Tag questions and Richard: extraclausal access to finite subjects

Course on "Locality of grammatical relations"
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Supporting claims

- Tag questions are adjuncts which modify a preceding declarative clause.
- Tag question verbs are [INV -]
- Tag auxiliaries are linked to their associated main clause auxiliaries by the requirement of CONT|KEY type identity.
- Least oblique valents of yes/no question-clausal heads are COMPS elements, with the SUBJ list empty in such clauses.

Two English constructions

- Tag questions: *You were waiting for me, weren't you?*
- Richard: *Robin sounds like she's not doing too well*

Major claims:

- Subjects of tags and Richard-sentences correlate with index properties of external constituents.
- An independently motivated head feature AGR will automatically encode the relevant information in a way that makes it accessible extraclausally.
- The potential nonidentity of AGR and INDEX accounts for both the tag subject correlation and the distribution of *there* dummy subjects in Richard sentences.

Tag data

(1) Sarah slept, didn't she/*Sara/*they/*I

(2) a. I'm still invited, $\left\{ \begin{array}{c} \text{aren't} \\ \text{*amn't} \end{array} \right\}$ I?

b. I'm still invited, $\left\{ \begin{array}{c} \text{aren't} \\ \text{*amn't} \end{array} \right\}$ I invited to that party?

(3) a. We needn't agree to this, need we?
b. Need we agree to this?
c. *We need agree to this.

- The class of auxiliaries in tag questions is exactly the class of inverted auxliaries

- This identity raises very serious questions about the basis for the claim that tag auxiliaries are [INV −]

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(4) a. Sara is sleeping, isn't $\left\{\begin{array}{c} \text{she} \\ \text{*her} \\ \text{*herself} \\ \text{*mine?} \\ \text{*there} \\ \text{*it} \end{array}\right\}$?

    b. It's raining, isn't $\left\{\begin{array}{c} \text{it} \\ \text{*there} \end{array}\right\}$?

    c. There's a lion in the closet, isn't $\left\{\begin{array}{c} \text{there} \\ \text{*it} \end{array}\right\}$?

- Tag subjects must match main clause subjects in INDEX values.

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(5) $\begin{bmatrix} \text{CAT|HEAD } noun \\ \\ \text{CONT} \begin{bmatrix} \text{INDEX } \boxed{1} \begin{bmatrix} \text{PERS} \\ \text{NUM} \\ \text{GEND} \end{bmatrix} \\ \text{RESTR } ... \end{bmatrix} \end{bmatrix}$

Where is the tag question attached?

- Is the tag attached to S? To VP? Both?

(6) a. (?)You get in trouble all the time and I get in trouble all the time, don't we(?)
    b. You argued with Robin but I agreed with him, didn't I?
    c. *You argued with Robin but I agreed with him, didn't you?

Relevance to the locality issue

Problem: In a framework in which information about valents is systematically suppressed by saturation, how can information about properties of the subject of the tag or the complement clause be aligned with the subject of the main clause?

Proposal: The head feature AGR proposed within HPSG in Kathol (2000) can be incorporated into the analysis of both constructions to allow a limited apparent nonlocality of extraclausal information sharing.

Comment: The B&F proposal, though it does rely on the soundness of AK's arguments and incorporates the specific mechanism he proposes, does significantly modify his AGR feature and should be regarded as a somewhat distinct notion.

Why AGR?

Kathol's (1999) arguments:

- Morphological resemblances between selector and selected categories:

  (7) ill**arum** du**arum** bon**arum** femin**arum**

  'of these two good women'

  (8) **ki**kapu **ki**kubwa **ki**moja **ki**lianguka

  'One large basket fell.'

  (9) **vi**kapu **vi**kubwa **vi**moja **vi**lianguka

  'Three large baskets fell.'

- Expression of generalizations about features eligible to participate in agreement phenomena.

AK's proposal: both AGR and INDEX

- As AK puts it, 'except for case concord, P&S treat agreement essentially as government' (p.232). On his alternative account, both the selected category and the selector bear AGR, which if spelled out phonologically in a uniform way entails the parallels in form in (7)–(9).
- Specifying the feature values which must be included in the specification of AGR immediately identifies what features are available to manifest agreement.
- Since heads may bear an AGR feature independently of any valence properties they have, the German impersonal cases such as (10) can be accomodated unproblematically.
- Mismatches can now be understood as the simultaneous satisfaction of constraints involving matches with two different feature specifications, i.e., AGR and INDEX.
  - In French, verbs agree with AGR number specifications as in Pollard and Sag (1994);
  - predicate adjectives however agree with the INDEX feature value for number on the NP;
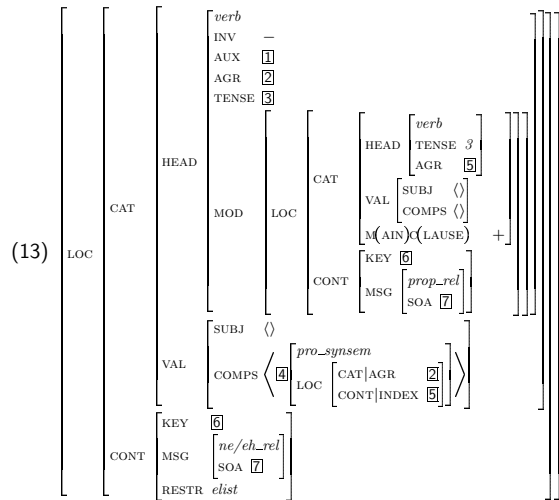 - verbs agree with the INDEX value for person.

- Cases where verbs bear agreement morphology without a correlation with any selected element:

  (10) a. An jenem Abend wurde viel galacht
       b. 'There was[3rd-sing] much laughter that evening.'

- Mismatches in agreement where different parts of a complex structure appear to be agreeing with different properties of the same head:

  (11) a. Su Majestad suprema está contento
       b. 'Your supreme[FEM] majesty is happy[MASC]

  (12) a. Vous êtes belle.
       b. 'You are[PL] beautiful[SG-FEM]

  - In order for AGR to work as intended, it must be visible both on the subject NP (which is what is visible to the selecting head that imposes the match between its own AGR features and those of the subject)and the lexical head of that NP (which is what bears the relevant inflectional morphology); hence AGR must be a head feature. Therefore, . . .

The lexical description of tag auxiliaries

$$(13)\ \left[\text{LOC}\ \left[\text{CAT}\ \left[\begin{array}{l} \text{HEAD}\ \left[\begin{array}{l} verb \\ \text{INV}\ - \\ \text{AUX}\ \boxed{1} \\ \text{AGR}\ \boxed{2} \\ \text{TENSE}\ \boxed{3} \\ \text{MOD}\ \left[\text{LOC}\ \left[\begin{array}{l}\text{CAT}\ \left[\begin{array}{l}\text{HEAD}\ \left[\begin{array}{l} verb \\ \text{TENSE}\ \mathit{3} \\ \text{AGR}\ \boxed{5}\end{array}\right] \\ \text{VAL}\ \left[\begin{array}{l}\text{SUBJ}\ \langle\rangle \\ \text{COMPS}\ \langle\rangle\end{array}\right] \\ \text{M(AIN)C(LAUSE)}\ + \end{array}\right] \\ \text{CONT}\ \left[\begin{array}{l}\text{KEY}\ \boxed{6} \\ \text{MSG}\ \left[\begin{array}{l} prop\_rel \\ \text{SOA}\ \boxed{7}\end{array}\right]\end{array}\right]\end{array}\right]\right] \end{array}\right] \\ \text{VAL}\ \left[\begin{array}{l}\text{SUBJ}\ \langle\rangle \\ \text{COMPS}\ \left\langle\boxed{4}\left[\text{LOC}\ \left[\begin{array}{l} pro\_synsem \\ \text{CAT}|\text{AGR}\ \boxed{2} \\ \text{CONT}|\text{INDEX}\ \boxed{5}\end{array}\right]\right]\right\rangle\end{array}\right]\end{array}\right] \\ \text{CONT}\ \left[\begin{array}{l}\text{KEY}\ \boxed{6} \\ \text{MSG}\ \left[\begin{array}{l} ne/eh\_rel \\ \text{SOA}\ \boxed{7}\end{array}\right] \\ \text{RESTR}\ elist\end{array}\right]\end{array}\right]\right]$$

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Main aspects of the analysis in (13)

- Tags are clause-level adjuncts identifying their targets of modification via MOD.
- The feature AGR is a HEAD feature, hence visible at the top of the main clause.
- Within each clause, verbs and subjects structure-share their AGR values; specifically, the lexical description for a finite verb in English will contain the subdescription (Kathol, 1999, pp. 236–237)

$$\left[\begin{array}{l}\text{HEAD}|\text{MORSYN}|\text{AGR}\ \boxed{1} \\ \text{VAL}|\text{SUBJ}\ \left\langle\boxed{2}\left[\begin{array}{l}\text{AGR}\ \boxed{1}\left[\begin{array}{l}\text{PER}\ \boxed{3}\\\text{NUM}\ \boxed{4}\end{array}\right] \\ \text{CONT}|\text{INDEX}\ \left[\begin{array}{l}\text{PER}\ \boxed{3}\\\text{NUM}\ \boxed{4}\end{array}\right]\end{array}\right]\right\rangle\end{array}\right]$$

reflecting a coincidence between the V's AGR and the subjects's AGR/INDEX values. Flickinger and Bender adapt this description to a subjectless analysis of inversion.
- Crucially, however, the tags and the main clauses they modify do not systematically share specifications for AGR, allowing for the possibility that tags and main clauses will display different agreement patterns.
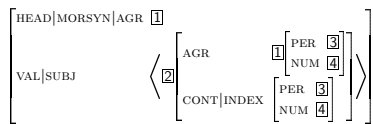
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- B&F require the type of AGR's value to be the same as that of INDEX's value, so that subtype information (e.g., *ref* vs. *it* vs. *there*) can be reflected in the AGR VALUE to account for dummy subjects in tags.
- Nouns either identify their AGR and INDEX values or they do not, but the index of the tag subject and the agreement value of the main clause verb are identified.
  - When AGR = INDEX, then $\boxed{2}$ = $\boxed{5}$, and the agreement morphology on the tag auxiliary matches that on the main verb (*Robin has lost her keys again, hasn't she?*). Thus, in the normal course of things,
    * the AGR value of the subject matches that of its index;
    * the AGR value of the verb matches that of the subject;
    * the verb's AGR value is a HEAD feature, and percolates up to the main clause node;
    * this node is visible to the modifying tag-clause via the latter's MOD feature;
    * the lexical entry for the tag auxiliary identifies the AGR value of the main clause with the index value of the tag clause subject;
    * hence, the tag clause subject index, the main clause subject AGR value and the main clause subject INDEX value are all identified.
  - When AGR $\neq$ INDEX, then $\boxed{2} \neq \boxed{5}$, and the agreement morphology on the tag

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auxiliary differs from that on the main verb (*Everyone gets invited back, don't they?*, where *they* has a description in which its AGR value specifies third person plural values, but its INDEX is third person singular.
- The RESTR value is *elist*, indicating that the tag question, unlike ordinary modification, does not correspond to a functor taking the situation variable contributed by the clause it modifies as an argument.
- The attribute MESSAGE corresponds to the SWB MODE feature, and the supertype *message* has as subtypes various specific semantic modes corresponding to assertion, direction, interrogation, etc:
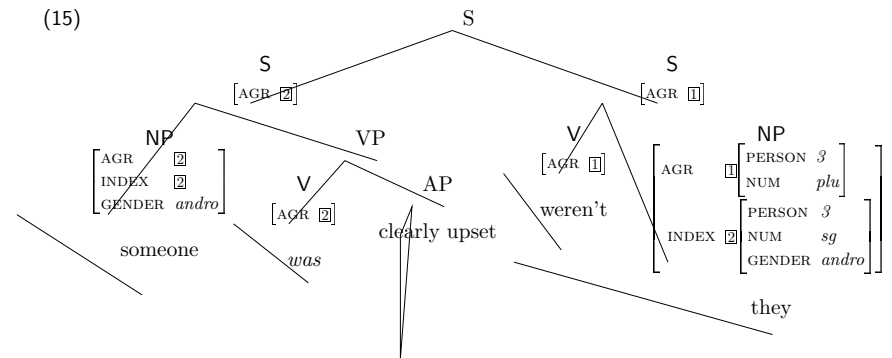
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Main features, cont'd

$$message$$
$$int \quad dir \quad assert \quad ...$$
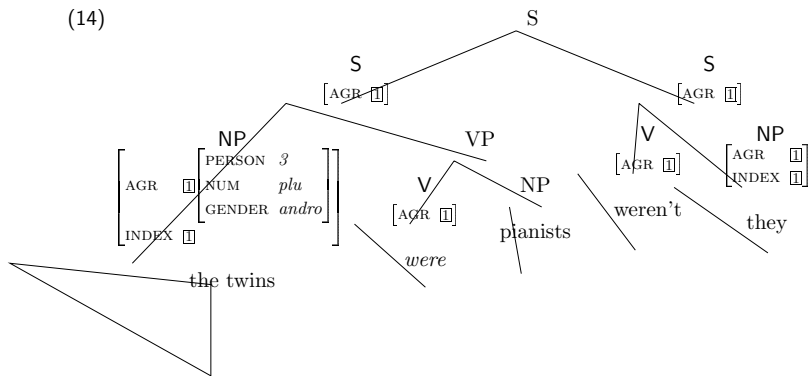$$ne\_reln \quad ...$$
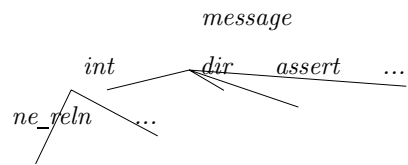
- The rather obscurely presented discussion in the paper about the compositional treatment of the MESSAGE property can be expressed much more simply as follows: the MESSAGE value of a sign is that of its semantic head, which is normally the syntactic head but is the adjunct daughter where there is one. Bottom line: adding a tag changes the message from a simple assertion to a kind of query.

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(15)

Tree for (15): S → S [AGR 2] + S [AGR 1]; S [AGR 2] → NP [AGR 2, INDEX 2, GENDER andro] "someone" + VP → V [AGR 2] "was" + AP "clearly upset"; S [AGR 1] → V [AGR 1] "weren't" + NP [AGR 1 [PERSON 3, NUM plu], INDEX 2 [PERSON 3, NUM sg, GENDER andro]] "they"

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Two examples

(14)

Tree for (14): S → S [AGR 1] + S [AGR 1]; S [AGR 1] → NP [AGR 1 [PERSON 3, NUM plu, GENDER andro], INDEX 1] "the twins" + VP → V [AGR 1] "were" + NP "pianists"; S [AGR 1] → V [AGR 1] "weren't" + NP [AGR 1, INDEX 1] "they"

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B&F's answers to the guiding questions

Q: Which properties need to be accessible/visible?
A: AGR is the crucial feature which must be visible to effect the necessary alignnment of subjects across clause boundaries.

Q: For which elements is a particular property visible?
A: Only for subjects, although in principle any grammatical relation for which an analogue of AGR could be defined.

Q: How far is a particular property visible?
A: As high as the maximal projection of a particular head specified for AGR.

Guiding questions (cont.)

Q: When does the property become visible in which of the domains?
A: At the point at which the main clause is modified by the tag question.

Q: Which representations and percolation principles should be used to make these properties visible?
A: The Head Feature Principle is responsible for making AGR appropriately visible.

Q: How is AGR used once it's visible?
A: AGR is used, via the tag question's MOD specification, to identify the tag head's subject index description with the main clause's AGR description, entailing a specific pattern of covariation between the main clause and tag subject.

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A problem for B&F: tags for locative inversion main clauses

(16) In the garden are many statues, AREN'T there?! (based on data in Bowers (1976))

- According to (13), the tag subject INDEX is identical to main clause AGR;
- but in (16), the possibilities are few: either the preposed PP is the subject, as argued in much of the literature (Stowell (1981), Bresnan (1994), Culicover and Levine (2001)) or the postverb NP is.
- Neither the PP nor the NP in the main clause are [INDEX *there*] (Note in particular: *Into the room strode Robin(*, didn't there?)*; **Down the altar steps rolled the statue(*, didn't there?)*)

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