Person-number asymmetries in switch reference  
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1. Summary. Many switch reference (SR) languages permit Same-Subject (SS) marking in situations of referential overlap (e.g. Nichols 2000; Nonato 2014) (1).

(1) ˜A-te_i hămnoxop pop tu ta yûmûg_i+k tet  
1SG-ERG food buy and SS ST 1PL.INCL cook  
‘I bought food and we cooked.’  
(Maxakali; Pereira 2016)

We present two crosslinguistic syntactic asymmetries in overlap patterns like (1). The first is that some SR languages allow such SS marking only when the two subjects match in person (Comrie 1983; Nonato 2014), but no known SR language requires number-matching. The second generalization concerns the fact that some SR languages permit SS in overlap situations like (1) only, in which the higher subject is included in the lower, but require Different-Subject (DS) marking in the reverse configuration, as in Maxakali (2).

(2) Ùgmû a-te_i+k hămnoxop pop ha a-te_i muk  
1PL-ERG food buy and DS 1SG-ERG cook  
‘We bought food and I cooked.’  
(Maxakali; Pereira 2016)

Some SR languages permit SS in both configurations, like Washo (Arregi & Hanink 2019), but no language allows SS only in (2). We argue that these two asymmetries provide evidence for a syntactic approach to switch reference, as in recent Agree approaches (e.g. Clem 2018; Nonato 2018; Arregi & Hanink 2019; Baker & Camargo Souza 2019). Drawing on Arregi and Hanink (2019), we develop an Agree model that incorporates a matching requirement and a directionality preference, accounting for these generalizations.

2. The dataset. Building on surveys of switch reference in Nonato (2014:96) and Roberts (2017:554), we identify six attested patterns of SS-marking in situations of overlap (Table 1), based on a sample of approximately 30 languages. Following Nonato, we refer to patterns in which the highest subject is included as “growing” patterns, and the reverse as “shrinking”.

<table>
<thead>
<tr>
<th>Exemplar</th>
<th>Growing</th>
<th>Shrinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Hua</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>b. Kîsêdjê</td>
<td>yes, person-matched</td>
<td>no</td>
</tr>
<tr>
<td>c. Diyari</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>d. Nend Waskia</td>
<td>yes, person-matched</td>
<td>yes, person-matched</td>
</tr>
<tr>
<td>e. Kobon</td>
<td>yes</td>
<td>yes</td>
</tr>
<tr>
<td>f. Washo</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 1: Patterns of Same-Subject marking in overlap situations.

3. Person-matching generalization. This dataset reveals that some SR languages only permit SS in overlap if both subjects match in person (Comrie 1983; Nonato 2014). In Kîsêdjê, SS is used when a 1SG overlaps with a 1PL (3), but DS is obligatory when overlap is with a different person.

(3) [Athe=FACT n a_khikre nh-hwêt] =ne/#wa [aj i-hwêtri khâm aj i-pa].  
1SG house LNK-build and SS/DS PL 1-all PL 1-live  
‘I built the house by myself and all of us moved into it.’  
(Nonato 2014:94)

The same sensitivity to person is found in at least Kobon, Usan, Nend Waskia, and Kewa (Nonato 2014; Roberts 2017). There is no switch-reference language, however, that only permits SS in overlap situations in which the two subjects are the same number. In other words, no SR system permits SS when a 3PL is included in a 2PL, but not when a 3SG is included in 2PL.

4. A directional asymmetry. Table 1 reveals a crosslinguistic asymmetry in the directionality of overlap. A number of languages are like Maxakali and permit SS only in instances of “growing” overlap, in which the structurally higher subject is contained in the lower subject. In addition, some SR systems permit SS also in the “shrinking” configuration, in which the structurally higher subject contains the lower one:

(4) [nee ne-haata?a-ka], tanaiti te-pekiii.  
1SG 1SG-arrive-SS together 1PL-leave
When I arrived, we left together. (Huichol; Comrie 1983:27)
The same bidirectionality is attested in at least Washo, Alamblak, Agave, Irumu, Mojave, Udihe, and Mian. However, no SR system permits SS only in the “shrinking” configuration in (4). (Nonato 2014 cites Zuni, but Nichols 2000 makes clear that this overlap pattern is the “growing” one.)

5. An Agree-based approach. We take the generalizations described above to provide evidence for a syntactic approach to switch reference, as in recent Agree-based approaches (Clem 2018; Nonato 2018; Arregi & Hanink 2019; Baker & Camargo Souza 2019). We follow this work in adopting the idea that SR involves Agree of one probe with subjects of different clauses. We assume SR always involves a clause-peripheral probe that enters into downward Agree with an embedded subject and upward Agree with a higher subject (5) (Arregi & Hanink 2019), regardless of whether SR is in an adverbial clause or conjunct.


(6) a. \([c \text{ ID}:i, \text{ ID}:j]\) \(\leftrightarrow\) Different subject
   b. \([c ]\) \(\leftrightarrow\) Same subject
   (Arregi & Hanink 2019)

They capture the possibility of overlap by allowing some SR probes to choose between the ID-features present on a plural. Adopting Deal’s (2015) distinction between probe satisfaction and probe interaction, we suggest that the SR probe may copy additional features of the goal, specifically person and number (and case, Clem 2018). We propose that these features can give rise to feature conflicts like (6a), leading to DS-marking in overlap situations. We posit an asymmetry in the representation of person and number, so that number features are contained in the person geometry (Harley & Ritter 2002). As a result, person features can be copied without number, but not vice versa. (See also Baier 2018 for evidence from anti-agreement that person can be Impoverished without number, but not number without person, providing independent evidence for this idea.)

This approach understands the variation in Table 1 as the result of different feature conflicts. In Hua, all features are copied and any conflict results in DS-marking (7a–b).

(7) 1SGi & 1PLi:j; [c ID:i, PERS:1, NUM:sg, NUM:pl] \(\leftrightarrow\) Different subject
   (Hua)
   In Nend Waskia, person and ID-features are copied, and such conflicts yield DS (8a–b). (Remember that some SR probes may choose either ID-feature on plurals, following Arregi and Hanink.)

(8) a. 1SGi & 1PLi:j; [c ID:i, PERS:1] \(\leftrightarrow\) Same subject
   (Nend Waskia)
   b. 3SGi & 1PLi:j; [c ID:i, PERS:1, PERS:3] \(\leftrightarrow\) Different subject
   In Washo, DS-marking is calculated only on ID-features, ignoring person/number conflicts.

We suggest that the difference between “growing” and “shrinking” patterns arises because the SR probe first enters into a downward Agree relation with the embedded subject, DP2, upon Merge. We propose also that a probe fails to copy features if all features on the goal are already present on the probe. In “growing” configurations, this means that features may fail to be copied when the SR probe encounters the higher subject, or DP1 in (5), allowing feature conflicts to be avoided. But in “shrinking” configurations, the SR probe will first Agree with the DP with the fewest features, and so still copy them. For K˚ıs˚edj˚e and Diyari patterns, we posit that copying of all ID-features. In K˚ıs˚edj˚e, person features are copied also (9a–b).

(9) a. 1SGi > 1PLi:j; [c ID:i+j, PERS:1] \(\leftrightarrow\) Same subject
   (K˚ıs˚edj˚e)
b. 1PLi:j > 1SGi; [c ID:i, ID:i+j, PERS:1] \(\leftrightarrow\) Different subject
   The Kobon pattern can be accounted if we assume the K˚ıs˚edj˚e system, but with DS-marking only if both person and ID-features conflict, a situation only found in “shrinking” contexts with different persons.