The Distribution of Pronouns and the Elsewhere Principle

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1. THE PROPOSAL

The distribution of reflexive and nonreflexive pronouns is subject to an Elsewhere Principle. We derive this distribution in terms of

(i) a minimalist syntax manipulating formal features, and
(ii) post-syntactic lexical insertion, as in the framework of Distributed Morphology (DM; Halle & Marantz 1993, Harley & Noyer 1999).

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2. THE ELSEWHERE PRINCIPLE IN THE DISTRIBUTION OF PRONOUNS

2.1. The Elsewhere Principle (Panini’s Principle)

(1) Elsewhere Principle (Anderson 1992:132; see also Kiparsky 1973)
Application of a more specific rule blocks that of a later more general one

(2) ‘to be’, present tense, indicative

<table>
<thead>
<tr>
<th></th>
<th>sg</th>
<th>pl</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>am</td>
<td>are</td>
</tr>
<tr>
<td>2</td>
<td>are</td>
<td>are</td>
</tr>
<tr>
<td>3</td>
<td>is</td>
<td>are</td>
</tr>
</tbody>
</table>

(3) a. 1P, sg ↔ am
b. 3P, sg ↔ is
c. elsewhere ↔ are
2.2. The Elsewhere Principle and pronouns

(4) Nonreflexive pronouns can assume reflexive functions when a dedicated class of reflexive pronouns is lacking. When dedicated reflexive pronouns are available, pronouns express nonreflexive meaning (disjoint reference, Condition B effect).

(5) |
| **Standard Dutch** |
| **(sg, acc, weak)** |
| nonrefl. | reflexive |
| 1 | me |
| 2 | je |
| 3m | hem |
| 3f | haar |
| 3n | het |
| 3f | zich |

(6) a. Jan, heeft zich i/*j gewassen. (reflexive/*nonreflexive)
    ‘Jan washed himself.’
b. Jan, heeft hem i/*j gewassen. (*reflexive/nonreflexive)
    ‘Jan washed him.’

(7) **Standard Dutch, 3P**
reflexive meaning ↔ dedicated reflexive pronoun (e.g. zich)
nonreflexive meaning (‘elsewhere’) ↔ pronoun

(8) a. Ik, heb me i gewassen. (reflexive/nonreflexive)
    ‘I washed myself.’
b. Jan, heeft me i/*j gewassen. ‘Jan washed me.’

(9) a. Jij, heb je i/*j gewassen. (reflexive/nonreflexive)
    ‘You washed yourself.’
b. Jan, heeft je i/*j gewassen. ‘Jan washed you.’

(10) **Standard Dutch, 1P and 2P**
reflexive meaning ↔ pronoun
nonreflexive meaning ↔ pronoun

➢ In sum: 3P contrasts with 1/2P because there is a dedicated reflexive form for 3P that is lacking in 1/2P:
➢ Problem: this intuition is inexpressible in traditional theories of reflexivity

2.3. Possessive pronouns

➢ English (Dutch, German, French, etc.): no dedicated reflexives:

(11) a. They like [3P each other’s bags].
b. He likes [3P his dog] (reflexive/nonreflexive)
Swedish: dedicated reflexive

(12) a.  Hon, ser sin_{i/j} man.
       ‘She sees her husband.’

(13) a.  Ioannes, sororem suam_{i/j} vidit.
       ‘Ioannes saw his sister.’

(14) a.  On, uze rasskazal mne o svoej_{i/g} zizni.
       ‘He had already told me about his life.’

(15) a.  Jørgen, elsker sin_{i/j} kone.
       Jørgen loves self’s wife

(16) a.  *De, elsker sine, koner.
       They love self’s wives

Danish (Pica 1985): dedicated reflexive in singular, not in plural

(17) a.  Max gedraagt zich/*zichzelf.  
       Max behaves REF L/REFL_self
       ‘Max behaves himself.’

Latin (Bertocchi & Casadio 1980): dedicated reflexive

(13) a.  Ioannes, sororem suam_{i/j} vidit.
        ‘Ioannes saw his sister.’

Russian (Timberlake 1979): dedicated reflexive

(14) a.  On, uze rasskazal mne o svoej_{i/g} zizni.
        ‘He had already told me about his life.’

2.4. Languages without dedicated simplex reflexive forms

(17) a.  Max gedraagt zich/*zichzelf.  
       Max behaves REF L/REFL_self
       ‘Max behaves himself.’

(18) a.  Max, hâld him/*himsels,
       Max behaves him/himself
       ‘Max behaves himself.’

(19) a.  Max, gedraagt ‘em/*z’n eigen.  
       Max behaves him/his own
       ‘Max behaves himself.’
b. Max, haat z’n eigen/*’em.
   Max hates his own/him
   ‘Max hates himself.’

2.5. Reflexive pronouns and clitics in Romance

➢ French reflexive pronoun *soi* is limited to:
   • the complement of prepositions
   • impersonal or quantified antecedents.

(20) a. Jean, se lave.
   ‘Jean washes himself.’

b. Chacun/on/persone, ne prend soin de soi.
   ‘Everyone/one/nobody takes care of himself.’

c. *Jean, prend soin de soi.
   ‘Jean takes care of himself.’

(21) a. Chacun prend soin de lui/*i*/j.
   ‘Everyone takes care of him.’

b. Jean, prend soin de lui/*i*/j.
   ‘Jean takes care of himself/him.’

➢ Italian reflexive pronoun *sé* is limited to:
   • the complement of prepositions

(22) Gianni ha vergogna di *lui/*sé.
   Gianni has shame of him/refl
   ‘Gianni is ashamed of himself.’

3. Distributed Morphology

(23) a. Classical (‘lexicalist’) view:
   I. Lexicon → II. Syntax

b. Distributed lexicon view:
   I. Functional Lexicon → II. Syntax → III. Content Lexicon (Encyclopedia)

➢ The Functional Lexicon contains:
   (a) morpho-syntactic features: φ-features (person, number, gender), (in)definiteness, quantifiers, tense, etc.

   (b) roots √ (placeholders for content words, to be inserted post-syntactically)

➢ Lexical insertion occurs post-syntactically

➢ Lexical insertion provides (morpho)syntactic features with a phonological expression.

(24) The cat slept
I. Functional lexicon:

   [+def] \[\{P:3, N:sg, G:m\}\] [+Past] √√

II. Syntax:

   \[CP C [TP [DP [+def] \[\{\text{NumP} \text{[Num} \{P:3, N:sg, G:m\}\} \text{[NP \ } \sqrt \]}\]\[\text{[+Past]\text{[}vP \sqrt\]}]]\]
III. After post-syntactic lexical insertion:

\[
[C_P \left[ TP \left[ DP \text{ the cat } \right] T^o \left[ VP \text{ slept } \right] \right] ]
\]

(25) You\[pl\] are crazy!

\[
[\left[ DP \left[ \text{Num} \{P:2, N:pl\} \right] \text{ ... } \left[ T \{P:2, N:pl\} \text{ ... } \right] \right]
\]

Post-syntactic lexical insertion: Vocabulary Items (VIs) specify a relation between a morpheme (i.e. a feature bundle) and a phonological exponent.

(26) a. \{P:1, N:sg\} ↔ am

b. \{P:3, N:sg\} ↔ is

c. elsewhere ↔ are

Two crucial features of VIs:

- Underspecification
- Competition

(27) Subset Principle (Halle 1997:428)
The phonological exponent of a Vocabulary Item is inserted into a morpheme in the terminal string if the item matches all or a subset of the grammatical features specified in the terminal morpheme. Insertion does not take place if the Vocabulary Item contains features not present in the morpheme. Where several Vocabulary Items meet the conditions for insertion, the item matching the greatest number of features specified in the terminal morpheme must be chosen.

4. The Syntax of Reflexivity

(28) φ-features

PERSON: 1, 2, 3
NUMBER: sg, pl
GENDER: masc, fem, neuter

(29) Syntax of Reflexive Relationships


\[
[DP \{P:-, N:-, G:-\}]
\]

b. These features are valued through an Agree relationship with the antecedent (goal).

c. Agree does not copy feature values, but causes feature values to be shared by probe and goal (cf. Frampton & Gutmann 2000, 2006)

(30) Agree

a. Agree involves a probe \( \alpha \) that has one or more unvalued features and a goal \( \beta \) that has matching (i.e. identical) valued features.

b. Agree is an asymmetric feature valuation operation that values the features of probe \( \alpha \) with the features of goal \( \beta \) at a distance in a local domain.

c. \( \alpha \) (probe) c-commands \( \beta \) (goal) and there is no potential alternative goal \( \gamma \) such that \( \alpha \) asymmetrically c-commands \( \gamma \), and \( \gamma \) asymmetrically c-commands or dominates \( \beta \).
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(31) a. \{p:3, N:sg, G:m\} lexically valued features (e.g. goal)
b. \{p:, N:, G:\} unvalued features (probe)
c. \{p:*, N:sg*, G:m*\} features valued after Agree (probe)

(32) \[\text{[XP} \{p:, N:, G:\}\} \rightarrow \text{[VP} \{p:3, N:sg, G:m\}\}]] \quad \text{(reflexive)}

(33) \[\text{[XP} \{p:3, N:sg, G:m\}\} \rightarrow \text{[VP} \{p:3, N:sg, G:m\}\}]] \quad \text{(nonreflexive)}

In (32), the reflexive c-commands its antecedent, which is the opposite of traditional theories of reflexivity. Possible solutions:

- Low Nominative Hypothesis (Sigurdsson 2006)

Simplex anaphors start out in a configuration where traditional c-command relationships are reversed, i.e. where the anaphor c-commands its antecedent.

Complex anaphors move to a position c-commanding their antecedent.

5. THE POST-SYNTAX OF REFLEXIVITY

5.1. Semantic interpretation

a DP that has shared feature values, like DP₂ in (32), is interpreted as referentially dependent on the DP it shares its features with (DP₁ in (32))

two DPs that have lexically specified \(\varphi\)-features, as in (33), receive a default interpretation of disjoint reference.

5.2. Morphology/Lexical insertion

5.2.1. German

(34)

<table>
<thead>
<tr>
<th>German</th>
<th>nonreflexive</th>
<th>reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nominative</td>
<td>dative</td>
</tr>
<tr>
<td>1sg</td>
<td>ich</td>
<td>mir</td>
</tr>
<tr>
<td>2sg</td>
<td>du</td>
<td>dir</td>
</tr>
<tr>
<td>3sg.masc</td>
<td>er</td>
<td>ihm</td>
</tr>
<tr>
<td>3sg.fem</td>
<td>sie</td>
<td>ihr</td>
</tr>
<tr>
<td>3sg.neut</td>
<td>sie</td>
<td></td>
</tr>
<tr>
<td>1pl</td>
<td>wir</td>
<td></td>
</tr>
<tr>
<td>2pl</td>
<td>ihr</td>
<td></td>
</tr>
<tr>
<td>3pl.masc</td>
<td>sie</td>
<td>ihnen</td>
</tr>
<tr>
<td>3pl.fem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3pl.neut</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6
(35) **Vocabulary Items (Insertion Rules)**

a. \{P:1, N:sg\} ↔ ich / ____ nominative Case  
b. \{P:1(*), N:sg(*)\} ↔ mir / ____ dative Case  
c. \{P:1(*), N:sg(*)\} ↔ mich / ____ accusative Case  
d. \{P:2, N:sg\} ↔ du / ____ nominative Case  
e. \{P:2(*), N:sg(*)\} ↔ dir / ____ dative Case  
f. \{P:2(*), N:sg(*)\} ↔ dich / ____ accusative Case  
g. \{P:1, N:pl\} ↔ wir / ____ nominative Case  
h. \{P:1(*), N:pl(*)\} ↔ uns / ____ accusative Case  
i. \{P:2(*), N:pl(*)\} ↔ euch / ____ accusative Case  
j. \{P:3(*)\} ↔ sich  
k. \{P:3, N:sg, G:m\} ↔ er / ____ nominative Case  
l. \{P:3, N:sg, G:m\} ↔ ihn / ____ accusative Case  
m. \{P:3, N:sg, G:m\} ↔ ihm / ____ dative Case  
n. \{P:3, N:pl\} ↔ ihnen / ____ dative Case  
o. \{P:3, N:sg, G:n\} ↔ es  
p. \{P:3\} ↔ sie  
q. elsewhere ↔ ihr

(36) a. Ich liebe mich. (reflexive)  
I love myself  
b. Johannes liebt mich. (nonreflexive)  
Johannes loves me

mich liebt ich  
→ (35c) applies

(38) a. Johannes liebt sich. [German]  
Johannes loves himself  
b. Johannes liebt ihn.  
Johannes loves him

sich liebt  
→ (35j) applies

Johannes liebt ihn  
→ (35l) applies
5.2.2. Brabant Dutch

(41)

<table>
<thead>
<tr>
<th>Brabant Dutch</th>
<th>nonreflexive</th>
<th>reflexive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>subject form</td>
<td>object form</td>
</tr>
<tr>
<td></td>
<td>strong</td>
<td>weak</td>
</tr>
<tr>
<td>1sg</td>
<td>ik</td>
<td>'k</td>
</tr>
<tr>
<td>2sg</td>
<td>gij</td>
<td>de</td>
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<tr>
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<td>hij</td>
<td>'m</td>
</tr>
<tr>
<td>3sg.fem</td>
<td>zij</td>
<td>ze</td>
</tr>
<tr>
<td>3sg.neut</td>
<td>het</td>
<td>'t</td>
</tr>
<tr>
<td>1pl</td>
<td>wijle</td>
<td>we</td>
</tr>
<tr>
<td>2pl</td>
<td>gijle</td>
<td>ulle</td>
</tr>
<tr>
<td>3pl</td>
<td>zij</td>
<td>ze</td>
</tr>
</tbody>
</table>

(42) Jan, heed 'm/i gewasse. [Flemish Brabant Dutch]
Jan has him washed.
'Jan washed him(self).'

(43) \{P:3(*), N:sg(*), G:m(*)\} ↔ 'm / ___ accusative Case, weak

6. COMPETITION BETWEEN VOCABULARY ITEMS

- Diachronic and synchronic relationships between reflexive systems:

<table>
<thead>
<tr>
<th>reflexive meaning</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
</tr>
</thead>
<tbody>
<tr>
<td>pronoun</td>
<td></td>
<td></td>
<td>reflexive</td>
</tr>
<tr>
<td>nonreflexive meaning</td>
<td>pronoun</td>
<td>pronoun + reflexive</td>
<td>pronoun</td>
</tr>
</tbody>
</table>

- These relationships become apparent in
  - diachronic evolutions
  - L1 acquisition

6.1. Diachronic evolutions

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(44) a. Wyp þe tokene he gan hym blesse. [Middle English]
   With the token he began to bless himself
   ‘With the token he began to bless himself.’
   (Robert Mannyng, Handlyng Synne, line 3875, quoted in Keenan 2002)

b. Hys ryȝt hand vp he lyfte and blessede hym-self stedfastly.
   His right hand up he lifted and blessed himself steadfastly
   ‘He lifted his right hand up and blessed himself steadfastly.’
   (Robert Mannyng, Handlyng Synne, line 3588, quoted in Keenan 2002)

➢ In S2 (350 years!), pronouns and self-forms coexist for the expression of reflexive meaning. Self-forms are analysed as syntactically complex DPs (cf. Sinar 2006).
➢ In S3, self-forms cease to be syntactically compositional: they are grammaticalized as reflexive pronouns (cf. Sinar 2006). Pronouns are no longer used as reflexives, pronouns indicate disjoint reference.
➢ Grammaticalisation = loss of syntactic complexity → integration into the pronominal paradigm → competition between VIs.

6.2. L1 acquisition

<table>
<thead>
<tr>
<th>English</th>
<th>S1</th>
<th>S2</th>
<th>S3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>below 3</td>
<td>3-8 yrs</td>
<td>8 and older</td>
</tr>
<tr>
<td>reflexive meaning</td>
<td>her(self)</td>
<td>her + herself</td>
<td>herself</td>
</tr>
<tr>
<td>nonreflexive meaning</td>
<td>her(self)</td>
<td>her</td>
<td>her</td>
</tr>
</tbody>
</table>

➢ Delay of Principle B Effect (DPBE):
   • English (Jakubowicz 1984, Chien & Wexler, 1990; Grodzinsky & Reinhart, 1993; Thornton & Wexler, 1999)
   • Dutch (Koster 1993, Philip and Coopmans 1996)
   • Russian (Avrutin & Wexler, 1992)

(45) a. Sue, thinks that Sally saw her
b. Sue, thinks that Sally saw herself

➢ Clitic Exemption Effect (CEE, Baauw 1999):
   • Italian (McKee 1992)
   • Spanish (Padilla 1990, Baauw, Escobar & Philip 1997)
   • Catalan (Escobar & Gavarró 2001).

(46) a. Gianni loi/j asciuga
John him-cl dries
   ‘John dries him.’

   [Italian child and adult language]
Additional languages with Exemption Effect (EE)

- German (Ruigendijk 2007)
- Icelandic (Sigurjónsdóttir & Hyams 1990)

What makes Dutch (English, Russian) different from German and Icelandic (and Romance)?

<table>
<thead>
<tr>
<th>Dutch</th>
<th>German</th>
<th>Icelandic</th>
</tr>
</thead>
<tbody>
<tr>
<td>non-reflexive</td>
<td>reflexive</td>
<td>non-reflexive</td>
</tr>
<tr>
<td>ACC/DAT/GEN</td>
<td>ACC/DAT/GEN</td>
<td>ACC/DAT/GEN</td>
</tr>
<tr>
<td>1 me</td>
<td>me</td>
<td>mich</td>
</tr>
<tr>
<td>mig/mér/min</td>
<td>mig/mér/min</td>
<td></td>
</tr>
<tr>
<td>2 je</td>
<td>je</td>
<td>dich</td>
</tr>
<tr>
<td>þig/þér/þín</td>
<td>þig/þér/þín</td>
<td></td>
</tr>
<tr>
<td>3 hem</td>
<td>zich</td>
<td>ihn</td>
</tr>
<tr>
<td>hann/honum/hans</td>
<td>sig/sér/sín</td>
<td></td>
</tr>
</tbody>
</table>

DPBE is due to the fact that it may take a while before the child recognizes pronouns and anaphors as forming part of the same pronominal system, i.e. as competing VIs.

(C)EE is explained by the fact that morphosyntax in certain cases makes pronouns more easily recognizable as belonging to a pronominal paradigm, and therefore as competing VIs.

7. CONCLUSION

- Both across languages and language-internally, we observe that the distribution of reflexive and nonreflexive pronouns is subject to an Elsewhere Principle.
- We accounted for this distribution in terms of
  - (i) a minimalist syntax manipulating formal features, and
  - (ii) post-syntactic lexical insertion
- The emergence of dedicated reflexives (both diachronically and in L1 acquisition) may suffer a delay, which is due to a delay in the analysis by the native speaker of two VIs as being in competition.

8. REFERENCES


Frampton, John and Sam Gutmann. 2000. Agreement is feature sharing. Ms. Northeastern University, Boston.


