Postal (1968)

$\text{D}^{+\text{pro}}$

- all
- these/those
- some
- we
- this/that
- --
- --
- --

$\text{D}^{-\text{pro}}$

- all men
- these/those men
- some men
- we men
- this/that man
- our man
- the man
- every man

may hit the ball
Deictic words are

Situation bound gestures and fixed sounds for person, place, and time of the speech situation

proximal
here
I
this
now

distal
there
you
that
then
Deictic hints

Natural human language is suffused with deictic hints

1) Time & aspect deixis in the predicate: I-marking
2) Person, number & place deixis in arguments: D-marking

The acquisition of I°-marking and D°-marking are the acquisition of deictic dimensions of our shared world
Where do deictic elements fit in?
deterioration of the Case system $\rightarrow$ introduction of articles

<table>
<thead>
<tr>
<th>Proper names</th>
<th>Mass nouns</th>
<th>Count nouns</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>−</td>
<td>+</td>
</tr>
<tr>
<td>Italian</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Dutch</td>
<td>−</td>
<td>+</td>
</tr>
</tbody>
</table>

(Longobardi 1994)
The Acquisition of D-marking Week 2-Thursday 5

Dutch child: Acquisition of D-marking

Sarah (Van Kampen corpus, CHILDES)

Noun phrases that realize D° in obligatory contexts
Graph A: Sentences that realize V<+fin> in ≥ 2-word utterances
Graph B: Noun phrases that realize D⁰ in obligatory contexts

Sarah (Van Kampen corpus, CHILDES)
Graph A: Sentences that realize \(V^{<+\text{fin}>}\) in \(\geq 2\)-word utterances
Graph B: Noun phrases that realize \(D^o\) in obligatory contexts
Dutch child: \(<+{\text{pro}}\) free anaphors

Sarah (Van Kampen corpus, CHILDES)

Ratio of 3rd person pronouns w.r.t. nouns measured as a percentage of the ratio in the speech of the mother within the same files.
The Acquisition of D-marking Week 2-Thursday 9

Dutch child: D-marking and <+pro> free anaphors

Sarah (Van Kampen corpus, CHILDES)

Graph B: Noun phrases that realize D₀ in obligatory contexts
Graph C: Ratio of 3rd person pronouns w.r.t. nouns
Williams (1994)

Williams 1994

\(<D>\) is
- referential argument marking
- theta-assignment

Theta-role assignment \(\iff\) \{\(<R> / \text{case, article}\)\}

Different theta-roles require different points \(<R>\)
Is there a universal acquisition order I > D?

a. Dutch: yes
b. French: yes (Van Kampen 2002)
c. English: perhaps
### French child: D-marking and free anaphors: subjects

<table>
<thead>
<tr>
<th>age</th>
<th>subject-clitic + topic-adjunct</th>
<th>D-marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1;9.18-28</td>
<td>89%</td>
<td>7%</td>
</tr>
<tr>
<td>1;10.20</td>
<td>78%</td>
<td>6%</td>
</tr>
<tr>
<td>1;11.22</td>
<td>78%</td>
<td>3%</td>
</tr>
<tr>
<td>2;0.5</td>
<td>95%</td>
<td>14%</td>
</tr>
<tr>
<td>2;1.25</td>
<td>— *</td>
<td>53%</td>
</tr>
<tr>
<td>2;3.0</td>
<td>61%</td>
<td>60%</td>
</tr>
<tr>
<td>2;5.1</td>
<td>37%</td>
<td>97%</td>
</tr>
<tr>
<td>2;5.13-27</td>
<td>35%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* too small numbers

- a. ours tombe
- b. il/elle tombe
- c. ours, il tombe

('bear falls') ('he/she falls') ('bear, he falls')
French child: D-marking and free anaphors: subjects

Grégoire (Champaud corpus, CHILDES)

Graph A: Perc. of topic adjunct + subject clitic (‘ours, il tombe’)
Graph B: Noun phrases that realize D° in obligatory contexts
French child: D-marking and free anaphors: subjects

Grégoire (Champaud corpus CHILDES)

<table>
<thead>
<tr>
<th>age</th>
<th>A. subject-clitic + topic</th>
<th>B. D-marking</th>
<th>(\downarrow) D-marking acquired</th>
</tr>
</thead>
<tbody>
<tr>
<td>1;9.18-28</td>
<td>89%</td>
<td>7%</td>
<td></td>
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</table>

*too small numbers

A. Fall in % of topic+subject-clitic w.r.t. ‘bare’ subject-clitics
   ‘ours, il tombe’, versus ‘il tombe’

A. Rise of D-marking before nouns
French child: D-marking and free object anaphors

Grégoire (Champaud corpus, CHILDES)

Graph: Noun phrases that realize D° in obligatory contexts
French child: I-marking and D-marking

Grégoire (Champaud corpus, CHILDES)

Graph A: Sentences that realize $V^{<+\text{fin}}$ in $\geq 2$-word utterances

Graph B: Noun phrases that realize $D^o$ in obligatory contexts
French acquisition order

a. $D< \text{ pro}> \approx D<+\text{pro}>$

b. I-marking $> D$-marking

a. The two UG acquisition conjectures are confirmed for French.

b. No grammatically marked predicate, means no grammatically marked argument.
The grammar of English has a few unpleasant properties

1) English has no morphological I-marking to speak of.

2) Systematic I-marking is late and probably follows the EPP (subject requirement).

3) The subject pronouns \{he/she/it\} appear as situation deixis elements quite early (before D-marking of nouns). They seem to realize the EPP.

All these questions wait for research
Order I-marking > D-marking Week 2-Thursday 19

English: acquisition of I-marking and D-marking

Research plan for English.

a. Construct the D-graph (obligatory Do before nouns).

b. Construct the graph for 3rd object pronouns \{him/her/it\}.

c. Construct the graph for 3rd subject pronouns \{he/she/it\}. Is there a marked rise after the acquisition of D-marking?

d. Construct the graph for the rise of be. Is be-insertion before or after D-marking?


Conjecture: - be/do-insertion are I-marking
- be/do-insertion precede D-marking
- English I-marking precedes D-marking as well