Austronesian Clausal Constituency in a Southeast Asian Perspective

Daniel Kaufman Queens College, CUNY & Endangered Language Alliance Daniel.Kaufman@qc.cuny.edu

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1 Introduction

- I examine here a problem which plagued me as an undergraduate student and which I am sure still plagues others 20 years later because it has not been addressed in a straightforward manner.
- The problem pertains to the verb phrase, its universality and its ingredients. Specifically, what does a (conservative) Austronesian VP look like, if such a thing exists?
- I show that Austronesian languages diverge from all their SEA neighbors in grouping the head of a transitive event-denoting predication (let's call it V for now) with the Agent-like argument (henceforth the A argument) while excluding the Patient-like argument (henceforth the P argument).

"Conservative Austronesian" (NucAn)	Mainland SEA sprachbund
[[V Agt] Pat]	[Agt [V Pat]]

- This constituency has been noted fleetingly in the literature (Starosta et al. 1982; Keenan 1976, 1995, 2000; Naylor 1980) but *completely obscured* by recent analyses which derive the Austronesian word order from something like the mainland order, increasingly accepted by certain factions to be a universal base order.
- I conclude by showing surprising evidence from Tsou that an even earlier state of Austronesian clause structure may be preserved in that language.

1.1 A very brief history of clausal constituency

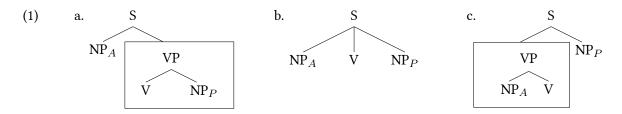
- Until relatively recently, it was not taken for granted that there existed phrasal constituents like the VP between the noun phrase and the sentence.
- Before Bloomfield, the notion of phrase itself was not even widely accepted, rather sentence structure was seen as relationships between words, likely due to the outsize influence of Greek and Latin on western linguistic thought.
- Bloomfield (1914) appears to have laid the foundation for Chomsky's (1957; 1965:102) phrase structure rule S → NP Predicate-Phrase: "In the primary division of an experience into two parts, the one focused is called the subject and the one left for later attention the predicate..."
- This in turn was due directly to the influence of the psychologist Wilhelm Wundt (Percival 1976), the first to argue for a strict binary branching structure for natural language. Wundt (1922:240):

"This principle of duality or of binary connection has found its unmistakable expression in the categories of grammatical syntax. For all these categories always reduce to just two representations which are

connected with each other. Thus we distinguish first the two main representations Subject and Predicate, which correspond with the first division of the thought. The Subject may be divided again into Noun and Attribute. The Predicate, when it is nominal, splits into the Copula and the Predicate proper, upon which the latter, like the Subject, may split into Noun and Attribute again. But if the Predicate is verbal it may split into Verb and Object, or into the Predicate proper and the supplementary Predicate."

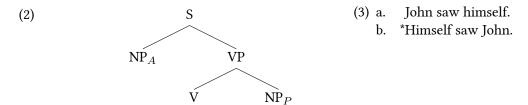
(Wundt 1880:5354, Seuren's 2006 translation)

- For Wundt, the sentence was composed of binary *logical* relations. As noted by (Seuren 2006) multiple branching was for him a sign of a primitive mind.
- After the general adoption of Wundt's (1880) VP hypothesis, Ken Hale brought things full circle and returned to the position that not all languages need to display binary branching.
- In Hale's analysis, several features of Warlpiri syntax were explained by the lack of a Verb Phrase.
 - The hierarchical structure in (1-a) represented languages like English, where the verb and object formed a unique constituent.
 - Non-configurational languages like Warlpiri were the result of a flat structure as in (1-b).
 - Notably absent from the discussion was the possibility of alternative verb phrases that included the predicate head and the A argument, as in (1-c).



1.1.1 The consequences of configurationality

- The consequences of the different structures in (1) depends entirely on how a particular framework exploits phrase structure.
- On the majority of theories (LFG, HPSG, GPSG, Categorial Grammar, Relational Grammar) constituency is kept separate from hierarchical effects. Asymmetries between subject and object are derived by direct appeal to argument or thematic structure.
- In contrast, a pillar of Chomskyan syntax has been that the constituency of a clause determines all asymmetries between arguments.
- There, it is by virtue of the verb and the object forming a constituent in the structure below that the subject and the object are in an asymmetrical relation with regard to phenomena like reflexive binding.



- Constituency and hierarchical diagnostics are thus not well distinguished in Chomskyan work and the hypothesis connecting constituency structure to hierarchical relations has prematurely become a given.
- Ubiquitous reflexive binding facts as in (3) are taken as evidence for a structure as in (2). I reject that methodology here and rely solely on true constituency diagnostics that show a grouping between the verb and an argument of the clause:
 - (4) Predictions of the traditional VP
 - a. Adverb placement: If adverbs cannot break up a verb + argument combination, it should be V+P.
 - b. Coordination: If only one verb + argument combination coordinates *naturally*, it should be V+P.
 - c. **Movement**: If only one verb + argument combination moves as a unit, it should be the V+P.
 - d. Ellipsis: If only one verb + argument combination can be elided as a unit, it should be the V+P.
 - e. Focus: If focus on only one argument can be interpreted as including the verb, it should be the P.
- We turn now to some of the major languages of SE Asia and their evidence for a traditional VP constituent.
- As it turns out, the question of the VP is rarely if ever addressed in modern descriptive grammars while in generative work it is always assumed. It is too theoretical a question for most descriptivists and too descriptive a question for theoreticians.
- A giant empirical gap thus remains for anyone brave enough to fill it!

2 Introducing the diagnostics

2.1 Coordination

- Coordination, a classic constituency test, has been shown to yield some puzzling results in English: The following sentence appears to show a Subject-Verb constituent, in contradiction to the traditional VP.
 - (5) John prepared and Mary ate the noodles.
- Much has been made of this in Categorial Grammar, which derives non-traditional constituents with the same ease as traditional constituents.
- But, as has been noted, structures like (5) are only acceptable with strong prosodic breaks following the verbs, suggesting an extra layer of derivation.
- The derivation, termed Right Node Raising (Ross 1967), is understood to involve a gap in both conjuncts from which a phrase has moved to a right-peripheral position.
 - (6) John prepared $\underline{\hspace{0.5cm}}_{i}$, and Mary ate $\underline{\hspace{0.5cm}}_{j}$, [the noodles] $_{i/j}$
- Another case of apparent non-constituent coordination involves examples like the following:
 - (7) a. Jane saw [Mary on Monday] and [Jane on Tuesday] (Obj+Adjunct)
 b. I ate [here on Monday] and [there on Tuesday] (Adjunct+Adjunct)

- In (7-a), the adjunct, which is not considered part of the verb phrase proper is conjoined together with the object. In (7-b), two adjuncts are coordinated together even though they do not form a constituent.
- Pesetsky (1995) argues that two simultaneous but separate kinds of structures are required to explain coordination facts (Cascade Syntax) together with hierarchical facts (Layered Syntax).
- But not all languages allow non-constituent coordination of the kind seen in (6) and (7). Chinese, for example, categorically rejects non-constituent coordination:
 - (8) John [hē chá], lìngwài hái [chī miàn] John drink tea, otherwise also eat noodle 'John [drinks tea] and [eats noodles].'
 - (9) a. *[John chǎo], kěshì [Tom chī] miàn John cook but Tom eat noodle '[John cooks] but [Tom eats] noodles.'
- [John chảo miàn], kěshì [Tom chī miàn]
 John cook noodle but Tom eat noodle
 '[John cooks noodles] but [Tom eats noodles].'
- (10)a. *John [zài xīngqīyī kàndào le Tom], ránhòu [zài xīngqīsān Jerry]

 John Loc Monday see PERF Tom, then Loc Wednesday Jerry

 'John saw [Tom on Monday] and [Jerry on Wednesday].'
 - b. John [zài xīngqīyī kàndào le Tom], ránhòu [zài xīngqīsān kàndào le Jerry]
 John Loc Monday see Perf Tom, then Loc Wednesday see Perf Jerry
 'John [saw Tom on Monday] and [saw Jerry on Wednesday].'

We can conclude that non-constituent coordination should be marked (prosodically or syntactically) in relation to constituent coordination.

2.2 Adverb placement

• Looking at English manner adverbs like well, we find that they are positioned on the right edge of the VP.

• Each type of adverbs has its own principles of placement (Ernst 2001) but note that none of the adverbs above can intervene between the verb and the object in English.

Adverb intrusion is one diagnostic that can reveal the existence of "intermediary" constituents like the VP.

2.3 Focus

• Focus is *not* a traditional constituency diagnostic but this is probably because it was a peripheral topic in syntactic research until recently.

- The *focus* of an utterance is new or contrastive information as opposed to the *presupposition*, which is information that is already given within the discourse.
- As shown by Jackendoff (1972), focus interacts with a class of ('focus-sensitive') adverbs to create entailments by triggering alternatives for a particular word or constituent. These adverbs include *also*, *only*, *even*, and negation, among others.
- Focus, as indicated intonationally in English, can give several different entailments to a single utterance in the presence of one of these adverbs, as seen in (12).

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(12)a. Only John [makes dumplings]. (Mary doesn't make dumplings.)
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- b. John **only** [<u>mákes</u> dumplings]. (John doesn't eat them.)
- c. John only [makes dúmplings]. (John doesn't do anything else.)
- d. John only [makes dúmplings]. (John doesn't make noodles.)
- Note that constituent structure determines both the placement of *only* as well as *focus spread* to the verb from the object.

Focus interpretation should respect the VP: prominence on the object can typically be interpreted on the verb. Focus adverbs may attach to the edge of VP while narrowly focusing on one of its subconstituents.

3 Mainland SEA languages (+)

3.1 Khmer

- Haiman (2011) describes Khmer as having SVO(Adv) order and offers several examples such as that in (13).
 - (13) cong kvaev [pdac vaul] ja:ng phuj tip machete cut vine kind easy "The tip of the machete cut through the vines easily" (Haiman 2011:204)
- Crucially, there appears to be no position between the verb and the object available for adverbs.
- In terms of coordination, Haiman describes three conjunctions:
 - nwng for NP and VP coordination
 - haeuj for clausal coordination
 - kaw: for same subject (VP) coordination
 - (14) A:chaj [trev taw:su:] nwng [mian ceut tnguan nah]

 A. must struggle and have heart heavy very

 "A. had to be stoical and bear a lot of grief." (Haiman 2011:219)
 - (15) burawh nuh [cam ju: pee:k] kaw: [daeu co:l tev cwt] fellow that wait long.time too.much and walk enter go close "The young man waited a long while and then came in close." (Haiman 2011:219)

- A lexical distinction between two additive adverbs distinguishes between same-subject (*dae*) and switch-subject contexts (*phaw:ng*).
 - (16) knjom kaw: kwt do:c nawh (dae/*phaw:ng)
 I so think like that also/also
 "I think so too." (Haiman 2011:220)
- In structural terms, this is equivalent to clausal coordination (SVO) versus VP-coordination.
- Note crucially that there is nothing like a "switch-object" conjunction, which would imply coordination of a Subject-Verb constituent excluding the object.

3.2 Vietnamese

- Đình Hoà (1997) defines the "verb phrase" as including a verbal nucleus with optional modal, negation, tense, adverbial material. As with many other descriptive grammars, this use of "verb phrase" is equivalent with what is often called the "verb complex", a grouping that includes the verb plus auxiliaries, modals and associated adverbials/particles.
- Despite the apparent short shrift given to the Vietnamese VP in the descriptive literature, these is evidence for it in at least adverb positioning and focus spread.
- First of all, adverbs seem to be unable to intervene between the verb and bare objects, as shown in (17).
 - (17) no doc (sách) hom-qua (*sách) he read book yesterday book 'He read a book yesterday.' (Trinh 2009)
- Erlewine (2015) offers excellent evidence for a VP constituent through the behavior of the focus adverb chi.
- This adverb attaches to the left edge of the verb phrase and selects its focus based on prosodic prominence, as seen in (18).
- The fact that both the object (a) or verb (b) can be narrowly focused in this configuration, as well as the entire VP constituent (c), strongly suggests that they constitute a phrase. Crucially, neither the subject nor the adverb can be focused when *chi* is found in this position, as indicated by (e) and (f).
 - (18) Hôm qua Nam chỉ $_{VP}$ [mua cuốn sách] (thôi). yesterday Nam only ADV buy CL book (prt)
 - a. ✓ 'Nam only bought [the book]_F yesterday.'
 - b. \checkmark 'Nam only [bought]_F the book yesterday.'
 - c. \checkmark 'Nam only [bought the book]_F yesterday.'
 - d. * 'Only [Nam]_F bought the book yesterday.'
 - e. * 'Nam only bought the book [yesterday]_F.'
 - f. * 'It's only that [Nam bought the book yesterday] $_F$.' (Erlewine 2015:10)

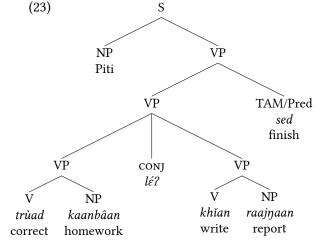
3.3 Thai

- Muansuwan (2002) shows that adverb intrusion is not permitted in Thai, neither with temporal adverbs, as in (19), nor with manner adverbs, as in (20). Rather, both types of adverbs must follow the entire VP, including indirect objects, as seen in (19).
 - (19) *Ukit hâj (*mûawannìi) wĕɛn-phéd (*mûawannìi) kèɛ Narii (mûawannìi)

 Ukit give yesterday ring-diamond yest. to Narii yest.

 "Ukit gave the hard-to-find, one-million-baht valued diamond ring yesterday to Narii."

 (based on Muansuwan 2002:30)
 - (20) Piti kin (*jàaŋ?ðɔnrεεŋ) khâaw (jàaŋ?ðɔnrεεŋ)
 Piti eat feebly rice feebly
 'Piti ate rice feebly.' (based on Muansuwan 2002:46)
- Muansuwan further shows that *tham?à:ŋdiawkan* 'do the same' replaces the traditional VP, as seen in (21). Replacing just the verb and replacing the object is ungrammatical.
 - (21) kă::ndă: sí: năŋsǐ: mî:wa::nnî: lé? sùri: cà? tham?à:ŋdiawkan (*pà:kka:) wannî:
 Kanda buy book yesterday and Suri FUT do.same pen today
 'Kanda bought a book yesterday and Suri will do so (*a pen) today.' (Muansuwan 2002)
- The VP can be coordinated as seen in (22):
- (22) Piti [trùad kaanbâan] lé? [khĭan raajŋaan] sèd Piti correct homework and write report finish 'Piti finished correcting the homework and writing the report.' (Muansuwan 2002:173)
- Furthermore, a clause final resultative has scope over both conjoined VPs, suggesting the phrase structure posited by Muansuwan in (23).



3.4 Lao

- Enfield's (2007) grammar of Lao assumes a verb phrase but does not attempt to define it formally.
- Lao shows a similar pattern to our previous cases with VP adverbs and ideophones apparently unable to intervene between the verb and the object, as exemplified in (24):
 - (24) kuu3 siø [kin3 (*qiik5) paa3] (qiik5)
 1sg.b irr eat more fish more
 'I'm going to eat more fish.' (Enfield 2007:131)
 - (25) laaw2 [vaw4 (*qòòj4-tòòj4) siang3 khùù2 (*qòòj4-tòòj4) khon2 laaw2] (qòòj4-tòòj4) 3sg.fa speak ideo voice like ideo person Lao ideo 'She speaks with an accent like a Lao person's exactly.' (Enfield 2007:301)

- Enfield shows evidence from movement and ellipsis that depictive adverbs do not form a constituent with the object but rather attach to the right edge of the VP.
- In (27), an object is fronted but must strand the depictive in final position.
- (26) man2 siø [kin3 [siin4 nii4] $_{NP}$] $_{VP}$ dip2 (27) [siin4 nii4] $_{NP_i}$, man2 siø [kin3 t_i] $_{VP}$ dip2 3.B IRR eat meat DEM raw meat DEM 3.B IRR eat raw 'He's going to eat this meat raw.' (Enfield 2007:400)

3.5 Burmese

- Burmese is typologically different from the previous languages. It is a verb-final language with case marking and obligatory, clause-final TAM marking.
- Different adverb types pattern differently with regard to their possible positions in the clause. The possibilities for temporal and manner adverbs are shown in (28) and (29), respectively.
 - (28) (mani-ka) Susu (mani-ka) jè (mani-ka) θaù? Τε yesterday Susu yesterday water yesterday drink REAL 'Susu drank the water yesterday.'
 - (29) (*kaunkaun) susu (*kaunkaun) mijama-zaga (kaunkaun) pijo ta Tɛ well Susu well Burma-language well speak know.how real 'Susu speaks Burmese well.'
- Note that both types of adverbs can (and in the case of manner adverbs, must) intervene between the verb and the object, contrary to what we saw for English, and thus offer no independent evidence for a VP.
- Focus interpretation however lends strong support for positing a VP:
 - when a focus clitic like $l\varepsilon$ attaches to the subject, only the subject can be focused
 - when the same clitic attaches to the object either the object or the entire verb phrase can be focused
 - (30) tʃu=lε tʰəmɪ́ sá=kε=Tε (31) tʃu tʰəmɪ́=lε sá=kε=Τε
 Chu=also themi eat=pst=real Chu themi=also eat=pst=real
 'Chu also ate themi.' 'Chu also ate themi.'
 (Others ate themi, too.) (Chu ate something else or Chu did something else)
- Furthermore, when the verb is narrowly focused, as in the following intransitive clause, the verb is reduplicated in order to keep the clitic within the VP.
 - (32) $t \int u = l \epsilon \quad p^h j i = k \epsilon = T \epsilon$ (33) $t \int u \quad p^h j i = l \epsilon \quad p^h j i = k \epsilon = T \epsilon$ Chu = also run=pst=real 'Chu also ran.' (Chu also <u>ran.</u>' (Chu did other things, too.)
- This can be taken as evidence for the verb and object constituting a focus domain which excludes the subject, i.e. a traditional VP constituent.

3.6 (Siklis) Gurung

- Like Tibetan (one of its closer relatives within Tibeto-Burman), Gurung is verb-final and displays an ergative case marking pattern on arguments. -(d)i marks ergative case absolutive case is unmarked.
- Gurung has a focus spreading pattern similar to Burmese. When *-mane* attaches to the object, it can be interpreted in two ways:
 - (34) nga-di momo-mane la-mo 1s.erg momo-only make-tam 'I only make momo.'
- a. ✓ I only make [momos] and nothing else.
- b. ✓ I only [make momos] and do nothing else.c. * Only [I] make momos and nobody else.
- As in Burmese, to focus narrowly on the verb in Gurung, it is necessary to reduplicate it. In Gurung however, this reduplication looks like a nominalization rather than a mere phonological reduplicant.
 - (35) nga-di momo la-u-mane la-di 1s.erg momo-only make-nmlz-only make-rl 'I only <u>make</u> momo.'

3.7 (Dharamsala) Tibetan

- Dharamsala Tibetan is a verb-final ergative language which allows scrambling in the preverbal domain. (36-a) shows the unmarked order in a transitive clause, which, like Gurung, is Ergative Absolutive Verb. (36-b) shows that the absolutive can be fronted over the ergative.
 - (36) OBJECT FRONTING PERMISSIBLE
 - a. Tenzin-ki nøʒε tʰy-∫a Tenzin-εrG plates wash-₽ERF 'Tenzin washed the dishes.'
- b. nøʒε Tenzin-ki t^hy-∫a plates Tenzin-ERG wash-PERF 'Tenzin washed the dishes.'
- Full clauses can be coordinated with *ani*, as in (37).
 - (37) CLAUSAL COORDINATION

 [Tenzin-ki nøʒε tʰy-ʃa] ani [Tsering-ki nøʒε kʰam-ʃa]

 Tenzin-erg plates wash-prf and Tsering-erg plates dry-prf

 (For, 'Tenzin washed and Tsering dried the dishes.')
- Crucially, VP coordination, as in (38), is judged as completely acceptable while ERG-VERB coordination, as in (39), is perceived to be highly marked.
- (38) VP COORDINATION GRAMMATICAL

 Tenzin-ki [nøʒɛ tʰy-ʃa] ani [hajaŋ kʰam-ʃa]

 Tenzin-erg plates wash-rl and pan dry-rl

 'Tenzin washed the dishes and dried the pan.'
- (39) A+VERB COORDINATION UNGRAMMATICAL

 ?*nøʒɛ [Tenzin-ki tʰy-ʃa] ani [Tsering-ki kʰam-ʃa]
 plates Tenzin-erg wash-prf and Tsering-erg dry-prf
 (For, 'Tenzin washed and Tsering dried the dishes.')

¹The Glovers primarily described the Ghachok dialect in a large number of publications spanning the 1970s until the present. The data presented here is based on the Siklis dialect as spoken by Narayan Gurung, with whom we have been collaborating in New York for several years.

4 Austronesian languages

- We now turn to Austronesian languages, which I argue show a non-traditional VP composed of the verb and the transitive A argument.
- This had been argued for vigorously by Ed Keenan in a series of publications (Keenan 1976, 1995, 2000) but almost completely ignored in the subsequent syntax literature (to our detriment).
- While Keenan had diagnosed the symptom correctly, the cause for this non-traditional VP only came to be understood later through the work of Starosta, Pawley and Reid (1982) and the so-called "SPQR hypothesis." Namely, the transitive agent was historically the possessor of a predicate nominal.
- Note that conservative Austronesian languages pattern ergatively (Cena 1977; Liao 2004; Reid and Liao 2004; Nolasco 2006, 2005; Aldridge 2004 and references therein) but that this is at least partly independent from constituency facts discussed here.

4.1 "Philippine-type" languages

4.1.1 Coordination and adverbs

- The standard reference grammar of Tagalog, Schachter and Otanes (1982), famously gives the impression that word order is relatively free in both actor voice and non-actor voice clauses.
- It is universally accepted that the unmarked order in non-actor voice clauses is **Pred A P** across Philippine languages. In Tagalog this manifests itself as a strong preference, as seen in (40).
- In Ilokano this is an inviolable rule, as shown in (41).
- (40) D<in>akip-Ø (ni Bobong) si Dodong (?ni Bobong) (41) K<inn>an-Ø ti kabayo ti baka PRF>arrest-PV GEN Bobong NOM Dodong GEN Bobong
 'Bobong arrested Dodong.'
 'The horse ate the cow.'
 Not: 'The cow ate the horse.'
 - Temporal and locative adverbs have also been generally described as being positioned freely (subject to scope conditions, Kaufman 2006).
 - (42) S<um>ulat kahapon ng liham kay Maria si Juan <AV.PRF>write yesterday GEN letter OBL Maria NOM Juan 'Juan wrote a letter to Maria yesterday.' (Schachter and Otanes 1982:436)
 - This is an exaggeration: separating the transitive agent from its predicate is possible, but dispreferred.²
 - (43) Dinakip (M nang mabilis) ng sundalo (nang mabilis) ang mga kriminal (nang mabilis). arrest gen quick gen soldier gen quick nom pl criminal gen quick 'The soldier arrested the criminals quickly.'
 - It has been noted in the literature that, in contrast to non-actor voice clauses, actor voice clauses allow the notional object to follow the nominative/absolutive phrase more readily:

²Several sources acknowledge the tight relationship between the predicate head and the transitive agent in regard to scrambling and adverb positioning, e.g. Kroeger (1993:112) "...adverbial expressions can occur virtually anywhere, even preceding the Actor phrase, though this is not the normal ordering."

- (44) K<um>ain (ng isda) ang buwaya (ng isda) <AV>eat GEN fish NOM alligator GEN fish 'The alligator ate a fish.'
- What is a preference in word order in a simple clause is felt more acutely in coordination structures:
 - (45) CONSTITUENT COORDINATION

 [I-ni-hatid ni=Paolo] at [s<in>undo-Ø ni=Pedro] si=Juan

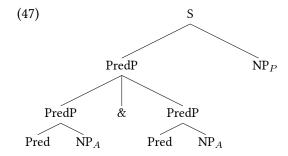
 CV-BEG-escort GEN=Paolo and <BEG>pick_up-pv GEN=Paolo NOM=Juan

 'Paolo escorted and Pedro picked Juan up.'
 - (46) NON-CONSTITUENT COORDINATION

 *?[I-ni-hatid si=Paolo] at [s<in>undo-∅ si=Pedro] ni=Juan

 CV-BEG-escort NOM=Paolo and <BEG>pick_up-PV NOM=Paolo GEN=Juan

 'Juan escorted Paolo and picked up Pedro.'
- This reflects a structure such as that in (47):
- Lest this gives the impression that is a general feature of VSO languages, rest assured it is not.
- Garifuna (Arawakan) is a verb-initial language with split ergative agreement pattern but strongly resists grouping the verb together with the A argument, as exemplified in (47) by coordination.



- (48)a. Aluguraha-ti John fein sell-3sm John bread 'John sells bread.'
- *[Adügü-tu Maria] luma [aluguraha-ti John] fein make-3sf Maria and sell-3sm John bread (Can only mean, 'Maria makes (something) and John sells bread')

4.1.2 Focus spread

- In terms of focus structure, in mainland languages we noted strong connectivity effects between V and P excluding A.
- In Philippine languages, we find no focus phenomena grouping the predicate head together with P.
- In (49), we see that focus adverbs (which are placed in second position in the clause) are not restricted in their scope possibilities.
 - (49) K<in>a-kain-∅=din ng pusa ang daga <ASP>PROG-eat-PV=also GEN cat NOM rat 'Cats also eat rats.'

a. ✓ - among other things that happen, <u>cats also eat rats</u>. (full clause)

b. ✓ - besides other things that cats eat, cats also eat rats. (P)

c. ✓ - besides other animals that eat rats, <u>cats</u> also eat rats. (A)

d. ✓ - besides other animals that eat animals, cats also eat rats. (A and P)

e. ✓ - besides other things that happen to rats, cats also eat rats. (Pred and A)

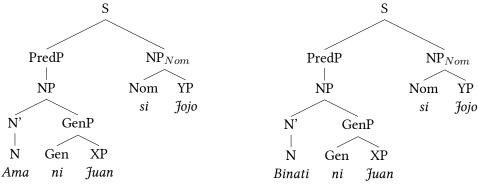
f. ✓ - besides other things that cats do, cats also eat rats. (Pred and P)

• While there exists more syntactic evidence, it is important to point out that new work on Tagalog prosody (Hsieh, forthcoming, see also Tanangkingsing 2009:74) also shows subtle but significant clues for the transitive predicate grouping together more closely with the A argument than the P argument.

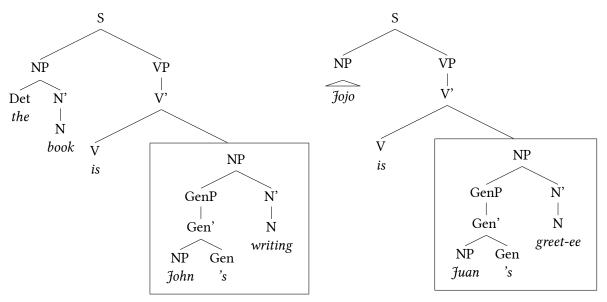
Philippine-type languages, as exemplified by Tagalog, depart strongly from languages of mainland SEA in basic clausal organization. Not only are they predicate initial, but the transitive predicates form an immediate constituent with A that excludes P. This is not a universal feature of VSO languages.

5 Diachrony and constituency in Austronesian

- We turn now to how this unusual clausal organization came about.
- Starosta, Pawley and Reid's (1982) landmark paper posited that the complex voice system of Austronesian languages derived historically from nominalizations. This was further extended in Kaufman (2009a,b), where I argued that underlyingly nominal predicates also accounts for other peculiarities of Austronesian syntax.
- The historical change, roughly based on the semantic equivalency of constructions like (50), took nominal predications that were reserved for relative clauses and turned them into canonical, main clause predicates.
 - (50) 'This book (was) my writing' ↔ 'I wrote this book'
- The result of this was that transitive agents shared the syntax of possessors in bona fide nominal constructions.



(51) Ama ni Juan si Jojo father GEN Juan NOM Jojo 'Jojo is Juan's father' To compare this to English, we can imagine the construction on the left giving way to a construction such as that on the right, which exists but is marginal. The spread of the *-ee* suffix could allow the possessive type predications supplant original declaratives.



In fact, Austronesian seems to have had a number of nominalizing morphemes that correlated with different thematic roles and allowed those roles to be assigned to a copular predicate in the same way shown above.

• SPQR claimed there was a reanalysis of verbal phrases that allowed the absolutive to intervene between the genitive and the predicate.

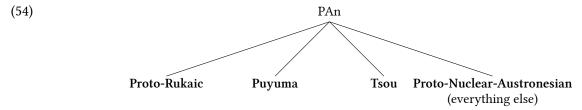
"The nominal constructions of course were always subject-final (allowing for following final outer Time and Place actants), since the grammatical subject of an equational sentence is one of the two immediate constituents in the sentence, and so cannot be in the middle of the other immediate constituent."

(Starosta et al. 1982)

- To whatever extent this is possible with event denoting predicates, it is also possible with possessors in modern languages, as shown in (53).
 - (53) Anak talaga si Romy ni Belen child really NOM Romy GEN Belen 'Romy is really Belen's son.' (Kroeger 1993:132)

6 Tsou and the clausal constituency of PAn

• Ross (2009) posited a new subgrouping for the top of the Austronesian family tree as shown in (54). The PNAn subgroup has its major innovation the reanalysis of nominalizations as plain matrix clause event-denoting predicates.



• Puyuma, Tsou and Rukai are argued to have never carried out this reanalysis and thus still reserve the complex nominalizations for relative clauses.

- If this is the case, we expect that the constituency diagnostics reviewed above should yield different results for the languages outside PNAn.
- Divergent patterns in Tsou word order and coordination may actually lend support to this idea.
- The first surprise comes from the following fact, reported by Zeitoun (2005): oblique objects cannot follow the NOM/ABS argument in the actor voice but oblique agents can follow the NOM/ABS in non-actor voice.
- (55) mo bonu (to tacumu) 'o amo (*to tacumu) (56) i-si ana (to amo) 'o tacumu (to amo)

 AV.RLS AV:eat OBL banana NOM father OBL banana

 'Father ate a banana.' (Zeitoun 2005:270)

 UV.RLS-3S PV:eat OBL father NOM banana OBL father

 'Father ate the banana.' (based on Zeitoun 2005:270)
 - Recall that precisely the opposite pattern holds in diverse Philippine languages like Tagalog and Ilokano. There, the transitive (genitive) agent tends strongly to stick to the predicate head but the actor voice object is more free in its positioning.
 - The unity of the predicate head and the transitive agent is expected if the latter was a possessor. The looser attachment of the transitive agent in Tsou suggests that it was never a possessor. Recall the (non-possessor) ergative agents in Tibeto-Burman which show no immediate grouping with the verb.
 - Not only can the transitive agent appear outside the NOM/ABS phrase, it appears to prefer coming outside of themes and instruments as shown in (57).
 - (57)a. mo t<m>oycu [to evi] [to p'eucungu] o ak'i

 AV <AV>cut OBL tree OBL axe NOM grandpa
 'Grandpa cut (down) a tree with an axe.'
 - b. i=si tyoc-a [to p'eucungu] to ak'i ['o evi] uv-3s cut-pv obl axe obl grandpa nom tree 'Grandpa cut (down) the tree with an axe.'
 - c. i=si tyoc-neni [to evi] to ak'i ['o p'eucungu] uv-3s cut-cv obl tree obl grandpa nom axe 'Grandpa cut (down) a tree with the axe.' (Lin 2009:200)
 - Additionally, we can coordinate the predicate head and the P argument while excluding the A argument, just as in Tibetan:
 - (58) i-si [tonzovi 'o yosku] ho [pei'i 'o chumu] to Pasuya UV.AUX-3s clean.LV NOM fish and cook.PV NOM water OBL Pasuya 'Pasuya cleaned the fish and boiled the water.' (PN 5/14/16)

We have seen how clausal constituency in Tsou seems to hint at a pre-nominalization past. The transitive agent does not form a constituent with the predicate head as it does in Philippine and other conservative PMP and even PNAn languages. On the other hand, it does show the same restrictions on extraction as other Austronesian languages which poses an interesting dilemma.

7 Conclusion

- We have seen how one does not have to look too far to find hints of a traditional VP in mainland SEA languages.
- Morphosyntactically conservative PNAn languages, on the other hand, show no evidence for a traditional VP in the transitive clause.
- We saw how this was in fact predicted by the SPQR theory as the possessor/agent is a dependent of the nominalized predicate.
- Finally, we saw that languages outside the PNAn subgroup may in fact show traces of an ergative syntax more like Tibeto-Burman and other languages, where the ergative argument does not form a constituent with the predicate head.
- The difference between languages like Tibetan and Tagalog has often been described as a difference between "surface" and "deep" ergativity (Dixon 1994; Liao 2004; Manning 1996). In the latter, we find that the case marking pattern corresponds to substantial syntactic differences while in the former it is often restricted to the morphology.

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