Kru as V→T rather than Verb-Second

Hannah Sande
April 17, 2014

1 Introduction

• Proposals
  a. Describe basic word order patterns of Guébie, an Eastern Kru language (Niger-Congo) [Côte d’Ivoire]
  b. Demonstrate that Kru languages have basic SOV word order, not SVO as is currently stated in the literature and in typological databases
  c. Argue contra Koopman (1984) that:
    * Guébie and other Kru languages are not verb-second in the Germanic sense.
    * Rather, they are mixed-headed SOV languages that undergo $V \rightarrow T$ movement.
    * Verb movement in Kru is morphophonologically motivated.

Roadmap
§ 1 Introduction
§ 2 Background
§ 3 Basic word order in Guébie
§ 4 Two possible analyses
§ 5 Motivation for movement
§ 6 Conclusion

2 Background

• Kru is a branch of Niger-Congo spoken in Liberia and Côte d’Ivoire.
• Guébie is spoken in a series of seven villages south of Gagnoa in southwest Côte d’Ivoire\(^1\).

• All data, unless specified, comes from personal elicitation with a native speaker.\(^2\)

3 Basic Guébie Word Order

• In recent past perfective and present tense clauses, Guébie exhibits SVO order.

(1) Present tense word order: S V O

a. 3\(^{\text{sg}}\) \text{li} \text{d}\(\text{za}\)\(^{31}\)
   3.SG eat.IMPF coconuts
   ‘He eats coconuts’

b. 3\(^{\text{sg}}\) \text{li} \text{d}\(\text{za}\)\(^{31}\)
   3.SG eat.PERF coconuts
   ‘He ate coconuts (recently)’

c. 3\(^{\text{sg}}\) \text{wa} \text{touri}\(^{1.1.3}\)
   3.SG like.IMPF touri(masculine name)
   ‘He likes Touri’

• In clauses of all other tenses and aspects, Guébie has S AUX O V word order.

• When multiple verbal elements are present, the auxiliary surfaces after the subject and all other verbal elements surface clause finally.

(2) Word order in clauses of all other tenses: S AUX O V

a. 3\(^{\text{sg}}\) \text{ji} \text{d}\(\text{za}\)\(^{31}\) \text{li}
   3.SG will.IMPF coconuts eat
   ‘He will eat coconuts’

b. 4\(^{\text{pl}}\) \text{ji} \text{d}\(\text{za}\)\(^{31}\) \text{lilije} \text{kotfj}\(^{12.3}\)
   I will coconuts eat.PROG start
   ‘I will start eating coconuts (regularly)’

4 Two possible analyses

• Based on the surface facts in basic clauses like (1,2), Kru looks a lot like verb-second languages (i.e. German and Dutch (?????), Danish (Mikkelsen, 2013, and citations therein), Dinka (?)).

• In German and Dutch, V is said to move (through T and) up to C, where it requires a specifier, thus surfacing in second position. The element in spec-C can vary.

\(^1\)Guébie is doubly classified in ?, once as a dialect of Bete-Gagnoa, and once as an alternative name for Dida-Lakota. I disagree with both classifications though I argue that it is in the Dida branch of Eastern Kru.

\(^2\)Tone is marked with a number system, where number 4 represents the highest tone and 1 represents the lowest. Dots represent syllable boundaries, and two numbers within two dots represent contour tones.
Among other arguments, evidence that V has moved to C comes from the fact that V2 cannot occur in clauses where there is an overt C.

- ? posits a unified account of the word order facts for Kru, German, and Dutch.
- The tree in (3a) shows the canonical verb-second account.
- Here I pursue the question: Are Kru languages really verb-second? An alternative analysis is shown in (3b).

(3) Two alternative analyses

a. V moves to C (V2)  
   \[
   \begin{array}{c}
   \text{CP} \\
   \text{DP}_i \quad \text{C'} \\
   \quad \text{C} \quad \text{TP} \\
   \quad \quad \quad \text{V}_k \quad \text{T} \quad \text{vP} \\
   \quad \quad \quad \quad \text{DP}_j \quad \text{v'} \quad \text{VP} \\
   \quad \quad \quad \quad \quad \text{v}_x \quad \text{v}_{x} \\
   \end{array}
   \]

b. V moves to T
   \[
   \begin{array}{c}
   \text{CP} \\
   \text{C} \quad \text{TP} \\
   \quad \text{DP}_i \quad \text{T'} \\
   \quad \quad \quad \text{T} \quad \text{vP} \\
   \quad \quad \quad \quad \text{DP}_j \quad \text{v'} \quad \text{VP} \\
   \quad \quad \quad \quad \quad \text{v}_x \quad \text{v}_{x} \\
   \end{array}
   \]

- In the following sections I demonstrate with evidence from subject/verb order, embedded clauses, negation, information structure, and passives that the V→T movement analysis in B is the right one for Kru.

4.1 Subject/verb order

- In Germanic languages a number of different elements can surface in first position, such as subject, object, adverbs or adverbial clauses, etc.
- In Kru, the verb always follows the subject (the nominative argument), and OVS word order is completely ungrammatical.

(4) No OVS word order in Kru

a. *d3a31 li2 ju4  
   coconuts eat.PERF boy  
   Intended meaning: ‘A boy ate coconuts’

- No matter the pragmatic context, OVS order is ungrammatical, as above.
- The subject always occurs before the inflected verb, supporting the analysis in (3b).
4.2 Embedded clause word order

- V2 order in (most) embedded clauses is blocked by an overt C in German and Dutch. Verbal elements remain clause final.

- In Kru, word order in embedded clauses is identical to main clauses: SVO or S AUX OV.

(5) Embedded clause data: S V O or S AUX O V

a. e⁴ dʒərəme³³ Gba¹ dʒəkʷi-jo³²² buru²²
I read.PERF that bird-PL fly
‘I read that birds fly.’

b. e⁴ jira²³ Gba² e⁴ ka³ lawi³²¹ lelo-wa¹¹¹ jokuni²³³
I want that I IRR vistor new-DEF see
‘I want to see the new visitor.’

- These data are potentially problematic for the canonical verb-second analysis, since an overt C leaves nowhere for V to move.

- The data in (5) are unproblematic for the V→T analysis in (3b). The verb moves to T and the complementizer is in C.

4.3 Negation

- Negation in most tenses is marked with a particle that replaces the tense/aspect auxiliary.

(6) Negation in auxiliary position: S AUX O V

a. dʒatʃi²² la³ tou्रi¹¹³ jokuni²³³
Djatchi.NAME NEG.PERF Touri.NAME vistor
‘Djatchi has not visited Touri.’

- In the present tense, negation is marked with a rising tone on the final syllable of the subject.

- In these cases, no verbal element surfaces in the AUX position between S and O.

(7) Present tense negation: S O V

a. dʒatʃi²¹³ tourι¹¹³ jokuni²³³
Djatchi.NAME.NEG.PRES Touri.NAME vistor
‘Djatchi does not visit Touri (habitually).’ or ‘Djatchi is not visiting Touri.’

- I posit that verb movement to T in sentences like (7) is blocked by negation. Since there is nowhere else to dock, the tonal TAM/Neg marker docks on the subject.

- Negation blocking head-movement of V is transparent in the structure in (3b).
4.4 Information structure

- Verbs in canonical verb-second languages remain in second position when information-structurally salient elements move to the left periphery.

- In Kru, Wh-words, focused elements, and topics surface in the left periphery; however, they do not affect the order of the subject relative to the verb.

(8) **Wh-words as clause initial**

a. ṁokpa\(^{3.3}\) tōuri\(^{1.1.3}\) ji\(^{3}\) lētri\(^{3.2}\) kōpa\(^{3.23}\) na\(^{3}\)
   who Touri.NAME will letter send Q
   ‘To whom will Touri send a letter?’

b. bēba\(^{2.2}\) tōuri\(^{1.1.3}\) ji\(^{3}\) dāṭfī\(^{2.2}\) kōpa\(^{3.23}\) na\(^{3}\)
   what Touri.NAME will Djatchi.NAME send Q
   ‘What will Touri send to Djatchi?’

(9) **Focus as clause initial**

a. bag\(^{w\,ɛ^{3.1}}\) ʂ ji\(^{3}\) kōpō\(^{3.232}\)
   book he will send.him
   ‘It’s a BOOK he will send him (as opposed to a letter).’

(10) **Topic as clause initial**

a. jūdi-ja\(^{3.1.3}\) ʂ wa\(^{2}\) jēre-lili\(^{3.2.2.2}\)
   man-DEF he like spice-food
   ‘As for the man, he likes spicy food.’

b. (k)uā\(^{31}\) kōgulp\(^{a.4.2.2.2}\) (ʂ) pi\(^{3}\) saka\(^{3.3}\)
   yesterday farmer (3.SG) cook.PERF rice
   ‘Yesterday the farmer cooked rice’

- In these cases the verb surfaces not in second position, but in third or even fourth.

- In the structure in (3b), where the landing site of V is T, there is an open space in C for WH-words, focused elements, and topics to move.

- No such open position exists in the tree in (3a), since the verb is in C and the subject in spec-C.

4.5 Passives in Guébie

- Subject movement to spec-C would be Ā-movement; the subject position in Guébie seems to be a canonical A-position.

  - It is the landing site of promoted patients in passives.

(11) **Passives in Guébie**

a. mobii-jo\(^{1.2.1.1}\) ji\(^{3}\) wejir-o\(^{3.2.21}\)
   car-DEF will steal-PASS
   ‘The car will be stolen.’
Kru languages as $V \rightarrow T$ rather than Verb-Second

Hannah Sande, UC Berkeley

ACAL 45
April 2014

b. bag$^w$ɛ$^{3,2}$ ji$^3$ mari$^{2,3}$ kɔp-o$^{2,21}$
books will Mary give-PASS
‘Books will be given to Mary.’

• This is evidence that the subject is in an A-position, namely spec-T, as oppose to an Ā-position like spec-C.

4.6 Summary

• When there is no overt auxiliary, $V$ moves to $T$ in Kru, as evidenced by:
  – The subject MUST immediately precede the inflected verbal element: *OVS
  – In both main and embedded clauses, an inflected verb immediately follows the subject in Kru languages: S AUX O V or SVO.
  – In negative present tense clauses there is no overt auxiliary, but $V$ movement is blocked by the presence of a negative head.
  – Focus, topic, and wh-elements surface before the subject when they are present. In these cases, the verb is still post-subject: FOC/TOP/WH S AUX O V or FOC/TOP/WH S V O.
  – The subject position has properties of an A-position like spec-T, not an Ā-position like spec-C.

• Based on the data shown here, I posit that $V$ moves to $T$ in Guébie and other Kru languages, as in the tree in (3b).

• Contra Koopman (1984), the tree in (3b) assumes mixed-headedness; $T$ (and $C$) is head-initial in Guébie, while everything $T$ dominates is head-final.

• With this structure, but not the structure in (3a), Kru word order facts are accounted for.

5 Motivation for movement

• We have seen that $V$ moves to $T$, not $C$ in Guébie.

• Why not call Kru verb-second where $V$ is in $T$? (cf. Mikkelsen’s (2013) analysis of Danish subject-initial clauses)?

• Other than the difference in landing site of $V$, another reason for distinguishing $V$-movement in Kru from verb-second is the motivation for verb movement.

• What motivates verb-second order?
  – Three analyses of movement motivation:
   1. Force: $?$ says that verb movement to $C$ marks the Force specification of a clause: verb-second declarative clauses versus verb-initial polar questions.$^3$

$^3$Alternatively, $?$ say that verb movement is motivated by a need to lexicalize $C$. That is, there must be an overt element in $C$. 

6
2. **Case:** ? says that V moves in Kru, German, and Dutch in order to satisfy the case filter, which requires a verb to be immediately adjacent to the noun to which it assigns (nominative) case.

3. **Affixation:** Much like do-support in English or V→T movement in Romance, TAM affixes require an appropriate verbal host.

- **Brandner’s (2004) Force analysis** cannot account for the Guébie data, since word order in polar questions is the same as in declarative clauses.
  - Polar questions in Guébie and other Kru languages retain strict ordering of subject before inflected verb. Declaratives and polar questions are determined by intonation and/or context.

  (12) **Polar question data:** S AUX O V or S V O

  dʒatʃi2 wa2 touri1.3
  Djatchi.NAME see.IMPERF Touri.NAME
  ‘Does Djatchi like Touri?’

- **Koopman’s (1984) Case analysis** cannot account for Guébie, since the verb is not always adjacent to the nominal argument.
  - Koopman’s analysis requires the verb to be immediately adjacent to the noun it assigns nominative case.
  - This does not reflect Guébie word order in negative present tense clauses which have S O V order (recall the data in (7)).
  - I assume nominative case is assigned to the specifier of T by the T head in Guébie, not by the verb itself.

- The Affixation analysis is the best fit for the Guébie data.
  - I argue that verb movement in Guébie and Kru in general in motivated by the need for a TAM/NEG affix to be realized on a verbal element.
  - ? and ? analyze the difference between V-to-T movement in Romance and do-support (??) as distinguished by a V-to-T parameter setting.
  - Both V-to-T movement and do-support are repairs that result in TAM markers being realized on a verbal host.
  - In Guébie and other Kru languages, TAM markers in must also be realized on a verbal host. When no auxiliary particle is present and TAM/Neg is a tonal morpheme, V moves to T to host TAM/Neg.

(13) **Word order summary**

<table>
<thead>
<tr>
<th>Construction</th>
<th>Word order</th>
<th>Overt auxiliary?</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Non-present positive</td>
<td>S AUX O V</td>
<td>Yes</td>
</tr>
<tr>
<td>b. Present positive</td>
<td>S V O</td>
<td>No</td>
</tr>
<tr>
<td>c. Non-present negative</td>
<td>S AUX.NEG O V</td>
<td>Yes</td>
</tr>
<tr>
<td>d. Present negative</td>
<td>S.NEG O V</td>
<td>No</td>
</tr>
</tbody>
</table>
• The language prefers for a verbal element to host TAM, and tonal TAM/Neg on the subject in (7, 13d) is a last resort mechanism because NEG blocks V to T movement.

• The motivation of verb movement in Kru is morphophonological, distinct from the motivation of verb movement in true verb-second languages and more like V-to-T movement in Romance.

(14) **Further evidence from Vata (?)**

a. li² 3² li² saka³⁴
   eat he eat rice
   ‘He ATE rice.’

b. *li² ³ li² saka³⁴

6 **Conclusion**

• **SOV order and V→T**

  – Kru languages have surface SVO structure in some tenses, though they have properties of head-final languages (Dryer 2007, and others): postpositions, post-nominal determiners, genitive-noun, etc.) (cf. ?).

  – I posit that Guébie and other Kru languages are SOV, despite the fact that in clauses with certain tense/aspect combinations they surface as SVO.

  – Despite its many head-final properties, T and C in Guébie must be head initial due to surface position of subject and inflected verb, WH-words, topics and focused elements.

• **Arguments:**

  – Kru languages are SOV, mixed-headed where T and C are head-initial, and they undergo V→T movement when there is no overt auxiliary particle.

  – Verb movement is morphophonologically motivated (Affixation).

  – **For future research:** Is all V2 movement motivated by Force specification? And is all V→T movement motivated by Affixation?

• **Final points:**

  – I present the first syntactic description of Guébie, an Eastern Kru language.

  – This study shows that Kru is not V2 in the Germanic sense.

  – Kru languages as a family are understudied and little understood. Theoreticians, typologists, and speakers alike would benefit from further documentation, description, and analysis of Kru and other underdescribed languages.

**Acknowledgments:**
I would like to thank Professors Larry Hyman, Lev Michael, and Line Mikkelsen at UC Berkeley for their comments and suggestions throughout various stages of the research process that led to this presentation. I would also like to thank my Guébie consultant Sylvain Bodji for sharing his time and knowledge of his language and culture.