

## Introduction

Verb alternations: one verb appears in two (or more) different syntactic frames

- (1) Dative alternation  
a. Peter gave Mary a book.      b. Peter gave a book to Mary.
- (2) Locative alternation  
a. Peter sprayed paint on the wall.      b. Peter sprayed the wall with paint.
- (3) Body-part possessor ascension alternation  
a. Peter kissed Mary's cheek. [NPos]      b. Peter kissed Mary on the cheek. [AccEPC]

What is interesting about verb alternations?

- Meaning differences between the alternating forms
- The source of these differences
- Verb alternations as a playground for the research on verbal semantics: identification of classes of verbs (e.g., Levin 1993)

## Point of Departure

What do we know about body-part possessor ascension alternation?

- Affected possessor in AccEPC vs. distant possessor in NPos (e.g., Chappell and McGregor 1996, Heine 1997). I call it WEAK AFFECTEDNESS.
- Weak affectedness ≠ Beavers's (2011) affectedness
- In AccEPCs, NPs headed by the possessee do not allow non-restrictive adjective modifiers:

- (4) a. Peter küsste Marie's rote / linke Wange.  
Peter kissed Marie's red / left cheek
- b. Peter küsste Marie auf die rote / linke Wange.  
Peter kissed Marie on the red / left cheek

- In AccEPCs, possessor is mostly animate.
- Verbs appearing in AccEPCs are mostly verbs of direct physical influence Levin (1993):

Different from hit-, cut-, and touch-verbs, break-verbs do not appear in NPos-AccEPC alternation.

- (5) a. Peter touched Paul on the arm.      b. \*Peter broke Paul on the arm.

Why?

- Levin (1993): Break-verbs do not entail physical contact.

❓ But verletzen 'injure', which also lacks this entailment, is fine:

- (6) Peter hat seinen Freund am Bein verletzt.  
Peter has his friend<sub>ACC</sub> on the leg injured  
'Peter injured his friend on the leg.'

- Dowty (2001): "out-of-order" entailment holds for the part, but not for the whole.

❓ But what about other break-verbs, such as deformieren 'deform' and einschlagen 'smash'?

- (7) \*Peter hat seinen Freund am Bein deformiert.  
Peter has his friend<sub>ACC</sub> on the leg deformed  
int.: 'Peter deformed his friend on the leg.'

What prevents break-verbs from appearing in NPos-AccEPC alternation?

Intuition: Whether a verb participates in body-part possessor ascension alternation seem to be related to the change of state in the theme participant.

## Methodology

- Verbs considered: damage-verbs with different levels of affectedness (cf. Beavers 2011)
- Analysis of syntactic behavior of these verbs as related to the NPos-AccEPC alternation

## Syntactic behavior of damage-verbs

Damage-verbs appear in four syntactic frames represented by rectangles (i) to (iv) in Figure 1. Some verbs alternate between two syntactic frames (bidirectional arrows connecting frames on the graph), whereas other verbs only appear in one frame (unidirectional arrows pointing to frames in which these verbs appear).

According to syntactic frames verbs appear in, damage-verbs can be divided in five classes indicated over the arrows. Examples and observations about each verb class and the frames they appear in are given in the five rectangles of correspondent colors below the graph.

## Abstract

Based on the analysis of syntactic behavior of damage-verbs and on the semantic differences between the syntactic frames they occur in, I suggest a novel taxonomy of these verbs dividing them into five subclasses (hit-verbs, cut/touch-verbs, scratch up-verbs, break-verbs, and torture-verbs). I also argue for a lexical rule that allows to account for the derivation of Accusative External Possessive Frame [AccEPC] from [NPos] and [NoDO] frames in the body-part possessor ascension alternation.

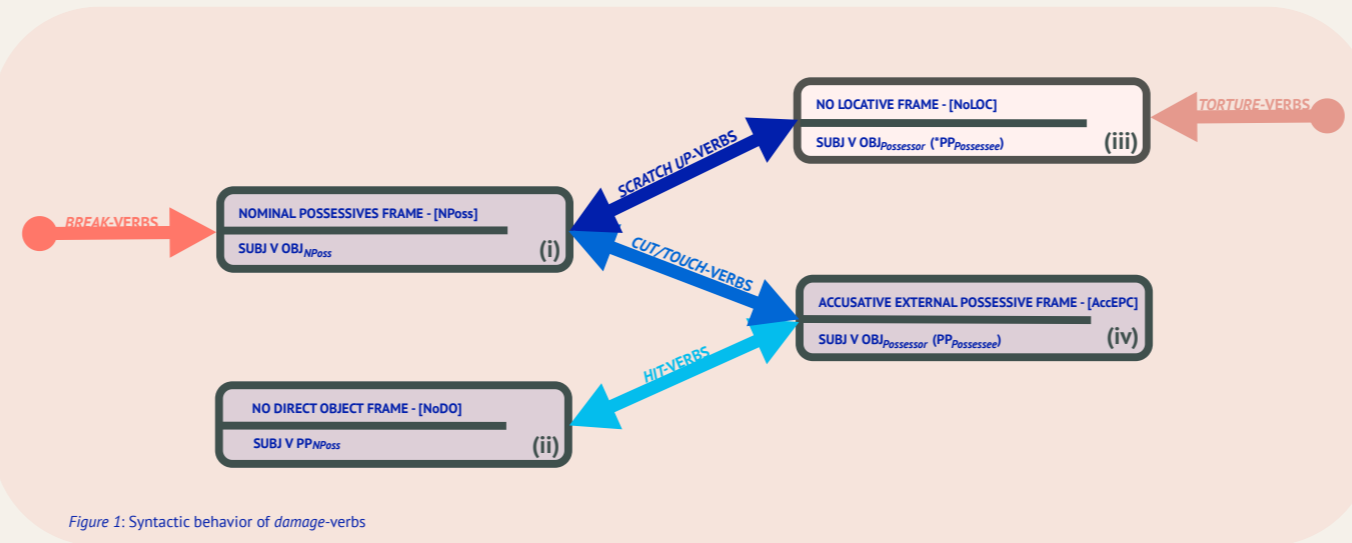
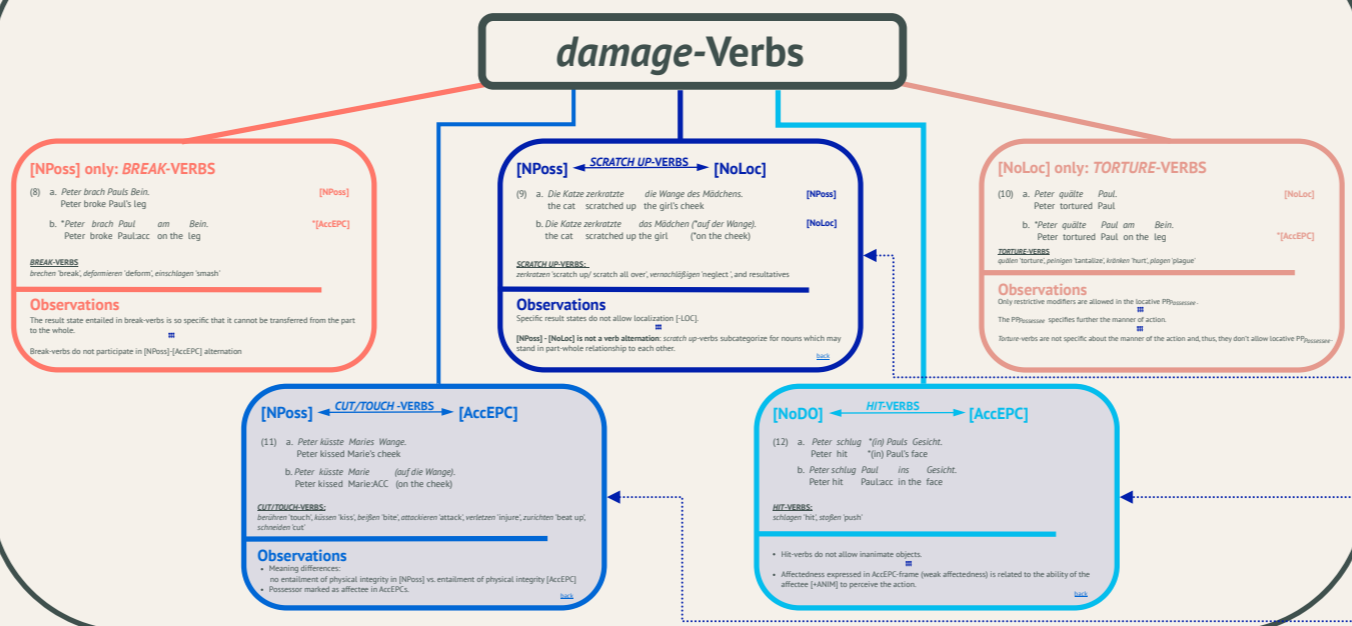


Figure 1: Syntactic behavior of damage-verbs

## Result I: New Taxonomy of damage-Verbs



## Next Step: Account for Verb Alternations

As shown above, scratch up-verbs appearing in Nominal Possessives Frame [NPos] and No Locative Frame [NoLoc] are not an instance of verb alternations. I.e., the lexical rule to be developed has to account for the derivation of Accusative External Possessive Frame [AccEPC] from Nominal Possessives Frame [NPos] and No Direct Object Frame [NoDO]. These frames and correspondent verbal classes are highlighted in blue on the graph.

## Dowty's (2001) Approach

- Following lexical semantic approach, Dowty formulates a lexical rule that allows to derive from input verbs new verbs with a different subcategorization frame: [NPos] -> [AccEPC].
- The rule applies to any verb under the following filtering conditions:
  1. "out-of-order"-condition: "out-of-order" entailment holds for the part, but not for the whole
  2. "part-to-whole spread" of the result state: the result state entailed for the part must also hold for the whole.
- According to Dowty, [NPos]-frame is the basic frame and the [AccEPC] is the derived one. The main argument in favor of this assumption is that the verbs occurring in [AccEPC]-frame form a subset of verbs occurring in [NPos]-frame.

## Deficits of Dowty's Approach

- Dowty's approach does not allow to account for other break-verbs (e.g., deform and smash): the result state can hold for both the part and the whole, but AccEPC still cannot be formed.
- Likewise the approach does not explain why scratch up-verbs do not participate in alternation, since the 'spreading' since the result state entailment in this case can also hold for both the part and the whole.
- Conditions for "part-to-whole spread" are unclear; for instance, it is not clear how to account for the cases like the ones below.

- (13) Peter hat Paul am Arm/Rucksack gepackt.  
Peter has Paul<sub>ACC</sub> at the arm / backpack grabbed  
lit.: 'Peter grabbed Paul at the arm/\*at the backpack.'

- (14) Peter hat Paul am Arm / \*Rucksack berührt.  
Peter has Paul<sub>ACC</sub> at the arm / \*backpack touched  
lit.: 'Peter touched Paul at the arm/\*at the backpack.'

## Result II: New Approach

As proposed by Dowty (2001), a lexical rule allows to derive verbs with [AccEPC] subcategorization frame from other verbs by the application of a lexical rule. This lexical rule applies under filtering conditions. Concerning the aforementioned shortcomings, I propose to adjust the lexical rule as follows:

Adopted from Dowty's account:

- Input verbs: any kind of verbs
- This assumption allows to account for the derivation of the [AccEPC]-frame for two different verb classes: touch/cut-verbs with [NPos]-frame and hit-verbs with [NoDO]-frame.

Adjusted filtering conditions - "the spreading conditions":

- Verbs must not entail a specific result state (cf. Beavers's (2011) quantized change) (see [here](#))
- Possessee is physically attached to the possessor (see [here](#))
- Possessor must be able to perceive the action physically (see (13), (14) and [here](#))

## References

- Beavers, J. (2011). On affectedness. *Natural language & linguistic theory* 29(2), 335–370.
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