Metonymic synaesthesia: The case of attributive characterization of olfactory stimuli in German

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Overview

1. Synaesthesia, metaphor, metonymy
2. Metonymic synaesthesia
3. Corpus and procedure
4. Findings
5. Conclusion
1. Synaesthesia, metaphor, metonymy

Synaesthesia

- Synaesthesia proper (synasthesia in the brain)
  - colored hearing (photism)
  - grapheme-color

- Verbal synaesthesia (synaesthesia in language)
  - loud colors
  - warm tones
  - sweet voice
  - etc.

1. Synaesthesia, metaphor, metonymy

Vogt’s (2013: 24-27): verbal perceptive-inferential metaphors

- attribute+noun (both refer to perceptual domains)
  - sharp voice

My presentation: verbal synaesthesia or synaesthetic expressions

- attribute+noun (noun pertaining to the olfactory domain + attribute is a color term)
  - green scent
1. Synaesthesia, metaphor, metonymy

Synaesthetic expressions are traditionally considered to be metaphoric:

*loud color*

a) **COLOUR** is construed as something that has the property of being loud in the auditory domain.

b) **LOUD** as a property of intensity in the auditory domain is extended to be a property of intensity in the domain of visual perception.
The **metonymic motivation** of synaesthetic expressions:

- most synaesthetic expressions have a metonymic motivation
  
  (Barcelona 2002: 243)

- intermediate category between metonymy and metaphor
  
  (Dirven 1985)

- heterogeneous regarding their conceptual motivation
  
2. Metonymic synaesthesia

My proposal:
Some synaesthetic expressions are better analyzed as **PROPERTY-metonymies**.

**PROPERTY-metonymy:**
A metonymy whose target is a **PROPERTY** accessed and activated through another **PROPERTY** of the same **THING** or that of a related **THING**.
2. Metonymic synaesthesia

(1) the **green scent** of the **lawn**
2. Metonymic synaesthesia

The underlying relation is co-occurrence or resemblance.

A perceptual property of a thing A is described with the help of ...

a) another perceptual property of A
b) a perceptual property of a co-occurrent thing B
c) a perceptual property of a thing B reminiscent of A regarding the given property
2. Metonymic synaesthesia

Co-occurrence (a)

(2) In front of the window of that house blossomed delicate lilacs, visible from far away. Sándor Csillag was seized by the desire to wake up every morning in a room like this, with lilacs at the window, which as he rose and opened the window wide would fill with their deep purple scent. [Vámos 2009, electronic ed., translation by Peter Sherwood, slightly modified]
(3) From far off comes the **warmer odor** of **cake** baking.

[Updike 2006: 101]

(4) There was the **warm smell** of **pig blood** and **smoke** in the backyard.

[McCullers 2005: 45]

(5) It was delightful to stroll along Apácza Street, whither the **crackling smell** of the nearby **coffee-roasters** and cafés was invariably borne by the wind.

[Vámos 2009]
2. Metonymic synaesthesia

Co-occurrence (b)

(6) The music had a **sausage smell**

[Kling 2014, my translation]

(7) He doesn’t hear the rumbling city anymore, the shouting and honking is replaced by the **cool silence** of the inner courtyards.

[N. Tóth 2015: 41, my translation]
2. Metonymic synaesthesia

Resemblance (c)

(8) The water gathered in a tank around its base and even in summer smelled like winter coats, like naphthalene. A round white smell, like the mothballs in the wardrobe back home.

[Müller 2012, translation by Philip Boehm]
3. Corpus and procedure

Olfaction:
- poorly lexicalized (cf. Holz 2007, Chernigovskaya and Arshavsky 2007)
- utilization of attributes from other sensory domains
- synaesthetic constructions are likely to occur

Color:
- the attribute is very unlikely to be a color term
- do occur in literary, poetic discourse (e.g. 2 and 8)
3. Corpus and procedure

A small-scale corpus study on German syneasthetic attribute-noun constructions combining COLOR and SMELL.

**Corpora:**
- Das Deutsche Referenzkorpus (DeReKo), COSMAS II\textsubscript{web} (ca. 25 billion words, written)

- Digitales Wörterbuch der deutschen Sprache (DWDS) (ca. 6.5 billion words, written)
  [http://dwds.de/](http://dwds.de/)
3. Corpus and procedure

Step #1 – Search for adjective-noun combinations

**Color terms** (all forms, no compounds): *rot* (‘red’), *grün* (‘green’), *blau* (‘blue’), *gelb* (‘yellow’), *weiß* (‘white’), *schwarz* (‘black’), *orange* (‘orange’), *grau* (‘grey’), *braun* (‘brown’), *rosa* (‘pink’) and *lila* (‘purple’)  

[Berlin and Kay 1969, Kay and McDaniel 1978]

**Nouns** (all forms, no compounds):
- *Duft*: positive / neutral
- *Geruch*: neutral / negative
- *Gestank*: negative

**Notes**: Within a distance of 3 words left. Extraction of of + / - 1 paragraph.
3. Corpus and procedure

Step #2 – Exclusion of non-relevant hits

- the color term was not an attribute of the noun (random proximity)

- the noun does not refer to an olfactory stimulus (Duft = ‘the bloom of fruit’ / ‘steam or air’)
3. Corpus and procedure

Step #3 – Categorization of the relevant hits

(i) co-occurrence-based metonymic
(ii) resemblance-based metonymic
(iii) undecided/metaphoric

Notes:
- repetitions: counted only once (*Der schwarze Duft der Schönheit* ‘The black scent of beauty’ 12x)
- undecided/metaphoric: the context did not support the metonymic analysis, nor spoke against it
### 4. Findings

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<th></th>
<th>Duft</th>
<th>Geruch</th>
<th>Gestank</th>
<th>All</th>
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<td>grün</td>
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<td>4</td>
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<td>30</td>
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<tr>
<td>braun</td>
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<td>5</td>
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<tr>
<td>All</td>
<td>45</td>
<td>21</td>
<td>9</td>
<td>75</td>
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</tbody>
</table>
4. Findings: grün + Duft / Gestank (30)

- Co-occurrence-based: 12 (40%)
- Resemblance-based: 12 (40%)
- Undecided/metaphoric: 6 (20%)

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For a detailed analysis of the findings, please refer to page 30 of the document.
4. Findings: grün + Duft / Gestank

- no unpleasant smells
- in the co-presence of: galbanum, parks, grass, leaves, forests, fir trees, etc.
- interaction of metaphor & metonymy: GREEN POLITICAL IDEAS
- reminiscent of: grass, unripe olives, artichokes, green tomatoes, toilet tablets, leaves, ferns, moose, meadows, citrus fruit, cedar trees, pine trees, galbanum, and oak moss
- fresh, clean, and energetic
4. Findings: *braun* + *Geruch / Gestank (// Duft)*

- unpleasant smells (only once with *Duft*)
- co-occurrence-based: 13/13
- in the co-presence of: vomit (1 item)
- interaction of metaphor & metonymy (12 items):
  - right extremist/neo-Nazi ideas/activities as having a smell
  - the color of the uniforms transferred to the smell
4. Findings: *blau* + *Duft / Geruch (/ Gestank)*

- primarily pleasant/neutral olfactory stimuli
- in the co-presence of: violets, cigarettes in blue packaging, blue perfume in liquid form, air, water, cigar smoke, and exhaust fumes of racing cars
4. Findings

- **schwarz**: total: 7; co-occurrence-based: 5; undecided/metaphoric: 2
  - in the co-presence of: shadows, coal, waste gas, and volcanic ash

- **grau**: total: 4; co-occurrence-based: 4
  - in the co-presence of: dark seas, dark rooms, grey cities, and grey fumes

- **rot**: total: 3; co-occurrence-based: 2; undecided/metaphoric: 1
  - in the co-presence of: sunset, rusty metal

- **gelb**: total: 2; co-occurrence-based: 2
  - in the co-presence of: urine, rape fields

- **lila**: total: 2; undecided/metaphoric: 2

- **white**: total: 1; co-occurrence-based: 1
  - in the co-presence of: perfume containing vanilla
4. Findings

- Co-occurrence-based: 15 (20%)
- Resemblance-based: 12 (16%)
- Undecided/metaphoric: 48 (64%)
5. Conclusion

- color-smell synaesthetic expressions are **very scarce**
  (Szántó 2011: 5 of 3,520 Hungarian synaesthetic expressions)

- color-smell synaesthetic expressions **do occur**
  (not only in poetic/specialized discourse)

- a great majority of color-smell combinations are **PROPERTY-metonymies**

- color-smell synaesthetic expressions **go against any directionality** proposed for the synaesthetic transfer


References (II)

Source of the examples

- COSMAS II-Webdienst. Online: [https://cosmas2.ids-mannheim.de/cosmas2-web/](https://cosmas2.ids-mannheim.de/cosmas2-web/)
- Digitales Wörterbuch der Deutschen Sprache. Online: [http://dwds.de/](http://dwds.de/)
Thank You for Your Attention!

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