An X-bar Analysis Proposal for Seenku

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I. Introduction

The Seenku language, also known as Sambla, is spoken by around 16,000 people west of the Bobo-Dioulasso city in southwestern Burkina Faso (1). It is a Mande language with two very similar dialects: Northern and Southern, the latter of which has more speakers (4) and is what I will be writing on. Part of the Samogo language group, Seenku belongs to the Niger-Congo family and is primarily used in domestic, everyday life. The French colonized Sambla in July of 1898, which has resulted in the education of the Sambla people in French. Due to the presence of many language groups in the geographic area, different ethnicities have been using Jula and French for spoken and written communication respectively, which threatens this language with endangerment (5-6). The source I will be referencing, *A Grammar of Seenku,* is written by Dr Laura McPherson and published in 2020. Primarily obtained through elicitation and texts, McPherson's research work is an incredibly thorough study, documenting the grammar, typology, discourse, usage, and customs of the Seenku language and people.

Seenku is not a particularly morphologically rich language, with tone replacing much of its segmental morphology. It lacks noun classes, and the only inflectional morphology on nouns is used for differentiation between the singular and plural, which is shown by vowel fronting and tone raising. Seenku adjectives also have plural inflection, but verbs inflect for aspect and reality status (irrealis vs. realis) and do not possess participant agreement (13). Further differentiation of other verbal aspects includes post-subject markers and particles for tense and negation, reduplication for pluralization, and grammatical tone for indicating the perfective and habitual (15). As is typical of Mande languages, Seenku has a fixed SOV word order, and complements and adjuncts can be both found preceding and following the head of a phrase. McPherson doesn't mention Seenku's case alignment, but given its strict word order, it is likely that Seenku does not have an extensive case system, since languages with extensive case systems tend to have freer word orders. Additionally, based on its valency-reducing mechanism (antipassive), it is possible that Seenku has either Ergative/Absolutive alignment, since they are more closely associated with having the this construction, or neutral alignment because they are found in languages with little to no morphological marking. In this paper, I will be deconstructing Seenku's polar and wh-question formation processes which is realized prosodically and morphologically, as well as comparing Seenku's transitive and intransitive sentence constructions in giving a structural analysis on the mechanics of its valency-reducing mechanism, the strict word orders in which provide further evidence for DP movement.

II. Phrase Structure

Verb Phrase:

Seenku Verb Phrases can take a DP specifier, AdvP and PP adjuncts, and AdjP, DP, and CP complements. The VP and AdvP rules are as follows:

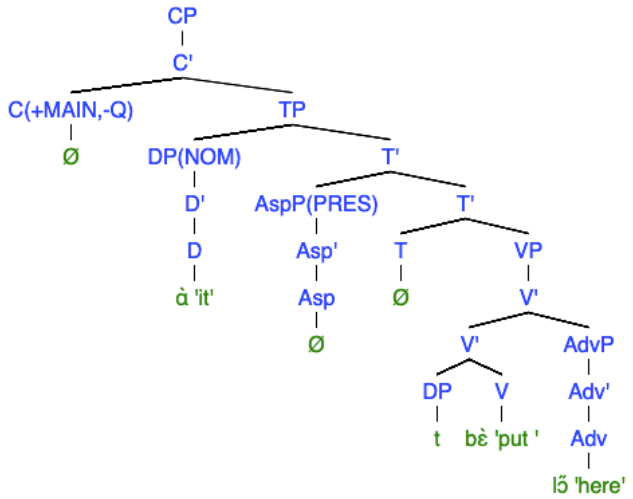
VP → (DP) V'
V' → V' AdvP
V' → V' PP
V' → AdjP V
V' → (DP) V (CP)

AdvP → Adv'
Adv' → Adv

As indicated by the traces left by DP movement in Examples (1) and (2), DPs can be located in complement and specifier position of VP, and can take both Patient and Agent theta roles. True to its SOV word order, both the subject and object DP always precedes the V head (see 13 for a transitive example). I will be elaborating on DP movement in the VPaux and Special Topics section. The AdvP and PP adjuncts (see 1 and 5) follow the V head, just like the CP complement (see 5), but the AdjP complement precedes the head (see 2). There is no subject agreement with the verb.

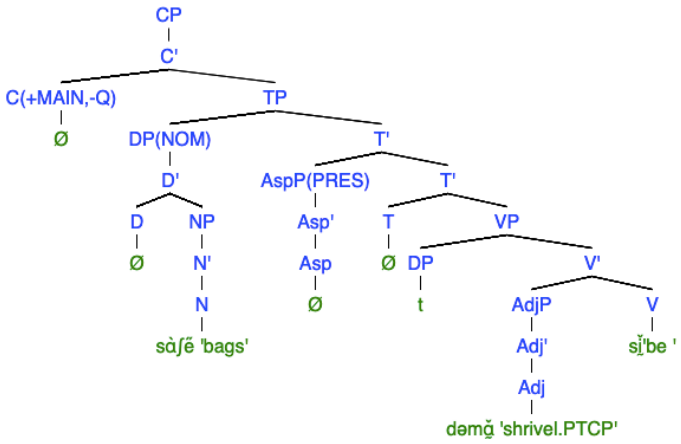
(1) ɑ̀ bɛ̀ lɔ̃́
3SG put. IRR here
'Put it here!'

(McPherson 2020:277)



(2) *sa`ʃe˝ dəmɑ̆* *sɻ̩̌*
bag shrivel.PTCP be
'Bags are tough.'

(McPherson 2020:366)



Vaux Phrase:

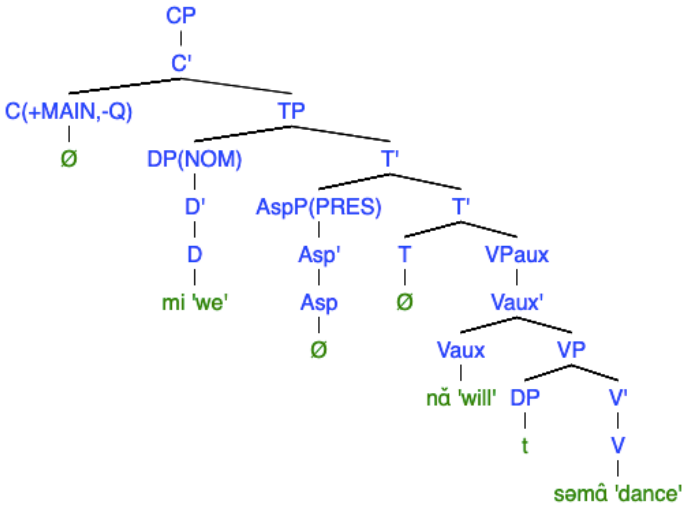
Seenku's *nă* is a prospective aspect marker rather than a future tense marker, and is categorized as an auxiliary by McPherson. As shown in Example (3), it takes a VP complement right of the head. This example also shows that DP movement happens in Seenku, because without the subject DP moving to specifier of TP, word order would be Aux-Subject-V rather than Subject-Aux-V. I believe Seenku's DP movement is the same as that of MUSE, in that the closest DP moves to the Specifier position of TP, and will be talking more about it shortly. The rules are below (Note that sentence this is present tense, which is unmarked)

VPaux --> V'aux
V'aux --> Vaux VP

DP ~> Specifier of TP

(3) *mi nă səmaˆ*
1PL PROSP dance.IRR
'We will dance.'

(McPherson 2020:339)



Tense Phrase:

Negation is indicated clause-finally, and I have introduced the Negative Phrase so as to allow it to remain in this position, positing it as an adjunct to the right of the T head (See 4). As indicated in Examples (3) and (4), Seenku's TP consists of the DP subject in specifier position left of the head after DP movement, and either a VP or VPaux complement on the right of the T head. I am proposing that subjects always appear in specifier position of TP, and the closest DP moves to fill this slot, whether it may be an agent (see 3) or patient (see 1).

Tense is not realized on the T head, but rather with an aspect marker that follows the subject. Each aspect marker's segmental material can be omitted, leaving only their tone and mora behind to attach to the preceding subject (16). I will be treating these as distinct from the auxiliary because the auxiliary always follows the aspect marker when they co-occur, and given this fixed word order, putting it within the TP generates the correct output. The Aspect Phrase or AspP is an adjunct on the left of the T head. This is shown in Example (13), where the past aspect appears between the subject and object DP after movement takes place; because present aspect is unmarked, I will be realizing it as Ø.

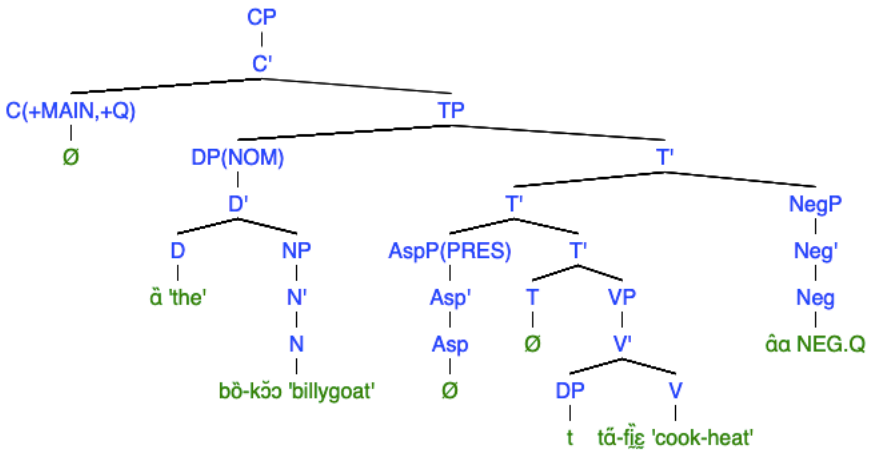
TP → DP T'
T' → AspP T'
T' → T' NegP
T' → T {VP, VPaux}

AspP → Asp'
Asp' → Asp

NegP -- >Neg'
Neg' → Neg

(4) à bɔ̀-kɔ̀ɔ tɑ́-fì˜ɛ˜ âɑ
DEF billygoat cook-heat.REAL.PFV NEG.Q
'The billygoat warmed up, didn't he?'

(McPherson 2020:334)



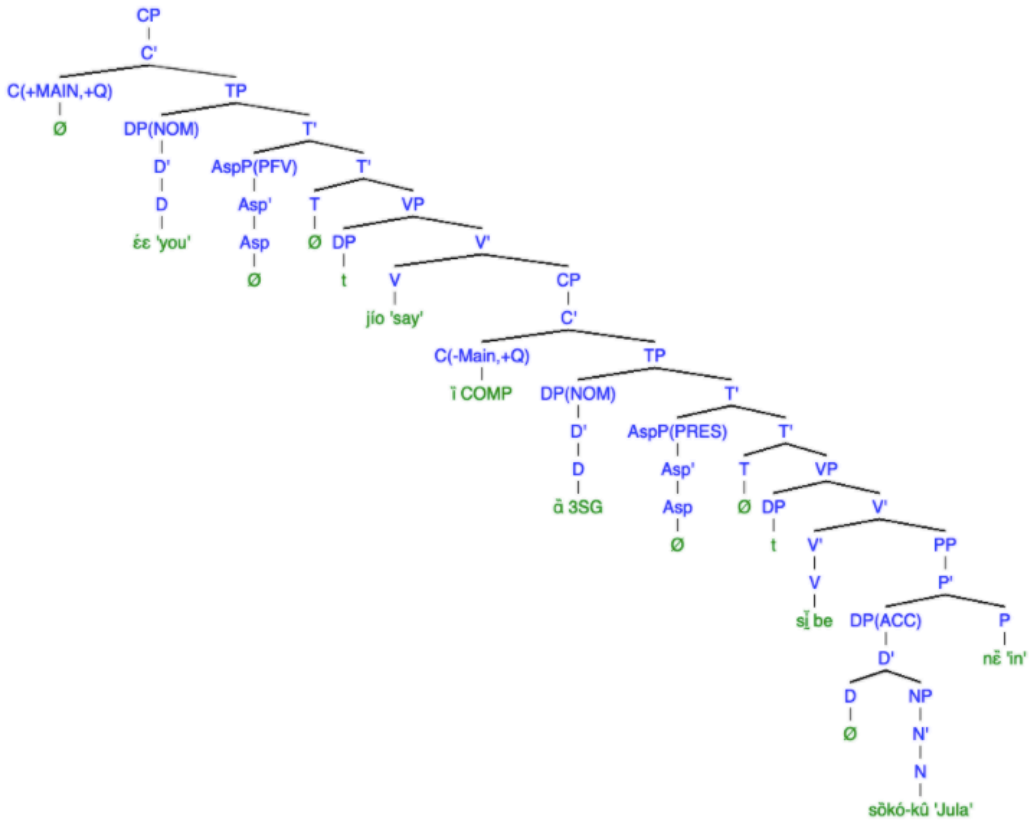
Complementizer Phrase:

Seenku's CP consists of a TP adjunct on the right of the C head. Overt complementizers are not found in main clauses, but are optionally observed in complement clauses (see 5). This example is of a polar question, the interrogative nature of which is wholly indicated by a falling tone on the final syllable of the utterance (and marked with the downward arrow). Note that McPherson categorizes the locative marker as a post-position (256).

CP → C'
C' → C TP

(5) *ɛ́ɛ jío ì̀ à sḭ̌ sɔ̀kó-kû nɛ̃̀↘*
2SG.LOG say.REAL.PFV COMP 3SG be Jula-thing LOC.Q
'You said that it's in Jula?'

(McPherson 2020:448)



A piece of data that my analysis would not account for is (5b):

(5b) *móő a` jəra` kɛ́ mó nă nɛ́*
1SG.EMPH.PST 3SG think.IRR COP 1SG PROSP come.IRR
'I thought that I would come.' (McPherson 2020:453)

It is possible to analyze the 3SG *a`* as a type of DP insertion that this particular sentence construction requires and put it in object position, and this seems to be the case in (5c) when 'thought' takes on a reflexive quality. The problem is that Seenku copulas can optionally cause its complementizer to delete, as seen (5b), but they can also co-occur (see 5c). I have not accounted for copulas in my phrase structure rules as McPherson says that they do not cause any change in a sentence (501) and don't seem to be an obligatory part of a sentence. Because they do appear, however, one might elect to posit it as an adjunct within the CP that follows the C head.

(5c) ä̀ ɑ̀ jərɑ̀ɑ ì̀ kɛ́ mó kʊ̀ níɔ
3SG 3SG think. IRR.HAP COMP COP 1SG toh eat.REAL.PFV
'He thought that I ate toh.' (McPherson 2020:453)

Noun Phrase

Seenku Noun Phrases can take Quantifier Phrase, Adjective Phrase, and Numeral Phrase adjuncts that follow the noun head. I did not encounter evidence for PP adjuncts or complements of NP. The phrase structure rules are as follows:

NP → N'
N' → N' QuantP
N' → N' NumP
N' → N' AdjP
N' → N

My source clearly draws the distinction between quantifiers, adjectives and numerals in that the quantifier always follows the numeral, which always follows the adjective when they occur together. As such, I have introduced the three adjuncts in my analysis. Example (7) shows the QuantP *kərúi˝* 'all' following the AdjP, and (6) shows the NumP *sʊ̀ɛ* 'three' following the AdjP *kɛ́-kɛ̌* 'white' located on the right of N'. The rules are below:

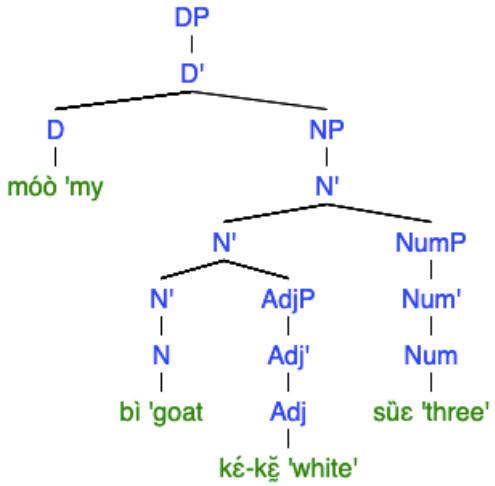
QuantP → Quant'
Quant' → Quant

NumP → Num'
Num' → Num

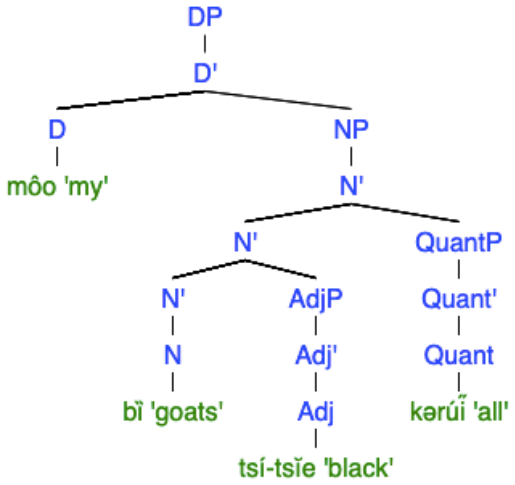
AdjP → Adj'
Adj' → Adj

(6) *móò bì kɛ́-kɛ̌ sʊ̀ɛ*
1SG.EMPH.DAT goat.PL RED-white.PL three
'my three white goats'

(McPherson 2020:14)



(7) *môo bì tsí-tsĭe kərúi˝*
1SG.EMPH.GEN goat RED-black all.PL
'all of my black goats' (McPherson 2020:180)



A problem I had was in accounting for McPherson's observation that Seenku's maximal noun phrase has the very specific order of Possessor/determiner – Noun – Adj – Numeral – Demonstrative/determiner – Quantifier (201). I had originally thought of putting QuantP in specifier position of DP, but due to the presence of the second DP specifier, this is not possible. My current NP rules would not be able to generate this specific order unless I posit an additional NP in the second DP with a null N head that would take the QuantP adjunct.

Determiner Phrase

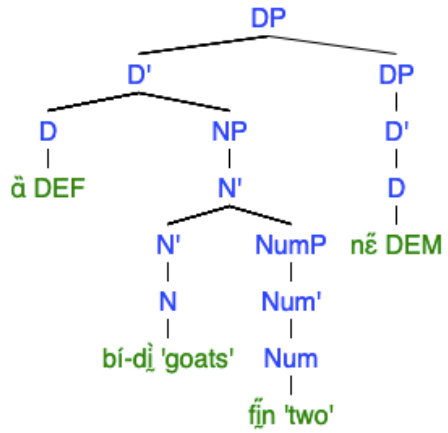
While Seenku's definite article can stand alone, it can also optionally co-occur with the demonstrative pronoun. Example (8) shows the NP in complement position, following the D head of the first DP and preceding the second DP. I proposed a second DP in specifier position of the

first DP instead of within the NP because it follows not just the N, but also other NP adjuncts excluding the QuantP. As seen in Example (7), possessors can also be D heads that precede the NP. The DP rules are below:

DP --> D' (DP)
D' --> D NP
D' → D

(8) *à̰ bí-dḭ̀ fḭ̋n nɛ̋*
DEF goat-CLF.PL two DEM.PL
'these two goats'

(McPherson 2020:180)



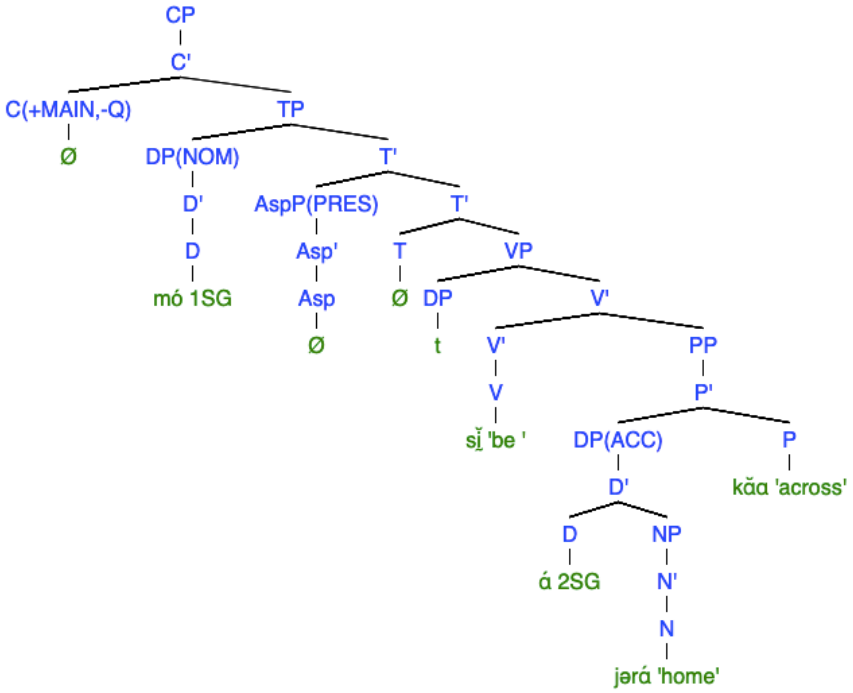
Postpositional Phrase:

Seenku's postpositional phrase consists of a DP complement located to the left of the P head, as shown in Example (9). The rules are below.

PP --> P'
P' --> DP P

(9) *mó sḭ̆ á jərá kăa*
1SG.EMPH be 2SG home across
'I am across from your house'

(McPherson 2020:255)



Summary

Several generalizations one can make are that complements are located to the right of the head in the TP, CP, and VPaux, to the left in PP, and either way in VP. All DP, NP, and VP adjuncts are to the right of the head while TP can take adjuncts on both sides. Verbs always follow their objects because Seenku is a strictly SOV language, and exhibits no movement in the question formation process. Because I have found no evidence indicating otherwise, I will be assuming Seenku's Agent/Patient theta roles as identical to that of MUSE in that they are base-generated in their respective places within the VP (Agents in specifier position and Patients in complement position). I will be talking more about DP movement shortly.

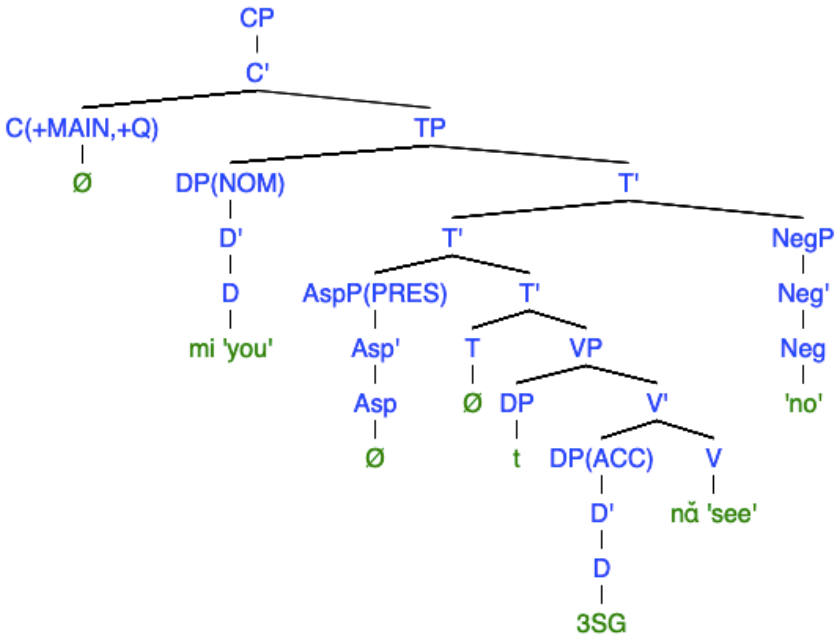
III. Special Topics: Question Formation

Seenku polar questions are marked prosodically by falling intonation on the final syllable of the utterance (395). Example (5) is of an affirmative polar question within an embedded clause, and the falling intonation is indicated by the downward pointing arrow on the LOC postposition. Negative and affirmative polar questions are similarly realized, differing in only two aspects: Affirmative polar questions exhibit vowel lengthening while the negative does not. Although this lengthening is not glossed, McPherson illustrates it with a spectrogram photo (396). Negative polar questions additionally exhibit a morphological alternation, substituting the declarative negative particle *ŋɛ́* with *âa*, which carries the falling tone question indicator, as seen in (10). This example additionally demonstrates the lack of movement, as the NegP appears clause-finally in both declarative and interrogative clauses (cf. Example 4). This example is of a main clause, and there is no indication of it behaving any differently from the embedded clause in (5); the question indicator always occurs on the final syllable of the entire utterance. One should note that the C heads of the main and embedded clauses do not change, for the only indications of

these sentences being questions are suprasegmentally realized (along with the morphological alteration). Even though there is no change of word order/T-to-C movement, I have decided to label both the embedded and main clause as [+Q] since the tonal marker, which seems to be able to attach to anything, occurs utterance-finally. Because Seenku is a language with a very complex tone system, I wanted to pay special attention to its tonal alternations, and since the drop in tone occurs at the end of both clauses, it marks the entire thing as [+Q].

(10) *a´ ä̀ jîo âa↘*
2SG 3SG see.REAL.PFV NEG.Q
'You see, no?'

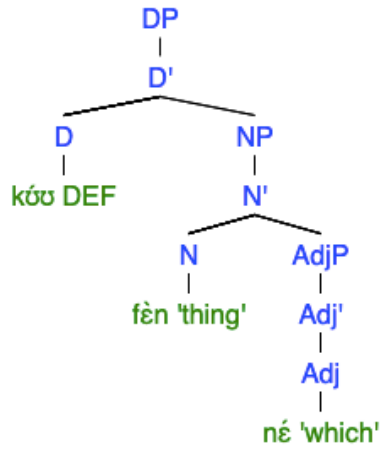
(McPherson 2020:398)



Seenku's content questions similarly undergo no movement, although adverbial wh-words, like their non-interrogative adverbial counterparts, are more flexible in their clausal position (399). Unlike polar questions, these are not marked prosodically but rather make use of wh-words. In Example (11), the combination of fɛ̀n and nɛ´ is synonymous with the MUSE wh-word 'what', and is realized in situ in its usual slot to the right of the noun. Because there is no singular morpheme for 'what' in Seenku, a combination of the wh-form and the word for 'thing' is used. I thought it appropriate to label it as the AdjP that modifies 'thing' because McPherson compares this example to the English form 'the what thing', noting how it encodes for a missing piece of information within an utterance like a riddle. She further notes that the response to this question can only be a concrete noun which would take up the entire NP. Aside from the substitution of a word for a wh-form, there are no other alternations or markings that indicate the interrogative nature of Seenku's phrases or sentences.

(11) *kʊ́ʊ̀ fɛ̀n nɛ´*
D.DEF thing which
'What is it?'

(McPherson 2020: 400)



III. Special Topics: The Antipassive and DP Movement

Seenku does not have the passive construction, and the only non-tonal affixation in Seenku's verbal morphology is the antipassive, which suppresses the patient of the transitive verb while leaving the agent unchanged. Without the patient, the verb loses an argument, and its valence is reduced. Morphologically indicated by a verb suffix (and occasionally surfacing as an infix), the antipassive is of limited productivity since not every verb can be antipassivized. The underlying phonological form of the antipassive suffix is /-i/, and the two lexically-specific allomorphs that mark the antipassive are [i] and [ri]. According to McPherson, it is unpredictable which allomorph gets used, but she notes that [ri] are more common after high vowels and [i] after non-high vowels.

In Example (12b), the Transitive object 'beer' is deleted, and the antipassive morpheme is shown with the addition of [-ri] suffix on the verb 'drink' in Example (12b). Because Seenku is an SOV language, the removal of the object does not reveal any change in word order in this sentence.

(12a) ń sḭ̆ dɔ̀ɔ mḭ̆ nɛ̋
1SG be beer drink.REAL.NOM LOC
'I am drinking beer'

(12b) mó sḭ̆ mərḭ̀ nɛ̏
1SG.EMPH be drink.ANTIP.REAL.NOM LOC
'I am drinking.'

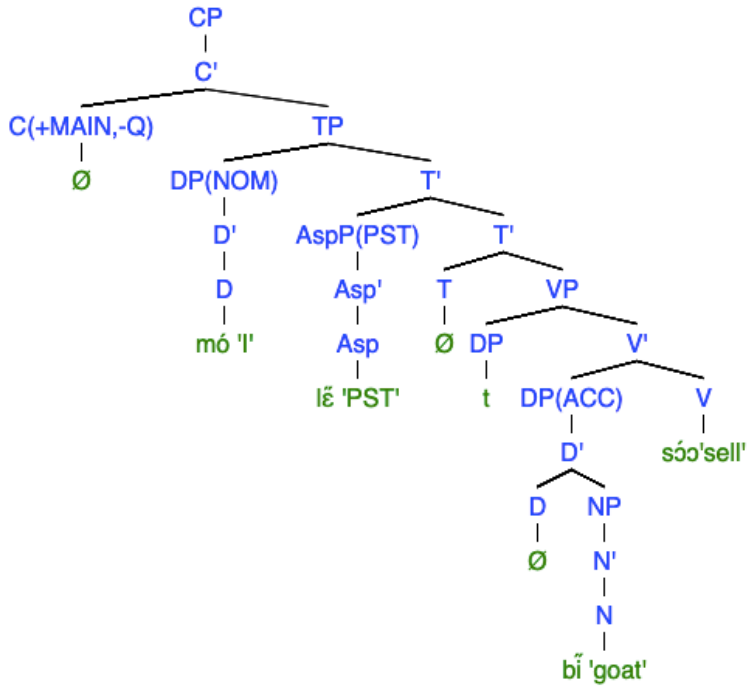
(McPherson 2020:322)

Example (13), on the other hand, demonstrates DP movement with its overt past tense aspect marker. Without the movement of *mó* 'I' to specifier of TP, the word order would be Aspect-Subject-Object-Verb. Despite satisfying Seenku's SOV requirement, this sentence would not be grammatical without DP movement, for the aspect must always follow the subject. DP movement would reflect McPherson's rigid sentence template, which is below (TAMP = aspect marker):

Subject – TAMP – Auxiliary – Object – Verb – PP/Adjunct – Negation
(McPherson 2020:16)

(13a) mó lɛ̃́ biˊˊ sɔ́ɔ
1SG.EMPH PST goat.PL sell.REAL.PFV
'I sold (the) goats.'
13b) mó lɛ̃́ biˊˊ sìɔ̃ɛɛ
1SG.EMPH PST goat.PL sell.ANTIP.PRF
'I have sold some of the goats'

(McPherson 2020:323)



Note: It is not uncommon to use the antipassive transitively in Seenku, and many antipassive verbs can continue to take a patient. When this happens, the VP will be semantically altered such that it takes on a partitive meaning (see 13b)

My other reasoning for DP movement is shown in Example (3). In 'We will dance', the auxiliary 'will' follows the subject 'we', and without DP movement, the word order 'will we dance' would ungrammatically surface. I have hypothesized that Seenku, like MUSE, moves the closest DP to subject position of specifier of TP, and that Patient DPs can be subjects. Examples (1) 'put it here!' and (4) 'The billygoat warmed up, didn't he?' don't seem to place any restrictions on allowing Patient DPs into specifier position of TP if there is no Agent DP present. However, none of my unaccusative sentence examples conclusively prove DP movement, for they all have the unmarked present aspect and none of them occur with an auxiliary. It is important to point out that analyzing those examples as a TP with an empty specifier slot and an object or Patient DP remaining in VP would still generate all the sentences cited in my paper. To prove this would require an overt aspect marker or auxiliary that follows the unaccusative subject I am proposing is base-generated in the verb. Unfortunately, I have not found an example of this construction in

my source, but I am making the prediction that in a construction such as this, the Patient would move in front of both the auxiliary and aspect marker and into subject position.

Conclusion

Notably strict in word order, Seenku does not seem to display much movement aside from the closest DP moving to specifier position of TP. Its tonally indicated polar question formation does not require Vaux-to-T and T-to-C movement, and this rigid word order subsequently makes an extensive case system unnecessary such that McPherson does not mention Seenku's case in this grammar. A particularly interesting excursion in my analysis came from having to account for the tense aspect markers, which I have posited as the adjunct of TP. Because the present tense is unmarked, I did not realize its existence until much later in my analyses, and having to revamp my phrase structure rules in a way that would put this aspect marker before the auxiliary and between the subject and object DPs made it evident that the specifier of TP must be filled by a subject DP, for the aspect marker and the auxiliary must both follow the subject. The intransitive sentence in Example (1) 'put it here' seems to similarly allow a sole patient DP into subject position, and I have moved it to specifier of TP where it precedes the null aspect marker, while the transitive sentence in Example (13) 'I sold the goats' leaves the patient 'goats' in complement position of VP, with the agent/subject DP moving to Specifier position of TP before the overt aspect marker.

References

McPherson, L. (2020). *A Grammar of Seenku*. De Gruyter Mouton.

Abbreviations

CLF: Classifier, COMP: Complementizer, DAT: Dative, DEF: Definite, DEM: Demonstrative, EMPH: Emphatic, GEN: Genitive, IRR: Irrealis, LOC: Locative, LOG: Logophoric, NEG: Negative, NOM: Nominalized, PFV: Perfective, PL: Plural, PRF: Perfect, PROSP: Prospective, PTCP: Participle, Q: Question, REAL: Realis, RED: Reduplicant, SG: Singular