Modification of bare nominals across languages and constructions

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Outline

- Introduction
- Corpus research
- Questionnaire
- Discussion
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Espinal & McNally (2011): Property-denoting BNs as complements of *have*-verbs. They do not go up to the NumP level, since they’re number neutral:

(1) Busco pis. Un a Barcelona. / Un a Barcelona i un a Girona.

‘I’m looking for an apartment. One in Barcelona./ One in Barcelona and one in Girona.’

■ Conclusion: BNs are NPs.
Introduction
modification (Espinal 2010)

- Spanish/Catalan BNs can only combine with kind-level modifiers:

  (2) Per a aquest espectacle necessitareu faldilla llarga/escocesa/de quadres.
  ‘For this event you will need a long skirt/a kilt/a plaid skirt.’ (Catalan)

- Combinations of BNs with qualitative and descriptive modifiers are generally unaccepted, because they modify individual entities:

  (3) *Necessiten faldilla feta a Singapur / neta.
  ‘Need skirt made in Singapore / clean skirt’ (Catalan)

- More support for an NP-level analysis, since kind-level modification is closest to the noun (Scott 2002; McNally & Boleda 2004)
Introduction

Hindi BNs

Dayal (2011): property-denoting BNs (pseudo-incorporated BSs) are semantically singular. So they project a NumP;

(4) Anu-ne tiiN ghanTe meN kitaab paRhii
    Anu.ERG 3 hours in book read.PFV
    ‘Anu read a book in three hours.’ = exactly one book

- They only yield a number neutral interpretation when interacting with aspectual operators (i.e. Iterativity, habituality);

(5) Anu kutta paaltii hai
    Anu dog keep.IMP be.PRS
    ‘Anu keeps (as pets) dogs.’
Introduction modification (Dayal 2011)

- Less restrictions on modification of BNs in Hindi:

(6) anu apne beTe ke-liye bahut sundar / paRhiI-likhiI laRkiI DhuunDh
    Anu self’s son for very beautiful educated girl search
    rahii hai
    PROG be-PRS
    ‘Anu is looking for a very beautiful/ educated girl for her son.’

- This is additional support for a NumP analysis.
Introduction

BNs in Greek

Greek also has property-denoting BNs as complements of *have*-verbs (Lazaridou-Chatzigoga 2011, Alexandropoulou 2013). However, they don’t seem to be number neutral:

(7) psahno/ eho dhyamerisma` ena stin Kalamata/ am.looking/look.1SG.for/ have.1SG apartment one in.the Kalamata #ena stin Kalamata ke ena stin Athina.
one in.the Kalamata and one in.the Athens ‘I’m looking for/ have an apartment; one in Kalamata/ #one in Kalamata and one in Athens.’

- Seems to be support for a NumP-level status
Dutch does not have BNs as complements of have-verbs. But it does have them as complements of the have-preposition met (‘with’).

Borthen (2003): both the preposition med ‘with’ and have-verbs allow for BN complements in Norwegian. She notes that these constructions are very similar in meaning and suggests that med also introduces a have-relation.

de Swart (2012) formalizes this intuition by extending Espinal & McNally’s (2011) analysis of have-verbs to have-prepositions with/without.
Introduction

Parallel between *have*-verbs and *have*-Ps

Lexical rule suppressing the theme of the *have*-verb (Espinal & McNally 2011):

(8) **Input:** \( \lambda y \lambda e[V(e) \land \theta(e) = y \land \exists w[C(w)] [\exists e'[\text{depend}(e,e',w) \land \text{have}(e') \land \text{havee}(e') = y]]] \)

**Output:** \( \lambda e[V(e) \land \exists w[C(w)] [\exists e'[\text{depend}(e,e',w) \land \text{have}(e') \land \text{havee}(e') = \theta(e)]]] \)

Extension to *with*, suppressing the theme argument of the Accompany relation it denotes (de Swart 2012):

(9) **Input:** \( \lambda y \lambda P \lambda x[P(x) \land \exists e[\text{Accompany}(e) \land \text{Ext}(e) = x \land \text{Int}(e) = y \land \exists w[C(w)] [\exists e'[\text{depend}(e,e',w) \land \text{Have}(e') \land \text{Havee}(e') = y]]]] \)

**Output:** \( \lambda P \lambda x[P(x) \land \exists e[\text{Accompany}(e) \land \text{Ext}(e) = x \land \exists w[C(w)] [\exists e'[\text{depend}(e,e',w) \land \text{Have}(e') \land \text{Havee}(e') = \text{Int}(e)]]] \)
Introduction

BNs in Dutch – *have*-P

Dutch BNs as complements of *met* ‘with’ don’t seem to be number neutral either:

(10) Ik ken een ex-dakloze *met* appartement. Eén in Amsterdam./
     I know an ex-homeless with apartment one in Amsterdam
     #Eén in Amsterdam en één in Weert.
     one in Amsterdam and one in Weert
     ‘I know somebody who used to be homeless, but now has an
     apartment. (It’s) one in Amsterdam./ #One in Amsterdam and one
     in Weert’

- Again: seems to be support for NumP status.
Introduction

summing up

- Spanish/Catalan: arguments for NP-level status of BNs.
- Hindi: arguments for NumP-level status of BNs.
- Greek/Dutch: indications for NumP-level status of BNs (only based on number neutrality data).

→ Number neutrality is a tricky diagnostic, so let’s also look at modification data.
Outline

- Introduction
- Corpus research
- Questionnaire
- Discussion
Corpus research

aim

- Collect BN modification data for Greek and Dutch.
- See if they pattern with Spanish/Catalan or with Hindi.
Corpus research method

Dutch (Eindhoven corpus VU-versie 768,000 words, Corpus Gesproken Nederlands 9,000,000 words)
- *met* (‘with’) + [adjective] + [singular count noun]

Greek (Hellenic National Corpus 47,000,000 words)
- *me* (‘with’) + [adjective] + [singular count noun]
- *eho* (‘to have’) “ “
- *forao* (‘to wear’) “ “
- *kratao* (‘to hold’) “ “
- *hrisimopio* (‘to use’) “ “
## Corpus research results

<table>
<thead>
<tr>
<th>Kind-level</th>
<th>Greek <em>have</em>-verbs</th>
<th>Greek <em>me</em></th>
<th>Dutch <em>met</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kind-level</td>
<td>53 (42%)</td>
<td>34 (54%)</td>
<td>20 (29%)</td>
</tr>
<tr>
<td>Not kind-level</td>
<td>73 (58%)</td>
<td>29 (46%)</td>
<td>48 (71%)</td>
</tr>
<tr>
<td>Total</td>
<td>126 (100%)</td>
<td>63 (100%)</td>
<td>68 (100%)</td>
</tr>
</tbody>
</table>
Corpus research results

Kind-level modification:

(11) gouverneur met houten been (Dutch)
    ‘governor with a wooden leg’

(12) foraghe palestiniako madili (Greek have-V)
    ‘s/he was wearing a Palestinian bandana’

(13) mia morfi me arheoeliniko hitona (Greek have-P)
    ‘a figure with an ancient Greek chiton’
Corpus research results

Not kind-level modification:

(14) z’n bureaulamp met groene kap (Dutch)
    ‘his desk lamp with a green shade’

(15) foruse anihthromi kabardina (Greek have-V)
    ‘s/he was wearing a light-coloured trench coat’

(16) enas nearos me aspri podhya (Greek have-P)
    ‘a young man with a white apron’
So the Spanish/Catalan modification pattern doesn’t cover all of the Greek and Dutch data.

Most of the not kind-level cases involved individual-level modification (mostly color, material).

Not a lot of data points.

Results should be confirmed through a questionnaire (more data, controlled conditions).
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Questionnaire

overall idea

2 languages:
- Dutch, Greek

2 constructions:
- *Have*-verbs (Greek)
- *Have*-prepositions (Dutch and Greek)
5 conditions (1x5 design):

- Unmodified (baseline)
- Stage-level modification (unacceptable in Spa/Cat)
- Evaluative adjectives (acceptable in Hindi, another type of ind.-level)
- Color modification (based on corpus findings)
- Kind-level modification (obviously)
A. What do you see on the picture?

B. I see a politician with / who’s wearing

- vest (unmodified)
- dirty vest (stage-level)
- nice vest (evaluative)
- pink vest (color)
- bulletproof vest (kind-level)

How acceptable do you find the sentence uttered by B?

( unacceptable) 0 – 1 – 2 – 3 – 4 – 5 – 6 – 7 ( acceptable)
Questionnaire design

- 15 test items that appeared in 5 conditions.
- 15 fillers, 6 acceptable ones (upper bound) and 9 unacceptable ones (lower bound).
- 5 lists (each in two orders), 30 items in total per list.
Good fillers: *have*-predicate + mass nouns

(17) I see a cook with/who’s holding fresh spinach.

Bad fillers: *have*-predicate + mass nouns with numerals

(18) I see a mechanic with/who’s carrying four smelly garbage.
Predictions

1. The unmodified items should not be significantly different from the good fillers (upper baseline).

2. The kind-level items should not be significantly different from the unmodified items.

Spanish/Catalan pattern:

3. All the other conditions should not be significantly different from the bad fillers (lower baseline).

Hindi pattern:

3. All other conditions should be significantly different from the bad fillers (lower baseline).
Questionnaire results Greek *have*-verbs
Questionnaire results Greek *have*-verbs

1. ✓ The unmodified items should not be significantly different from the good fillers (upper baseline).

2. ✓ The kind-level items should not be significantly different from the unmodified items.

Spanish/Catalan pattern:

3. ❌ All the other conditions *should not* be significantly different from the bad fillers (lower baseline).

Hindi pattern:

3. ✓ All other conditions *should* be significantly different from the bad fillers (lower baseline).
Questionnaire results Dutch *met*
1. ✗ The unmodified items should not be significantly different from the good fillers (upper baseline).

2. ✓ The kind-level items should not be significantly different from the unmodified items.

Spanish/Catalan pattern:

3. ✗ All the other conditions should not be significantly different from the bad fillers (lower baseline).

Hindi pattern:

3. ✓ All other conditions should be significantly different from the bad fillers (lower baseline).
Questionnaire

summing up

- In both Greek and Dutch there was no significant difference between kind-level items and unmodified items.

- Furthermore, both in Greek and Dutch the other conditions also scored significantly higher than the bad fillers.

→ for these BNs a wider range of modification is allowed, in line with the Hindi pattern. From this and the number neutrality facts, we conclude that Greek and Dutch BNs are NumPs, not NPs.

- Issues:
  - Differences between the Greek and Dutch data.
  - Differences that we found between conditions.
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Discussion
difference between Greek and Dutch

- The fact that the unmodified items scored significantly lower than the good fillers in Dutch suggests that the *met* BN construction is a bit marginal.

- It could also be that *have*-verb+BN constructions aren’t completely similar to *have*-preposition+BN constructions after all.

→ Data on Greek *me* ‘with’ are crucial to decide between these two possibilities.

Focus on the Greek data for the rest of the discussion.
Questionnaire results Greek have-verbs
Discussion

difference between conditions (Greek)

kind, color > stage-level, evaluative (and unmodified > color)

- We suggest that these are due to the characterizing property constraint posited by Espinal & McNally (2011) for Spanish/Catalan:

  In the context of use, the resulting verb phrase should denote a ‘characterizing property’ of the external argument. I.e. in this context it should be relevant whether or not an individual has the property in question.
Discussion
difference between conditions (Greek)

- So why are kind-level and color adjectives equally OK, and significantly better than evaluatives and stage-levels?

- Kind-level: intuitively easy to be part of a characterizing property because distinguishing subkinds is often relevant.

- Color: perceptually/cognitively very salient (Sedivy 2003), and therefore, also relevant.

→ Since the characterizing property constraint holds for Greek, our data pattern with Spanish/Catalan rather than Hindi (for which the ‘prototypicality requirement’ holds).
Future work

extending questionnaire to Spanish/Catalan

informal judgments wrt modification:

(19) Veo a una muchacha que lleva falda roja/rosa. (Spanish)
   ‘I see a girl who’s wearing a red/pink skirt.’

informal judgments wrt number neutrality:

(20) Veig una noia que du anell. (Catalan)
   a. De diamants.
      ‘I see a girl who’s wearing a ring. A diamond one.’
   b. #Un de diamants i un d'or.
      ‘A diamond one and a gold one.’
   c. #Un al polze i un al dit del mig.
      ‘One on her thumb and one on her middle finger.’
Concluding remarks

- Dutch data: unclear if the *met*+BN construction is slightly marginal or if the parallel between *have*-verbs and *have*-prepositions needs to be reconsidered.

- Greek *have*-verb data: mixture of Dayal’s analysis (the fact that they’re NumPs) and Espinal & McNally’s analysis (the fact that the characterizing property constraint seems to hold).

- Future work:
  - Greek *me* ‘with’ data
  - Catalan *have*-verb (and *have*-preposition) data
  - ...
Thank you!

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References


