]'								
	Constructed AV RC: *lieâitomä nubââ=kâ								
(46)	Applicative -ive:								
	[pedevalili [RC John ku-mâea-ive-mana-i-i ]]]=lâ								
	children John IPFV-[laugh-APPL] <sub>IIV</sub> -very-uv-3Aug =DIST								
	'The children who were laughing at John [were very small]'								
	Constructed AV: *kulumâeaivemana John=kâ								