Morphology feeds prosody in Degema serial verb constructions: A reply to Rolle 2019

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Paper online at: ling.auf.net/lingbuzz/004944

1 Introduction

Background:


• He argues it is evidence for a parallel morpho-phonology module.

Today:

• The Degema ‘conspiracy’ results from the interaction of two independently-attested syntax-prosody phenomena.
  - Prosodic serialization in serial verb constructions (SVCs).
  - Suppression of redundant agreement within a prosodic word (Kinyalolo’s Generalization).

• We model these phenomena as syntax-prosody OT constraints, and develop a prosodic account of the Degema pattern.

• We argue against Rolle’s account: it doesn’t generalize well to SVCs outside Degema.

• Serial architecture (syntax→morphology→prosody) can be maintained.

Roadmap:

§2 The pattern

§3 Analysis

§4 Alternative: Parallel OT-DM (Rolle 2019)

§5 Conclusion

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2 The pattern (from Rolle 2019)

Degema verbs are bookended by agreement proclitics and, sometimes, aspectual enclitics:¹

(1) a. [ me- síré ]
   1SG.set1-run
   ‘I am running.’ (Rolle’s 4a)

b. Ohoso [ q- sá -n ] ̃énám
   Ohoso 3SG.set2-shoot-fac animal
   ‘Ohoso shot an animal.’ (R4b)

In contiguous serial verb constructions—where no object NP intervenes between the verbs—clitics bookend the entire SVC:

(2) Ohoso [ q- tá dé -n ] isen
    Ohoso 3SG.set2-go buy-fac fish
    ‘Ohoso went and bought fish.’ (R10a)

In non-contiguous SVCs, each verb is bookended by its own identical set of clitics:

(4) Tatane [ gbiyé-ën ] ̃énam[ q- gbíyé-ën ]
    Tatane 3SG.set2-shoot-fac animal 3SG.set2-kill -fac
    ‘Tatane shot and killed an animal.’ (R8b)

In non-contiguous SVCs, each verb is bookended by its own identical set of clitics:

(3) a. FAC/PREF: H tone spreads across SVC
   Ohoso [ o- tá dé võ yí kiyé -n ] óyí
   Ohoso 3SG.set2-go buy take come give -fac her/him
   ‘Ohoso went and bought (something) and brought (it) to her/him.’ (R25c)

b. NEG: L tone spreads across SVC
   Ohoso [ o- kótu me kake ] inum
   Ohoso neg3SG.set2-call me show something
   ‘Ohoso did not call me and (did not) show (me) something.’ (R29c)

1. Glossing conventions for Degema: FAC factative aspect, PREF perfect aspect, SET 1 clitic, SET 2 Set 2 clitic.
And the intervening object NP interrupts tone spreading:

(5) Osoabo [ó von ] élege [e- fiyá]
Osoabo NEG3SG.SET-take knife 3SG.SET-cut
‘Osoabo did not use a knife to cut something.’ (R31b)

Summary, where ‘[ ]’ is a prosodic constituent serving as the domain of tone spreading:

(6) SVC distribution of clitics

<table>
<thead>
<tr>
<th>Contiguous</th>
<th>Non-contiguous</th>
</tr>
</thead>
</table>

= ‘single-marking’
= ‘double-marking’

3 Analysis

3.1 Assumptions

SVCs with the same syntax can end up with single-marking or double-marking (Rolle 2019:§A3.1):

(7) a. In-situ object: double-marking

[ mi- dúw -n ] ovó [ mi- tá -an ]?
1SG.SET2-follow-FAC who 1SG.SET2-go-FAC
‘I went with who?’ (R12a)

b. Moved object: single-marking

ovó, nú [ mi- dúw ] t1 tá-an ]?
who that 1SG.SET2-follow go-FAC
‘Who did I go with?’ (R12b)

(8) a. Heavy object pronoun: double-marking

eni [ mé- dúw ] òyì [ mé- tá ]
we 1PL.SET1-follow him/her 1PL.SET1-go
‘We will go with him/her.’ (R15b)

b. Light object pronoun: single-marking

Breno [ mó- dúw mé tá ]
Breno 3SG.SET1-follow me go
‘Breno will go with me.’ (R15a)

• N.B. See Appendix A.1 for discussion of heavy vs. light object pronouns.


In the morphology, every [v+V] head sprouts AgrSUBj and AgrASp nodes (via Dissociated Node Insertion, Embick and Noyer 2001):

(10) a. [v+V ] (object) [v+V ] (Syntax)

b. → [v AgrSUBj+vv+V AgrASp ] (object) [v AgrSUBj+vv+V AgrASp ] (Morphology)

→ Hooray! We’ve successfully derived the double-marking pattern.

...But what about single-marking (found with contiguous SVCs)?

• Rolle 2019: Only one set of clitics is sprouted in single-marking environments.

→ Requires that morphology and prosody be computed in parallel.

• Us, today: Clitics are sprouted on each verb, then prosody is able to delete them in contiguous environments.

→ Serial morphology→prosody model can be retained.
Derivation of a single-marking pattern:

(11) a. [\(v \cdot v + V\)] \(v \cdot v + V\) (Syntax)
    b. \(\rightarrow [\text{Agr} + v + V + \text{Agr}]\) \(\text{Agr} + v + V + \text{Agr}\) (Morphology)
    c. \(\rightarrow [\text{Agr} + v + V + \text{Agr}] \rightarrow \text{Agr} + v + V + \text{Agr}\) \(\text{Agr} + v + V + \text{Agr}\) \(\text{Agr} + v + V + \text{Agr}\) (Prosody)

3.2 Two syntax-prosody interface constraints

If double-marking is the default, how does single-marking arise? Intuition:

- Pressure #1: Serial verbs want to prosodically serialize—i.e. form a single PWd.
- Pressure #2: Repeated functional material inside a PWd is dispreferred (Kinyalolo’s Generalization).
- When these two pressures conflict, the result is clitic deletion—i.e. single-marking.

Implementation:

(12) Informal constraints:
    a. SERIALIZE
       Adjacent verbs in an SVC should form a single PWd.
    b. KINYALOLO
       Inflectional material shouldn’t be repeated within a single PWd.
    c. MAX(Agr)
       Don’t delete Agr nodes.

With non-contiguous SVCs, SERIALIZE is irrelevant and each V is happily matched to its own PWd:

(13) Deriving double-marking in non-contiguous SVCs:

| \(\text{[} \cdot \text{Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}} \text{]} \cdot \text{[} \cdot \text{Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}} \text{]} \text{] }|  | \text{KINYALOLO} | \text{SERIALIZE} | \text{MAX} |
|-----------------|-----------------|-----------------|-----------------|
| \#1 b. \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) | \text{KINYALOLO} | \text{MAX} | \text{MAX} |
| \#1 c. \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) | \text{KINYALOLO} | \text{MAX} | \text{MAX} |

With contiguous SVCs, SERIALIZE and KINYALOLO conspire to make clitic-deletion the ‘least-worst’ option:

(14) Deriving single-marking in contiguous SVCs:

| \(\text{[} \cdot \text{Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}} \text{]} \cdot \text{[} \cdot \text{Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}} \text{]} \text{] }|  | \text{KINYALOLO} | \text{SERIALIZE} | \text{MAX} |
|-----------------|-----------------|-----------------|-----------------|
| \#1 a. \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) | \text{KINYALOLO} | \text{MAX} | \text{MAX} |
| \#1 b. \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) | \text{KINYALOLO} | \text{MAX} | \text{MAX} |
| \#1 c. \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) \(\text{[Agr}_{\text{SUBJ}} \cdot V \cdot \text{Agr}_{\text{ASP}}\) | \text{KINYALOLO} | \text{MAX} | \text{MAX} |

- N.B. See §3.5 for full tableaux, which include MATCH WORD.

Next: motivating SERIALIZE and KINYALOLO.

3.3 SERIALIZE

(15) SERIALIZE (informal)
    Adjacent verbs in an SVC should form a single PWd.

This is grounded in typology:

- Dixon (2006:339)
  “[an SVC] is like a single predicate in prosodic properties […] [A]n SVC generally constitutes one intonation group; and, in most cases, no pause is possible in the middle of an SVC.”
- Aikhenvald (2006:7)
  “[an SVC] has the intonational properties of a monoverbal clause, and not of a sequence of clauses.”
- Haspelmath (2016:308)
  “I have not come across any work that contradicts [this generalization], so I am assuming that this is true of all SVCs.”

2. SERIALIZE and KINYALOLO fall into the larger family of syntax-prosody interface constraints which make reference to syntactic categories, but, unlike ALIGN or MATCH constraints, are not concerned with enforcing constituency-matching. Others in the family include SUBCAT (Bennett et al. 2018; Tyler 2019), COMPLEMENT-\(\phi\) (Henderson 2012) and ARGUMENT-\(\phi\) (Clemens 2014, 2019).

3. Prosodic serialization is not exceptionless. Nicholas Rolle (p.c.) notes that in SVCs in Kalabari (Ijo), adjacent verbs do not form a prosodic unit, even though other adjacent lexical categories in this language do form a single prosodic unit (Harry and Hyman 2014). This pattern is generable in our system through varying the constraint ranking, MATCH WORD \(\supset\) SERIALIZE.
**N.B.** **Serialize** only applies to **adjacent** verbs in SVCs.

→ **Contiguous** SVCs form PWds; non-contiguous SVCs do not. E.g. SVCs in Khwe: 4

(16) a. **Contiguous** SVC: prosodic serialization

\[
\text{ti} \quad \text{♯gi-é} \quad \text{yaá-à-góë} \quad \text{SVC-PWD} \\
\text{1sg be.late-ii} \quad \text{come-i-fut} \\
\text{‘I will come later.’}
\]

b. **Non-contiguous** SVC: no prosodic serialization

\[
\text{ti} \quad \text{t’iyá} \quad \text{cácà-à} \quad \text{kkx’á-a} \quad \text{kx’-óxò-à} \quad \text{kx’-ró} \quad \text{PWD} \\
\text{1sg standing} \quad \text{beer obj drink-ii} \quad \text{meat obj eat-it} \\
\quad \text{txóró-é-tè} \quad \text{PWD} \quad \text{SVC} \\
\text{dance-1-pres} \\
\text{‘In standing position I am drinking beer, eating meat, and dancing.’} \\
\text{(Kilian-Hatz 2006:113)}
\]

- See also Ingram (2006) on Dumo (Skou, Papua New Guinea); Givón (1991) on several Papuan languages.

**Formal definition:** 5

(17) **Serialize**

Assign one violation for every pair of adjacent \(v\) heads, where one asymmetrically c-commands the other, that do not form a single PWd.

**Necessary ranking: Serialize \(\gg\) Match Word.** 6

(18)

<table>
<thead>
<tr>
<th>[vp v’ [v’]]</th>
<th>Serialize</th>
<th>Match Word</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;a. ([v v]\text{PWD})</td>
<td>&quot;&quot;</td>
<td>&quot;&quot;</td>
</tr>
<tr>
<td>&quot;b. ([v]\text{PWD} \ [v]\text{PWD})</td>
<td>&quot;!&quot;</td>
<td>&quot;!&quot;</td>
</tr>
</tbody>
</table>

4. The contiguous SVC in (16a) can be determined to be a single intonation unit (we label it ‘Pwd’ but other category labels would also make sense) from Kilian-Hatz’s description that “the lexical elements of most [SVCs] maintain their internal tone melody, but the first word takes the main stress which is realized as a downdrift on the verbs following the [first verb]” (Kilian-Hatz 2006:121). The non-contiguous SVC in (16b), by contrast, can be determined to consist of multiple intonation units from her generalization that SVCs “do not form such an intonation unit if the verbs have different objects preceding their corresponding verb; in these cases, every verb takes its own stress and the verb phrases may be separated by a short pause” (ibid.).

5. The c-command condition ensures that **Serialize** does not force adjacent verbs in covert coordination structures to serialize (Rolle 2019:§A3.2), since the c-command relation would not hold.

6. It is not necessary to invoke **Serialize** to account for all instances of prosodic serialization in SVCs cross-linguistically: if the verbs in an SVC syntactically incorporate into a single complex head (e.g. 4-Hoan in Collins 2002), then their prosodic constituency will follow from their syntactic constituency (by Match Word or similar).

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**Is Serialize really necessary?**

What about other potential sources of prosodic constituency for adjacent verbs in an SVC:

- It doesn’t follow from syntax \(\rightarrow\) prosody constituency-matching (e.g. Match Theory, Selkirk 2011 et seq.).
  - ...because the verbs don’t form a syntactic constituent (see (9)).

- It doesn’t follow from prosodic well-formedness principles (e.g. Binarity, Non-Recurrsion, Equal Sisters,...).
  - ...because serialization applies only to V-V sequences (and not, e.g. V-N).

- It *may* follow from prosodic pre-specification of v/V (e.g. via prosodic subcategorization, Inkelas 1989; Bennett et al. 2018,...).
  - ...but there would still need to be some way of blocking V-N serialization.

One promising route to eliminating **Serialize**:

- **Argument-\(\phi\)** (Clemens 2014, 2019); **Complement-\(\phi\)** (Henderson 2012): the constraints force a syntactic head to be prosodically parsed with its arguments (e.g. vP in the complement of V).

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**3.4 Kinyalolo**

Kinyalolo (informal)

Inflectional material shouldn’t be repeated within a single PWd.

- Previous work with Kinyalolo’s Generalization or Kinyalolo’s Constraint: Kinyalolo (1992); Carstens (2003, 2005); Henderson (2011); Baker (2010, 2012); Baker and Kramer (2016); Alok and Baker (2018).
E.g. Carstens (2005) on KiLega: multiple heads in the spine agree with the subject:

(20) \[
\{\varepsilon, C_{(\text{obj})}\} [T_{\text{subj}} [T_{\text{obj}} [\text{Asp1}_{(\text{obj})}] [\text{Asp2}_{(\text{obj})}] [\text{Voice} \ldots]]]\]

But we see one agreement morpheme per PWd:

(21) a. T, Asp1 and Asp2 in separate PWds

‘Sheep were about to be slaughtered.’

b. T+Asp1 in the same PWd; Asp2 in a separate PWd

‘The yams are still being cooked.’

c. T+Asp1+Asp2 in the same PWd

pro Mu 4./a.sc/g.sc./s.sc/e.sc/t.sc2 -be-still 4./a.sc/g.sc./s.sc/e.sc/t.sc2 -pour-
‘You could have poured water.’ (KiLega, Carstens 2005:253-255)

3.5 Summary: Deriving single vs double-marking

Pattern:

(24) a. [mi- dúw- ñ ] ovó [mi- tá- an ]?
1SG.SET2-follow-FAC who 1SG.SET2-go-FAC
‘I went with who?’

Rolle 2019

b. ovó, nú [mi- dúw t1 tá- an ]?
who that 1SG.SET2-follow go-FAC
‘Who did I go with?’

Constraints:

(25) a. KINYALOLO: Don’t repeat Agrs within a single PWd.

b. SERIALIZE: Adjacent verbs in a SVC should form a single PWd.

c. Max(Agr): Don’t delete Agr nodes.

d. MATCH WORD: Syntactic X’s should correspond to PWds.

Derivations:

(26) Deriving double-marking in non-contiguous SVCs:

<table>
<thead>
<tr>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>N [ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN.</td>
<td>SER.</td>
<td>MAX</td>
<td>MATCH.Wd</td>
<td></td>
</tr>
<tr>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
</tr>
</tbody>
</table>

(27) Deriving single-marking in contiguous SVCs:

<table>
<thead>
<tr>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>N [ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
<th>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN.</td>
<td>SER.</td>
<td>MAX</td>
</tr>
<tr>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
<td>[ V_Agr\text{SUBJ}-V_Agr\text{ASP} ]</td>
</tr>
</tbody>
</table>

4 Alternative: Parallel OT-DM (Rolle 2019)

In OT-DM (Rolle 2019), The syntax feeds parallel computation of morphology and phonology (including prosody).
Three crucial ingredients for Rolle’s analysis of Degema, encoded as constraints:

(28)  a. **Label-MWd**
    Vs and Ns need to project their category label onto a morphological word, e.g.:
    \[ V \Rightarrow \{V\}; N \Rightarrow \{N\} \]
    \[ V \Rightarrow \{V\}; N \Rightarrow \{N\} \]
    \[ V \Rightarrow \{V\}; N \Rightarrow \{N\} \]
    \[ V \Rightarrow \{V\}; N \Rightarrow \{N\} \]

    b. **V(Agr)**
    Verb words must be marked with Agr clitics
    (Rolle’s ‘\[ V=WF-MW(d.sc(/a.sc/s.sc/p.sc) /a.sc/g.sc/r.sc /s.sc/b.sc/j.sc /a.sc/g.sc/r.sc /a.sc/s.sc/p.sc) \]’)

    c. **Dep(Agr)**
    Do not sprout Agr nodes. (Rolle’s ‘\[ \text{Dep-IO(Node)} \]’)

4.1 Single verbs

V and N form + label their own MWd:

(29)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{MWd} & \text{V(Agr)} & \text{Dep(Agr)} \\
\hline
V \text{MWd} & \checkmark & \checkmark \\
N \text{MWd} & \checkmark & \checkmark \\
\hline
\end{array}
\]

N.B. For Rolle, MWds correspond to PWds.

4.2 SVCs

**Single marking** is when both V’s project their labels onto a single MWd. This minimizes the number of Agr nodes that need to be sprouted:

(30)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{MWd} & \text{V(Agr)} & \text{Dep(Agr)} \\
\hline
V \text{MWd} & \checkmark & \checkmark \\
N \text{MWd} & \checkmark & \checkmark \\
\hline
\end{array}
\]

**Double marking** is when the two V’s cannot form a single MWd, because it would be unlabelable:

(31)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{MWd} & \text{V(Agr)} & \text{Dep(Agr)} \\
\hline
V \text{MWd} & \checkmark & \checkmark \\
N \text{MWd} & \checkmark & \checkmark \\
\hline
\end{array}
\]

4.3 Discussion

OT-DM assumes that single-marking is the default and double-marking the ’special case’.

- **Our account**: Each verb in an SVC sprouts its own Agr nodes and single-marking is the special case.
  - The Agr node may be deleted during prosodification.

- **Insertion vs deletion**: We follow recent work arguing for syntactic doubling followed by PF-deletion (Barbiers 2014; Gouskova To appear; §3.4).

Three critiques of Rolle’s account.

**First**, Rolle’s account of prosodic serialization in SVCs is parochial:

- **Crosslinguistically**: Many if not most SVCs occur in the absence of agreement or clitics.
  - If verbs cluster together in SVCs regardless of agreement marking, an “anti-clitic” conspiracy cannot be a general explanation for clustering.
  - A theory with an independent Serialize constraint is more widely-applicable.

**Second**, Rolle’s account requires extra technology:

- **OT-DM requires**:
  - Morphological words as representations distinct from prosodic words and syntactic heads.
  - An associated labelling mechanism.

- **Our account requires only prosodic words and syntactic heads (and no intermediate representation).”

7. An ”insertion” analysis could be maintained here without recourse to the parallel architecture of OT-DM. One would need to assume that the output of the morphology gives just one Agr node and just one Agr node in an SVC, and reinterpret Kinyalolo’s Constraint as enforcing a one-to-one correspondence between agreement morphemes and verbs capable of bearing agreement.

8. Morphological words have been analyzed as important for the calculation of contextual allomorphy (Bobaljik and Harley 2017; Choi and Harley 2019), but are not widespread in DM.
Third, serial architecture may be worth preserving?

- Common assumption: morphosyntax and phonology are calculated separately (Pul-lum and Zwicky 1986).
- Embick (2010) argues that morphology feeds phonology, contra theories which interleave the two or rank phonology over morphology (McCarthy 2008; Wolf 2008).
  → Kalin (2018) and Kastner (2019) for recent rebuttals in additional domains.
- Surprising possibilities in Rolle’s system:
  → Arbitrary interactions such as a distinction between single marking and double marking which depends on an arbitrary morphosyntactic feature.
  - for example single marking on singular NPs and double marking on plural NPs. This constraint is easy to encode: ‘PWD=PLURAL’, on a par with (28a).
  - If morphosyntax is dissociated from prosody, this kind of constraint no longer fits naturally in the architecture.9

5 Conclusion

Summary:

<table>
<thead>
<tr>
<th>SVC</th>
<th>distribution of clitics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contiguous</td>
<td>[ Agr_{v_sc} V Agr_{a_sp} ] = ‘single-marking’</td>
</tr>
<tr>
<td>Non-contiguous</td>
<td>[ Agr_{v_sc} V Agr_{a_sp} ] NP [ Agr_{v_sc} V Agr_{a_sp} ] = ‘double-marking’</td>
</tr>
</tbody>
</table>

The Degema pattern is the interaction of two typologically-grounded phenomena:

- Prosodic serialization in SVCs → encoded as SERIALIZE
- Suppression of redundant agreement within a PWd → encoded as KINYALOLO

These can both be encoded as syntax-prosody interface constraints, in that they require simultaneous access to (morpho)syntax and prosody.

- They support a parallel prosodic module (following the thrust of indirect reference theories).
- But they do not support a parallel morphology-phonology component.

9. It is true that SERIALIZE could also be written so as only to apply to plural nouns. SVCs seem to form a robust crosslinguistic phenomenon, so we think that constraint is independent. It would be interesting to see if future work can derive this constraint from other principles.

References

Baker, Mark, and Ruth Kramer. 2016. Doubling clitics are pronouns: Reduce and interpret. Ms, Rutgers University and Georgetown University.
Appendix: Accounting for more Degema data

A.1 Light object pronouns

Light object pronouns appear between the verb and the aspectual enclitic:

(33) [o- kótú wó-ôn ]
3SG.SET2-call you-FAC
‘He/she called you.’ (R5b)

They do not interrupt contiguity in SVCs:

(34) a. Heavy object pronoun: double-marking

eni [mé- dúw ] ýyi [mé- tá ]
we 1PL.SET1-follow him/her 1PL.SET1-go
‘We will go with him/her.’ (R15b)

b. Light object pronoun: single-marking

Breno [mó- dúw mé tá ]
Breno 3SG.SET1-follow me go
‘Breno will go with me.’ (R15a)

- We follow Rolle (2019), who argues that light object pronouns incorporate (in some sense) into the verb [v+V].
- We remain agnostic as to whether this ‘incorporation’ is morphological (e.g. by Local Dislocation) or prosodic (e.g. by prosodic subcategorization).
- See Rolle (2019:§A3.1.3) for evidence that it is not syntactic incorporation (head-movement).

A.2 Why do the inner rather than outer clitics delete?

In our account the outer clitics remain but the inner ones delete:
(35) a. \[v \ v^*V \] \[v \ v^*V \] (Syntax)
  b. \[v \ Agr_{u/sc} + V + V_{agr} \] \[v \ Agr_{u/sc} + V + V_{agr} \] (Morphology)
  c. \[v \ Agr_{u/sc} + V + V_{agr} \] \[V_{agr} + V + V_{agr} \] (Prosody)

- Pre-specification: Vocabulary Items may be pre-specified to integrate into prosodic structures in particular ways (Inkelas 1989; Inkelas and Zec 1990; Bennett et al. 2018; Zec 2005; Tyler 2019).

- Proclitics sit at the left edge of a PWd and enclitics sit at the right edge.

  → The prosodic pre-specifications are most easily satisfied by deleting the inner clitics.

One possible implementation, following Bennett et al. (2018) and Tyler (2019): prosodic subcategorization frames SubCat (cf. ALIGN in Rolle 2019).

- In prosodic structure, the mother and sister nodes of the Agr morpheme must be of the PWd category, and the sister of Agr must be to its right. The aspect enclitics are associated with the mirror-image frame in (36b).

(36) a. \[PWd \ Agr \ PWd \cdots \] \[PWd \ PWd \cdots \]
  b. \[PWd \ PWd \cdots \] ASP

What this means is that a verb-containing PWd (corresponding either to a single verb or to a SVC with single-marking) with both an agreement proclitic and an aspect enclitic will have an internal structure like (37). For discussion of clitic-hood in Degema see Kari (2002a,b).

(37) \[Agr \ [V \ (V \cdots) \] PWd ASP \] PWd

Implementing SubCat:

(38) SubCat(X) (Tyler 2019:9)

Assign one violation for every instance of morpheme X where X’s prosodic subcategorization frame is not satisfied.

(39) | [v Agr-V-Asp] [v Agr-V-Asp] | SubCat(Agr) | KIN | SER | Max(Agr) | MW |
--- | --- | --- | --- | --- | --- |
| # | a. Agr [V PWd -Asp] PWd | | | | |
| | b. [V-Asp Agr-V] PWd | | | | |

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