<u>**Choosing who to agree with: A psycholinguistic investigation of agreement mismatches**</u>
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Language often draws a sharp distinction between speaker, addressee and others. 1st-person expressions (*I, myself…*) refer to the speaker, and 2nd-person expressions (*you, your…*) to the addressee. Others can be referred to with 3rd-person pronouns (s*he, himself, they…*) and other expressions (e.g. *Jane, my uncle Bob*). Our work focuses on cases where this neat division breaks down, in particular cases where 3rd-person expressions refer to the speaker. Consider (1a), a father speaking to his young child, or (1b), said by news anchor Dan Rather about himself (from Collins & Postal'12):

(1a) *Daddy* needs to rest a bit!   *(father to daughter)*
(1b) At the time, CBS News and *this reporter* fully believed the documents were genuine.

Here, *Daddy* and *this reporter* are **imposters** (Collins & Postal '12). They look like 3rd-person expressions and occur with 3rd-person verb agreement, but their intended interpretation is 1st-person *I* (speaker). Collins & Postal (2012:5) define an imposter as "a notionally 1st or 2nd person DP that is grammatically 3rd person", or "a notionally X person DP that is grammatically Y person, X≠Y."

There are two competing analyses of imposters: the **Notional view** and the **Syntactic view**. According to the **Notional view** (Stirling & Huddleston'02, Baker'08, Siewierska'04), imposters are syntactically normal 3rd-person DPs. They are special only in their semantics/pragmatics, as they refer to a 1st-person referent. *Any special agreement properties they exhibit must stem from semantics/ pragmatics/discourse.* Syntactically, they are the same as normal (non-imposter) 3rd-person DPs. According to the **Syntactic view** (Collins&Postal'12, Collins'14), imposters have special *syntactic properties* (covertly include 1st/2nd person forms), which is why they can have 1st/2nd-person agreement patterns. According to this view, their behavior is *syntactically determined, not due to semantics or discourse.*

Pronoun patterns: We report a *psycholinguistic study* that investigates the kinds of pronouns used to refer to imposter antecedents, to gain insights into the validity of these two competing views. One of the key observations regarding imposters is that, though they require 3rd-person verb agreement, **plural imposters** (e.g. *the present authors*) or **coordinated imposters** (e.g. *Mommy and Daddy*) can antecede both 3rd or 1st person pronouns and reflexives (ex.2b,c,d). **Singular imposters** (e.g. *Daddy*), however, seem to require 3rd person pronouns/reflexives (ex.2a, Collins & Postal'12).

(2a) Daddy needs to take {his/*my} shoes off first! *(father to child, adapted from CHILDES corpus)*
(2b) Mommy and Daddy need to take {their/our} shoes off first! *(father to child)*
(2c) Not now! Ask Auntie Jane to show you the garage. Daddy and Uncle Jim are enjoying {themselves/ourselves} on the beach. *(adapted from Collins & Postal'12, father to child)*
(2d) The present authors defend {themselves/ourselves} against the charges *(adapted from Collins'14)*

How can these pronominal patterns be explained? According to Collins and Postal ('12), the left periphery of a clause contains null DPs for AUTHOR (Speaker, 1st sing/pl) and ADDRESSEE (2nd sing/pl), represented in an expanded left periphery (Rizzi'97) or arguments of a covert performative clause (see Collins'14, see also Speas & Tenny 2003). For present purposes, the key idea is that in sentences like (2b), the possessive pronoun can agree with **(i)** the immediate antecedent *Mommy and Daddy*, yielding 3rd-person *their*, or (ii) with the ultimate antecedent AUTHOR, yielding 1st-person *our*. (See Collins & Postal'12 for details). (The same reasoning holds for reflexive pronouns.)

(3) [[DP **AUTHOR**] **Mommy and Daddy** need to take {their/our} shoes off first.]

The existence of two pronominal options raises the question of what modulates the choice of one over the other. Psycholinguistic research suggests that referents which are cognitively more accessible/prominent in language users' minds are more likely to be chosen as antecedents of pronouns (e.g. Ariel'90, Gundel et al.'93). This line of reasoning predicts that in (3), the pronoun will tend to agree with whichever

antecedent (immediate or ultimate antecedent) is more prominent/salient. To test this hypothesis, we manipulated the salience of AUTHOR: We created sentences like (4), where the main clause was (or was not) preceded by a subordinate temporal clause that explicitly mentions the speaker(s) using *I/we*.

If an approach along the lines of the **Notional view** is correct in attributing a role to *pragmatics/discourse-level representations*, we expect that the agreement patterns exhibited by imposter DPs should be sensitive to the discourse properties/salience of the referent: If the 1st-person referent is very salient because it has just been explicitly mentioned in the temporal clause, then we might see a preference for a form that agrees with the ultimate antecedent (AUTHOR/speaker) – compared to contexts where there is no preceding explicit mention of the 1st-person AUTHOR/speaker. Under the **Syntactic view**, however, this is not expected to matter, because both the local and the ultimate antecedent are syntactically available (see Collins & Postal 2012 for details).

Experiment: We manipulated **(i) NUMBER:** whether the subject of the sentence was a **singular** third-person imposter (e.g. *Mommy, Daddy, Grandpa, Grandma*) or two coordinated DPs yielding a **plural** (e.g. *Mommy and Daddy*), **(ii) PERSON**: whether the possessive pronoun modifying the object was **first- or third-person** (1: *my, our* vs. 3: *her/his, their*), and **(iii) CONTEXT:** whether the main clause was preceded by a temporal clause containing a first-person pronoun (*I, we*) that refers to the speaker (AUTHOR). Thus, we used a 2x2x2 design (ex.4) with 32 targets and 36 fillers.
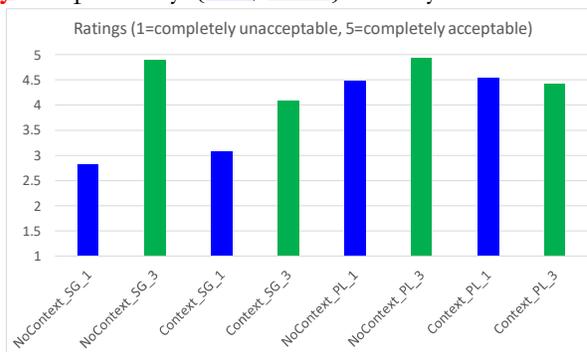
(4) *Mother says to child:*

(a) **Mommy** will put away {**my**/**her**} car keys.   NoContext_ SG_{**1**/**3**}

(b) Before **I** give you a snack, **Mommy** will put away {**my**/**her**} car keys.   Context_SG_{**1**/**3**}

(c) **Mommy and Daddy** will put away {**our**/**their**} car keys.   NoContext_PL_{**1**/**3**}

(d) Before **we** give you a snack, **Mommy and Daddy** will put away {**our**/**their**} car keys. Context_PL_{**1**/**3**}

Task: The subject, possessive pronoun and first-person pronoun in the initial clause (if present) were bold and underlined. (All text was in black font. Colors here are for expository purposes.) Participants (n=32) were instructed to rate (5-pt scale; 1=compl unacceptable, 5=compl acceptable) how acceptable each sentence sounds if the underlined expressions refer to the same person (method from Gordon & Hendrick'97). Each

Ratings (1=completely unacceptable, 5=completely acceptable)

sentence was preceded by who said it (e.g. *Mother says to child*); comprehension questions ensured that people attended to this. The average ratings are in the figure. We analyzed the data using mixed-effects models (lmer). Right away, we find that our results confirm that singular imposters are not suitable antecedents for 1st-person pronouns (low ratings in Context_SG_1 and NoContext_SG_1).

Effects of AUTHOR-boosting context? The presence/absence of AUTHOR-boosting context sentences has *no clear effect* on the ratings for sentences with (sing or pl) **first-person pronouns** (NoContext/Context SG_1,PL_1). Sentences with (sing/pl) **third-person** pronouns are rated higher in NoContext than Context conditions (t's>|3|, NoContext/Context SG_3,PL_3), presumably because Context conditions involve a clash between 1st-person (initial clause) and 3rd-person pronouns. Crucially, the finding that sentences with **first-person pronouns** (SG_1,PL_1) are *not* clearly influenced by context is in line the Syntactic view, and goes against the Notional view. However, our data show that 3rd-person pronouns are preferred over their 1st-person counterparts, regardless of number or context. This suggests that – although AUTHOR is available as antecedent – *the local (and linguistically overt) antecedent is more salient*, suggesting that a syntactic approach alone is insufficient.