Fake Indexicals

1 Problem

Referential and bound pronouns are often identical in form:

(1) a. [Every woman]_3 thinks she_2 is incompetent. \( \sim \) Every woman is in the set of those who think that g(2) is incompetent.

\( \sim \) Every woman is in the set of those who think that g(2) is incompetent.

b. [Every woman]_3 thinks she_3 is incompetent. \( \sim \) Every woman is in the set of those who consider themselves incompetent.

Bound readings for first and second person pronouns are rare but they do exist:

(2) a. I’m the only one around here who takes care of my\(^{bv}\) children.

\( \sim \) No one else around here takes care of his or her own children.

b. Only you eat what YOU\(^{bv}\) cook.

\( \sim \) No one else eats the food he or she cooks. \( \text{(Kratzer 2009)} \)

(3) a. We all think we\(^{bv}\) are smart.

\( \sim \) Each of us thinks that he/she is smart.

b. We all think we\(^{bv}\) are the smartest person in the world.

c. *We’re the smartest person in the world. \( \text{(Rullmann 2004)} \)

The ambiguity between bound and referential/indexical readings is standardly resolved by assigning pronouns a unifying semantics (see also Heim and Kratzer 1998):

(4) For all variable assignments \( g \) admissible in a context \( c \):

a. \( [\text{she}_2]^{g,c} = g(2) \text{ if } g(2) \text{ is a single female, undefined otherwise.} \)

b. \( [\text{I}_5]^{g,c} = g(5) \text{ if } g(5) \text{ is the speaker in } c, \text{ undefined otherwise.} \) \( \text{(Kratzer 2009)} \)

(4a) works for (1a) and (1b):

– in (1a) context \( c \) determines that \( g \) assigns 2 to Carla \( \rightarrow \) the reference of she\(_2\) is fixed \( \rightarrow \) she\(_2\) comes out as a referential pronoun

– in (1b) context \( c \) does not determine what \( g \) should assign the index to \( \rightarrow \) different assignments could therefore assign the index to different individuals \( \rightarrow \) she\(_3\) comes out as a bound variable pronoun

(4b) does not work for (2) and (3): all admissible assignments for a given context \( c \) must assign the index to the same individual, i.e. the speaker \( \rightarrow \) (2) and (3) are not predicted to have bound readings
This is why the 1\textsuperscript{st} and 2\textsuperscript{nd} person pronouns in (2) and (3) are called \textbf{fake indexicals}: they show 1\textsuperscript{st} and 2\textsuperscript{nd} person inflection although they do not denote indexical meanings as given in (4b) \textit{→ morphology-semantics mismatch}.

\section*{1.1 Data set without cross-linguistic differences}

Wurmbrand (2017) compares German, English, Icelandic, and Dutch with respect to fake indexical contexts. The following context shows no cross-linguistic differences:

\begin{enumerate}
\item Only I did my\textsuperscript{bv} best. \textit{English}
\item Nur ich habe mein\textsuperscript{bv} Bestes gegeben. \textit{German}
\item Alleen ik heb m'n\textsuperscript{bv} best gedaan. \textit{Dutch}
\item Aðeins ég geri mitt\textsuperscript{bv} besta. \textit{Icelandic}
\end{enumerate}

\begin{flushright}
\textsuperscript{bv} bound variable reading: No one else did their best.
\end{flushright}

\textit{Comment:} This data set does not allow for indexical readings. (6-7) provide examples that allow for both readings.

\begin{enumerate}
\item Context: The speaker talks to a couple of other parents at a back-to-school night and learns that all the other parents do not prepare lunch for their own children.
\item Only I prepare lunch for my\textsuperscript{bv} son. \textit{No one else prepares lunch for his/her own children.}
\item Only I prepare lunch for my\textsuperscript{ind} son. \textit{No one else prepares lunch for my child.}
\end{enumerate}

\begin{enumerate}
\item Context: The speaker assumes that lunch is prepared at school for his/her child that goes there but learns that this is not the case.
\item Only I prepare lunch for my\textsuperscript{bv} son. \textit{No one else prepares lunch for his/her own children.}
\item Only I prepare lunch for my\textsuperscript{ind} son. \textit{No one else prepares lunch for my child.}
\end{enumerate}

\section*{1.2 Data set with a cross-linguistic split}

As Heim (2008) and Kratzer (2009) already noted, we see a cross-linguistic split in relative clause contexts: English permits fake indexicals, German does not. Wurmbrand (2017) observes that Dutch behaves like English, whereas Icelandic patterns with German.
(8) a. I’m the only one who takes care of my\(^{\text{bv}}\) son. \(\sim\) bv-reading: No one else takes care of his/her own son.

b. *Ich bin der einzige, der meinen\(^{\text{bv}}\) Sohn versorgt.* \(\sim\) bv-reading: No one else takes care of his/her own son.

c. *Ik ben de enige die m’n\(^{\text{bv}}\) best gedaan heeft.* \(\sim\) bv-reading: No one else did their best.

d. *Ég er sá eini hérna sem getur séð um börnin mín\(^{\text{bv}}\).* \(\sim\) bv-reading: No one else takes care of their own children.

1.2.1 The gender observation

What separates German and Icelandic from Dutch and English is that the former, but not the latter, exhibit a GENDER distinction on the head noun of the relative clause:

<table>
<thead>
<tr>
<th></th>
<th>English</th>
<th>Dutch</th>
<th>German</th>
<th>Icelandic</th>
</tr>
</thead>
<tbody>
<tr>
<td>F.SG</td>
<td>the only one</td>
<td>de enige</td>
<td>die einzige</td>
<td>sú eina</td>
</tr>
<tr>
<td>M.SG</td>
<td>the only one</td>
<td>de enige</td>
<td>der einzige</td>
<td>sá eini</td>
</tr>
<tr>
<td>PL</td>
<td>the only ones</td>
<td>de enigen</td>
<td>die einzigen</td>
<td>þær einu (FEM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>þær einu (MASC)</td>
</tr>
</tbody>
</table>

Table 1: Wurmbrand (2017) observation

1.3 Does verbal inflection play a role?

Kratzer (2009) observes that fake indexicals in German relative clauses are not unacceptable per se:

(9) *Wir sind die einzigen, die unseren\(^{\text{bv}}\) Sohn versorgen.* \(\sim\) bv-reading: No one else takes care of his/her own son.

She ties this observation to the 1/3 syncretism Germans shown in plural. It seems to be important for bound readings that the agreement affix of the embedded verb is syncretic for the person feature of the head noun and the person feature of the antecedent. Wurmbrand (2017) provides examples that cast doubt on this generalization.

(10) *Ich bin der einzige, der meinen\(^{\text{bv}}\) Kind versorgte.* \(\sim\) bv-reading: No one else takes care of his/her own son.
1.4 Does word order play a role?

Fake indexicals are only possible if their antecedent precedes them, an observation made by Kratzer (2009). Note that this condition is based on output representations: the antecedent nur uns is first-merged as an object and only precedes fake indexical via movement to spec,CP.

(11) a. Nur uns versorgt unser\(^{bv}\) Sohn.  
only us.ACC takes.care our.NOM son  
‘Only we are taken care of by our son.’  
\(\sim\) bv-reading: No one else is taken care of by their own son.

b. Unser\(^{bv}\) Sohn versorgt nur uns.  
our.NOM son takes.care only us.ACC  
‘Our son only takes care of us.’  
\(\sim\) bv-reading: No one else is taken care of by their own son.

c. [Nur uns]\(_1\) versorgt unser Sohn \(_1\)

This observation carries over to examples, given in (5b). (12b) is out because the bound reading is blocked and there is no available indexical reading. Again, the condition is based on output representations.

(12) a. Nur ich habe mein\(^{bv}\) Bestes gegeben.  
only I have my best given  
‘Only I did my best.’  
\(\sim\) bv-reading: No one else did their best.

b. *Mein\(^{bv}\) Bestes habe nur ich gegeben.  
my best have only I given  
‘Only I did my best.’  
\(\sim\) bv-reading: No one else did their best.

c. [Mein Bestes]\(_1\) habe nur ich \(_1\) gegeben.

Wurmbrand (2017) observes that movement to spec,CP is not required. The same effect can be observed with scrambling.

(13) a. weil nur uns unser\(^{bv}\) Sohn versorgt.  
because only us.ACC our.NOM son takes.care  
‘because only we are taken care of by our son’  
\(\sim\) bv-reading: No one else is taken care of by their own son.

b. weil unser\(^{bv}\) Sohn nur uns versorgt.  
because our.NOM son only us.ACC takes.care  
‘because our son only takes care of us’  
\(\sim\) bv-reading: No one else is taken care of by their own son.

c. weil [nur uns]\(_1\) unser Sohn \(_1\) versorgt
Comment: I personally have troubles getting the bound variable readings for (11a) and (13a). Those readings predict that, e.g., (13a) is fine in the following context:

(14) Context: The speaker talks to her partner about other parents’ experience with their sons and how badly they are taken care of by them.

a. ?Uns ist gar nicht klar dass nur uns unser\(^{bv}\) Sohn versorgt.
   us is at.all not clear that only us.ACC our.NOM son takes.care
   ‘We don’t realize that only we are taken care of by our son.’

b. #Uns ist gar nicht klar dass unser\(^{#bv}\) Sohn nur uns versorgt.
   us is at.all not clear that our.NOM son only us.ACC takes.care
   ‘We don’t realize that only we are taken care of by our son.’

Finally, fronted relative clauses seem to block fake indexicals as well, another observation by Wurmbrand (2017). This is shown for Dutch and English (recall those are the languages that permit fake indexicals in relative clauses). Dutch provides the minimal example here because agreement on the matrix verb does not change when the relative clause gets fronted.

(15) a. I’m the only one who has done my\(^{bv}\) best.
   ~ bv-reading: No one else did their best.

b. *The only one who has done my\(^{#bv}\) best is me.
   ~ bv-reading: No one else did their best.

(16) a. Ik ben de enige die m’n\(^{bv}\) best gedaan heeft.
   I am the only one who my best have.3SG
   ‘I am the only one who has done my best.’

b. *De enige die m’n\(^{#bv}\) best gedaan heeft ben ik.
   the only one who my best have.3SG am I
   ‘The only one who has done my best is me.’
   ~ bv-reading: No one else did their best.

Comment: It is interesting that surface word order does not apply to bound variable readings per se, but only to fake indexicals. If we replace the 1\(^{st}\) person pronouns with 3\(^{rd}\) person pronouns, bound variable readings are possible.

(17) a. The only one who has done his\(^{bv}\) best is me.
   ~ bv-reading: No one else did their best.

b. De enige die z’n\(^{bv}\) best gedaan heeft ben ik.
   the only one who his best have.3SG am I
   ‘The only one who has done his best is me.’
1.5 Bound readings for 3rd person pronouns

The last point, shown in (17), touches upon another curious facet of the phenomenon: although 3rd person pronouns are always allowed, their bound variable reading can also be blocked. Simple sentences without a relative clause, see section 1.1, do not allow bv-readings for 3rd person pronouns:

(18) a. Only I take care of his/her\textsuperscript{bv} son. \quad \textit{English}

   b. \textit{Nur ich habe seinen/ihren\textsuperscript{bv} Sohn versorgt.} \quad \textit{German}
   only I have his/her best taken.care

   ‘Only I took care of his/her son.’

   $\triangleright$ bv-reading: No one else takes care of his or her own son.

It looks like binding and agreement seem to depend on each other. Thus, 3rd person pronouns cannot trigger a bound reading because they do not agree with the antecedent. (19) provides a more abstract example of this idea.

(19) Only ANTECEDENT take care of POSS son.

\begin{equation}
\begin{array}{c}
\text{agree/binding}\\
\text{binding}
\end{array}
\end{equation}

This generalization, however, does not carry over to relative clauses, where bound readings are only allowed if binding and agreement is distributed onto different goals.

(20) a. I’m the only one who takes care of his\textsuperscript{bv} son. \quad \textit{English}

   b. \textit{Ich bin der einzige, der seinen\textsuperscript{bv} Sohn versorgt.} \quad \textit{German}
   I am the.M.SG only.one who.M.SG my son take.care.3SG

   ‘I am the only one who takes care of my son.’

   c. \textit{Ég er sá eini héra sem getur sóð um bórmin sín\textsuperscript{bv}.} \quad \textit{Icelandic}
   I am DEM.M.SG only here that.can.3SG see about children SELF

   ‘I am the only one who takes care of his children.’

   $\triangleright$ bv-reading: No one else takes care of his or her own son/their own children.

Again, the structure below makes the operations more explicit.

(21) ANTECEDENT am THE ONLY ONE who takes care of POSS son.

\begin{equation}
\begin{array}{c}
\text{agree}\\
\text{binding}
\end{array}
\end{equation}

1.6 Anaphoric/reflexive possessives in Russian

Russian, like many other languages,\textsuperscript{1} exhibits reflexive possessives, i.e. possessives that behave like anaphora with respect to Principle A. Déchaine and Wiltshcko (2010) observe that only the reflexive possessives can trigger the bound variable reading in VP-ellipsis contexts (sloppy readings).

\textsuperscript{1}Other languages: Bulgarian, Danish, Faroese, \textit{Icelandic}, Koromfé, Macedonian, Norwegian, Romanian, Swedish, Belorussian, Chinese, Czech, Dolakha Newar, Hindi-Urdu, Japanese, Kannada, Kashmiri, Korean, Latin, Lezgian, Malayalam, Mosetén, Old Church Slavonic, Persian, Polish, Proto-Slavonic, Russian, Serbo-Croatian, Slovak, Slovenian, Sorbian, Tamil, Thai, Turkish, Ukrainian, sample taken from (Despić 2015).
We tested reflexive possessives for the data set without the cross-linguistic split.

(22) Context: The speaker talks to a couple of other parents at a back-to-school night and learns that all the parents do not take so much care of their children.

a. *Tolko ja zabochus’ o mojom\textsuperscript{bv} / svojom\textsuperscript{bv} syne.*
   Only I take.care of my/SELF son.
   ‘Only I take care of my son.’
   $\leadsto$ No one else takes care of his/her own son.

b. *Tolko ja zabochus’ o mojom\textsuperscript{ind} / svojom\textsuperscript{ind} syne.*
   Only I take.care of my/SELF son.
   ‘Only I take care of my son.’
   $\leadsto$ No one else takes care of my son.

c. *#Tolko ja zabochus’ o jejo syne.*
   Only I take.care of her son.
   ‘Only I take care of her son.’
   $\leadsto$ No one else takes care of her son.

(23) Context: The speaker expects support in raising his own son, but does not receive it.

a. *Tolko ja zabochus’ o mojom\textsuperscript{bv} / svojom\textsuperscript{bv} syne.*
   Only I take.care of my/SELF son.
   ‘Only I take care of my son.’
   $\leadsto$ No one else takes care of his/her own son.

b. *Tolko ja zabochus’ o mojom\textsuperscript{ind} / svojom\textsuperscript{ind} syne.*
   Only I take.care of my/SELF son.
   ‘Only I take care of my son.’
   $\leadsto$ Nobody except me takes care of my son.

c. *#Tolko ja zabochus’ o jejo syne.*
   Only I take.care of her son.
   ‘Only I take care of her son.’
   $\leadsto$ Nobody except me takes care of her son.

In relative clause contexts Russian permits bound interpretation only with reflexive possessors. With respect to (24a) and (24b), Russian patterns with Icelandic.

(24) a. *Ja edinstvennaja, kto zabotitsja o svojom\textsuperscript{bv} syne.*
   I’m the.only.one.F.SG who takes.care of SELF son.
   ‘I’m the only one who takes care of my son.’

b. *Ja edinstvennaja, kto zabotitsja o mojom\textsuperscript{bv} syne.*
   I’m the.only.one.F.SG who takes.care of my son.
   ‘I’m the only one who takes care of my son.’

c. *Ja edinstvennaja, kto zabotitsja o jejo\textsuperscript{bv} syne.*
   I’m the.only.one.F.SG who takes.care of her son.
   ‘I’m the only one who takes care of her son.’
   $\leadsto$ bound variable (bv) reading: No one else takes care of his/her son.
2 Previous accounts

2.1 Kratzer (2009)

*Observation:* Bound variable readings for 1st and 2nd pronouns are available only if those pronouns have person and number features compatible with those of a local verbal inflectional head.

⇒ compare German (5b), (8b), and (9)
⇒ problematic: relative clauses in Dutch and English
⇒ also problematic: Russian SELF in (22a)

Apart from traditional *downward Agree*, Kratzer assumes two additional φ-feature related operations which are needed in binding configurations (both instances of *upward Agree*):

(25) *Feature Transmission under Binding:*

The φ-feature set of a bound DP unifies with the φ-feature set of the verbal functional head that hosts its binder.

(26) *Predication (Specifier-Head Agreement under Binding):*

When a DP occupies the specifier position that carries a λ-operator, their φ-feature sets unify.

Pronouns are minimal: they acquire their φ-features from the head that hosts their binder. For possessive pronouns, the binder is introduced by v, for relative pronouns the binder is introduced by C. φ-features are shared (Pesetsky and Torrego 2007) between the verbal head, the pronoun, and the DP that sits in the specifier position of the head.

(27) Only I take care of my son.

Binding is done by the next local functional head (v or C), introducing the binder, i.e. λn above. This account can derive the core binding facts for reflexive pronouns. See appendix for an example.

*Morpho-semantic mismatch:* A pronoun denotes an index. (25) provides the right agreement morphemes but those acquired features are invisible to interpretation.
Additional assumptions for relative clauses:

- the head of the relative clause moves out of the relative CP (Bhatt 2002)
- feature sharing with the features of the head of the relative clause \([\phi : \beta]\) is postponed until post-syntax, see (28c)
- \(\phi\)-features of the possessive pronoun are born on \(v\) (last resort since the relative pronoun is also minimal)
- there are no 3\(^{rd}\) person features (Benveniste 1971), relative pronouns are specified for gender, a feature which originates on the head noun of the relative clause

(28) (I am the) only one who takes care of my son.

\[\text{(28) (I am the) only one who takes care of my son.}\]
Spell-out dilemmas

Idea: \( \phi \)-features \( \beta \) contribute a gender value, \( \phi \)-features \( \alpha \) contribute number and person values. The possessive pronoun (n), the relative pronoun (m) and T must all find exponents that can spell-out gender and person features at the same time.

Assumption: A spell-out dilemma arises when two vocabulary items are both compatible with the \( f \)-morpeme and equally specific.

Relevant \( f \)-morphemes \( \phi : \alpha + \beta \)

1. \([\text{MALE},1,\text{SG}] \rightarrow (8a)^{\check{b}v} \text{ and } (8b)^{\check{b}v}\)
2. \([\text{MALE},1,\text{PL}] \rightarrow (9)^{\check{b}v} \text{ and } \text{We are the only ones who take care of our child.}^{\check{b}v}\)
3. \([\text{MALE},\text{SG}] \rightarrow (20a)^{\check{b}v} \text{ and } (20b)^{\check{b}v}\)

No problem arises with relative pronouns.

(a) VIs for English relative pronouns:
   a. /which/ \( \rightarrow [\text{WH,THING}]\)
   b. /who/ \( \rightarrow [\text{WH}]\)

(b) VIs for German relative pronouns:
   a. /der/ \( \rightarrow [D,\text{MALE,SG}]\)
   b. /die/ \( \rightarrow [D,\text{FEM,SG}]\)
   c. /das/ \( \rightarrow [D,\text{THING,SG}]\)
   d. /die/ \( \rightarrow [D]\)
T morphemes create spell-out dilemmas for German in 1. For English, 1\textsuperscript{st} be is problematic: I'm the only one who is brushing my teeth.\textsuperscript{76}\textsuperscript{bo}

(31) **VIs for English T:**

a. /-s/ $\leftrightarrow$ [THING, MALE, FEM],SG
b. /-∅/ $\leftrightarrow$ [THING, MALE, FEM],SG

(32) **VIs for German T:**

a. /-e/ $\leftrightarrow$ [1,SG]

Possessive pronoun also create spell-out dilemmas in German and English for 1.

(33) **VIs for English possessive pronouns:**

a. /my/ $\leftrightarrow$ [1,SG,POSS]
b. /her/ $\leftrightarrow$ [FEM,SG,POSS]
c. /his/ $\leftrightarrow$ [MALE,SG,POSS]
d. /our/ $\leftrightarrow$ [THING,SG,POSS]
e. /your/ $\leftrightarrow$ [1,POSS]
f. /their/ $\leftrightarrow$ [POSS]

g. /are/ $\leftrightarrow$ [ ]

(34) **VIs for German possessive pronouns:**

a. /mein/ $\leftrightarrow$ [1,SG,POSS]
b. /dein/ $\leftrightarrow$ [2,SG,POSS]
c. /sein/ $\leftrightarrow$ [THING, MALE],SG,POSS]
d. /ih/ $\leftrightarrow$ [FEM,SG,POSS]
e. /unser/ $\leftrightarrow$ [1,POSS]
f. /euer/ $\leftrightarrow$ [2,POSS]
g. /ih/ $\leftrightarrow$ [POSS]

**Summary:**

- 2 and 3 contexts do not lead to spell-out dilemmas, hence bv-readings are correctly predicted
- 1 contexts for German create spell-out dilemmas, hence the lack of bv-readings is correctly predicted
- 1 contexts for English also lead to spell-out dilemmas $\rightarrow$ problem

**Additional assumption for English:** Nominal gender feature are marked in English, and thus can be ignored. This resolves the mismatch situation and enables bound possessive pronouns to show up in 1\textsuperscript{st} or 2\textsuperscript{nd} person. Evidence comes from other mismatch contexts.
(35)  a. The teacher and I have done our/*their best to fix the problem.
        b. The teacher and you have done your/*their best to fix the problem.

(36)  a. A friend of mine forgot their lunchbox.
        b. Nobody has lost their job.

2.2 Wurmbrand (2017)

Observation: What matters for the possibility of fake indexicals is that the antecedent c-commands the (to be) bound pronoun.
⇒ see word order effects, presented above

Wurmbrand is more explicit than Kratzer about the direction of Agree: since the pronoun receives its $\phi$-features from a c-commanding antecedent, we can consider this a case of \textit{upward Agree}.

(37) Only I take care of my son.

\[
\begin{array}{c}
\text{DP} \\
i\phi:1.SG
\end{array}
\quad \cdots \quad \cdots \\
\begin{array}{c}
\text{PRON} \\
\phi: \Box
\end{array}
\]

(38) \textit{Reverse (upward) Agree:}
    A feature $F: \Box$ an $\alpha$ is valued by a feature $F: \text{val}$ on $\beta$, iff $\beta$ c-commands $\alpha$.

\textbf{Morpho-semantic mismatch:}
→ two types of $\phi$-features in syntax (Smith 2015): interpretable ($iF$) and uninterpretable ($uF$); only $iF$s reach LF, only $uF$s reach PF
→ (to be) bound pronouns inserted with $uF$s only, no $iF$s
→ Agree translates as binding on LF (index sharing)

\textbf{Additional assumptions for relative clauses:}

• three semantic operations establish a feature sharing chain (in the sense of Pesetsky and Torrego 2007):

(39) I $\downarrow_{\text{DP}}$ the only one who $\downarrow_{\text{PREDCATION}}$ (only one) who $\downarrow_{\text{RELATIVIZATION}}$ POSS $\downarrow_{\text{BINDING}}$

• Locality matters!
(40) Rule $H_{PF}$: A variable $x$ cannot Agree with an antecedent $\alpha$, in cases where a more local antecedent $\beta$ could Agree with $x$ and share morphosyntactic features with $x$.

• the cross-linguistic split in relative clauses is accounted for by a filter (41) that repairs certain feature combinations. Languages like German and Icelandic whose relative pronouns are encoded for gender will fall under this filter

(41) Markedness filter: *[GENDER,PARTICIPANT]

(42) I am the only one who takes care of my $^b\eta$/her $^v\eta$ son.  

Feature sharing between the antecedent in the matrix clause and the pronoun in the relative clause is blocked by (41). Hence, 1.SG pronouns cannot occur. The pronoun is spelled out as 3.SG, because the person feature is not valued. (This is slightly different from Kratzer who assumes radically underspecified 3.SG exponents.)

Rule $H_{PF}$ ensures that the possessive pronoun enters an Agree relation with the relative pronoun first and with the antecedent at a later stage of the derivation.

In (43) and (44) the markedness filter is not violated because the relative pronoun does not inflect for gender, this captures the observation made in section 1.2.1.
(43) We are the only ones who takes care of our\textsuperscript{\(\text{bv}\)} son. \textit{German/English/Dutch}

(44) I am the only one who takes care of my\textsuperscript{\(\text{bv}\)} son. \textit{English/Dutch}
Problem: T-Agree

- embedded T has to be invisible for the Agree relation originating from the antecedent

- 2 solutions:
  - T-Agree is strictly local, 1st person feature comes too late
  - embedded T-Agree with the matrix subject is not related to a semantic operation and hence invisible (also: PREDICATION does not involve morphological feature sharing)

\[(45) \text{Er ist die einzige Person, die...} \quad \text{German}
\]
\[
\text{he is the.FEM only person who.FEM}
\]
\`
He is the the only person who...
``

References


