Forbidden clitic clusters in Zapotec: Implications for the Person–Case Constraint

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1 Introduction

Many languages prohibit certain combinations of clitic arguments based on person: e.g. the Person–Case Constraint (PCC) and “3–3 Effects” (Perlmutter 1971, Bonet 1991).

(1) Person–Case Constraint (Spanish)
   a. \{1, 2\} \ni 3
      Pedro \{me, te\} lo envía.
      Pedro \{1SG.DAT, 2SG.DAT\} 3SG.M.ACC send.PRES.3SG
      ‘Pedro sends it to {me, you}.’
   b. 3 \ni \{1, 2\}
      *Pedro lo \{me, te\} envía.
      Pedro 3SG.DAT \{1SG.ACC, 2SG.ACC\} send.PRES.3SG
      Intended: ‘Pedro sends \{me, you\} to him.’

(2) 3–3 Effect (Spanish): 3 \ni 3
    *Le lo recomendé.
    3SG.DAT 3SG.M.ACC recommend.PRES.1SG
    Intended: ‘I recommended it to him.’ (Perlmutter 1971:132)

These constraints are often taken to have distinct sources: the PCC is syntactic, while 3–3 effects have a morphological source (Anagnostopoulou 2003, Nevins 2007, 2011, Rezac 2011, a.o.).

To support this division, a certain line of reasoning is sometimes advanced (Nevins 2007, 2011, Rezac 2011):

(3) Division of Labor (Nevins 2011:948)
   a. Syntactic restrictions are hierarchical, and asymmetric. Based on principles of Multiple Agree. Repairs involve periphrasis.
   b. Postsyntactic restrictions may be idiosyncratic and symmetric. Based on principles of syntagmatic markedness. Repairs involve deletion.

Since the repair for the PCC involves periphrasis, it arises from a syntactic constraint. By contrast, since the 3–3 Effect in Spanish is repaired through replacement of a clitic by a “spurious se,” it has a morphological source.

(4) 3 \ni 1
    Me enviaron a él.
    1SG.ACC send.PAST.3PL to 3SG.M
    ‘They sent me to him.’
    (Ormazabal and Romero 2007:318)

(5) 3 \ni 3
    Se lo recomendar.
    3SG 3SG.M.ACC recommend.PAST.1SG
    ‘I recommended it to him.’
    (Perlmutter 1971:132)

We examine clitic clusters in several Northern Zapotec varieties (Oto–Manguean: Oaxaca), which have a four-way gender distinction. They forbid certain combinations of third-person clitics in somewhat familiar ways:

○ Gender–Case Constraint (GCC) (general)
  Some combinations of subject and object clitics are not permitted depending on their position in a hierarchy of gender.

(6) Gauloiss Zapotec
   a. 3.E.L \ni 3.AN
      Bdelme=e=ba.
      hug.COMP=3.E.L=3.AN
      ‘S/he (an elder) hugged it (an animal),’
      (RM and FA, GZYZ012, 32:15)
   b. 3.AN \ni 3.E.L
      *Bdi=me=e=ba.
      bite.COMP=3.AN=3.E.L
      Intended: ‘It (an animal) bit her/him (an elder),’
      (RM, GZYZ014, 32:32)

○ *X–X Constraint (general)
  Combinations of identical subject and object clitics are not allowed.

(7) Gauloiss Zapotec
   a. Ba bet=ba=ba.
      already hit.COMP=3.HU=3.HU
      ‘It already hit her/him.’
      (RM and FA, GZYZ014, 18:18)

Methodological Point The source of these constraints is not necessarily indicated by their repair: though the *X–X Constraint is repaired through periphrasis, it has a morphological source.

Theoretical Point The GCC — and, by analogy, the PCC — must be able to rule in combinations of identical clitics as syntactically well-formed; that is, it is grammatically distinct from the *X–X Constraint (Anagnostopoulou 2003, Nevins 2007, 2011; contra Walkow 2012).

The remainder of this talk is structured as follows:

○ Section 2: Background on clitic pronouns in Zapotec
○ Section 3: The manifestations of the *X–X Constraint
○ Section 4: Distinguishing the *X–X Constraint from the GCC
○ Section 5: Conclusions and further consequences
2 Clitic pronouns in Zapotec languages

We focus on several closely related Northern Zapotec varieties:

- San Sebastián **Guiloxi** (original field work, Toosarvandani 2017)
- San Baltazar **Yatzachi el Bajo** (Butler 1980)
- San Bartolomé **Zoogocho** (Long and Cruz 2000, Sonnenschein 2004)

Figure 1: Zapotec varieties of the Sierra Norte, Oaxaca (Butler 1980)

These varieties all exhibit the same four-way gender distinction:

- **ELder human vs. non-elder**
- **HUMAN vs. ANimal vs. INanimate**

These gender distinction are realized in the languages’ third-person pronouns, which come in both strong and clitic forms.

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### (8) Strong and clitic pronouns in **Guiloxi** Zapotec

<table>
<thead>
<tr>
<th></th>
<th>Strong</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>nada'</td>
<td>=a'</td>
</tr>
<tr>
<td>2SG</td>
<td>lè'</td>
<td>=o'</td>
</tr>
<tr>
<td>3EL</td>
<td>lè'</td>
<td>=e'</td>
</tr>
<tr>
<td>3.HU</td>
<td>leba'</td>
<td>=ba'</td>
</tr>
<tr>
<td>3.AN</td>
<td>leb</td>
<td>=b(a)</td>
</tr>
<tr>
<td>3.IN</td>
<td>len</td>
<td>=(e)n</td>
</tr>
</tbody>
</table>

Across the Zapotec languages, clitic pronouns are syntactically and prosodically dependent, while the strong pronouns occur elsewhere (though see Marlett 2010a,b for further details).

### 2.1 The distribution of clitic pronouns

Clitic pronouns can serve as arguments of the verb, possessors of inalienable nouns, and arguments of prepositions.

#### (9) Strong and clitic pronouns in **Guiloxi** Zapotec

- **Subject or object**
  - Bdel(*=ba') hug.
    - COMP=3.HU=h3.EL
    - ‘S/he hugged her/him.’
  - Inalienable possessor
    - hibl(*=a')
      - sister=3SG
      - ‘my sister’
  - Object of preposition
    - Dzun=*ba'
    - do.COMP=3.HU thought of=3.HU
    - ‘S/he is thinking of her/him.’

In subject position, R-expressions and third person strong pronouns are in complementary distribution with clitics.

#### (10) R-expression

- **Ba** already
  - shtahs(*=b') sleep.
    - CONT=3.AN=3.IN
    - ‘It (an animal) is sleeping.’

- **Ba** already
  - bzxup(*=en) fall.
    - COMP=3.IN=3.IN
    - ‘It fell.’

### (11) Third person strong pronoun

- **Ba** already
  - shtahs(*=b') sleep.
    - CONT=3.AN=3.IN
    - ‘It (an animal) is sleeping.’

- **Ba** already
  - bzxup(*=en) fall.
    - COMP=3.IN=3.IN
    - ‘It fell.’

- **Ba** already
  - bdel(*=ba') hug.
    - COMP=3.HU=h3.EL
    - ‘This child already hugged Pedro.’

- **Ba** already
  - bdel(*=ba') hug.
    - COMP=3.HU=h3.EL
    - ‘S/he (a non-elder) already hugged the dog.’

- **Ba** already
  - bdel(*=ba') hug.
    - COMP=3.HU=h3.EL
    - ‘S/he (an elder) is sleeping.’

### (12) Local person strong pronoun

- **Tzxizh(*=a')**
  - laugh
    - CONT=1SG=1SG
    - ‘I am laughing.’

- **Tzxizh(*=a')**
  - laugh
    - CONT=2SG=2SG
    - ‘You are laughing.’

---

1 Other Zapotec languages have genders specific to adult males, adult females, children, babies, young unmarried men, deities, celestial bodies, liquids, trees and wooden objects, and disparaged/pejorative referents; see Marlett 2010a for a survey.
The verb can bear a clitic cross-referencing the direct object only when a subject clitic is present. A direct object cannot encliticize across an R-expression subject, across a trace of the subject, or onto the subject itself.

\[(13)\]
\[
\begin{align*}
\text{a.} & \quad \ast \text{Bdel=}_b \text{Maria.} \\
& \quad \text{hug.COMP=3.AN Maria} \\
& \quad \text{Intended: ‘Maria hugged it.’} \\
& \quad \text{(Guiloxi: FA and RM, GZY012, 24:55)} \\
\text{b.} & \quad \ast \text{No}_1 \text{betw } t_1 =\text{eb?} \\
& \quad \text{who hit.COMP =3.AN} \\
& \quad \text{Intended: ‘Who hit it?’} \\
& \quad \text{(Guiloxi: RM and FA, GZY013, 3:34)} \\
\text{c.} & \quad \ast \text{Bdel Maria=}_b. \\
& \quad \text{hug.COMP Maria=3.AN} \\
& \quad \text{Intended: ‘Maria hugged it.’} \\
& \quad \text{(Guiloxi: RM and FA, GZY013, 4:40)}
\end{align*}
\]

Unlike subject clitics, direct object clitics are always in complementary distribution with an overt argument, regardless of whether it is a strong pronoun or an R-expression.

### 2.2 A clitic doubling analysis

We take the clitic pronouns to arise through clitic doubling, even when they are in complementary distribution with an overt argument.

Specifically, we adopt a “big DP” analysis of clitic doubling: the clitic is generated in the specifier of a nominal functional projection, e.g. Part(icipant)P or K(ase)P (Torrego 1992, Uriagereka 1995, Nevins 2011, Arregi and Nevins 2012, a.o.)

\[(14)\]
\[
\begin{align*}
& \text{F} \\
& \text{FP} \\
& \text{CI} \\
& \text{F'} \\
& \text{DP}
\end{align*}
\]

Because clitics are deficient, they must Agree with T, triggering movement of the clitic to a position adjacent to the verb, which surfaces in initial-position through predicate fronting (Lee 2006, Adler et al. 2017).

The clitic might undergo either phrasal movement plus morphological merger (e.g. Nevins 2011) or head movement (e.g. Arregi and Nevins 2012, Preminger 2017).

To account for the contrast between the distribution of local and non-local person clitics, we assume that:

- local person strong pronouns are always Merged with a clitic pronoun
- third-person clitics can only be Merged with a null pronoun

In the absence of evidence to the contrary, we assume this analysis of clitic pronouns in Guiloxi extends to the other Zapotec varieties.

### 2.3 Restrictions on clitic clusters

All four Zapotec varieties restrict the clitic clusters that are possible based on their gender (as well as person).

\[(15)\]
\[
\begin{align*}
& \text{TP} \\
& \text{VP} \\
& \text{vP} \\
& \text{T} \\
& \text{V} \\
& \text{FP} \\
& \text{CI} \\
& \text{F'} \\
& \text{DP}
\end{align*}
\]

Though there is variation across the four varieties, these restriction can be broadly divided into two patterns, each paralleling a constraint found in the domain of person (Perlmutter 1971, Bonet 1991).

- *X–X Constraint, cf. 3–3 Effects
- Gender–Case Constraint (GCC), cf. Person–Case Constraint (PCC)
3  The *X–X Constraint

Generally speaking, across all four Zapotec varieties, combinations of clitics at the same rank on the gender hierarchy are forbidden, e.g. *3.HU 3.HU, etc.

(17) Yalalag
a. * Bchew’=e’=e’.
   kick.COMP=3.EL=3.EL
   Intended: ‘He kicked him.’
   (Avelino Becerra, p.c.)

b. * Lline’=be’=be’.
   speak.HAB=3.HU=3.HU
   Intended: ‘He is speaking to him.’

c. * Bdinn=ba’=ba’.
   bite.COMP=3.AN=3.AN
   Intended: ‘It bit it.’
   (Avelino Becerra 2004:35)

d. * Bchochj=en=en.
   bite.COMP=3.IN=3.IN
   Intended: ‘It hit it.’ (following Avelino Becerra 2004:34)

When the subject and object clitics for each gender are phonologically identically, it is not possible to tell whether these clusters are forbidden because the clitics share the same form or the same features.

(18) Strong and clitic pronouns in Yalalag Zapotec (Avelino Becerra 2004)

<table>
<thead>
<tr>
<th>STRONG</th>
<th>CLITIC</th>
<th>subject</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>nada’ =a’ =da’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2SG</td>
<td>lue’ =o’ =do’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.EL</td>
<td>le’e =e’ =e’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.HU</td>
<td>lebe’ =be’ =be’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.AN</td>
<td>leba’ =ba’ =ba’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.IN</td>
<td>len =n =n</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

In these Zapotec varieties, the form of certain clitics varies by grammatical or thematic role, allowing these two possibilities to be teased apart.

3.1  Case 1: Guiloxi

As we saw in (8), the third-person elder clitic in Guiloxi has two forms: one for subjects and one for objects.

(19) a. * Bgota’,
   already die.COMP=3.EL
   ‘He already died.’
   (RM, GZYZ004-s, 5)

b. * Bbetw=a’n
e’.
   already hit.COMP=2.SG=3.EL
   ‘You already hit her/him.’
   (RM, GZYZ011-s, 23)

Unlike in Yalalag, two third-person elder clitics can co-occur in Guiloxi, despite other combinations of identical clitics remaining ungrammatical.

(20) a. * Bdel=a’.
   hug.COMP=3.EL=3.EL
   ‘She (an elder) hugged her/him (an elder).’
   (RM, GZYZ030, 34:15)

b. * Ba betw=ba’=ba’.
   already hit.COMP=3.HU=3.HU
   Intended: ‘She (a non-elder) already hit her/him (a non-elder).’
   (RM, GZYZ014, 18:18)

c. * Ba bzhige=ba=ba’.
   already push.COMP=3.AN=3.AN
   Intended: ‘It (an animal) already pushed it (an animal).’
   (FA and RM, GZYZ014, 19:57)

d. * Ba bdishj=en=en.
   already break.COMP=3.IN=3.IN
   Intended: ‘It (a thing) already broke it (a thing).’
   (FA and RM, GZYZ014, 45:05)

3.2  Case 2: Yatzachi

In Yatzachi, the third-person elder clitic also has two forms, conditioned both by thematic and grammatical role.

(21) Strong and clitic pronouns in Yatzachi Zapotec (Butler 1980)

<table>
<thead>
<tr>
<th>STRONG</th>
<th>CLITIC</th>
<th>subject</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>1SG</td>
<td>nada’ =a’ =da’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>2SG</td>
<td>le’ =o’ =do’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.EL</td>
<td>le’e =e’ =e’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.HU</td>
<td>lebe’ =be’ =be’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.AN</td>
<td>leba’ =ba’ =ba’</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>3.IN</td>
<td>len =n =n</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

3.3  Case 3: Xayachi

In Xayachi, the third-person elder clitic also has two forms, conditioned both by thematic and grammatical role.

(22) a. * Bchew’=e’=e’.
   sing.CONT =1SG =2.SG =3.EL
   ‘I, You, S/he are/is singing.’
   (Butler 1980:56)

b. * Bchya’=en=enn.
   need.CONT =1SG =2.SG =3.EL
   ‘I, You, S/he need/needs to.’
   (Butler 1980:65)

When the clitic cross-references a direct object, it has a form identical to an experiencer clitic.

(23) * Gqasalena’=a’.
   help.COMP=1SG=3.EL
   ‘I helped him.’
   (Butler 1980:171)
Though identical clusters of other third-person clitics are always ruled out (Butler 1980:176–177), elder clitic clusters are only ungrammatical when the subject is an experiencer — when the clitics are identical in form.

(24) a. Chlo‘=me=ne‘.
   teach,CONT=3.EL=3.EL
   ‘S/he (an elder) teaches her/him (an elder).’

b. *Chlo‘=me=ne‘.
   see,CONT=3.EL=3.EL
   Intended: ‘S/he (an elder) sees her/him (an elder).’ (following Butler 1980:176)

3.3 Case 3: Zoogocho

In Zoogocho, the third-person elder clitic has three forms, whose distribution again depends on both thematic and grammatical role.

(25) Strong and clitic pronouns in Zoogocho Zapotec (Sonnenschein 2004)

<table>
<thead>
<tr>
<th>STRONG</th>
<th>CLITIC</th>
<th>object</th>
</tr>
</thead>
<tbody>
<tr>
<td>agent</td>
<td>subject</td>
<td>experiencer</td>
</tr>
<tr>
<td>1SG</td>
<td>neda‘=s</td>
<td>=da‘</td>
</tr>
<tr>
<td>2SG</td>
<td>lee (loo)</td>
<td>=o‘ =do‘</td>
</tr>
<tr>
<td>3.EL</td>
<td>lhe‘=e‘</td>
<td>=de‘ =ne‘</td>
</tr>
<tr>
<td>3.HU</td>
<td>lheba‘=be‘</td>
<td>=be‘ =be‘</td>
</tr>
<tr>
<td>3.AN</td>
<td>lheba‘=ba‘</td>
<td>=ba‘ =ba‘</td>
</tr>
<tr>
<td>3.IN</td>
<td>lhen =e‘in</td>
<td>=e‘in =e‘in</td>
</tr>
</tbody>
</table>

Any combination of subject and object elder clitics is permitted — because they always differ in their form — though all other identical clitic clusters are impossible (Sonnenschein 2004:54).

(26) a. Na da Doler=en‘ dxe=me‘... and late Dolores=DEF say,CONT=3.EL=3.EL
   ‘And the late Dolores said to him...’ (Sonnenschein 2004:384)

b. Bi lhe‘=e=de‘=ne‘.
   NEG see,COMP=3.EL=3.EL
   ‘She didn’t see her/him.’ (Long and Cruz 2000:467)

3.4 Repairing the *X–X Constraint

Across these Zapotec varieties, two featurally identical clitics are allowed in the same cluster as long as they do not have the same realization, regardless of their grammatical function.

(27) 

<table>
<thead>
<tr>
<th></th>
<th>ag.</th>
<th>ex.</th>
<th>obj.</th>
<th>ag.</th>
<th>obj.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guiloxi</td>
<td>=e‘</td>
<td>=me‘</td>
<td>=e‘</td>
<td>=me‘</td>
<td></td>
</tr>
<tr>
<td>Yatzachi</td>
<td>=e‘</td>
<td>=me‘</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Zoogocho</td>
<td>=e‘ =de‘ =ne‘</td>
<td>=e‘ =me‘</td>
<td>=e‘ =me‘</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Within Distributed Morphology, the ill-formedness of certain combinations might be derived by positing no Vocabulary Items for a specific syntactic terminal, resulting in ineffability (Nevins 2014, Arregi and Nevins 2014).

(28) a. Guiloxi
   Cl [3.EL] ⇔ =e‘ / V
   ⇔ =ne‘ / {Cl Cl Cl [1SG] [2SG] [3.EL]}

b. Yatzachi
   Cl [3.EL] ⇔ =e‘ / [θ_AG] —
   ⇔ =ne‘ / {[θ_EX] —
   ⟨ [Cl Cl [1SG] [2SG] V Cl [θ_AG] [3.EL] —

<p>| | | | | | |</p>
<table>
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</tbody>
</table>

However, this misses the generalization that, in every variety we examine, featurally identical clitics may occur in a cluster if and only if they do not have the same form.

Instead, we propose that there is a general constraint on Vocabulary Insertion in these languages, which penalizes combinations of clitics with the same realization.

(29) *X–X Constraint

For two clitics D and D’ in the same cluster, D and D’ cannot be exponed by the same Vocabulary Item.

Together with some much simpler Vocabulary Items, this derives the pattern of prohibited clitic clusters across these Zapotec varieties in a maximally general way.2

2Support for this account comes from imperatives in Guiloxi, which do not allow an overt subject, even if this is a clitic pronoun. A third-person elder object can only be exponed as a clitic pronoun by the same Vocabulary Item as a subject in declarative clauses.

(1) a. Bdel=me‘!
   hug,COMP=3.EL
   ‘Hug her/him!’
   (Guiloxi: FA and RM, GZYZ030, 33:44)

b. *Bdel=me‘!
   hug,COMP=3.EL
   Intended: ‘Hug her/him!’
   (Guiloxi: FA and RM, GZYZ030, 33:48)

In other words, the =e‘ realization occurs in initial position, while the =ne‘ realization occurs in non-initial position in a cluster.
a. **Guiloxi**

Cl 

\[
\begin{array}{c}
\text{CI} \\
\text{[3.EL]} \\
\end{array}
\]

\[
\begin{array}{c}
\Rightarrow \ne' / \text{Cl } \\
\Rightarrow e'
\end{array}
\]

b. **Yatzachi**

Cl 

\[
\begin{array}{c}
\text{CI} \\
\text{[3.EL]} \\
\end{array}
\]

\[
\begin{array}{c}
\Rightarrow \ne' / \left\{ V \theta_{\text{EX}} \right\} \\
\Rightarrow e'
\end{array}
\]

c. **Zoogocho**

Cl 

\[
\begin{array}{c}
\text{CI} \\
\text{[3.EL]} \\
\end{array}
\]

\[
\begin{array}{c}
\Rightarrow \ne' / \left\{ V \theta_{\text{EX}} \right\} \\
\Rightarrow e'
\end{array}
\]


The grammatical source of the *X–X Constraint is not reflected in how its violations are repaired: contra the Division of Labor, it is remedied by periphrasis, despite being postsyntactic in nature.

4 **The Gender–Case Constraint**

Clitic clusters in Zapotec are also governed by a family of Gender–Case Constraints (GCCs; Toosarvandani 2017, Foley et al., to appear).

The grammaticality of clitic clusters with identical gender features in some Zapotec languages can help us decide between alternative theories of the GCC — and, by extension, the PCC as well.

A Multiple Agree account

One prominent approach to the PCC makes use of an intervention condition on Multiple Agree to derive ungrammatical clitic clusters (Anagnostopoulou 2003, Nevins 2011, 2014).

Elsewhere (Foley et al., to appear), we argue that such an intervention constraint is well-suited to account for microvariation in the GCC across Zapotec varieties. There are two crucial ingredients in this account:

- Clitic pronouns must be licensed through Agreement with a Φ-probe; unlicensed clitics crash the derivation.
- A probe may license more than one clitic simultaneously via Multiple Agree, so long as the following intervention condition is satisfied, which is a revised version of Nevins’ (2011, 2014) Contiguous Agree:

\[
\begin{array}{c}
\text{Intervention Constraint on Multiple Agree} \\
\text{For a probe P relativized to features } [F]/[F'], \text{ where } [F'] \subseteq [F], \text{ with a goal G that bears } [F], \text{ there can be no } G' \text{ such that:} \\
\begin{array}{c}
(i) \quad P \text{ c-commands } G' \text{ and } G' \text{ c-commands } G, \text{ and} \\
(ii) \quad G' \text{ does not bear } [F'].
\end{array}
\end{array}
\]

Simplifying somewhat, when a probe is relativized to a single gender feature [F], it can license an object clitic just in case the subject clitic has [F] — that is, it is at least as high as F on the gender hierarchy.
the PCC in Classical Arabic that can be extended to account for the GCC in Yatzachi, and Zoogocho). Others, of course, are filtered postsyntactically by the *X–X Constraint. This is a desirable consequence: some X combinations are grammatical in some Zapotec varieties (Guiloxi, Yatzachi, and Zoogocho). Others, of course, are filtered postsyntactically by the *X–X Constraint.

An alternative account

Not all theories of the PCC will admit X → X combinations. Walkow (2012), for instance, proposes a theory of the PCC in Classical Arabic that can be extended to account for the GCC in Yalalag:

- Clitics must be licensed by valuing some feature on a φ-probe; unlicensed clitics crash the derivation.
- A probe Agree cyclically (Béjar and Rezac 2009), first with the lower clitic and then with the higher one.

For a 3.EL → 3.HU combination, a fully specified gender probe is able to Agree with, and license, both clitics.

But for a 3.HU → 3.EL combination, the probe is satisfied after Agreeing with just the object clitic, so that the subject clitic remains unlicensed.

However, this system also rules out all X → X combinations. No matter the probe’s relativization, a subject will never be able to value any features on the second cycle of Agree if it is featurally identical to the object.

Ruling out X → X combinations on syntactic grounds necessarily undergenerates. Clusters that would surface given the right morphological properties are nipped in the bud.

Therefore, any theory of the GCC (or the PCC) must not categorically rule out clitic clusters with identical features.\(^1\)

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\(^1\)We may not want to make the stronger claim that a theory of the PCC and GCC must categorically rule in such clusters. For Santiago Lacopa Zapotec, it may be necessary for some X → X combinations to violate the intervention condition on Multiple Agree. In this variety, all 3.EL → 3.EL clusters are ungrammatical, even when the clitics have non-identical realizations.

- * He won one!
hug COMP=3.EL → 3.EL
  ‘She hugged her/him.’
  (FSR, SLZ1012, 14:37)

This suggests that the GCC can, in some languages, rule out clusters whose subject clitic does not strictly outrank the object clitic.
5 Conclusions and further consequences

These Zapotec varieties provide a new perspective on two constraints on clitic combinations:

- The GCC has a syntactic source in an intervention condition on Agree, while the *X–X Constraint is morphological in nature, constraining Vocabulary Insertion.

- Despite their different grammatical sources, the GCC and *X–X Constraint have the same repair — periphrasis — which does not support the Division of Labor.

So far, while we have talked about the postsyntactic character of the *X–X Constraint, we have not addressed the precise mechanism that leads to its repair.

Two possibilities:

1. The *X–X Constraint acts as a filter on syntactically convergent derivations, cf. adjacency requirements for morphological merger (Bobaljik 1995). The intended meaning is then expressed through a distinct derivation involving periphrasis.

2. If, however, the morphology must always deliver an output, the repair might instead involve the spellout of a lower copy of the clitic’s movement chain (Bonet 1991).

There are subtle ways of teasing these two possibilities apart (Rezac 2011), which we intend to pursue next.

References


Foley, Steven, Nick Kalivoda and Maziar Toosarvandani. To appear. Gender–Case Constraints in Zapotec. Workshop on Structure and Constituency in Languages of the Americas (WSCLA) 22.


