Bavarian complex *der*-verbs and temporal adverbials

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07.11.2020
Event Semantics 2020
Bavarian *der*-verbs

- Bavarian *der*-verbs: complex verbs built with the Bavarian prefix *der-*

  (1) a. *essen* ‘eat’ $\rightarrow$ *der-essen*  
      b. *aufessen* ‘eat up’ $\rightarrow$ *auf-der-essen*
Bavarian der-verbs

- Bavarian der-verbs: complex verbs built with the Bavarian prefix der-
  1. a. essen ‘eat’ ⇝ der-essen (ROOT: essen)
     b. aufessen ‘eat up’ ⇝ auf-der-essen (ROOT: aufessen)

- Bavarian der- may correspond to Standard German er-, ver- zer- but has also independent uses (e.g., Sonnenhauser 2012)
  2. a. er-arbeiten ‘acquire’ ⇝ der-arbeiten
     b. ver-faulen ‘rot’ ⇝ der-faulen
     c. zer-stechen ‘prick all over’ ⇝ der-stechen
Focus: *der*-verbs conveying “successful realization”

Purely Bavarian use: the complex verb encodes roughly that the agent managed to perform the action described by the verbal material *der*-combines with

(3)  *Der* Alex hat das Schnitzel auf-*der-*essen.*
    the Alex has the schnitzel up-*der-*eaten
    (∼ ‘Alex managed to eat the schnitzel.’)

(4)  *Der* Alex hat den Ball gegen die Wand *der-*schmissen.*
    the Alex has the ball against the wall *der-*thrown
    (∼ ‘Alex managed to throw the ball against the wall.’)
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- the agent performed the action
- the agent intended to perform the action
Focus: *der*-verbs conveying “successful realization”

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(≈ ‘Alex managed to throw the ball against the wall.’)

▶ the agent performed the action
▶ the agent intended to perform the action
▶ the speaker believes that the action was not easy to complete
Goals of this talk

▶ **Starting point:** What is the aktionsart of *der*-verbs?
  ⇒ we show that they are *achievement predicates*
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  - we show that they are **achievement predicates**

- The result that *der*-verbs describe achievements, leads to a puzzle:
  - *der*-verbs can combine with temporal adverbials that are otherwise incompatible with achievement predicates
  - the resulting interpretation cannot be explained by aspectual coercion
Goals of this talk

▶ Starting point: What is the aktionsart of *der*-verbs?
   ⇒ we show that they are *achievement predicates*

▶ The result that *der*-verbs describe achievements, leads to a puzzle:
   – *der*-verbs can combine with temporal adverbials that are otherwise incompatible with achievement predicates
   – the resulting interpretation cannot be explained by aspectual coercion

▶ We discuss two potential solutions to the puzzle and present further data that, we believe, favors one of the two solutions.
Roadmap

Introduction

Aktionsart of *der*-verbs
- *der*-verbs are not states or activities
- *der*-verbs are achievements, not accomplishments
Conclusion: the aktionsart of *der*-verbs

Puzzle: combinations with unexpected temporal adverbials
The puzzle
Proposition B1: temporal adverbials as internal modifiers
Proposition B2: *der*-verbs are morpho-syntactically complex
B1 vs. B2: aspectual coercion

Conclusion
Behavior with time-point adverbials

▶ **Observation:** time-point adverbials temporally locate the event described by *der*-verbs

(5) *Der Alex hat die Kiste um Punkt 12h der-zogen.*  
the Alex has the box at point 12h der-pulled  
‘At 12h sharp, Alex managed to pull the box.’

*der*-verbs are not states or activities
Behavior with time-point adverbials

- Observation: time-point adverbials temporally locate the event described by *der*-verbs

(5) *Der Alex hat die Kiste um Punkt 12h der-zogen.*
the Alex has the box at point 12h der-pulled
‘At 12h sharp, Alex managed to pull the box.’

- with activities and states, they localize an instance within the runtime

(6) *Die Susi lief um Punkt 12h.*
the Susi ran at point 12h
‘Susi was running at 12h sharp.’

(7) *Die Ida war um Punkt 12h glücklich.*
the Ida was at point 12h happy
‘Ida was happy at 12h sharp.’

⇒ *der*-verbs denote neither activities nor states
der-verbs: achievements or accomplishments?

- Background: only accomplishments are compatible with *dauern*
  ⇒ predicates describing an event with a left and a right boundary

(8) Accomplishments

a. *Die Susi hat die Türe zugemacht.*
   the Susi has the door closed
   ‘Susi closed the door’.

b. *Die Ida ist zum Haus gegangen.*
   the Ida is to the house went
   ‘Ida went to the house’.

c. *Die Ina hat einen Apfel gegessen.*
   the Ina has a apple eaten
   ‘Ina ate an apple.’

✓...Es hat 10 min gedauert.
✓...‘It lasted 10 minutes.’
dauern-test: der-verbs behave like achievements

der-verbs and achievement predicates are incompatible with *dauern*

▶ Achievements

(9) *Der Tom hat die Partie gewonnen/verlassen.*
the Tom has the game won/left
‘Tom won/left the game.’
??...Es hat 10 min gedauert.
??...‘It lasted 10 min.’

▶ *der*-verbs

(10) *Der Alex hat die Kiste der-zogen.*
the Alex has the box der-pulled
‘Alex managed to pull the box’.
??...Es hat 10min gedauert
??...‘It took 10min.’

wrt *dauern*: *der*-verbs behave like achievement predicates
der-verbs are achievements, not accomplishments

**in-adverbials as an aktionsart-test**

- **Background:** achievements describe *left or right boundaries* of events
  (Piñón 1997; Zybatow 2004, 2008)
in-adverbials as an aktionsart-test

- **Background**: achievements describe left or right boundaries of events (Piñón 1997; Zybatow 2004, 2008)

- **Zybatow 2004, 2008**: in-adverbials are potentially ambiguous between two readings
  - **within-reading**: measures the runtime of the event described by the modified predicate
  - **after-reading**: measures the time from reference time to some boundary of the event described by the modified predicate

⇒ accomplishments and achievements show distinct interpretation patterns with in-adverbials
**Introduction**

Aktionsart

Puzzle: temp. adverbials

Conclusion

References

*der*-verbs are achievements, not accomplishments

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**in-adverbials as an aktionsart-test**

- **Background:** achievements describe **left or right boundaries** of events  
  (Piñón 1997; Zybatow 2004, 2008)

- **Zybatow 2004, 2008:** *in*-adverbials are potentially ambiguous between two readings
  
  - *within-reading:* measures the runtime of the event described by the modified predicate
  
  - *after-reading:* measures the time from reference time to some boundary of the event described by the modified predicate

  ⇒ accomplishments and achievements show distinct interpretation patterns with *in*-adverbials

- **We show**
  
  - *der*-verbs do not pattern with accomplishments
  
  - they pattern with both types of achievements: right boundary achievements (rAs) and left boundary achievements (lAs)
Accomplishments + \textit{in}-adverbials (Zybatow 2004, 2008)

Interpretation-pattern of \textit{accomplishments} + \textit{in adverbials}

- \textit{within}-reading available
- \textit{after}-reading targets left boundary

\begin{enumerate}[a.]
\item \textit{Er liest den Brief in 2 min}
  He reads the letter in 2 min.
  ‘It takes him 2 min to read the letter.’
\item \textit{Er liest \textit{in 2 min} den Brief.}
  he reads in 2 min the letter
  ‘In 2 min, he starts reading the letter.’
\end{enumerate}
Achievements + *in*-adverbials (Zybatow 2004, 2008)

1) right boundary achievements (= right boundary of an inferred event)
   - *within*-reading available
   - *after*-reading targets right boundary

(12) a. *Der Alex gewinnt das Spiel in 2 min.*
   the Alex wins the game in 2 min
   ‘It takes Alex 2 min to win the game.’

   b. *Der Alex gewinnt in 2 min das Spiel.*
   ‘In ten minutes, Alex wins the game.’
Achievements + *in*-adverbials (Zybatow 2004, 2008)

1) right boundary achievements (= right boundary of an inferred event)
   - *within*-reading available
   - *after*-reading targets right boundary

(12)  
a. *Der Alex gewinnt das Spiel in 2 min.*  
the Alex wins the game in 2 min  
‘It takes Alex 2 min to win the game.’

b. *Der Alex gewinnt in 2 min das Spiel.*  
‘In ten minutes, Alex wins the game.’

2) left boundary achievements (= left boundary of an inferred event)
   - *within*-reading unavailable
   - *after*-reading targets left boundary

(13)  
a. *Der Alex verlässt den Platz in 2 min.*  
the Alex leaves the square in 2 min  
#‘It takes Alex 2 min to leave the square.’

b. *Der Alex verlässt in 2 min den Platz.*  
‘In 2 min, Alex leaves the square.’
**der-verbs and in-adverbials**

1) \(\text{der-} + \text{ROOT}^+_{\text{acc/rA}} \Rightarrow \text{rA pattern}\)

(14) a. \(\text{Er der-liest den Brief in 2 min.}\)
    'He manages to read the letter within 2 min.'

b. \(\text{Er der-liest in 2 min den Brief.}\)
    'In 2 min, he manages to read the letter.'

2) \(\text{der-} + \text{ROOT}^+_{\text{act/IA}} \Rightarrow \text{IA pattern}\)

(15) \(\text{Die Ida der-zieht die Kiste in 2 min.}\)
    'In 2 min, Ida manages to pull the box.'

(16) \(\text{Sie der-haut in 2 min ab.}\)
    'In 2 min, she manages to leave.'
Aktionsart: conclusion

▶ **Time-point adverbials:** *der*-verbs do not denote states or activities

▶ **dauern-test:** *der*-verbs do not denote accomplishments

⇒ like achievements, *der*-verbs are incompatible with *es hat x-Zeit gedauert*

▶ **in-adverbials:** *der*-verbs pattern exactly like achievements

– *der-* + \( \text{ROOT}^+_{\text{acc/rA}} \) pattern like right boundary achievements

– *der-* + \( \text{ROOT}^+_{\text{act/lA}} \) pattern like left boundary achievements

⇒ Prefixion of *der-* creates achievements by introducing a boundary of the event described by the \( \text{ROOT}^+ \).
Puzzle: combination with temporal adverbials

▶ Observation: only the boundary described by the full *der*-verb is accessible to negation

(17) *Der Alex hat das Schnitzel nicht auf-der-essen.*
    the Alex has the Schnitzel not up-der-eaten
    ‘Alex did not manage to eat the schnitzel.’

(not: ‘Alex managed to not eat the schnitzel.’)

⇝ event described by ROOT is not compositionally accessible
The puzzle

Puzzle: combination with temporal adverbials

- **Observation:** only the boundary described by the full *der*-verb is accessible to negation

  (17) *Der Alex hat das Schnitzel nicht auf-der-essen.*
  the Alex has the Schnitzel not up-der-eaten
  ‘Alex did not manage to eat the schnitzel.’
  *(not: ‘Alex managed to not eat the schnitzel.’)*

  \[\rightarrow\] event described by ROOT is not compositionally accessible

- **Puzzle:** when *der-halten* ‘der-hold’ combines with a durative adverbial, the sentence has an interpretation (R2) that cannot be explained via aspectual coercion

  (18) *Der Alex hat die Kiste zwei Stunden lang der-halten.*
  the Alex has the box two hours long der-halten.
  **R1:** ‘For two hours, Alex repeatedly managed to hold the box.’
  **R2:** ‘Alex managed to hold the box for two hours.’
How to proceed?

Assuming the following contribution for durative adverbials:

(19) \([\text{zwei Stunden lang}] = \lambda e. \text{for}(e, \text{two-hours})\)  
(Dölling 2014)

there are two ways to deal with this puzzle:

(A) the prefix \(\text{der-}\) does not fix the aktionsart of the complex verb, the verbal root does (cf. Sonnenhauser 2012)

(B) \(\text{der-}\)verbs are achievements and the interpretation R2 can be explained by independent means

⇒ we see two ways to make (B) concrete:

(B1) temporal adverbials can be internal modifiers
(B2) \(\text{der-}\)verbs are morpho-syntactically complex

Internal locative modifiers adjoin low in the VP and locate an entity involved in the eventuality:

(20) Eva signed the contract on the last page.

⇒ interpretation via a flexible modification template

(21) MOD*: $\lambda Q. \lambda P. \lambda x. P(x) \& R(x, v) \& Q(v)$

($R$ and $v$ are contextually instantiated)

Internal locative modifiers adjoin low in the VP and locate an entity involved in the eventuality:

(20) Eva signed the contract on the last page.

⇒ interpretation via a flexible modification template

(21) MOD*: \( \lambda Q. \lambda P. \lambda x. P(x) \land R(x, v) \land Q(v) \)

\((R \text{ and } v \text{ are contextually instantiated})\)

⇒ combination of on the last page with sign in (20)

(22) \([ [ \text{sign} \ [\text{MOD* on the last page}]]] = \lambda e. \text{sign}(e) \land R(e, v) \land \text{on-the-last-page}(v)\)

⇒ \(R\) is instantiated as a part-of relation
⇒ \(v\) is inferred to denote Eva’s signature
B1: Possible analysis for (18)

(18) Der Alex hat die Kiste zwei Stunden lang der-halten.
    the Alex has the box two hours long der-halten.
    ‘Alex managed to hold the box for two hours.’

− Assume: der-halten describes a boundary e of a holding-event
− Assume: zwei Stunden lang ‘for two hours’ adjoins between the direct object and the der-verb
Proposal B1: temporal adverbials as internal modifiers

B1: Possible analysis for (18)

(18)  *Der Alex hat die Kiste zwei Stunden lang der-halten.*

the Alex has the box two hours long der-halten.

‘Alex managed to hold the box for two hours.’

- **Assume:** *der-halten* describes a boundary e of a holding-event
- **Assume:** *zwei Stunden lang* ‘for two hours’ adjoins between the direct object and the *der-*verb

▶ use MOD* to compose *zwei Stunden lang* with *der-halten* in (18)

(23)  \[\text{[[MOD* } \text{zwei Stunden lang]} \text{ derhalten}]\] =

\[\lambda e. \text{der-hold(e) & } R(e, e') & \text{for-two-hours(e')}\]

⇒ R is plausibly instantiated by a part-of relation
⇒ v is inferred to denote the holding-event e’ performed by Alex

(cf. Zybatow 2008 for *in-*adverbials)
A syntactic analysis of complex verbs

Wurmbrand (1998), Zeller (2001): complex verbs in German are built in the syntax

▶ prefixes have scope over a lower VP that introduces the particle and verbal root
▶ the verbal root is combined with the prefix via head movement but reconstructs into the lower VP

⇒ adjunction sites in lower and higher VP
B2: Possible analysis for (18)

(18) Der Alex hat die Kiste zwei Stunden lang der-halten.
    the Alex has the box two hours long der-halten.
    ‘Alex managed to hold the box for two hours.’

– **Assume**: zwei Stunden lang ‘for two hours’ adjoins to the lower VP
– **Assume**: der- has scope over the lower VP, closes off the holding-event described there, and introduces a boundary event for it

▶ zwei Stunden lang composes with halten ‘hold’ as a “regular modifier”

(25) \( \text{VP}_{high}: [.VP [.V’ \text{VP}_{low} [.V der- ] ] ] \)

⇒ no inference-based composition step needed
B1 or B2? – A look at aspectual coercion

Observation:

If a *der*-verb combines with a temporal adverbial that does not readily combine with the complex verb *and* the internal verbal material, we observe aspectual coercion readings with both parts.

(26) *Der Alex hat 10 Minuten lang einen Reifen über einen Zaun*  
the Alex has 10 minutes long a tire over a fence  
drüber-der-schmissen.  
over-der-thrown

▶ temporal adverbial: *10 Minuten lang* ‘for 10 Minutes’
▶ ROOT: *drüberschmeissen* ‘throw across’
## Aspectual coercion: scenario 1

**Scenario 1:** Alex participates in a Spartan Race. His final task is to throw a tire across a fence for as long as he can manage. The longer he manages, the more points he gets.

(26) *Der Alex hat 10 Minuten lang einen Reifen über einen Zaun drüber-der-schmissen.*

‘For 10 minutes, Alex managed to throw a tire across a fence.’
Aspectual coercion: scenario 1

Scenario 1: Alex participates in a Spartan Race. His final task is to throw a tire across a fence for as long as he can manage. The longer he manages, the more points he gets.

(26) *Der Alex hat 10 Minuten lang einen Reifen über einen Zaun drüber-der-schmissen.*

‘For 10 minutes, Alex managed to throw a tire across a fence.’

Interpretation: the *der*-verb plus its internal arguments and modifiers are coerced to get an iterative interpretation

(27) For 10 minutes, Alex repeatedly managed to throw a tire across a fence. Then he didn’t manage another throw.
Aspectual coercion: scenario 2

Scenario 2: Alex participates in a Spartan Race. His final task is to throw a tire across a fence for 10 minutes. If he takes a break during those 10 minutes, he won’t get any points.

(26) Der Alex hat einen Reifen 10 Minuten lang über einen Zaun
drüber-der-schmissen.
‘Alex managed to throw a tire over a fence for 10 minutes.’
Aspectual coercion: scenario 2

**Scenario 2:** Alex participates in a Spartan Race. His final task is to throw a tire across a fence for 10 minutes. If he takes a break during those 10 minutes, he won’t get any points.

(26) *Der Alex hat einen Reifen 10 Minuten lang über einen Zaun*  
the Alex has a tire 10 minutes long over a fence  
drüber-der-schmissen.  
over-der-thrown  
‘Alex managed to throw a tire over a fence for 10 minutes.’

**Interpretation:** the verbal material without *der-* but including the internal argument and modifiers is coerced to get an iterative interpretation

(28) Alex managed to throw a tire across a fence for a duration of 10 minutes. He didn’t take a break.
**B1 or B2?**

How B1 and B2 account for the aspectual coercion reading in scenario 2:

- **B1 – Flexible modification template**: combining the temporal adverbial with the verb requires inferring an event that cannot combine with the adverbial unless the combination is repaired by aspectual coercion.

- **B2 – Complex syntax**: combining the temporal adverbial with the verb requires no additional inference step; the compositional mismatch is repaired by aspectual coercion.

⇒ to our minds, B2 is a more parsimonious account of the data
⇒ **But**: we still lack clear evidence for or against either B1 or B2.
Summary

- Bavarian *der*-verbs that describe the successful realization of an action are achievement predicates.

- The type of achievement depends on the ROOT that *der-* combines with.

- While negation cannot access the eventuality described by the verbal ROOT material, **temporal adverbials** seem to be able to modify this eventuality.

- **Two possible ways to account for this:**
  1. temporal adverbials can serve as internal modifiers
  2. complex verbs provide low adjunction sites that give access to the eventuality described by the verbal ROOT material

- The aspectual coercion data, to our mind, favors the second account.
Thank you!

We would like to thank our friends and families for acting as our native speaker consultants!
References I


References II


Appendix: rA

- *der*-verbs + rAs also describe rAs

- Zybatow 2004: *einlösen* is a right boundary achievement

  (29) *Er der-löst den Gutschein in 1 min ein.*
  he der-solves the voucher in 1 min PART
  ‘He manages to redeem the voucher within 1 min.’

  (30) *Er der-löst in 1 min den Gutschein ein.*
  he der-solves in 1 min the voucher PART
  ‘In 1 min, he manages to redeem the voucher.’
Appendix: other adverbials

(31) *Die Johanna hat das Buch mit meiner Brille der-lesen.*
the Johanna has the book with my glasses der-read
R1: ‘With my glasses, Johanna managed to read the book.’
R2: ‘What Johanna managed, was reading the book with my glasses.’

(32) *Der Alex hat das Schnitzel ohne Training auf-der-essen.*
the Alex has the schnitzel without training PART-der-eaten
R1: ‘Without training, Alex managed to eat the schnitzel.’
R2: ‘What Alex managed, was eating the schnitzel without training.’