Partial Blocking, Deblocking
and Argument Structure

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Outline of the talk

Lexical pragmatics and OT

- Lexical semantics: Lexical meaning + context influence
- Lexical pragmatics: word meaning may be paradigmatic in nature
- Alternative expressions relevant for the distribution of a lexical item: Competition
- Partial blocking: narrowing
- Deblocking (poorly studied): broadening

The meaning variation of agentive *durch*

> **_durch_ as an agentive preposition**
>
> Ad-verbally (in passives): limited to special kinds of agents
> Ad-nominally: no such limitation

(1)   a.   *Die Brücke wurde* **durch drei Männer** *zerstört.*
            'The bridge was destroyed by three men (who were ordered to do so).'

      b.   *die Zerstörung der Brücke* **durch drei Männer**.
            'the destruction of the bridge by three men'

- Is agentive *durch* ambiguous?

Durch and *von* as markers of agentivity I

- There are (mainly) two prepositions which can head an agent phrase in passive sentences in German, *von* and *durch*.
- 'Agentive' is to be understood broadly. The term also subsumes other semantic roles assigned to external arguments.
- The discussion will mostly be limited to individuals as agents to avoid some complications wrt the semantics of *durch*
- *Von* may be used for prototypical and non-prototypical agents

(2)   a.   *In Port Elizabeth wurde ein 37jähriger Mann* **von einem Freund** *mit drei Schüssen getötet, weil er abfällige Bemerkungen über Südafrikas Team gemacht hatte.*
       'A 37 years old man was killed with three shots by a friend in P.E. because he had made some derogatory remarks on the South African team.'

Durch and *von* as markers of agentivity II

b.   *Angeborene Verhaltensweisen können* **von einer an sich geringfügige Änderung von Umweltbedingungen** *völlig aus dem Gleichgewicht gebracht werden.*
'Innate behaviour mechanisms can be thrown completely out of balance by small, apparently insignificant changes of environmental conditions.'

Durch and *von* as markers of agentivity III

Durch is used agentively when an individual does not control a situation or when it can be seen as ordered by someone:

(3)   a.   *Die Kühlerflüssigkeit wurde* **durch die Feuerwehr Mannheim** *entsorgt.*
        'The cooler liquid was disposed of by the fire brigade of Mannheim.'

    b.   *Die Gemälde wurden* **durch Vollstreckungsbeamte** *aus dem Haus geholt.*
        'The paintings were removed from the house by bailiffs.'

    c.   *Der Vertrag wurde* **durch den Bundespräsidenten** *unterzeichnet.*
        'The treaty was signed by the German president.'

- *von* is possible in all these cases.

Durch and *von* as markers of agentivity IV

Some further examples:

(4)   a.   *Der Kuchen wurde* $\left\{ \begin{array}{l} \textit{von den} \\ ^{??}\textit{durch die} \end{array} \right\}$ *Finnen gegessen.*
            'The cake was eaten by the Finns'

      b.   *Es wurde* $\left\{ \begin{array}{l} \textit{von den Kindern} \\ ^{??}\textit{durch die Kinder} \end{array} \right\}$ *gelaufen.*
            'The children ran.'

The children in (4-b) can only be interpreted as fulfilling the task
of running as representatives of a group.

Durch and *von* as markers of agentivity V

durch **is unacceptable with certain predicates**

(5)   a.   *Das Feuer wurde* $\left\{ \begin{array}{c} \textbf{von} \\ ^*\textbf{durch} \end{array} \right\}$ **Karl** *wahrgenommen.*
        'The fire was perceived by Karl.'

   b.   *Das Englische wurde schon nach drei Wochen*
      $\left\{ \begin{array}{c} \textbf{von} \\ ^*\textbf{durch} \end{array} \right\}$ **Alex** *beherrscht.*
      'Alex mastered the English language already after three weeks.'

Observations made by Höhle (1978), *Lexikalistische Syntax*

- For perception and mastering, no intervening agents can be imagined?

Is *durch* agentive at all?

Durch has prominent causative readings, but agentive *durch* may be combined with non-causative predicates.

(6) *Der Vertrag wurde* **durch den Bundespräsidenten** *unterzeichnet.*
'The treaty was signed by the German president.'

Durch patterns with *von* in not being combinable with unaccusative predicates in its agentive interpretation:

(7) a. *Er starb durch* $\left\{ \begin{array}{c} \text{eine Kugel} \\ \text{einen Schuss} \end{array} \right\}$.
'He died through a bullet/a shot.'

b. **Er starb* $\left\{ \begin{array}{c} \text{durch einen} \\ \text{von einem} \end{array} \right\}$ *Bauarbeiter.*
Literally: *He died by/through a construction worker
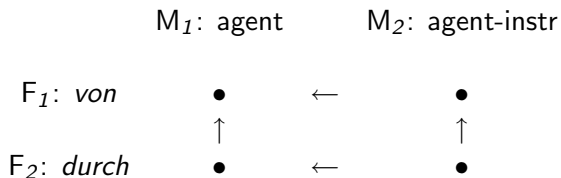Intended: 'He was killed by a construction worker'

durch is partially blocked by *von* I

Partial blocking

Partial blocking can be observed in cases where one out of two
more or less synonymous expressions acquires a specialised,
narrower interpretation, cf. *informant* and *informer*.

- The meaning of agentive *durch* may be considered specialised
  as compared to the semantics of *von* to the extent that *durch*
  may only apply to individuals which are not completely in
  control of a situation: agent-instrument.

durch is partially blocked by *von* II

M_1: agent M_2: agent-instr

F_1: *von*   •   ←   •

          ↑   ↑

F_2: *durch*   •   ←   •

- *von* is formally less complex than *durch* (Old High German: *thuruh*, Middle High German: *dur(u)h*). Not as obvious as in other cases (*kill* vs. *cause to die*)
- *agent-initiators* are semantically less complex than *agent-instruments*, as the latter involve an additional (sub-)event
- *von* may be considered underspecified with respect to **agent-initiator** and **agent-instrument**

Durch deblocked: *von* is non-agentive adnominally

(8) a. *die Hinrichtung der Gefangenen* **von den Soldaten**
'the execution of the soldiers' prisoners'

b. *die Hinrichtung* **von den Soldaten**
'the execution of the prisoners'

c. *die Entdeckung Amerikas* **von Kolumbus**
'the discovery of Columbus' America'

d. *die Zestörung der Brücke* **von drei Männern**
'the destruction of the three men's bridge'

- *von* has a possessive, associative interpretation, also if it immediately follows the nominalisation
- *von* is never unambiguously agentive – if at all agentive – as the head of an adnominal adjunct
- genitive an alternative, but also ambiguous

Only 'durch' is unambiguously agentive adnominally

(9) a. *Die Gefangenen wurden* **von den Soldaten**
         hingerichtet.
         'The prisoners were executed by the soldiers.'
     b. *die Hinrichtung der Gefangenen* **durch die Soldaten**
         'the execution of the prisoners by the soldiers'
     c. *die Entdeckung Amerikas* **durch Kolumbus**
         'Columbus' discovery of America'
     d. *die Zerstörung der Brücke* **durch die Soldaten**
         'the destruction of the bridge by the soldiers'

- **nominalisation (+ gentive) + agent** → *durch*
- There are no restrictions to the agentivity of *durch* phrases adnominally
- *durch* has a **preferred** interpretation of agent-initiator, similar to *von* in passives

'Durch' is deblocked (contextually)

Deblocking

Deblocking refers to cases where an expression is no longer blocked because the expression itself cannot be used in a particular context, cf. examples of *conceptual grinding*.

AVOIDAMBIGUITY?

von may never be understood to be an agent alone. An alternative expression must be sought to make sure the hearer chooses the correct interpretation. *Durch* is the only other candidate and thus emerges as the winner.

- The **semantics** of *durch* does not change as such.

Some complications in favour of deblocking I

von **available agentively if base predicate is intransitive**

(10)   a.   das Gemeckere von alten Frauen
             'the complaining of old women'
        b.   das Laufen von Kindern
             'the running of children'

Only one argument to be realised

Some complications in favour of deblocking II

von **more acceptable if internal argument is incorporated in nominalisation**

(11)   a.   *die Beschreibung von Bürgermeisterin Isabel Alcover*
                'the description of mayor Isabel Alcover'

          b.   *die **Lage**beschreibung von Bürgermeisterin Isabel Alcover*
                'die situation-description by mayor Isabel Alcover'

It is clear that the *von* phrase cannot designate the internal argument in (11-b)

Some additional data in favour of a deblocking approach I

- If the acceptability of *durch* in combination with certain predicates was determined only through the semantics of a predicate and *durch*, we would expect *durch* to be unacceptable with the corresponding nominalisations too

- Earlier, we saw some examples of predicates with which *durch* seems uncompatible as a marker of the external argument *beherrschen* ('master') and *wahrnehmen* ('perceive', 'sense')

Some additional data in favour of a deblocking approach II

(12) a. *Die Gitarre wurde durch Alex beherrscht.*
         'The guitar was mastered by Alex.'
      b. *Das Feuer wurde durch Karl wahrgenommen.*
         'The fire was perceived by Karl'.

(13) a. *die Beherrschung der Gitarre durch Alex*
         Alex' mastering of the guitar
      b. *die Beherrschung der Eingriffe durch die Ärzte*
         'the doctors' mastering of the surgery'
      c. *die Wahrnehmung des Feuers durch Karl*
         'Karl's perception of the fire'.
      d. *die optische Wahrnehmung durch den Kunden*
         'the customers' optical perception'.

This distribution cannot be explained by reference solely to the semantics of the base predicate and *durch* in combination

The nature of deblocking

Deblocking is contextual in nature, i.e. we need to make reference to context.

- Contextual neutralisation of constraints?
- Avoid ambiguity?
- Bidirectional approach: a speaker considering the hearer's perspective should avoid using *von* adnominally

Concluding remarks

- In its agentive usage *durch* is partially blocked by *von* in passives. *Durch* may only apply to agents which do not control a situation (completely)

- Adnominally, *von* is (in most cases) blocked as an expression of agentivity because it is ambiguous.

- This has a deblocking effect on *durch*, which emerges as the preferred expression of agentivity adnominally.

- The usage of *durch* cannot be explained by considering only distribution in passives or adnominally.

- The availability of *von* plays an important role.

- Lexical organisation: paradigmatic dimension, at least in the case of functional parts of speech such as prepositions

Selected references

📕 Beaver, D. & H. Lee (2004)
Input–Output Mismatches in Optimality Theory
in Blutner/Zeevat (eds.): Optimality Theory and Pragmatics

📕 Blutner, R. (1998)
'Lexical Pragmatics'
Journal of Semantics 15(2)

📕 Solstad, T. (2003)
Towards the optimal lexicon
in M. Weisgerber (ed.): Proceedings SuB7

📕 Zwarts, J. (2004)
Competition between word meanings: the polysemy of
(A)Round
in C. Meier & M. Weisgerber (eds.) Proceedings SuB8