The expression of multi-participant motion across languages

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The typology of motion expressions has drawn considerable interest during the past two decades, not least inspired by Talmy's well-known distinction between verb-framed and satellite-framed languages. The main focus of these investigations has been on single-participant motion and on the mophosyntactic realization of manner of motion and path, including shape, direction, and deixis (inter alia, Slobin, 2004; Croft et al., 2010; Beavers et al., 2010). This talk investigates how multi-participant directed motion is expressed across languages and how the different meaning components involved in such expressions are distributed over the lexicon and the morphosyntax. Multi-participant motion is here understood as involving an actor that acts on an undergoer which changes its location as a consequence of the actor's activity. This characterization covers both, transport and caused motion, as lexicalized by the English verbs *bring*, *carry*, *throw*, *pull*, and (transitive) *slide*, among others. Like single-participant motion verbs, all of these verbs can occur with directional expressions.

Multi-participant motion comes with a wider set of semantic parameters than single-participant motion since the way in which the actor brings about the motion of the undergoer can vary in several aspects. Transport, for instance, means that the actor has control over the undergoer, and moves, and thereby causes the undergoer to move with him or her. The transport verb *carry* differs from *bring* in that it specifies the manner of how the actor controls the undergoer. The verb *pull*, in contrast to *carry*, means that the actor causes the undergoer to move by acting forcefully on it in a specific manner, while motion of the actor is not necessarily implied in this case. Pure caused motion verbs like (transitive) *slide*, by comparison, encode the manner of motion of the undergoer and the causation of this motion by the actor. The verb *throw*, on the other hand, specifies an activity by which the actor initiates the movement of the undergoer. The different factors of multi-participant motion events just described play a fundamental role in conceptualizing events of this type (e.g., Michotte, 1963; Wolff, 2008). We show how these conceptual-semantic distinctions can be naturally represented within the approach of decompositional frame semantics (Kallmeyer & Osswald, 2013; Osswald & Van Valin, 2014), which allows us to combine a detailed event decomposition with additional constraints on the interaction between event participants.

Based on these frame-semantic representations, we present a cross-linguistic account of the syntax-semantics interface of multi-participant motion expressions with the goal of tracking in detail how the different semantic components are realized in the morphology and the syntax. To this end, data from a number of languages are analyzed, including German, English, Spanish, Russian, Hungarian, Japanese, and Lakhota (Siouan). Lakhota is particularly transparent in its morphosyntactic encoding of the various semantic components of multi-participant motion. Consider the examples in (1), taken from Ullrich (2008).

(1) a. Woȟtáka-pi na wo-slóhaŋ   iyé-ya-pi
         shove-PL   and by.impact-slide move.away-CAUS-PL
         'They gave it a shove making it slide [away].'
    b. Yu-slóhaŋ   á-ye.
         by.pulling-slide bring.away
         'He was dragging it away.'

Both sentences describe directed multi-participant motion events, which are encoded by verb-verb constructions consisting of two complex transitive verbs. The first verb of the construction (*woslóhAŋ*, *yuslóhAŋ*) expresses the activity of the actor and the manner of motion of the undergoer; the second verb expresses deictic causative or accompanied motion (*iyéyA*, *áyA*). The motion of the undergoer is expressed in both cases by the basic deictic motion verb *yÁ* ('move away'). In (1-a), the general causative suffix *-yA* is applied to this verb; in (1-b), the motion verb is combined with the prefix *a-*, which expresses accompanied motion. The manner of the motion of the undergoer is encoded by the verb *slohÁŋ* ('move on the ground'; lit.: 'crawl', 'creep'), which carries the so-called instrumental prefixes *wo-* (1-a) and *yu-* (1-b) that express the type of force by which the motion is brought about. In the talk, we show how the interdependence between semantic and semantic components in constructions of this kind can be described more systematically within the framework of Role and Reference Grammar (Van Valin, 2005) extended by the compositional frame-semantic approach developed in Kallmeyer & Osswald (2013).

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