

# *(The) most* in Dutch: Definiteness and Specificity

Koen Roelandt | CRISSP, KU Leuven HUBrussel | [koen.roelandt@hubrussel.be](mailto:koen.roelandt@hubrussel.be)



# Introduction

(1) Jan heeft **de** meeste bergen beklommen.

John has the<sub>pl.masc.</sub> most mountains<sub>pl.masc.</sub> 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<sub>sing.neut.</sub> most mountains<sub>pl.masc.</sub> climbed

John climbed the most mountains.

The article *het* ‘the’ does not agree with the noun *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 *de meeste* and *het meeste*. Either D agrees with the head noun, or it doesn’t.

# Outline

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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*
  - a. Preamble: *de* and *het*
  - b. Dutch data
    - i. First test: existential *there*
    - ii. Second test: DP-internal focus
    - iii. Third test: scrambling
  - c. Claim 1: definiteness and specificity
  - d. Claim 2: two different syntactic structures
4. Conclusion

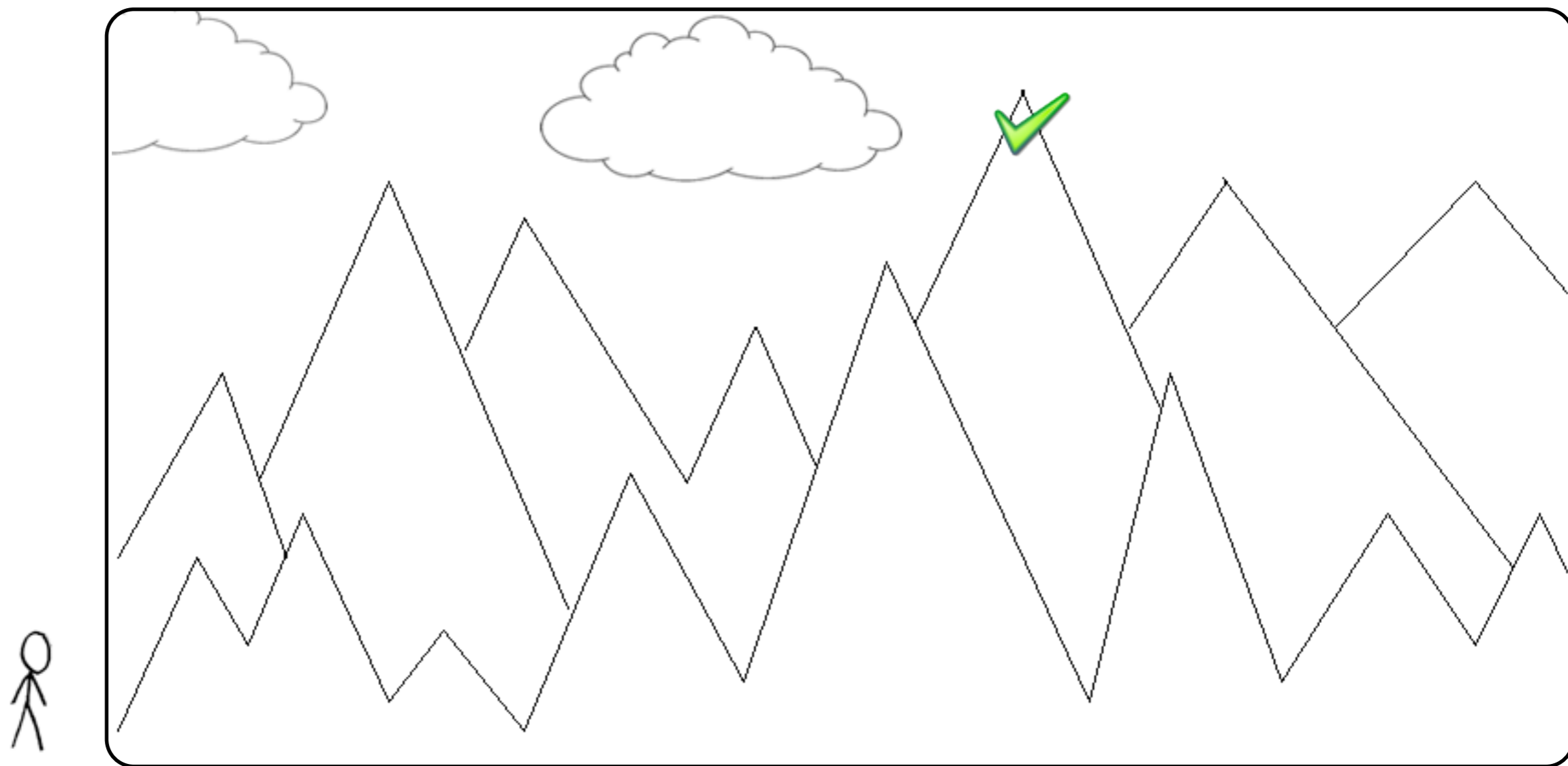
# English superlatives

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

- Two different readings:
  - absolute reading
  - relative reading.

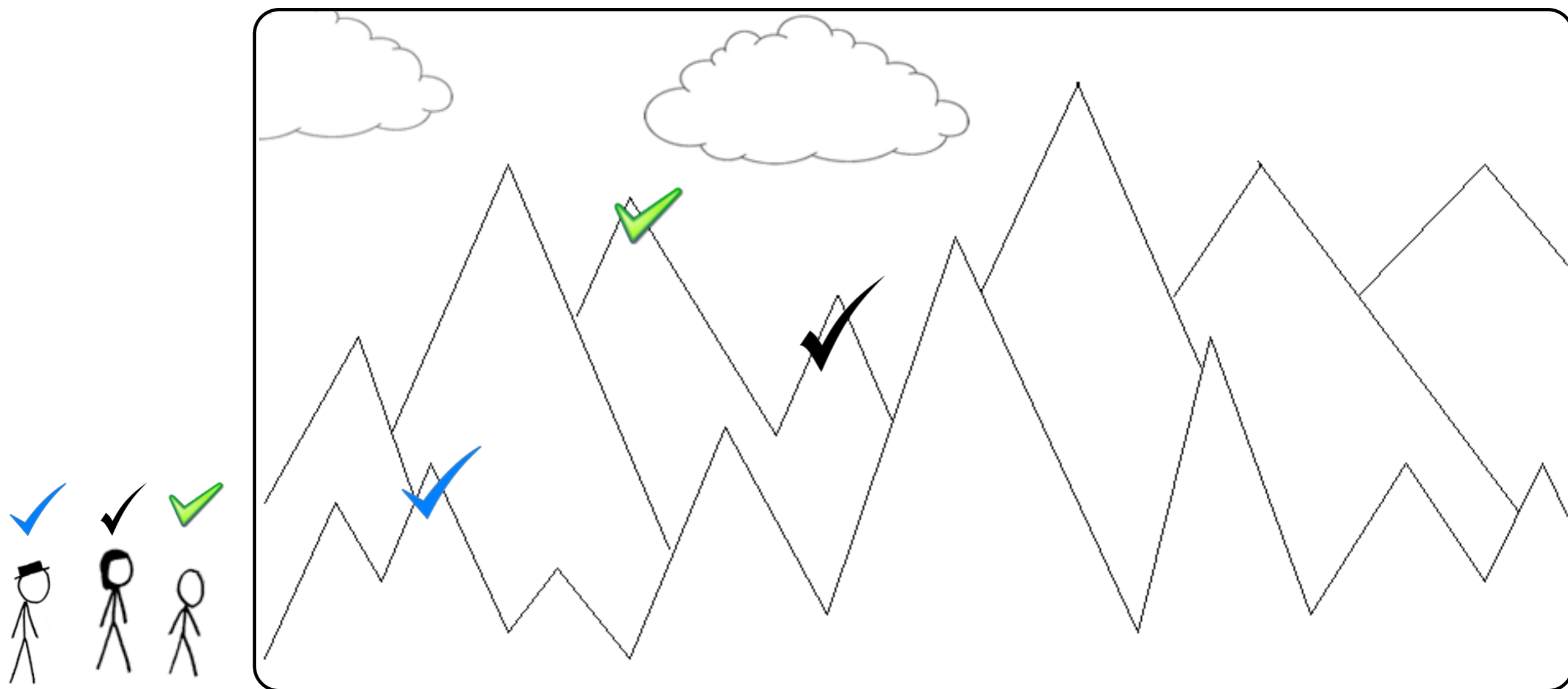
# English superlatives: absolute reading



John climbed **the highest mountain**.

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

# English superlatives: relative reading



John climbed **the highest mountain**.

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

# English superlatives: definiteness

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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.

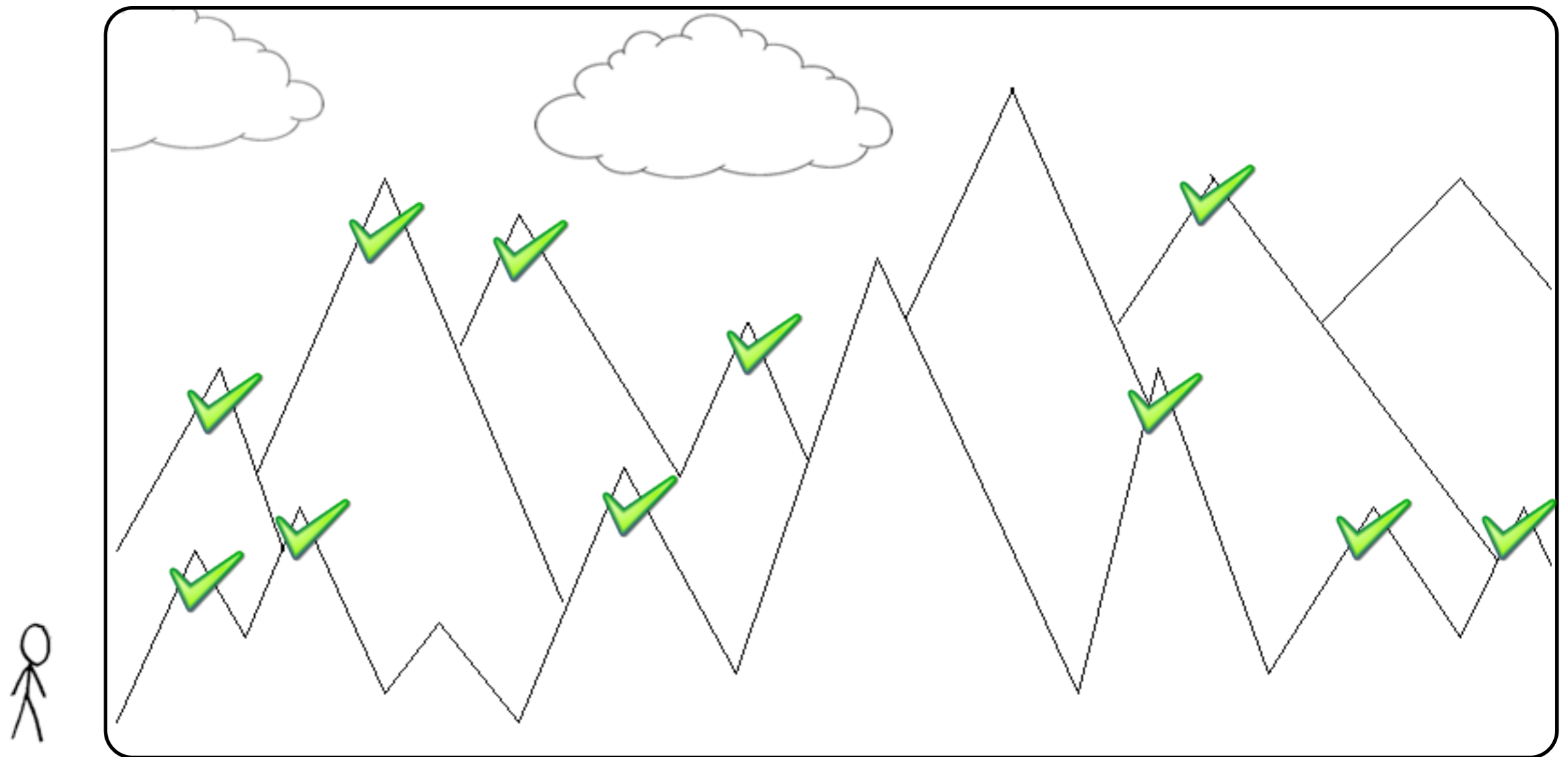
(absolute)

(b) John climbed the most mountains.

(relative)



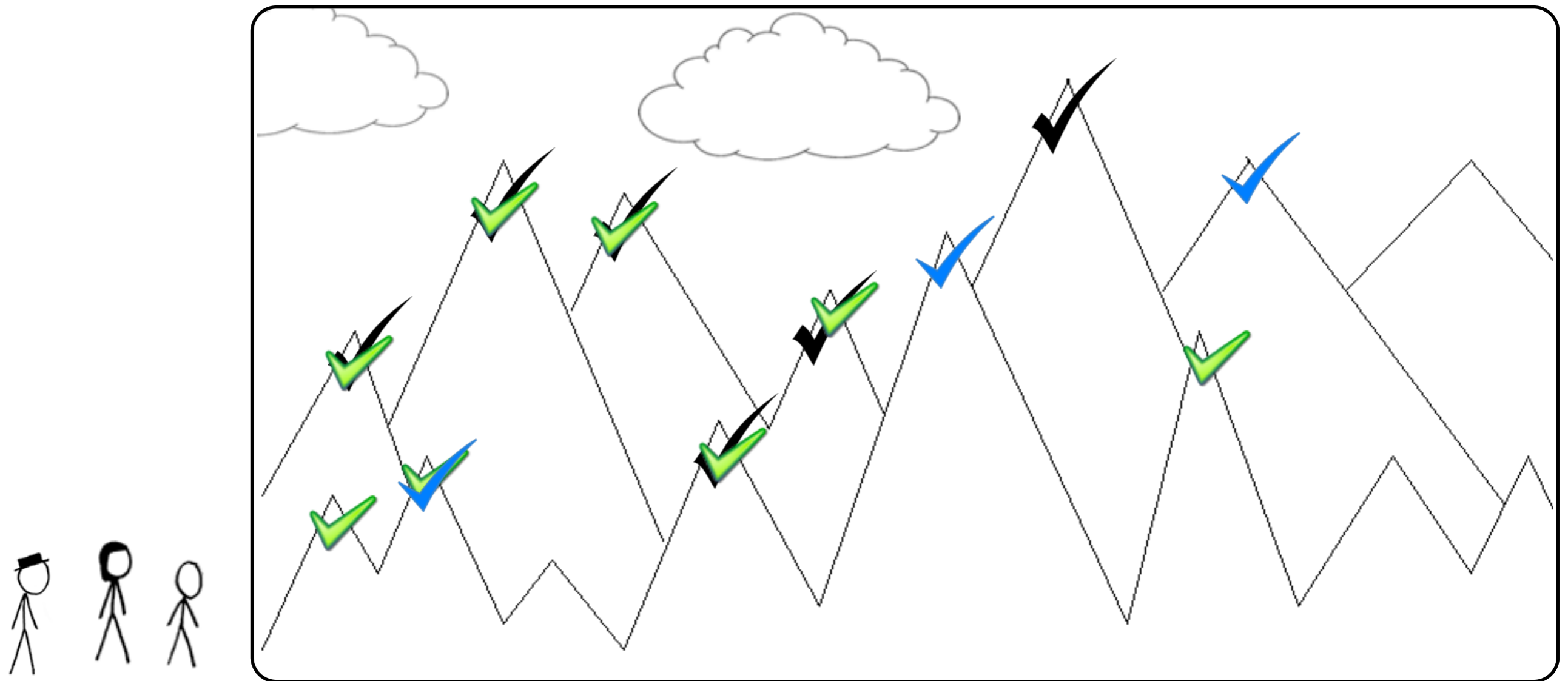
# English *most*: absolute reading



John climbed **most mountains**.

$\llbracket [-\text{est } C]_i [d_i\text{-many mountains}] \rrbracket = \lambda x. \forall y \in C [y \neq x \rightarrow$   
 $\max \{d: \text{mountains}(x) \ \& \ |x| \geq d\} >$   
 $\max \{d: \text{mountains}(y) \ \& \ |y| \geq d\}]$

# English *most*: relative reading



John climbed **the most mountains**.

$\llbracket [-\text{est } C]_i \llbracket \text{climbed } [\emptyset d_i\text{-many mountains}] \rrbracket \rrbracket = \lambda x. \forall y \in C [y \neq x \rightarrow \max \{d: \exists z [\text{mountains}(z) \ \& \ |z| \geq d \ \& \ \text{climbed}(x, z)]\} > \max \{d: \exists z [\text{mountains}(z) \ \& \ |z| \geq d \ \& \ \text{climbed}(y, z)]\}]$

# *Most*: definiteness

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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. (relative/absolute)

John has the<sub>pl.masc.</sub> most mountains<sub>pl.masc.</sub> climbed

John climbed (the) most mountains.

(2) Jan heeft **het** meeste bergen beklommen. (relative)

John has the<sub>sing.neut.</sub> most mountains<sub>pl.masc.</sub> 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*.

Milsark (1974), Szabolcsi (1986)

- (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 [<sub>DP</sub> de meeste platen [<sub>PP</sub> 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<sub>pl.</sub> 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 I: 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 I**

- 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

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

### **Claim 2**

There are two syntactic structures underlying *de meeste* and *het meeste*:

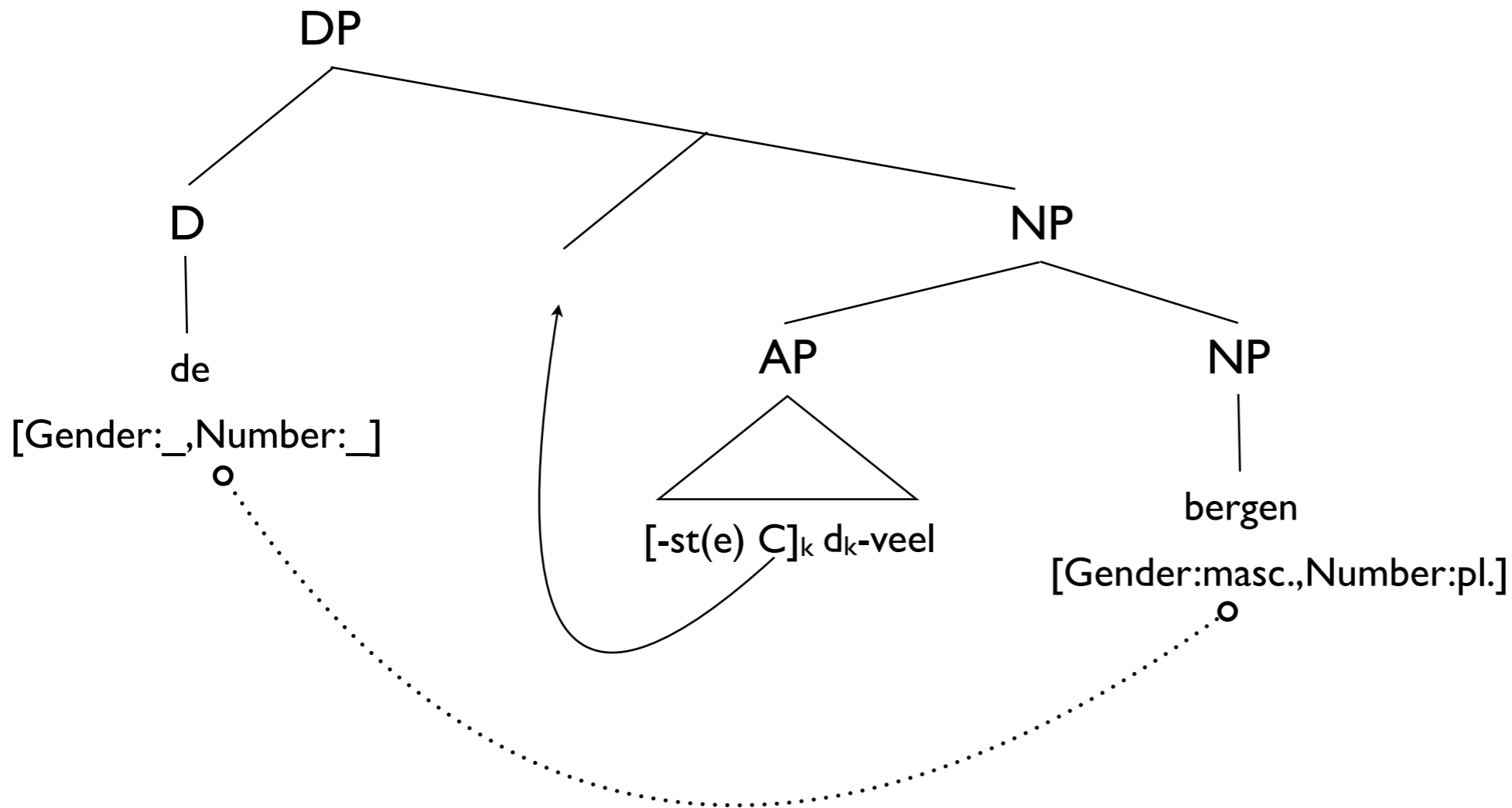
1. AGR: with a D that agrees with the head noun
2. \*AGR: with a D that does not agree with the head noun
3. *het meeste* + neuter mass N is ambiguous between the two.

# AGR

- The determiner agrees with the head noun:

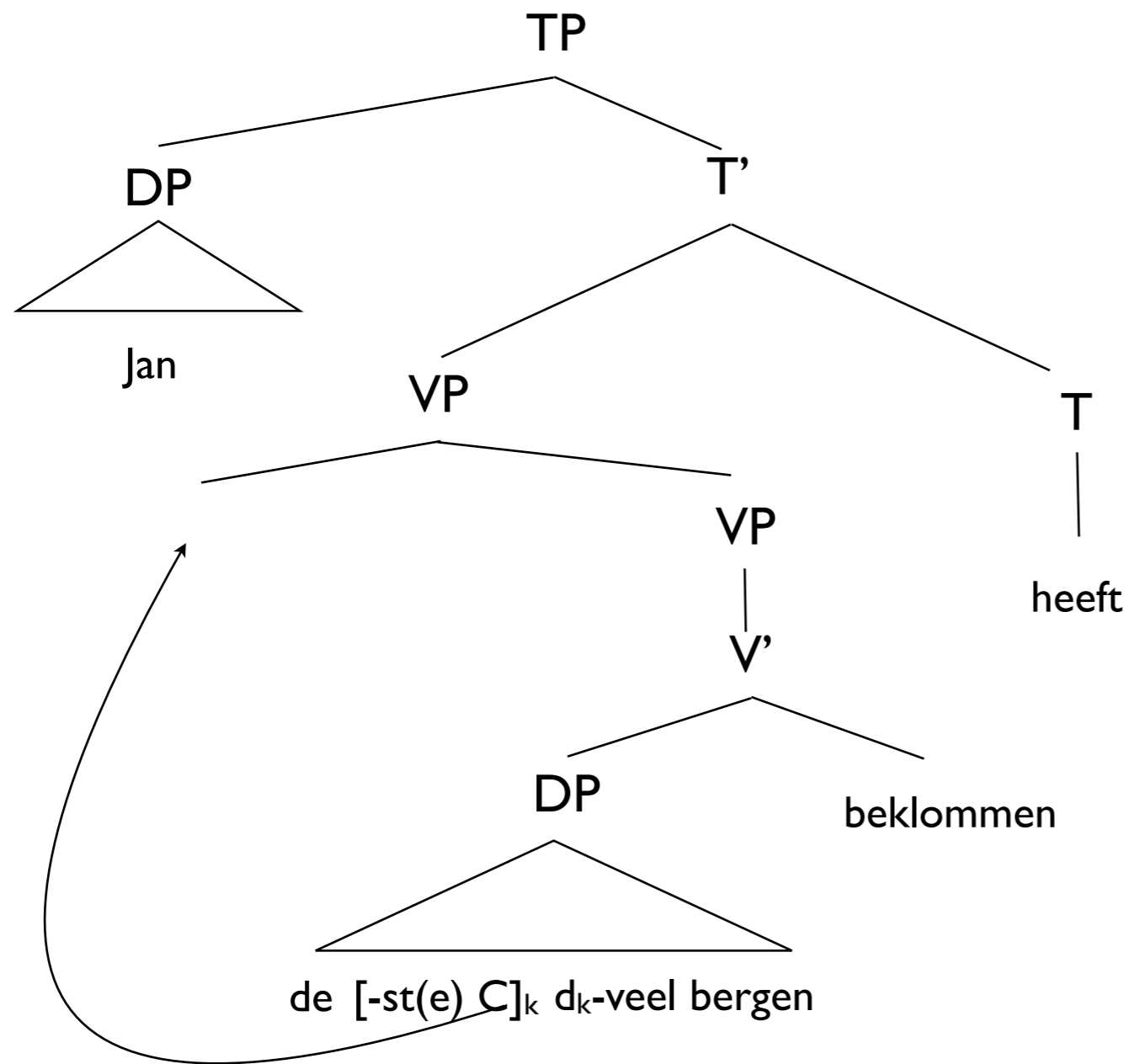
- (12) (a) de            meeste mannen  
         the<sub>pl.masc.</sub> most    men<sub>pl.masc.</sub>
- (b) de            meeste vrouwen  
         the<sub>pl.fem.</sub> most    women<sub>pl.fem.</sub>
- (c) de            meeste huizen  
         the<sub>pl.neut.</sub> most    houses<sub>pl.neut.</sub>

# AGR: absolute reading



- D agrees with the NP in number and gender.
- [-st(e) C]<sub>k</sub> moves out of the AP (Heim (1999), Hackl (2009)).
- [[-st(e) C]<sub>k</sub> [d<sub>k</sub>-veel bergen]] is the expected absolute reading.

# AGR: relative reading



- [-st(e) C]<sub>k</sub> adjoins to VP (Szabolcsi (1986), Heim (1999), Hackl (2009)).
- [[-st(e) C]<sub>k</sub>[[de d<sub>k</sub>-veel bergen] beklommen]] is the relative reading.



## \*AGR

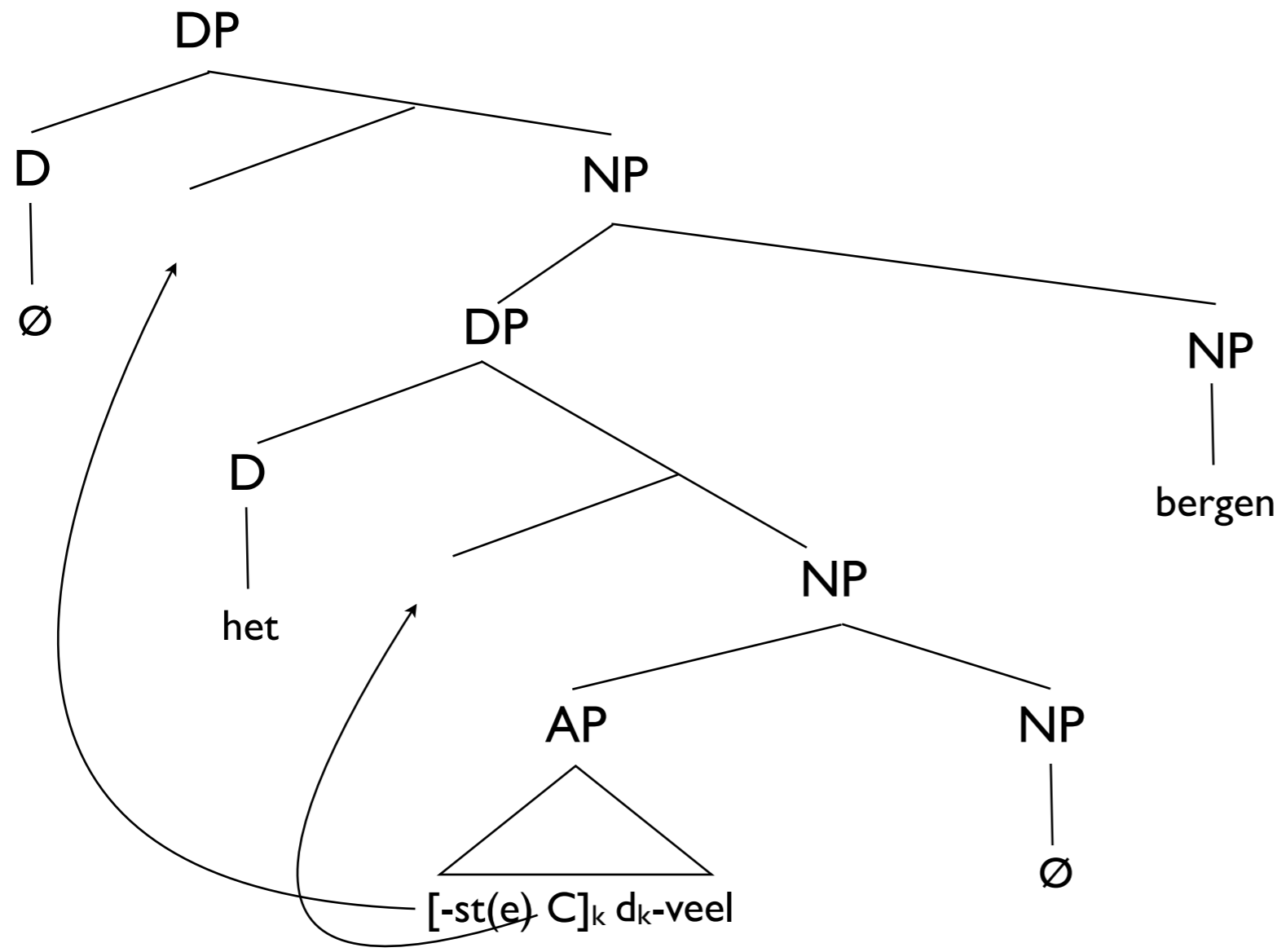
- The determiner in \*AGR does not agree with the head noun:

- (13) (a) het meeste mannen  
the<sub>sing.neut.</sub> most men<sub>pl.masc.</sub>
- (b) het meeste vrouwen  
the<sub>sing.neut.</sub> most women<sub>pl.fem.</sub>
- (c) het meeste huizen  
the<sub>sing.neut.</sub> most houses<sub>pl.neut.</sub>

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

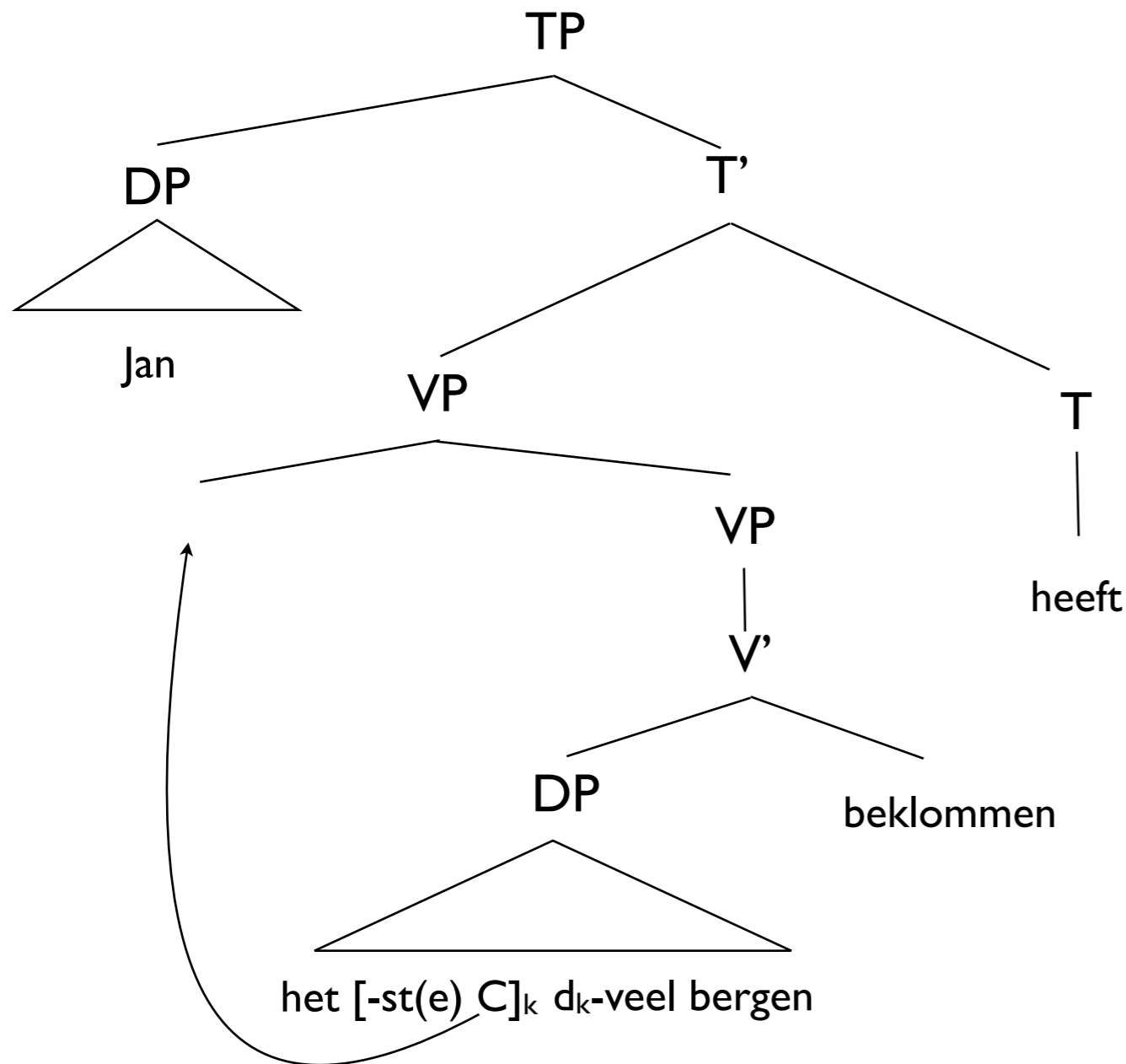
- (15) (a) Er zijn [DP  $\emptyset$  [DP het meeste] bergen [PP in Zwitserland.]]  
there are  $\emptyset$  the most mountains in Switzerland
- (b) Er zijn [DP  $\emptyset$  mannen [PP in de straat.]]  
there are  $\emptyset$  men in the street

# \*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]<sub>k</sub> adjoins to VP (Szabolcsi (1986), Heim (1999), Hackl (2009)).
- [[-st(e) C]<sub>k</sub>[[het d<sub>k</sub>-veel bergen] beklommen]] is the relative reading.
- This is the only available reading for \*AGR structures.

# Interesting consequences

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- 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

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- 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.

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# Thank you!!!



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

