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CAUSED MOTION EVENTS AS COMPLEX STRUCTURES

From numerous works dealing with causative predicates it follows that their decomposition poses numerous problems. Decompositional formulas of causative events employ the abstract predicate ‘cause’ taking two arguments, the cause and the result. Causative events are thus represented as chains with the cause on the one pole and the result on the other: the causer *x* acts on the causee *y*, inducing a change in *y*. The resulting change in *y* may be either a process or a state.

The present paper will focus on caused motion predicates. It will demonstrate that

- (a) caused motion events represent complex structures that may involve more than two subevents; the subevents are not only interrelated, but also display a hierarchical ordering
- (b) in spite of being clearly discernible, the subevents do not have an autonomous status
- (c) the interaction between the verb’s specific causative structure and its lexico-semantic structure manifests itself at a syntactic level.

The position of subevents in decompositional formulas

Movement and manipulative causation are regarded as belonging to the core of causative events (Talmy 1976). Decompositional formulas of caused motion events are traditionally presented in the form ‘*x* made it be the case that *y* moved’ (‘*x* made it be the case that *y* changed location’) or ‘*x* caused *y* to move’ (‘*x* caused *y* to change location’). These decompositions may pose problems as to the specification of concrete semantic values of the two subevents (the causing subevent and the caused one). For example, Jackendoff (1983: 177) offers two possible interpretations of the sentence *Amy put the flowers in the vase* in the form ‘Amy made it happen that the flowers went into the vase’ and ‘Amy made it be the case that the flowers were in the vase’, and adds that the latter seems less acceptable because “what Amy really did was bring about an event whose end-state is the situation in question”. However, a closer look reveals that both vari-

ants might serve as paraphrases of the sentence *Amy dropped the flowers in the vase* or *Amy threw the flowers in the vase*. In the event of “dropping”, the causer ceases to release a stationary type of energy between himself and the object. (By the term ‘stationary energy’ I mean such a type of energy as the causer releases to merely maintain the position of the object in his/her physical scope. By contrast, a release of a dynamic type of energy sets the object in motion.) As a result, the object becomes subject to the force of gravitational energy and moves downwards – Jackendoff (1983: 178) introduces the concept of ‘permissive agency’. In “dropping the flowers in the vase”, the position of the object is first controlled by the causer but then it is free from such control. The same is valid for *throw*, *fling* and other verbs of “ballistic motion”. In “throwing”, the causer transmits dynamic energy onto the object, in this way making the object move in a certain direction (typically not downwards). By contrast, in “putting something somewhere”, the causer controls the movement of the object all along the path that the object traverses. That is, in the event represented by the verb *put*, the causing subevent (the activity carried out by the causer) and the caused subevent (the motion of the object) are temporally coextensive, which does not hold for *drop* and *throw*. In the light of this, the paraphrase in the form ‘Amy made it be the case that the flowers went into the vase’ (not ‘were in the vase’) is better suited to represent “dropping” or “throwing”, i.e. such events as involve an unaccompanied movement of the object. The decomposition in the form ‘Amy made it be the case that the flowers were in the vase’ is, then, more appropriate for *Amy put the flowers in the vase* because the caused motion event (linguistically grasped by the verb *put*) profiles the resulting state, i.e. the final localization of the object. It must be added that this type of paraphrase (‘x makes it be the case that y is somewhere’) can, in fact, be offered as a decomposition of any event involving the object’s change of location brought about by an external causer. It may represent not only “putting something somewhere”, but also, let’s say, “throwing/raising/pushing something somewhere”. One cannot overlook one important fact, namely that the specification of the first argument of the abstract predicate ‘cause’ in the form ‘Amy made it be the case that’ is, in spite of representing a verb of action and imputing agency (cf. Davidson 1966: 65–7), very vague to this effect, which also adds to the broad applicability of the decompositional formula under consideration.

It is clear that the causing subevent cannot be specified independently of the caused subevent because the two form an inseparable unit. To give a well-known example, the causing subevent ‘Mary did something’ from the causative paraphrase of the sentence *Mary opened the door* (‘Mary did something that caused the door to be open’, see, e.g., Parsons 1994: 227) may stand not only for stereotypical actions (involving manipulating handles, for example) but also for kicking against the door (true enough, this last scenario would probably be rendered in the form *Mary kicked the door open*). It is worth noting that a stereotypical character of actions is an important factor motivating the use of lexical causatives. For example, McCawley (1978) points out that the lexical causative *kill*

represents the action in question in its stereotypical version. In the light of these considerations, it is apparent that the concrete semantic value of ‘Mary did something’ as the first argument of ‘cause’ depends not only on semantic, but also on pragmatic factors, i.e. on certain prototypical scenarios.

The analysis of lexical causatives in a lexical decomposition theory raises problems also because decompositional formulas, necessarily, employ the abstract predicate ‘cause’. From this it logically follows that causative decompositional formulas cannot conform to the ways in which a natural language is used. It is, then, quite symptomatic that if a given decompositional formula does not sound plausible, its interpretative status is cast into doubt. For example, Palmer (1986:139) observes that there are “degrees of plausibility in the causative analysis of English verbs” and points out that decompositional formulas bring about problems when it comes to verbs such as *hit*: *John hit Bill* – ‘John caused Bill to -(?)’. In fact, Palmer’s criticism concerns two related problems, namely which verbs should actually be taken as causative ones, and how the concept of a ‘resulting change of state’ could be specified in clearer terms. The test ‘x Verbed y, but nothing happened to y’ as in *John melted the ice, but nothing happened to it* (cf., e.g. Shibatani 1976) is a useful device for singling out verbs of change of state from those that do not entail such a change (the verb *melt*, naturally, entails a change of state), but its applicability as a diagnostic test for determining verbs of change of location is open to debate. Consider:

Harry hit John, but nothing happened to him.

? *Harry raised (rolled/pushed/threw/bounced) the ball, but nothing happened to it.*

The plausibility of the first sentence is beyond doubt, but the second sentence poses problems. One cannot reasonably say that if someone raises the ball, the ball does not undergo any change. Still, the statement in the form “but nothing happened to it” is not a felicitous way of grasping this aspect of meaning because it points to the ‘inner’ change in the object (to the damage done to it, perhaps) rather than to its change of location.

It cannot be overlooked that such decompositions are possible, and hence seem plausible, when the slot for the given verb in the formula ‘cause to V’ is filled with intransitive variants of their causative transitive counterparts. Let me adduce well-known examples with the verbs *break* and *open*. The causative transitive events *He broke the vase/opened the door* are traditionally paraphrased by means of formulas employing intransitive verbs that are part of the natural language lexicon: ‘He caused the vase to break/the door to open’. It should be realized that intransitive verbs are used in sentences that abstract the activity of the causer from the profiled action in question: *The vase broke, The door opened*. In these eventualities, the external causer is presumed but not explicitly stated. It is either specified in the extra-sentential context or may be inferred from it, or there is no external causer and the event is presented as ‘spontaneous’ or ‘internally caused’.

(On the feature ‘spontaneousness’ see Haspelmath 1993, on the concept of internal causation see esp. Levin and Rappaport Hovav 1995, and Levin 1994.) The same is valid for caused motion events. The formulas ‘*x* caused *y* to rise/turn/bend/go down/fly’ etc. seem plausible precisely because they employ intransitive verbs from the natural language lexicon, i.e. verbs that express actions (movements) in which the activity of the causer (the causing subevent) is relinquished.

The causer’s versus the causee’s perspectivization

It will have been noted that decompositions in the form ‘cause to V’ can be readily offered for predicates that can participate in the causative/inchoative alternation. In other words, these decompositions are open for causative predicates representing events which can be broken down into the causing subevent and the caused subevent in such a way that the caused subevent is presentable as abstracted from the activity of the causer (which means that an intransitive verb capable of rendering the situation in this way is available). A closer look reveals that intransitive verbs present caused motion events from the causee’s perspective. If someone raises (rolls, turns, bends, rotates, spins, bounces, etc.) an object, the object (as the causee) rises (rolls, turns, bends, rotates, spins, bounces). The causee’s rising (rolling, turning, bending, rotating, spinning, bouncing) is, naturally, part of its being raised (rolled, turned, bent, rotated, spun, bounced) but in this case it is presented as abstracted from the exertion of force on the part of the causer. The paraphrase decomposing the event into two parts, the causing subevent and the caused one, is, then, quite plausible: ‘*x* causes *y* to rise (roll, turn, bend, rotate, spin, bounce)’.

The subtraction of the causing event from the caused one is, however, highly problematic with verbs that represent caused motion events from the causer’s perspective. In such a case, the verb lexicalizes the activity carried out by the causer, namely the type of energy the causer imparts on the object and the type of physical contact between the causer and the object, from both a spatial and a temporal point of view. If the verb specifies the activity carried out by the causer, the resulting motion of the object only follows from the nature of the causer’s activity. Needless to say, in spite of not being explicitly lexicalized by the verb, the causee’s motion is part of the lexico-semantic content of the verb. In such a case, the paraphrase ‘cause to V’ cannot be offered as an analytic formula because the lexicon does not contain a verb which could fill the slot reserved for the intransitive verb: * ‘*x* causes *y* to push (pull, throw, toss, cast, hold, bring, carry, etc.)’.

Let me illustrate this point in greater detail in the example of the verb *push*. This verb denotes motion during which the object moved does not leave the physical scope of the causer’s body, which is one of the reasons why it is difficult to specify the caused subevent (the movement of the object) as a distinct event. It is certainly possible to capture the event as ‘*x* causes *y* to move’, but this paraphrase does not take us any further because it can be offered for any caused

motion event. The decomposition in the form ‘*x* causes *y* to move along *x*’ does not represent any progress either because it is applicable to other caused motion events (to “carrying something”, for example). It appears that two more aspects of meaning must be taken into consideration, namely the dual causative character of the subevents and the type of energy transmitted from *x* onto oneself and onto *y*. The formulas in the form ‘*x* causes oneself to move by constantly transmitting dynamic energy onto oneself’ and ‘*x* causes *y* to move by constantly transmitting dynamic energy onto *y*’ represent a better solution. They capture not only the type of energy but also the complex causative structure of the entire event, namely (a) transition of dynamic energy from *x* onto oneself (with the resulting motion of *x*) and (b) transition of dynamic energy from *x* to *y* (with the resulting motion of *y*). What remains to be specified, is the relation between (a) and (b). Pinker (1989: 103) characterizes *push* as involving “continuous exertion of force resulting in the guided motion of a theme”. Little reflection shows that the postulation of temporal coextensiveness (note the expression “constantly” in “constantly transmitting dynamic energy”) is, however, too mechanical and does not reflect the fact that (a) and (b) are interdependent in such a way that the nature of (a) follows from the nature of (b) and vice versa. In other words, the specific character of the subevents is constituted in their interaction.

All these factors point to the fact that the verb *push* lexicalizes the caused motion event from the perspective of the causer in that it specifies the manner in which the causer acts on the object (on the causee). The motion of the object, being incorporated in the causer’s activity, is discernible only as its logical part. This explains why *push* cannot participate in the causative/inchoative alternation:

Harry pushed the cart.

* *The cart pushed.*

The verb *push* represents an event in which the activity of the external causer cannot be relinquished. This prevents the verb from entering into the inchoative construction, which, as mentioned above, renders the causee’s movement as released from its ties with the causing subevent.

In theory, one might expect that the dissociation of subevents would be less problematic in caused motion events in which the object leaves the physical scope of the causer’s body as is the case in the event of throwing. The verb *throw* is commonly specified as a verb of “instantaneously causing ballistic motion” (Levin 1993: 147). So *Harry threw the ball into the air* is paraphrasable as ‘*x* causes *y* to fly’. One must take into account, however, that the initial kinetic phase of “throwing” encompasses a certain portion of the path that *y* traverses because *y* is placed in *x*’s body part(s). In other words, the path that *y* traverses has two sections: the first belongs to an “accompanied” movement, the second to an “unaccompanied” one. From this it follows that the direction of the movement of *x*’s part(s) determines the direction of the subsequent unaccompanied move-

ment of y – hence the difference between “throwing to somebody” and “throwing at somebody”. As can be seen, this strictly physical aspect of the causative event in question manifests itself at a syntactic level, which testifies to the fact that the partial overlap of the two subevents must be regarded as a constitutive meaning component in the lexico-semantic structure of the verb.

Throw as a complex structure

The verb *throw* may be used to represent a causative event with yet another participant: when Harry throws a ball to John, Harry causes not only the object’s change of location but also a change of its possession. This complex causative event thus involves two meaning complexes, each with its own causative structure: the first can be paraphrased as ‘ x causes y to move’ and the second as ‘ x causes z to have y ’ (z = the receiver). Although these decompositions may be applied also to events that are not commonly labelled as involving caused motion (*give somebody something*, for example), they provide frames that represent specific syntactic structures (cf. Goldberg’s construction grammar taking the basic conceptual components of a causative event as syntactically relevant aspects of meaning, see esp. Goldberg 1995). Therefore, “throw somebody something” occurs in the same syntactic frame as “send somebody something” or “give somebody something”: *Harry threw/sent/gave John a ball*.

Let us now have a closer look at the relation between the two meaning complexes in question. Needless to say, each represents a different perspectivization imposed on the entire event. The paraphrase ‘ x causes y to move’ grasps the event from the perspective of the entity whose motion is caused, whereas the paraphrase ‘ x causes z to have y ’ grasps the event from the perspective of the participant (the receiver) in whose direction the object moves. However, what remains to be specified is the nature of the relation between the two subevents. The paraphrase ‘ x causes y to move, thereby causing z to have y ’ represents no progress in that it merely establishes a causative relation between the subevents. In fact, it cannot be overlooked that the causation of the second subevent is already present in the first subevent. When Harry throws a ball at John (not “to John”), he transmits dynamic energy onto the ball in such a way as substantially diminishes the possibility that John will catch it. Therefore, one can say *Harry threw a stone at John, but John caught it* (or *but John managed to catch it*) but one cannot reasonably say *Harry threw a stone to John, but John caught it* (or *but John managed to catch it*). In the event “throwing a stone at John”, John is not the intended receiver (as is the case in “throwing a stone to John”), but represents a mere spatial end-point in the direction of which the object moves. In this type of event, then, the causer intentionally sets the object in motion, but, at the same time, does not want the potential receiver to have it. Therefore, the subevent ‘ x causes z to have y ’ is missing here.

The paraphrase of the subevent ‘*x* causes *z* to have *y*’ (and, by the same token, ‘*x* causes *y* to move’) captures the given situation from the point of view of the causer. Viewed from the perspective of the receiver (“John catches the ball”), it should be paraphrased as ‘*z* causes oneself to have *y* (by transmitting dynamic energy onto *y*)’. In this connection, let me mention briefly that the idea that an event may contain more than one level of causation is not a novel one. Kastovsky (1973: 273), for example, suggests that the verb *teach* is a double causative because it implies ‘cause to learn’ and *learn*, in turn, implies ‘cause oneself to know’.

It will have been seen that although the subevents ‘*x* causes *y* to move’ and ‘*x* causes *z* to have *y*’ represent two clearly discernible units, they cannot, from the point of view of the structure of the event as a whole, be posited as having a functionally independent status. It is also worth noting that the presence of intention does not have a mere additive status, but co-shapes the causative structure of the entire event. Decompositional formulas of caused motion predicates should, therefore, incorporate a potential unintentionality of setting the object in motion. In the event of dropping, for example, the object can be caused to move intentionally as well as unintentionally because this type of event involves a release of stationary energy. In the event of throwing, by contrast, a release of dynamic energy of a specific type presupposes the presence of intention, but not necessarily in the overall physical pattern of the event. Let us recall the difference between “throwing something to somebody” and “throwing something at somebody”, which, as has been demonstrated, points to the conceptual link between the causing subevent and the caused one: in *throw*, the two subevents overlap to a certain extent. In this context, one might point out that the potentiality of the presence of intention in certain caused motion events attests to the need of separating the concept of causation from that of intention.

Caused motion predicates as nets of interrelated subevents

The analysis of a selected group of verbs (*hold*, *carry* and *bring*) offered in this section will demonstrate that caused motion events represent complex structures involving a net of interrelated subevents. (Strictly speaking, *hold* is not a verb of caused motion but a verb of caused position. It is incorporated in the analysis because it helps to characterize the causative structures of *carry* and *bring*.)

hold

‘*x* causes *y* to be at oneself (by transmitting stationary energy onto *y*)’

carry

subevent (1):

‘*x* causes oneself to move (by transmitting dynamic energy onto oneself)’

subevent (2):

‘*x* causes *y* to be at oneself (by transmitting stationary energy onto *y*)’

bring

subevent (1):

‘*x* causes oneself to move (by transmitting dynamic energy onto oneself)’

subevent (2):

‘*x* causes *y* to be at oneself (by transmitting stationary energy onto *y*)’

subevent (3):

(a) ‘*x* ceases to move oneself’ (= *x* changes his/her final location)
thereby

(b) ‘*x* ceases to move *y*’ (= *x* changes the final location of *y*)

The causative structures of *carry* and *bring* as presented above represent minimal patterns that these verbs must involve for them to be what they are meant to be. As can be seen, *hold* represents a simple causative chain, while *carry* and *bring* represent complex causative structures:

carry = ‘(hold + move)’

bring = ‘(hold + move)’ and ‘cease to (hold + move)’

As to the number of subevents, one important remark must be made. The presence of subevent (3) in the structure of *bring* correlates with the intrinsic telicity of the verb. It is important to realize that a directed movement can be telic only when the desired spatial goal is built in the motor plan of subevent (1). In other words, subevent (1) is conceptually related to subevent (3). In *carry*, telicity is a mere potential feature (with a *to*-directional phrase as its manifestation at the surface level): *I carried the package to Peter*. This means that, in its telic use, the verb *carry* also involves subevent (3).

The subevents, each representing a causative unit in its own right, are inter-related on temporal as well as on conceptual grounds. More specifically, the relation between subevents (1) and (2) in both *carry* and *bring* involves their temporal coextensiveness. In *bring*, the relation between (1) and (2) on the one hand and (3) on the other involves their temporal successiveness. What is more, subevents (1) and (2) in both the verbs are mutually dependent. The intrinsic, non-separable relation between (1) and (2) manifests itself clearly in the specification of (3): (3a) (= discontinuation of 1), implies (3b) (= discontinuation of 2). Note, however, that the discontinuation of (2) does not imply that *y* changes its owner, which explains why a change in *y*’s possession necessitates a syntactic slot for the receiver: *Harry brought him a glass of water*; *Harry brought a glass of water to him*.

Let us now consider the causative structures of the verbs under consideration in the light of their syntactic behaviour. Needless to say, the absence of subevent

(3) in an atelic use of *carry* explains why this verb can be used without a *to*-directional phrase, which denotes a spatial goal or a potential receiver. The verb *bring*, due to the obligatory presence of subevent (3), always indicates a final change of the object's location or a change of its possession. When used deictically, these components are inferred from the context:

Harry carried a book.

Harry brought the book (to John/to the meeting).

As has already been mentioned, the verb *carry* can denote a telic event, i.e. can be used in the same sense as *bring* ("carry something to somebody/somewhere"). In this case the verb's causative pattern must also contain subevent (3). This fact shows itself directly at a syntactic level: the verb is complemented with a *to*-directional phrase denoting a spatial goal of motion or a receiver of the object, cf.:

Amanda carried the package to Pamela/to New York. (Levin 1993: 135)

It is worth noting, however, that *carry* and *bring*, even when used as verbs of a possession change, differ not only in that the former denotes a manner of motion and the latter is mute about this aspect of meaning. Consider:

? *Amanda carried Pamela the package.* (Levin 1993: 135)

Amanda brought Pamela the package.

As opposed to *bring*, the verb *carry* does not dativize (or, at least, such a possibility is highly questionable). The reason must be sought in a different hierarchical ordering of their sub-events. In *carry*, the subevent involving the causer's motion takes precedence over the subevent involving the object's position. By this, it is meant that although the two subevents are temporally coextensive, they are not of equal importance in the conceptualization of the entire event. The motion of the causer has a dominant position, the motion of the causee (the object's motion) represents a mere co-occurring event. This is the reason why a change of possession can only be rendered as a change of location and why the dative alternation is barred for the verb. We can say that, in *carry*, it is the spatial (vectorial) schema that plays a decisive role in determining the syntactic behaviour of the verb. This schema enables the verb to enter into a vectorial type of construction only, i.e. into the construction with a directional phrase. The object's change of location is thus rendered as a result of the causer's change of location. From this it follows that when a possession change is to be expressed, the receiver can only be expressed in the *to*-directional phrase (*to Pamela*), which renders the receiver as an end-point on the path traversed by the causer. In *bring*, by contrast, the causer's motion and the object's motion have an equal status, which enables the verb to enter into both types of syntactic construction.

Needless to say, *carry* lexicalizes the type of position of the object: the object is not only located at the causer, but this location has certain manner characteristics. And, what is more (and what is probably consistent with the other semantic features of this verb as discussed so far), *carry* does not render the object's position (and, hence, a potential change of its location expressed in the *to*-phrase) in a contrastive way. In other words, the verb does not imply that the object is located at the causer as a result of a change of its original position, whereas *bring* does carry such an implication. In *bring*, the object's change of location is always present because the verb renders the object's change of location as a change of its original location. Let me corroborate this assumption by appealing to Dowty's observation (1991: 578), namely that in *put something somewhere* the object undergoes two changes: first it is removed from the original position and then placed in its new one.

We have dealt with the reasons why *bring* and *carry* do not behave uniformly as far as the syntactic manifestation of a possession change is concerned. The discussion has also shown that the two syntactic constructions denoting a change of possession (the dative construction and the construction with the *to*-phrase) are endowed with their own semantic potential and that it is this inherent syntactic meaning that imposes restrictions on the range of verbs that can enter into them. The construction with the directional phrase conceptualizes ownership as location: 'y is located at z' (z = the receiver), while the dative construction conceptualizes ownership as possession without locative implications: 'z has y'.

Stationary energy versus dynamic energy

By way of concluding the analysis, let me add a remark on the two types of energy as postulated in this paper. It will be seen that the difference between them manifests itself at a syntactical level, which attests to their incorporation in the verbal conceptual structure. Let me demonstrate this point on the example of the verbs *carry*, *bring* and *push* again. Levin characterizes *carry*, *push* and *bring* as displaying common lexico-semantic features (*bring* may be used deictically). She describes *carry* and *push* as "verbs of causation of accompanied motion in some manner" (Levin 1993: 138), and *bring* as a verb of "continuous causation of accompanied motion in a deictically specified direction" (Levin 1993: 135). However, these verbs differ in one important aspect of meaning: *carry* and *bring* involve transmission of stationary energy from the causer onto the object, while *push* involves transmission of dynamic energy from the causer onto the object. Compare:

Nora pushed the chair. (Levin 1993: 137)

Nora pushed at/on/against the chair. (Levin 1993: 137)

Nora brought the book.

* *Nora brought at/on/against the book.*

Nora carried the book.

* *Nora carried at/on/against the book.*

As opposed to the verbs *bring* and *carry*, the verb *push* can be used with the prepositional phrases employing *at*, *on* and *against* because these phrases profile the imparting of force (dynamic energy) to the object and thus are not compatible with verbs denoting actions that involve transition of stationary energy.

On the value of decompositions

As the analysis of lexical causatives expressing caused motion has shown, difficulties connected with the concrete specification of the causing subevent and the caused subevent testify to the fact that their dissociation may obscure the nature of the entire event. Although the cause and the result represent two discernible events, they are not functionally independent. They both represent clearly discernible components of the whole event but such as cannot be posited as autonomous units. Naturally, this fact imposes limits on the interpretative value of a decompositional approach. The analysis of *kill* as 'cause to die' (McCawley 1968) may serve as a classic illustrative example. This decomposition was duly criticised, among others, by Fodor (1970) and Wierzbicka (1975), basically because 'cause to die' fails to capture certain spatial, temporal and volitional aspects of meaning as present in *kill*. Haiman (1985) observes that, due to the principle of iconicity, lexical causatives require a single clause and can therefore denote a single event only. The internally compact character of lexical causatives is often posited as following from the fact that lexical causatives denote events involving direct causation (direct causation as implied in lexical causatives has been argued for by Fodor 1970, Shibatani 1976, McCawley 1978, among others). Wolff (2003) provides experimental evidence that English speakers encode a given event by means of a lexical causative if they view it as a single unit involving direct causation, and Gergely and Bever (1986) argue along the same lines.

In spite of all the facts mentioned above, it cannot be denied that decompositional formulas have a descriptive value. They explicitly capture the presence of a dynamic relationship between the causer and the causee. The causer transmits energy onto the object and in this way performs a causative role with respect to its motion. Transitivity seen from this perspective justifies the postulation of dissociation between the cause and the result. In other words, decompositional formulas of caused motion events encode the transitivity of causativity in terms of its force-dynamic nature. As is well known, Talmy's force dynamics (e.g., Talmy 1976, 1988) involves causality as one of its spheres of action. Kemmer and Verhagen (1994), following Talmy, take transitivity as "essentially force dynamic in nature" (1994: 127).

Conclusion

Decompositions in the form ‘*x* made it be the case that *y* went/was somewhere’ or ‘*x* caused *y* to move/to change location’ represent analytic structures that grasp situations (actions and states) of caused motion events that are regarded as their constitutive parts. They are, however, mute about certain meaning components that have a role in shaping the causative structure of the event. The analysis of a selected group of verbs has shown that an analysis of verbal causative structures should involve a more detailed description of their inner structuration, not only with respect to their representation at a syntactic level but also with respect to their representation at a lexical conceptual level.

References

- Davidson, Donald (1966) ‘The Logical Form of Action Sentences’. In N. Rescher (ed.) *The Logic of Decision and Action*, 81–95. Pittsburgh: University of Pittsburgh Press.
- Dowty, David (1991) ‘Thematic Proto-roles and Argument Selection’. *Language* 67, 547–619.
- Fodor, Jerold A. (1970) ‘Three Reasons for Not Deriving *Kill* from *Cause to Die*’. *Linguistic Inquiry* 1, 429–38.
- Gergely, György, and Bever, Thomas G. (1986) ‘Relatedness Intuitions and the Mental Representation of Causative Verbs’. *Cognition* 23, 211–77.
- Goldberg, Adele E. (1995) *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago and London: Chicago University Press.
- Haiman, John (1985) *Natural Syntax: Iconicity and Erosion*. Cambridge: Cambridge University Press.
- Haspelmath, Martin (1993) ‘More on the Typology of Inchoative/Causative Verb Alternations’. In B. Comrie and M. Polinsky (eds) *Causatives and Transitivity*, 87–111. Amsterdam and Philadelphia: John Benjamins.
- Jackendoff, Ray (1983) *Semantics and Cognition*. Cambridge, Mass.: MIT Press.
- Kastovsky, Dieter (1973) ‘Causatives’. *Foundations of Language* 10, 255–315.
- Kemmer, Suzanne, and Verhagen, Arie (1994) ‘The Grammar of Causatives and the Conceptual Structure of Events’. *Cognitive Linguistics* 5, 115–56.
- Lakoff, George (1970) *Irregularity in Syntax*. New York: Holt, Rinehart and Winston.
- Levin, Beth (1993) *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Levin, Beth (1994) ‘A Preliminary Analysis of Causative Verbs in English’. *Lingua* 92, 35–77.
- Levin, Beth, and Rappaport Hovav, Malka (1995) *Unaccusativity: At the Syntax-Lexical Semantics Interface*. Cambridge, Mass.: MIT Press.
- McCawley, James D. (1968) ‘Lexical Insertion in a Transformational Grammar without Deep Structure’. In B. Darden, C. Bailey and A. Davison (eds) *Papers from the Fourth Regional Meeting*, CLS, 71–80. Chicago: Department of Linguistics, University of Chicago.
- McCawley, James D. (1978) ‘Conversational Implicature and the Lexicon’. In P. Cole (ed.) *Syntax and Semantics 9: Pragmatics*, 245–59. New York: Academic Press.
- Palmer, Frank R. (1986) *Semantics*. Cambridge: Cambridge University Press.
- Parsons, Terence (1994) *Events in the Semantics of English: A Study in Subatomic Semantics*. Cambridge, Mass.: MIT Press.
- Pinker, Steven (1989) *Learnability and Cognition: The Acquisition of Argument Structure*. Cambridge, Mass.: MIT Press.

- Shibatani, Masayoshi (1976) 'The Grammar of Causative Constructions: A Conspectus'. In M. Shibatani (ed.) *Syntax and Semantics 6: The Grammar of Causative Constructions*, 1–40. New York: Academic Press.
- Talmy, Leonard (1976) 'Semantic Causative Types'. In M. Shibatani (ed.) *Syntax and Semantics 6: The Grammar of Causative Constructions*, 43–116. New York: Academic Press.
- Talmy, Leonard (1988) 'Force Dynamics in Language and Cognition'. *Cognitive Science* 12, 49–100.
- Wierzbicka, Anna (1975) 'Why *Kill* Does Not Mean *Cause to Die*. The Semantics of Action Sentences'. *Foundations of Language* 13, 491–528.
- Wolff, Phillip (2003) 'Direct Causation in the Linguistic Coding and Individuation of Causal Events'. *Cognition* 88, 1–48.

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