

Between morphology and syntax:

Compact units of adjectival passives and adverbial modifiers

In recent years, linguists increasingly turned their attention to borderline phenomena between morphology and syntax that cast doubt on the possibility of an always clear-cut distinction of words and phrases and, thus, force us to rethink some well-established assumptions about the overall architecture of grammar. As I will show, one such grey area between words and phrases is given by the combination of adjectival passives with adverbial modifiers. While expressions such as *expert-written* in (1a) no doubt are morphological units (more specifically: adjectival compounds) and the combination of the respective verbal participle with an adverbial modifier such as *written by an expert* in the verbal passive (1c) obviously is a complex syntactic unit, the seemingly parallel case of *written by an expert* in the adjectival passive in (1b) upon closer scrutiny turns out to behave much more like a compact, “word-like” unit than like a standard syntactic phrase. That is, the case of (1b) will be argued to lie in between (1a) and (1c) and thus proves to be an interesting probe into the transitional zone between morphology and syntax.

Following Kratzer (2000), Maienborn (2009) and others, adjectival passives will be analyzed as combinations of the copula with an adjectivized verbal participle. This is particularly transparent in a language like German, which uses different forms for the adjectival passive (copula *sein* ‘to be’) and the verbal passive (auxiliary *werden* ‘to become’). Thus, unlike English, a sentence such as (2b) unequivocally expresses a stative property resulting from the respective verbal event, whereas (2c) only has an eventive meaning.

In my talk I will provide different kinds of theoretical arguments and experimental evidence that support the view that an expression like [vom TÜV geprüft] in (2b) differs sharply from the corresponding verbal passive in (2c) and behaves more like the adjectival compound in (2a). More specifically, I will present the results of two acceptability rating studies and a reaction time experiment that corroborate the hypothesis that the adverbial and the adjectivized participle form a compact informational unit in the sense of Jacobs’ (1993, 1999) notion of integration. This compact unit corresponds to a complex concept at the conceptual level (cf. Maienborn’s (2009) account of the semantics of adjectival passives as expressing an event-based ad hoc property) and it behaves in certain respects like a word at the linguistic level. For instance, scrambling of the adverbial out of its verb adjacent position is less acceptable with adjectival passives than with verbal passives (cf. (3b) vs. (3c)), suggesting that the adverbial is structurally integrated into the participle in the case of adjectival passives. Moreover, one of the semantic effects of building a compact informational unit is that the integrated adverbial is not easily referentially accessible anymore. In the case of the verbal passive the adverbial remains semantically autonomous and can be taken up by a subsequent anaphoric expression (cf. (2’c)). For obvious reasons this is completely ruled out in the case of the adjectival compound (cf. (2’a)). Here the agent has been incorporated into the adjective and cannot be referred to anymore. The case of the adjectival passive (2’b) ranges in between these two extremes. An anaphoric continuation is extremely odd, suggesting that the agent phrase isn’t autonomous anymore.

This and similar observations concerning the semantic integration of the adverbial into the participle in adjectival passives is further substantiated by a reaction time experiment with word recognition task. (This experiment used the same material as the acceptability rating study. Participants were presented sentences such as (4a/b) and had to decide for two subsequent words whether these occurred in the previously read sentence (4c)). The assumption was that if the adverbial is integrated into the participle in the case of adjectival passives then it should be recognized faster if it is presented after the participle (4ac), whereas no such priming effect would be expected in the case of verbal passives (4bc). Both hypotheses were borne out: The recognition of the modifier was significantly faster in the adjectival passive condition than in the verbal passive condition, and there was no significant recognition time difference for the subject (control condition).

These results can be taken as an indication that there is in fact a particularly strong connection between a participle and an adverbial in adjectival passives that has reflexes at all linguistic levels (prosody, syntax and semantics) and that requires a genuine structural solution that accounts properly for its hybrid categorial status between word and phrase.

Examples:

- (1) a. Each term paper is expert-written and 100% original. (adjectival compound)
b. Each term paper is written by an expert and 100% original. (adjectival passive)
c. Each term paper has been written by an expert and is 100% original. (verbal passive)
- (2) a. Mein Auto ist TÜV-geprüft. (adjectival compound)
My car COP TÜV-checked. (TÜV: German Technical Inspection Authority)
b. Mein Auto ist vom TÜV geprüft. (adjectival passive)
My car COP by-the TÜV checked.
c. Mein Auto wurde vom TÜV geprüft. (verbal passive)
My car AUX by-the TÜV checked.
- (2') a. Mein Auto ist TÜV-geprüft. * Er hatte nichts zu beanstanden.
My car COP TÜV-checked. He had nothing to object.
b. Mein Auto ist vom TÜV geprüft. ?? Er hatte nichts zu beanstanden.
My car COP by-the TÜV checked.
c. Mein Auto wurde vom TÜV geprüft. Er hatte nichts zu beanstanden.
My car AUX by-the TÜV checked.
- (3) Maria hat gesagt ('Maria said'), ...
a. dass der Weg mit Mosaiksteinen gefliest wird / ist
that the path with tesserae tiled AUX / COP
b. dass [mit Mosaiksteinen]_i der Weg t_i gefliest wird
that with tesserae the path tiled AUX
c. ??dass [mit Mosaiksteinen]_i der Weg t_i gefliest ist
that with tesserae the path tiled COP
- (4) a. AdjPass: Der Weg ist mit Mosaiksteinen gefliest.
b. VerbPass: Der Weg wurde mit Mosaiksteinen gefliest.
c. Task: Did the word occur in the previously read sentence?
ModN: GEFLIEST [yes/no] MOSAIKSTEINE [yes/no]
SubjN: GEFLIEST [yes/no] WEG [yes/no]

References:

- Jacobs, J. (1993): Integration. In M. Reis (ed.), *Wortstellung und Informationsstruktur*, Tübingen: Niemeyer, 63–116.
- Jacobs, J. (1999): Informational Autonomy. In P. Bosch & R. van der Sandt (eds.), *Focus: Linguistic, Cognitive, and Computational Perspectives*, Cambridge: Cambridge University Press, 56–81.
- Kratzer, A. (2000): Building statives. In: *Berkeley Linguistic Society* 26. [<http://semantics-archive.net/Archive/GI5Mml0M/kratzer.building.statives.pdf>]
- Maienborn, C. (2009): Building event-based *ad hoc* properties: On the interpretation of adjectival passives. In A. Riester & T. Solstad (eds.): *Proceedings of Sinn und Bedeutung 13*, Stuttgart, 35-49.