Why word-formation is the short route to the lexicon –
A pragmatic approach

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Miranda Hart … and her mother:

Mother: “Perhaps we should explain why we’re here, in case you were thinking us a little, what I call, odd.”
Newly formed **word-formation products** seem to be able to (non-humorously) function as **names** “right from the beginning”:

*Adjective-noun phrases versus compounds*

(1)  

a. ✗ *Am Sonntag hatten wir einen sogenannten heißen Tag.*  
   ‘on Sunday we had a so-called hot day’

b. ✔ *Am Sonntag hatten wir einen sogenannten Heißtag.*  
   ‘on Sunday we had a so-called hot_day’

(2)  

a. ✗ *Das Haus hat ein sogenanntes rotes Dach.*  
   ‘the house has a so-called red roof’

b. ✔ *Das Haus hat ein sogenanntes Rotdach.*  
   ‘the house has a so-called red_roof’
Introduction

How do complex expressions come into the mental lexicon?

Lexicalist / separatist approaches:

cf., among others, Booij (2010); Di Sciullo & Williams (1987); Lieber (1992), (2004)
Are novel compounds in comparison to phrases, in German, indeed more prone to function as names for lexical concepts?

How is the naming function of compounds related to kind reference and semantic specialization in novel compounds?

What pragmatic factors are involved in this interplay?

1. Evidence for the naming / labelling function of compounds: Focus on newly formed (adjective-noun) complexes in German
2. Meaning specialization: A pragmatic perspective
3. Conclusion
How is the naming function of a complex expression defined?

Making a name:

- establishing a sub-node in a conceptual-ontological taxonomy thus
- creating a sub-category of the category denoted by the head noun and
- adding a label to that category

```
bags
  Shoulder bags  Sports bags  Hand bags
   expression X  expression Y  expression Z
```

create a category
label it
Phrases are less suitable for naming contexts than their compound counterparts:

(1)  
   a. ??*Man nennt sowas ein rotes Dach.*
      ‘one calls this a red roof’
   b.  *Man nennt sowas ein Rotdach.*
      ‘one calls this a red_roof’

- a naming predicate (*call*) identifies an unfamiliar label
- a naming predicate entails *worthiness of the label* to be identified in its labelling function, cf. a so-called *table / lecture table*
- *rote Dach* in (1a) provides a simple *object description* and not a label of some specific category

cf. Bücking (2010); Härtl (2015a, 2015b)
Phrases call for **additional marking** like quotation marks or capitals when they are used as labels.

Compare the examples in (a) and (b):

1. **Man nennt sowas ein “rotes Dach”**.
   ‘one calls this a red roof’
2. **Man nennt sowas ein Rotdach**.
   ‘one calls this a red_roof’

3. **ein sogenanntes “schwarzes Loch” / Schwarzes Loch**
   ‘a so-called black hole’
4. **sogenanntes Schwarzlicht**
   ‘so-called black_light’
The semantics of *to call / so-called*:

(1) *One calls this thing “clicker”.*

\[ \lambda z \, \lambda y \, \lambda x \, [\text{CALL} (x, y, \text{NAME} (z)) : z = y] \]

\[ \text{GEN} (x) \, [\text{CALL} (x, \text{this thing}, \text{klıkər})] \]

(2) *Max used a so-called “clicker”.*

\[ \exists z \, \text{GEN} (x) \, [\text{CALL} (x, a \, \text{clicker}, \text{NAME} \_\text{so} (z)) : z = y] \]

cf. Predelli (2003); Washington (1992)
Naming as labelling

The semantics of to call / so-called:

(1) One calls this thing “clicker”.

$$\lambda z \lambda y \lambda x [\text{CALL} (x, y, \text{NAME} (z)) : z = y]$$

$$\text{GEN} x [\text{CALL} (x, \text{this thing, klikør})]$$

(2) Max used a so-called “clicker”.

$$\exists z \text{GEN} x [\text{CALL} (x, \text{a clicker, NAME}_{\text{so}} (z)) : z = y]$$

Quotation marks point out the use of the expression as a name.

cf. Predelli (2003); Washington (1992)
Corpus study

- Do (established) **phrasal** A-N names occur more often in a **naming context**, i.e. with *so-called*, than A-N compounds?

- Are **phrasal A-N names** used **more often with quotes**, compared to compounds?

**COSMAS corpus data; *so-called* + A-N:**

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Grauwasser (<code>gray_water</code>) [21]</td>
<td>(‘this slightly polluted domestic wastewater – <em>so-called gray-water</em> – can be re-used in households’)</td>
</tr>
<tr>
<td>Weißfäule (<code>white_rot</code>) [21]</td>
<td></td>
</tr>
<tr>
<td>Grünbrücke (<code>green_bridge</code>) [18]</td>
<td></td>
</tr>
<tr>
<td>Schwarzlicht (<code>black_light</code>) [17]</td>
<td></td>
</tr>
<tr>
<td>Langholz (<code>long_wood</code>) [16]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>blauer Brief (<code>blue letter</code>, <em>pink slip</em>) [21]</td>
<td>(‘by the hundreds these days schools in the Rhine-Lahn district are sending out <em>so-called “blue letters”</em>’)</td>
</tr>
<tr>
<td>grüner Pfeil (<code>green arrow</code>, <em>turn-right sign</em>) [21]</td>
<td></td>
</tr>
<tr>
<td>roter Faden (<code>red thread</code>, <em>golden thread</em>) [18]</td>
<td></td>
</tr>
<tr>
<td>grüne Welle (<code>green wave</code>, <em>synchronized traffic</em>) [17]</td>
<td></td>
</tr>
<tr>
<td>kleine Anfrage (<code>minor interpellation</code>) [16]</td>
<td></td>
</tr>
</tbody>
</table>
The A-N phrases occurred considerably more often in a so-called context than the compounds:

![Sogenannt* AN Compound vs AN Phrase](image)

This indicates higher pressure to identify the naming function of the phrases.
In *so-called* contexts, more often **phrases are used with quotation marks** than compounds:

<table>
<thead>
<tr>
<th>Type</th>
<th>Mean of Quotes (in %)</th>
<th>Sogenannt*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compound</td>
<td>(n = 9)</td>
<td></td>
</tr>
<tr>
<td>Phrase</td>
<td>(n = 42)</td>
<td></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 33.90, \ p < 0.001 \]

This indicates a **higher pressure for the phrase to promote its “mentioning use”**.
Even when written in **capital**s, more often phrases are used with quotes than compounds:

> We conclude that **phrases** compared to compounds underlie a higher pressure to specify their **naming status** as well as to mark the **mentioning use** of the phrasal expression.
Naming as labelling

Temporal mismatches between subject and predicative are more acceptable with compounds:

(1) a. "Professor Miller ist ein Kind.
    'professor Miller is a child'

b. "Professor Miller ist ein Schüler mit Bestnoten.
    'professor Miller is a pupil with top grades'

c. Professor Miller ist ein Bestnotenschüler.
    'professor Miller is a top grade pupil'

We can conclude that compounds are better inclined to adopt a labelling function.

cf. Rapp (2014)
A **kind** comprises the totality of all objects contained in the object’s extension.

- It thus represents a **conceptual category** of some sort.
- Names for kinds are associated with a **classifying** function.

Compounds easily **adopt kind interpretations** in kind-sensitive environments:

(1) *Das ??rote Dach / Rotdach wurde in Belgien entwickelt.*
   ‘the red roof / red_roof was developed in Belgium’

(2) *Eine typische ??hohe Lampe / Hochlampe benötigt keinen Überspannungsschutz.*
   ‘a typical high lamp / high_lamp does not need overvoltage protection’

(3) *Der ??leichte Topf / Leichttopf an sich ist kostengünstig in der Production.*
   ‘the light pot/ light_pot per se is cost-efficient in production’

- We can conclude that compounds provide names for **kinds**.

cf. Bücking (2010); Krifka et al. (1995); Mueller-Reichau (2011)
Descriptive nominal modifiers don’t combine with **classifying** ones:

(1)  
   a. "beeindruckende und Kanarische Kiefern"  → [descr + class]  
      ‘impressive and Canarian pines’
   b. "beeindruckende und große Kiefern"  → [descr + descr]  
      ‘impressive and big pines’

The same holds for **novel compounds**:

(2)  
   a. "beeindruckende und Großkiefern"  → [descr + class]  
      ‘impressive and big_pines’
   b. "Kanarische und Großkiefern"  → [class + class]  
      ‘Canarian and big_pines’

➢ **We can conclude that compound modifiers adopt a classifying function right from the beginning.**

A pragmatic approach

Point of origin:

We can identify **meaning differences** in pairs also that are otherwise (apparently) identical in meaning:

(1)  
   a. *Der Bentley hat ein optimales Design, fast schon ein Optimaldesign.*  
      ‘the Bentley has an optimal design almost an optimal_design’  
   b. ??*Der Bentley hat ein Optimaldesign, fast schon ein optimales Design.*

(2)  
   a. *Tom hat eine ideale Lösung vorgeschlagen, fast schon eine Ideallösung.*  
      ‘Tom has suggested an ideal solution almost an ideal_solution’  
   b. ??*Tom hat eine Ideallösung vorgeschlagen, fast schon eine ideale Lösung.*

see Härtl (2015a), (2015b)
Scalar particles like *almost* signify that some property is not fully attained and that its **complement** still holds: \[ \text{almost } X \rightarrow \text{not } X \]

(1) *Der Bentley hat ein optimales Design, fast schon ein Optimaldesign.*

‘the Bentley has an optimal design almost an optimal design’

A scalar implicature:
The choice of the **weaker expression** (i.e. the phrase) implicates that the stronger expression (compound) does not hold.

- Compounds represent the **stronger category** on the corresponding scale.

cf. Horn (1972); Rotstein & Winter (2004)
Novel A-N compounds trigger a strong **markedness effect** in German, see Barz (1998).

The effect produces the **implicature** that the compound, as the **more marked** expression, denotes a category **which deviates in meaning** from the phrasal counterpart.

**A manner implicature**

> A deviation from the default way of forming a complex expression (i.e. from the phrase) indicates a deviation from the combination’s canonical denotation.

- **Levinson’s M-principle:**
  
  \[
  \begin{align*}
  \text{matchbox} & \rightarrow \text{stereotypical box of a specific type} \\
  \text{box for matches} & \rightarrow \text{non-stereotypical box}
  \end{align*}
  \]

- **Q/R-based conflict** resolution à la Horn:
  
  Q: *Rotdach* is more marked compared to *rotes Dach*
  
  R: *Rotdach* is not significantly more economical than *rotes Dach*

  \[
  Rotdach \ q\text{-implicates} \ *} \neg \text{ rotes Dach}
  \]

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Meaning specialization

The analysis implies that the markedness of A-N compounds is the cause for semantic specialization as well as the kind interpretation:

Markedness > Semantic specialization / Kind interpretation

Semantic specialization and kind interpretation are effective right from the beginning. Lexicalization is, thus, seen as the effect of semantic specialization.

Semantic specialization: Intersectiveness

- A-N compounds allow non-intersective readings only

  (1) a. ein schneller Raucher → intersective: sb. who is speedy
     ‘a speedy smoker’ → non-intersective: sb. who smokes speedily

  b. ein Schnellraucher → non-intersective: sb. who smokes speedily
     ‘a speedy_smoker’

cf. Egg (2006); Schäfer (2011)
Novel (A-N) compounds in German are inclined to function as labels right from the beginning.

Compounds instantly take on specialized meanings and are more prone to adopt kind readings, as compared to phrases.

We ascribe this to a pragmatic, manner-based implicature: Deviation from the phrase implicates deviation from the meaning of the phrase.

The compounds’ affinity to be lexicalized results from their semantic specialization and kind interpretation – and not vice versa.

The analysis is compatible with a rule-based grammar model, which upholds a categorial and functional distinction between word-formation and phrasal syntax, with the understanding that morphology produces more marked forms than syntax.

Thank you.
References can be found in:


Available here: www.uni-kassel.de/go/haertl