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## On Factors Barring the Causativization of Path Verbs

### Czynniki powstrzymujące kauzatywizację czasowników ruchu

The present paper is a contribution to the long-standing discussion of principled connections between semantics and syntax, namely, between types of verbal semantic templates and types of syntactic configurations into which verbs may enter. It focuses on caused motion constructions with verbs of human locomotion and argues that factors that license the formation of these types of construction should be sought not only in the verb's lexical semantic representation but also, and no less importantly, in the type of causal structuration of the motion situation. It will be demonstrated that the key aspect of meaning is the absence/presence of energy that triggers the movement and controls its course and that decides on the type of causal structuration of the motion (and, hence, on the nature of the arguments involved).

Locomotion verbs are commonly classified into two distinct categories, manner of motion verbs and path verbs. Manner of motion verbs encode information about the physical modality of motion but, in contrast to the so-called path verbs, do not provide information about direction of motion unless they combine with a path phrase (cf. e.g. Levin 267): *John walked, John ran, John swam*, etc. By contrast, path verbs merely encode information about "the configuration and position of the path, often specified in relation to the direction of motion" (Matsumoto 190): *John came, John went, John left, John arrived*, etc.<sup>1</sup>

The two major classes of locomotion verbs display a substantially different syntactic behaviour. Consider the following sets of examples with two frequently used verbs, namely, the manner of motion verb *walk* and the path verb *go*:

- (1) a) John walked to the door.  
b) John went to the door.
- (2) a) John walked Mary to the door.  
b) \*John went Mary to the door.
- (3) a) John walked himself to the door.  
b) \*John went himself to the door.
- (4) a) John walked his way out of the room.  
b) \*John went his way out of the room.

As is evident, manner of motion verbs display a marked elasticity in their meaning, whereas path verbs are, in this respect, largely restricted. This fact provides support for positing the features 'manner of motion' and 'path of motion' as contrastive (cf. Levin and Talmy *inter alia*). In this connection, note the possibility of dissociating the traversal of a path and the manner of its execution in the syntactic configuration 'the path verb *go* (*come*) + a manner of motion verb in the *ing*-form':

- (5) John came running to the garden to see what had happened.  
 (6) John went running to the house to see what the matter was.

If certainly cannot be denied that the meaning components 'manner of motion' and 'path of motion' represent abstractions of verbal idiosyncratic properties and, as such, are commonly evaluated as syntax-sensitive. This position is a common denominator both in the lexical-projectionist theory proposed by, e.g., Pinker, and Rappaport Hovav and Levin, and in Jekendoff's lexical conceptual structure.<sup>3</sup> A closer look reveals, however, that positing the two meaning components as core does not, by itself, explain the marked differences in the syntactic behaviour of the verbs under consideration. That is, in spite of obvious correlations between verbal class membership and syntactic behaviour, the components 'manner of motion' and 'path of motion' cannot be evaluated as the sole factors underlying the mappings between semantics and syntax.

Rappaport Hovav and Levin propose that the behaviour of path verbs can be explained by the fact that these verbs lexicalize an achieved location and, as such, belong to the category of 'result verbs', which are characterized by a largely constrained syntactic usability (on the difference between manner and result verbs see also Fillmore). The flexibility of manner verbs and the marked rigidity of result verbs can be illustrated in the following sets of examples, taken from Rappaport Hovav and Levin (103):

- (7) a) Mary scrubbed her fingers to the bone. (*scrub*: manner verb)  
 b) \* Mary broke her knuckles to the bone. (*break*: result verb)  
 (8) a) Mary rubbed the tiredness of her eyes. (*rub*: manner verb)  
 b) \* Mary broke the beauty of the vase. (*break*: result verb)  
 (9) a) Mary swept the leaves off the sidewalk. (*sweep*: manner verb)  
 b) \* Mary broke the dishes off the table. (*break*: result verb)

It certainly cannot be denied that minimizing the lexical information contained in verbs is a necessary procedure if one strives to account for as many syntactic constructions as possible.

However, argumentation in Rappaport Hovav and Levin's vein poses problems because it rests solely on the inherent telicity of path verbs. In actual fact, certain path verbs are underspecified as to the reference to an achieved location, leaving the type of path to be determined (or, rather, co-determined) by the intra-sentential context. For example, the verbs *go* or *descend* can be used not only in telic motion situations (*John went to the door*, *The aircraft descended in five minutes*), but also in atelic ones (*John went*

towards the door. *The aircraft descended for five minutes*). In addition, the path verb *approach* is inherently, i.e. not merely potentially, atelic. That is, irrespective of the type of path phrase and the type of temporal modification, this verb does not allow of a bounded presentation of a motion situation (cf., e.g., the sentences *John approached the house*, *John approached along the corridor*).

It is evident that the largely restricted syntactic usability of path verbs cannot be explained by appealing to the concepts 'result' and 'manner' solely. It remains to be answered why path verbs cannot causativize, i.e. why they cannot enter into constructions in which the subject position is occupied by the causer as the instigator of the motion encoded in the verb and the direct object position is occupied by the causee as the target of the causer's activity and, at the same time, the actual executor of the motion (cf. the examples in (2) and, also, the examples in (3), in which the causer and causee are identical). Generally speaking, it seems reasonable to evaluate caused motion constructions in which the actual executor of the motion takes up the direct object position (prototypically reserved for patients) as representing an externalized stylization of internal causation of a motion. By this wording it is meant that the causee is endowed with both the agentive and the patientive role.

Related to the impossibility of causativization is, apparently, the impossibility of path verbs of entering into the *one's way* construction (exemplified in 4). There is good reason to treat this type of construction as belonging to the family of caused motion constructions. The expression *one's way*, occupying the direct object position, designates the path "created" by the mover (on this see Goldberg). Consistent with this is the fact that this construction explicitly presents the mover as the causer of the motion, i.e. as the source of energy whose exertion results in the motion in question (as will be shown later, this aspect of meaning is of considerable importance).

To turn to the semantic roles of causer and causee, it appears that the character of argument structuration, undelimited by a specific type of causal structuration, plays an important role in determining the verb's syntactic behaviour. According to Perlmutter's classification of intransitive verbs into unergatives and unaccusatives, unergative verbs, to which self-agentive manner of motion verbs belong, are monadic verbs expressing eventualities that are internally caused (on this see Perlmutter). That is, the subjects of unergatives are agents (*John walked to the station*, *John ran to the station*, *John swam across the lake*, etc.). Unaccusative verbs, to which path verbs belong, are monadic verbs whose subjects are deep-structure objects (unaccusative verbs are thus described as lacking an external argument). That is, the subjects of unaccusatives are not agents but patients (*John came to the station*, *John went to the door*, *John approached the house*, *John left the house*). The problem for this analysis is that the patientive status of the surface structure subject of path verbs should, in theory, enable these verbs to causativize. In other words, path verbs should allow for the possibility of inserting an external argument into the sentence, relegating the internal argument to the direct object position. This is, needless to say, not possible: \**John went (came) himself to the door*, \**John went (came) Mary to the door*, \**John went (came) his way out of the room*<sup>4</sup>.

A remark is due here. The impossibility of forming causative constructions with path verbs like *descend*, *leave*, *enter* can be given an independent explanation: the alleged patient cannot occupy the direct object position, i.e. the position reserved for an internal argument, because this position is already taken up by a nominal phrase designating a place which functions as the spatial anchorage of the motion. Consider:

- (10) a) Mary descended the stairs.  
 b) \*John descended Mary the stairs.  
 (11) a) Mary left the town.  
 b) \*John left Mary the town.  
 (12) a) Mary entered the house.  
 b) \*John entered Mary the house.  
 (13) a) Mary approached the station.  
 b) \*John approached Mary the station.

In line with their internal argument status, phrases encoding the spatial anchorage of the motion can take up the subject position in passive constructions. Consider two interesting illustrative examples from the British National Corpus:

- (14) It is a perceptual garden in which there are goodies to be picked – once the garden has been entered.  
 (15) The aircraft was left for two hours while the pilot was arranging for its recovery, and during this period it was extensively damaged by vandals.

What is, then, the semantic status of the mover in situations expressed by means of path verbs? One grows increasingly conscious that an answer to this question will most probably provide an explanation of the impossibility of the causativization of path verbs. No matter how counterintuitive it may seem, the non-agentive status of the mover does not necessarily have to imply that this participant is the patient. Let me offer an explanation. In terms of flow of energy, an agent is a participant that exerts energy and a patient is its target (the concept of the transmission of energy is dealt with in great detail in, e.g., Langacker). That is, the patient is the receiver of the energy. In motion situations expressed by means of manner of motion verbs, the mover changes location owing to the exertion of a concrete type of physical energy. In other words, the mover changes location by providing energy whose outward physical manifestation is a concrete physical modality of motion. Viewed from the perspective of the flow of energy, the mover is both its source and its receiver precisely because they move due to the manipulation of their body. From this point of view, the mover is both an agent and a patient. This description of the status of the mover in the causal structuration of the motion situation is in line with the observation offered in Croft, Pinker or Talmy, namely, that there is a causal link between the traversal of the path and the activity lexicalized by the verb. This explains why it is possible to causativize manner of motion verbs: *John walked himself to the window*, *John walked Mary to the station*, *John walked his way out of the room*. These caused motion constructions accommodate both the source of energy (the causer)

and its receiver (the causee). The possibility of forming the *one's way* construction (*John walked his way out of the room*) attests to the causal link between the mover's activity of walking and the creation of the path.

By contrast, in motion events expressed by means of path verbs (*John went to the door*, *John came to the sitting room*, *John arrived at the station*, etc.), no release and, hence, no transmission of concrete physical energy is involved. Following Russell's lead, all that can be said about the mover is that he "is in one place at one time and in another at another" (Russell 83-84). Needless to say, there are differences between path verbs but they do not concern the modality of movement in terms of its concrete physical form. For example, *arrive* encodes a journey (i.e. a relatively long path), *approach* lexicalizes a spatial orientation of the motion (i.e. it encodes inherent atelicity), etc. What is at issue here is the fact the movement is presented in its bare, simplest form -- as a pure change of location, stripped off all additional components of meaning. This is, most probably, the reason underlying the vast semantic applicability of path verbs. More specifically, path verbs may be used to designate situations in which no real movement is present. They may encode situations in which entities move in an abstract sense or in which they change their state (as is well known, a change of state is, at a very abstract level, a movement along a scale). One can, for example, say that *a question arises*, *this road goes to Prague*, *he came to the conclusion*, *he went mad*, etc.

From this specific construal of motion situations lexicalized by path verbs it follows that the movements in question are not the result of any action. Since path verbs lexicalize the mere fact of a change of location, one cannot posit a causal relation between, e.g., the mover's going (/ coming / appearing) somewhere and the fact of the mover's translocation. One cannot say that "the mover goes (/ comes, / arrives) somewhere and in this way changes location". In other words, the movement is not a means of translocation and that's why one cannot say that "the mover changes location by means of going (/ coming / arriving) somewhere" (one can thus come, go or arrive somewhere in many different ways). As opposed to the movement in manner of motion verbs, the movement in path verbs is presented as abstracted from a causal chain.

The non-instrumental position of this type of movement is in line with the semantic status of the mover. No matter how counterintuitive it may seem, this participant can be identified neither as an agent nor as a patient. An explanation along these lines can be supported by appealing to Langacker's analysis of situations encoded in the verbs of the *come*, *go* or *arrive* type. Langacker (390) observes that these verbs "impose an absolute construal on the movement they designate. This does not imply that the motion is conceived as being inherently non-energetic, but rather that only the thematic process itself (i.e. the movement per se) is saliently evoked and placed in profile". Inspired by this, we may say that these motion situations are not instantiations of an actional schema (involving an agent-patient differentiation) but instantiations of a pure kinetic schema. The non-patientive position of the mover, then, explains why this participant cannot occupy the direct object position, reserved for the receiver of the energy underlying the motion (to repair, patients are, by definition, affected participants).

It may be argued that the possibility of modifying movement encoded in path verbs by means of pace adverbs (*John went quickly to the door*, *John went slowly to the door*) runs counter to the claim that motion of this type is presented in its bare form, abstracted here 'pertains to the very basics of motion as progression in space over time. It expresses a property of the temporality that converts space into a path, i.e. that converts a static stretch of space into a dynamic one' (Kudrnáčová 56-57). By contrast, speed in motion (*/ran/ slowly*) is a derived feature because it follows from the concrete physical modality of the motion (on this see e.g. Miller and Johnson-Laird 551-552).

To sum up the paper has attempted to show that the lexical semantic representation of the classes of verbs under consideration involving the semantic features 'manner', 'path' and 'result' does not adequately account for the syntactic behaviour of the verbs in question. What also comes into play is the type of causal structuration of the motion underlain by its specific energetic profile.

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## Notes

- 1 In Asher and Sablayrolles manner of motion verbs are termed 'verbs of displacement' and path verbs 'verbs of direction'.
- 2 An analogous phenomenon is discussed – from the functional point of view – in Adam (118-119) in relation to a special type of so-called Extended Presentation Scale sentences in his research on religious texts based on the Firbasian theory of functional sentence perspective (see Firbas).
- 3 In this connection it should be pointed out that idiosyncratic properties of verbs do, after all, play a role in determining the syntactic behaviour of verbs (on this see, e.g., Boas and Kudrnáčová).
- 4 Related to this is also, the impossibility of forming passive constructions with path verbs: \**John was come (/ was gone) to the store*, \**John was arrived at the station*, *John was approached along the corridor* (meaning that John is the mover).