Skewed AGREE: accounting for a closest- $(_4$ conjunct effect with semantic implications

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Fixing AGREE for Ambiguous Domains

The AGREE operation as defined in Chomsky (2000) can't unequivocally determine a match when probes have Ambiguous Domains (AD, 1). For a ϕ -feature probe, for instance, (2) is an AD.

(1) A probe has an **Ambiguous Domain** if

- a. its domain contains **multiple SGs** (Suitable Goals),
- b. the **PIC** doesn't make all but one of the SGs invisible to probing,
- c. none of the SGs asymmetrically c-commands all others.

(2) IP coordination is an **AD** for a ϕ -probe: $\begin{bmatrix} \& P \end{bmatrix} \begin{bmatrix} IP \\ IP \end{bmatrix} \begin{bmatrix} & & \\ \& & \end{bmatrix} \begin{bmatrix} IP \\ & & \end{bmatrix} \begin{bmatrix} & & \\ & & \end{bmatrix} \begin{bmatrix} IP \\ & & \end{bmatrix} \begin{bmatrix} & & \\ & & \end{bmatrix} \begin{bmatrix} IP \\ & & & \end{bmatrix} \begin{bmatrix} & & & \\ & & & \end{bmatrix} \begin{bmatrix} & & & \\ & & & & \end{bmatrix} \begin{bmatrix} & & & & \\ & & & & & \end{bmatrix}$ (=9)

I will present data in which ϕ -probes with ADs always end up matching the linearly closest SG. As this matching has both morphological and semantic effects—unlike other closest-conjunct phenomena—it motivates an addendum to AGREE: Skewed AGREE (3).

(3) Skewed AGREE: If a probe has an AD, match the linearly closest SG.

As a precondition for (3), word-order must be defined early (Travis 1989), maybe at Merge. Early determination of word order is also assumed, for instance, in Bruening's (2014) theory of binding and Khalaf's (2015) account of inter-conjunct asymmetries.

Switch-reference marking

Kīsêdjê (Northern Jê, Brazil) marks switch-reference (SR, Jacobsen 1967) on clausal coordinating conjunctions (CCC). In simple cases, each CCC tells whether the clauses it connects have the same subject (SS) or different subjects (DS):

- $(4) \mid \varnothing$ khwã tho thẽ] = $\mathbf{nhy_1}$ [\varnothing \varnothing -ndât | = ne_2 3.NOM 3.to 3.with go.sg =&.ds 3.Nom 3-get.pl =&.ss
 - s-õmu $|=n_3 | \emptyset$ khu-ru ro no. =&.ss 3.nom 3.eat.sg-nmlz with lay.sg 3.NOM 3-see

'He_i brought them to \lim_{i} , \lim_{i} took them, \lim_{i} looked at them and \lim_{i} lay down eating them.

Modeling SR

Syntax

- Each SR-marking CCC (&) bears two ϕ -probes, with domains [Compl,&] and [Spec,&].
- The DPs matched by a CCC's probes are linked with the CCC for later interpretation at CI.
- Linking is implemented here by copying the CCC's numeration onto the matched DPs.

Semantics

- The DPs linked with a **ss** CCC are interpreted as **coreferent**.
- The DPs linked with a **DS** CCC are interpreted as **disjoint**.

Baseline: no ADs (5) clearly shows that SR is sensitive to hierarchy (tree in 10). No domains are ADs, so (3) isn't necessary. **Derivation:** (i.) the specifier probe in the CCC =ka matches the highest DP in [Spec,&]—'me and your daughter', the subject of IP_a —rather than the linearly closest DP—'you', the subject of IP_b ; (ii.) the complement probe matches the highest DP in IP_c ; (iii.) the matched DPs are linked with the DS CCC and correctly interpreted as disjoint.

- $[\&P |_{IP_a} [wa a-katôt me aj]_{1} [_{IP_b} a-mbârâ-\emptyset] mba-j$ (5) Hẽn 1.NOM 2-daughter with PL NFUT
 - $[_{\mathrm{IP}_c} a_{\{1\}}$ -mbârâ ra! $\lfloor_{\&'} = \mathbf{ka_1}$ indeed $=\&.\mathrm{DS.2}$ 2-cry

'Me and your daughter were hearing you crying and you were crying indeed!'

With ADs Assuming that recursive coordination expands at *Compl* (Johannessen 1998), the structure of (4) is (11). Since $[\text{Compl},\&'_1]$ and $[\text{Compl},\&'_2]$ are ADs, we need Skewed AGREE (3). Probing and linking happens in the syntax, and at CI the DPs linked with a ss CCC are interpreted as coreferent and those linked with a DS CCC are interpreted as disjoint.

to ta 2-cry-NMLZ hear-NMLZ with stand

Skewed to the left, skewed to the right

Kĩsêdjê marks clausal embedding very clearly

- Main verbs are underived and mark their arguments as nominative-accusative.
- Embedded verbs are nominalized and mark their arguments as ergative-absolutive.
- In embedded clausal coordination, each clausal conjunct shows the marks of embedding.

	Unembedded	Embedded
Case of arguments	Nom-Acc	Erg-Abs
Form of verb	Underived	Nominalized

Some monoargumental verbs in Kĩsêdjê embed clauses. One such verb is the negative existential $kh\hat{e}r\hat{e}$ 'not.be'. In (6) and (7) (tree in 12), the clause headed by $kh\hat{e}r\hat{e}$ (IP_a) is coordinated with a simple clause (IP_d). The argument of $kh\hat{e}r\hat{e}$ ($\&_1P$) is the coordination of two simple clauses, (IP_b) and (IP_c). The specifier probe of CCC₂ (= nhy_2 in 6, = ne_2 in 7) has an AD. IP_a is an AD because, within it, neither of the DP subjects of IP_b or IP_c (the SGs) is made inaccessible to probing by the PIC nor asymmetrically c-commands the other (1). Skewed AGREE is therefore activated and the SG linearly closest to the probe is matched, namely, the DP subject of IP_c .

Note the lack of resolution in (6-7): the system isn't treating $IP_b + IP_c$ as the subject.

(6) $\left[\operatorname{IP}_{a} \left[\&_{1P} \left[\operatorname{IP}_{b} \operatorname{Pam}_{\{1\}} = \operatorname{nda} \operatorname{kh-wa} \operatorname{h\tilde{y}} \operatorname{nhy-r\tilde{y}} \right] = \operatorname{nhy}_{1} \left[\operatorname{IP}_{c} \varnothing_{\{1,2\}} - \operatorname{th\tilde{e}-m} \right] \right]$ khêt father =ERG 3-to yes say-NMLZ =&.DS = $\mathbf{nhy_2} \left[\operatorname{IP}_d \mathscr{O}_{\{2\}} \text{ mbârâ-} \mathscr{O} \text{ ro } \operatorname{nhy.} \right]$ 3.NOM cry-NMLZ with sit =&.DS

'Her father didn't allow her to go and a person sat crying (not her).' (lit. 'It was not the case that he said yes to her and she went, and then a person sat crying.')

(7) $|_{\text{IP}_a} [\&_{1P} [_{\text{IP}_b} \text{Pam}_{\{1\}} = \text{nda kh-wa hỹ nhy-rỹ}] = \mathbf{nhy_1} [_{\text{IP}_c} \varnothing_{\{1,2\}} - \text{the-m}]]$ khêt father =ERG 3-to yes say-NMLZ =&.DS 3-go-NMLZ =**ne**₂ [IP_d $\varnothing_{\{2\}}$ mbârâ- \varnothing ro nhy. 3.NOM cry-NMLZ with sit =&.ss

'Her father didn't allow her to go and she sat crying.' (lit. 'It was not the case that he said yes to her and she went, and then she sat crying.')

In (6-7) a CCC's specifier probe has an AD, and since [Spec,&] is to the left of &, linearly closest means *rightmost*. The converse point is shown by (8) below (tree in 13), in which the *complement* probe of CCC₃ has an AD (IP_b, headed by $m\tilde{a}$ 'be.imminent'). Since [Compl,&₃] is to the right of $\&_3$, linearly closest now means *leftmost*. IP_b is an AD because, within it, none of the DP subjects of IP_c , IP_d or IP_e is made inaccessible to probing by the PIC or asymmetrically c-commands the others (1). Skewed AGREE (3) is activated and the DP subject of IP_c is matched by the complement probe on CCC_3 since it is the linearly closest SG.

(8) [I-kandikl	$nwaj_{\{1\}}$	=ta	banheiro	mã	atá] =n ₁
1-sister		=NOM	bathroom	into	enter	&.ss
$[\&_3\mathrm{P}$	$[IP_a w]$	$a_{\{2,3\}}$]	khuthêp	ta]	=nhy
	1.	NOM	3-waiting.fc	or sta	and	&. DS
=nhy ₄	[& ₅ P [IP	$_{_{d}}$ kh.wã	i $_{\{4,5\}}$ -tá-r	á]	=ne	5 [$_{\mathrm{IP}_e}$ \mathbf{i}

3-into 1-enter-NMLZ &.SS $\&. \mathrm{DS}$ 'My sister entered the bathroom, is taking a shower and I am waiting, and it is imminent that she leave, I enter the bathroom and take a shower.³

Discussion 5

Given the formulation of AGREE in Chomsky (2000), ADs are a reality. The closest-conjunct evidence we reviewed indicates that in such domains the SG linearly closest to the probe is matched. The closest-conjunct evidence from SR is stronger than other closest-conjunct effects discussed in the literature because its effects aren't only morphological, but also semantic, and therefore can't be ascribed to a "split" view of AGREE, in which AGREE in narrow syntax doesn't have access to linear order, and the linear effects are obtained in the morphological component (Bhatt and Walkow 2005; Marušič, Nevins, and Badecker 2015). I borrow Marušič, Nevins, and Badecker's idea that Agree produces a link between the matched goal and the probe.

To the extent that the data presented here make us reevaluate the nature of AGREE and our view of where linear order information enters the derivation, the same account could be extended (if we consider *minimal domains* and a multiple specifier account of DP coordination) to more classical closest-conjunct effect, allowing us to dispense with the split view of AGREE.

3-go-nmlz not.be

not.be

 $\mathbf{1}$ [$\mathbf{s}_{\{1,2\}}$ -wâ-râ ro ta] = $\mathbf{wa_2}$ S 3-bathe-NMLZ with stand &.DS.1 **y**₃ [IP_b [$\&_{4}$ P [$_{IP_c} \varnothing_{\{3,4\}}$ -khatho-ro] 3-exit-NMLZ i_{5}-twâ-râ]] | mã 1-bathe-NMLZ be.imminent

References

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Glossing conventions

& = coordinating conjunction, 1 = first person, 2 = second person, 3 = third person, DS = differentsubject, ERG = ergative, NFUT = non-future, NMLZ = nominalizer, NOM = nominative, PL = plural, SG = singular, SS = same subject.

Trees in long-form notation 6 (9) (=2)& PDP I'& DP I' (10) Structure of the &P in (5)DP VP IP_c & DP I'_c IP_{h} DP I'_{i} (12) Structure of (6) and (7) $\&_2 P$ AD IP_d $\&_1 P$ $V | \&_2 |$

DP

 IP_{h}

DP I'_b &1

 IP_c

DP I'



 $DP \dots \&_5 DP \dots$