

“Affectedness” and “unintentional causation”: Interpretations of dative constructions of motion and change of state verbs

Introduction

Constructions with a free dative (dative constructions) in German admit two different types of interpretations – i.e. an *affectedness* reading (A-reading) and an *unintentional causation* reading (UC-reading) – depending on the base predicate (see also McIntyre 2006; Schäfer 2008; Wegener 1985). This paper investigates the mechanisms for a potential UC-reading; the main part of the analysis explores motion verbs such as *fallen* (“fall”) and *rollen* (“roll”), etc. in dative constructions. Using a corpus-based analysis, it is argued that the centrifugality/centripetality of the described motion events is closely linked to possible interpretations of the construction as a whole. Therefore, it is an existing disposition of the moved object (*theme*), as the subject to the dative person, which can be induced in the event structure due to the centrifugality of the motion, leading to a UC-reading. In addition, the same criterion applies to verbs denoting a change of state such as *zerbrechen* (“break”), *sich öffnen* (“open”), etc. The analysis allows us to conclude that the relevant readings only emerge through complex, syntactically mediated processes of compositional semantics.

General features of motion verbs in German

1. Active vs. passive motion

German motion verbs are essentially divided into two different classes in the classical literature (cf. Diersch 1972; Gerling/Orthen 1979; Schröder 1993): they describe either an active motion or a passive motion. In the case of the former, the moving object (typically human beings or animals) has control over the expressed motion while a passive motion is caused by an external cause. As the same predicate verb can denote not only active but also passive motion, the activity/passivity of the described motion can only be identified at sentence level.

2. Aspectual features of motion events

Motion verbs in German are, in general, aspectually underspecified (cf. Maienborn 1990). The aspectual interpretations of motion events can be fully specified by the arguments of motion verbs, i.e. directional prepositional phrases. Motion verbs describe first and foremost durative events. In this case the described motion events are dynamic and aspectually atelic “processes”. However, when motion verbs are combined with directional PPs, the described motion events are not durative but rather perfective, the directional PPs delivering sufficient information to interpret the described motion as being a dynamic and aspectually telic “change of state”. This shift in the event structure is motivated by the boundedness of the moving path that the directional PPs express. The moving path itself is classified into three types: *source*, *goal* and *path*. The *source* and/or *goal* always repre-

sent the bounded path while the explicit *path* can be bounded or unbounded depending on the context.

Interpretations of dative constructions of motion verbs: a corpus-based study

Here I introduce several data items from the corpus-based study in Takahashi (2015), on which the following discussion about the different interpretations of dative constructions is based. In Takahashi (2015) I investigated 13 motion verbs in German, namely *fahren* (“drive”), *fallen* (“fall”), *fliegen* (“fly”), *klettern* (“climb”), *kriechen* (“crawl”), *laufen* (“run”, “walk”), *reiten* (“ride”), *rollen* (“roll”), *rudern* (“row”), *rutschen* (“slide”), *schwimmen* (“swim”), *segeln* (“sail”) and *springen* (“jump”) in dative constructions. The data were collected from the Mannheim German Reference Corpus (DeReKo), 240 examples in all. I analyzed the data in relation to the following points in particular: (i) activity vs. passivity of the described motion events and (ii) the relevance of path arguments to the interpretations of constructions.

1. Correlation between the activity/passivity of the motion and the interpretations of dative constructions

The data show that the activity/passivity of the described motion events closely correlates with the different interpretations of the dative constructions (A-reading and UC-reading). The A-reading is not only to be found in active motion sentences but also in passive motion sentences. On the other hand, the UC-reading is limited to sentences that represent passive motion events.

2. The relevance of path arguments to the interpretations

Regarding this point, it must be emphasized that all the examples collected from the corpus are combined with one or more path arguments in the form of directional PPs. In almost 80% of the examples, they are combined with a directional path argument for a *source* or *goal*. Accordingly, motion verbs in dative constructions do not represent durative events (a “process”), but rather perfective events (a “change of state”). The analysis also reveals that the directional path arguments closely correlate with the interpretations. In the case of an A-reading, *source* appears only seldom and *goal* is apparently dominant. However, in the case of a UC-reading, the frequency of occurrence of *source* is approximately the same as for *goal*. A crucial semantic factor that favors a UC-reading is this relatively high *source* directivity: the UC-reading only occurs when the sentence represents a centrifugal motion, namely when the object (*theme*) is moving away from the dative person. Conversely, this reading is impossible in the case of centripetal motion, i.e. when the moving/moved object is approaching the dative person.

3. Necessary conditions for a UC-reading

To sum up the results of the corpus-based analysis, dative constructions of motion verbs allow the UC-reading only when the two following conditions are present:

- (i) The sentence represents passive motion.
- (ii) The sentence represents centrifugal motion from the viewpoint of the dative person.

A UC-reading in the case of motion verbs

Based on the conditions revealed for a potential UC-reading above, we can now discuss the mechanism that makes this reading possible. As already mentioned, the motion events described in dative constructions are not a durative “process” but rather a perfective “change of state”, due to the obligatory co-occurrence of directional path arguments. In addition, the dative person as the potential possessor of the object (*theme*) contributes to establishing deictic-indexical relations (centrifugal vs. centripetal motion). The motion events as a “change of state” always mean that the object previously located in one place changes its location to another place. Centrifugal motion thus implies that the object probably belongs to the dative person in the initial phase. Therefore, it can be assumed that the dative person is responsible for the described change in location since the person, as the possessor, could prevent the object from moving away. Accordingly, the centrifugality of the described motion enables inducing an existing disposition of the object to the dative person in the event structure, which is lost as the consequence of its change in location. This disposition of the object in the initial phase is crucial to a potential UC-reading. The same induction is not allowed in centrifugal motion, where the possessive relation cannot be implied in the initial phase, but rather only in the end phase of a change of state.

A UC-reading in the case of change of state verbs

The essential criterion for a potential UC-reading discussed above can be applied to inchoative change of state verbs. It is known that inchoative intransitive verbs such as *zerbrechen* (“break”) allow both types of interpretations of dative constructions – i.e. an A-reading and a UC-reading – while the latter is not available in dative constructions of inchoative reflexive verbs such as *sich öffnen* (“open”) (cf. Schäfer 2008, p. 42–45). These two types of inchoative change of state verbs differ in the quality of the change caused, according to the lexical analysis in Aoki (2010, p. 60–61). Accordingly, intransitive verbs such as *zerbrechen* always describe that the object has essentially been changed in that it no longer exists. On the other hand, in the case of reflexive verbs such as *sich öffnen*, the existence of the object remains even after the described change of state has taken place. Owing to this difference in lexical semantics, a UC-reading is only allowed in dative constructions of intransitive verbs. Since the object itself does not exist in the end phase of a change of state, an existing disposition of the object to the dative person in the initial phase can be induced in the event structure, which leads to a UC-reading. The same induction is unavailable in dative constructions of reflexive verbs. These verbs exclude an existing disposition of the object, which is lost in the end phase of a change of state due to their lexical meaning.

Final remarks

The main contributions of this paper are summarized as follows. First, the possible/impossible interpretations of dative constructions of motion verbs are defined depending on how the base sentences are configured. The UC-reading is only available when the base sentence represents passive and, at the same time, centrifugal motion. Second, the centrifugality of motion enables the induction of the crucial semantic factor for the UC-reading, i.e. an existing disposition of the object to the dative person, which is lost as a consequence of the described change in location. Finally, the same principle applies to inchoative change of state verbs. Based on the lexical semantics of the verbs, the UC-reading is allowed in

dative constructions of intransitive verbs but not in those of reflexive verbs, which exclude a disposition existing only in the initial phase of a change of state. Thus the interpretations of dative constructions cannot be chosen freely depending on the context. The results of this paper show that the emergence of relevant readings is directed through complex, syntactically mediated processes of compositional semantics as well as pragmatic factors on this basis.

Literatur

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