



other languages, although with slightly different distribution and usage constraints (e.g. Polish, Russian, French, English, Greek, see Legate 2010). In this talk, we will focus on German.

One of the few references discussing the meaning of eventive readings of *wie*-complements is Falkenberg (1989). He observes that the complement must denote a durative eventuality – states are excluded, cf. (5) – and that they give rise to the imperfective paradox, cf. (6). Combining these data with the progressive-like paraphrase in (3c) there is good evidence that *wie*-complements denote events in progress.

- (5) \*Anna sah wie Berta müde war.  
'Anna saw Berta being tired. / Lit: how Berta was tired.'
- (6) Anna sah, wie Berta ihre Tasche packte, aber die halbvolle Tasche dann wieder auspackte.  
'Anna saw Berta packing her bag but in the middle of it unpacking the bag again.'

The semantics of *wie*-complements is puzzling for a number of reasons. There is, first of all, the question of how to interpret the eventive reading and, in particular, how to explain that various languages make use of a manner question word in expressing events in progress. Secondly, even if the semantics of interrogative complements is in general well understood, there is no agreement about the denotation of manner question words – are we obliged to add manners to the ontology or is there a more conservative solution? (cmp. the case of *why*, where you would not want to add reasons to the ontology and instead refer to causally related proposition). Thus the semantic analysis has to answer two questions, (i) what is the meaning of *wie* in manner & method readings and, assuming that there is no ambiguity? (ii) what is its role in eventive readings – why use a manner question word to express an event in progress?

Here is our proposal in a nutshell:

- A. We start from an interpretation of *wie* as denoting similarity;
- B. We assume that in manner & method readings *wie* is base-generated in a low position while in eventive readings it is generated only after the event has been introduced.
- C. We interpret manner and method readings as answers to questions involving sets of similar events where features of comparison relate to properties licensed by the event predicate (in the case of manner) and to procedures of realizing an instance of the event predicate (in the case of method).
- D. We interpret the eventive reading as a variant of the method reading: While method readings yield sequences of subevents realizing events of a certain type, eventive readings yield events in progress, i.e. initial stages plus possible continuations. Thus while method readings apply at the level of the event type providing different ways of realizing events of this type, eventive readings apply at the level of particular events providing different ways of continuing a given initial stage of an event.

**ad (A):** We start from the similarity interpretation of *wie* in manner equatives as in (2) (cf. Umbach & Gust 2014). The basic idea is that *wie* creates classes of events. Grossly simplifying technical details (see Gust & Umbach 2015), *wie* denotes a similarity relation between two entities  $x$  and  $y$  with respect to a set  $F$  of features of comparison:  $\lambda x \lambda y. \mathbf{sim}(x, y, F)$ . The similarity relation is, again grossly simplifying, implemented such that two items are similar with respect to a given set  $F$  of features  $f_1 \dots f_n$  if their values are identical,  $\mathbf{sim}(x, y, \{f_1 \dots f_n\})$  iff  $f_1(x) = f_1(y), \dots, f_n(x) = f_n(y)$ . Spelt out this way the similarity relation generates sets or classes of items similar to a given item  $y_0$  with respect to a given set of features,  $\{x \mid \mathbf{sim}(x, y_0, F)\}$  (note that this notion of similarity is tantamount to indistinguishability with respect to given features  $F$ , and is an equivalence relation).

**ad (B):** We follow standard theories on adverbial positions in German as, e.g. in (7), see Schäfer (2013). We assume that in manner and method readings *wie* is base-generated in the position of verb-related adverbials modifying the event type, e.g. *sorgfältig* in *die Tasche sorgfältig packen* 'pack the bag carefully'. In eventive readings *wie* is generated in the position of event-related adverbials, which is reserved for adverbials characterizing an event only after it has been introduced. Adverbials in this positions are also called 'event-external'.

(7) subject > adverbial<sub>EVENT-RELATED</sub> > direct object > adverbial<sub>VERB-RELATED</sub> > verb

**ad (C):** On their manner and method readings *wie*-complements are interpreted as answers to a question addressing a manner or method modifier of the event predicate. The modifier is given as a similarity class, and the difference between manner and method is realized via different features of comparison. In the example in (3a), manner features of bag-packing might be SPEED (n minutes) or TIDINESS (low/middle/high) etc., whereas methods of bag-packing are ordered sets of stages: *shoes in*, *shoes + books in*, *shoes + books + sweater in*, ... (8) shows the interpretation of manner/method readings.

(8) a. There is an event  $e_0$  of Anna seeing an eventuality (i.e. event or state)  $e$ , where  $e$  is a bag-packing event and is an element of a class of bag-packing events similar with respect to their manner or method, and  $e$  being in this class causes Anna to know an answer to the question of what the manner or method of bag-packing performed by Berta is, that is, Anna's seeing is epistemic, see the discussion in Barwise (1989).

b.  $\exists e_0, \exists e. \text{see}_c(e_0)(\text{Anna})(e) \ \& \ \text{bag-pack}(e) \ \& \ \text{ag}(e, \text{Berta})$

$\ \& \ e \in \{e' \mid \text{sim}(e', e, F) \ \& \ \text{bag-pack}(e')\}$  where F is a set of features or of ordered stages

(Note that even though the similarity conjunct is logically idle it generates a class of items representing manner/method. We are aware of the fact that indexing *see* as being epistemic is not yet satisfactory.)

**ad (D):** On the eventive reading *wie*-complements denote events in progress. Following Landman (1992) progressive events include an initial stage plus a set of possible (and reasonable) continuations, that is, ways of how the initial stage may develop into a complete event of the respective type. Landman implements continuations in terms of developments in possible worlds. Bonomi (1997) adapts the idea of continuations in an extensional fashion making use of *frames* specifying *natural courses of events*. More specifically, courses of events are partially ordered sets of stages and frames are functions taking a stage (and some contextual facts) and giving a course of events extending the original stage. Now compare methods and courses of events. They are both ordered sets of stages. But there is a crucial difference: While any (reasonable) ordered set of stages may qualify as a method, courses of events interpreting the progressive must include the initial stage of the event up to the time of evaluation. Put it the other way around: methods can be seen as events in progress with a not yet existing initial stage.

(9) a. There is an event  $e_0$  of Anna seeing an eventuality  $e$ , where  $e$  is the unique stage of bag-packing at evaluation time  $t$  by Berta and is an element of a similarity class of bag-packing-by-Berta events including the interval  $t$  that differ only in their degree of development.

b.  $\exists e_0. \text{see}(e_0)(\text{Anna})(t.e. \text{bag-pack}(e) \ \& \ \text{ag}(e, \text{Berta}) \ \& \ t \subset \tau(e)$

$\ \& \ e \in \{e' \mid \text{sim}(e', e, F) \ \& \ \text{bag-pack}(e') \ \& \ \text{ag}(e', \text{Berta}) \ \& \ \tau(e) \subset \tau(e')\}$ ,

where F is provided by a Bonomi frame.

## References

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