

Ps in Motion: On the semantics and syntax of P elements and motion events

Standard approaches to the aspectual properties of events (Verkuyl 1972, 1993; Krifka 1989) concentrate on the role of the internal argument in determining whether an event is telic (terminative) or atelic (durative). Verkuyl (1972, 1993) proposes that an event is telic only if the verb is dynamic (+ ADD TO) and combines with argument DPs whose quantity is specified (+ SPECIFIED QUANTITY OF A) (e.g. *John ate an apple in / *for an hour* vs. *John ate apples *in / for an hour*). Similarly, Krifka (1989) assumes that certain verbs take gradual patients as their arguments, whose internal structure (having cumulative or quantised reference) is mapped onto the structure of events due to a homomorphism relation between events and objects. A problem for such accounts is that telicity does not always arise due to a direct object being quantised but due to other elements in the clause (e.g. *John walked to the store in / *for an hour*), and telicity can be absent in other cases where the entity denoted by the direct object DP actually has quantised reference (e.g. *John pushed the cart *in / for an hour*).

To account also for such cases, one can propose a generalised homomorphism between events and scales, where the scales can be associated with different elements in a clause: the internal structure of the internal argument as in *eat an apple / the apple*, the path denoted by a directional PP as in *walk to the store*, or the adjective underlying the denotation of degree achievements like *widen, ripen* (see Jackendoff 1991, 1996; Krifka 1998, Hay et al. 1999; Zwarts 2005, 2006; Beavers to appear, for related ideas). In the realm of motion events denoted by both intransitive and transitive motion verbs (*walk, push the cart*), then, we can generally assume that such verbs have to combine with directional PPs referring to bounded paths (in the sense of Zwarts 2005) in order to denote telic events. However, there are motion events that do not rely on a directional PP to refer to a telic event, let alone a directed motion event: *Mary put the keys in a box, John jumped in the lake*. Similar examples are found in other languages like Dutch, Norwegian or Russian. It seems that in these cases the verbs alone already provide something similar to a bounded path, but this cannot straightforwardly be accounted for in terms of a homomorphism between events and scales.

Such cases, in turn, can be accounted for in terms of the event structure licensed by particular verbs and the items they combine with. Accounts of telicity in terms of event structure (Moens & Steedman 1987, Pustejovsky 1991, Higginbotham 2000, Ramchand to appear) assume that events can be decomposed into state and process subevents and combinations of these, and that telic events involve a transition into from one subevent into a state (the result state subevent). So one could assume that verbs like *put* and (semelfactive) *jump* always license a complex event structure of a transition into a state, where the state, then, can be modified by a locative PP like *in a box* or *in the lake*. However, event structure alone cannot account for all cases under discussion, because not all events have a visible result state (for example, not all telic events can be modified by a *for*-adverbial referring to the duration of a result state, e.g. *John gave Mary a book for two months* but **John found the keys for two months*), and in many cases it is relevant to look at the scalar properties of the elements of a clause or the internal structure of the process of a decomposed event (see Zwarts 2006, for arguments pointing in this direction).

In this talk, I will present some of the main ideas and issues addressed in my PhD research, which focuses on the semantics and syntax of motion events and P elements (adpositions, prefixes, particles) with a spatial meaning. In particular, I try to combine insights from both the homomorphism and the event structure approaches by combining Rothstein's (2003) more lexical approach to event structure with insights from the literature on PPs such as Fong (1997), Zwarts (2005), among others. From the lexical semantics of particular P elements and verbs with a spatial semantics, I assume that one can derive the syntactic structure these elements can independently license and the semantics associated with such structure. Furthermore, I explore mechanisms underlying complex PPs and the issue of how PPs interact with verbs, i.e. the internal and external PP semantics and syntax. Particular issues involve the attachment site and the semantic function of PPs with respect to the verbal predicate and its arguments (as predicates, modifiers, or arguments), the kind of event structure licensed by and the aspectual properties associated with PPs and PP-verb combinations.

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