# **Revisiting the elasticity of verb meaning and the** *way-***construction in English**<sup>1</sup> Josep AUSENSI — *Universitat Pompeu Fabra*

**Abstract.** Rappaport Hovav and Levin (2010) argue that result verbs (e.g. *break*) are more restricted than manner verbs (e.g. *wipe*) with regard to argument realization, since result verbs do not permit object deletion (e.g. \*John broke) or nonselected objects (e.g. \*John broke his fingers bloody). In the present paper, I argue that result verbs can permit nonselected objects, i.e. I show that they are found in the *way*-construction when the result state they encode is predicated of a patient that despite not being overtly realized is semantically implicit. In a similar vein, Marantz (1992), Levin (1993) and Levin and Rappaport Hovav (1995) argue that unaccusative verbs are never found in the *way*-construction, as only unergative verbs are permitted. However, as Kuno and Takami (2004) note, there are some unaccusative verbs (e.g. *roll*) that can appear in this construction. In this respect, I argue that unaccusative verbs permit the *way*-construction when they do not encode result states. Consequently, I contend that unaccusativity is not the constraint imposed by the *way*-construction on the verb classes permitted, contra previously assumed. In short, I argue that both result and unaccusative verbs appear to be more elastic with regard to argument realization than previously claimed.

**Keywords:** argument realization, manner, result, unaccusativity, nonselected objects.

#### 1. Introduction

Rappaport Hovav and Levin (2010) (also Levin and Rappaport Hovav, 1991, 1995, 2013, 2014; Rappaport Hovav and Levin, 1998; Rappaport Hovav, 2008, 2014, 2017; Levin, 1999, 2015, 2017) (hereafter, RHL) argue that verbs fall within two wide semantic classes: manner verbs (1a), which encode a manner of action, but not any result state from that action, and result verbs (1b), which encode a result state but not the manner of action that brought about the result state.

- (1) a. Manner verbs: run, swim, blink, sweep, poison, wipe, scrub, etc.
  - b. Result verbs: break, kill, clean, destroy, arrive, go, shatter, etc.

RHL strongly contend that no single verb can encode both a manner of action and a result state, what they call Manner/Result Complementarity.<sup>2</sup> RHL argue that such complementarity is a consequence of how roots are inserted into the event structure, since a single root can only be inserted as a modifier of the so-called ACT predicate, or as an agument of the so-called BECOME predicate (see Rappaport Hovav and Levin, 1988). Manner/Result Complementarity thus comes about since a single root cannot be inserted as both a modifier and as an argument at the same time. In addition, RHL further argue that roots are inserted into the event structure as modifiers or arguments depending upon their root ontology, taking manner and result as

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<sup>&</sup>lt;sup>2</sup>More specifically, RHL (p. 26) argue that Manner/Result Complementarity does not apply to verbs *per se*, but to roots. As Rappaport Hovav (2017) notes, the motivation for this claim comes from the structure of verbs in other languages (e.g. Lakhota) in which a single verb can encode both a manner of action and a result state but such verbs are clearly bimorphemic in that prefixes and stems combine to form complex verbs.

root ontologies.<sup>3</sup> Thus, Manner/Result Complementarity also holds as a restriction on the entailments roots can have, since a single root either encodes manner or result, but never both.<sup>4</sup>

RHL make the interesting claim that the distinction between manner and result is grammatically relevant, since manner and result verbs further differ in argument realization. The facts bear this out, since, as shown below, canonical manner verbs such as *sweep* or *run* permit object deletion and nonselected objects, whereas canonical result verbs like *dim* or *break* do not.

- (2) a. All last night, John swept.
  - b. The joggers ran the pavement thin. (Levin and Rappaport Hovav, 1995: 53)
- (3) a. \*All last night, John broke.
  - b. \*We dimmed the room empty. (Rappaport Hovav, 2008: 23)

In a similar vein, Marantz (1992), Levin (1993) and Levin and Rappaport Hovav (1995) argue that only unergative verbs are found in the *way*-construction in English (e.g. *John kicked his way in*), i.e. a nonselected object construction (Levin and Rappaport Hovav, 1995). Unaccusative verbs thus do not appear to permit nonselected objects either. This unaccusativity restriction appears to be correct since canonical unaccusative verbs are not permitted in this construction, as shown in (4).

- (4) a. \*The flower bloomed its way to a prize. (Levin, 1993: 99)
  - b. \*They disappeared their way off the stage. (Levin, 1993: 99)
  - c. \*The apples fell their way into the crates. (Levin and Rappaport Hovav, 1995: 148)

However, Kuno and Takami (2004: 74-5) show that some unaccusative verbs are found in this construction (5), thus suggesting that the constraint on the verb classes permitted may not be related to unaccusativity.

- (5) a. The big rock rolled its way down the mountain.
  - b. A steel rope snaked its way across the construction site.
  - c. Rainwater trickles its way to the underground pool.

In the present paper, I argue that the argument realization options of result verbs need to be revisited. In this respect, I argue that result verbs can be compatible with nonselected objects as I show that they frequently appear in the *way*-construction. More specifically, I contend that result verbs are found in the *way*-construction when the result state they encode is predicated of an object that while not being overtly realized is semantically implicit. Further, I argue that the *way*-construction in English is not sensitive to unaccusativity, but rather to whether the verb encodes a result state predicated of the entity denoted by the subject. This is related

<sup>&</sup>lt;sup>3</sup>For root ontologies, i.e. ontological classifications that are relevant when determining grammatical properties, see Rappaport Hovav and Levin (1998), Reinhart (2002), Ramchand (2014), Alexiadou, Anagnastopolou, and Schäfer (2015), Rappaport Hovav (2017) *i.a.* In contrast, the view that roots have an ontological classification relevant when determining grammatical properties is rejected in Borer (2005), Acquaviva (2014), Acedo-Matellán and Mateu (2014) *i.a.* 

<sup>&</sup>lt;sup>4</sup>Manner/Result Complementarity, however, has been challenged and shown to not hold categorically (Zlatev and Yangklang, 2004; Goldberg, 2010; Husband, 2011; Mateu and Acedo-Matellán, 2012; Beavers and Koontz-Garboden, 2012, 2017; and see Levin and Rappaport Hovav, 2013, 2014; Rappaport Hovav 2017, for some responses). Insofar as the present paper is concerned with argument realization, and not whether Manner/Result Complementarity holds as a restriction on verb/root meaning, this will not be further explored in the present paper, but see the references aforementioned.

to the fact that within the unaccusative verb class, most unaccusative verbs already encode a result state predicated of the entity denoted by the subject (e.g. *die*, *arrive*, *disappear*, *bloom*). Hence, integrating this type of unaccusative verbs in the *way*-construction would entail that the entity denoted by the subject has undergone two result states at once, the one denoted by the construction and the one encoded by the verb (e.g. \*John died his way out of prison), which has been argued to not be grammatically possible (Goldberg, 1991; Tenny, 1994; Tortora, 1998; Matsumoto, 2006). I argue that this grammatical constraint in the number of result states that can be predicated of the same entity explains the ungrammaticality of the examples in (4): unaccusativity is not what prevents unaccusative verbs of the *arrive* sort from appearing in the *way*-construction, but rather the fact that these unaccusative verbs encode a result state predicated of the entity denoted by the subject. I note that this is borne out by the fact that unaccusative verbs that do not encode a result state are indeed found in the *way*-construction. In order to illustrate this, I focus on the *roll* verb class in Levin (1993), i.e. *roll*, *slide*, *whirl* and *spin*, and I argue that these verbs are unaccusative and yet are found in the *way*-construction since they do not encode a result state.

The present paper is structured as follows. In Section 2, I briefly summarize the proposal by RHL to equate manner and result with so-called nonscalar and scalar changes, as well as the diagnostics to tell manner and result verbs apart. In Section 3, I present a brief overview of the way-construction in English. I argue then that *roll* verbs are unaccusative and yet are found in this construction. In Sections 4 and 5, I revisit the argument realization options of result and unaccusative verbs and argue that both verb classes appear to be more elastic with regard to argument realization than previously claimed. Section 6 concludes the paper.

#### 2. Manner and Result

RHL (p. 28) argue that the crucial difference between result and manner verbs is related to the types of changes these verbs denote, i.e. result verbs encode scalar changes, whereas manner verbs encode nonscalar changes. In this respect, result verbs, insofar as they encode scalar changes, lexically specify a scale (see Tenny, 1994; Ramchand, 1997; Hay, Kennedy and Levin, 1999; Kennedy and McNally, 2005; Beavers, 2011; Rappaport Hovav, 2008, 2014; Beavers and Koontz-Garboden, 2012, 2017, i.a.), where a scale is formed by a set of degrees, which specify measurement values, on a specific dimension, e.g. width, length, alive-dead etc., with an ordering relation (e.g. a warming and a cooling event differ in the increasing and decreasing of the temperature of the patient) (Kennedy and McNally, 2005). A scalar change then "[...] involves a change in value of [an] attribute in a particular direction along the scale, with the direction specified by the ordering relation." (RHL p. 28). For instance, the verb die is related to an attribute (i.e. dead) which holds of an argument when it undergoes a dying event. Thus, result verbs encode a change in some property of a patient (i.e. a result state). For instance, when a patient participates in an event of scalar change, at the end of it, there is a modification in the degree of some value/property of the patient (e.g. a soup becoming cooler/warmer after an event of cooling/warming).

In contrast, RHL propose to equate manner verbs with nonscalar changes, i.e. "any changes that cannot be characterized in terms of an ordered set of values of a single attribute." (RHL

<sup>&</sup>lt;sup>5</sup>The examples in this paper are extracted from web searches (Web), Google Books (GBooks), and Corpus of Contemporary American English (COCA).

p. 32). Manner verbs thus encode nonscalar changes since they relate to complex combinations of various changes, but these complex combinations do not constitute an ordered relation and therefore no scalar change follows (e.g. *run*, *walk*, *exercise*). In short, as Beavers and Koontz-Garboden (2012: 343) note, "a manner is a complex sequence of separate changes that collectively define an action, but do not necessarily add up to a single cumulative change along any one dimension."

## 2.1. Telling manner and result apart

RHL lay out three diagnostics to capture whether a verb encodes a result state. The first diagnostic relates to denying that a change has occurred, and therefore, that a specific result state holds of a participant, i.e. if a participant engages in an event involving scalar change, at the end of the event, such participant must have an altered degree of some property or value, and therefore, denying that this change has occurred results in a contradiction if the verb encodes a result state, as illustrated in (6).<sup>6</sup>

- (6) a. John just melted the cheese, #but it is not melted/#but nothing is different about it.
  - b. John just killed his dog, #but it is not dead/#but nothing is different about it.
  - c. John just broke the vase, #but it is not broken/#but nothing is different about it.

The infelicity of result verbs with this diagnostic contrasts with manner verbs, as applying the same diagnostic does not result in a contradiction, as no result state is encoded.

- (7) a. John just wiped the counter, but nothing is different about it.
  - b. John just poisoned my dog, but nothing is different about it.
  - c. John just hit the vase, but nothing is different about it.

The second diagnostic relates to the fact that result verbs are argued to permit a narrow range of possible result phrases (cf. *John kicked the door open*), whereas manner verbs allow a wide range.

- (8) a. John wiped the table shiny.
  - b. Tom mopped the floor spotless.
  - c. The child scrubbed his hands clean.

More specifically, result verbs only permit result phrases that further specify the result state encoded by the verb, i.e. if the verb encodes a result state along a specific dimension (e.g. temperature), the result phrase must denote a result state on the same dimension (9). Hence, result verbs do not permit result phrases that introduce a result state on a dimension different from the one encoded by the verb (10).

- (9) a. John broke the vase in half.
  - b. Tom shattered the bottle into pieces.

<sup>&</sup>lt;sup>6</sup>In addition to the original diagnostic by RHL, i.e. denying that the result state named by the verb holds of a patient, I also make use of the diagnostic as implemented in Beavers (2011), namely *something is different about x*, in order to capture that a participant has undergone a more general change. As noted by Beavers and Koontz-Garboden (2012: 357), the original diagnostic by RHL could be subject to the criticism that this diagnostic does not show that all result verbs encode the "same notion of result." Hence, the *something is different about x* diagnostic by Beavers (2011) identifies a notion of change/result which is not specific to a particular verb.

- c. The cook froze the soup solid.
- (10) a. \*John broke the vase off the table.
  - b. \*Tom shattered the bottle valueless.
  - c. \*The cook froze the soup onto the table.

This limitation in the types of result phrases permitted by result verbs follows from the grammatical restriction that a single entity cannot undergo two distinct result states along different dimensions at the same time, i.e. the Unique Path Constraint by Goldberg (1991) (but see also Tenny, 1994; Levin and Rappaport Hovav, 1995; Tortora, 1998; Matsumoto, 2006). Goldberg (1991) argues that two different result states (paths in her terminology) cannot be predicated of the same entity within the same clause. This is supported by the fact that result verbs combined with result phrases introducing a distinct result state than the one encoded by the verb (11) or two result phrases describing distinct result states along different dimensions predicated of the same entity (12) are not possible combinations.<sup>7</sup>

- (11) a. \*Sally carried John giddy. (Simpson, 1983: 147)
  - b. \*Bill broke the vase worthless. (Jackendoff, 1990: 240)
  - c. \*The vase fell broken. (Rappaport Hovav, 2014: 23)
- (12) a. \*Sam kicked Bill black and blue out of the room. (Goldberg, 1991: 368)
  - b. \*He wiped the table dry clean. (Goldberg, 1991: 370)
  - c. \*Sam tickled Chris off her chair silly. (Goldberg, 1991: 368)

The last result diagnostic by RHL relates to the possibility of permitting nonselected objects and object deletion, as briefly discussed before. In this respect, recall that RHL claim that whereas manner verbs permit object deletion as well as nonselected objects, result verbs do not.<sup>8</sup> This is illustrated in more detail in (13): manner verbs permit nonselected objects (13a) (as well as the way-construction (13b) and fake reflexives (13c)) and constructions that involve the deletion of the object (i.e. out-prefixation (13d)), apart from simply allowing the deletion of the object (13e), whereas this is argued not to be possible with result verbs (14).

- (13) a. The joggers ran the pavement thin. (Levin and Rappaport Hovay, 1995: 52)
  - b. I kicked my way across the beach. (COCA)
  - c. John worked himself tired.
  - d. John outscrubbed Tom.
  - e. All last night, John swept.
- (14) a. \*The toddler broke his hands bloody. (RHL p. 22)
  - b. ?John shattered his way into the vault.
  - c. \*John murdered himself tired. (to mean John murdered people until he became tired) (adapted from Goldberg, 2001)

<sup>&</sup>lt;sup>7</sup>As Beavers and Koontz-Garboden (2012: 340) note, the examples in (11) are not pragmatically impossible, since there could be scenarios in which, for instance, Sally carries John, and as a result of the carrying, John becomes giddy, yet these scenarios cannot be described by means of a result verb and a result phrase.

<sup>&</sup>lt;sup>8</sup>Goldberg (2001) notes that result verbs do permit nonselected objects and object deletion, but only in generic or habitual sentences (e.g. *Tigers only kill at night*); crucially, though, manner verbs are not restricted in this sense. In light of this, RHL (p. 21) argue that "while manner verbs are found with unspecified and non-subcategorized objects in non-modal, non-habitual sentences, result verbs are not."

- d. ??Kim outshattered the other bottle-shatterer. (Beavers and Koontz-Garboden, 2012: 339)
- e. All last night, John killed \*(the criminals at that prison).

In this respect, as Beavers and Koontz-Garboden (2012) note, Rappaport Hovav (2008: 24) proposes that disallowing object deletion follows from the fact that result verbs lexicalize scales of change, and therefore Rappaport Hovav suggests that scales "require that the participant whose property is measured by them be overtly realized." It follows, then, that result verbs do not permit object deletion, since this would involve that the participant whose property is being measured out is not overtly expressed. Similarly, from this it also follows that result verbs disallow nonselected objects since such objects involve the deletion of the 'true' object.

In a similar vein, Levin (2017: 583) argues that the objects of result verbs must be expressed "because to know that a state holds requires looking at the entity it holds of", what she calls the 'patient realization condition.' Levin further argues that in an event of scalar change, the patient whose property is being measured out "must be expressed due to the patient realization condition and further it must be expressed as an object." From this it follows then that, as Levin (p. 584) argues, result verbs "cannot be found with unspecified objects or nonselected objects, nor can they be found in constructions where anything but their patient argument is the object."

In short, RHL strongly argue that if a verb encodes a result state predicated of a participant, such participant must be given syntactic expression. As Beavers and Koontz-Garboden (2012) note, this constraint might follow from Rappaport Hovav and Levin's (2001: 779) Argument-Per-Subevent Condition:

(15) **Argument-Per-Subevent Condition**: There must be at least one argument XP in the syntax per subevent in the event structure.

In this respect, manner and result verbs differ with regard to the subevents they involve: manner verbs are simplex in the sense that they are only assigned one subevent (16a), whereas (transitive) result verbs are more complex insofar as they are composed of two different subevents (16b), i.e. the causing event and the change-of-state event.

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(16) a. [x ACT < ROOT>]
b. [x ACT] CAUSE [y BECOME < ROOT>]]]
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Consequently, according to the Argument-Per-Subevent Condition, in result verbs the patient whose property is measured out must be expressed, since a result state involves a change-of-state (i.e. BECOME) subevent of which the patient is the unique participant. Similarly, object deletion and nonselected objects are found with manner verbs since manner verbs do not encode a result state and therefore manner verbs do not have that additional subevent.

### 3. The way-construction in English

The way-construction in English is a long studied-construction (Levin and Rapoport, 1988; Salkoff, 1988; Jackendoff, 1992; Marantz, 1992; Tenny, 1994; Goldberg, 1995, 1996; Israel, 1996; Kuno and Takami, 2004, *i.a.*) that consists of a verb taking as its complement a noun phrase comprised of a possessive determiner, coreferential with the subject, and the noun way. This noun phrase headed by way is followed by a directional phrase, which is usually a prepositional phrase, but can also be an adverb phrase, describing a path, either metaphorical (17)

or physical (18), usually created by the action denoted by the verb. Semantically, the interpretation of this construction entails that the entity denoted by the subject traverses this path, as shown in (17).

- (17) a. Tom slept his way to the top, #but didn't get to the top.
  - b. Emma built her way to success, #but didn't achieve success.
- (18) a. Nigel danced his way \*(out of the theater).
  - b. Tod elbowed his way \*(through the crowd).

The noun phrase headed by way in this construction is a clear case of a nonselected object (Levin and Rappaport Hovav, 1995), i.e. an object that is nonselected by the verb. As Mateu (2002) notes, it is actually the directional phrase that requires the realization of the noun phrase headed by way as the direct object, not the verb, as shown in (18).

More specifically, Marantz (1992) argues that the way-construction in English is a diagnostic to tell unaccusative and unergative verbs apart since only unergative verbs are claimed to appear in this construction. Levin and Rappaport Hovav (1995: 137) further argue that unaccusative verbs are not found in the way-construction since "they lack the ability to assign Case to a postverbal NP [noun phrase]." This is related to Burzio's (1986) claim that only unergative verbs can assign case to their subjects and consequently they can also assign accusative case, despite not subcategorizing for any object. Hence, since unergative verbs have the ability to assign accusative case, they can be found with objects that are not selected by the verb (e.g. John ran his shoes ragged). As a consequence, unergative verbs are found in the way-construction since, despite not subcategorizing for any object, they can assign accusative case to the nonselected noun phrase headed by way. Unaccusative verbs on the other hand are not case assigners and therefore would fail to assign case to the noun phrase headed by way. Burzio argues that the unability of unaccusative verbs to assign case correlates with the occurrence of an external argument, since only verbs that can assign case to their subjects can assign accusative case. As noted above, this appears to be a correct generalization since canonincal unaccusative verbs are never found in the way-construction. Consider the further examples from Levin and Rappaport Hovav (1995: 148, 150).

- (19) a. \*Andrea appeared her way to fame.
  - b. \*The water evaporated its way into the air.
  - c. \*The oil rose its way to the top.

However, following Kuno and Takami (2004), I contend that *roll* verbs (i.e. *roll*, *slide*, *spin* and *whirl*) are unaccusative (following Rappaport Hovav, 2014) and yet appear in the *way*-construction, thus suggesting that unaccusativity may not be the relevant notion constraining the verb classes permitted by the construction. Some further examples are offered next.

- (20) a. An enormous snowball slowly rolled its way towards him. (GBooks)
  - b. Sandy was whirling its way toward the U.S. coastline. (COCA)
  - c. The wheel spun its way to a standstill. (GBook)
  - d. I'm actually asking this young lady to sort of slide her way out the door. (COCA)

In order to further show that *roll* verbs are unaccusative in their intransitive variant, I briefly make use of some of the widely accepted unaccusative diagnostics in the literature to tell unac-

cusative and unergative verbs apart. For instance, it has been argued that unaccusative verbs are found in the so-called *there*-construction (21) (Burzio, 1986; Belletti, 1988; Lumsden, 1988; Levin and Rappaport Hovav, 1995, *i.a.*), whereas unergative verbs are not (22).

- (21) a. There could have occurred a disaster.
  - b. There appeared a really tall man at the door.
  - c. There arrived the men you had been waiting for.
- (22) a. \*There danced two ballerinas on the stage.
  - b. \*There played two children on the street.
  - c. \*There worked two farmers inside the farm.

In this respect, *roll* verbs pattern like unaccusative verbs as they are found in the *there*-construction, as shown in the following examples (from GBooks).

- (23) a. In Sandy's head there whirled a confusing medley of the two lives she had lived.
  - b. And on the screens, there spun a kaleidoscope of whirling dancers in garish colors.
  - c. Over the whole sky there rolled great masses of cloud of a deep copper colour.
  - d. She cut it open and there slid on the table oilcloth five gold coins.

Another unaccusative/unergative diagnostic relates to the fact that result phrases can be predicated directly of the subjects of unaccusative verbs without introducing a fake reflexive in object position, as shown in (24) (Simpson, 1983; Bresnan and Zaenan, 1990; Hoekstra, 1984, 1988; Levin and Rappaport Hovav, 1995, *i.a.*), whereas result phrases cannot be predicated of the subjects of unergative verbs without introducing a fake reflexive in object position, as shown in (25).

- (24) a. The river froze solid.
  - b. The vase broke into pieces.
  - c. The earth split open. (Winkler 1997: 342)
- (25) a. The CEO worked \*(herself) tired.
  - b. The singer sang \*(himself) hoarse.
  - c. The children laughed \*(themselves) silly.

In this respect, *roll* verbs further show unaccusative behavior when subject to this diagnostic.

- (26) a. The door whirled open. (GBooks).
  - b. As the doors roll shut and lock behind him. (COCA)
  - c. He screams. Tries to spin free. (COCA)
  - d. The little window in the front cab slid closed. (COCA).

Lastly, it has been argued that unaccusative verbs are not generally found with cognate objects

<sup>&</sup>lt;sup>9</sup>It has been argued that result phrases can only be predicated of objects, not of subjects (Levin and Rappaport Hovav, 1995; Rappaport Hovav and Levin, 2001). However, since the subjects of unaccusative verbs are supposedly underlying objects (as held by proponents of the Unaccusative Hypothesis (Perlmutter, 1978; Burzio, 1986)), result phrases can be predicated directly of the subjects of unaccusative verbs. The subjects of unergative verbs, on the other hand, are not underlying objects at any level, and therefore a fake reflexive in object position must be introduced so that the result phrase is predicated of this fake reflexive object position, correferential with the subject (Rappaport Hovav and Levin, 2001).

(Levin and Rappaport Hovav, 1995; Massam, 1990; Larson, 1988; Keyser and Roeper, 1984; Macfarland, 1995; Miyamoto, 1999), as illustrated by the examples in (27) (from Levin and Rappaport Hovav, 1995: 40, 148). Unergative verbs, on the other hand, permit them (28).

- (27) a. \*The glass broke a crooked break.
  - b. \*She arrived a glamorous arrive.
  - c. \*The apples fell a smooth fall.
- (28) a. Malinda smiled her most enigmatic smile. (Levin and Rappaport Hovav, 1995: 40)
  - b. Sue slept a sound sleep. (Kuno and Takami, 2004: 105)
  - c. John laughed a bitter laugh.

*Roll* verbs further pattern like unaccusative verbs as they do not generally permit cognate objects.

- (29) a. ??The ball rolled a smooth roll.
  - b. ??The tornado whirled a quick whirl.
  - c. ??The wheel spun a slow spin.
  - d. ??The athlete slid a wonderful slide.

In short, *roll* verbs are unaccusative in their intransitive variant and yet are found in the *way*-construction, thus showing that unaccusativity does not seem to be the relevant notion constraining the verb classes permitted by this construction. As I argue in Section 5, the unaccusative *roll* verb class is found in the *way*-construction since they do not encode a result state. Canonical unaccusative verbs such as *arrive*, *die* or *disappear*, on the other hand, encode a result state predicated of the subject referent, and therefore incompatible with the *way*-construction as per the Unique Path Constraint (Goldberg, 1991), as this would involve that two different result states would be predicated of the same entity, i.e. the result state denoted by the construction and the result state encoded by the verb would be predicated of the same subject.

In a similar vein, recall that result verbs should not be found in the *way*-construction either, as this is a case of a nonselected object construction. However, this does not appear to be the case since I show that result verbs frequently appear in the *way*-construction as illustrated by the following examples.

- (30) a. We cannot kill our way out of this war. (COCA)
  - b. The prisoner probably melted his way out. (GBooks)
  - c. They tried to burn their way into something with a cutting torch. (COCA)
  - d. Looters smashed their way in and went on a digging spree. (COCA)

In this respect, note what Rappaport Hovav (2017: 96) has recently argued with regard to result verbs and the *way*-construction:

[...] the way-construction generally selects manner verbs because it is supposed to specify the kind of action which brings about or accompanies a certain COS [change of state verbs] (Goldberg, 1995). Precisely because result verbs do NOT specify any manner of action, they typically do not appear in this construction. Only in heavily contextualized environments, where the action can easily be recovered, are COS verbs compatible with this construction.

In short, it appears that, according to Rappaport Hovav, result verbs can be found in the *way*-construction in some exceptional cases. In the next section, however, I argue that this does not appear to be the case since I show that instances of result verbs in the *way*-construction can have inanimate entities as their subjects. Inanimate subjects are, by definition, incompatible with the carrying out of an action to bring about a change-of-state, as this is typical of (animate) agent subjects. Further, the fact that, as I show, different result verbs frequently appear in this construction strongly suggests that result verbs do not appear to be constrained in the sense Rappaport Hovav argues.

# 4. The elasticity of result verbs revisited

In this section, I focus on different result verbs which, over the last twenty-five years, RHL have, to some extent, presented as examples of canonical result verbs, e.g. *kill*, *melt*, *burn*, *smash*, *slaughter*, *break*, *shatter*, *freeze*, *crush*, *rip*, *tear*, *open*, *destroy*, *cool* and *crack*, in order to argue that result verbs permit nonselected objects in some cases, contra RHL. All these verbs pattern as result verbs when subject to the diagnostics laid out by RHL, i.e. denying that a change has occurred results in a contradiction (cf. *John just killed Tom*, *#but he is not dead/#but nothing is different about Tom*), they only allow result phrases that further specify the result state they encode (cf. *John broke the vase into pieces* vs. \**John broke the vase off the table*) and they do not permit object deletion (cf. \**All last night, John smashed/melted/shattered*).

Recall that way-construction in English entails that the subject referent traverses the path described by the construction, i.e. this construction denotes a change-of-location predicated of the subject referent. In this respect, manner verbs, insofar as they do not encode a result state, are frequently found in this construction since in this case only one result state is being predicated of the subject referent, i.e. the one denoted by the construction, and therefore the grammatical restriction on the number of result states predicated of the same entity (i.e. the Unique Path Constraint) is not violated.

- (31) a. John just kicked his way into the concert, #but he is not somewhere else/#but he is not at the concert.
  - b. John just elbowed his way out of the theater, #but he is not somewhere else/#but he is not out of the theather.
  - c. John just talked his way into the meeting, #but he is not somewhere else/#but he is not in the meeting.

Result verbs, on the other hand, appear to more restricted than manner verbs with regard to appearing in the *way*-construction since they do encode a result state. In this respect, I argue that result verbs are frequently found in the *way*-construction when the result state they encode is predicated of an object that, while not being overtly realized, is semantically implicit.

- (32) a. Similar to modern birds and reptiles, dinosaur young cracked their way out of eggs. (GBooks)
  - b. Spartacus wanted to engage Crassus in battle, slaughtering his way toward the general's position. (COCA)
  - c. The group of 6 destroyed their way out of the lab and made it to the ground floor. (Web)
  - d. I spent hours with a frail woman while opening our way through a set of Russian

dolls. (COCA)

e. You might switch to the knight to crush your way through a barrier. (Web)

More specifically, by 'unexpressed object' I mean the object that, while not being syntactically expressed (as the object position is occupied by the nonselected noun phrase headed by way), undergoes the result state encoded by the verb. This is in line with Goldberg's (2001: 509) argument that result verbs are still causative verbs when they are used in this construction, since, as shown in the examples below, one cannot, for instance, kill their way out of prison without causing people to die. In a similar vein, Rappaport Hovav (2017: 96) further notes that result verbs "maintain [their] truth-conditional content as a result root" when they are found in this construction. This is illustrated in the following examples where it cannot be denied that the unexpressed objects do not undergo the result state encoded by the verb.

- (33) a. Theatre's annual summer melodrama is about a harsh Victorian Duke who has killed his way to power, #but nobody was killed/#but nobody died. (COCA)
  - b. Yet, once more, while he broke his way among the branches, the traveller lost his friend, #but the branches weren't broken/#but nothing was broken. (COCA)
  - c. The dragons might simply burn their way out of the netting, #but the netting might not be burned/#but nothing might be burned. (COCA)

The fact that result verbs only appear in the *way*-construction when the result state they encode is predicated of an unexpressed object follows from the grammatical restriction that, as held by the Unique Path Constraint, two different result states cannot be predicated of the same entity. In other words, result verbs are found in the *way*-construction when the result state they encode is predicated of an unexpressed object, while the result state denoted by the construction is predicated of the subject referent. In this way, the limitation on the number of result states that can be predicated of the same entity is not violated. This is illustrated in the following example.

- (34) a. \*The wood burns its way to the ground. (Goldberg, 1996: 45)
  - b. William T. Sherman burned his way through Georgia and then did more damage in the Carolinas. (GBooks)

Thus, I argue that the example in (34a) is ungrammatical due to the fact that two distinct result states are being predicated of the same entity. Namely, in (34a) it is understood that the entity denoted by the subject both burns and ends up on the ground, i.e. the result state denoted by the construction and the verb are being predicated of the same entity. Instead, the same (result) verb is found in the *way*-construction when the result state encoded by the verb is predicated of an object that is not given syntactic expression, but is semantically implicit, as argued before. In this respect, no restriction arises with regard to the number of result states that can be predicated of the same entity, since the two distinct result states, i.e. the one encoded by the verb and the one denoted by the construction, are predicated of distinct entities. Namely, in (34) the result state denoted by the construction is predicated of the entity denoted by the subject (i.e. *William T. Sherman*), whereas the result state encoded by the verb is predicated of the unexpressed, but semantically implicit, object (cf. *William T. Sherman burned his way through Georgia, #but Giorgia wasn't burned*).

Although Rappaport Hovav (2008: 24) argues that result verbs are not found in nonselected object constructions since most of these constructions "involve the introduction of a new scale"

and therefore "ruled out with change of state verbs by the constraint against more than one scale in a clause", this does not appear to the be case. The grammatical restriction in the number of scales is actually a restriction on the number of scales predicated of the same entity (already hinted at by Levin and Rappaport Hovav, 1995: 60 and further argued in Beavers and Koontz-Garboden, 2017: 868-70). This is supported by the fact that, as already shown in , result verbs do appear in the *way*-construction when the result state they encode and the result state denoted by the construction are not predicated of the same entity. Additional examples further support this claim.

- (35) a. \*The soup cooled its way to room temperature. (Levin and Rappaport Hovav, 1995: 173)
  - b. The brew cooled its way down her throat as she cast her eyes around the bar. (Web)
- (36) a. \*The window broke its way into the room. (Jackendoff, 1992: 213)
  - b. The snow must have frozen so hard during the night that he couldn't break his way out. (COCA)
- (37) a. \*The butter melted its way off the turkey. (Godberg, 1996: 45)
  - b. For perhaps an hour the ray melted its way into the solid rock. (GBooks)

Lastly, recall that Rappaport Hovav (2017) argues that result verbs are found in this construction when an "action can be easily recovered." I show, however, that this does not appear to be the case since result verbs are also found in the *way*-construction with inanimate entities as their subjects. This is relevant since inanimate subjects are, by definition, not compatible with performing an action to bring about a change-of-state, since this is typical of (animate) agent subjects.

- (38) a. The cold froze its way into her skull and eye sockets like a razor. (Web)
  - b. Several more explosions ripped their way along the street, blowing a group of old people into a bloody heap. (GBooks)
  - c. Radiation and chemo tore their way through Jeff, sores opened up all over his body. (COCA)
  - d. Over 800 lightning strikes this afternoon shattered their way into central California. (Web)
  - e. The heat of the 1 million candle stick powered light melted its way through the resin floor of the ambulance. (GBooks)
  - f. [...] a fire which burnt its way into the computer networks room from outside. (GBooks)

In short, I have argued that result verbs can permit nonselected objects in some cases, thus showing that result verbs appear to be more elastic with regard to argument realization than previously claimed, contra RHL.

### 5. The elasticity of unaccusative verbs revisited

As we have observed, unaccusativity does not seem to be the restriction in place in the way-construction, since unaccusative verbs of the *roll* sort are found in this construction.

(39) a. Our 8,000 ton ship rolled its way down the English Channel to the Atlantic.

(GBooks)

- b. I slid my way up to the top and when I got there, I could see. (COCA)
- c. The egg-shapped pod spun its way down to the earth's surface. (GBooks)
- d. The snow storm known as Winter Storm Santa has whirled its way across the Mid-Atlantic. (GBooks)

Although it is the case that most unaccusative verbs are not permitted in this construction, I argue that this is due to the fact that the unaccusative verbs that are not permitted encode a result sate, not due to being unaccusative. Canonical unaccusative verbs such as *arrive*, *die*, *bloom*, *flower* or *come* encode a result state predicated of the subject referent, and therefore are not found in the *way*-construction since integrating this type of unaccusative verbs in this construction would involve that two different result states are predicated of the same entity, which has been argued not to be grammatically possible, i.e. the Unique Path Constraint. As shown in the following examples, canonical unaccusative verbs pass the result diagnostics laid out by RHL, i.e. denying that a change has occurred results in a contradiction (40) and they are restricted in the types of result phrases permitted, as they only permit result phrases that further specify the result state encoded (41).<sup>10</sup>

- (40) a. The flower just bloomed, #but nothing is different about it.
  - b. Tony just came to Paris, #but he is not somewhere else.
  - c. John just died, #but nothing is different about him.
- (41) a. The box arrived at the aiport/\*open. (to mean arrival made it to open) (Goldberg, 1991: 371)
  - b. She ascended to the sky/\*sick. (to mean ascension made her sick) (Goldberg, 1991: 371)
  - c. The vase fell off the table/\*broken. (to mean falling caused it to break). (Rappaport Hovay, 2014: 276)

Thus, in accordance with the grammatical restriction that no more than one distinct result state can be predicated of the same entity within the same clause, unaccusative verbs encoding a result state are not compatible with the *way*-construction. In contrast, the unaccusative *roll* verb class displays different properties since I argue, following Rappaport Hovav (2014) and RHL, that *roll* verbs do not encode a result state, and consequently unaccusative *roll* verbs can be found in the *way*-construction.<sup>11</sup>

More specifically, if *roll* verbs do not encode a result state, they should be compatible with a wide range of distinct result phrases, as argued by RHL. The facts bear this out, as *roll* verbs are compatible with a wide range of result phrases that introduce different result states (see Rappaport Hovav, 2014: 273-78 for further examples with *roll*, as well as the examples in (26)).<sup>12</sup>

<sup>&</sup>lt;sup>10</sup>The diagnostic related to object deletion cannot be applied with result verbs of the *arrive* sort since this is an intransitive verb class and this diagnosic was laid out to be applied to transitive result verbs.

<sup>&</sup>lt;sup>11</sup>Rappaport Hovav (2014) argues that verbs of the *roll* sort only encode a manner of motion, since the change they specify is not directed, i.e. they encode nonscalar changes as they do not lexically specify any scale of change.

<sup>&</sup>lt;sup>12</sup>Although some of these examples show the transitive variants of these verbs, these are still relevant insofar as they further show that these verbs do not encode any result state, neither of their subject in their intransitive variant nor of their object in the transitive variant. If it were the case that *roll* verbs encoded a result state, they would not show this flexibility in permitting different types of result phrases.

- (42) a. The briefly rolled free of one another. (COCA)
  - b. Tom [...] hit his head on a rock and rolled unconscious. (Web)
  - c. Adam rolled awake at the first light of peeping past the half-open curtains. (GBooks)
- (43) a. They had been literally whirled unconscious at the end of their subterranean flight. (GBooks)
  - b. It dries by the centrifugal process, the cloths being literally whirled dry. (GBooks)
  - c. [...] hope he gets whirled silly in a revolving door or something. (Web)
- (44) a. Prepare the salad greens, wash and spin dry. (COCA)
  - b. [...] and they Kurds spin loose and join with the Kurds in Turkey. (COCA)
  - c. He wanders inside an ancient stone tower and is spun unconscious by a blinding tornado of green light. (Web)
- (45) a. He struck the wall with a crunch, and slid unconscious to the ground. (GBooks)
  - b. She slid free, dropped to her knees again, [...]. (COCA)
  - c. The second block slid loose from its case. (COCA)

In addition, if *roll* verbs do not encode any result state, denying that a change has occurred should not result in a contradiction, as no result state is encoded (cf. *John just ran (in place), but he is not somewhere else*). In this respect, I argue that *roll* verbs are compatible with the *x is somewhere else* test by Beavers (2011) which identifies verbs that encode changes of location. In contrast, unaccusative verbs encoding a result state related to a change of location are not compatible with the same diagnostic, as previously shown in (40b).

- (46) a. The tornado just whirled, but it is not somewhere else.
  - b. The disc just spun, but it is not somewhere else.
  - c. The log hung in the air just rolled, but it is not somewhere else.
- (47) a. The students just arrived (in London), #but they are not somewhere else.
  - b. The thief just left (the house), #but he is not somewhere else.
  - c. The children just entered (the cinema), #but they are not somewhere else.

Beavers and Koontz-Garboden (2017: 863) however argue that *roll* and *slide* are scalar change verbs, i.e. they encode a result state, since it is not possible to *roll* or *slide* in place or without leaving one's spot (cf. *#John slid/rolled in place/without leaving his spot*). I suggest that this apparent displacement is due to world knowledge, since real-world events of rolling or sliding are generally followed by displacement. On closer inspection, however, it is possible to find naturally occurring examples of events of rolling or sliding that do not seem to entail any displacement.

- (48) a. The meteor appears to be rolling in place on its axis—rather than toward us. (Web)
  - b. One really cool effect that I've seen a bunch is one where an image seems to be sliding in place when you hover over it using your mouse. (Web)

In addition, Beavers and Koontz-Garboden (2017: 867) further argue that *roll* and *slide* encode a scalar change since only goal prepositonal phrases are acceptable as result phrases, whereas "other kinds of result phrases are generally unacceptable." However, this does not appear to be the case since I have shown that both *roll* and *slide* permit a wide range of result phrases.

In short, unaccusative *roll* verbs do not encode a result state since they are compatible with a wide range of result phrases and denying that a change has occurred does not result in a contradiction, in contrast to unaccusative verbs encoding a result state. Consequently, this explains why unaccusative verbs show variable behavior with regard to permitting the *way*-construction or not: under the present analysis, unaccusative verbs of the *roll* sort are predicted to appear in this construction, whereas unaccusative verbs of the *arrive* sort are not. Some more naturally occurring examples of *roll* verbs in the *way*-construction are offered next.

- (49) a. Some chose to roll their way under it other decided to crawl. (COCA)
  - b. The deep ocean currents whirling their way into the Arabian Sea. (COCA)
  - c. The warrior watched as the ball of fire spun its way higher into the tent. (GBooks)
  - d. A cable car [...] slid its way down slowly from the cableway station. (GBooks)

#### 6. Conclusion

In the present paper, I have shown that both result and unaccusative verbs appear to be more elastic with regard to argument realization than previously claimed. Regarding result verbs, I have argued that they permit nonselected objects in some cases, contra RHL. In this respect, I have shown that result verbs are found in the *way*-construction when the result state they encode is predicated of an unexpressed object, thus avoiding the limitation in the number of distinct result states that can be predicated of the same entity. With regard to the unaccusative verb class, I have argued that unaccusative verbs are found in the *way*-construction when they do not encode a result state, thus showing that unaccusativity is not the relevant constraint imposed by the construction on the verb classes it permits, contra Marantz (1992), Levin (1993) and Levin and Rappaport Hovav (1995).

## References

Acedo-Matellán, V. and J. Mateu. (2014). From syntax to roots: A syntactic approach to root interpretation. In A. Alexiadiou, H. Borer, and F. Schäfer (Eds.), *The Syntax of Roots and the Roots of Syntax*, pp. 259-281. Oxford: Oxford University Press.

Acquaviva, P. (2014). The roots of nominality, the nominality of roots. In A. Alexiadiou, H. Borer, and F. Schäfer (Eds.), *The Syntax of Roots and the Roots of Syntax*, pp. 259-281. Oxford: Oxford University Press.

Alexiadou, A. E. Anagnostopoulou, and F. Schäfer. (2015). *External arguments in transitivity alternations: a layering approach*. Oxford: Oxford University Press.

Beavers, J. (2011). On affectedness. Natural Language and Linguistic Theory 29(2), 335-370.

Beavers, J. and A. Koontz-Garboden. (2012). Manner and result in the roots of verbal meaning. *Linguistic Inquiry 43*(3), 331-369.

Beavers, J. and A. Koontz-Garboden. (2017). Result verbs, scalar change, and the typology of motion verbs. *Language* 93(4), 842-876.

Belletti, A. (1988). The case of unaccusatives. Linguistic Inquiry 19(1), 1-34.

Borer, H. (2005). Structuring sense. Oxford: Oxford University Press.

Bresnan, J. and A. Zaenen. (1990). Deep unaccusativity in LFG. In K. Dziwirek, P. Farrell, and E. Mejias-Bikandi (Eds.), *Grammatical relations: A cross-theoretical perspective*, pp. 45-57. Standford, CA: Center for the Study of Information.

Burzio, L. (1986). Italian Syntax: A Government-Binding Approach. Dordrecht: Reidel.

Goldberg, A. (1991). It can't go down the chimney up: Paths and the English resultative. In *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society*, pp.

- 368-378.
- Goldberg, A. (1995). *Constructions. A Construction Grammar Approach to Argument Structure*. Chicago and London: The University of Chicago Press.
- Goldberg, A. (1996). Making one's way through the data. In M. Shibatani, and S. A. Thompson (Eds.), *Grammatical constructions: their form and meaning*, pp. 29-53. Oxford: Oxford University Press.
- Goldberg, A. (2001). Patient arguments of causative verbs can be omitted: the role of information structure in argument distribution. *Language Sciences* 23, 503-524.
- Hay, J., Kennedy, C., and B. Levin. (1999). Scalar structure underlies telicity in 'degree achievements'. In *Proceedings of Semantics and Linguistic Theory 9*, pp. 127-144.
- Hoekstra, T. (1984). Transitivity. Dordrecht: Foris.
- Hoekstra, T. (1988). Small Clause Results. Lingua 74(2-3), 101-139.
- Husband, M. (2011). Rescuing manner/result complementarity from certain death. In *Proceedings of the 47th annual Chicago Linguistics Society*. Chicago Linguistics Society.
- Israel, M. (1996). The Way Constructions Grow. In A. Goldberg (Eds.), *Conceptual Structure, Discourse and Language*, pp. 217-230. Standford, CA: CSLI Publications.
- Jackendoff, R. (1992). Babe Ruth Homered His Way into the Hearts of America. In E. Wehrli, and T. Stowell (Eds.), *Syntax and the Lexicon. Syntax and Semantics* 26, pp. 155-178. Academic Press Inc.
- Kennedy, C. and L. McNally. (2005). Scale structure, degree modification, and the semantics of gradable predicates. *Language* 81(2), 345-381.
- Keyser, S. and T. Roeper. (1984). On the middle and ergative constructions in English. *Linguistic Inquiry* 15(3), 381-416.
- Kuno, S. and K. Takami. (2004). Functional constraints in grammar: On the unergative-unaccusative distinction. John Benjamins Publishing.
- Larson, R. (1988). On the double object construction. Linguistic Inquiry 19(3), 335-391.
- Levin, B. (1993). *English verb classes and alternations: a preliminary investigation*. Chicago: University of Chicago Press.
- Levin, B. (1999). Objecthood: An event structure perspective. In *Proceedings of the Chicago Linguistic Society 35*, pp. 223-248. Chicago IL: Chicago Linguistic Society.
- Levin, B. (2015). Verb classes within and across languages. In B. Comrie and A. Malchukov (Eds.), *Valency Classes: A Comparative Handbook*, pp. 1627-1670. De Gruyter, Berlin.
- Levin, B. (2017). The elasticity of verb meaning revisited. In *Proceedings of Semantics and Linguistic Theory* 27, pp. 571-599.
- Levin, B. and T. Rapoport. (1988). Lexical Subordination. In *Proceedings of the Chicago Linguistic Society* 24, pp. 275-289. Chicago IL: Chicago Linguistic Society.
- Levin, B. and M. Rappaport Hovav. (1991). Wiping the slate clean: a lexical semantic exploration. *Cognition* 41(1-3), 123-151.
- Levin, B. and M. Rappaport Hovav. (1995). *Unaccusativity: At the syntax-lexical semantics interface*. MIT press.
- Levin, B. and M. Rappaport Hovav. (2013). Lexicalized meaning and manner/result complementarity. In B. Arsenijevic, B. Gehrke, and R. Marín (Eds.), *Studies in the composition and decomposition of event predicates*, pp. 49-70. Springer Netherlands.
- Levin, B. and M. Rappaport Hovav. (2014). Manner and result: The view from clean. In R. Pensalfini, M. Turpin, and D. Guillemin (Eds.), *Language Description Informed by Theory*, pp. 337-358. John Benjamins Publishing Company.
- Lumsden, M. (1099). *Existential sentences: Their structure and meaning*. London: Croom Helm.

- MacFarland, T. (1995). *Cognate objects and the argument/adjunct distinction in English*. Doctoral dissertation. Northwestern University.
- Mateu, J. (2002). *Argument structure: relational construal at the syntax-semantics interface*. Doctoral dissertation, Universitat Autònoma de Barcelona
- Mateu, J. and V. Acedo-Matellán. (2012). The manner result complementarity revisited: A syntactic approach. In M. C. Cuervo, and Y. Roberge (Eds.), *The end of argument structure? Syntax and Semantics*, pp. 209-228. New York: Academic Press.
- Marantz, A. (1992). The way construction and the semantics of direct arguments in English. In E. Wehrli, and T. Stowell (Eds.), *Syntax and the Lexicon. Syntax and Semantics* 26, pp. 155-178. Academic Press Inc.
- Massam, D. (1990). Cognate object as thematic objects. *Canadian Journal of Linguistics 35*, 161-190.
- Matsumoto, Y. (2006). Constraints on the co-occurrence of spatial and non-spatial paths in English: A closer look at the unique path constraint. Paper presented at *The Fourth International Conference on Construction Grammar*, University of Tokyo.
- Miyamoto, T. (1999). *The light verb construction in Japanese: The role of the verbal noun.* Amsterdam: John Benjamin.
- Perlmutter, D. (1978). Impersonal Passives and the Unaccusative Hypothesis. In *Proceedings* of the Fourth Annual Meeting of the Berkeley Linguistics Society, pp. 157-189.
- Ramchand, G. (1997). Aspect and Predication. Oxford: Clarendon Press.
- Ramchand, G. (2014). On structural meaning vs. conceptual meaning in verb semantics. *Linguistic Analysis* 39(1-2), 207-244.
- Rappaport Hovav, M. B. Levin (1998). Building verb meanings. In M. Butt and W. Geuder (Eds.), *The projection of arguments: Lexical and compositional factors*, pp. 97-134. Standford, CA: CSLI Publications.
- Rappaport Hovav, M. and B. Levin. (2001). An Event Structure Account of English Resultatives. *Language* 77(4), 766-797.
- Rappaport Hovav, M. and B. Levin. (2010). Reflections on manner/result complementarity. In E. Doron, M. Rappaport Hovav, and I. Sichel (Eds.), *Syntax, lexical semantics, and event structure*, pp. 21-38. Oxford: Oxford University Press.
- Rappaport Hovav, M. (2008). Lexicalized meaning and the internal structure of events. In S. Rothstein (Eds.), *Theoretical and crosslinguistic approaches to the semantics of aspect*, pp. 13-42. Amsterdam: John Benjamins.
- Rappaport Hovav, M. (2014). Building scalar changes. In A. Alexiadiou, H. Borer, and F. Schäfer (Eds.), *The Syntax of Roots and the Roots of Syntax*, pp. 259-281. Oxford: Oxford University Press.
- Rappaport Hovav, M. (2017). Grammatically relevant ontological categories underlie manner/result complementarity. In *Proceedings of IATL 32*, pp. 77-98. Hebrew University of Jerusalem.
- Reinhart, T. (2002). The theta system an overview. *Theoretical Linguistics* 28(3), 229-290 Salkoff, M. (1998). Analysis by Fusion. *Linguisticae Investigationes* 12(1), 49-84.
- Simpson, J. (1983). Resultatives. In L. Levin, M. Rappaport, and A. Zaenen (Eds.), *Papers in lexical-functional grammar*, pp. 143-157. Bloomington: Indiana University Linguistics Club.
- Tenny, Carol. (1994). *Aspectual roles and the syntax-semantics interface*. Dordrecht: Kluwer. Winkler, S. (1997). *Focus and Secondary Predication*. New York: Mouton de Gruyter.