PHRASALEX III

PHRASEOLOGICAL APPROACHES TO LEXICOGRAPHY

PHRASEBASE TALK

Language learner relevant features of verbal aspect in movement verbs

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1. Context: introducing verbal aspect information into dictionary entries

Aim: to introduce information on verbal aspect into a pattern-based electronic dictionary for advanced learners.

Verbal aspect

conceptual category in language
expressed by various linguistic devices

language-specific and
essential to verb meaning and behaviour

→

Lexicography

as yet no systematic consideration of verbal aspect in the description of verbs in GER/ENG/ITA

PhraseBase

descriptions of (the polysemy of) words
in their semantic and syntactic context

Approach:

1) collect information on verbal aspect – 2) develop presentation devices – 3) test devices with language learners

↓

Case study: examples from collected data for *steigen* and *klettern*

→ relevance for advanced learners

2. Verbal aspect: basic principles and aspectual properties

Temporal structuring of events and situations via language regarding their boundaries (and phases)

Sasse, 2002; Dessì Schmid, 2014

= verbal aspect as a conceptual area with a language-specific structure, expressed by various linguistic devices

Various approaches in literature on verbal aspect, Overview in Sasse, 2002; Filip, 2012

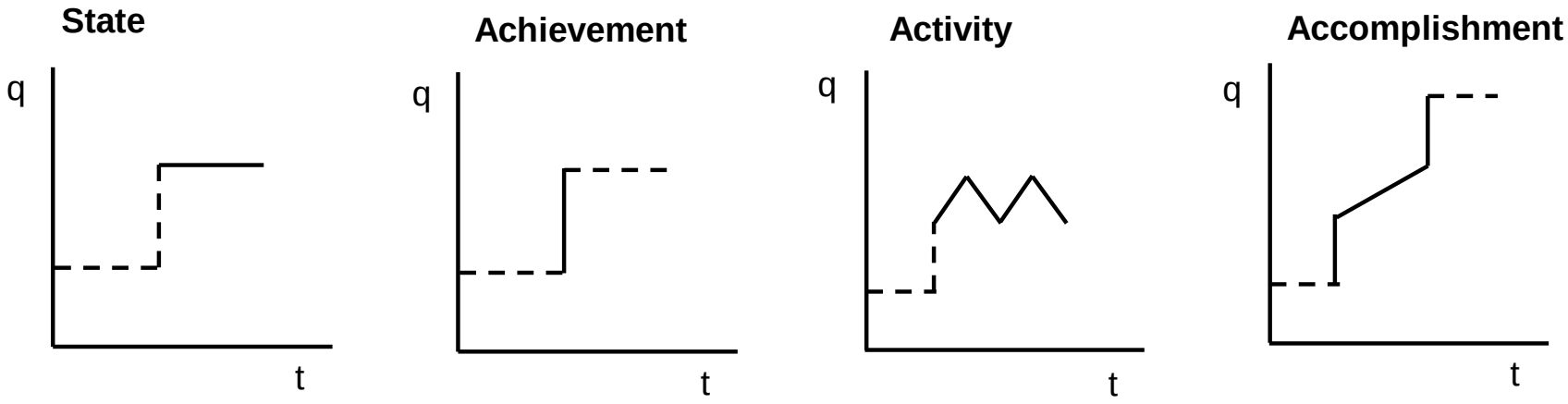
a **bidimensional approach** is assumed here

1) **Lexical aspect** as a lexical-semantic property of verbs and verb phrases
   following Vendler (1957) / Mourelatos (1978)
2) **Grammatical aspect** expressed by verb inflection and certain verbal periphrases
   imposes a certain ‘perspective‘ on the temporal structure as expressed by lexical aspect

Comrie, 1976; Johanson, 2000

2. Verbal aspect: basic principles and properties

Lexical aspect: properties according to Vendler (1957) / Mourelatos (1978), images in Croft (2012)



simplified representation of basic aspect properties

q-axis: qualitative features (change of state), t-axis: time

3. Verbs of movement: semantic and syntactic properties

„There is probably going to be some kind of parallelism between how a category structures space and how it structures time.“ (Talmy, 2018, p. 12)

Translational motion according to Talmy (2007, p. 70f. and 1991, p. 488):

A **figure** (some object) moves in relation to a **ground** (some reference object) along a certain **path**.

Languages can be classified by looking at how they **tend to encode path** in movement verbs (Talmy, 2007):

Verb framed languages: Path is contained in the verb root

= characteristic of Romance languages, e. g. *salire*

Satellite framed languages: Path is expressed in a “satellite”, e. g. a prepositional phrase or particle

= characteristic of German, predominantly also English (Bernini, 2006), e. g. *climb out*, *hochklettern*

salire is a **path of motion verb**

climb and *klettern* are **manner of motion verbs**

3. Verbs of movement: semantic and syntactic properties

Motion verbs can take **different satellites**:

locative PPs (*in the park*), directional PPs (*to the door*), adjuncts (*a mile, a trail*) …

Dowty, 1991; Tenny, 1994; Drăgan, 2011

Satellites may **influence aspectual properties** of the verb phrase, e. g.:

directional PPs indicating a goal (TERMINUS, i. e. an endstate): *climb to the top of a mountain*

adjuncts denoting a path with an inherent endpoint (MEASURE): *climb a route*

Tenny, 1994

Path of motion verbs vs. **manner of motion verbs**

two ends of a continuum: path verbs may have manner components and vice versa

groups on this continuum allow or disallow combinations with certain satellites

Drăgan, 2011

3. Verbs of movement: semantic and syntactic properties

steigen: path of motion verb (with a manner of motion component)

klettern: manner of motion verb

Path of motion verbs that also specify manner of motion — Drăgan, 2011

typically require a path element, do not allow locatives

Manner of motion verbs — Drăgan, 2011

typically allow combination with path elements (source, direction, path, goal) and locatives

All meanings of the verbs are analysed: **factive as well as fictive motion** — Talmy, 2018

e. g. *ein Weg steigt* *a road climbs,* *ein Aktienkurs steigt* *a stock price climbs*

→ instances „that we can describe linguistically as if there were actual motion there.“ (Talmy, 2018, p. 125)

→ linguistic expressions of some areas are conceptually structured as movement — Lakoff & Johnson, 1980

4. Phrase-based active dictionary model

Phrase-based active dictionary (PAD): monolingual electronic dictionary model for language production

Words occur in **characteristic semantic-syntactic patterns** Sinclair, i. a. 2003 (also Hanks, i. a. 2004)

Patterns are based on three features around the word in question:

1) collocations
2) associated groups of words with shared semantic features (semantic preference)
3) grammatical structure (colligation)

Each pattern corresponds to a certain meaning of the word, which means that

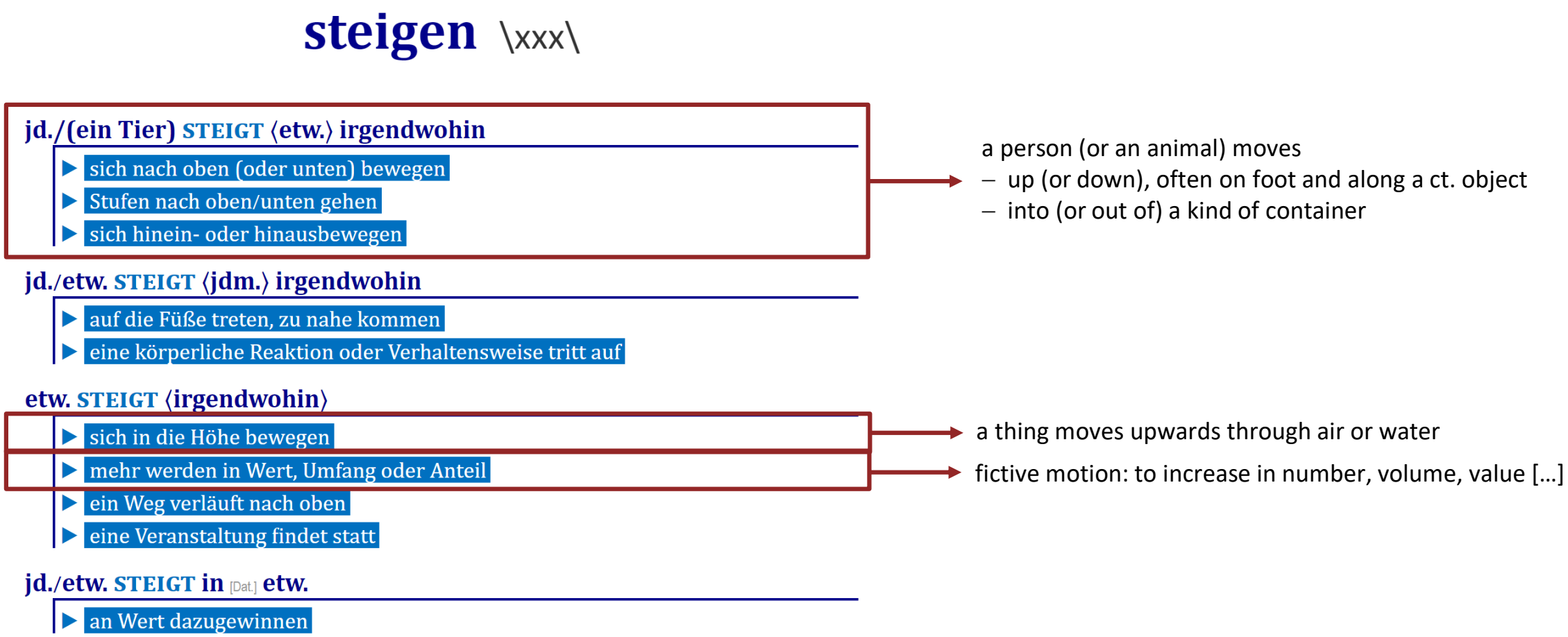
… meanings can be identified by analysing **corpus data:** Giacomini et al., 2020

extraction of collocations, grouping of semantically-related collocations

… meanings can be adequately **presented in their characteristic pattern**

patterns are the basic units in the PAD model: "**lexical units**" DiMuccio-Failla & Giacomini 2022

4. Phrase-based active dictionary model



Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

4. Phrase-based active dictionary model

steigen \xxx\

jd./(ein Tier) STEIGT ⟨etw.⟩ irgendwohin

▶ sich nach oben (oder unten) bewegen

1 jd. STEIGT auf ein [relativ großes] Objekt / eine Erderhebung

2 jd. STEIGT auf einen [kleineren] Gegenstand

SPEZIALFÄLLE: ▽ ■ jd. STEIGT auf ein Siegerpodest
■ jd. STEIGT auf den Thron

VARIATIONEN: ▽ **a** jd. STEIGT auf/in die Bremse(n) / aufs Gas / in die Eisen
: ■ jd. STEIGT auf die Bremse / aufs Gas

3 jd. STEIGT auf ein Fortbewegungsmittel

SPEZIALFÄLLE: ▽ ■ jd. STEIGT auf ein Fortbewegungsmittel

VARIATIONEN: ▽ **a** jd. STEIGT in den Sattel
: ■ jd. STEIGT in den Sattel

3′ jd. STEIGT von einem Fortbewegungsmittel

VARIATIONEN: ▽ **a** jd. STEIGT aus dem Sattel

4 jd. STEIGT über ein vertikales Hindernis

▶ Stufen nach oben/unten gehen

▶ sich hinein- oder hinausbewegen

jd./etw. STEIGT ⟨jdm.⟩ irgendwohin

▶ auf die Füße treten, zu nahe kommen

▶ eine körperliche Reaktion oder Verhaltensweise tritt auf

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

4. Phrase-based active dictionary model



a person (or an animal) moves
- up (or down) something by using hands and feet
- up or in/out of something with difficulty

fictive motion: to increase in number, volume, value […]

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

5. Interim conclusion: patterns, movement verbs and verbal aspect

Patterns are used to describe the polysemy of words via semantic-syntactic structures of word meanings

→ principles are similar to certain approaches in general linguistics (i. a. Principled Polysemy Approach)

Tyler & Evans, 2001; Evans, 2005

Aspectual polysemy: a verb can express different kinds of events and situations Coll-Florit, 2009

- aspectual properties of verbs are part of the verb‘s meaning
- are related to certain semantic and syntactic factors of the verb and its environment

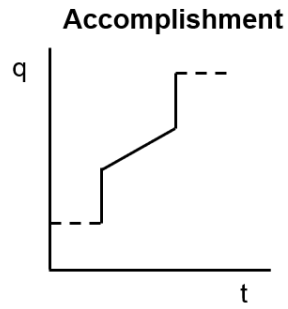
Assumption: Verbal aspect is an integral part of a verb‘s patterns (and their respective meanings)

- lexical units of the verb in the dictionary entries can benefit from aspectual information
- aspectual information has to be collected for each verb meaning individually

6. Case study *klettern* and *steigen:* 'irgendwohin'

jd./(ein Tier) STEIGT ⟨etw.⟩ irgendwohin

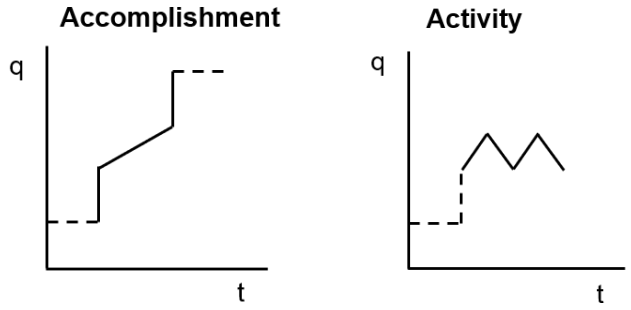
verb of inherently directed motion with a manner component
requires a path-element: source/goal or path (measuring out)



1) *Als sie vom Fahrrad steigen sollte, verlor die Frau komplett das Gleichgewicht.*
   When she was supposed to get off the bike, the woman completely lost her balance.
2) *Wir stiegen auf einen kleinen Hügel […]*
   We climbed to the top of a small hill […]
3) *Wer die mehr als 240 Stufen nach oben steigt, hat einen tollen Ausblick […].*
   If you climb the more than 240 steps to the top, you will have an amazing view […].

jd./(ein Tier) KLETTERT ⟨⟨etw.⟩ irgendwohin⟩

verb of manner of motion (path-idea present)
combination with path elements optional, locatives possible



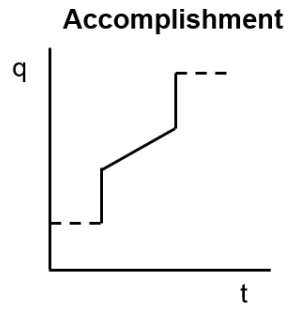
1) *An der Anlegestelle angekommen, kletterten wir auf den Felsen an der Küste […]*
   After we arrived at the pier, we climbed on top of the rock at the coast […]
2) *Beim Bouldern klettert man an einer Kletterwand […]*
   When bouldering, you climb on a wall […]

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* 'irgendwohin'

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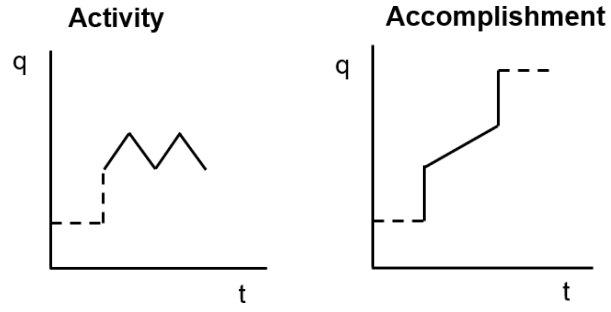


etw. STEIGT ⟨irgendwohin⟩

verb of inherently directed motion
path is present in verb meaning

1) *Das Flugzeug stieg noch immer […]*
   The plane was still rising […]

2) *Für das Auge ist es wunderschön, wenn viele bunte Ballons in den Himmel steigen.*
   It is beautiful to the eye seeing many colourful balloons rise into the sky.

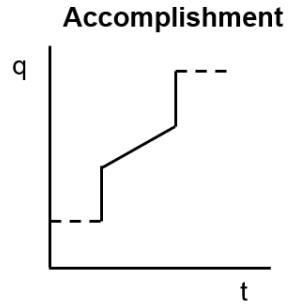


Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* ‘irgendwohin’

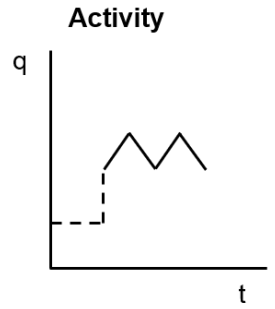
jd./(ein Tier) STEIGT ⟨etw.⟩ irgendwohin

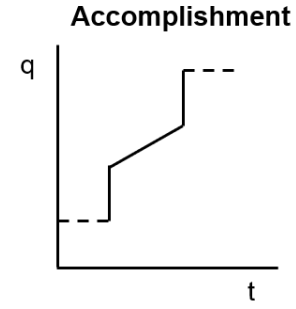
Always needs a goal of movement (e. g. *to the top of a mountain*) or a delimited path (e. g. *the 32 steps to the top*).



etw. STEIGT ⟨irgendwohin⟩

verb of inherently directed motion
path is present in verb meaning





1) *Das Flugzeug stieg noch immer […]*
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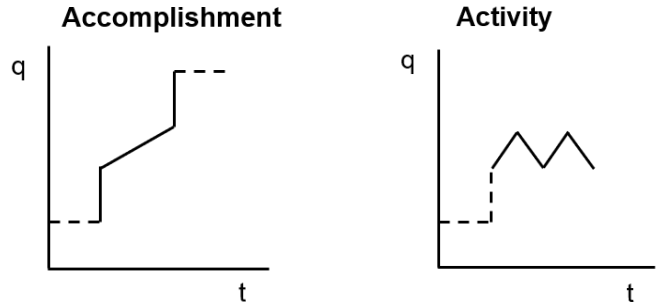
6. Case study *klettern* and *steigen:* different sense fields

jd./(ein Tier) KLETTERT ⟨⟨etw.⟩ irgendwohin⟩

- sich mithilfe der Extremitäten an einer Sache nach oben (oder unten) bewegen
- sich mit gewisser Mühe/Anstrengung irgendwohin bewegen

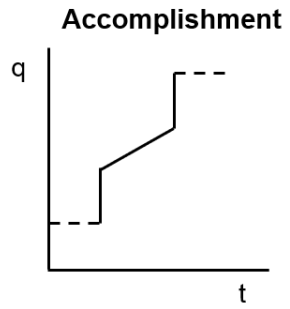
Sense Field 1: to move using hands and feet

verb of manner of motion (path-idea present)
combination with path elements optional, locatives possible



Sense Field 2: to move (on foot) with some effort – meaning close to *steigen*

verb of inherently directed motion with a manner component
needs a path element: source/goal or path (measuring out)

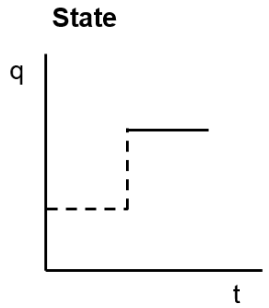


6. Case study *klettern* and *steigen: klettern* as a manner of motion verb

jd./(ein Tier) KLETTERT ⟨⟨etw.⟩ irgendwohin⟩

▶ sich mithilfe der Extremitäten an einer Sache nach oben (oder unten) bewegen

FÄHIGKEIT: ■ jd. / ein Tier KANN (gut) KLETTERN ∘ jd. / ein Tier ist in der Lage, sich an einer Sache mithilfe der Extremitäten nach oben (oder unten) zu bewegen oder besitzt besonderes Können dazu • BEISPIELE: ① *Berberaffen können gut klettern, verbringen aber einen Großteil des Tages auf dem Boden.* ② *Die Norwegische Waldkatze kann außerordentlich gut klettern und aufgrund ihrer Größe und Geschmeidigkeit sehr hoch und auch tief hinab springen.* ③ *Die Käfer leben im Boden, können aber auch auf Pflanzen klettern, um Samen zu fressen.* ④ *Die zwölfjährige Maddy kann klettern wie ein Affe.*

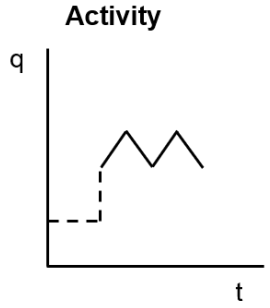


ability
– innate or acquired

klettern ✓

~~*steigen*~~

0 jd. KLETTERT (irgendwo) ∘ jd. bewegt sich in einer geeigneten (natürlichen oder künstlich geschaffenen) Umgebung mithilfe der Arme und Beine an einem Objekt/Objekten (typischerweise als Freizeitaktivität) • BEISPIELE: ① *Ich liebe es, in freier Natur zu wandern, zu klettern, Kayak zu fahren.* ② *Kinder lernen ganz nebenbei eine Menge, während sie klettern, balancieren, springen und schaukeln.* ③ *Neben dem Zoo ist ein attraktiver Spielplatz angelegt, wo die Kinder klettern und mit Sand und Wasser spielen können.* ④ *Der Wanderweg führt an einem Seilpark vorbei, wo man in zehn Parcours klettern, balancieren und an Seilrutschen durch den Wald sausen kann.* ⑤ *Im Waldseilpark Kahlenberg kann man auf insgesamt 14 Parcours in verschiedenen Schwierigkeitsstufen klettern.* ⑥ *Im Hochseilgarten klettert man in einem Wald zwischen den Bäumen in einer Höhe von 4 bis 10 Metern.* ⑦ *Als Bergsportlerinnen und Bergsportler möchten wir natürlich nicht immer nur in der Halle klettern oder die Aussicht im Stadtpark genießen, sondern auch regelmäßig auf dem Gipfel stehen.* ⑧ ... • TYPISCHE FÄLLE: ① jd. klettert durch einen Parcours / in /auf einem Parcours ② jd klettert in den Bergen / im Hochseilgarten / in der Halle ③ jd. klettert auf Bäumen / dem Klettergerüst/Spielgerüst/Spielplatz ④ jd. klettert am Fels(en) / an der Kletterwand



activity
– locative possible (dative)

klettern ✓

~~*steigen*~~

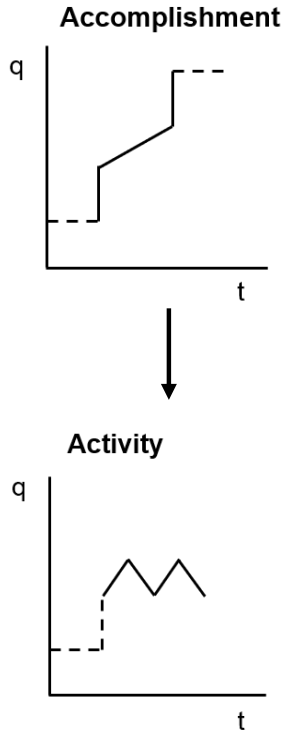
Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* special cases within *steigen*

jd./(ein Tier) STEIGT ⟨etw.⟩ irgendwohin

3 jd. STEIGT auf ein Fortbewegungsmittel ∘ jd. bewegt eines der Beine über ein Fortbewegungsmittel mit einer Sitzfläche, um sich rittlings darauf zu positionieren • BEISPIELE: ① *Als wir wieder zurück im Stall waren und ich aufs Fahrrad steigen wollte, um nach Hause zu fahren, fing es gerade wieder an zu regnen.* ② *Wenn ich morgens noch leicht ver-*

SPEZIALFÄLLE: ▽ ■ **jd. STEIGT auf ein Fortbewegungsmittel ∘ jd. nutzt ein Fortbewegungsmittel** • BEISPIELE: ① *Eine Studie aus Dresden konnte zeigen, dass die Menschen weniger Bus und Bahn fahren, dafür jetzt wieder vermehrt aufs Fahrrad steigen.* ② *Trösten Sie*



Movement of mouting a vehicle

used with individuals or specific groups
description of manner: with momentum […]
temporally located before/after another event

Usage of a vehicle

used with generic groups: one, people […]
habituality: more and more, frequently […]
OR

[…] steigen Sie lieber auf das Fahrrad, als den Bus oder das Auto zu nehmen.

[…] rather go by bike than by bus or car.

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* connections between lexical units

klettern: **jd./(ein Tier) KLETTERT ⟨⟨etw.⟩ irgendwohin⟩**

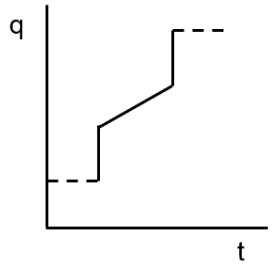
Lexical unit: **5 jd. KLETTERT über ein** [relativ großes] **Hindernis**

Definition: jd. überwindet ein Hindernis und benutzt dafür Arme und Beine

sb. uses hands and feet to get over an obstacle

Examples: *Um den Vulkan besser sehen zu können, ist ein Tourist über die Absperrung geklettert […]*

A tourist climbed over the barrier to get a better view of the volcano […]



Usually used with specific, countable nouns

→ delimited (Tenny, 1994, p. 24)

Can be modified both with:

count: über zwei Hindernisse

frequency: zweimal über ein Hindernis

(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

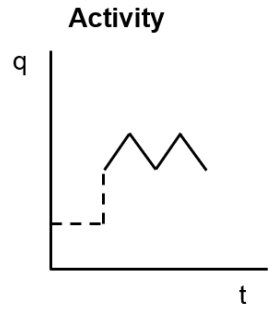
9 jd. / ein Tier KLETTERT über kleine Objekte am Boden

jd./ein Tier bewegt sich in unebenem Gelände/ über kleinere Hindernisse am Boden hinweg bewegen und [als Mensch] ggf. die Arme zu Hilfe nehmen

sb./an animal moves over uneven ground/over smaller obstacles on the ground, [as a person] possibly by occasionally using their hands

[…] der Weg wird schmaler, an manchen Stellen muss man ein wenig übers Geröll klettern.

[…] the path becomes narrower, in some places you have to clamber over some rocks.



Usually used with bare plurals, mass nouns

→ not delimited (Tenny, 1994, p. 24)

Can be modified only with:

frequency: zweimal über Geröll

(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

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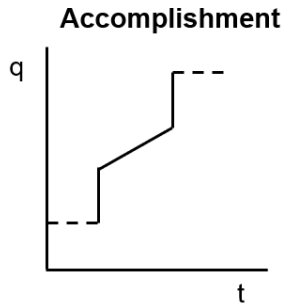
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Definition: jd. überwindet ein Hindernis und benutzt dafür Arme und Beine

sb. uses hands and feet to get over an obstacle

Collocation: ein~ Mauer/Zaun/Geländer/Absperrung […]

a wall/fence/railing/barrier […]



Usually used with specific, countable nouns

→ delimited (Tenny, 1994, p. 24)

Can be modified both with:

count: über zwei Hindernisse

frequency: zweimal über ein Hindernis

(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

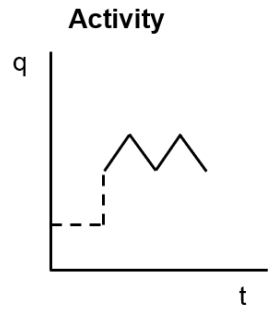
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sb./an animal moves over uneven ground/over smaller obstacles on the ground, [as a person] possibly by occasionally using their hands

Baumstämme/Baumwurzeln/Geröll/Trümmer […]

logs/tree roots/rocks/debris […]



Usually used with bare plurals, mass nouns

→ not delimited (Tenny, 1994, p. 24)

Can be modified only with:

frequency: zweimal über Geröll

(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* connections between lexical units

klettern: **jd./(ein Tier) KLETTERT ⟨⟨etw.⟩ irgendwohin⟩**

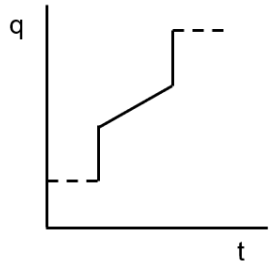
Lexical unit: **5 jd. KLETTERT über ein** [relativ großes] **Hindernis**

Definition: jd. überwindet ein Hindernis und benutzt dafür Arme und Beine

sb. uses hands and feet to get over an obstacle

Examples: Parkour ist ein sportlicher Lauf, bei dem die Athleten über Hindernisse klettern […]

Parkour is a sport in which athletes climb over obstacles […]



Usually used with specific, countable nouns

→ delimited (Tenny, 1994, p. 24)

Can be modified both with:

count: über zwei Hindernisse

frequency: zweimal über ein Hindernis

(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

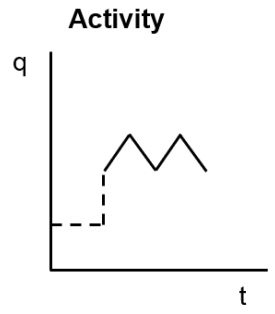
9 jd. / ein Tier KLETTERT über kleine Objekte am Boden

jd./ein Tier bewegt sich in unebenem Gelände/ über kleinere Hindernisse am Boden hinweg bewegen und [als Mensch] ggf. die Arme zu Hilfe nehmen

sb./an animal moves over uneven ground/over smaller obstacles on the ground, [as a person] possibly by occasionally using their hands

[…] der Weg wird schmaler, an manchen Stellen muss man ein wenig übers Geröll klettern.

[…] the path becomes narrower, in some places you have to clamber over some rocks.



Usually used with bare plurals, mass nouns

→ not delimited (Tenny, 1994, p. 24)

Can be modified only with:

frequency: zweimal über Geröll

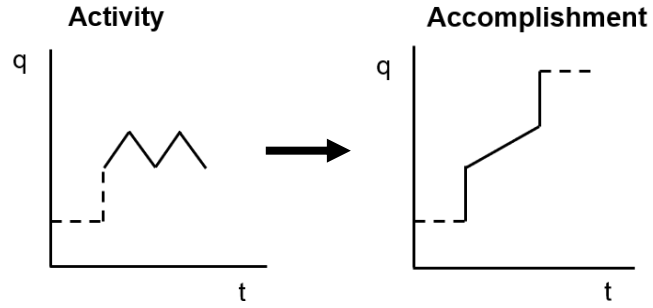
(i. a. Mourelatos, 1978; Krifka, 1992; Rothstein, 2004)

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* fictive motion

etw. STEIGT ⟨irgendwohin⟩ **etw. KLETTERT ⟨irgendwohin⟩** → when referring to numbers, values, volume

die Temperatur kletterte nach oben/stieg → *die Temperatur kletterte/stieg auf 35 °C*
the temperature climbed/rose *the temperature climbed/rose to 35°C*



Hay, Kennedy & Levin (1999) extend the concept of **degree achievements** to movement verbs

„[w]hen a bound on the difference value is linguistically specified, a non-cancellable telic interpretation arises“ (p. 139)

→ unlike examples concerning people, numbers / values / volume have „no maximal level“

Consequences:

1) adverbial expressions of time: without an endpoint often described as an ongoing process (‘for years’) or a habit/repeated event (‘before the holidays’, ‘every day’, ‘in summer’, ‘usually’)
2) meaning of tenses: without an endpoint often used in present tense (past tense possible): ongoing process, habit

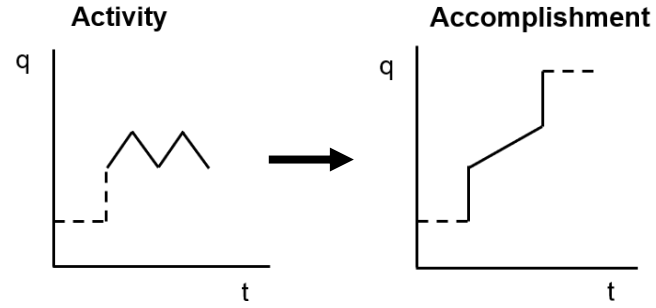
   with an endpoint: present tense does not indicate an ongoing process – endpoint not known beforehand! possible interpretations: forecast or recent result (may be an intermediate state)

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

6. Case study *klettern* and *steigen:* fictive motion

etw. STEIGT ⟨irgendwohin⟩ **etw. KLETTERT ⟨irgendwohin⟩** → when referring to numbers, values, volume

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the temperature climbed/rose *the temperature climbed/rose to 35°C*



*MAI WERDEN MAXIMAL 29C erreicht. (11) Ein Temperaturrekord jagt den nächsten, das Thermometer **klettert** in Süddeutschland bis an die 40-Grad-Marke und auch der "kühle Norden" bekommt von der Hitze einen großen Anteil. (12) Im Juli und im August kann es sehr heiß werden und das*

By specifying the exact temperature a forecast is expressed here with the use of the present tense.

*Anteil der arbeitenenden Rentner kletterte in einem Jahr um 24 Prozent. (7) Den Medien kann man heute entnehmen, dass in der Euro-Zone die Arbeitslosenquote auf den höchsten Stand seit dreizehn Jahren **klettert**. (8) Generell kletterte der Anteil der mit der Politik Unzufrieden[illegible] der 1994 nur*

By specifying a level of the unemployment rate, the present indicates that this level has been reached very recently.

Information for learners:

When specifying a value that is reached, usually use the past tenses (result is not know beforehand).

If the present tense is used – be aware:
Present tense does not indicate an ongoing development, but a forecast or a value that has just been reached.

Data for *steigen/klettern*: DWDS-Kernkorpus 1900-1999 and 2000-2010 (https://www.dwds.de/r), German Web 2020 (https://www.sketchengine.eu).

7. Summary of aspectual phenomena

Verb description is related to aspectual phenomena:

1. *steigen* (of people) and *klettern* (used similar to *steigen*) always take a source/goal or measure phrase (= accomplishment)
2. different sense fields of *jd. klettert* show different syntactic restrictions
3. only *klettern* as vertical movement using hands and feet can be described as an ability (= state) or an activity
4. the difference between *steigen* as ‘mounting a vehicle’ (= accomplishment) and ‘using a vehicle’ (= activity) is signalled by specific linguistic items
5. different senses of *klettern* with the preposition *über* have different properties (= accomplishment vs. activity) that are related to features of the nouns of the PP
6. specifying a certain value with the fictive motion of numbers / values / volumes with *klettern* and *steigen* is associated with a different use of the present tense

8. Conclusion and next steps

Conclusion:

Verbal aspect impacts a range of semantic / syntactic features of verb patterns
that learners can benefit from in language production.

Generally, these features do not appear in (learner's) dictionaries
but need to be looked up (and learnt) for each verb and verb meaning.

Piepkorn & Giacomini, 2023

Next steps:

Develop presentation devices for verbal aspect information
that are accessible for users without expert knowledge.

References

Bernini, G. (2006). Strategie di lessicalizzazione: tipologia e apprendimento. Il caso dei verbi di moto. *Zeitschrift für Literaturwissenschaft und Linguistik, 36*(3). 95–118.

Coll-Florit, M. (2009). *La modalitat de l'acció. Anàlisi empírica, reformulació teòrica i representació computacional*. [Dissertation: Universitat Oberta de Catalunya]. http://hdl.handle.net/10803/9125

Comrie, B. (1976). *Aspect: an introduction to the study of verbal aspect and related problems*. Cambridge University Press.

Croft, W. (2012). *Verbs: Aspect and causal structure*. Oxford University Press.

Dessì Schmid, S. (2014). *Aspektualität: Ein onomasiologisches Modell am Beispiel der romanischen Sprachen*. De Gruyter. https://doi.org/10.1515/9783110334449

Dowty, D. (1991). Thematic proto-roles and argument selection. *Language, 67*(3). 547–619. https://www.jstor.org/stable/415037

Drăgan, R. (2011). Motion verbs and the expression of directed motion in English. *Bucharest Working Papers in Linguistics, XIII*(2). 73–90. https://doi-org/10.1093/ijl/ect034

DiMuccio-Failla, P. V. & Giacomini, L. (2022). A proposed microstructure for a new kind of active learner's dictionary. *Lexicographica, 38*(1). 475–499. https://doi.org/10.1515/lex-2022-0016

References

Evans, V. (2005). The Meaning of Time: Polysemy, the lexicon and conceptual structure. *Journal of Linguistics, 41*(1). 33–75.

Filip, H. (2012). 48. Aspectual class and Aktionsart. In K.Heusinger, C. Maienborn & P. Portner (eds.) *Handbooks of Linguistics and Communication Science [HSK], Volume 33/2* (pp. 1186–1217). De Gruyter Mouton. https://doi.org/10.1515/9783110255072.

Giacomini, L.; DiMuccio-Failla, P. V. & Lanzi, E. (2020). The interaction of argument structures and complex collocations: role and challenges in learner's lexicography. In Gavriilidou, Z.; Mitsiaki, M. & Fliatouras, A. (eds.), *Proceedings of the XIX EuraLex International Congress, 7–9 September 2021, Alexandroupolis, Vol. 1* (pp. 285-293). Democritus University of Thrace. https://euralex.org/publications/the-interaction-of-argument-structures-and-complex-collocations-role-and-challenges-in-learners-lexicography/

Hanks, P. (2004). Corpus pattern analysis. *Proceedings of the XI EURALEX International Congress*, Vol. 1. 87–98.

Hay, J., Kennedy, C. & Levin, B. (1999). Scalar structure underlies telicity in „degree achievements". *Proceedings of SALT 9*. 127–144. https://doi.org/10.3765/salt.v9i0.2833

Johanson, L. (2000). Viewpoint operators in European languages. In Ö. Dahl (ed.), *Tense and aspect in the languages of Europe* (pp. 27–188). De Gruyter Mouton.

References

Mourelatos, A. (1978). Events, Processes, and States. *Linguistics and Philosophy, 2*(3). 415–434.

Krifka, M. (1992). Thematic relations as links between nominal reference and temporal constitution. In I. A. Sag, A. Szabolski (eds.) *Lexical Matters*. CSLI, Center for the Study of Language and Information.

Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. University of Chicago Press.

Piepkorn, S. & Giacomini, L. (2023). *Actional properties of verbs in learner's dictionaries' entries*. [Presentation at Electronic lexicography in the 21st century (eLex 2023): Invisible Lexicography. Brno, 27–29 June 2023]. Presentation available at: https://elex.link/elex2023/presentations/ (Oct 23, 2023)

Rothstein, S. (2004). *Structuring events: a study in the semantics of lexical aspect*. Blackwell. https://doi.org/10.1002/9780470759127

Sinclair, J. (2003). *Reading concordances: an introduction*. Pearson.

Sasse, H.-J. (2002). Recent activity in the theory of aspect: Accomplishments, achievements, or just non-progressive state?. *Language Typology 6*(2). 199–271.

Talmy, L. (1991). Path to realization: A typology of event conflation. *Annual Meeting of the Berkeley Linguistics Society, 17*(19). 480–519.

References

Talmy, L. (2007). Lexical typologies. In T. Shopen (eds.), *Language Typology and Syntactic Description: Volume 3: Grammatical categories and the lexicon* (pp. 66–168, 2nd ed.). Cambridge University Press.

Talmy, L. (2018). *Ten lectures on cognitive semantics*. Brill.

Tenny, C. (1994). *Aspectual roles and the syntax-semantics interface*. Kluwer.

Tyler, A. & Evans, E. (2001). Reconsidering prepositional polysemy networks: The case of over. *Language, 77*(4). 724–765. https://www.jstor.org/stable/3086846

Vendler, Z. (1957). Verbs and times. *The Philosophical Review*, *66*(2). 143–160. https://doi.org/10.2307/2182371