

Nominalization as a window into the structure and analysis of participles

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Introduction The formation of stative adjectival participle passives in German is different for prefix-verbs and non-prefixed verbs. (a) non-prefixed verbs (1-b) form their adjectival passive with the perfect morpheme *ge-* as in (1-a). (b) adjectival passives (2-a) of prefix-verbs (2-b) are – besides the lack of verbal inflection – not morphologically marked.

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|-----|----|---|-----|----|---|
| (1) | a. | Der Eimer ist geleert.
The bucket is ge.prfx.empty
The bucket is emptied | (2) | a. | Die Wand ist bemalt.
The wall is be.prfx.painted
The wall is painted |
| | b. | Peter leert den Eimer.
Peter empty the bucket
Peter is emptying the bucket. | | b. | Peter bemalt die Wand.
Peter be.prfx.paint the wall
Peter is painting the wall. |

Following Kratzer [2000], German adjectival passives have been analyzed as the result of an operation on verbal constructions. In this paper, I argue that if word formation is syntactic, adjectival passives of type (b) cannot be accounted for as derivations from verbal constructions. To the contrary, prefix-verbs must be derived from their type (b)-participles.

Data: Nominalization and Participles *-ung*-nominalizations of type (b)-constructions like *Bemalung* in (3) are often ambiguous between denoting an event, the result state caused by that event and the object in which that result state manifests itself. (3) identifies the different denotations of *Bemalung* with copredication of *Bemalung* by verbs with different sortal selection restrictions.

- (3) Die Bemalung₁ der Wand war anstrengend. Sie₁ bestand
the be.prfx.mark.ung.nmlz of the wall was exhausting.event. It persist.state
jahrelang. Sie₁ wurde entfernt.
for years. It was removed.object.
'The painting of the wall₁ was exhausting. It₁ persisted for years. It₁ has been removed.'

The event denotation of *Bemalung* in (3) makes available a result state and a result object but the reverse is not possible: (4) shows that the state reading of *Bemalung* does not make available an event reading.

- (4) Die Bemalung der Wand₁ bestand jahrelang. *Sie₁ war
the be.prfx.mark.ung.nmlz of the wall persist.state for years. It was
anstrengend.
exhausting.event.
'The painting₁ of the wall persisted for years. *It₁ was exhausting.'

(5) shows that the object reading neither makes available a state nor an event reading. It is important to note at this point that object denotation cannot be equated with the material manifestation of an object (as e.g. in Ehrich and Rapp [2000]). A painting can show Mona Lisa without the paint from which it is made showing Mona Lisa. That is, as e.g. Asher [2011] argues in detail, object denotation decomposes into properties, among them physical properties but also e.g. perceptual, informational or functional properties.

- (5) Die Bemalung₁ der Wand trocknete nicht. *Sie₁ bestand
the be.prfx.mark.ung.nmlz of the wall dried.object not. It persist.state
jahrelang./ *Sie₁ war anstrengend.
for years./ It was exhausting.event
'The wall painting₁ did not dry. *It₁ persisted for years./ *It₁ was exhausting.'

Analysis A central tenet of syntactic approaches to word formation like Distributed Morphology is structural containment: “the analysis and structures proposed for a form must also be contained within the analysis of any structure derived from that form” [Harley, 2009, p. 320]. Structural containment entails that the ambiguity of *Bemalung* must be reconstructed as a structural contrast in the analysis of *Bemalung*. This structural contrast must emerge from a structure and analysis of $be-+\sqrt{mal}$ that is constant throughout the different readings of *Bemalung*, the participle (2-a) and the verbal construction (2-b). The copredication diagnosis in (5) indicates that the minimal structure that is realized by the prefix $be-$ and the root \sqrt{mal} is one which does not contain an event-introducing verbalizer or a result state-introducing functional layer. Instead, the minimal structure realized by $be-+\sqrt{mal}$ denotes a property and thus involves an adjectival functional layer. Participle constructions that function as adjectives proper have been called ‘stative’ participles in Embick [2004] in opposition to ‘resultative’ participles which involve eventiveness and a transition into a result state. The main difference between minimal type (b)-participles and stative participles in English, however, is that minimal type (b)-participles are complex, i.e. they consist of a prefix and a nominal root phrase: insertion of \sqrt{mal} into an nP template derives the noun *das Mal* (‘the mark, the spot’). Given that $be-+\sqrt{mal}$ must denote a property, we can conclude that the semantic function of $be-$ is that of an intensional operator that turns a noun into a property (i.e. a set of possible worlds). In addition, because it is not the nominal root which bears the property derived by $be-$, $be-$ also introduces an argument slot for the holder of that property. The property derived by $be-$ serves as the semantic input to an adjectival functional layer which, when it is nominalized, gives the property-denotation of *Bemalung* in (5). If the adjective isn’t nominalized, the derivation gives the adjectival use of the participle in prenominal position: *Die bemalte Wand* (‘the painted wall’).

The state reading of the nominalization in (3) is derived by merging the structure of the property-denoting minimal type (b)-participle with a small clause PP that introduces a state. The PP-structure thus denotes a state but does not make available an event. Those properties are also defining features of the type(b)-adjectival passive construction in (2-a) according to the event-kind analysis of adjectival passives (Gehrke [2011]). In the present analysis of type(b)-adjectival passive, event-related modifiers are restricted because they are based on the inference of generic higher functional projections in order to explain what might have caused the state described by the adjectival passive (see also McIntyre [2015]’s State Relevance Hypothesis). Finally, merge of the state-denoting PP construction with a verbalizer derives the active, event-denoting use of the verb (2-b) and, if the resulting vP is nominalized with *-ung*, derives the event denotation of *Bemalung*.

Conclusion In the approach of type(b)-adjectival passives in German presented in this paper, type(b)-adjectival passives do not involve a verbal functional layer and thus also lack higher verbal functional projections like Voice. Time permitting, I would like to conclude with an assessment of stem alternation in type(b)-participles that Alexiadou et al. [2014] analyze in favour of the presence of a Voice projection in German adjectival passives.

References

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