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Resultatives and low depictives in English

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Abstract: We argue against a purely semantic account of the Unique Path Constraint (Goldberg, Adele. 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*, 368–378.), i.e., the constraint that there can only be one result state in a single clause, and in favor of a syntactic restriction regarding event structure. We propose, following Mateu, Jaume & Víctor Acedo-Matellán. 2012. The manner/result complementarity revisited: A syntactic approach. In M. Cristina Cuervo & Yves Roberge (eds.), *The end of argument structure? Syntax and semantics*, 209–228. New York: Academic Press, that structurally there can only be one result predicate per clause since the little *v* head selects for one result predicate as its complement. In order to make our claim, we provide novel data that violate the Unique Path Constraint defined as a semantic constraint. Further, we analyze examples that at first blush pose a problem for the present account as they appear to involve two result phrases, e.g., *shot him dead off the horse*. We argue, however, that the second result phrase is not syntactically a result, but rather constitutes a case of what Acedo-Matellán, Víctor, Josep Ausensi, Josep Maria Fontana & Cristina Real-Puigdollers. forthcoming. Old Spanish resultatives as low depictives. In Chad L. Howe, Timothy Gup-ton, Margaret Renwick & Pilar Chamorro (eds.), *Open romance linguistics 1. Selected papers from the 49th linguistic symposium on romance languages*. Berlin: Language Science Press have called low depictives, which join the syntactic derivation through a low applicative head.

Keywords: argument structure; depictives; event structure; manner; result; resultatives

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1 Introduction

An important body of work analyzing the expression of resultativity in English holds that there can only be one result state predicated in a single clause (Goldberg 1991, 1995; Levin and Rappaport Hovav 1995; Rappaport Hovav 2008, 2014; Tenny 1987, 1994; Tortora 1998). Examples such as **He wiped the table dry clean* (Goldberg 1991, 370) putatively illustrate this restriction: they involve two distinct result states predicated of the same entity and therefore argued to be ungrammatical. In this vein, Tenny (1987, 190) originally proposed that “there may be at most one ‘delimiting’ associated with a verb phrase”, where eventualities can be delimited by means of result phrases as in *hammer the metal flat* or when the verb is inherently delimited, as in *break the vase*. Drawing on Tenny (1987), Goldberg (1991, 368) proposed that more than one result state cannot be predicated of an entity in a single clause. Recently, some authors have argued that there can be more than one distinct result state in the same clause as long as the result states are not predicated of the same entity (Ausensi 2019, to appear; Beavers and Koontz-Garboden 2017). For instance, Beavers and Koontz-Garboden (2017) argue that examples such as *The skiers skied the trail clean of snow* involve two distinct result states: the verb encodes a change of location, whereas the result phrase a change of state.¹ Such examples are argued to be possible since the entities denoted by the subject undergo the change of location, whereas the entity denoted by the object undergoes the change of state.

In the present paper, we provide a syntactic account of data that pose a challenge for such a widely-assumed semantic restriction.² The first set of data we analyze includes examples that involve two distinct result states predicated of the same entity: the verb encodes a change of state (e.g., *melt*) and the result phrase denotes a change of location (e.g., *out of the hamburger*) or a distinct change of state (e.g., *flat*).³

1 We do not agree, however, with such an analysis of *The skiers skied the trail clean of snow*, as we take the verb in this example to provide a manner component to a change of state event, i.e., the skiers cause the trail to become clean of snow *by skiing*. This will be made clear in the following sections.

2 Unless explicitly indicated, the examples in this paper are extracted from *Google Books* (GBooks), *Corpus of Contemporary American English* (COCA) and *Corpus of Web-Based Global English* (GloWbE).

3 Similar examples have been observed in the literature at least since Goldberg (1991) and Levin and Rappaport Hovav (1995), e.g., *He broke the eggs into the glass*. However, examples in (1)–(2) are different in the sense that the two distinct result states are predicated of the same entity, whereas Levin and Rappaport Hovav (1995) note that examples of the *break the eggs into the glass* type are possible since the two result states are predicated of distinct entities, i.e., the eggshells break and the contents move. We discuss this in detail in Section 2.

- (1) a. Your already cooked bacon might be overcooked and the cheese might melt out of the hamburger. (GloWbE).
 b. It essentially has some of the carbon burned out of the surface layer. (GloWbE)
- (2) a. Sailor finishes his beer [...] steps on it, crushing it flat. (COCA)
 b. The ceiling split open. (COCA)

Adopting a neo-constructionist approach to argument/event structure, we argue that structurally there can only be one result predicate per clause. We contend that in the examples in (1)–(2), the verbal root merges as a modifier to the verbalizing little *v* head, describing the manner through which the result state is brought about (Embick 2004; Harley 2005; Mateu 2005; McIntyre 2004). The (syntactic) result state is denoted by a result predicate, i.e., an AP or a path PP, which merges as the complement of a SC (small clause) result predicate (cf. Hoekstra 1988) in turn embedded under the *v* head. We thus propose that the restriction on the number of result states that can be predicated in a single clause is naturally accounted for in light of the fact that the verbalizing little *v* head can only select for one result predicate as its complement. Semantically, however, more than one result state can be predicated simultaneously of the same entity, as is the case in (1)–(2) and contra Goldberg (1991) *et seq.*

The second set of data we analyze involves examples provided by Goldberg (1991) that at first blush appear to violate the current claim that the little *v* head can only select for one result predicate as its complement. This set of examples apparently involves the realization of two distinct result predicates, one constituted by an AP and another one constituted by a PP, as illustrated below.

- (3) a. He pounded the dough flat into a pancake-like state.
 b. The liquid froze solid into a crusty mass.

We argue, however, that examples of the type in (3) do not represent a counterexample to our syntactic formulation of the constraint, insofar as the AP and the PP can be shown to refer to the same change of state, with the PP further specifying the syntactic result state denoted by the AP. For instance, in (3-b) the PP *into a crusty mass* is to be conceived of as a modifier of the result state *solid*, joining the syntactic derivation as an adjunct to the SC predicate, rather than as introducing an independent result state.

Another set of examples apparently involving two different result predicates includes the ones in (4) where an AP that denotes a change of state is followed by a path PP denoting a change of location.⁴

⁴ This type of examples was first observed—to our knowledge—by Cappelle (2005), but have gone largely unanalyzed (though see Iwata 2020). We thank an anonymous reviewer for drawing our attention to (4-a).

- (4) a. The Indians were laying for them and shot them dead off their horses.
(Web)
- b. Schumacher's forearm connected with Battiston's face, removing two teeth and knocking him unconscious to the ground. (GloWbE).

We argue that, under close examination, such examples adhere to the constraint as proposed in the present paper that syntactically there can only be one result predicate per clause (see also Ausensi to appear; Marantz 2013). In this respect, we propose that the PP is not an actual result phrase, but rather constitute an instantiation of a particular kind of modifier that Acedo-Matellán et al. (forthcoming) have called low depictive, which joins the syntactic derivation through a low applicative head. Low depictives denote states that are temporally linked with the state denoted by a result predicate—in the present case, the result state denoted by the AP, e.g., *dead* in (4-a). In contrast to standard depictives, where the state denoted by the depictive holds of a participant both when the event begins and finishes (e.g., in *He froze the meat raw* the *meat* is *raw* before and after the event of *freezing*), the state denoted by low depictives only holds of a participant once the event finishes.

The final set of data we analyze involves cases where a particle and an AP seem to introduce two distinct result states predicated of the same entity in a single clause.

- (5) a. A tractor comes along and knocks him down dead. (Cappelle 2005, 252)
- b. In a fight between an officer and a warrior, the warrior was shot down dead. (GBooks)

Following the analysis put forth for the data in (4), we adopt a low depictive account to these putative counterexamples to the constraint of one (syntactic) result per predicate. However, while in (4) the AP is intended as the resultative complement and the PP receives a low depictive analysis, we propose that in (5) it is the AP which is introduced as a low depictive, while the particle is realizing the resultative complement of the SC. As we show, this allows us to account for differences in word order restrictions between (4) and (5), as well as to provide an explanation to the requirement for the particle to appear in a full PP when the AP precedes it (4-a).

We proceed as follows. Section 2 reviews some previous semantic accounts to the restriction on the number of result states that can be predicated in a single clause. Section 3 lays out the present syntactic account toward resultatives and shows how data that are challenging for semantic approaches are accounted for by the structural account entertained in the present paper. Section 4 provides the basic theoretical backdrop for the novel class of depictives as put forth in Acedo-Matellán et al. (forthcoming) and lays out the analysis of the English

examples of the *shot him dead off the horse* type and of the *knock him down dead* type. Section 5 discusses some further predictions of the present syntactic account of English resultatives. Section 6 concludes the paper.

2 The Unique Path Constraint

One of the most influential (semantic) constraints regarding the number of result states that can be predicated in a single clause is possibly the one laid out by Goldberg (1991) (see also Goldberg 1995), known as the Unique Path Constraint.⁵

- (6) Unique Path Constraint (UPC): if an argument *X* refers to a physical object, then more than one distinct path [= result state, JA&AB] cannot be predicated of *X* within a single clause. (Goldberg 1991, 368)

Goldberg (1991) argues that the examples in (7) (from Goldberg 1991, 368, 370) are ruled out on the basis of the UPC. Similarly, the ungrammaticality of the examples in (8) is also claimed to be captured by the UPC: the verbs encode a result state (as defined in Rappaport Hovav and Levin 2010) and the result phrases denote distinct result states.⁶

- (7) a. *He wiped the table dry clean.
 b. *Sam kicked Bill black and blue out of the room.
 c. *Sam tickled Chris off her chair silly.
- (8) a. *She carried John giddy. (Simpson 1983, 147)
 b. *Bill broke the vase worthless. (Jackendoff 1990, 240)
 c. *The box arrived open. (Goldberg 1991, 371)

Levin and Rappaport Hovav (1995, 60) note, however, that examples such as *The cook cracked the eggs into the glass* pose a challenge to the UPC since the verb encodes a change of state and the result phrase denotes a distinct result state, i.e., a change of location. Levin & Rappaport Hovav suggest that such examples are possible since the two distinct result states are not actually predicated of the same entity, i.e., the eggshells undergo the *cracking*, whereas the content of the eggs undergoes the change of location. Such examples led Levin and Rappaport Hovav (1995, 60) to suggest that “the restriction may be that only one change per entity

⁵ See also Tenny (1994), Tortora (1998), Matsumoto (2006), Iwata (2020), and Ausensi (to appear) for similar formulations of this constraint.

⁶ We set aside cases of result phrases further specifying the result state encoded in the verb, as in *John froze the soup solid/hard*, since in this case the result phrase does not introduce a distinct result state (see Beavers 2011; Rappaport Hovav and Levin 2010; Tortora 1998).

may be expressed in a single clause.” As previously discussed, Beavers and Koontz-Garboden (2017) (see also Ausensi 2019, to appear) also argue that two distinct result states are possible if they are predicated of distinct entities (cf. the previously mentioned examples of the *The skiers skied the trail clean of snow* type).

Yet, even if one recasts the restriction on resultatives into a (semantic) restriction on the number of result states predicated of the same entity, such a reformulation also makes false predictions in light of the data in (1)–(2). Additional examples of this sort are provided below. Namely, in (9), the entities denoted by the object become melted, frozen and burned respectively and also undergo the change of location denoted by the path PPs. Similarly, in (10), the referents of the objects undergo the change of state entailed by the main verb and the change of state denoted by the APs.

- (9) a. The snow melted off the lower part of the Range. (COCA)
 b. A lot of the water sprayed onto the ship had frozen onto the steel.
 (GloWbE)
 c. Half the potatoes burned into the pan. (GloWbE)
- (10) a. Frankie was pulling a lever that wound his cables in and crushed it tighter. (COCA)
 b. Huebner picked a nit from behind his ear and squished it dead. (COCA)
 c. All-news channels are now splitting the niche smaller and smaller.
 (GloWbE)

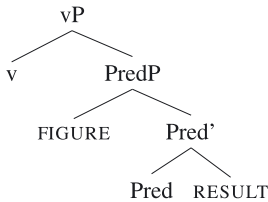
In the next section, we argue that such challenging data for previous approaches relying on semantic notions are naturally accounted for if the UPC is reformulated into a syntactic constraint regarding the architecture of event structure. Namely, there can only be one structural result predicate per event structure.

3 A syntactic restriction on the architecture of event structure

As mentioned in the Introduction, we adopt a neo-constructionist approach to argument structure wherein argument relations are assumed to arise syntactically from a limited set of possible structural combinations. Following Mateu (2002), Borer (2005a, 2005b), and Acedo-Matellán (2016), *i.a.*, we take syntactic operations to be instantiated by means of two sets of elements interacting with each other: functional heads, which are conceived of as grammatically transparent elements directly available for syntax to operate on, and roots, which are grammatically opaque elements carrying a meaning linked to our general world knowledge. In particular, following Mateu (2012), Mateu and Acedo-Matellán (2012), and Acedo-Matellán and Mateu (2015), in turn heirs of Hale and Keyser (2002), we assume

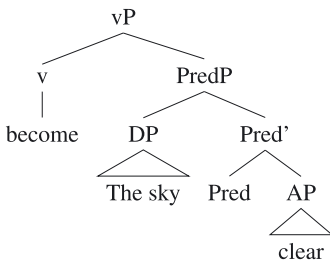
that there is a structure building operation which is responsible for the linguistic expression of resultative events, involving a small clause (SC) result predicate along the lines of Hoekstra (1988) (labelled here as PredP) embedded in the complement of a *v* head. The final state, or result, of a resultative event is structurally associated with the complement of the SC, while the undergoer of the resultative change (labelled as Figure in (11), after Talmy 1975 and following works) is introduced in the specifier of the SC. Putting all the pieces together, the basic skeleton of this structure is represented as follows.

(11) Basic structure.



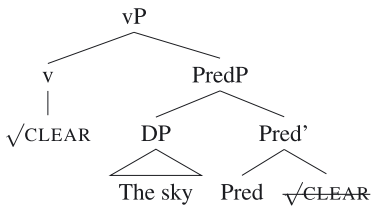
A root that joins the structure in the complement of the SC is semantically interpreted as specifying the result state which comes to hold as a consequence of the action introduced by *v*. From this position the root can either remain *in situ* (12) and be locally categorized by a functional head, while *v* is provided with phonological substantiation by means of a light verb, or incorporate into *v* (13), where it becomes grammatically categorized and surfaces as a verb.⁷

(12) The sky became clear.



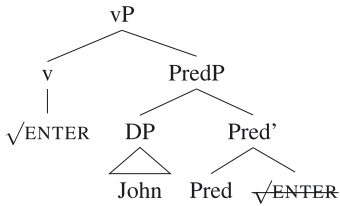
⁷ As it appears clear from the structures in (12) and (13), we take unaccusatives to involve a *v* head taking a SC complement, which is where the subject argument is initially introduced. This implies a structural account of unaccusatives along the lines of Moro (1997), *pace* Hale and Keyser (2002). For the latter, structures like (12) and (13) are to be associated with transitive predicates, where the argument introduced in the specifier of the complement of the verbal head is assigned accusative case *in situ* by *v*.

(13) The sky cleared.



Change of location predicates, involving an event of directed motion, receive the same structural analysis of change of state predicates in this framework, endorsing a localistic view whereby the final state involved in a change of state is conceived of as the final location of an abstract path.⁸

(14) John entered.

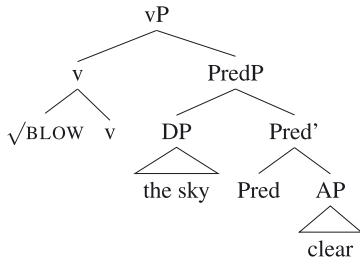


There is a third possible operation available in the process of syntactically building up resultative events, involving a second root which can be directly adjoined to *v* thus precluding both a direct phonological instantiation of *v* through a light verb (12) and the incorporation of the root merged as the complement of the SC (13). In this respect, we follow Mateu (2012), Mateu and Acedo-Matellán (2012), Acedo-Matellán and Mateu (2015), and Acedo-Matellán (2016), along with Embick (2004), McIntyre (2004), Harley (2005), and Den Dikken (2010), in taking a root adjoined to *v* to semantically provide a manner component to the event, i.e., the meaning component responsible for specifying the way in which the action is carried out. In this case, both the result of the process and the manner through which the result is brought about are specified, in what is usually known as a Complex Predicate (cf. Embick 2004; Mateu 2012).⁹

⁸ See Jackendoff (1983), Talmy (2000), Mateu (2008), and Acedo-Matellán (2016), *i.a.*

⁹ We take the external argument in (15) and in the transitive variants of the examples under consideration to be introduced higher in the structure, by a Voice projection which merges on top of the vP, following Kratzer's (1996) proposal that external arguments are to be severed from the verb and introduced instead by a Voice projection in the verbal domain (see also Alexiadou et al. 2015; Borer 2005b; Marantz 1984; Pylkkänen 2008, *i.a.*).

(15) The wind blew the sky clear.



The relevant structural generalization arising from the present theory is that syntax can only arrange for the expression of one result predicate per clause, as the only position available in syntax providing a result state to an event of change is the one associated with the complement of the SC.¹⁰ This way, the UPC is given a structural explanation.

Before proceeding any further, one important caveat is in order concerning the operation of adjoining a root to the *v* head in syntax. Namely, this operation is to be intended as independent of the lexical entailments of roots in terms of resultativity. While some roots (e.g., *wipe*, *roll*) are interpreted semantically (that is, *qua* the syntactic structure) as manner roots, because their meaning only entails an activity (i.e., an ACT event; cf. Rappaport Hovav and Levin 2010), other roots (e.g., *break*, *melt*) can be semantically regarded as being intrinsically resultative, to the extent that a change of state/location forms part of their lexical entailments. When roots of the *break*-type are adjoined to an eventive *v* in syntax, their truth-conditional content is not affected. That is, even when the root is used syntactically as a manner modifier, it cannot be denied that an entity is undergoing the change of state/location entailed by the root, as the following made up example shows.

(16) He ripped him free, #but nothing was ripped.

This proves that the syntactic positioning of a root does not alter the complexity of its lexical entailments, which we take to be lexically stored and can be captured by its truth-conditional values. However, it would be a mistake to take this as a way to prove that a semantically resultative root always requires that its lexically entailed change be represented in the syntactic structure of the predicate it appears in. For the sake of argument structure, roots of the *break*-type can function as manner

¹⁰ This claim has already been exploited in Mateu and Acedo-Matellán (2012) to provide a syntactic account of Manner/Result Complementarity (see Rappaport Hovav and Levin 2010). We argue, however, that it can also be relevant to account for cases where more than one result per clause seems to be present.

modifiers in the same way as roots of the *wipe*-type do. In this case, the undergoer of the result that is lexically entailed by the root (e.g., what actually becomes *ripped* in (16)) is not required to surface as an argument in the argument structure of the predicate, its presence as a participant of the event being recovered from the context (or by world knowledge) and not being mandatory for the grammaticality of the predicate. Importantly for the present argumentation, this means that the result lexically entailed by a root does not always count as relevant for the UPC understood as a syntactic constraint. Accidentally, the entity undergoing the change lexicalized by the verb can coincide with the entity undergoing the change specified structurally by the complement of the SC. For instance, while the subject of the predicate in (16) (i.e., *He*) becomes *free*, but definitely does not become *ripped*, the subject of a predicate like (17) can be understood as undergoing both a change of location and a change of state (in terms of a *melting* process).

(17) Metal components melted into the ground. (COCA)

This predicate is correctly predicted to be felicitous according to our syntactic formulation of the UPC, because the result component entailed by the verb is not syntactically realized but merely conceptually involved. However, (17) poses a challenge for a semantic account of the UPC, which is forced to treat as equally relevant both the result entailed by the verb and the result provided by the SC. We discuss similar cases in more detail in the next section.

A syntactic take on the UPC also accounts for cases where more than one result is predicated in the same clause by means of coordination.¹¹

- (18) a. Wipe the gun clean and dry and return it to the proper storage location. (GloWbE)
 b. UMWA national board member Chris Evans [...] was beaten bloody and unconscious with rifle butts. (GBooks)
 c. He still wandered on, out of the little high valley, over its edge, and down the slopes beyond. (*The Hobbit*, ch. 6, J.R.R Tolkien)

We take coordination as a way to link two or more constituents of the same category in a given syntactic position. In light of this, examples of the type in (18) can be easily accounted for by our structural analysis of the UPC, because the coordinated result phrases can all be taken to be included in the complement of the SC. However, these examples are problematic if a semantic account of the UPC is entertained, because semantically they involve multiple results that are being predicated of the same entity, contra Goldberg (1991). We thus take examples of

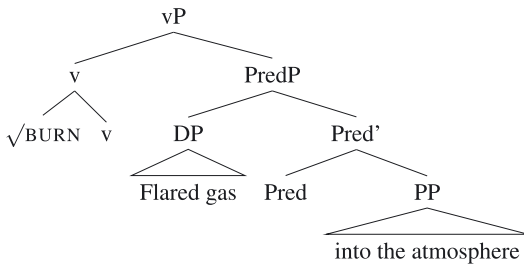
¹¹ We are grateful to Jaume Mateu (p.c.) for drawing our attention to conjoined resultatives as those in (18).

this sort as an additional piece of evidence in favor of adopting a syntactic account of the UPC.

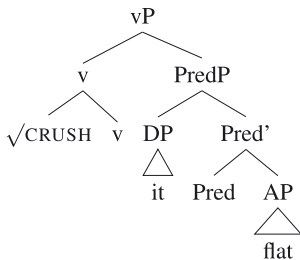
3.1 A syntactic approach to the Unique Path Constraint

We start by analyzing examples involving a verb that semantically encodes a result state (as defined in Rappaport Hovav and Levin 2010) and a result phrase that denotes a distinct result state than the one encoded by the verb, as previously illustrated by examples of the type in (9), (10) and (17). In this respect, we propose that the verbal root in these examples is adjoined to *v*, describing the manner that the event is brought about, whereas the result state is denoted by the result predicate in the complement of the SC.

- (19) Flared gas coming from oil wells that nowadays is directly burnt into the atmosphere. (Web)



- (20) Sailor finishes his beer [...] steps on it, crushing it flat. (COCA)



These examples involve the same structure provided in (15), despite (15) displaying a (semantically) non-resultative verb. This analysis is made possible for examples involving resultative verbs thanks to the assumptions of our framework that takes roots to be packages of encyclopedic content which, as such, are

devoid of grammatically relevant information concerning the possibility to be coerced into a manner interpretation syntactically. Thus, although examples like (19) semantically denote that the same entity is achieving two distinct result states at once, they are predicted to be well-formed by the present structural account since syntactically there is only one result, which is denoted by the result predicate in the complement of *v*.

Further evidence in favor of an adjunct analysis of the verbal root in this type of predicates comes from cases where the DP object is not theta-selected by the verb, i.e., the result state named by the verbal root is not predicated of the theme DP (see also McIntyre 2004).¹²

- (21) a. With a few slices of her claws, she tore him free. (GBooks) (cf. *She tore him)
- b. Six times we broke her loose from the rocks only to have her catch again. (GBooks) (cf. *We broke her)

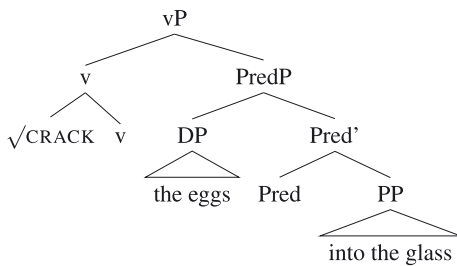
It is worth noticing that, as argued in Mateu and Acedo-Matellán (2012), this analysis gives a structural explanation to the so-called Manner/Result Complementarity, which was first semantically formulated by Rappaport Hovav and Levin (2010) in a lexicalist approach. According to this generalization, a verb may only lexicalize a manner of action or a result state, but never both at the same time. Once Manner/Result Complementarity is given a syntactic account (i.e., once the manner and the result components which are relevant for the Complementarity are conceived of as derivational meanings depending on syntactic structure), the Complementarity need not be stipulated (the way Rappaport Hovav and Levin 2010 do) but can actually be derived from structural restrictions on the architecture of argument structure. Namely, a root may not simultaneously undergo adjunction (manner) and incorporation (result) to *v* (Haugen 2009). The relevant conclusion for the sake of our argumentation, then, is that what can be *conceptually* interpreted as a result verb (e.g., *burn* in (19), *crush* in (20)), so far as it arises from an operation of root adjunction to *v*, is to be *configurationally* interpreted as providing a manner of action to the event, that is, it denotes the manner with which the result

¹² We thank an anonymous reviewer for bringing this to our attention. Another anonymous reviewer points out that the data in (21) are compatible with a semantic explanation similar to the one given by Levin and Rappaport Hovav (1995) to examples like (22). For instance, in (21-a) what is *torn* is the constraint and what becomes *free* is him, thus complying with a semantic take on the UPC as a constraint on the number of result states that can be predicated in a single clause per *single entity*. In this respect, the data in (21) are not meant to provide evidence against a semantic take on the UPC, but rather to show that the lexical stored information, e.g., that of encoding a result state, of some classes of roots does not determine their association patterns with the argument structural configuration (yet see Ausensi to appear for a more nuanced view).

state is achieved. Thus, (19) should be paraphrased as ‘Flared gas [...] is released into the atmosphere *by burning*’ and (20) should be paraphrased as ‘Sailor finishes his beer [...] steps on it, making it flat *by crushing*’. In a similar vein, (21-a) should be paraphrased as ‘[...] she made him free *by tearing*’, where the entity which undergoes the *tearing* event need not be specified because the verb *tear* is providing here a manner component rather than a result component (i.e., it is adjoined to *v*).¹³

The challenging data provided by Levin and Rappaport Hovav (1995), e.g., *crack the eggs into the glass*, are also naturally accounted for by the present analysis. Namely, the verbal root in these examples is also adjoined to *v*, denoting a manner component, while the PP denotes the result state introduced by the SC predicate.¹⁴

(22) Crack the eggs into the glass.



¹³ See Mateu and Acedo-Matellán (2012) for an exhaustive syntactic account of Manner/Result Complementarity the way it is intended here.

¹⁴ The attentive reader will have noticed that the present approach predicts examples of the sort in (8) to be possible. We suggest that the ungrammaticality of examples in (8) might be only apparent and conceptual in nature, as it is not possible to establish a causal (or manner-like) relation that links the action by the verb and the result by the AP/PP. Further, as an anonymous reviewer points out, examples like *break something worthless* can also be said to be out due to independent problems having to do with morphologically complex adjectives in resultatives (see Kratzer 2005). As they note, resultative constructions tend to be reliant on world-knowledge regarding what is a possible and expected outcome of an event, and therefore it is not surprising that examples such as *carry someone giddy* or *the box arrived open* are out since, for instance, it is difficult to establish a relation whereby an event of carrying somebody causes them to become giddy. In particular, the ungrammaticality of those examples may be due to clashes between the conceptual content of the root and the functional structure the root is merged with (see Acquaviva 2008, 2014; Borer 2003, 2005a, 2005b; Mateu and Acedo-Matellán 2012), which might be the case also in examples that include verbs of pure directed motion such as *arrive*, *come*, *leave* (cf. (8-c)). How exactly the conceptual content of roots can determine the different structures roots can appear in is still a matter of debate and an active area of current research (see Alexiadou et al. 2014; Beavers and Koontz-Garboden 2020; Borer 2005a). In any case, what is important for the present purposes is that naturally-occurring examples in (9) and (10) show that it is grammatically possible to combine (semantically) resultative verbs and path PPs/APs denoting result states distinct from the one by the verb, contra the UPC.

Concomitantly, the ungrammaticality of the examples in (7), repeated below as (23), also receives a straightforward explanation in the present account. Namely, we take these examples to involve two realizations of a SC predicate. For instance, (23-a) involves two APs denoting the result states of becoming *dry* and *clean*.¹⁵

- (23) a. *He wiped the table dry clean.
 b. *Sam kicked Bill black and blue out of the room.
 c. *Sam tickled Chris off her chair silly.

Goldberg (1991, 371), however, provides some examples that indeed appear to contain two result predicates distinct from the verb, as in (24). These examples seem to involve an AP and a PP denoting two result states.

- (24) a. He pounded the dough flat into a pancake-like state.
 b. The liquid froze solid into a crusty mass.

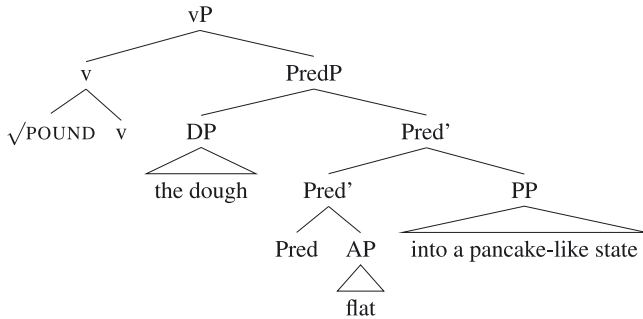
We argue that examples of the type in (24) are not problematic for the present analysis, insofar as the PPs in these examples do not denote distinct result states than the ones encoded by the APs. Namely, the PPs in (24) are cases of so-called property PPs, not path PPs denoting changes of location. Property PPs denote changes of state and, in these examples, they can be intended as further specifying the result states introduced by the APs (see Rappaport Hovav and Levin 2010; Tortora 1998 and especially the discussion to follow in Section 4). In this vein, it is important to recall that a major generalization of the present account is that the *v* head only selects for one result predicate as its complement. We argue that property PPs of the type in (24) are not complements, but modifiers of the result states denoted by the APs, joining the syntactic derivation as adjuncts to the SC. Evidence for this comes from the word order restrictions these examples display, namely, the AP needs to precede the property PP. This fact is consistent with the claim that the AP is the complement expressing the (syntactic) result state, whereas the property PP is an adjunct providing further details about the result state denoted by the AP (further see Matushansky et al. 2012).

- (25) a. *He pounded the dough into a pancake-like state flat.
 b. *The liquid froze into a crusty mass solid.

Thus, in these examples, only one complement is selected by the SC, namely the AP, denoting the result state. The property PP joins the syntactic derivation as an adjunct providing further specification about the result state denoted by the AP.

¹⁵ Though see fn. 20 for further discussion concerning the ungrammaticality of examples like (23).

- (26) He pounded the dough flat into a pancake-like state.



In short, the current approach makes the prediction that an event structure can contain no more than one result predicate, typically expressed by an AP or by a path PP. As shown below, this prediction appears to be borne out.¹⁶

- (27) a. *He broke the eggs into the bowl into the glass.
 b. He broke the eggs into the glass.
 c. He broke the eggs into the bowl.
- (28) a. *He laughed himself silly faint.
 b. He laughed himself silly.
 c. He laughed himself faint.

4 Building low depictives in English

In the previous section, we argued that the architecture of event structure is such that only one syntactic result can be expressed per predication. By doing so, we gave a structural explanation to the UPC. More importantly, we analyzed examples

¹⁶ An anonymous reviewer points out that examples such as *The chocolate melted out of the box into the cup* appear to be possible (judgments his/hers). We acknowledge that combinations of multiple path PPs may be possible (to some extent), especially if contrasted with combinations of multiple APs, which seem to be systematically rejected (e.g., **wipe the table dry clean*). We note, however, that in such examples both PPs are specifying different points of a single direction, i.e., the chocolate first gets out of the box and then goes into the cup. In contrast, a series of APs like *dry clean* denote two result states which are unrelated to one another, insofar as the state of *dryness* and the state of *cleanness* are not dependent on each other. The relation holding between the two spatial PPs *out of the box* and *into the cup* resembles the type of relation existing between the adjectival resultative and the PP in (24). We come back to constructions with multiple spatial PPs in Section 5.

that violate the UPC defined as a semantic restriction and showed how such examples are naturally accounted for by the syntactic formulation entertained in the present paper. We now move to analyze examples of the type in (29), which at first blush appear to violate the present claim that the *v* head only selects for one result predicate as its complement.

- (29) a. A guard shot him dead off his horse. (Cappelle 2005, 252)
 b. They spotted a man waiting in ambush in a tree. J.B. was quick on the draw and shot him dead out of the tree! (Web)
 c. Schumacher's forearm connected with Battiston's face, removing two teeth and knocking him unconscious to the ground. (GloWbE)

These examples are different from the ones in (24), e.g., *He pounded the dough flat into a pancake-like state*, in that no clear relation holds between the state introduced by the AP and the one introduced by the PP. For instance, while in (24-a) the PP *into a pancake-like state* can be intended to further specify the state of *flatness* introduced by the AP, it would be problematic to claim that a similar semantic relation holds between the AP and the PP in (29), where the two phrases introduce results which are unrelated to one another (the AP referring to a change of state, the PP to a change of location). It is important to note that this property is shared with secondary predicates of the depictive type. Namely, in a depictive secondary predication the state denoted by the depictive is independent of the state denoted by the verb (cf. *John froze the meat raw*, where the verb *freeze* encodes a result state along a scale of *frozenness* and the secondary predicate *raw* encodes a property state along a scale of *rawness*).

Regarding scales, we follow current and standard assumptions that result states involve scales of change (cf. Verkuyl 1972; Krifka 1989; Tenny 1994; Hay et al. 1999; Kennedy and McNally 2005; Beavers 2008, 2011; Kennedy and Levin 2008; Rappaport Hovav 2008; Rappaport Hovav and Levin 2010; Rappaport Hovav 2014, i.a.). Namely, in the events described by result verbs, a participant moves from an initial state or location to a different one at the end of the event, which results in a change of state or location. Within this scalar approach, a scale is assumed to be formed by a set of degrees (which specify measurement values) on a specific dimension, i.e., width, length, alive-dead etc., with an ordering relation. In more formal terms, a scale is usually defined in terms of a triple relation, as in (30) (from Beavers and Koontz-Garboden 2012, 37).

- (30) a. δ = some property/dimension (e.g., for height, length, straightness, temperature, proximity to some reference point).
 b. S = a set of (intervals of) degrees for having property δ .
 c. R = an ordering of members of S (determining directionality).

For instance, a *warming* and a *cooling* event just differ in the ordering relation of the degree of temperature, i.e., in the increasing and decreasing of the temperature that holds of the theme (Kennedy and McNally 2005). In this respect, result verbs such as *cool* appear with result phrases that provide a degree of specification of the scale of change lexicalized by the verb as in *cool the soup to 10 °C*.

Drawing on the fact that in a depictive secondary predication the state that the depictive denotes is independent of the state that the verb denotes, i.e., the scales of change denote distinct states, we propose that the PPs in (29) are not actual cases of syntactic results, nor are they property modifiers to the SC result predicate along the lines of (24). Rather, we propose they involve a particular type of secondary predication that Acedo-Matellán et al. (forthcoming) call low depictive, which is introduced by a type of a low applicative head labelled Dep_s. In what follows, we provide the theoretical backdrop necessary for the analysis of the examples of the type in (29).

4.1 Introducing low depictives

Acedo-Matellán et al. (forthcoming) argue that putative cases of adjectival resultative constructions in Old Romance (see Troberg 2019; Troberg and Burnett 2017 for Old French), as illustrated below for Old Spanish, are not actual cases of resultative constructions of the type found in satellite-framed languages such as English but rather involve a type of secondary predication that they call low depictive. By doing so, Acedo-Matellán et al. show that Old Romance languages adhered to Talmy's (1991, 2000) class of verb-framed languages.¹⁷

- (31) y derribó muerto Héctor al cruel Anpimaco.
and knock-down.PFV.3SG die.PTCP.M.3SG Héctor DOM=the cruel Anpimaco
Lit. 'And Héctor knocked the cruel Anpimaco down dead.' (Juan de Mena, *Homero romanzado*, 1442; *apud* Acedo-Matellán et al. forthcoming)

Acedo-Matellán et al. (forthcoming, 20) note that such examples entail that the entity denoted by the object is only dead when the event denoted by the verb *derribar* 'knock down' finishes (e.g., in (31), Anpimaco is not dead when Héctor starts the event of knocking him down). Crucially, though, the state denoted by the AP *muerto* 'dead' overlaps with the result state encoded by the verb *derribar* 'knock down'. This contrasts with standard depictives, in which the state denoted by the secondary predication holds for the whole duration of the event denoted by the main predicate.

¹⁷ See Acedo-Matellán et al. (forthcoming) for specific details why such constructions do not constitute actual cases of adjectival resultative constructions of the satellite-framed type. Here, we focus on the novel class of depictives they lay out.

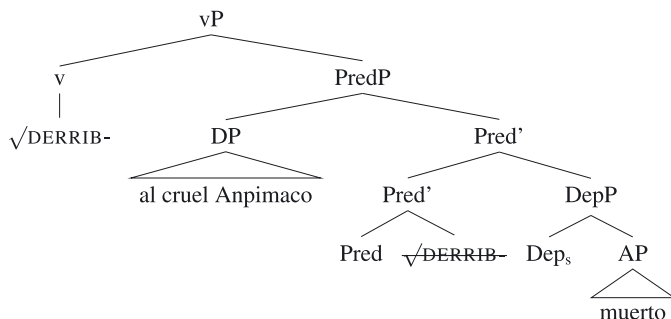
- (32) a. John froze the meat raw.
 b. They burned the bandit alive.
 c. She painted the door open.

In (32), it is understood that *the meat*, *the bandit* and *the door* are *raw*, *alive* and *open* when the events denoted by the verbs start and finish. Acedo-Matellán et al. draw on this crucial difference between standard depictives and the Old Spanish constructions of the type in (31) in order to build their analysis of low depictives, which is based on the analysis of secondary predication as put forth in Pylkkänen (2008). Pylkkänen proposes a complex predicate account where a functional head Dep combines with the secondary predicate and the main predicate. Such an account aims at capturing the fact that, in standard depictives, the state denoted by the depictive overlaps with the event denoted by the main predication. In order to analyze the Old Spanish constructions, Acedo-Matellán et al. adapt Pylkkänen's analysis by proposing a modified version of Dep which they call Dep_s.

Dep_s is linked to a projection denoting a result state, rather than to a projection denoting an event as in standard depictives. This reflects the fact that, in Old Romance adjectival constructions of the type in (31), the state denoted by the secondary predicate *muerto* 'dead' only holds of a participant after the event of *knocking down* is over, as discussed above.

More specifically, Dep_s first takes a secondary predicate as its complement (e.g., *muerto* in (31)) and combines it with the projection denoting the result state (to be identified by $\sqrt{\text{DERRIB-}}$ in (31)). This way, the state introduced by the secondary predicate is understood as overlapping with the state resulting from the event (i.e., the syntactic result state). The subject of the resultative predication (i.e., the specifier of PredP) becomes the third argument of Dep_s, and is interpreted as the entity about which the result state and the secondary predicate simultaneously start to hold.

- (33) Derribó muerto al cruel Anpimaco.



Low depictives thus denote states that are temporally linked with the state denoted by a result predicate, to the exclusion of the event that brings about the result.

4.2 Low depictives in English

Having laid out the basic theoretical backdrop for this type of secondary predication, we argue that examples of the sort in (29), i.e., *A guard shot him dead off his horse*, are to be analyzed as involving low depictive predications. Additional examples of this type follow.¹⁸

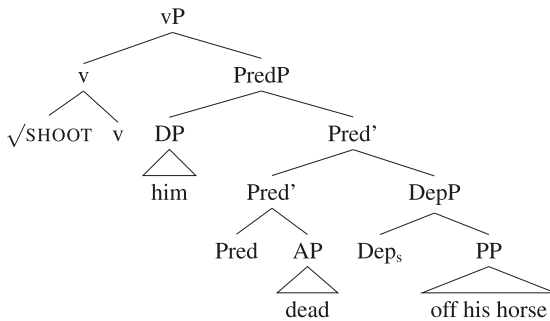
- (34) a. They would dig these huge holes and tell our men to stand by them as they shot them dead into the grave. (Web)
 b. In quick succession, five eagles were knocked dead to the ground in this fashion. (GBooks)
 c. Marcher Amelia Boynton, tear-gassed and clubbed unconscious to the ground during the first charge. (COCA, *apud* Iwata 2020)

It is important to note that, in these examples, the state denoted by the path PP temporally overlaps with the result state denoted by the AP. Thus, in (29-a), repeated below as (35), the result state of *being dead* and the state of *being off the horse* are understood as holding simultaneously for the entity denoted by the object to the exclusion of the *shooting* event itself. Additionally, no direct semantic relation can be identified between the two states, such that the latter cannot be considered a further specification of the former (as was instead the case in examples of the *freeze solid into a crusty mass* type, cf. (24)). Given the parallelism with the Old Romance constructions seen in the previous section, we thus propose the following structure.¹⁹

¹⁸ We thank an anonymous reviewer for drawing our attention to (34-a).

¹⁹ An anonymous reviewer asks whether we can provide evidence for merging DepP with PredP rather than directly with the resultative phrase in the complement of PredP (e.g., with the AP *dead* in (35)). The reason for merging DepP at the PredP level arises to account for cases where a root is merged as the complement of Pred, under the assumption that roots do not project phrases in syntax. In that case, DepP would be wrongly predicted to not be available (cf. the Old Spanish example in (33)), unless one wants to assume that DepP takes different merging positions in different languages. Another reason for merging DepP with PredP rather than with its resultative complement is that we take DepP to be linked to a projection denoting a result state, but the complement of PredP does not take a result state reading until the upper chunk of structure merges with it. In any case, we note that nothing crucial for our analysis of low depictives in English hinges on whether DepP is merged with PredP or with its resultative (phrasal) complement.

(35) A guard shot him dead off his horse.



The secondary predicate *off his horse* is the first argument that Dep_s takes. The second argument is the result state denoted by the complement of the SC, *dead*. The last argument that Dep_s takes is the specifier of the SC, i.e., the object *him*. Descriptively, such constructions involve a result state (i.e., the complement of the SC, *dead*) that comes to hold of the entity denoted by the object as a result of a *shooting* event and overlaps with another state (i.e., the state denoted by the PP *off his horse*).

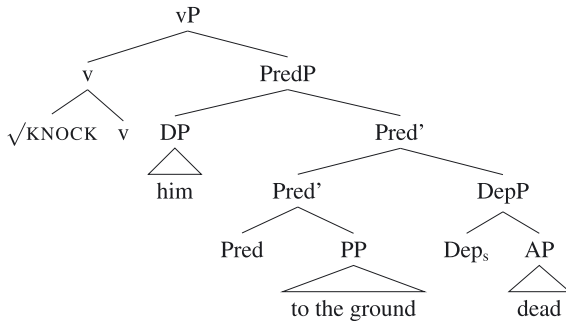
It is worth pointing out that given the present structural account, no reason shall prevent the AP to join the syntactic derivation as a low depictive, with the path PP merged as the complement of the SC. As a matter of fact, naturally-occurring examples involving this order are not hard to find.²⁰

²⁰ An anonymous reviewer asks what prevents the second phrase in result predicates like **wipe the table dry clean* or **laugh oneself silly faint* to join as a low depictive. We suggest that these combinations are not possible since in order for a low depictive predication to hold, the state denoted by the low depictive phrase must be (pragmatically) compatible and an expected outcome from the result state denoted by the main predication. Namely, examples of *shoot somebody dead off his horse* are natural on a low depictive reading insofar as the low depictive *off his horse* denotes a state that is a natural (and expected) consequence from the event of *shooting him dead*. In contrast, it is hard to see how such a relation can be said to hold from an event of *wiping a table dry clean* or *laugh oneself silly faint* where the APs denote states that are unconnected to each other in the sense that the second AP is not a state that holds as a natural consequence of the main predication, therefore it is difficult to establish a relation that would allow for a low depictive predication. Additionally, we believe that there might be an independent reason preventing the combination of two simultaneous APs, since this combination appears not to be possible outside the domain of resultativity either:

- (i) a. *John is intelligent handsome. (cf. John is intelligent/handsome)
 b. *John arrived tired sleepy. (cf. John arrived tired/sleepy)

- (36) a. He was working as a helper to the drum runner, stepping back struck an electric wire with his shoulder and was knocked to the ground dead. (GBooks)
 b. God hit him with a lightning bolt and knocked him to the ground dead as a doorknob. (GBooks)
 c. [...] a death beam that causes them to merely be knocked to the ground dead. (Web)

(37) Knock him to the ground dead.



In the following section, we turn to discuss the interaction of low depictives with particles in English. Before doing so, we address a comment by an anonymous reviewer who asks whether there really exists a structural difference between low depictives and low adjunct modifiers of the type displayed in (26), insofar as both indicate a result that obtains at the same time as the state named by the result predicate. The reason why we claim that no DepP predicate is needed in the case of property modifiers of the type in (26), as explained in Section 3.1, is that these elements denote a state which is indeed a further specification, in semantic terms, of the result state. That is, these modifiers do not introduce a different scale than the one involved in the result state. In contrast, low depictive predicates denote states whose scales are not shared by the resultative element, thus they need a special head (Dep_s) to license them. The reviewer further provides examples where a property modifier seems to appear to the left of another result phrase, a fact which would go against the contrasts noticed between (24) and (25).

- (38) a. 5 men are bloody and beaten to a pulp unconscious on the ground. (Web)
 b. Then cut them to bits into your food processor. (Web)

We notice that both these examples should not be regarded as problematic, insofar as the alleged property modifiers in (38) (namely, *to a pulp* and *to bits* respectively) can be claimed to directly lexicalize the syntactic result in these examples. Crucially, being a property modifier semantically does not always imply being a

property modifier syntactically: the latter possibility becomes of course exploitable in case another phrasal element realizes the complement of Pred, which is not the case in (38). Thus, in these examples, the low depictive (*unconscious* and *into your food processor* respectively) surfaces to the right of the syntactic result, represented here by the PPs *to a pulp* and *to bits*.

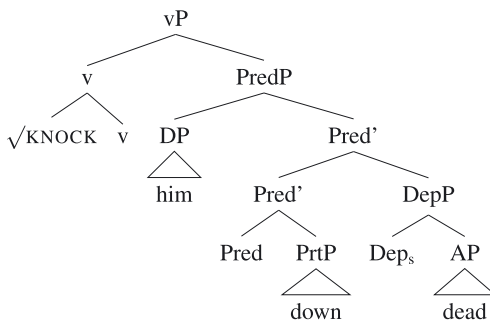
4.2.1 Particles and low depictives

Here, we consider yet another set of examples which could be argued to potentially involve two distinct result states. In contrast to the examples analyzed in the previous section, this set of examples involves the sequence of a particle (e.g., *down*) followed by an AP, as illustrated below.

- (39) a. A tractor comes along and knocks him down dead. (Cappelle 2005, 252)
 b. In a fight between an officer and a warrior, the warrior was shot down dead. (GBooks)
 c. If an old woman is knocked down dead in the quiet village street where she played as a child. (GloWbE)
 d. One of the more drunken young warriors was trying to take a musket from a soldier to look at it, and he was knocked down unconscious. (GBooks)

For these examples we propose an analysis along the lines of (35), i.e., *A guard shot him dead off his horse*, with the difference that, in this case, we take the particle to lexicalize the resultative complement of the SC while the AP is introduced as the complement of the Dep_s head and interpreted as a low depictive related to the result state denoted by the particle. Thus, in (40) there is a state of *being dead* temporally overlapping with a result state of *being down* which is brought about by a *knocking* event.

- (40) A tractor knocks him down dead.



Examples of the type in (39) should not be confused with cases where particles are followed by path PPs instead of APs, as is the case in the following examples.

- (41) a. He will go down into the water. (COCA)
 b. He drives you in a circle that goes down to the Pacific and along it. (COCA)
 c. I moved up into the woods. (COCA)

To the extent that no different results are introduced by the particle and the PP in (41), we contend that these examples do not involve the realization of a Dep_s projection. Rather, the particle in (41) should be regarded as merely specifying the orientation adopted to reach the final location expressed by the PP.²¹

A difference between examples in (39) and examples of the type in (35) relates to the fact that the AP in (39) must necessarily follow the particle, (instead of preceding it (cf. (42) with (36)). In other words, the presence of the particle forces an interpretation where the AP is lexicalizing the secondary predicate and the particle is lexicalizing the syntactic result, while the reversed interpretation is precluded.

- (42) a. *A tractor comes along and knocks him dead down.
 b. *In a fight between an officer and a warrior, the warrior was shot dead down.
 c. *If an old woman is knocked dead down in the quiet village street where she played as a child.
 d. *One of the more drunken young warriors was trying to take a musket from a soldier to look at it, and he was knocked unconscious down.

Once acknowledged that the AP in (39) is occupying an adjunct position in the form of a low depictive, the above contrasts should come as no surprise and are rather a welcome prediction of our account, as they are to be related to an independent requirement of English particles which are known for their incapability to appear in adjunct position without a full PP. This is illustrated by the following contrast, from Collins (2007, 27).²²

21 See Svenonius (2010), who identifies the position of the particle in cases like (41) with a projection labelled Dir(ectio)nP which, in his framework, is merged on top of the Path functional area of the PP. In particular, he excludes that a Path particle be assigned an adjunct status, as he notes that particles do not seem to recursively modify Path. Examples like the ones below, which apparently show the co-occurrence of more than one particle modifying the Path component of the PP, should not be considered problematic, insofar as the particle *back* with a restitutive reading is unique in allowing a Path modification together with another particle (cf. Svenonius 2010, 151):

- (i) a. The man ran back down into the cellar. (Talmy 1985)
 b. Temperatures fortunately are in the mid-60s today and tomorrow and 70F on Wed before going back up to the upper 70s/low 80s later in the week. (COCA)

22 We thank an anonymous reviewer for the reference. Further evidence for the adjunct status of secondary results that we analyze as low depictives may come from the *do so* test (Fu et al. 2001;

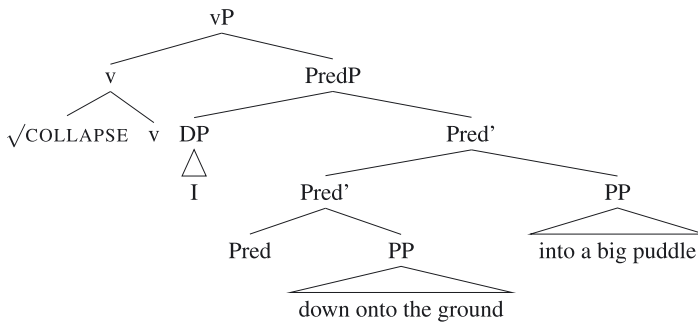
- (43) a. *She did her homework in/out.
 b. She did her homework inside/outside.

5 Cooccurrence of distinct types of resultative modifiers

The structural nature of the constraints arising from the present syntactic approach is such that a number of predictions can be made with respect to how the different types of predicate modification concerning events of change which have been presented relate to each other in the expression of a resultative event.

Our model predicts that a modification of the type in (19) (cf. *Flared gas [...] is directly burnt into the atmosphere*), consisting of the (manner) adjunction of a (semantically) resultative root with *v*, can co-occur with a low adjunct modifier targeting the result state, which in turn is realized either by an AP (as in (26), cf. *He pounded the dough flat into a pancake-like state*) or by a PP, as in the following example. The modifier (e.g., *into a pancake-like state* in (26) and *into a big puddle* in (44)) is taken to further specify the result introduced by the AP or PP complement of the SC (e.g., *flat* in (26) and *onto the ground* in (44)).²³

- (44) I collapsed down onto the ground into a big puddle. (Web)



McIntyre 2004), as the following data informally collected from native speakers show (we are grateful to Ryan Walter Smith and Jianrong Yu for discussion on this type of examples):

- (ii) a. John shot a man dead off the horse and Mary did so into the grave.
 b. The sheriff shot a mean dead off a horse and the deputy did so off a camel.

²³ We analyze the verb *collapse* in (44) as consisting of a root externally merged with *v* to account for the fact that the verb is here to be interpreted as providing the manner of a change of location event. However, a predicate like *I collapse* (where there is no PP realizing the complement of the SC) would receive an analysis along the lines of (13), with the verb being provided phonological content through the incorporation of the resultative element introduced in the complement of the SC.

Further evidence for the adjunct status of *into a big puddle* in (44) may come from naturally-occurring examples where more than one spatial PP accumulated in a single clause is attested.

- (45) It immediately dashed off down into the thickly vegetated gully below the trail. (Web)

For instance, in (45), the PP *down into the thickly vegetated gully* and the PP *below the trail* can be intended as low adjuncts to a goal of motion event whose syntactic result is being provided by the particle *off*.²⁴

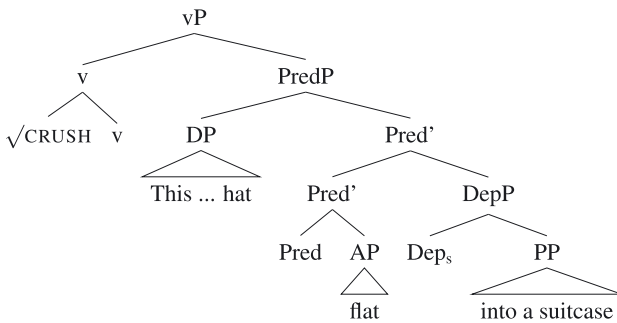
Another configuration predicted by our model consists in a modification of the type in (19) (i.e., the (manner) adjunction of a (semantically) resultative root with *v*) co-occurring with a low depictive predicate of the type exemplified in (35) (cf. *A guard shot him dead off his horse*). In this construction, a (semantically) resultative root adjoined to *v* (e.g., *crush*) specifies the manner of a transition event whose result is introduced by an independent AP or PP (e.g., *flat*), while a further predicate is merged in the form of a low depictive (e.g., *into a suitcase*).²⁵

- (46) a. This crisp, lightweight wool hat is great for travel because it can be crushed flat into a suitcase. (Web)
 b. Aluminum cans are crushed flat into a bale. (Web)
 c. [...] and then crack it [= an egg, JA&AB] open into the glass to reveal it is a real egg. (Web)

²⁴ See fn. 21 for the reason why *off down into the thickly vegetated gully* is not regarded as a single constituent displaying two particles in (45). Namely, as noted by Svenonius (2010), particles in English do not recursively modify Path, which is here signalled by the presence of the *into* preposition. An alternative analysis for (45) would have the PP *below the trail* as a modifier of the NP *gully* which is contained in the preceding PP, as pointed out by an anonymous reviewer. If this analysis turns out to be the one involved, a possible explanation for this could be sought in the fact that multiple modifiers referring to the same scale are likely to form a single complex constituent rather than multiple parallel constituents when possible.

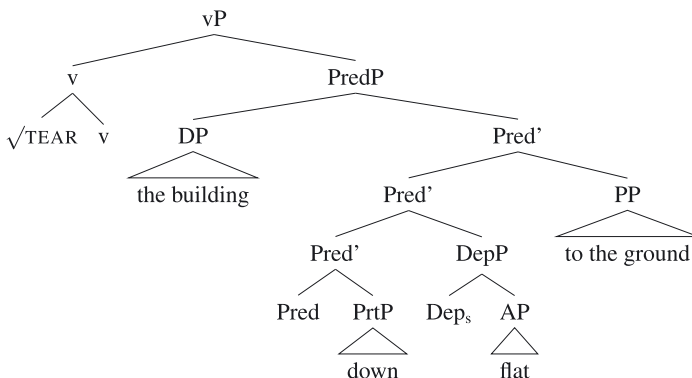
²⁵ We note that two different interpretations are acquired by the DP complements of the PPs in (46-a) and (46-b). Namely, while in (46-a) *the suitcase* is realizing the *affected* Ground of a goal of motion event, *a bale* in (46-b) is more likely intended as an *effected* entity which comes into existence as a result of the event of *crushing flat* the aluminum cans. We take no structural difference to be involved between (46-a) and (46-b), insofar as so-called Created Results of the type in (46-b) are typically assumed to include a SC result predicate the way change of state predicates do (see Folli and Harley 2020 for a recent syntactic account of this type of predicates).

- (47) This ... hat can be crushed flat into a suitcase.



Finally, a further prediction of our model concerns the possibility for a low adjunct of the type displayed in (26) (cf. *He pounded the dough flat into a pancake-like state*) to co-occur with a low depictive predicate of the type in (35), while the verb is realized through the manner adjunction of a (semantically) resultative root to *v*. We contend that this is the case in examples like the following one, where the particle (*down*) and the spatial PP (*to the ground*) are separated by an intervening AP (*flat*). In particular, the particle in 5 realizes the complement of the SC, while the AP is introduced as a low depictive. The spatial PP, being a low adjunct, further specifies the result introduced by the particle.

- (48) A couple of rough carpenters could probably tear the building down flat to the ground in a day or so. (Web)



Of course, the root merged with *v* can, but need not, be semantically interpreted as introducing a result state. Thus, no structural difference is to be posited between (48) and (49) (where $\sqrt{\text{BEAT}}$ and $\sqrt{\text{BUTT}}$ are not taken to involve a result semantically),

insofar as the root realizing the verb is in both cases adjoined to *v* and structurally interpreted as a manner modifier.

- (49) a. It struck it, and beat it down flat to the ground. (Web)
 b. Butt it down flat to the ground. (Web)

Last, an important caveat is in place. The attentive reader may have noticed that, while arguing that many alleged resultative phrases from naturally occurring examples taken into account in this paper are not structurally resultatives (but rather modifiers or low depictives that attach to the result phrase), we have not applied semantic diagnostics for result-hood to them. We claim, however, that it should not be considered a problem for our approach if those phrases that we analyze as low modifiers/depictives do comport as resultatives semantically. Indeed, this is a welcome prediction of our approach, as what it tells us about this type of alleged resultative elements is that, semantically, they are indeed expected to acquire a resultative reading. The reason for this is that these elements join the argument structure below PredP, that is where the result component of an event of transition is introduced. Thus, they are semantically interpreted as resultative elements. Crucially, this explains why there seems to be no effective way of semantically deriving the UPC in light of these examples, which is why our syntactic account becomes relevant. In particular, if these alleged resultatives were proved to not be resultative elements according to semantic diagnostics, no need for a syntactic approach to the UPC in order to account for these examples would have arisen at all.

6 Conclusion

The syntactic approach to event structure entertained in the present paper has been proven capable of providing an account to different types of complex resultative predications which constitute a problem if addressed from a purely semantic perspective, as they appear to be violating the UPC and related (semantic) constraints imposing restrictions on the expression of resultativity. In particular, we have argued that syntax can arrange for an interpretation of the many alleged resultative elements in a way that does not end in a violation of the UPC, provided that a syntactic definition of the constraint is assumed. The relevant generalization arising from the present approach is that there may be more than one *semantic* result being predicated of an entity in a single clause, but only one result can be *structurally* interpreted as directly deriving from the event of transition (i.e., as directly providing a bound to the event). In this respect, we have provided evidence for three different types of predicate modification concerning

events of transition, which constitute counterexamples to the UPC if they are considered from a purely semantic point of view.

First, we have shown that a verbal root which can be claimed to semantically encode a result state (e.g., *split*) can be adjoined to the verbal head in syntax and hence be interpreted as a manner modifier of the event of transition predicated by the SC complement of *v* (e.g., *The ceiling split open*). Second, we have analyzed cases where an adjectival resultative is followed by a PP which at first sight appears to introduce a different result than the one introduced by the AP (e.g., *The liquid froze solid into a crusty mass*). We have shown that these constructions should not be taken as counterexamples to our syntactic definition of the UPC, insofar as the PP is merely specifying the result component realized by the AP and displays adjunct properties (e.g., word ordering restrictions). Last, we have addressed cases where an AP and a PP (e.g., *He was shot dead off his horse*), or an AP and a particle (e.g., *In a fight between an officer and a warrior, the warrior was shot down dead*), co-occur in the same clause and indeed appear to predicate different result states of the same entity. Building on Acedo-Matellán et al. (forthcoming), we have proposed that such examples do not pose a problem for the present approach as they involve a peculiar type of secondary predication called low depictive.

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