

Interpreted Agreement in Indexical Binding

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We discuss the semantic import of number and person agreement features (on T, but with wider relevance to other agreeing head probes). We first illustrate that number/person features on T can encode a presupposition about the subject's denotation. We then discuss the licensing interaction between agreement and indexical binding in French and English (see Kratzer 2009, Wurmbrand 2017, Charnavel et al. 2024, i.a.) to support the hypothesis that person agreement can (and perhaps must) have semantic import, corroborating evidence for semantic agreement being a Spec/Head process (see Smith 2017, Sportiche 2016, i.a.) and for the possible specificity of person vs. number (or gender) agreement (see den Dikken 2019, Mancini et al. 2017, i.a.), only the latter being optionally semantic.

1. Semantic Agreement: Agreement on T in French in (1) codes how the subject is interpreted:

- (1) Un sous-ensemble d'entre nous {i. a-3Psg / ii. ont-3Ppl / iii. avons-1Ppl} toujours raison.
'A subset of us is / are-3rdpl/ are-1stpl always right.'

The subject is singular (there is a single subset). Plural agreement makes it denote a plurality (it can only denote a singleton with singular agreement), which, with 1st person agreement, must include the speaker. We interpret this semantic paradigm as showing that the number/person feature values on T (only possible due to *nous/us* - 1st prs agreement e.g. would be out with *eux/them*) triggers a presupposition, not about itself as for a DP, a senseless option for T, but about how the subject denotes.

2. Indexical binding and person agreement in French: Charnavel & Sportiche (2024) report a correlation indexical binding / person agreement in French relative clauses (RC) for some speakers:

- (2) a. Je suis le seul qui t {i. **suis** /ii. # **est**} fier de **mes** enfants.
b. Je suis le seul qui t {i. # **suis** /ii. **est**} fier de **ses** enfants.
'lit. I am the only one who {i. **am**/ii. **is**} proud of {a. **my**/b. **his**} kids.'

Intended bound reading: the others are not proud of their kids. [ok under a-i and b-ii]

Here, we further specify the nature and conditions of person agreement and indexical binding in French RC, leading us to argue that person agreement is a semantically-based Spec-Head process.

First, we specify that 1P (or *mutatis mutandis* 2P) agreement in RC requires the following conditions:

- The RC head noun must be null, suggesting that it should not be lexically specified for person $\neq 1^{\text{st}}$:

- (3) Je suis {a. le seul/celui vs. b. *le (seul) **étudiant**} qui t_{wh} **suis** français.
'lit. I am {a. the only **one**/the **one** vs. b. the (only) **student**} who **am** French.'

- the RC must occur in value-initial specificational sentences (cf. Ivan & Mirrazi 2019, Bassi 2021):

- (4) Je {a. suis/ b. *connais} le seul qui t_{wh} **suis** français. × QUD for 4a: What is your specificity?
'lit. I {a. am/ b *know} the only one who **am** French.' ✓ QUD for 4a: Who is French here?

- (5) Le seul qui t_{wh} {a. ***suis**/b. **est**} français, c'est moi.
'lit. The only one who {a. ***am**/b. **is**} French, it's me.'

(3)-(5) show that the embedded *wh*-subject trace (or the silent nominal head of the relative) in (3a,4,5) can be specified as first person – as shown by 1st person agreement – only if it is independently bound by a 1st person binder (here *je/I*), which fails in (3b) and (5), as corroborated by (6) which lacks binding.

- (6) *Qui **sommes-1PL** venus ? 'who have come?' [*even if the speaker is presupposed to have come]

Further 1st person agreement in the relative leads to covaluation of the RC with *je/I* in both (4a) and (4b), triggering a Condition C in (4b), but not in (4a), since condition C prohibits presupposed covaluation (in 4b), but not asserted covaluation (in 4a) (Büring 2005).

But this is insufficient: indeed, we newly observe a strong contrast in the availability of (local or long distance) indexical binding in French RC depending on whether the binder is a clausal subject or not: indexical binding is degraded when the binder is an object or subject of non-TP (controlling for WCO).

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- (8) a. Je suis le seul **qui** suis fier de **mes** enfants. ‘I am the only one **who** is proud of **my** kids.’
b. # Je suis le seul **qu**’on compare à **mes** enfants. ‘I am the only one **that** they compare to **my** kids.’
Intended: nobody else is proud of their kids/is compared to their kids.
- (9) a. Je suis le seul **qui** suis content que **mes** enfants soient là.
b. # Je suis le seul **à qui** on a annoncé que **mes** enfants étaient là.
‘I am the only one {a. **who** is happy that / b. **to whom** they announced that} **my** kids are here.’
Intended: nobody else is happy/has been told that their kids are here.’

This is not predicted by any existing theory: Sauerland (2013) (cf. Jacobson 2012) does not impose any constraint on the configuration hosting the bound pronoun as long as it is in focus alternatives; Kratzer (2009) requires a v binder locally (for feature transmission), but not long distance (due to context shifting); Charnavel & Sportiche (2024) only require the binder to be focused (4a with the right QUD). We conclude from (8-9) that a 1st person *wh*-trace licensed via binding/specification as in (3) can only be legitimate when also licensed via **Identification** by overt agreement, here on T.

2. A presuppositional account: Such a purely syntactic treatment runs into trouble when we consider different more tolerant speakers of French, or English speakers. Indeed, some French speakers allow the bound reading in (2aii). And English exhibits similar conditions on indexical binding in RC, but no variable person agreement (see glosses of examples (2) to (9), where 1st person agreement is not available in English). If *wh*-traces were syntactically 1st person in the relevant cases, we would expect 1st person agreement on T to be mandatory. We conclude that *wh*-traces can never be specified for 1st person (as in Douglas 2015, den Dikken 2019). Instead, unspecified *wh*-traces can acquire 1st person meaning at LF through binding, and thereby bind indexicals, which explains why they must be bound by a 1stpers binder (in order to bind a first person indexical). And we conclude that **Identification** (recalling Rizzi’s 1986 identification condition on *pro*, now possibly formalizable in presuppositional terms as below) is in fact not agreement, but rather is due to the features on T being interpreted, triggering a presupposition on the denotation of the subject – an independently available option given (1). Intolerant French speakers (#2aii) require 1st person agreement; tolerant French speakers allow (unmarked for person) 3rd “person” agreement (the difference likely due to register differences), compatible with 1st person. English – differing from French in only marginally allowing morphological person agreement in appositives or clefts, but not in restrictive RCs (Akmajian 1970, Morgan 1972) – functions like tolerant French: the lack of competition between person exponence in RC allows 3rd person agreement on T_{DP*} to license person semantics on the *wh*-trace binding the indexical in (8a, 9a).

3. Person agreement and semantic agreement: Sportiche (2016) and Smith (2017) have argued that semantic agreement as in (1) must be Spec/Head and hold at LF, blocking reconstruction, as in (10):

- (10) Un sous-ensemble d’entre nous { i. a-3Psg / ii. ont-3Ppl / iii. avons-1Ppl } toujours raison.

‘A subset of us is / are-3rdpl/ are1stpl always right’: ✓*subject* > *always*; in ii. and iii: ✗*always* > *subject*

This follows if semantic agreement on T, be it for person or number, triggers a presupposition on its specifier, hence at LF (presuppositions being LF properties). This is consistent with pairs such as *There is always me* /* *There am always me*, with excluded 1st prs agreement. The stronger hypothesis that person agreement is always semantic – always triggering a person presupposition – is now suggested by Baker’s (2008, 2011) SCOPA, or den Dikken’s (2019) argument that person agreement always requires a Spec/Head licensing configuration. This is consistent with neural evidence (from ERP and fMRI experiments) showing that violation of person (but not standard number) agreement induces e.g. N400 effects usually associated with interpretative problems (Mancini et al. 2011, 2017).

5. Further Issues: Our conclusions raise questions about how Agree functions which we will briefly address: (i) That φ -feature values can appear on T when its goal lacks these values suggests that Agree does not involve a copying or valuing operation but rather a Matching/Compatibility operation (as in Ackema and Neeleman 2018; (ii) Is person and sometimes number agreement requiring a Spec/Head configuration generally, requiring a wholesale reanalysis of all cases of agreement as Spec/Head?

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Selected references: **Ackema&Neeleman 2018** Features of Person. MIT press. **Akmajian 1970:** On deriving cleft sentences from pseudo-cleft sentences. *LI* 1(2); **Baker 2011** When agreement is for number and gender but not person, *NLLT* 29. **Büring 2005.** *Binding theory*. CUP. **Charnavel&Sportiche 2024:** Indexical binding, presupposition and agreement. *SuB28*; **den Dikken 2019** The attractions of agreement: Why person is different. *Frontiers in psychology* 10; **Kratzer 2009** Making a pronoun: fake indexicals... *LI* 40; **Rizzi 1986:** Null objects in Italian and the theory of pro. *Linguistic Inquiry* 17(3). **Sauerland 2013** Presuppositions and the alternative tier. In *SALT* 23; **Smith 2017** The syntax of semantic agreement in English, *J. of Linguistics* 53 (4); **Wurmbrand 2017** Feature sharing or how I value my son. MITWPL.