

# Syntactic complexity and semantic opacity of manner in manner-expressing verbs

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## 1. Introduction

The fact that verbs express the types of meaning that are also found expressed by different kinds of phrasal syntactic constituents has been the trigger of many discussions and the subject of many theories, from those about incorporation, such as Baker (1988), through typological generalizations such as Talmy's (1994) division of languages into the verb- and satellite-framed type, to more recent discussions about the different natures of manner-, result- and theme incorporation (Rappaport Hovav & Levin 2010). In the recent literature, the expression of manner figures most prominently of all types of meanings expressed by the verb, due to our insufficient understanding of its nature and its own tendency to be subject to a wide range of different restrictions in different types of languages. In this paper, I build on the formal syntactic views of this phenomenon, especially within the tradition stemming from the analysis proposed by Hale and Keyser (1993), and including, among others, Mateu (2002), Harley (2005), Zubizarreta & Oh (2007), Haugen (2009). In particular, I tackle the position that most of these approaches take for granted, namely that the manner component should be treated as a syntactically primitive element (a lexical head, or a root), and not as a complex syntactic item (but see Zubizarreta & Oh 2007 for an opposing view).

Recent approaches to the syntax of manner expressing verbs establish a consensus about the primitive syntactic nature of this component. Harley (2005:44) states that verbs expressing manner, such as *hammer*, *fit* or *smear* are derived "by a mysterious, parametrically varying, illunderstood process which [she]'ll call *Manner Incorporation*". Works like Haugen (2009) or Mateu (2011) assume a special syntactic operation through which manner is syntactically generated, called conflation, in which manner is introduced by a root which externally merges with the verbal head by head adjunction. With many others, Acedo-Matellán & Mateu (2011) insist that "[a] sharp distinction between syntactically nontransparent conceptual content and syntactically transparent semantic construal" has to be assumed, and that manner is directly contributed by syntactic elements that belong to the former class.

One (partial) exception to this tendency is found in Zubizarreta and Oh (2007), who treat the manner component in languages like Korean as a structural complex projected by a lexical verb, which enters a serial verb construction with another verb. However, they still consider manner expressing verbs in the Germanic type of languages as formed by compounding with a light verb and/or with the result component, due to the particular parameter setting in the respective languages (along the lines of Roeper, Snyder & Hiramatsu 2002, Snyder 1995 and Snyder 2001). On this view, the manner component is atomic only in the latter type of languages, as the former type allows for it to be contributed by a non-minimal projection. Assuming the analysis is correct, the syntactic atomicity and semantic opacity of the manner component is not a universal, but rather a parametric property. In this paper, I argue that, in fact, the analysis Zubizarreta & Oh propose for Korean applies universally, also for languages typically targeted by analyses assuming a syntactically atomic and semantically opaque nature of the manner component, i.e. that the manner component is universally contributed by a complex compositionally interpreted syntactic item.

This paper offers a series of arguments in favor of this view, more precisely, that the manner component universally presents a bare unergative VP. A consequence is that syntactic explanations for the facts of incorporation (in the weak sense, of the verb expressing one of its arguments or modifiers) have to be formulated in a different way, which does not crucially rely on the atomic status of manner.

Moreover, I try to show that the data are much better accounted for by a structurally complex manner component, and that an analysis along these lines can also account for the effects that triggered people to take the manner component as syntactically primitive and semantically idiosyncratic and opaque. The arguments can be summarized as follows: 1) the component contributing manner is subject to selection requirements along different dimensions, implying that it comes with a set of formal features, hence is not primitive, 2) from the morphological perspective, the items lexicalizing the manner component sometimes carry a significant morphological complexity (i.e. inflection) and are clearly semantically transparent (anaphors, demonstratives), 3) the manner contributing component can be directly modified, 4) it can surface in the form of cognate objects, implying that it has a syntactic position and enters complex syntactic relations, and 5) it shows syntactic effects typical of complex syntactic items, such as triggering islands at its point of base generation.

The paper is organized as follows. Section 2 introduces the problem and sketches the two types of analyses that have been proposed. Sections 3 through 6 bring arguments in favor of structural complexity and semantic transparency of the item contributing the manner component to a manner expressing verb. Section 3 presents arguments from selection, relating to the aspectual and argument structure, section 4 from proportional modification, section 5 from cognate objects, and section 6 from manner expressing non-bridging verbs. Section 7 presents arguments from the surfacing morphological and semantic complexity of the manner component suggesting that the manner component is compositionally non-primitive, but also that, its complexity is restricted in some interesting ways, and argues that this supports the view that the manner component is universally contributed by a structure matching that of an unergative verb. In section 8, it is observed that the analysis that the paper argues for involves two adjacent instances of the light verb DO in the structure, one of which is vacuous; it is shown, however, that this configuration never really obtains due to the effects of lexicalization. Section 9 concludes.

A large portion of the empirical phenomena used to make these arguments can also be used as tests for different properties of a verb, especially for the type of meaning it expresses (result, manner, possibly theme as well).

## **2. The two types of analyses**

It is a relatively old observation that lexical verbs tend to express exactly two components: core verbal content, often represented as a structural skeleton of one or two, in some views even more, light verbs such as BE, DO, CAUSE, BECOME, CONTROL (Dowty 1979, Parsons 1990, Hale & Keyser 1993) and the (lexical) conceptual content that is structurally opaque and non-systematic in nature. In combination, different properties of the two components give rise to several major types of lexical verbs in respect of the type of semantics that they express (Levin & Rappaport Hovav 1991, 1997). Among these types are result expressing verbs, manner expressing verbs, attitude verbs, as in (1), respectively.

- (1) a. John killed Bill.  
       b. Mary danced.  
       c. John believed the story.

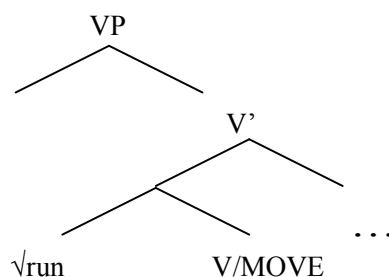
As it has been showed that the type of lexical meaning expressed by the verb correlates with a number of other semantic and syntactic regularities (a.o. Hale & Keyser 1993, Talmy 1994, Levin & Rappaport Hovav 1991), both syntacticians and semanticists have engaged in trying to provide a good model for the status of the conceptual content and its relation with the structural skeleton of the verb (Hale & Keyser 1993, Talmy 1994, Harley 2005, Zubizarreta and Oh 2007, Haugen 2009, Rappaport Hovav & Levin 2010 or Acedo-Matellán & Mateu 2011, to mention just a few).

Manner expressing verbs proved to be especially hard to be assigned a general analysis, as they both vary in their properties across languages, and show certain unusual semantic and syntactic properties, such as involving highly idiosyncratic meanings which often seem complex and possibly internally structured, or being heavy to be assigned a base generation position other than the one in which they surface – the lexical verbal head.

In this paper, I start from an informally defined notion of manner expression, assuming that a verb can be considered to express manner if 1) it does not plausibly incorporate the undergoer or result and 2) it can be reformulated using a light verb and an explicit manner modifier. As the paper unfolds, and certain syntactic and semantic properties are shown to cluster around the set of verbs targeted by the informal definition, the regularities introduced will come in with a double status: as arguments for the claims this paper puts forth, and as possible tests for the manner expressing nature of particular verbs. Note as well that as argued in Rappaport Hovav & Levin (2010), the manner-expressing type of interpretation and the corresponding syntactic effects are not in a one to one mapping with a particular set of lexical verbs: certain verbs may appear with different types of interpretations and syntactic features (i.e. different templates in Rappaport Hovav & Levin, or different structural chunks in frameworks such as that taken by Caha 2007, i.e. that different verbs can be merged in different structural positions in Distributed Morphology etc.). For this reason, it is impossible to provide non-overlapping lists of verbs for different classes depending on the type of incorporated material.

This section presents the two general types of syntactic accounts of manner expressing verbs proposed in the literature. The more prominent is the family of accounts in which the manner component is taken to be syntactically primitive and semantically opaque, and hence syntactically presented as a head. In Distributed Morphology based approaches, such as Harley (2005), Haugen (2009) or Acedo-Matellán & Mateu (2011), this element is a root, which eventually gets merged with the lexical verb. Haugen (2009) introduces a special operation of conflation to model this merge. Conflation is an external merge of a root which results in its left adjunction to another head. In other words, it is an external merge of a minimal syntactic projection, but its result looks like that of a head-movement. What we get is a straightforward, but quite stipulative, hybrid analysis for a puzzling empirical phenomenon. Namely, while it really looks like head movement, it is hard to determine a position in the structure where the manner expressing item comes from. Conflation allows to circumvent this issue: it comes from the lexicon/numeration.

## (2) The verb *run* in Haugen's analysis

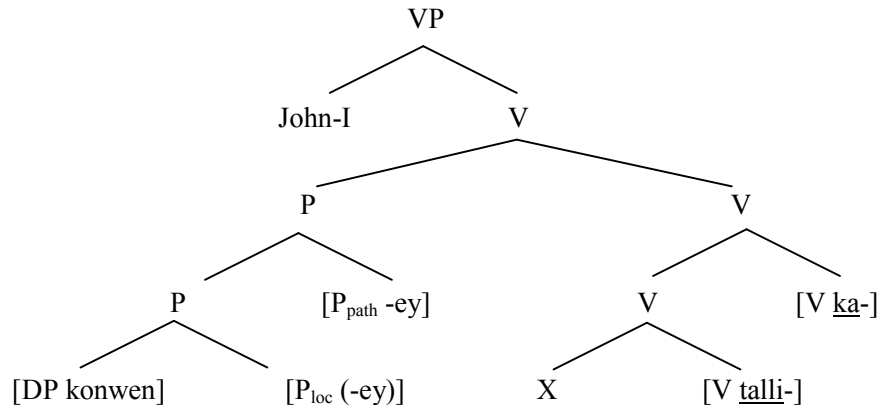


Zubizarreta & Oh (2007) propose a different type of analysis, although they restrict it to the manner expressing verbs in Korean only, allowing that what we can call the Indo-European type still rather fits the former type of analysis. Korean verbs of motion express manner in a construction involving two verbs, one verb of motion and one expressing manner. Zubizarreta & Oh argue that these verbs are best analyzed as entering a Serial Verb Construction, as in (3).

- (3) John-I kongwen-ey talli-e ka-ss-ta.  
 John-Nom park-Loc run-L go-Past-Decl  
 ‘John ran to the park.’

*Korean*

(Zubizarreta & Oh 2007: 91)



Here the manner component is not contributed by a head, but rather by a non-minimal projection involving the manner verb and its argument. This projection adjoins to the directed motion verb to form a complex that has both manner and directed motion semantics, and all this happens in the domain of lexical syntax. Apart from architectural differences, the crucial split between the two types of analyses is that the manner component in this latter model is a non-minimal projection: a complex, semantically transparent syntactic item. This feature of the analysis is empirically supported by the Korean data, where the manner verb can come with its own argument. I argue that a syntactic model of this type is universally the best fit for manner expressing verbs. The rest of the paper provides arguments for this view: for the syntactic complexity and semantic transparency of the manner component (sections 3 to 6) and that it is exactly a verb with a possible complement (section 7).

### 3. Arguments from selection

A set of arguments that the syntactic item contributing the manner component is non-primitive, and that it is best analyzed as a VP, comes from the fact that a number of selectional restrictions apply to this syntactic item, which could hardly be expected under the assumption of syntactic atomicity and semantic opacity. Moreover, these restrictions target features typical of a VP. For a syntactic item to be subject to selectional restrictions means that in addition to a lexical semantic content that it carries, it also carries a set of functional features, i.e. that it presents a set of minimally two elements: the conceptual semantic content and at least one functional feature. Even if only listed in a selection from the lexicon, a pair of a lexical item and a feature is immanently structured, considering the syntactically active nature of the feature. As will be shown, some of the selectional restrictions involve syntactic and semantic properties that are typically linked with complex syntactic structures.

#### 3.1. Aspectual properties of the manner component

Talmy (1994) refers to the manner component in the semantics of a manner-expressing verb used with a directional meaning as the manner co-event. He thinks of the two components – manner and directionality – as two distinct events that are combined by means of syntactic combinations of the respective expressions. Similarly, Zubizarreta & Oh (2007) distinguish two distinct components, and note that the manner component is limited to unergative unbounded meanings. In other words, only those syntactic items can act as the contributors of the manner component that show certain semantic properties (dynamicity, unboundedness, agentivity). Without such restrictions, sentences like those in (4) should be grammatical, expressing that John made Mary worried by collapsing and transferred her

into the lake by killing her, or in the other two cases that by knowing something John moved Mary out of the room, i.e. John got Mary's apartment dirty by living there. Due to the boundedness as in (4a-b) or lack of dynamicity as in (4c-d), the sentences are judged ill-formed.

- (4) a. \*John collapsed Mary worried.  
 b. \*John killed Mary into the lake.  
 c. \*John knew Mary out of the room.  
 d. \*John inhabited Mary's apartment dirty.

Unless one relegates the ill-formedness of the examples in (4) to the encyclopedia as in exo-skeletal approaches (Borer 2005), it is impossible to account for the aspectual selectional restrictions while maintaining the syntactically atomic, semantically opaque nature of the elements contributing manner. One might argue that unboundedness is simply a consequence of the syntactic atomicity of the manner component (in the sense that it takes a complex structure to derive a telic meaning, which then cannot undergo head-adjunction), but this would not explain the dynamicity restriction, where dynamicity is certainly marked, and arguably also more complex, compared to (Kimian, as in Maienborn 2008) stative meanings. Moreover, it would lead to a contradiction in respect of items like the root  $\sqrt{\text{kill}}$ , or the lexical item *kill* in lexicalist approaches, which should then also be treated as syntactically atomic elements (hence unbounded), contrary to their aspectual entailments.

In most syntactic approaches to aspect, a bare VP – a single projection headed by a lexical verb, can only have an atelic interpretation (Borer 2005, Arsenijević 2006, Ramchand 2007, among many others). If manner is a bare VP serialized with the main verb, as in Zubizarreta & Oh (2007)'s analysis of Korean, and if this were universally the case, then the constraint of atelicity comes for free. The ergative (or in Korean also possibly transitive) nature of the manner component, which also subsumes dynamicity, can be accounted for as a selectional restriction of the light verb that is modified by the manner component. The reason possibly comes from what Rappaport Hovav & Levin 2010 refer to as the manner-result complementarity: verbs involving an affected participant all incorporate temporally bound properties of the result subevent and hence exclude manner.

### 3.2. Manner-result complementarity

Levin & Rappaport Hovav (2008) and Rappaport Hovav & Levin (2010) argue that manner and result are in complementary distribution across verbs. A verb expresses manner or result, but never both. Moreover, action verbs express manner, which modifies their sole decompositional component, that of action. Lexically telic verbs, involving a culmination, are likely to incorporate the result, as their structurally deepest semantic component, but there is often available an option of assigning them a manner interpretation instead (Levin & Rappaport Hovav 2010).

Assuming, in the spirit of any version of UTAH that the difference in interpretation indicates that manner and result target different syntactic positions, the mutual exclusion cannot be due to a competition for the same position. Rappaport Hovav & Levin resort to a restriction on the number of components incorporated in a lexical verb. But even on a theory that is very explicit about incorporation and its restrictions, such as Snyder 1995, Snyder 2001 and especially Roeper, Snyder & Hiramatsu 2002, there is no principled reason for such a restriction (note that their N-N compounds are known exactly for their structurally unbounded recursive nature). As in principle head movement is not limited with respect to the number of heads that can be picked up along the way by means of head adjunction, there are no reasons why restrictions should be imposed on the heads representing manner, even if they incorporate not by movement but by a special operation of conflation (Haugen 2009). The only way to introduce this restriction is by stipulation (e.g. it is in the nature of conflation that it blocks incorporation), and this stipulation looks especially suspicious in a system which already assumes a



c. oda-gnati  
from<sup>LX</sup>-chase  
'chase away'

c'. \*po-gnati  
over<sup>SLX</sup>-chase

d. na-pre-slikavati  
on<sup>SLX</sup>-through<sup>LX</sup>-paint  
'do a lot/enough of copying pictures'

d' \*pre-na-slikavati  
through<sup>LX</sup>- on<sup>SLX</sup>-paint

While the aspectual and argument-structural effects of prefixation in S-C and other Slavic languages are quite well explored (in, among many others, Borik 2002, Filip 2003, Arsenijević 2006, Gehrke 2008, Žaucer 2008), its interaction with the type of incorporated element in the verb (using the term in a neutral sense, with respect to the syntactic derivation of the verb) has, to the best of my knowledge, escaped the attention of linguists engaged with the Slavic verbal system. In this section, I present a typology of prefixed verbs based on the relation of the (semantic content of the) prefix with the incorporated content, pointing to certain regularities and interactions of this typology with the syntactic behavior of the verb, and use these findings to argue for a non-atomic and transparent nature of the manner component. As the subject of the paper is what has been called lexical syntax (Hale & Keyser 1993), I only consider the lexical prefixes, although as the paper develops, references to superlexical prefixes will also be made.

Based on the relation between the prefix and the incorporated element, prefixed verbs can be classified into three groups. The first includes the verbs which systematically involve a prefixless form, and when added a prefix – they derive compositional semantics and add an additional result-argument to the argument structure of the source verb (7a, b). (Each example in (7) presents a verb without a prefix and a prefixed verb with the same stem, even though not in all these cases the prefixed verb can be seen as derived from the one without a prefix due to the lexical semantic effect of the prefix.) The other two groups include verbs which always result in the same argument structure, irrespective of whether there is a prefixless counterpart of the prefixed verb, and in cases there is one – irrespective of its argument structure. The derived argument structure of the prefixed verbs of this class involves an agent and a theme, with a causative component universally part of the verb's meaning (7c-d, e-f). One of these two groups of verbs incorporate the preposition together with its complement, i.e. the entire result predicate. The other, the third class all together, does not even necessarily involve a semantically specified result component. The prefix there contributes the meaning of an absolute change, of a full instantiation of a phase transition, from a previous situation in which an eventuality has not yet taken place, to the situation in which it has taken place and its consequences hold. The prefixed version of (7e) thus denotes that the strangling event took place in its full extent, with its characteristic phase transition of Marija switching from being alive to being dead. The prefixed version of (7f) entails that after the event took place, the hose is not straight any more, i.e. that the phase transition from it being straight to being twisted has taken place in its full extent. This class of verbs is also of little relevance for the present paper, hence it is not further discussed.

- |  |   |  |
|--|---|--|
| (7) a. Jovan je trčao.<br>J Aux run<br>'Jovan ran / was running.'            | : | Jovan je u-trčao u stan.<br>J Aux in-run in flat<br>'Jovan ran into the flat.'                               |
| b. Marija je vozila auto.<br>M Aux driven car<br>'Marija was driving a car.' | : | Marija je do-vezla auto do kuće.<br>M Aux till-driven car till house<br>'Marija drove the car to the house.' |
| c. Cipela je/se sijala.<br>shoe Aux/Refl shined<br>'The shoe was shiny.'     | : | Jovan je u-sijao cipelu.<br>J Aux in-shined shoe<br>'Jovan made the shoe shiny.'                             |

- |  |   |                                       |
|--|---|---------------------------------------|
| d. Marija je glačala kamen.              | : | Marija je u-glačala kamen.            |
| M Auxslick_ed stone                      |   | M Aux in-slick_ed stone               |
| ‘Marija was polishing the stone.’        |   | ‘Marija polished the stone.’          |
| e. Jovan je gušio Mariju.                | : | Jovan je u-gušio Mariju.              |
| J Auxstrangle M                          |   | J Aux in-strangle Marija              |
| ‘Jovan was strangling Marija.’           |   | ‘Jovan strangled Marija (to death!).’ |
| f. *Marija je vrnula crevo. <sup>1</sup> | : | Marija je u-vrnula crevo.             |
| M Aux√turn.Pcl hose                      |   | M Aux in-twisted hose                 |
|  |   | ‘Marija twisted the hose.’            |

Interestingly enough, the first group, the verbs which are added one argument to their original argument structure, include only manner-expressing verbs (assuming, pre-theoretically, that manner incorporating verbs are those that can be paraphrased using a light verb and a manner modifier), and the second, verbs with a fixed argument structure in the prefixed form, includes only verbs which incorporate the result argument (the result, the caused eventuality, or the final value of the property under change in the eventuality). Thus, *trčao* ‘run’ denotes a motion event with a particular set of manner features; *čitao* ‘read’ is an action, again with a particular set of manner features; *sijala* ‘shined’ in the prefixed form describes an eventuality specified to be caused by the subject; and finally the root  $\sqrt{\text{glad}}$  (close to the English  $\sqrt{\text{slick}}$ ) in *u-glačala* ‘polished’, ‘made slick’ specifies the result of the process, namely the respective surface being slick to a certain contextually determined degree.

Considering that the prefix somehow corresponds to the preposition which specifies the result relation (see Žaucer 2008, Arsenijević 2006 for a detailed discussion), we can generalize that in the first type of prefixed verbs (those adding a result argument), the prefix is linked to an independently expressed argument in the clause (i.e. the added result argument), or such an argument is contextually determined, while in the second type, the argument of the preposition is incorporated into the verb (although it can be ‘doubled’ by a cognate argument). In other words, one type involves the expression of manner and of the relation characteristic of the result predicate, i.e. (a reflex of) the preposition specifying result without its complement, and the other expresses semantic content related to both an underlying result preposition and its complement, i.e. to the entire result phrase.

Already here, two consequences can be drawn. One is that the contrast between prefixed manner expressing verbs and prefixed result expressing verbs confirms Zubizarreta & Oh’s (2007) claim that the manner and the result components are expressed by two distinct structural segments. The presence of result is obligatorily marked on the verb by a prefix, irrespective of whether the stem expresses the actual result argument or not. And the stem may express either the manner component or the result (argument) component, but never both.

The second consequence is that analyses like Haugen (2009) or Acedo-Matellán & Mateu (2011) cannot account for these data without significant complications. The reason is that they postulate a rule that bans result incorporation into verbs that have already undergone manner conflation, and S-C prefixed manner incorporating verbs, which express both manner and the result predicate, look like good candidates for a whole class of exceptions. While indeed there are ways to get around this problem, such as postulating a different syntactic strategy for the incorporation of the result predicate in S-C (Acedo-Matellán, p.c.), these would unavoidably increase the ‘costs’ of the already ‘expensive’ model.

Unlike the manner-incorporating class of verbs, which often take an overt result introduced by the same preposition that is reflected in the prefix on the verb, verbs of the result-incorporating class rarely

<sup>1</sup> In some dialects, this sentence is fine, and means that Marija returned the hose (e.g. after having borrowed it, or just removed it from its usual position).



appear with a result argument, and when they do, this argument can be described as a ‘cognate result’, as it expresses a result which is already specified or strongly restricted by the semantics of the verb. Note that it is not necessary that the cognate result is morphologically related, or semantically identical to the root of the verb – the root acts as just a restriction on the possible results of the eventuality, which may be further specified by the actual result argument. In other words, the relation expressed by the preposition in the cognate result must be subsumed by the prefix on the verb, and the complement of the cognate result must be subsumed by the result component of the meaning of the verb.

- (8) a. U-trapio je krompir u vrlo neobičan trap.  
in-trench.Pcl Aux potato in very unusual trench/hole  
‘He stored the potato in a very unusual (potato-)trench.’
- b. U-većala je nacrt do nezamislivih dimenzija.  
in-big.Pcl Aux sketch to unthinkable dimensions  
‘She enlarged the sketch to/till unthinkable dimensions.’
- c. U-domio je Petra u neku bučnu, veselu porodicu.  
in-home.Pcl Aux Petar in some noisy cheerful family  
‘He housed Petar into a noisy, cheerful family.’

The analysis of such examples can go in two directions. One is to assume that the root in such cases extracts out of the result phrase and into the verb, and the other that the incorporation takes place in lexical syntax, and that the evacuated complement of PP in such a case may receive other material in syntax proper, as long as it subspecifies the originally generated material (e.g. in the way of Roeper et al. 2002, involving an abstract clitic). The overt expression of result, in the underlying structure, might as well be analyzed as an apposition to the incorporated root, which loses its apposition status once the root is incorporated and no more overtly expressed, one of the two views eventually opted in this paper in section 5, where cognate arguments are discussed.

Importantly for the issue of transparency and complexity of the manner component, similar cognate arguments can be expressed for the manner expressing verbs as well. In such cases, as expected, the cognate manner must be subsumed by the manner component of the lexical meaning of the verb, and has nothing to do with the prefix that the verb takes (unlike cognate results).

- (9) a. Jovan je u-trčao brzim trkom.  
J Aux in-run fast run.Inst  
‘Jovan ran in, (by) running fast.’
- b. Jovan je u-trčao na prstima.  
J Aux in-run on toes  
‘Jovan ran in on his toes.’

While a more detailed discussion of cognate arguments is offered in section 5, here it suffices to observe the degree of parallelism and regularity between the behavior of manner expressing verbs and their result incorporating counterparts, indicating that manner is contributed by a syntactic mechanism sensitive to the internal syntax and/or semantics of the item contributing it.

Another interesting property of result incorporating verbs, distinguishing them from the other two types, is that a majority of them are what traditional grammar calls non-derived: their stem without the prefix does not build grammatical verb forms, as illustrated by examples in (10), where (10c, d) are result-incorporating, and (10a, b) are manner-incorporating verbs. In other words, result expressing verbs in S-C exist only as prefixed verbs. For some of these verbs, a non-prefixed form exists, but by a rule with different semantics (e.g. as a manner-incorporating verb stem), and usually with a different argument structure.

- (10)a. Jovan je (u-)gurao kolica.  
 J Aux in-pushed cart  
 ‘Jovan pushed the cart (in).’
- b. Marija je (pro-)letela (kroz sobu).  
 M Aux through-fly through room  
 ‘Marija flew through (the room).’
- c. Jovan je \*(u-)domio svoje štence.  
 J Aux in-home.Pcl his puppies  
 ‘Jovan found a home for his puppies.’
- d. Marija je \*(u-)spavala dete. (but: Marija je spavala.)  
 M Aux in-sleep.Pcl child M Aux slept  
 ‘Marija set the child asleep.’ ‘Marija slept.’

This additionally supports the view that the prefix on the verb reflects the result predicate: whenever the argument of result is expressed by the verb, a prefix corresponding to the predicate of result is also present, else the structure is ungrammatical.<sup>2</sup> It also implies that manner ‘enters’ the verbs before result does, under the assumption of a syntactic exclusion of the expression of both manner and result by the same verb. In the presence of both these components in the relevant syntactic structure, it is manner that the lexical verb will express. I remain at the level of observation without speculating about the possible ways to model this ordering.

The main aim of the presented data in the context of this paper was to eliminate any doubts about the syntactic nature of the process that derives a manner expressing verb, i.e. that endows the verb with its manner component. It was shown that manner expressing verbs can have a result prefix, and that they behave in a fully uniform way in respect of prefixation. This, and other generalizations presented, would not be expected if manner were a syntactic and lexical primitive. Moreover, the manner somehow has a priority over the result, either in being more local, or for some other reason. In light of this conclusion, some other facts from S-C, in particular those presented in sections 4 and 5, become very strong arguments against semantic opacity and syntactic atomicity of the manner component in the decompositional syntactic structure of manner incorporating verbs.

#### 4. Proportional modification

The main goal of this paper is to show that the manner component in the manner expressing verbs is universally structurally complex. Arguments for its complexity have already been provided for particular languages, most prominently for Korean, by Zubizarreta & Oh (2007). In this section, I show how one of their arguments for the serialization structure of manner expressing verbal complexes in Korean can be replicated in the Indo-European type of languages, which do not display an overt serial verb construction.

Zubizarreta & Oh (2007:64-65) discuss the expression of manner in Korean, where a serial verb construction is employed to contribute a manner component to another lexical verb. They present the following data from Korean, illustrating how scalar or contrastive markers *-man* (only), *-to* (even), and *-nun* (contrastive topic) can be attached to the right of the first verb in the construction, which is the one that contributes manner. Semantic effects show that they indeed take scope only over the manner-contributing verb.

<sup>2</sup> Highly lexicalized result incorporating verbs, with an idiomatic interpretation (arguably turning a result expressing verb into a manner expressing one), as well as the imperfective forms of certain verbs allow for the drop of the prefix, but it can be shown that this is a process subsequent to the process of prefixation.

- (11) a. John-i        hakkyo-ey        (pesu-nun    tha-cianh-ko)    kel-e-man    ka-ss-ta.  
          John-Nom   school-Loc (to)   bus-Contr    take-Neg-Conj   walk-L-only go-Past-Decl  
          ‘John went to school, only by walking (not by bus).’
- b. John-i        hakkyo-ey        talli-e-to        ka-ss-ta.  
          John-Nom   school-Loc (to)   run-L-even    go-Past-Decl  
          ‘John went to school, even by running.’

As has been observed in the literature, certain verbs allow for an ambiguous interpretation of proportional modifiers. In the example in (12), the proportional quantifier *half* could be interpreted on a scale representing the amount of dishes washed (half of the dishes) or it could be interpreted on a scale representing the evaluative degree of this event being an event of washing (the speaker would be half way towards a proper description if she described this event as an event of washing) (see Bochnak 2011 for a detailed account).

- (12) John half washed the dishes.

In S-C (and arguably in other languages too), only manner-incorporating verbs can have proportional modification. Moreover, it can be shown that the evaluative interpretation is always equivalent to a paraphrase in which the verb is decomposed to a light verb with an overt realization of the originally incorporated element. The availability of the evaluative interpretation directly depends on the well-formedness of the proportional quantification over the incorporated element. Evaluatively interpreted proportional modifiers (almost) never combine with verbs incorporating results, objects, or (nearly) nothing at all, but they combine well with (most) manner modifiers.

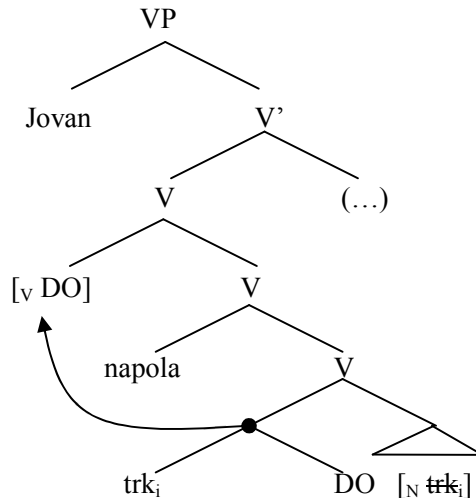
- (13) a. Jovan je        napola trčao.  
          J        Aux    half    run  
          ‘Jovan was half running.’ (i.e. something between walking and running)
- ⇔
- Jovan se        kretao na        polu-trčeći        način.  
          J        Refl    moved on        half-running        way  
          ‘Jovan was moving in a half running way.’
- b. #Jovan se        napola kretao.  
          J        Aux    half    moved  
          ‘Jovan was half moving.’ (also bad in English)  
          paraphrase impossible as no manner is incorporated
- c. #Jovan je        napola u-domio        svoje    štence.  
          J        Aux    half    in-home.Pcl    his        puppies  
          ~ ‘Jovan half found a home for his puppies.’
- ⇔⇒
- ?Jovan je        našao polu-dom        za        svoje    štence.  
          J        Aux    found half-home        for        his        puppies  
          ~ ‘Jovan found a half-home for his puppies.’

This can be explained by analyzing the proportional modifier in the evaluative interpretation as a modifier of the incorporated element. The action referred to by the VP matches to a CERTAIN EXTENT that specified by the incorporated material.

In order to be available for modification by proportional modifiers, incorporated manner modification has to have a syntactic realization at some stage in the derivation, and the modifier has to be base generated in this position, yielding a complex syntactic structure, in line with the main claim of

the present paper. The structure in (14) gives an analysis in terms of Zubizarreta and Oh's (2007) model.<sup>3</sup>

- (14) Jovan je napola trčao.  
 J Aux half run  
 'Jovan was half running.'



The syntactic reality of such an evacuated complex structure is further confirmed by the cognate manner arguments, which have already been mentioned, and which are discussed in the next section.

## 5. Cognate manner

Cognate objects, also known as the cognate accusative, figura etymologica, internal (direct) object or implied (direct) object, have been in the center of linguistic attention for about two decades. An example of a cognate object is given in (15), where the meaning of the verb (*live*) implies the meaning of the direct object (*life*), i.e. the direct object in isolation of its modifiers does not contribute information which is not already contributed by the verb.

- (15) John lived a happy life.

The main point of discussion in the literature on cognate objects was whether these syntactic constituents should be treated as arguments or as adjuncts. The former view was defended by, among others, Massam (1990), Macfarland, (1995), Mittwoch (1998) and de Swart (2007), and the latter by Jones (1988) and Moltmann, (1989). Pereltsvaig (1999) shows, on the data from Russian, that in fact, there are two distinct types of cognate objects, one of which behave as adjuncts (her type A), and the other as arguments (her type B). Type A cognate objects exhibit the following properties:

1. they cannot bear strong determiners,
2. they can only have a narrow, in situ scope, and never scope out of the VP,
3. they do not delimit the event (via event-argument homomorphism relations),<sup>4</sup>

<sup>3</sup> At this point, it becomes obvious that the implementation of Zubizarreta and Oh's model on languages which do not exhibit the serial verb construction carries an undesired feature: it always comes with two instances of the light verb DO. I raise this issue in section 9, where it is discussed in the context of the architecture of grammar and the differences between languages that do and those that do not have the serial verb construction, and where a refined account is proposed.

<sup>4</sup> Pereltsvaig provides an example in which the cognate object does not unambiguously have a quantized quantity, but once it does, as in (i), we see that indeed no homomorphism effects can be observed.

4. they do not passivize,
  5. they do not A'-extract,
  6. the question about a type A cognate object goes with *How...?* – not with *What ... ?*
  7. they can be coordinated with manner adverbs, and not with direct objects
  8. in morphologically rich languages, type A cognate objects bear a different morphological form from typical direct objects (instrumental instead of accusative in Slavic, a special template in Semitic).
- The list given is not exhaustive – some language-specific properties are omitted for sake of space, and because they are not directly relevant for the present discussion. For examples and a discussion of each of these properties – see Pereltsvaig (1999).

Pereltsvaig observes, in passing, only two properties characteristic of cognate objects of type B (for which she notes that they are the only type of cognate objects in languages like English and French), since they are of little relevance for her topic of discussion. However, these properties are very important for the arguments made in this paper. The properties are:

1. in languages with both types of cognate objects – type B occurs only with unergative verbs,
2. in all of the mentioned respects, cognate type B objects pattern with normal direct objects.

S-C behaves exactly like Russian, and in the relevant respects also similar to Hebrew, Vietnamese and Edo, languages discussed by Pereltsvaig. A minimal pair between the type A and type B cognate objects in S-C is given in (16).

- (16) a. Jovan je voleo ogromnom ljubavlju.  
           J      Aux  loved  great.Inst  love.Inst  
           ‘Jovan loved with a great love.’
- b. Jovan je mučio tešku muku.  
           J      Aux  suffered  heavy.Acc  trouble.Acc  
           ‘Jovan suffered heavily.’

Hence, for all intents and purposes of the discussion of cognate objects and the expression of manner, S-C data are representative of the important phenomena involved.

There is a clear correlation between the two issues: the type of cognate objects that a verb takes and the type of the verb, in respect of the type of meaning it expresses and its aspectual and argument structure. Pereltsvaig observes that only some unergative verbs take type B cognate objects. In other words, the only class of verbs derived, in Hale & Keyser’s terms, via direct object incorporation, is the only class of verbs able of taking cognate objects that indeed behave like direct objects. How about the verbs that may take type A cognate objects? Crosslinguistically (looking at languages that do show the distinction between the two types), this class involves verbs like *smile*, *criticize*, *read*, *pick*, *run*, *love* – all of them manner expressing verbs. All the verbs combining with type A cognate objects that I found in the literature, and all those I identified in S-C, are manner-expressing verbs. To summarize: object-incorporating verbs take cognate objects that behave like proper direct objects, and manner-incorporating verbs take cognate objects that behave like adjuncts, more precisely – like manner modifiers.

- 
- (i) Jovan se smešio ironičnim osmehom sat vremena / \*za sat vremena.  
       J      Refl  smiled  ironic.Inst  smile.Inst  hour  time      in      hour  time  
       ‘Jovan smiled ironically for an hour / \*in an hour.’

(17) Two types of cognate objects in S-C

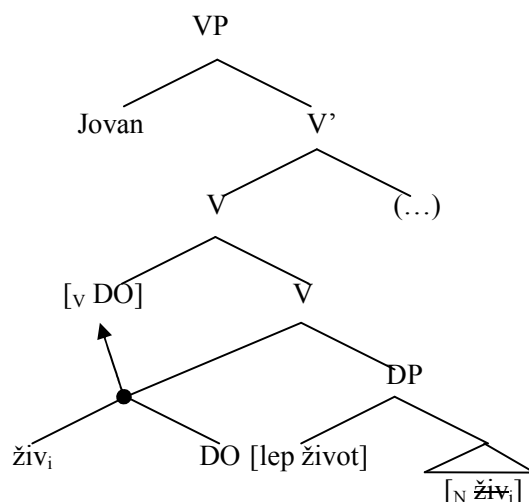
a. Manner-incorporating unergatives	b. Object-incorporating unergatives
trčati brzim trkom / *brzi trk runs [fast run].Inst [fast run].Acc	pevati lepu pesmu / *lepom pesmom sing [beautiful song].Acc [beautiful song].Inst
skočiti dugim skokom / *dugi skok jump [long jump].Inst [long jump].Acc	sanjati ružan san / *ružnim snom dream [ugly dream].Acc [ugly dream].Inst
pasti teškim padom / *težak pad fall [heavy fall].Inst [heavy fall].Acc	plesati divlji ples / ?divljim plesom dance [wild dance].Acc [wild dance].Inst

De Swart (2007) argues that cognate objects of the type B are not really cognate objects, but proper direct objects, as they can appear without modification. Nevertheless, it is uncontroversial that they contribute information that is already part of the meaning of the verb, and that the verb may, and most often does, appear without an object. Moreover, they share the same root with the verb. Perhaps the issue of cognate objects is not as black-and-white as usually presented, but in any case, type B cognate objects share some relevant properties with those of type A.

The aggregate picture is thus the following: there are three relevant kinds of cognate arguments: cognate objects, cognate manners and cognate results (for the cognate results, see examples in (8), which served to introduce the problem of cognate arguments). All of them have designated syntactic positions, and all of them can be modified and even take arguments. This strongly suggests that incorporated manner, which is tightly related to cognate manner expressions, is generated as a non-primitive syntactic structure, and becomes expressed by the lexical verb through a syntactic process affecting the two items involve: the base generated manner and the position of the lexical verb.

To make it more precise, the link that I observe and use as a guide in constructing an analysis of manner-expressing verbs is that cognate arguments, in the typical case, share their root with the verb, and that the root from one syntactic position syntactically incorporates into another one – that of the verb. This is straightforwardly captured by applying Zubizarreta & Oh's (2007) model, while assuming that cognate arguments originate as appositions to the objects that incorporate into the manner contributing verb, and then further into the projecting light verb (most naturally via head movement).

- (18) Jovan je živeo lepim životom.  
J Aux lived beautiful.Inst life.Inst  
'Jovan lived a beautiful life.'



In this way, we can formulate the empirically observed distinction between the two types of cognate objects in the following way. Type A cognate objects are actually cognate manners, which is quite natural since they are generated inside the adjunct of a light verb, more precisely inside the object of the verb contributing the manner component. Type B cognate objects are real cognate objects generated inside the object position of a projecting verb. In both cases, cognate arguments can be taken as appositions to the expressions referring to the respective arguments. As the issue of case assignment falls beyond the goals of the present paper, we refrain from going into a deeper discussion. The reader is referred to Caha (2007) for a model closely matching the relation between the positions marked by instrumental (cognate manner) and those marked by accusative (cognate object) in our analysis.

Further support for the present view comes from the fact that certain verbs can take both types of cognate objects. This is exactly as predicted by Caha's approach, in which instrumental phrases moving higher up in the structure peel off a layer of their case structure switching from the instrumental case to accusative.

- (19) a. Jovan je živeo lepim životom.  
           J      Aux  lived beautiful.Inst life.Inst  
           'Jovan lived a beautiful life.'  
       b. Jovan je živeo lep život.  
           J      Aux  lived beautiful.Acc life.Acc  
           'Jovan lived a beautiful life.'

More particularly, on our view, objects of the manner component may become proper direct objects in case they carry an aspectual feature which enables them to establish the measuring-out relation with the entire eventuality. In such cases, they move to the designated position (e.g. Borer's 2005 FP), establish the relevant semantic relation and receive the accusative case.

This analysis is confirmed by the fact that (19a) has a preferred progressive interpretation (at some time in the past, Jovan was living a beautiful life), while (19b) has an implicature that Jovan is dead. To further illustrate this effect, note that the instrumental cognate object does not combine with a verb that has a perfectivizing suffix.

- (20) a. \*Jovan je pro-živeo lepim životom.  
           J      Aux  through-lived beautiful.Inst life.Inst  
       b. Jovan je pro-živeo lep život.  
           J      Aux  through-lived beautiful.Acc life.Acc  
           'Jovan lived a beautiful life (to its end).'

## 6. Bridging verbs expressing manner

This section presents one rather general argument in favor of the complex syntactic nature of the manner component, which concerns the syntactic effects of non-bridging verbs. Roughly, it observes the island effects corresponding to the presence of the manner component in manner-expressing non-bridging verbs, and points that head-adjunction, by internal or external merge, should not trigger such effects. A more complex structure is rather involved.

Non-bridging verbs are verbs which trigger certain syntactic effects in respect of *that*-deletion, islands and some other phenomena. Observe the asymmetry in (21).

- (21) a. Who did John say that Mary kissed?  
       b. \*Who did John whisper that Mary kissed?

Both verbs are verbs of saying, but only one of them seems to trigger an island effect. The only difference between the two verbs seems to be that one of them also incorporates manner; in case of verbs of saying, it is always a manner of saying, and in this case it could be paraphrased as ‘in a devoiced way’. This indicates that the presence of a marked manner in the lexical semantics of the verb triggers an island effect. Indeed, the literature on the issue recognizes two phenomena that seem to lead to effects of this kind: factivity of the complement implied by the verb and a manner component in the lexical semantics of the verb Kayne (1981).

Arguably, manner-of-saying verbs are manner-expressing verbs. Hence, the expression of manner is linked with core syntactic effects such as islandhood. This is only expected to be the case if the incorporated manner is a non-primitive syntactic item, with a suitable position in the syntactic structure of the entire expression. In the analysis argued for in this paper, these effects are at least partly due to the argument of the manner contributing verb, which, even though light and incorporated, still carries some nominal features and triggers intervention effects.

## 7. The size of the incorporated component

In certain languages, there is a very liberal mechanism of ‘verbalization’ of manner. Peterson (2010) describes the situation in Kharia, a western Munda language spoken in eastern India and shows that in this language structurally complex nominal expressions and even clauses combine with the aspect and voice morphology to derive verbs. In a general case, the derived ‘verb’ has one of the following two types of interpretation: 1) act in the way of X and 2) become X – where X is the denotation of the incorporated (in a theory neutral sense) expression, or is ambiguous between the two. In such a case the type of voice and aspect expressed, the context, and, importantly, the categorial status of the incorporated material, disambiguate between the two. This is exemplified in (22).

- (22) a. *ne dasi hoRo tan-iq.* (hoRo as an adjective)  
           this servant Munda Cop3Sg.Subj  
           ‘The servant is a Munda.’
- b. *ne dasi hoRo-a=eq.* (hoRo as a manner verb)  
           this servant Munda-Indic=3S  
           ‘This servant speaks Munda.’
- c. *bhagwan lebu=ki ro qel=ki.*  
           God man=M.PT and come=M.PT  
           ‘God became man and came [to earth].’
- d. *iŋ ho=kaɽ=te i=a□=yo□j.*  
           1Sg 3=S.HUM=OBL 1Sg=GEN=A.PT.  
           ‘I adopted him/her. (i.e., I ‘mine-ed’ him, made him mine)’
- e. *am ho=kaɽ=te am=a□=yo□b.*  
           2Sg 3=S.HUM=OBL 2S=GEN=A.PT.2Sg  
           ‘You adopted him/her. (You ‘yours-ed’ him, made him yours)’



f. ho rocho<sup>2</sup>b=ki=n.  
 that side=M.PT=1S  
 ‘I moved to that side. (I that-side-ed)’<sup>5</sup>

(Kharia, Peterson 2010)

It is very symptomatic that the two interpretations available are exactly those that Rappaport Hovav & Levin (2011) argue to be in complementary distribution in verb roots, and that the manner interpretation comes with the aspectual value of an activity. Assuming, with, among many others, Hale and Keyser (1993), Mateu (2002), Harley (2005), Zubizarreta & Oh (2007), Haugen (2009) a syntactic nature of the process that derives manner and result expressing verbs, this indeed means that at least in some languages, the manner component is of a phrasal nature.<sup>6</sup>

That some languages clearly incorporate more than a root still does not entail that all languages behave in the given way, i.e. that there are no languages in which the manner component is contributed by a syntactically atomic and semantically opaque element such as a root. In the remaining part of this section, I present data from S-C, a language similar to Germanic and Romance languages, for which the analyses involving roots are formulated. Showing that in this language verbs also incorporate (again in a neutral sense) referential elements, or those that enter syntactic and semantic relations such as binding, at the very least proves that the incorporated element is not semantically opaque, but also implies that it is syntactically non-primitive. The restrictions on the complexity of the incorporated element, which are further discussed in the second half of this section, are probably a consequence of an interplay of diverse factors, among which those of phonotactics of the given language play the main role.

Observe the following examples of manner expressing verbs in S-C.

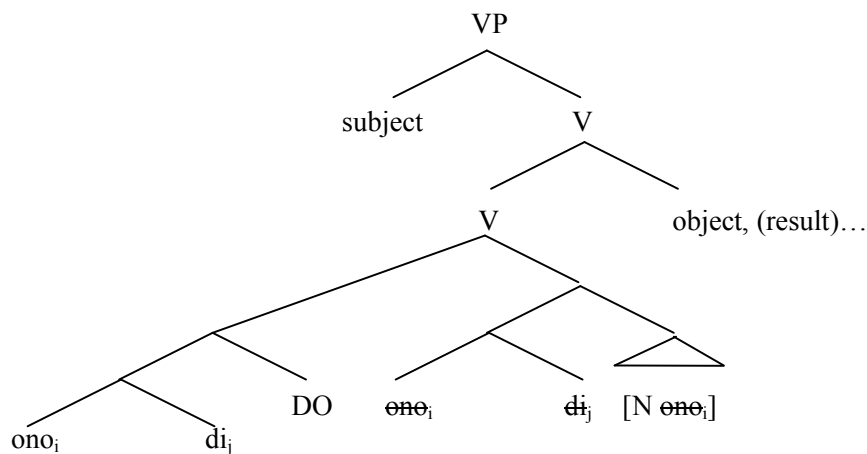
- |   |  |
|---|--|
| (23)a. svoj-at-ati X<br>PossRefl-V-Inf<br>‘behave as if X belongs to you’ | b. (raz)-ono-di-ti (se)<br>de-that.NSg-V-Inf Refl<br>w/out the prefix: ‘act in that way’<br>with the prefix: ‘have rest/fun’ |
|---|--|

The verb in (23a) incorporates an anaphor and that in (23b) contains a demonstrative. Neither of these can be considered syntactically primitive. Taking that these items express the manner component, the manner component is expressed by syntactically non-primitive elements. It is particularly interesting, in light of the analysis taking the manner component to enter the syntactic derivation as an ergative verb, that the item glossed V in the example in (23b) historically comes from the old verb *děti* ‘do’ – the closest lexical match of the light verb usually proposed to serve as the skeleton of unergative lexical verbs.

<sup>5</sup> Were it pragmatically salient, i.e. were the referent of *that side* animate, this sentence would also have a manner-expressing interpretation: he behaved in the way of that side (Peterson, p.c.), proving that complex expression denoting manner can incorporate in Kharia.

<sup>6</sup> Similar argument is made for the manner component in Korean in Zubizarreta & Oh (2007), but without aiming to present it as a universal structure. Kharia shows empirical phenomena which are very difficult or impossible to be captured by any theory that does not allow for a structurally complex manner component.

(24) the analysis of *onoditi*



The data discussed so far in this section best illustrate the advantage of Zubizarreta & Oh's (2007) model compared to the analyses assuming a syntactically primitive manner component. The complement position of the adjoined manner structure can take structurally complex syntactic items of the nominal category. This lets us account for a lot of data that implies the presence of a complex syntactic item in the position of the manner component, and at the same time restrict the derivational possibilities in the required ways. Note in this respect that, at least in S-C, the manner component is still regularly lexically contributed by an item of a maximal complexity of one word. This holds of the reflexive possessive *svoj* in (23a), involving the reflexive item *sv* and the possessive ending *-oj*, as well as of the demonstrative in (23b), which contains a stem and an inflectional suffix marking the zero values of gender and number (taking neuter to be zero gender, the gender of entities unspecified for sex, and singular as the zero number – the number value of an object without an internal countability structure). This restriction can plausibly be attributed to the two steps of incorporation involved (from the complement of the manner contributing verb to the verb, and then from this verb to the projecting verb), but probably also certain phonological restrictions are involved too.

While all the arguments presented so far were directed towards showing that the syntactic representation of the incorporated manner component in manner-expressing verbs cannot be structurally primitive, i.e. that it has to be a syntactic phrase rather than a head, the remaining part of this section takes the opposite direction. It aims to show that this cannot be an unbounded complexity, more precisely – that the manner component universally fits the size of a bare VP with an unergative interpretation. Especially interesting in this perspective are the facts presented earlier in this section, involving complex manner specifications in Kharia and S-C.

Looking at the incorporation patterns in the two languages, one can observe a strong asymmetry. While verbs incorporating the result often incorporate complex elements of different categories and degrees of complexity, manner-expressing configurations always involve only nominal expressions or clauses. Crucially, S-C allows for the incorporation of PPs, negated verbs (PolPs), or scalar expressions (DegPs) in the case of result incorporation, as shown in (25a-c), respectively, all yielding ungrammaticality when manner interpretation is attempted, as illustrated in (25d-f).

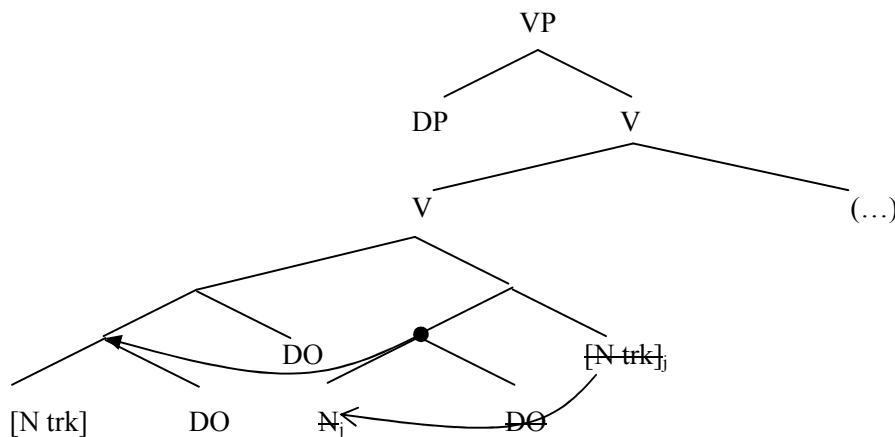
- (25) a. o-bez-glav-iti                      b. za-ne-mar-iti                      c. u-pre-podob-iti                      se  
       around-without-head-Inf        for-not-care-Inf                      in-over-adequate-Inf                      Refl  
       ‘decapitate’                      ‘abandon’                      ‘to take a fake appearance’  
       bez glave                      ne mariti                      pre-podoban  
       without head                      not care.Inf                      over-adequate  
       ‘without a/the head’                      ‘be indifferent’                      ‘highly adequate’, ‘of high virtues’
- d. \*bez-ženiti                      e. \*za-ne-mar-iti                      f. \*pre-podob-iti                      (se)  
       around-without-wife-Inf        for-not-care-Inf                      over-adequate-Inf                      Refl  
       int. ‘live without a wife’        int. ‘start not to care’                      int. ‘to show a fake appearance’  
       bez žene                      ne mariti                      pre-podoban  
       around-without-head-Inf        not care.Inf                      over-adequate  
       ‘decapitate’                      ‘be indifferent’                      ‘highly adequate’, ‘of high virtues’

These facts follow from the earlier generalizations about the unergative VP nature of the manner component. If manner is syntactically an unergative VP, of the general form [<sub>VP</sub> *do* [<sub>DP/CP</sub> ...]], such that the internal argument incorporates into the light verb *do*, then it is natural that exactly typical arguments will be expected to be seen as the lexical counterparts of the incorporated material. PPs, PolPs and DegPs all require additional structural material along the verbal projection, and are hence not able to enter the relevant configuration.

## 8. The two instances of the light verb DO

Throughout the paper, I have been implementing the analysis of Korean manner verbs from Zubizarreta & Oh (2007) to the data from S-C and English. Since these languages do not have serial verb constructions, this implementation yielded a universally and vacuously doubled light predicate DO, as illustrated in (26).

(26) Two adjacent DO heads after the incorporation via head adjunction

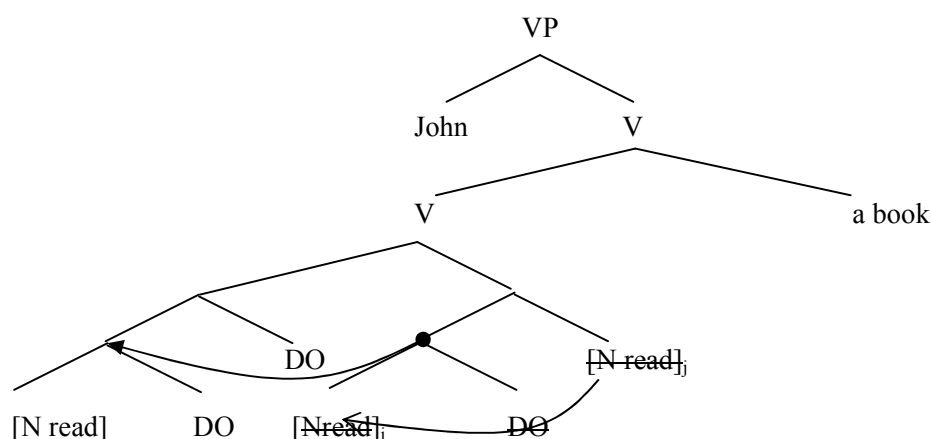


The two adjacent heads DO carry both a semantic redundancy and a possibility of a legibility problem at the interface with phonology (Richards' 2007 distinctness condition on linearization). While the latter problem might be avoided by their lack of phonological realization, this is still an undesirable property of the analysis, and one immediately wonders whether a more economical analysis can be made for the empirical issue at stake.

Let me briefly recapitulate what the main reason was to introduce this type of structure. As argued extensively in this paper, the manner component in manner expressing verbs is a complex syntactic

structure, semantically transparent, and matching best with an unergative verb's template, i.e. a verbal head taking a light, incorporating internal argument. The crucial property of the structure is thus the incorporating internal argument, not so much the second light verb DO.

(27) Two light verbs for two complements: *read*



Is there a way to simplify the analysis to including only one instance of the light verb DO, while still preserving the two arguments: the incorporated manner argument and the actual direct object? One restriction on the formation of manner verbs has been mentioned earlier in the paper (in the last paragraph of section 7), without much elaboration: both in Kharia and in S-C, languages that do incorporate complex structures, the incorporated manner component has to match maximally one single word. In the domain of result incorporation, for instance, no such restriction holds (examples in (25)). This asymmetry tells us something about the nature of manner incorporation. It needs to be preceded by a lexicalization of the manner contributing structure.

This is very close to the ideas of Zubizarreta & Oh (2007), who place the entire process within the lexical syntax, and who assume that the manner component is first independently derived (in the lexical syntax), and only then, fully derived as a complete structure, does it enter the serial construction with the projecting verb. All I need to say to explain away the problem under discussion is that after the manner component is derived, it needs to be lexicalized, by which its internal structure is made inaccessible for syntax, and only its derived meaning, together with its functional features (the V category, the unergative nature etc.) are still visible for syntactic computations. For all intents and purposes in syntax, it acts as a single head. On the one hand, a condition for this is naturally that it is one lexical item. On the other, the structural minimality and semantic opacity effects observed by the proponents of the conflation type of analyses are fully explained by the step of lexicalization. Finally the two light predicates never really appear adjacent to each other, as by the time the manner component adjoins the projecting light verb, the incorporated light verb, as well as the incorporated direct object, have both been made inaccessible by lexicalization.

This makes a very strong argument for the existence of two different domains of syntax. Whether they are treated as the lexical and the sentential syntax, or as the structure stored in the lexicon and structure productively generated, or in some other way – is irrelevant for the aims of this discussion.

And finally, the question emerges why these restrictions do not hold in Korean – i.e. why the adjunction of the manner specifying structure does not need to be preceded by the incorporation of the internal argument and lexicalization. A simple answer would be: because Korean has the serial verb construction. But while simple answers are usually the best ones, sometimes they appear to be circular. In order to keep it simple and avoid circularity, and at the same time do not go over the limits of the research questions of this paper, I would rather formulate it this way: the reason for Korean (and possibly some other language) behaving differently is closely related to the reasons why some languages have serial verb constructions and the other do not. And this is certainly not one of the questions this paper attempts to answer.

## 9. Conclusion

The paper presents a series of arguments in favor of a complex syntactic structure for the manner component in manner expressing verbs. These arguments refer to the effects of selection in respect of argument and aspectual structure, inducing of islands in configurations where these can be attested, the possibility of having overtly lexicalized structurally complex cognate counterparts, and having some of the typical structurally complex lexical items incorporated. It has also been argued that not just any type of complexity would do, but rather a restricted set of categories can be found in the stems of manner-expressing verbs – those typically appearing as arguments: nominal expressions and clauses. This is taken to support the view that manner is expressed by an unergative VP in the decomposed structure, before the argument incorporates into the light verb. This presents the analysis in Zubizarreta and Oh (2007), or for that matter any analysis assuming a manner component base generated as a VP, as an empirically much better analysis than any of the analyses assuming a syntactically primitive nature of the manner component, such as Harley (2005), Haugen (2009), Mateu (2011) or Acedo-Matellán & Mateu (2011).

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