(The) most in Dutch: Definiteness and Specificity

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Introduction

(1) Jan heeft de meeste bergen beklommen.
John has the\textsuperscript{pl.masc.} most mountains\textsuperscript{pl.masc.} climbed
John climbed (the) most mountains.

Two different readings:
1. Absolute: “John climbed more mountains than he didn’t climb”
2. Relative: “John climbed more mountains than the other climbers did”

(2) Jan heeft het meeste bergen beklommen.
John has the\textsuperscript{sing.neut.} most mountains\textsuperscript{pl.masc.} climbed
John climbed the most mountains.

The article \textit{het} ‘the’ does not agree with the noun \textit{bergen} ‘mountains’. (2) only has a relative reading.

**Claim 1:** In Dutch, the distribution and the different readings are linked to definiteness and specificity.

**Claim 2:** In Dutch, there are two different structures underlying \textit{de meeste} and \textit{het meeste}. Either D agrees with the head noun, or it doesn’t.
Outline

1. Analysis of English superlatives
   a. Absolute reading
   b. Relative reading
   c. Definiteness

2. Analysis of English *most*
   a. Absolute reading
   b. Relative reading
   c. Definiteness

3. Analysis of Dutch *de meeste* and *het meeste*
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   b. Dutch data
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   d. Claim 2: two different syntactic structures

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English superlatives

Analysis of superlatives by Heim (1999) and Szabolcsi (1986).

- Two different readings:
  - absolute reading
  - relative reading.
John climbed the highest mountain.

\[ \llbracket \text{-est } C \rrbracket_i \llbracket d_i\text{-high mountain} \rrbracket = \lambda x. \forall y \in C \ [y \neq x \rightarrow \max \{d: x \text{ is a } d_i\text{-high mountain}\} > \max \{d: y \text{ is a } d\text{-high mountain}\}] \]
John climbed the highest mountain.

\[ \llbracket \llbracket \text{-est } C \rrbracket_i \llbracket \text{climbed } [d_i\text{-high mountain}] \rrbracket \rrbracket = \lambda x. \forall y \in C \ [y \neq x \rightarrow \max \{d : x \text{ climbed a } d\text{-high mountain}\} > \max \{d : y \text{ climbed a } d\text{-high mountain}\} ] \]
English superlatives: definiteness

Heim (1999):

• The the which appears on the surface is semantically vacuous.

• On a deeper level, the represents the definite or the indefinite article.
  - Definite in absolute readings.
    The DP acts as an island, which prevents movement of [C -est] out of the DP.
  - Indefinite in relative readings.
    [C -est] can move out of the DP to adjoin to [SPEC, VP].
English *most*

Analysis of *most* by Hackl (2009).

- *Most* is the superlative of *many*.
- Two different readings:
  - absolute (or proportional) reading
  - relative reading.
- The two different readings are triggered by the presence or absence of *the*.

(3) (a) John climbed most mountains. (absolute)
    (b) John climbed the most mountains. (relative)
English *most*: absolute reading

John climbed **most mountains**.

$$[[\text{[-est } C], [\text{-[d]-many mountains}]]] = \lambda x. \forall y \in C \ [y \neq x \rightarrow$$

$$\max \{d: \text{mountains}(x) \& |x| \geq d\} >$$

$$\max \{d: \text{mountains}(y) \& |y| \geq d\}$$
John climbed **the most mountains**.

\[
[[\text{est } C_i \text{ climbed } [\emptyset d_i\text{-many mountains}]]] = \lambda x. \forall y \in C \ [y \neq x \rightarrow \\
\max \{d : \exists z \ [\text{mountains}(z) \land |z| \geq d \land \text{climbed}(x, z)] \} > \\
\max \{d : \exists z \ [\text{mountains}(z) \land |z| \geq d \land \text{climbed}(y, z)]\}
\]
Hackl (2009):

- The is undefined (and absent?) in an absolute reading:
  - Maximality presupposition (Link (1983)): the demands reference to the full set of objects (‘the mountains’ = ‘all mountains’).
  - The absolute reading is incompatible with the full set since it denotes a proportion of the set.

- The is indefinite in relative readings.
  [C -est] can move out to adjoin to [SPEC, VP].
Preamble: de and het

De versus het

(4) (a) de man - de vrouw
    the man<sub>sing.masc.</sub> - the woman<sub>sing.fem.</sub>

(b) het huis - het geld
    the house<sub>sing.neut.</sub> - the money<sub>sing.neut.</sub>

(c) de mannen - de vrouwen - de huizen
    the men<sub>pl.masc.</sub> - the women<sub>pl.fem.</sub> - the houses<sub>pl.neut.</sub>
Dutch *de meeste* and *het meeste*

Two puzzles

(1) Jan heeft **de** meeste bergen beklommen.  
John has the\textsubscript{pl.masc.} most mountains\textsubscript{pl.masc.} climbed  
John climbed (the) most mountains.

(2) Jan heeft **het** meeste bergen beklommen.  
John has the\textsubscript{sing.neut.} most mountains\textsubscript{pl.masc.} climbed  
John climbed the most mountains.

1. Why does (2) only have a relative reading?  
2. Why can the neuter article *het* combine with plural masculine *bergen* in (2)?

Claims  
1. The different readings and distribution are linked to definiteness and specificity.  
2. There are two distinct structures underlying *de meeste* and *het meeste*.
Definiteness test: existential *there*

Only indefinite DPs can appear in sentences with existential *there*.

(5) (a) Er is een man in de straat.
    there is a man in the street

(b) Er zijn mannen in de straat.
    there are men in the street

(c)* Er is de man in de straat.
    there is the man in the street
Existential *there*: *de/het meeste*

Only indefinite DPs can appear in sentences with existential *there*.

(6) (a) Er zijn het meeste bergen in Zwitserland. (relative)
    there are the most mountains in Switzerland

(b)*Er zijn de meeste bergen in Zwitserland.
    there are the most mountains in Switzerland

⇒ *Het meeste* appears to be indefinite, *de meeste* definite.
Definiteness test: DP-internal focus

Only indefinite DPs can have DP-internal focus. (Pancheva and Tomaszewicz (2012))

- The relative reading with DP-internal focus is not available in English.
- It can be found in Slavic languages if the DP is indefinite.
- If one puts a definite article in front of the DP, this relative reading disappears in Macedonian and Bulgarian.

(7) ... dat JAN [DP het meeste platen [PP van Zappa]] beluisterd heeft. (relative)
    ... that John the most records by/of Zappa listened has
    ... that John listened to the most records by/of Zappa

(8) ... dat Jan [DP het meeste platen [PP van ZAPPA]] beluisterd heeft. (relative)
    ... that John the most records by/of Zappa listened has
    ... that John listened to the most records by/of Zappa
Definiteness test: DP-internal focus

• If we build a sentence with *de meeste* instead of *het meeste*, the relative reading with DP-internal focus disappears.

(9) ... dat Jan [DP de meeste platen [PP van ZAPPA]] beluisterd heeft. (absolute)
    ... that John the most records by/of Zappa listened has
    ... that John listened to most records by/of Zappa

⇒ *Het meeste* appears to be indefinite, *de meeste* definite.
Specificity test: scrambling

Non-specific indefinite DPs can’t be scrambled
Specific: the speaker has a particular object in mind
Non-specific: the speaker does not have a particular object in mind
(Hawkins 1978)

(11)(a) ...dat Jan gisteren iets/wat gekregen heeft.
...that John yesterday something gotten has
...that John got something yesterday.
(b) ...dat Jan iets/*wat gisteren gekregen heeft.
...that John something yesterday gotten has

(12)(a) ...dat Jan gisteren de/één/een auto gekregen heeft.
...that John yesterday the/one/a car gotten has
...that John got the/one/a car yesterday.
(b) ...dat Jan de/één/??een auto gisteren gekregen heeft.
...that John the/one/??a car yesterday gotten has
...that John got the/one/a car yesterday.
Scrambling: *de meeste* versus *het meeste*

(13)(a) ...dat Jan gisteren *de meeste bergen* beklommen heeft. (relative/absolute)
...that John yesterday the most mountains climbed has
...that John climbed (the) most mountains yesterday.

(b) ...dat Jan *de meeste bergen* gisteren beklommen heeft. (absolute)
...that John the most mountains pl. yesterday climbed has
...that John climbed most mountains yesterday.

(14)(a) ...dat Jan gisteren *het meeste bergen* beklommen heeft. (relative)
...that John yesterday the most mountains climbed has
...that John climbed the most mountains yesterday.

(b) *...dat Jan *het meeste bergen* gisteren beklommen heeft.
...that John the most mountains yesterday climbed has

⇒ DPs with relative readings pattern with the distribution of non-specific indefinite DPs: they are excluded in a scrambled position.
Claim 1: definiteness and specificity

DPs with relative readings
• are only found in the base-generated position, just like non-specific indefinites
• can occur in clauses with existential there
• can have a comparison class defined by the DP-internal PP.

DPs with absolute readings
• can be scrambled
• are ungrammatical in clauses with existential there
• do not have a comparison class defined by the DP-internal PP.

Claim 1
• DPs with de/het meeste and relative readings are non-specific indefinite.
• DPs with de/het meeste and absolute readings are definite.

→ het meeste bergen can only have relative readings and is always indefinite
Claim 2: two structures

Why can the neuter article *het* combine with plural masculine *bergen*?

**Claim 2**
There are two syntactic structures underlying *de meeste* and *het meeste*:
1. AGR: with a D that agrees with the head noun
2. *AGR: with a D that does not agree with the head noun
3. *het meeste* + neuter mass N is ambiguous between the two.
• The determiner agrees with the head noun:

(12) (a) de meeste mannen
       the\textsubscript{pl.masc.} most men\textsubscript{pl.masc.} \\
(b) de meeste vrouwen
       the\textsubscript{pl.fem.} most women\textsubscript{pl.fem.} \\
(c) de meeste huizen
       the\textsubscript{pl.neut.} most houses\textsubscript{pl.neut.}
• D agrees with the NP in number and gender.
• [-st(e) C]_k moves out of the AP (Heim (1999), Hackl (2009)).
• [[-st(e) C]_k [d_k-veel bergen]] is the expected absolute reading.
• [-st(e) C]_k adjoins to VP (Szabolcsi (1986), Heim (1999), Hackl (2009)).
• [[-st(e) C]_k[[de d_k-veel bergen] beklommen]] is the relative reading.
• The determiner in *AGR does not agree with the head noun:

(13) (a) het meeste mannen
    the\textsubscript{sing.neut.} most men\textsubscript{pl.masc.}
(b) het meeste vrouwen
    the\textsubscript{sing.neut.} most women\textsubscript{pl.fem.}
(c) het meeste huizen
    the\textsubscript{sing.neut.} most houses\textsubscript{pl.neut.}

• The *AGR structure shows similarities with indefinite plurals. We assume that there is a null D in both cases:

(15) (a) Er zijn [DP $\emptyset$ [DP het meeste] bergen [PP in Zwitserland.]]
    there are $\emptyset$ the most mountains in Switzerland
(b) Er zijn [DP $\emptyset$ mannen [PP in de straat.]]
    there are $\emptyset$ men in the street
*AGR: no absolute reading

- Null D in the highest DP accounts for the combination with existential *there*.
- Null NP accounts for the absence of agreement.
*AGR: relative reading

- [-st(e) C]_k adjoins to VP (Szabolcsi (1986), Heim (1999), Hackl (2009)).
- [[-st(e) C]_k[[het d_k-veel bergen] beklommen]] is the relative reading.
- This is the only available reading for *AGR structures.
Interesting consequences

• Absolute readings are definite:
  - There is a unique plurality of mountains that John climbed and that is greater than the mountains he did not climb.
  - Uniqueness is a feature of definite DPs (Milsark (1974), Farkas and Kiss (2000))

• Relative readings are non-specific indefinite:
  - The cardinality of different pluralities of mountains is compared relative to climbers.
  - It is not possible to refer to one unique plurality of mountains.
Conclusion

• In Dutch, *de/het meeste* has an absolute and a relative reading:
  - the different readings do not depend on the article
  - the DPs with relative readings are non-specific indefinite
  - the DPs with absolute (‘proportional’) readings are definite
  - there are two different syntactic structures underlying *de/het meeste*.

• Future research:
  - Research of English data (and other languages)
  - How can definite *de meeste* become indefinite in the relative reading?
  - What is the status of the empty NP in *AGR* structures?
  - Similar expressions, such as *de/het minste, de meerderheid* etc.
Bibliography


Thank you!!!

http://www.xkcd.com/77/