

VP Fronting and Predicate Initial Word Order In Western Subanon

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Writing Sample

Abstract

Much attention has been paid to the verb-initial structures of Austronesian languages. A variety of analyses including head movement and VP-fronting have been proposed to explain the derivation of these structures. Although a VP-fronting analysis has traditionally been used to explain VSO/VOS alternations observed in languages such as Niuean and Samoan, it has less often been applied to languages with more strict VSO tendencies. This paper presents evidence from Western Subanon suggesting that a remnant VP-fronting analysis is not only compatible with the strict VSO word order of the language but may also offer advantages over a head movement analysis. I also present evidence to demonstrate that this phrasal movement is driven by a +Predicate EPP feature associated with T that attracts XP-sized constituents, in line with Massam's (2000) analysis of Niuean, Collin's (2017) analysis of Samoan, and Coon's (2010) analysis of Chol. My analysis shows that while Niuean and Samoan exhibit VSO/VOS surface alternations that Western Subanon does not, all three languages share a common underlying syntactic structure and mechanism for the derivation of verb-initial word order.

List of Abbreviations

*	Ungrammatical
1	First person
2	Second person
3	Third person
ABS	Absolutive case
ADJ	Adjective
AGR _O	Object agreement phrase
AGR _S	Subject agreement phrase
AP	Adjectival phrase
ASP	Aspect
AV	AGENT voice
C	Complementizer head
CP	Complementizer phrase
DET	Determiner
DP	Determiner phrase
EPP	Extended projection principle
ERG	Ergative case
GV	Goal voice
IRR	Irrealis
K	Case
LOC	Location
NPSA	Non-privileged syntactic argument
NP	Noun phrase
PAT	PATIENT
PERF	Perfective
PF	Phonetic form
PL	Plural
PSA	Privileged syntactic argument
PRED	Predicate
PP	Prepositional phrase
PST	Past tense
PV	PATIENT voice
REA	Realis

T	Tense head
TP	Tense phrase
v	Voice head
vP	Voice phrase
VP	Verb phrase

1 Introduction

This paper aims to explain the derivation of verb-initial word order via VP-fronting in Western Subanon and show that despite differences in surface word order, it shares this mechanism with Niuean and Samoan. Western Subanon is a primarily VSO language, as seen in (1).

- (1) VSO sentence in Western Subanon (Estioca 2020: 123)

s<um><in>aluy og polopanad nog kolatas
<AV><PERF>buy PSA teacher NPSA paper
'A teacher bought some paper.'

Although head movement is most commonly used to explain surface VSO word order, this paper presents evidence that phrasal movement, rather than head movement, is more compatible with the empirical facts. I adopt Massam's (2000) analysis of Niuean, where the object argument is first moved out of the VP in order to check case, after which the remnant VP is fronted to the specifier of TP as the result of a +Predicate EPP feature on T.

Massam (2000) proposed this analysis to explain the VSO/VOS alternation in Niuean, as seen in (2a) and (2b).

- (2) VSO/VOS Alternation in Niuean (Massam 2000: 98)

- a. Ne inu e Sione e kofe
PST drank ERG Sione ABS coffee
'Sione drank the coffee.'
- b. Ne inu kofe a Sione
PST drank coffee ABS Sione
'Sione drank coffee.'

Under Massam's proposal a full DP object, as in (2a), must move out of the VP before VP-fronting in order to check case, resulting in VSO word order. However, a bare NP object, as in (2b), does not need to check case and remains VP internal during VP-fronting, resulting in VOS word order. Based on this analysis, I predict that a language which does not allow bare NPs and also displays predicate fronting would result in a strict VSO word order. This is precisely what is observed in Western Subanon, a language with no bare NPs, predicate fronting, and strict VSO word order. After some discussion of traditional head movement and phrasal movement analyses, supporting data from Western Subanon including obligatory case marking, non-verbal predicate fronting, the placement of manner adverbs, and serial verb constructions will be used to defend this proposal.

2 Head Movement of V

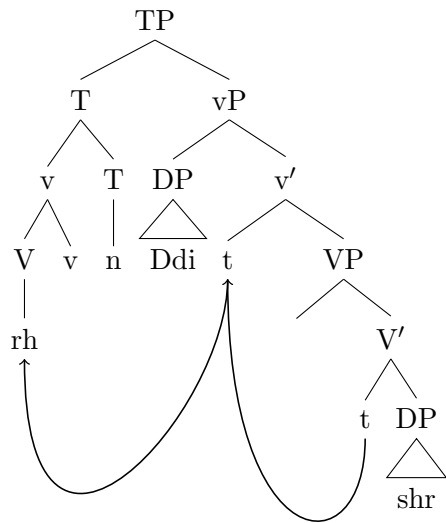
Head movement of V is a widely proposed mechanism for deriving verb-initial word order, particularly in languages with a predominantly VSO structure. Most theories of head movement suggest that there is an underlying SVO structure, and through movement, the verb is pronounced in PF to the left of the subject (Potsdam 2009). It has been proposed that the verb moves to either T or C depending on "the position of the subject and the head positions available in the clause" (Potsdam 2009). Head movement is a common analysis for Irish and other Celtic languages (Carnie et al. 2005) and provides a straight-forward analysis for VSO languages.

This line of research suggests that the V head may move to different clause initial landing sites

depending on the language, with some languages fronting V to T, and others fronting V to C. One representative analysis is Kramer (2009), who argues that in Middle Egyptian V is only fronted to T, with the subject argument remaining in-situ in the specifier of vP, rather than moving to the specifier of TP as the result of a EPP feature, as it does in English (Chomsky 2001). An example of verb-initiality in Middle Egyptian is seen in (3), with the accompanying tree in (4).

- (3) Verb-initial Word Order in Middle Egyptian (Kramer 2009: 10)
 rh.n ddi shr
 learn.PST Djedi plan
 ‘Djedi learned the plan.’

- (4) Middle Egyptian Head Movement Tree (Kramer 2009: 11)

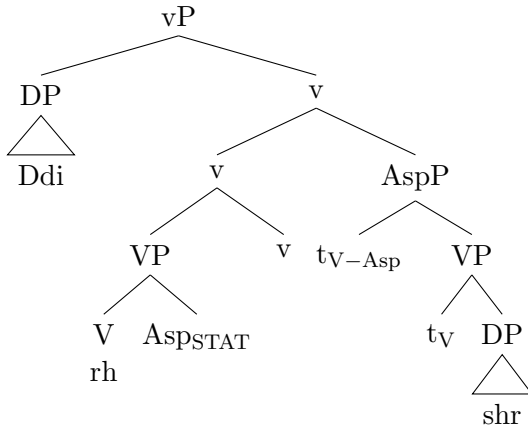


Kramer (2009) goes on to defend the derivation in (4) with data from Middle Egyptian clauses containing verbs with stative aspect. Rather than following the VSO order observed in (3), clauses containing stative verbs display an SVO order, seen in (5). Under this analysis, the observed SVO word order is the result of the stative verb only partially raising to v. The crucial fact is that these stative verbs are never observed with tense morphology, which indicates that they are not raising to the T head in order to check tense features (Kramer 2009: 14).

- (5) Middle Egyptian stative verbs (Kramer 2009: 3)

- a. Ddi rh.w shr
 Djedi learn.STAT-3MS plan
 ‘Djedi knows the plan.’

b. Middle Egyptian stative verbs tree (adapted from Kramer 2009: 19)



The data from Middle Egyptian shows that certain VSO languages are compatible with a V head movement analysis, and that the landing site appears to be no higher than the T head. However, there is also evidence that V can raise higher than TP in certain languages, including Old Irish (Carnie et al. 2000). Carnie et al. (2000: 52) propose that Irish clauses must have some element occupying the C head position, in what they call a “filled C^o requirement”. This element could be a complementizer particle, preverb, or finite verb as seen in (6) - (8).

(6) Complementizer particle (Carnie et al. 2000: 47)

Ni epur/*as-biur a nanman sund
 NEG say-1S their names here
 ‘I do not say their names here.’

(7) Preverb (Carnie et al. 2000: 47)

As-biur inso
 say-1S this
 ‘I say this.’

(8) Finite verb (Carnie et al. 2000: 45)

Beirid in fer in claideb
 carries.3S.ABS the man the sword
 ‘The man carries the sword.’

This means that in the absence of a complementizer particle or a preverb, the finite verb must raise to adjoin the C head and fulfill the filled C^o requirement. This is similar to proposed derivations for “verb second” languages such as German and Dutch, where both the C head and specifier of CP must be occupied. In such languages, it is suggested that the verb raises to the C head and the subject argument raises to the specifier of CP (Carnie et al. 2000).

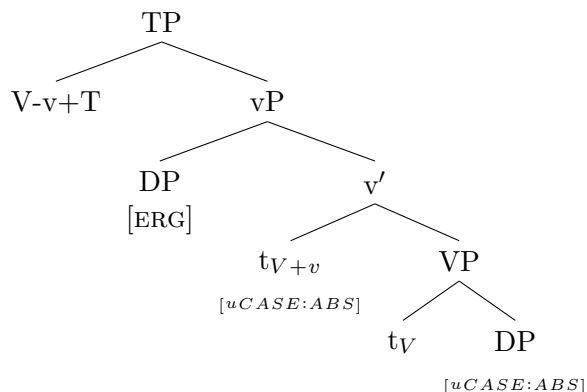
Head movement has also been proposed for a variety of verb-initial Austronesian languages, including Tagalog (Aldridge 2004; 2005; Kroeger 1993; Rackowski 2002; Rackowski & Richards 2005). Kroeger (1993) proposes that Tagalog word order can be explained through head movement of V to T. In Tagalog, the verb generally appears in the clause initial position. However, adjuncts

are observed in clause initial position preceding verbs. Kroeger argues that these fronted adjuncts are appearing in a position below C. However, verbs in these sentences still precede both the subject and object arguments. This indicates that the verb is moving to a position above vP. If the verb is appearing in a position below C and above vP, the most logical landing site is T. Similar to Kramer’s (2009) analysis of Middle Egyptian, Aldridge (2005: 3) proposes that the verb in Tagalog moves to T, with the subject DP remaining in situ and not fronting to the specifier of TP. This results in VSO order, as seen in (9).

(9) VSO example sentence in Tagalog (Aldridge 2005: 7)

- a. b-in-ili ni Maria ang libro.
 -TR.PERF-buy ERG M ABS book
 ‘Maria bought the book.’

b. VSO word order in Tagalog (Aldridge 2005: 3)



However, Aldridge (2004: 183) argues for an alternative analysis, in which Tagalog verbs move to an ASP head below TP, rather than the V to T movement supported by Kroeger (1993) and Rackowski (2002). Under this analysis, both v and ASP have a strong [V] feature that induces verb movement. To support the claim that the verb does not move to all the way to T, Aldridge (2004) offers evidence from the relative positions of negation and verbs. Aldridge (2004: 182) assumes that negation is universally located below the T head. In Tagalog, negation always precedes the verb. This indicates the the verb must be moving to a position below T. However, as previously mentioned, Tagalog verbs always precede subject and object arguments, indicating that the verb is not remaining within the VP. Therefore, under Aldridge’s (2004) analysis, the verb must be moving to a position above vP, but below T.

3 Phrasal Movement

In addition to head movement, phrasal movement of a larger XP-sized constituent has been proposed to account for verb-initial word order in a variety of Austronesian and non-Austronesian languages (Massam 2000; 2001; Lee 2000; Coon 2010; Collins 2017). The movement of XP-sized constituents such as DPs, is well attested cross-linguistically. For example, a subject DP obligatorily moves to the specifier of TP in English as a result of an EPP feature (Chomsky 2001). Therefore, it is reasonable that an entire VP or VP-remnant could move to the left of the external argument. A VP movement analysis provides obvious advantages for a primarily VOS language, where the verb and its complement are both appearing to the left of the external argument in PF.

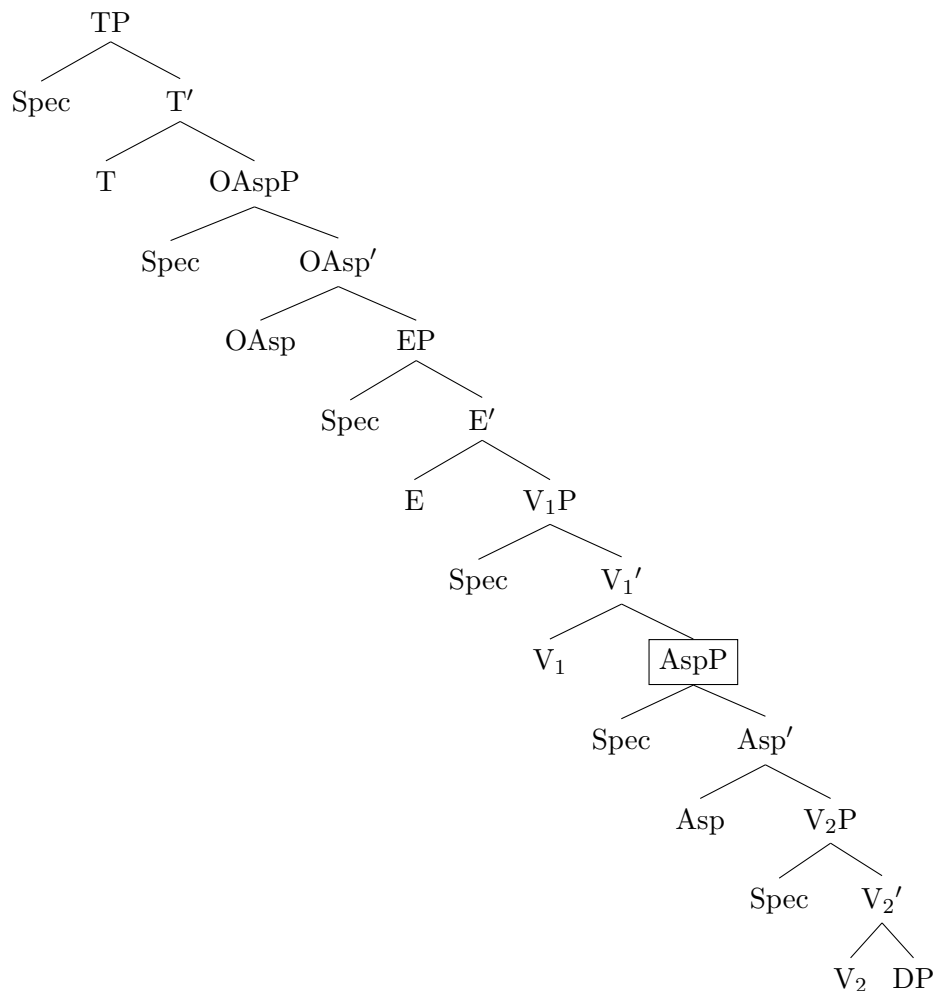
VP-remnant movement has also been proposed for strict VSO languages such as Quiavini Zapotec (Lee 2000).

3.1 Functional Projection in vP

In order for a VP-fronting analysis to be compatible with VSO word order, we must first account for the position of the object argument. As previously described, it is assumed that object arguments originate as a complement of VP. If the verb is appearing in a clause initial position while the object appears to the right of the subject, this indicates that the object argument has moved to a VP-external position before the remnant VP moves to its final landing site. Travis (2010) and other researchers including Mahajan (1990) and Koizumi (1995) have presented evidence that there is a functional projection within vP and above VP, to which object arguments may move.

Building on previous analyses and using data from a variety of languages, Travis (2010) proposes that this functional projection is located within the vP. Travis (2010) uses the label V_1P rather than vP, and as shown in (10), the functional projection AspP appears below the external argument and V_1P and represents an “inner aspect”. Movement of a maximal projection to this position is possible. Travis (2010) therefore proposes the following structure:

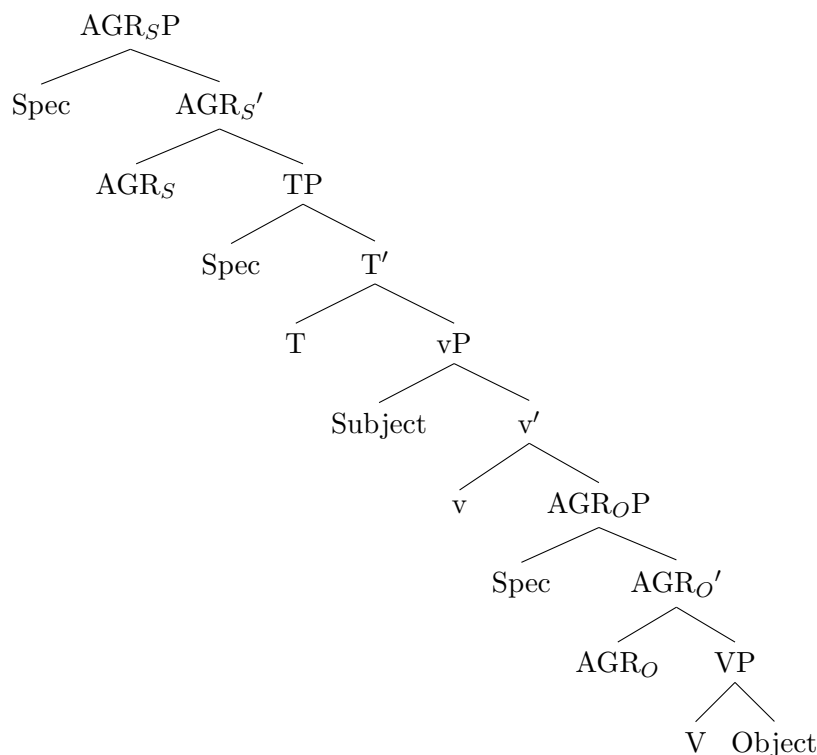
(10) Travis (2010: 5) Articulation of VP



The existence of this functional head and its position are supported by cross-linguistic evidence, including the position of derived objects. Travis (2010: 19) argues that it is generally objects that move to this position, although other elements may also appear there in special circumstances.

Many early proposals such as Mahajan (1990) suggested that objects move to a functional projection within the vP in order to check case features, similar to the A-movement undergone by subject arguments. The fact that this movement is motivated by case checking leads Mahajan (1990) to label this functional projection as $AGR_O P$, an object agreement phrase. In addition to an AGR_O projection below the external argument, authors including Mahajan (1990) and Koizumi (1995) propose that there is a corresponding AGR_S projection above TP, to which the subject argument moves in order to check case. This results in the overall structure shown in tree (11).

(11) Location of AGR_S and AGR_O Phrases (adapted from Koizumi 1995: 133)



To defend the position of the AGR_O projection, Koizumi (1995) provides examples of floating quantifiers in English. In example (12), the DP *the books* has moved from its original position to the specifier of AGR_O in order to check case. However, the quantifier *all* has remained in its original position. Therefore, the surface position of the DP precedes the position of the quantifier.

(12) I gave the books all to John.

This provides evidence that the object has moved to a position that is below the final position of the verb *gave*, but above the position where the object originally merged into the derivation with its quantifier. This can be explained if the object is moving to a functional projection that is within the vP.

The functional projections AGR_S and AGR_O fell out of favor as the field moved towards minimalism and attempted to reduce the number of functional projections. However, many researchers continue to posit a vP internal functional projection to account for data ranging from Scandinavian object shift to Chinese preverbal and postverbal object positions (Travis 2010). Taken together, these facts demonstrate ample evidence for a functional projection such as AspP within the vP and below the external argument, and that object movement to such a position is cross-linguistically supported. A functional projection in this position is critical for a VP-fronting analysis that results in surface VSO word order, as is observed in Western Subanon.

3.2 Phrasal Movement in Austronesian Languages

Many analyses have been proposed to account for the verb-initial word order commonly observed in Austronesian languages (Clemens & Polinsky 2017). Phrasal movement of VP is one of the most widely suggested derivations, where either a remnant or full VP moves to the clause initial position. Remnant VP-fronting has previously been applied to account for VSO word order in a

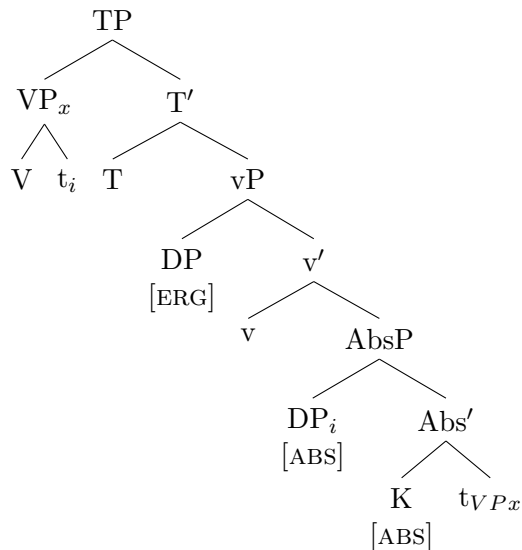
variety of Austronesian languages (Massam 2000; Collins 2017). Importantly, these languages are not strictly VSO, as they allow for both VSO and VOS order in basic transitive constructions. Massam’s (2000) analysis of Niuean revolves around this VSO/VOS alternation in the language, shown in examples (13a) and (13b).

(13) VSO/VOS Alternation in Niuean (Massam 2000: 98)

- a. Ne inu e Sione e kofe
 PST drank ERG Sione ABS coffee
 ‘Sione drank the coffee.’
- b. Ne inu kofe a Sione
 PST drank coffee ABS Sione
 ‘Sione drank coffee.’

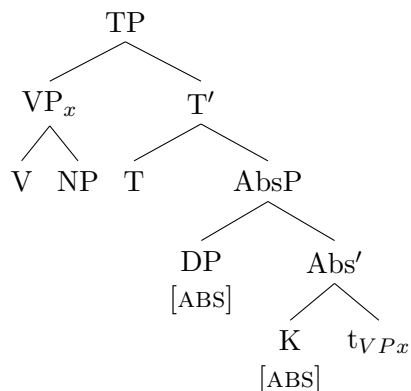
In order to explain these different sentence structures, Massam (2000) focuses on the NPs/DPs and their case marking. When an object argument is a full DP containing a determiner, as in (13a), the word order surfaces as VSO. However, bare nouns must be fronted along with the verb, resulting in a VOS order, as in (13b). Massam (2000) proposes that this difference in word order is the result of a full DP needing to escape the VP in order to check case features associated with a functional projection within the vP. Example (14) from Massam (2000: 108) illustrates the proposed structure for VSO sentences with a full DP in Niuean.

(14) Derivation of VSO in Niuean (adapted from Massam 2000: 108)



Massam (2000) proposes that surface VOS word order is the result of “pseudo noun incorporation”. Pseudo noun incorporation occurs when the V head selects a bare NP argument as its complement rather than a DP. In Niuean, a full DP must be overtly marked for case in order to be grammatical. Therefore, it moves out of the VP in order to check case in the specifier of AbsP. A bare NP is not required to be overtly marked for case, so it does not undergo movement to the specifier of AbsP and remains VP internal, as shown in example (15).

(15) Derivation of VOS in Niuean (adapted from Massam 2000: 107)



Collins (2017) discusses the same VSO/VOS alternation in Samoan. In the VSO example (16a), the full DP *le maile* must move out of the VP in order to check case features before the remnant VP is fronted. In the VOS example (16b), we see that the bare NP *maile* does not need to check features, and therefore remains inside the VP when it is fronted.

(16) VSO/VOS Alternation in Samoan (Collins 2017: 3)

- a. E su'e pea e le teine le maile ula
 PRES search continually ERG SPEC girl SPEC dog mischievous
 'The girl continually searches for the mischievous dog.'
- b. E su'e maile ula pea le teine
 PRES search dog mischievous continually SPEC girl
 'The girl continually searches for mischievous dogs.'

In addition to Austronesian languages, this alternation has been found in Mayan languages such as Chol (Coon 2010). Just like in Niuean and Samoan, clauses containing a full DP object argument require VSO order, whereas clauses containing bare noun object arguments result in a VOS order, as seen in (17) and (18).

(17) VSO in Chol (Coon 2010: 355)

- a. Tyi i-kuch-u aj-Maria jini si'
 PRFV A3-carry-TV DET-Maria DET wood
 'Maria carried the wood.'
- b. *Tyi i-kuch-u aj-Maria si
 PRFV A3-carry-TV DET-Maria wood
 'Maria carried the wood.'

(18) VOS in Chol (Coon 2010: 355)

- a. Tyi i-kuch-u si‘ aj-Maria
PRFV A3-carry-TV wood DET-Maria
‘Maria carried wood.’
- b. *Tyi i-kuch-u jini si‘ aj-Maria
PRFV A3-carry-TV DET wood DET-Maria
‘Maria carried the wood.’

Previous research has indicated that certain verb-initial Austronesian languages are more accurately classified as predicate-initial than verb-initial (Massam 2000; Coon 2010; Collins 2017). To defend this claim, researchers have presented evidence that both verbal and non-verbal predicates can occur in clause initial positions in these languages. This indicates that there is a strong feature associated with a phrasal head near the left periphery of the clause, and that this feature must probe for predicates rather than the lexical category of verbs. Therefore, Massam (2000) proposes that a +Predicate EPP feature is associated with the T head, rather than a [+D] EPP feature commonly proposed for languages such as English. As a result of this [+PRED] EPP feature, the specifier of TP must be filled with a predicate, whether it is verbal or non-verbal. Example (19a) shows verbal predicate fronting in Niuean, while examples (19b), (19c), and (19d) demonstrate NP, PP, and DP predicate fronting respectively.

(19) Verbal and Non-verbal Predicate Fronting in Niuean

- a. Ne inu e Sione e kofe
PST drink ERG Sione ABS coffee
‘Sione drank the coffee.’ (Massam 2000: 104)
- b. Ko Mele e faiaoga
PRED Mele ABS teacher
‘The teacher is Mele.’ (Massam 2000: 104)
- c. Ha he fale gagao a ia
PRED in house sick ABS she
‘She is in the hospital.’ (Seiter 1980: 54)
- d. Ko e tau kamuta fakamua a lautolu
PRED ABS PL carpenter before ABS they
‘They were carpenters before this.’ (Seiter 1980: 54)

Collins (2017) explains that in non-verbal predicate fronting, including full DP fronting, an XP-sized constituent is moving to the clause initial position. This is compatible with the theory that a maximal projection such as a full VP or VP-remnant is being targeted for movement rather than a phrase head. Otsuka (2005: 67) delivers an excellent summary of the theoretical advantages of this approach when discussing Massam’s (2000, 2001) work by stating:

“We would have to postulate two rules in order to accurately capture the predicate initial nature of Niuean: one involving head (V-) movement for VSO and the other involving maximal projection (XP) movement for NP/PP predicates. As a theory, it would be more elegant if we could postulate a single rule that accounts for both types of constructions.”

Chung (2005) provides an overview of VP and VP-remnant fronting analyses, and attempts to determine whether all verb-initial languages can be accounted for using such an analysis. Although Chung is not able to offer any firm answers to this question, they are able to determine that some Austronesian languages such as Seediq and Malagasy are more easily analyzed using a VP-fronting analysis than other languages such as Chamorro. This is in line with Otsuka (2005), who proposes that certain languages make use of VP-fronting, while others make use of head movement.

Although VP-fronting has been proposed for Austronesian languages including Niuean (Massam 2000) and Samoan (Collins 2017), as well as the Mayan language Chol (Coon 2010), previous analyses have focused on VSO/VOS alternations that exist within these languages. Although such an alternation is not observed in Western Subanon, evidence from manner adverbs, non-verbal predicate fronting, obligatory case marking, and serial verb constructions will be presented to defend a remnant VP-fronting analysis.

4 Western Subanon

Western Subanon [suc] is a Philippine language of the Malayo-Polynesian branch of the Austronesian language family spoken by approximately 125,000 people in the Zamboanga Sibugay province, Republic of the Philippines (Eberhard et al. 2021).

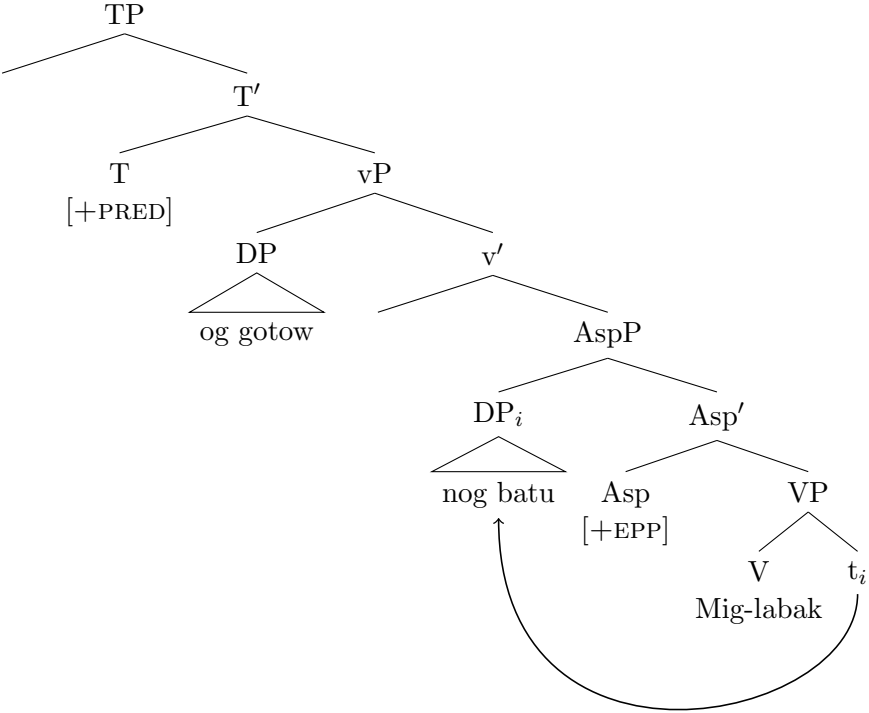
Western Subanon clauses display a predicate-initial word order, with basic transitive sentences displaying a VSO word order (Estioca 2020). I propose that this VSO word order is derived from an underlying SVO structure, with a remnant VP fronting to the specifier of TP as the result of a +Predicate EPP feature associated with T, after the object has moved to a vP internal functional head to check case. Like Niuean, Samoan, and Chol, Western Subanon displays DP, AP, and PP predicate fronting. Adopting a predicate-initial analysis making use of a +Predicate EPP feature on the T head therefore provides us with the theoretical advantages described in section 3.2. Take for example the sentence in (20), which displays the typical VSO pattern.

(20) Western Subanon VSO Sentence (Estioca 2020: 196)

Mig-labak og gotow nog batu
 AV.REA-throw PSA person NPSA stone
 ‘A person threw a stone.’

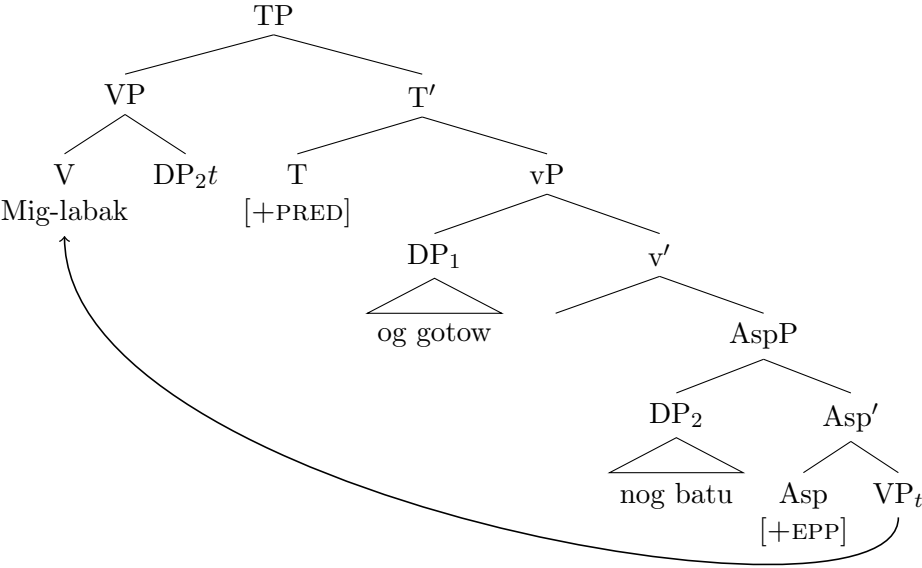
The verb selects the object DP *nog batu* as its complement, while the subject DP Merges in the specifier of vP. Then, as seen in (21), the object moves to the specifier of a vP internal functional projection, which is labelled as AspP following Travis (2010).

(21) Movement of object DP to spec Asp



Next, as seen in (22) the remnant VP moves to the specifier of TP in order to check the +Predicate EPP feature on T.

(22) Movement of remnant VP to spec TP



After a brief description of the case/symmetrical voice system in Western Subanon, this derivation will be defended using data from obligatory case marking, non-verbal predicate fronting, manner adverbs, and serial verb constructions.

4.1 Symmetrical Voice

Western Subanon has been classified as a Philippine-type symmetrical voice system (Estioca 2020). In such languages, one argument is marked as the Pivot or “Privileged syntactic argument” (PSA), and the verb is marked with an affix corresponding to the thematic role of the PSA. Estioca (2020: 1) describes this privileged syntactic argument as being “prominent”. The exact nature of this prominence is unclear, but the fact that the argument triggers overt morphological agreement on the verb indicates that it is syntactically privileged in some way. There are a variety of verbal affixes, marking voice (AGENT, PATIENT, GOAL), mood (realis, irrealis), aspect (perfective, non-perfective), and speech-time proximity (immediate past, immediate future) (Estioca 2020: 105). It is possible for voice and mood, or voice and aspect to be combined into a single affix, along with other semantic features marking argument structure (reflexive, causative, collective, distributive). The complete table of these verbal affixes seen below in (23) is adapted from Estioca (2020: 106). Following Estioca (2020), pivot marked arguments will be glossed as PSA and non-Pivot arguments will be glossed as NPSA. In other closely related languages such as Tagalog, Aldridge (2005) notes that only this privileged syntactic argument can undergo certain syntactic processes such as A'-extraction.

(23) Western Subanon Verbal Morphology Table (Estioca 2020: 106)

Temporality	Affix		Function	PSA
Mood system	Realis	Irrealis	stative	patient-like
	<i>mi-</i>	<i>mo-</i>		
	<i>mig- (ming-)</i>	<i>mog- (mong-)</i>	agent voice	agent
	<i>pig- (ping-)</i>	<i>pog- (pong-)...- on</i>	patient voice	patient
	<i>pig- (ping)...- an</i>	<i>pog- (pong)...- an</i>	goal voice	goal
	<i>mik-po-</i>	<i>mok-po-</i>	causative	agent
	<i>pi-</i>	<i>po-</i>	causative	patient
	<i>mik-soli-</i>	<i>mok-soli-</i>	reflexive causative	agent
	<i>mik-si-</i>	<i>mok-si-</i>	collective	plural agent
	<i>mig-Co-...-oy</i>	<i>mog-Co-...-oy</i>	reciprocal	agent
<i>pig-Co-...an</i>	<i>pog-Co-...-an</i>	distributive	patient or goal	
Aspectual system	Perfective	Non-perfective		
	<i>-in-</i>	<i>-um-</i>	agent voice	agent
		<i>-on</i>	patient voice	patient and instrumental
		<i>-an</i>	goal voice	goal
	<i>miko-</i>	<i>moko-</i>	potentivity	agent
	<i>mi-</i>	<i>mo-</i>	potentivity	patient
	<i>ki-...-an</i>	<i>ko-...-an</i>	potentivity	goal
Speech-time	Immediate Past	Immediate future	speech-time	agent (only in
Proximity	<i>ko-...-oy</i>	<i>ko-...-on</i>	proximity marker	the immediate future)

Examples (24)-(26) from (Estioca 2020:118) demonstrate this system. In (24), the AGENT argument *gina* ‘mother’ is the privileged syntactic argument. Therefore, its article is marked as PSA and there a corresponding AGENT Voice affix attached to the verb root. In (25), the PATIENT argument *tubig* ‘water’ serves as the privileged syntactic argument, and the verb is marked with a corresponding PATIENT Voice affix. In (26), the GOAL argument *glupa* ‘ground’ is the privileged syntactic argument, and the verb is marked with a GOAL Voice affix.

(24) AGENT Voice (AV) (Estioca 2020: 118)

Mog-bunag og gina’ nog tubig sog glupa’
 AV.IRR-pour PSA mother NPSA water OBL ground
 ‘A mother will spill water on the ground.’

(25) PATIENT Voice (PV) (Estioca 2020: 118)

Pog-bunag-on nog gina' og tubig sog glupa'
PV.IRR-pour-PAT NPSA mother PSA water OBL ground
'A mother will spill water on the ground.'

(26) GOAL Voice (GV) (Estioca 2020: 118)

Pog-bunag-an nog gina' og glupa' nog tubig
GV.IRR-pour-GO NPSA mother PSA ground NPSA water
'A mother will spill water on the ground.'

Under a symmetrical voice analysis, it is important to note that none of these constructions are considered basic, with the others being derived. In Western Subanon, the AGENT Voice, PATIENT Voice, and GOAL Voice all require overt morphological marking on the verb. This observation motivates the use of the labels Pivot/PSA and Non-Pivot/NPSA when discussing case markers rather than more traditional nominative-accusative or ergative-absolutive labels.

4.2 Obligatory Case Marking

Unlike Niuean, Samoan, and Chol, Western Subanon does not allow bare nouns, with the exception of “a proper name of an animate or inanimate noun” (Estioca 2020: 218). All arguments must be accompanied by a case marking determiner.

As a result of predicate-initial word order, the verb precedes the subject argument in intransitive clauses. In intransitive clauses, a core argument is obligatorily marked by the PSA marker, as seen in example (27) (Estioca 2020: 216).

(27) Western Subanon Intransitive Sentence (Estioca 2020: 150)

G<um>obok og gotow
<AV>run PSA person
'The person will run.'

Transitive clauses demonstrate a VSO word order. Core arguments of a transitive clause may be marked with either the PSA or NPSA marker depending on whether the verbal morphology is agreeing with the AGENT, as in (28a), or the PATIENT, as in (28b).

(28) Western Subanon Transitive Sentences (Estioca 2020: 2)

- a. Mik-putuk og gotow nog tobu
AV.REA-cut PSA person NPSA sugarcane
'The person is cutting (some) sugarcane.'
- b. Pik-putuk nog gotow og tobu
PV.REA-cut NPSA person PSA sugarcane
'The person is cutting (some) sugarcane.'

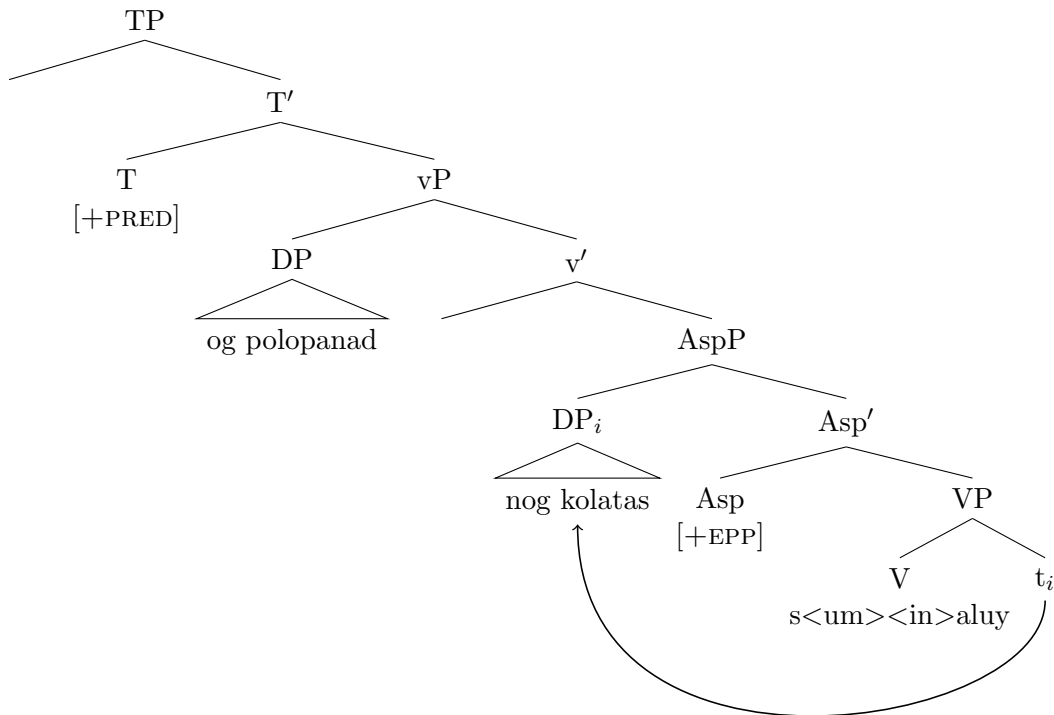
Obligatory case marking explains why there is no pseudo noun incorporation in Western Subanon. In languages such as Niuean and Samoan, pseudo noun incorporation occurs when a bare NP is selected as the complement of a verb. However, in Western Subanon all nouns are obligatorily accompanied by a case marking determiner. This indicates that the language lacks bare NPs. Therefore, a verb can only select a full DP as its complement, which must move out of the VP in order to check case, resulting in VSO word order.

I propose that obligatory case marking in Western Subanon is driven by an EPP feature on the inner Aspect head. This means that the object DP in (29), *nog kolatas* ‘the paper’, will always move out of the VP to the Specifier of AspP, as seen in (29b). Combined with the lack of bare NPs in the language, an EPP feature on the Asp head explains the lack of a VSO/VOS alternation seen in some Niuean and Samoan (3.2). This obligatory case marking, when combined with data from non-verbal predicate fronting, the position of manner adverbs, and serial verb constructions can be used to explain the surface word order observed in Western Subanon.

(29) VSO sentence in Western Subanon (Estioca 2020: 123)

- a. s<um><in>aluy og polopanad nog kolatas
 <AV><PFV>buy PSA teacher NPSA paper
 ‘A teacher bought some paper.’

- b. Tree demonstrating the +EPP feature on the Asp Head



4.3 Non-verbal Predicate Fronting in Western Subanon

Following Coon’s (2010) analysis of Chol and Massam’s (2005) analysis of Niuean, I argue that Western Subanon is better described as a predicate-initial language rather than a verb-initial language. Both verbal and non-verbal predicates appear in the sentence initial position. This is taken as further evidence for a +Predicate feature associated with the T head. The examples in (30)-(32) demonstrate DP, AP and PP predicate fronting in Western Subanon.

- (30) DP Predicate Fronting (Estioca, p.c.)

Og polopanad si John
PSA teacher PSA John
‘John is a teacher.’

- (31) AP Predicate Fronting (Estioca, p.c.)

Moto si John
smart PSA John
‘John is a teacher.’

- (32) PP Predicate Fronting (Estioca, p.c.)

Sog baloy si John
LOC house PSA John
‘John is in the house.’

A +Predicate feature on the T head provides an explanation for both the primary VSO word order and the fronting of non-verbal predicates. It is worth noting that in examples (30) and (32), whole phrases are being fronted rather than heads. This is analogous to the entire VP fronting rather than the V head. This is an important factor in deciding between a head movement or a phrasal movement analysis for the language. If the language requires that full phrase non-verbal predicates fill the clause initial position, then one must propose a separate mechanism to force the movement of the V head.

4.4 Determiner Phrases

Deictic and case marking determiners may co-occur within a single DP in Western Subanon. Consider (33), where the determiner *og* is co-occurring with the deictic determiner *koyon*.

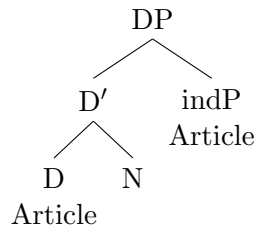
- (33) Co-occurrence of determiners in Western Subanon (Estioca 2020: 219)

Mi-tulug og bata’ koyon
STAT.REA-sleep PSA child DET3
‘That child is/was sleeping.’

This paper adopts Giusti’s (2015) theory of DP structure, which has been further elaborated by Hsu and Syed (2018). Giusti (2015: 127) draws a distinction between articles and determiners and states that articles act as nominal inflectional morphology. It is cross linguistically attested that

articles can co-occur with other determiners in Spec DP (Giusti 2015: 135), also observed in the Western Subanon example in (33). Hsu and Syed (2018: 189) refer to demonstratives, pronouns, and proper names as “indexical expressions” that denote person, reference, or deixis. Under their analysis, a deictic determiner, although it can merge at different stages of the derivation, must either merge or move into the highest specifier position of the DP. Example (34) demonstrates the structure that allows the occurrence of multiple determiners in single DP in Western Subanon. In this example, the phrase containing the indexical expression is labelled as *indP*. Based on the observed word order of Western Subanon, as observed in (35), this *indP* must occupy a specifier that is rightward branching. It is unclear why this would be the case, and these facts deserve further investigation.

(34) Tree for co-occurring determiners (adapted from Hsu & Syed 2019: 189)

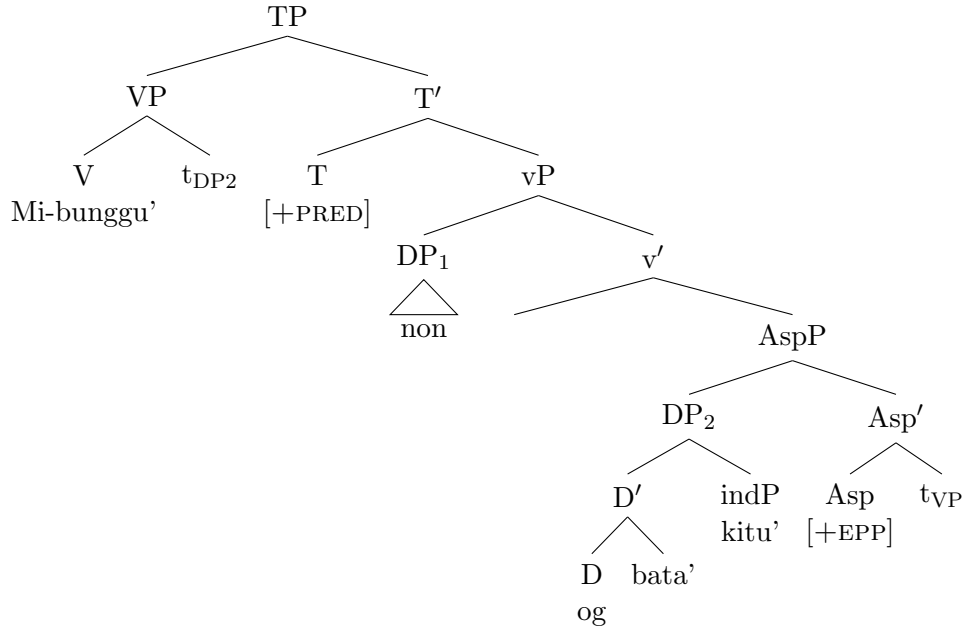


When an article and deictic determiner co-occur in an object DP in a transitive clause, the maximal projection of the DP is targeted for movement. After originating within the VP, the entire DP containing both the article and determiner moves to the specifier of AspP before the VP-remnant is fronted. Assuming the structure in (34), this accounts for the word order observed in (35).

(35) Transitive sentence with co-occurring determiners (Estioca 2020: 146)

- a. Mi-bunggu' non og bata' kitu'
 PV.PERF.ACC-bump 3SG.NPSA PSA child DET6
 'He/she accidentally bumped into that child.'

b. Tree with co-occurring determiners



4.5 Manner Adverbs

The position of manner adverbs in Western Subanon provides further evidence in favor of a VP-remnant fronting analysis. Manner adverbs are usually analyzed as VP-internal or VP-adjoining (Collins 2017). If manner adverbs originate VP-internally, then we would expect them to be fronted along with the VP-remnant. Therefore, we should see manner adverbs appearing to the left of the subject, just as we do in examples (36a) and (36b).

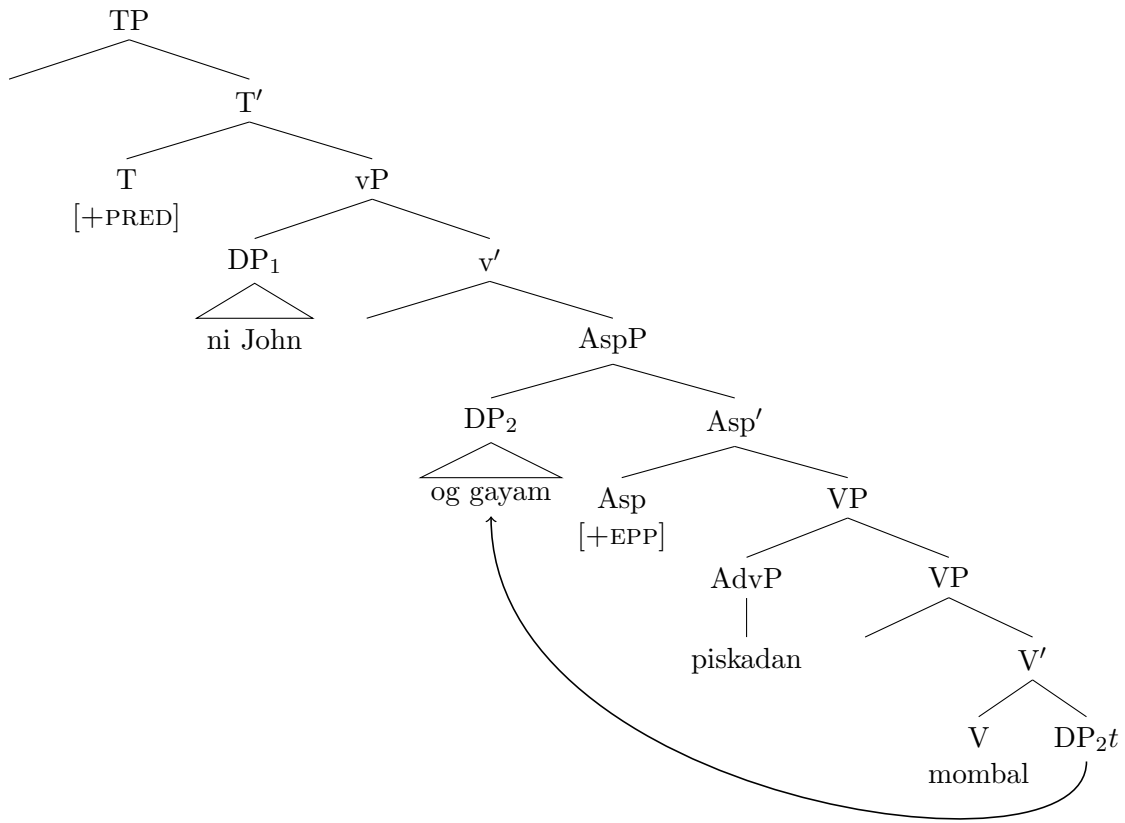
(36) Manner adverb placement in Western Subanon

- a. Pi-sikad-an mombal ni John og gayam
 CAUS.REA-fast-PAT hit NPSA John PSA dog
 ‘John hit the dog hard.’ (Estioca, p.c.)
- b. Po-doli’-an mog-upad og gubikayu koyon
 CAUS.IRR-fast-PAT AV.IRR-peel PSA cassava DET3
 ‘The cassava should be peeled quickly.’ (Estioca 2020: 300)

It is important to note that adverbs in Western Subanon are inflected with the same morphological markers as verbs, as seen in the examples above. This makes them difficult to distinguish from more semantically prototypical verbs.

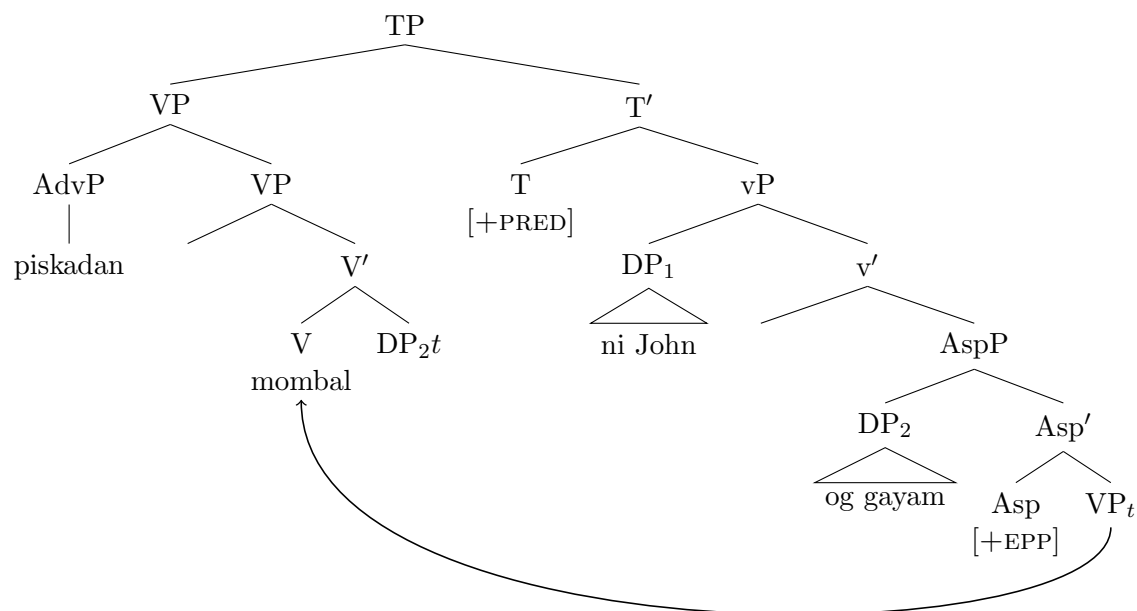
As seen in tree (37), the manner adverb and object DP originate in a VP-internal position. Then, the object DP moves to the specifier of AspP as a result of the EPP feature on the Asp head and in order to check strong case features.

(37) Tree displaying the position of manner adverbs



Next, the verb phrase, along with the VP-internal manner adverb are fronted to the specifier of TP in order to check the +Predicate EPP feature associated with the T head, as seen in (38).

(38) VP fronting with manner adverb



These two movements result in the surface word order observed in (36a)-(36b).

Now I will argue against a head movement analysis for Western Subanon. If head movement were taking place rather than phrasal movement, we would expect the manner adverb to appear to the right of the subject argument, which is not the case. Although time, location, and frequency adverbs can appear clause initially, clause medially, and clause finally in Western Subanon, manner adverbs can only appear clause initially and preceding a verb or a pronoun, as seen in the examples in (39)-(42) (Estioca 2020: 59).

(39) Clause initial preceding a verb (Estioca 2020: 59)

Mo-dali' mok-talu' si Ata'
 ADV-fastness AV.IRR-speak PSA Ata'
 'Ata' speaks fast.'

(40) Clause initial preceding a pronoun¹(Estioca 2020: 59)

Mo-dali' ion mok-talu'
 ADV-fastness 3SG.PSA AV.IRR-speak
 'He/she speaks fast.'

(41) Clause medial (Estioca 2020: 59)

*Mok-talu' mo-dali' si Ata'
 AV.IRR-speak ADV-fastness PSA Ata'
 'Ata' speaks fast.'

¹Further investigation is required regarding this example. It is unclear why the manner adverb and verb are separated. It is possible that the adverb alone is serving as the predicate in this example. However, this makes the difference between (39) and (40) unclear.

(42) Clause final (Estioca 2020: 59)

*Mok-talu' si Ata' mo-dali'
AV.IRR-speak PSA Ata' ADV-fastness
'Ata' speaks fast.'

The positioning of manner adverbs provides further evidence that an XP-sized constituent is being targeted for movement rather than a head, and that this XP-sized constituent must be a predicate.

4.6 Serial Verb Constructions

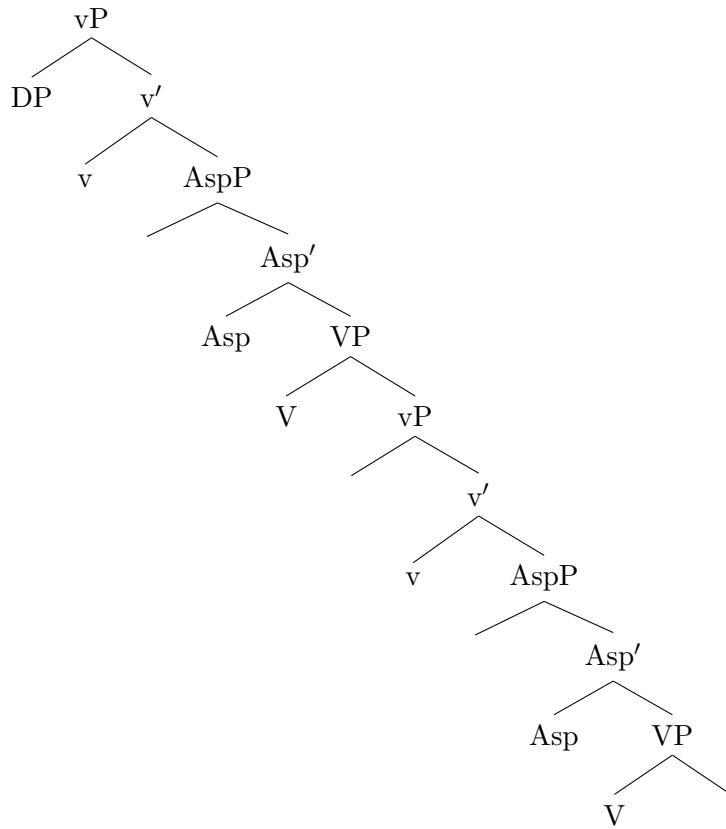
Serial verb constructions provide further evidence that a VP-remnant is being fronted rather than a verbal head. As seen in example (43), in Western Subanon serial verb constructions multiple verbs occur in sentence initial position (Estioca 2020: 297).

(43) Western Subanon Serial Verb Constructions (Estioca 2020: 297)

- a. Mig-domuk mok-punas og glibun koyon nog glomisahan
AV.REA-frown AV.IRR-wipe PSA woman DET3 PSA table
'The woman was frowning when wiping the table.'
- b. T<in>ipot mog-labak nog glibun og kolatas
<PV.PERF>finish AV.IRR-throw NPSA woman PSA paper
'The woman threw away all the papers.'

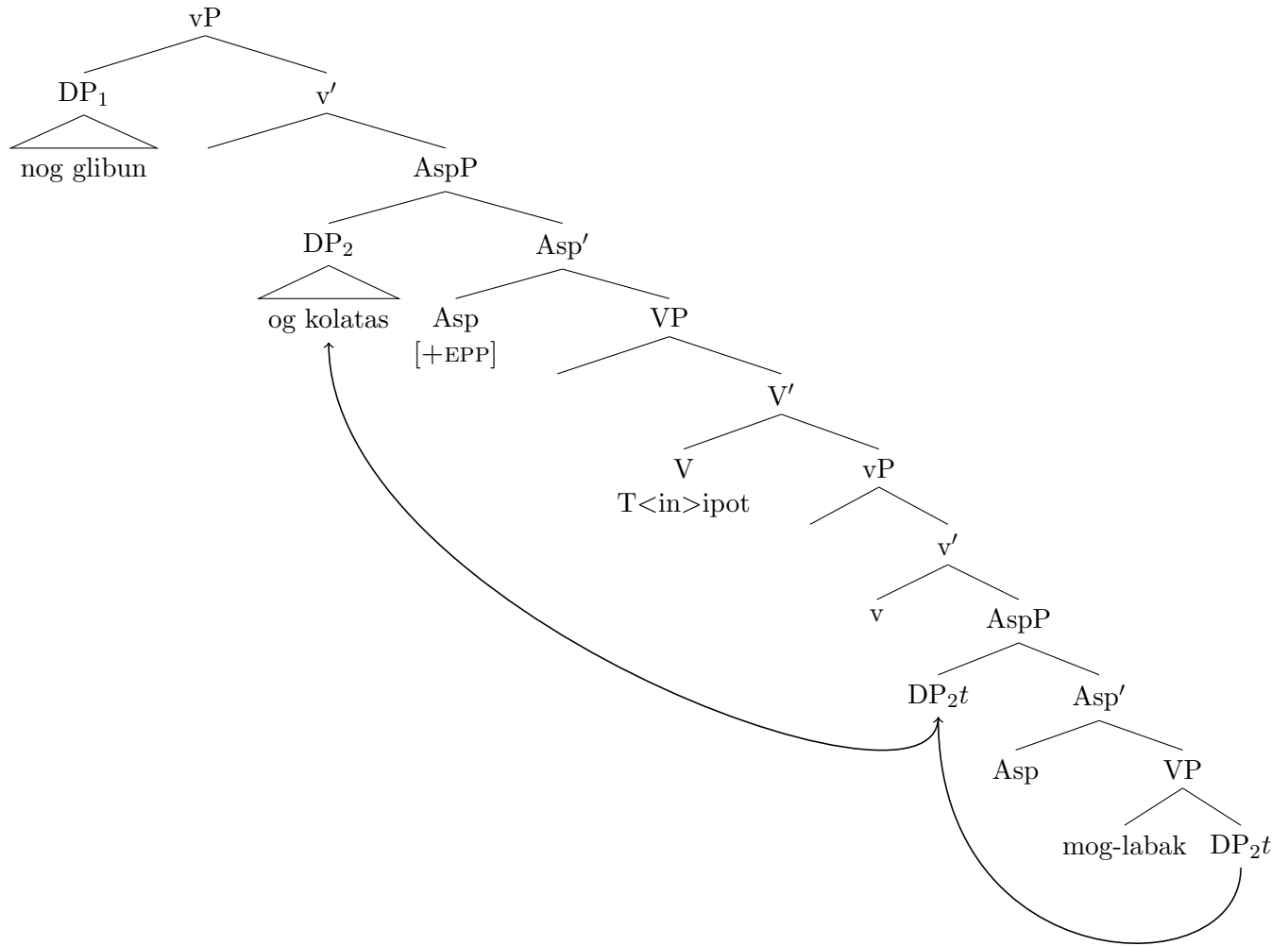
This paper will adopt the analysis of Collins (1997; 2002), Rolle (2020), and Tyler and Kastner (2022), which proposes that serial verb constructions “consist of nested vP shells, where one lexical verb selects the next vP as its complement” (Tyler & Kastner 2022: 288). This would result in the vP structure for serial verb constructions demonstrated in (44).

(44) Western Subanon Serial Verb vP Structure



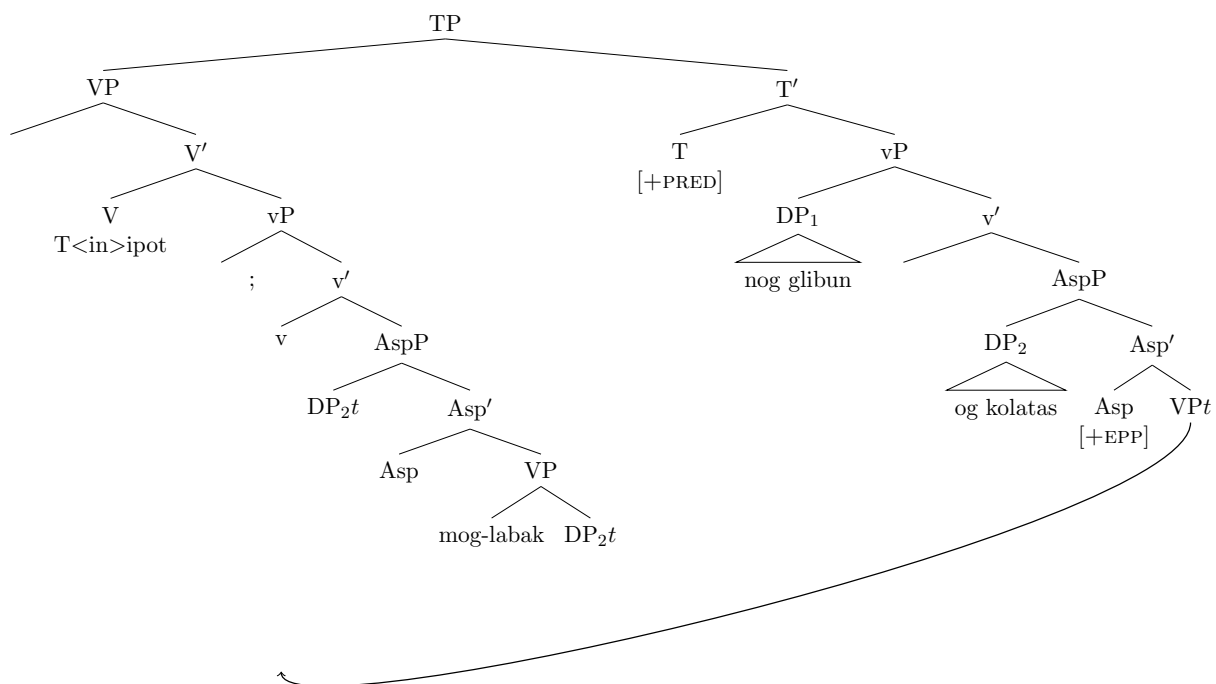
If we assume this structure, then the VP-fronting analysis provides an easy answer for the serial verb sentences. As seen in (45), the object argument *kolatas* ‘paper’ originates within the VP before moving to the specifier of the highest AspP.

(45) VP-fronting with serial verbs



Then, as seen in (46), the highest VP is moved to the specifier of TP to check the +Predicate EPP feature on the T head. Because the lower VP and its vP shell are c-commanded by the higher VP, they are also fronted to the beginning of the sentence. This provides an advantage over a head movement analysis, under which the heads of both verb phrases would need to move to a position in the left periphery of the clause independently.

(46) VP fronting with manner adverb



Serial verb constructions also provide evidence that the +REALIS and +AV features are located within the vP, rather than a higher structural position. This is unexpected, given that mood is generally analyzed as being above the vP (Paoli 2006). Within a serial verb construction, the two verbs may be marked differently for voice (47), mood (48), and plurality (49). Example (47) demonstrates that one verb may be marked for PATIENT voice while the other may be marked for AGENT voice, (48) demonstrates that one verb may be marked as realis while the other may be marked for irrealis, and example (49) demonstrates that one verb may be marked with plural agreement while the other is unmarked for plural agreement.

(47) Voice (Estioca 2020: 294)

P<in>otiang mok-sogow nog gina'=non og bata' 'The crying child was
 <PV.PERF>ignore AV.IRR-cry NPSA mother=3SG.POSS PSA child
 ignored by its mother.'

(48) Mood (Estioca 2020: 293)

Mig-indog mok-sogow og gotow koyon
 AV.REA-stand AV.IRR-cry PSA person DET3
 'That person was standing still crying.'

(49) Plurality (Estioca 2020: 296)

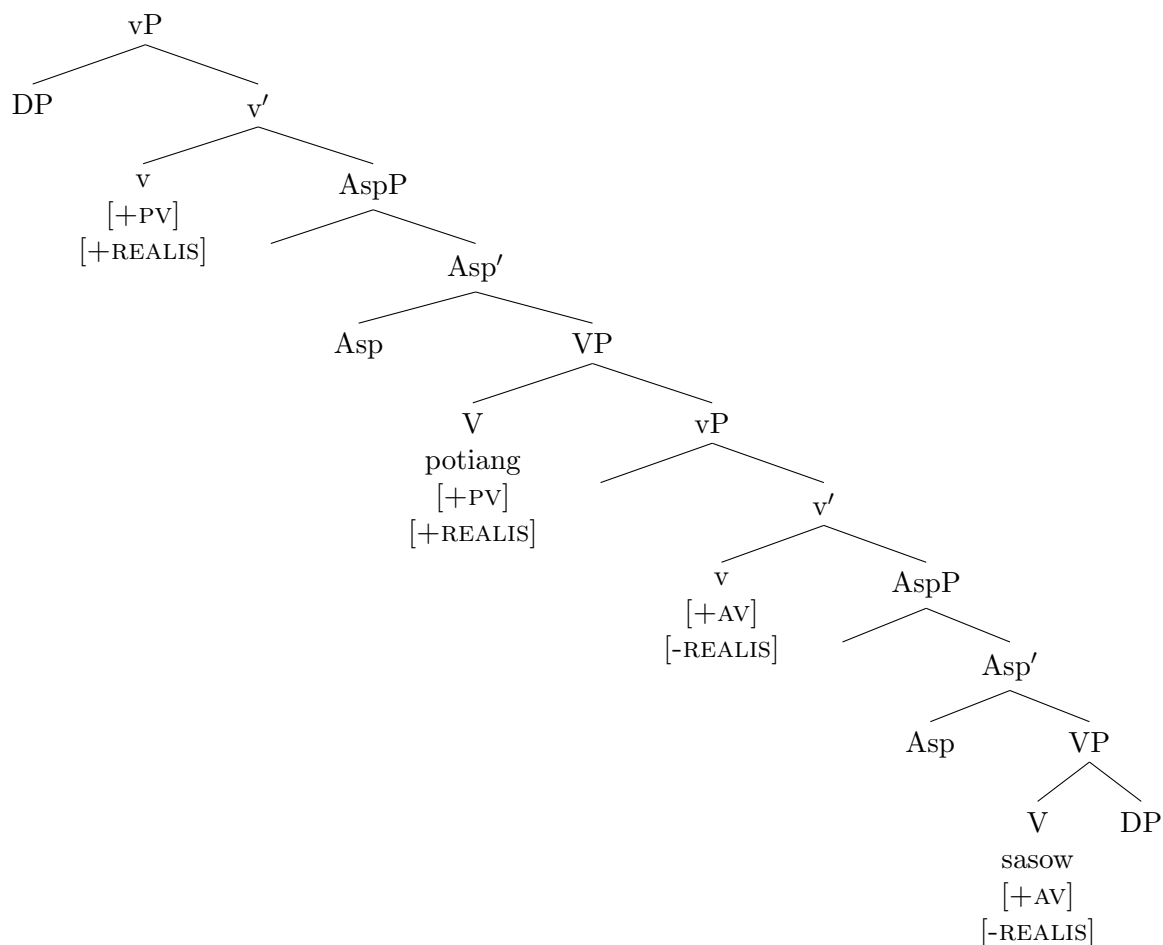
Ping-potiang mok-sasow nog sundalu-anan og gotow-anan 'The soldiers ig-
 PV.REA.PL-ignore AV.IRR-cry NPSA soldier-PL PSA person-PL
 nored the people making trouble.'

This difference in verb marking can be explained if the voice and mood features are associated with the *v* head and are checked in-situ before the VP is fronted to check the +Predicate EPP feature on T. Each *v*P shell contains its own *v* head, leading to the possibility of feature mismatches. This is compatible with Chomsky’s (2000) probe-goal approach to agreement, as defined by the following three criteria.

- (50) Criteria for Probe-Goal agreement (adapted from Chomsky 2000: 122)
- a. Probe and the Goal must have matching features.
 - b. The domain of the Probe is the sister of P.
 - c. Locality reduces to “closest *c*-command.”

Let us now apply this approach to example (49). I propose that the +PV and +REALIS features are on the highest *v*, while +AV and -REALIS features are associated with the lower *v*. The +PV and +REALIS features on the highest *v* are probes. Therefore, they search for the closest *c*-commanded element with matching features. This closest *c*-commanded element is the verb *potiang* ‘ignore’. When the +AV and -REALIS features on the lowest *v* head probe their domain, the closest *c*-commanded element with matching features is the verb *sasow*. Because these are weak uninterpretable features, they are checked and deleted in-situ. The structural position of these features is shown in example (51).

- (51) Position of voice and realis features



Unlike voice and mood mismatches, aspect mismatches are not allowed in serial verb constructions. Further investigation into the nature of aspect marking in Western Subanon is needed.

4.7 Agreement Relationships

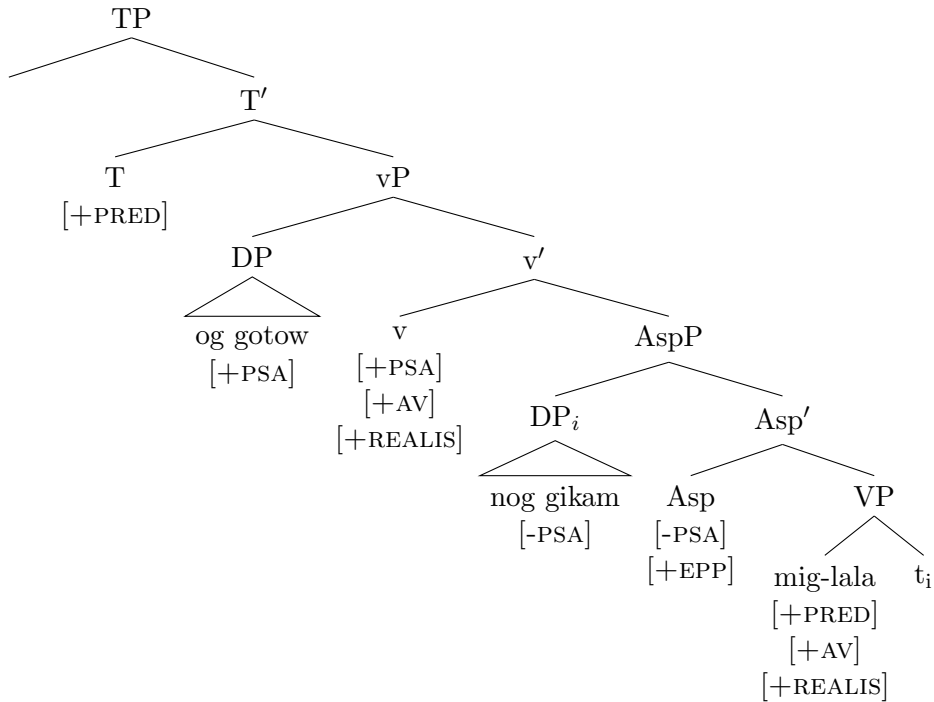
The overt morphological marking on verbs and case marking on articles indicates a complex set of agreement relationships in Western Subanon. In any given clause, any argument can be marked with any case. In other words, there is no restriction on a subject argument, object argument, or GOAL argument receiving either a PSA or NPSA case marker. I will present evidence that the *v* head and Asp head have associated features that induce this overt morphological marking. These features along with the EPP features on the T and Asp heads provide a ready explanation for both the word order and morphological form of transitive sentences in Western Subanon.

In a transitive sentence, case features are associated with both the *v* and Asp heads. The case feature associated with the heads varies depending on whether the sentence is AGENT voice, PATIENT voice, or GOAL voice. The sentence in example (52) displays AGENT voice. This means that there is a +PSA feature associated with the *v* head and a -PSA feature associated with the Asp head.

- (52) Western Subanon AGENT Voice Transitive Sentence (Estioca 2020: 153)
Mig-lala og gotow nog gikam
AV.REA-weave PSA person NPSA sleeping.mat
'The person wove a sleeping mat.'

As seen in tree (53) below, the subject *og gotow* 'the person' is base-generated in the specifier of *vP* and is therefore able to check its +PSA case feature in-situ in a local spec-head relationship. However, the object argument *nog gikam* 'a sleeping mat' must move from its original position inside the VP to the specifier of AspP to check its -PSA case feature and to fulfill the EPP feature on the Asp head. As previously described, the +AV and +REALIS feature on *v* are probing their domain for the nearest *c*-commanded element with matching features. In this case, they find the verb *mig-lala* 'weave', which also has +AV and +REALIS features. Because the features on the *v* head are weak, they may be checked at a distance, meaning that the +AV and +REALIS features on the verb are checked in-situ.

(53) Agreement Relationship Tree



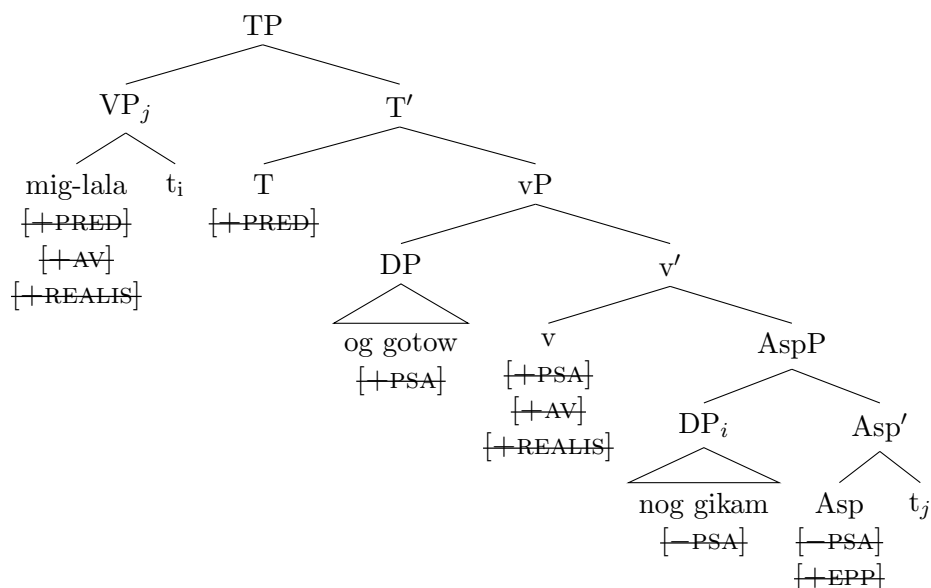
This differs from PV sentences, where the v head will have a -PSA feature and the Asp head will have a +PSA feature. The features associated with the various heads are displayed below in table (54).

(54) Table displaying head features

	AGENT VOICE	PATIENT VOICE
v	+PSA, +AV	-PSA, +PV
Asp	-PSA	+PSA

Now that the case features of both DPs have been checked, the +AV and +REALIS features on the verb have been checked, and the +EPP feature on the Asp head have been checked, the only feature left unchecked is the +Predicate feature on the T head. Because this is an EPP feature, the predicate must move to the specifier of TP, as seen in (55). Once this movement is complete, this analysis accounts for the observed word order, case marking, and verbal morphology of sentence (52).

(55) Tree displaying all agreement relationships



5 Conclusion

Although a VP-remnant fronting analysis has most often been applied to VSO/VOS alternations observed in the world's languages, evidence from Western Subanon indicates that this analysis provides certain advantages over a head movement analysis despite the language's strict VSO word order. This demonstrates that despite Niuean and Samoan allowing VOS word order alternations, the surface word order of all three languages can be accounted for using a VP-fronting analysis. Data from manner adverbs, non-verbal predicate fronting, obligatory case marking, and serial verb constructions indicate that a functional head within the vP and a +Predicate EPP feature on the T head account for the observed word order and verbal morphology of Western Subanon. Verbal morphology in serial verb constructions provides evidence that features including voice and mood may be present on the v head rather than a higher structural position. Further investigation into ditransitive constructions, serial verb constructions, and aspect morphology are likely to tell us more about the nature of VP movement and agreement in Western Subanon.

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