

ARE MANNER OF SPEAKING VERBS TRULY MANNER?

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Abstract: Manner of speaking verbs (MoS) are said to induce strong island effects, in contrast with verbs of communication, which allow extraction. The main studies which tried to account for this distinction focused either on the existence of a manner component, of an added layer of meaning, or on that of a nominal element, corresponding to the resulting emitted noise. However, these intuitions according to which they simultaneously denote both manner and result would induce a violation of the Manner Result Complementarity (Levin & Rappaport 2011). What's more, a closer look at the data shows that there are at least some cases where extraction out of the complement of MoS verbs is actually allowed. The goal of this paper is to put forth an analysis which first of all accounts for the ban on extraction, but also for the variable behaviour that these verbs evince. By postulating two structurally distinct subclasses of MoS verbs, I not only manage to reconcile the two intuitions present in the literature without violating the MRC, but also explain the syntactic behaviour of these verbs with respect to extraction from the post-verbal clause.

Keywords: Manner of speaking verbs, manner verbs, result verbs, extraction, island effects

1. Introduction

Manner of speaking (henceforth MoS) verbs (*whisper, shout, mumble, groan, etc.*) are a class of verbs which have often been singled out in the literature as “exceptions” to various phenomena, including island effects. They are traditionally argued to ban extraction from their post-verbal clauses, in contrast with verbs of communication (Erteschik-Shir 1973, Stowell 1981, Snyder 1992). Briefly, some studies have tried to account for their behaviour in semantic terms, focusing on a manner component which adds another layer of meaning and therefore hinders extraction, which is argued to be possible only from the complement of a semantically lighter element (Erteschik-Shir 1973, Ambridge & Goldberg 2008). Syntactic analyses, on the other hand, focus on the existence of a nominal component in the structure of these verbs, corresponding, to some extent, to the emitted sound. In other words, not only do MoS verbs portray the manner in which a speech act is carried out, but they also give information on the resulting noise. As is well known however, lexicalizing both manner and result simultaneously would infringe the Manner Result Complementarity (henceforth MRC) put forth by Levin and Rappaport (2011). What's more, judgements regarding their behaviour differ, a variety of studies reporting instances where extraction is in fact possible (Erteschik-Shir 2005; Warnasch 2006, Stoica 2016).

The aim of this present paper is therefore two-fold: first of all, I will try to put forth a proposal which can account for the ban on extraction from the clausal complements of MoS verbs, in contrast with verbs of communication, reconciling the semantic and syntactic lines of analysis present in the literature. Secondly, in arguing in favour of two sub-classes of MoS verbs, I will also account for their variable behaviour. This way, the

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intuition according to which they denote both manner and result can be maintained, without violating the MRC.

This paper is organized as follows. Section 2 presents an overview of MoS verbs, with a focus on those properties which seem to have raised a series of issues in the literature, such as complementizer omission, double object constructions or extraction. In section 3 I argue that this apparently dual behaviour of MoS verbs can be explained if we assume two distinct sub-classes of MoS verbs and in section 4 I put forth a structural analysis which can account for both the ban on extraction and for the those cases where extraction is in fact allowed. In section 5 I present in more detail and evaluate the semantic accounts that have been put forth for MoS verbs as island inducers, while section 6 is dedicated to the syntactic approaches. A brief section 7 summarizes the main findings and draws the conclusions.

2. Manner of speaking verbs: An overview

MOS verbs were first analysed as a distinct class of verbs by Zwicky (1971), who defined them as “denoting intended acts of communication by speech and describing the physical characteristics of the speech act”. In his squib, Zwicky identifies a series of properties that these verbs have, some more transparent, others more opaque, which are said to be “systematically associated with their semantic representation”. Although the notion of classes of verbs itself has been long debated in the literature, some authors considering them to be epiphenomenal (Mufwene 1979), one cannot ignore the fact that, as Zwicky points out, if a new verb were invented, which is supposed to express “intended acts of communication by speech and describing the physical characteristics of the speech act”, it would share the whole array of properties Zwicky lists¹.

Studies that challenge the notion of verb classes argue that what should be emphasized are rather components of meaning. However, this is problematic for at least two reasons: first of all, as Levin (1993) points out, not all components of meaning are grammatically relevant. While there is a difference between verbs of communication and manner of speaking verbs from the point of view of their syntactic behaviour, no such difference occurs between verbs of loud speech and verbs of soft speech. What’s more, Levin (2015) also argues that those components of meaning which determine syntactic behaviour are the same across languages. If manner were such a component of meaning, then we would expect MoS verbs to behave similarly crosslinguistically. This is not the case: MoS verbs in English behave differently from their counterparts in other languages, such as Romanian, German, Italian or Spanish at least from the point of view of extraction from the postverbal clause and the compatibility with double object constructions (i.e. while in English MoS verbs are traditionally said to ban extraction of both arguments and adjuncts from the postverbal clause (Stowell 1981, Snyder 1992) and to be incompatible with double object constructions (Pinker et al. 1989, Pesetsky 1995), in the other languages mentioned, both structures are allowed (Stoica 2019). This is why treating manner of speaking verbs as a distinct class might not be superfluous after all.

¹ And, as a matter of fact, others that he does not list in his squib but that will be discussed in this paper.

In his characterization of MoS verbs, Zwicky (1971)² notices that these verbs are activities and are thus compatible with progressive markers, as in (1), and with imperative structures, as in (2):

- (1) She was mumbling in a corner of the room when I walked in.
- (2) Shout it from the top of your lungs and I'll believe it!

He also points out that MoS verbs can be used in a wide frame of contexts: they can be used intransitively, as illustrated in (3), or transitively. The direct object that these verbs can take can be either a DP, as shown in (4), a CP, as illustrated in (5), or a direct quotation, as in (6).

- (3) Jack groaned all night long.
- (4) Andrew whispered the secret.
- (5) The little girl whispered that she was scared.
- (6) The little girl whispered: "I'm scared."

Moreover, these verbs can be followed by a PP, either a *to* phrase or an *at* phrase. The difference between the two is that while in the former the verb is used communicatively and the message is emphasized, in the latter the verb is perceived as non-communicative, with a focus on the physical properties of the emitted sound.

- (7) John mumbled to his sister that he needed help.
- (8) John mumbled at his neighbours that they're always flooding his apartment, but nobody paid attention.

Last but not least, in English, these verbs have homophonous nouns, which can function as cognate objects.

- (9) whisper_N/whisper_V; shout_N/shout_V
- (10) John whispered a soft whisper.

Other than the properties Zwicky identified in his study, there are also some that have since been noticed. While complementizers can be omitted in the case of verbs of communication, in the case of MoS verbs they need to be overt (Stowell 1981, Snyder 1992, Doherty 2000).

- (11) a. Bill says Mary likes John.
- b. *Bill whined Mary likes John.

(examples from Stowell 1981)

² Only those that are directly relevant for the present discussion are presented here. For the entire list of properties, see Zwicky (1971).

MoS are said to differ from verbs of communication also from the point of view of their compatibility with double object constructions: while the latter can be used in such constructions, the former are traditionally said to be compatible only with prepositional object constructions (Pinker et al. 1989, Pesetsky 1995).

- (12) a. I told John the answer.
 b. *I murmured John the answer.
 (example from Pinker et al. 1989)

Last but not least, unlike verbs of communication, MoS verbs are traditionally said to ban the extraction of both arguments and adjuncts from their post-verbal clause, as seen in (13) and (14) (Stowell 1981, Snyder 1992, Warnasch 2006).

- (13) a. What did she say that Fred had done?
 b. *What did she simper that Fred had done?
 (example from Erteschik-Shir 2005)
- (14) a. With which binoculars did Ron say that Frank watched Liliana?
 b. *With which binoculars did Ron whisper that Frank watched Liliana?
 (example from Warnasch 2006)

However, a closer look at the data reveals that judgements differ for all three phenomena mentioned above. While the complementizer is traditionally said to be necessarily overt, Dor (2005) reports cases where it can be null even in the case of MoS verbs.

- (15) He whispered John was an undercover agent.
 (example from Dor 2005).

Bresnan & Nikitina (2003) argue that, while unlikely, MoS verbs can in fact be found in DOC, especially if the Goal is a pronoun.

- (16) Shooting the Urasian a surprised look, she muttered him a hurried apology as well before skirting down the hall.
 (example from Bresnan & Nikitina 2003)

Moreover, in the case of island effects, while there seems to be some consensus with respect to adjunct extraction, the grammaticality of argument extraction is still a matter of debate: while some studies consider it ungrammatical, as seen in (13b) above, others view it as simply degraded while others still consider it fully acceptable.

- (17) a. ?What did Truman Capote lips that he'd do?
 (example from Erteschik-Shir 1973)
 b. Who are you whining that you don't like <who>?
 (example from Stowell 1981)

Also, even adjunct extraction seems to be acceptable when the verb is used communicatively (Stoica 2016):

- (18) a. ?Towards which gate did the police officer shout to his colleague that the smuggler ran?
 b. *Towards which gate did the police officer shout at his colleague that the smuggler ran?

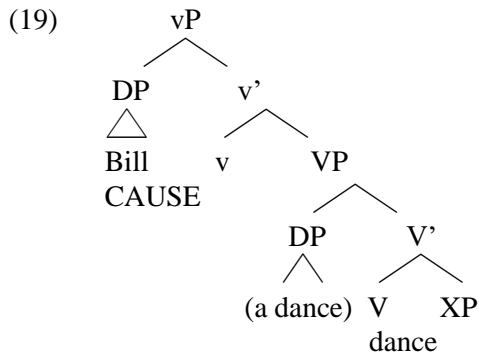
In the next two sections I will put forth an account which seems to explain both the intra-speaker variation, and the crosslinguistic one, all without violating the MRC. In addition to that, as will be seen in section 5 and section 6, it manages to do so while reconciling some of the lines of reasoning put forth in the literature with respect to MoS verbs.

3. Are MoS verbs truly manner?

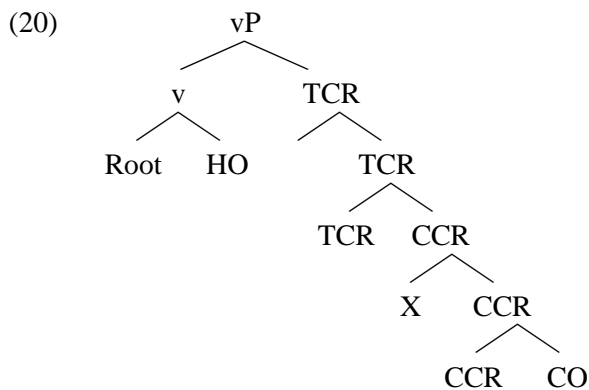
As will be detailed later in this paper, MoS verbs have mainly been analysed from two distinct angles: on the one hand, the semantic route focuses on the importance of a manner component, one which makes the verb “heavier” in some sense, from the point of view of its meaning, and therefore opaque to a variety of phenomena (Erteschik-Shir 1973, Ambridge & Goldberg 2008, Kogusuri 2009). On the other hand, syntactic accounts turn this “heaviness” into a structural element, postulating the existence of a nominal component in the structure of these verbs (Stowell 1981, Snyder 1992). As will be seen in section 6, this nominal component corresponds to an emitted sound. However appealing both of these lines of analysis might be, if both were taken forward, it would potentially mean that MoS verbs violate the MRC, denoting both manner and results simultaneously. In what follows I will try to propose a solution for this apparent violation.

Going back to the beginning, recall that Zwicky (1971) defines MoS verbs as “verbs referring to intended acts of communication by speech **and** describing the physical characteristics of the speech act” [my emphasis]. These two components of the definition correspond to the two intuitions outlined above. Indeed, manner of speaking verbs show both the manner in which a speech act is carried out, and they contain information on the sound which was emitted. In other words, focusing on the second part of the definition, MoS verbs refer to the creation of a sound, whose physical properties are then characterized.

This idea is not a new one. A number of studies in the literature (Kural 2002, Puigdollers 2009, Gallego 2012) argue that unergative verbs (e.g. *dance*, *laugh*, *whisper*) should be analyzed on a par with verbs of creation. For example, looking at verbs such as *dance*, Kural (2002) puts forth the structure below, arguing that “the lower VP contains the root of the verb of creation and the cognate object that denotes the entity that is being created, in either the implicit or the explicit form”.



Puigdollers (2009) too argues that verbs which take cognate objects should be analyzed as verbs of creation, claiming that English cognate objects “are linked to some subevent of a change of state” adding “an eventive layer to the unergative verbal structure.” and putting forth the structure below, which contains a functional head as a Terminal Coincidence Relation, denoting an event of change of location or, in these cases, of change of state, whose complement is precisely the cognate object.



Other analyses argue however that the cognate object does not surface as the complement of a verb, but rather in a specifier position. Thus, for a sentence such as the one in (21a) below, Gallego (2012) proposes the structure in (21b):

- (21) a. Maria cantó una canción
 Maria sang a song
 ‘Maria sang a song.’
- b.
-
- ```

graph TD
 VP --> V[V]
 VP --> cantar[V√cantar]
 V --> V[V]
 V --> cantar[V√cantar]
 cantar --> una_cancion["una canción"]
 cantar --> cantar[V√cantar]

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Importantly for the analysis that I will put forth, Gallego (2012) argues that a part-whole relation holds between the root and the cogante object, on a par with the possessor-possessee relation that Uriagereka proposes for clitic doubling.

In English, MoS verbs are unergatives and can take homophonous cognate objects, as can be seen in (22), so analyzing them on a par with verbs of creation would not be farfetched:

- (22) a. John screamed.  
b. John screamed a tragic scream.

However, creating a sound in such a context is not equal to creating a cake, in *bake a cake* or a house in *build a house*. In the literature, verbs of creation have been divided into at least two categories (see Levinson 2007 and references therein, Jezek 2014): verbs of external creation, where what surfaces as the direct object functions as the entity that was actually created, and verbs of internal creation, where, following Dowty (1991) “something is created, but not literally the thing named by the object DP. Rather, a representation of that object is created, and the object itself does not undergo any change”. Dowty further argues that the entity that is brought into existence can either be concrete (*paint a landscape, translate a book, braid your hair*), or abstract (*prove a theorem, sing a sonata*).

Taking into account the analyses presented so far, I argue that MoS verbs come in two guises: on the one hand, they are proper manner verbs, expressing an act of communication carried out in a particular manner, but they can also be analyzed on a par with verbs of internal creation, where what is emphasized is the sound, together with its physical properties.

A sentence such as the one in (23) below could, in principle, have two paraphrases:

- (23) Mary whispered the secret.  
i. Mary told the secret, in a whispered manner.  
ii. Mary uttered a whisper, which was a secret.

At first sight, this would seem to challenge the MRC, put forth by Levin & Rappaport Hovav (2011), according to which manner and result are in complementary distribution, a verb being able to lexicalize only one of the two components at a time. However, following Mateu & Acedo-Matellán (2012), I argue that the uses of verbs which seem to lexicalize both constants (in this cases the use of MoS verbs as manner verbs or verbs of internal creation respectively) differ not only in terms of their interpretation, but also structurally. In the next section I will put forth a structural analysis of MoS verbs which could account not only for the ban on extraction, but also for the variable behaviour these verbs evince.

#### 4. The structure of MoS verbs

Before I outline my proposal for MoS verbs, recall two important observations that will become relevant shortly: first of all, MoS verbs have been included in the class of

denominal verbs, alongside verbs such as *dance*, *laugh*, *braid*, *foal*, *hammer*, etc. (Hale & Keyser 1993, 2002). At least at first sight, the structure of denominal verbs in general seems to have been a matter of great debate among researchers ever since the advent of Distributed Morphology (Hale & Marantz 1993 and subsequent work). While some argued that in such cases the root is simply a complement of the verb (Arad 2003), others that it is adjoined to it (Marantz 2005), while others still postulate the root to be the head of a small clause (Harley 2014) – the question as to how these verbs are in fact formed has not yet received a uniform answer. However, the discussion became even more complex (and possibly more revealing), as linguists started to distinguish between various subclasses of denominal verbs and to attribute to them distinct structures, as will be seen shortly<sup>3</sup>.

Recall also that the challenge regarding MoS verbs is not just to provide one structure which could account for their behaviour, but rather two – one corresponding to proper manner verbs, and one corresponding to MoS verbs as verbs of internal creation.

The idea according to which there could be more than one structure for seemingly related verbs is not a new one. One such example that has been widely discussed in the literature is that of instrument verbs, such as *hammer* and *tape*. In her analysis of denominal verbs, Arad (2003) follows Kiparsky (1982) that, in the case of zero-derived pairs, semantic cues are necessary in order to establish the direction of the process of derivation. More specifically, she claims that words in general can be either root derived, in which case the root simply merges with one categorizer, or word-derived, namely they can first merge with a categorizer and then further merge with another categorizer. The question for denominal verbs is therefore whether they are root derived or noun derived. The answer seems to be *both*, but in different configurations.

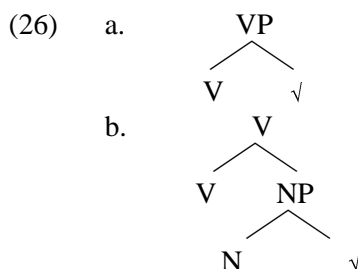
More specifically, Arad (2003) argues that in the case of *hammer*, the verb does not entail a strict relation to its corresponding noun, while a verb such as *tape* necessarily entails the existence of the noun *tape* as well, as can be seen in (24) and (25) respectively:

(24) He hammered the nail with a rock.

(25) \*She taped the pictures to the wall with pushpins.

(examples from Kiparsky 1982: 21)

Therefore, Arad argues that hammer-verbs are derived directly from the root, while in the case of tape-verbs, the root first merges into a nominalizer and then further merges with the verb, as in (26a) and (26b):

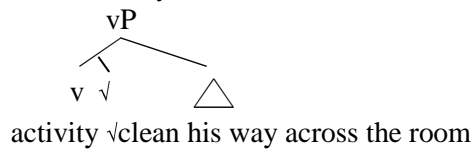


<sup>3</sup> For several examples of different subclasses of denominals see Harley (2005), Marantz (2005), Mateu & Acedo-Matellán (2012), among others.

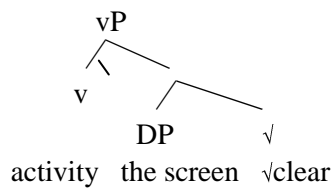


tree: it will either be the complement of the verb to which the root has adjoined, or it will occupy the subject position of the small clause.

- (29) clean his way across the room

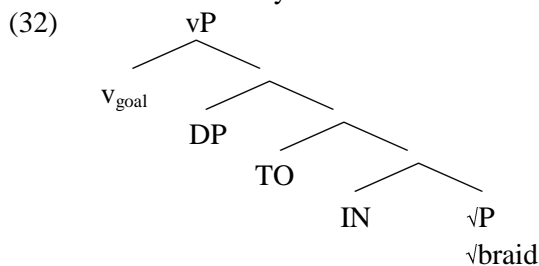


- (30) clear the screen



Notice that Marantz argues that verbs of creation pattern with (29). However, also recall that in the literature there is a distinction between verbs of explicit creation (e.g. *bake a cake*) and verbs of implicit creation (e.g. *braid your hair*). According to Levinson (2007), these verbs differ not only from the point of view of their interpretation, but also structurally. Analyzing verbs such as *braid*, Levinson follows Harley's analysis of location and locatum verbs (Harley 2005) and argues that the relation between the verb and the noun is mediated by another head, "somewhat like a preposition", and she proposes the structure in (32).

- (31) a. The stylist braided her hair.  
b. The stylist made her hair into a braid.

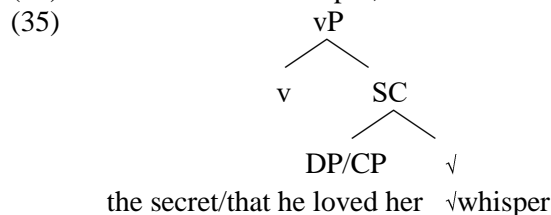


While Levinson's account for verbs of internal creation can readily account for verbs such as *braid*, I believe it cannot explain the behaviour of **all** verbs of implicit creation. A sentence such as the one in (33a) cannot have the interpretation in (33b):

- (33) a. John whispered a secret.  
b. \*John made the secret into a whisper.

However, I propose that her intuition should be maintained: there is a structural difference between verbs of explicit creation and verbs of implicit creation. In the case of MoS verbs, however, I argue that the relation between the root and the verbal head is mediated by an nP, in a similar vein to Arad's analysis of *tape*-like verb. Moreover, regarding the relation between the verb and what surfaces as the direct object, I suggest that, in a sentence such as (33a), the relation between the two is one of predication, yielding the interpretation in (34) and having the representation in (35):

(34) John uttered a whisper, which was a secret.

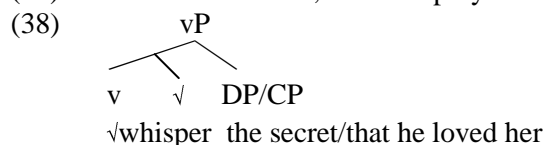


It is precisely because what surfaces as the direct object actually functions as the subject of this small clause that extraction is banned, in a sentence such as the one in (36).

- (36) a. John shouted that he saw Mary.  
 b. \*Who did John whisper that he saw?

On the other hand, when MoS verbs are interpreted as strictly manner verbs, the root simply merges into the verb as a modifier and what surfaces as the direct object will function as the argument of the verb. In such cases, there is no structural reason for extraction to be banned and, to some extent, MoS verbs behave similarly to verbs of communication.

(37) John said a secret, in a whispery manner.



(39) What did John whisper that he should have done?

Such an analysis has three main advantages: on the one hand, it accounts for the variation in judgements presented in section 2. Some MoS verbs, those that are verbs of internal creation do indeed ban extraction from their post-verbal clause, but others, those that are proper manner verbs, do not. Second of all, in proposing two distinct types of manner of speaking verbs, we can capture the intuitions present in the very definition of MoS verbs, according to which they denote both the manner in which something is said and the existence of the emitted sound, without violating the MRC. Last, but by no means least, it manages to reconcile two main lines of analysis which have been presented in the

literature: the semantic one, which emphasized the importance of the manner component, and the syntactic one, which focused on a nominal element in their structure.

In the last two sections of this paper I would like to briefly revisit these two lines of analysis and show why these intuitions needed to be carried forward in order to obtain a desirable result. In addition to that, I will highlight some predictions that these analyses make that still need to be dealt with in further research.

## 5. MoS verbs as island inducers: Semantic accounts

### 5.1 MoS verbs and semantic dominance

One of the first studies that tried to account for the behaviour of MoS verbs with respect to extraction was the one put forth by Erteschik-Shir (1973). The author argues that extraction is possible only from semantically dominant clauses. Because MoS verbs contain information not only on the message, but also on the manner in which this message was sent, in contrast with verbs of communication, they will be seen as semantically heavier and, consequently, semantically dominant. This turns the post-verbal clause into an element that is non-dominant and therefore extraction is banned.

What is however interesting about Erteschik-Shir's analysis is that she acknowledges cases in which judgements regarding the grammaticality of extraction out of the post-verbal clause of MoS verbs differ. More specifically, while she views a sentence such as the one in (40a) as being grammatical, (40b) or (40c) are considered to be degraded or even ungrammatical:

- (40) a. Who did Bill mutter that he doesn't like?  
(example from Stowell 1981)
- b. ? What did she purr that Fred had given her?
- c. ?? What did Abehsera ululate that macrobiotic cooking would do for you?  
(examples from Erteschik-Shir 2005)

For Erteschik-Shir, the acceptability of (at least) argument extraction is questionable from the complements of those MoS verbs „that describe more or less precisely the manner in which something is being said (p. 84), such as *holler, mumble, mutter, roar, scream, shout* but it is “bad” from the complements of verbs like *coo, croak, jeer, lisp, rumble, ululate*, which do not only describe the manner of saying”, but are also rare in the context”.

Frequency is therefore one factor which can improve the acceptability of extraction. Speaker-hearer knowledge is yet another one. Looking at an example such as the one in (41), which contains the verb *lisp*, originally included in the “bad” list, Erteschik-Shir (1973) argues that if the verb is used referring to someone who is known to lisp, the acceptability increases (as it is known that Truman Capote used to lisp).

- (41) ?What did Truman Capote lisp that he'd do?  
(example from Erteschik-Shir 1973)

## 5.2 MoS verbs and focus

A similar intuition is shared by Ambridge & Goldberg (2008), who argue that extraction is only possible with elements which are in the focus domain. As seen above, MoS verbs are considered to be more complex, heavier, so that the post-verbal clause will be seen, by comparison, as being back-grounded. In such cases, extraction is naturally banned.

Evidence in favour of this proposal comes from the realm of negation. In a sentence such as the one in (42), it is not the proposition which is negated, but rather the verb itself.

- (42) She didn't mumble that he left.  
 Natural interpretation: She didn't *mumble* the content<sup>4</sup>.  
 (example from Ambridge & Goldberg 2008)

Ambridge & Goldberg identify a context where negation can in fact influence the interpretation of the post-verbal clause, namely when the MoS verb can be taken for granted, such as a whisper-down-the-alley game. In a context such as the one below, because the propositional content is emphasized and the verb is clearly used communicatively, extraction is much improved.

- (43) a. I didn't whisper that the horse was green.  
 Natural interpretation: That the horse was green is not what I whispered.  
 (e.g. I whispered that the house was clean.)  
 b. What did she whisper that the house was?  
 (example from Ambridge & Goldberg 2008)

Therefore, while normally MoS verbs are semantically more complex and the proposition from the clausal complement is interpreted as a back-grounded element, contexts can be construed in such a way that the focus is on the content of the CP, allowing extraction.

## 5.3 MoS verbs and the manner component

Another explanation for the behaviour of MoS verbs is put forth by Kogusuri (2009). The author argues that the variable behaviour of MoS verbs can be justified on account of lexical semantics. Briefly, he states that these verbs have two components: one which is shared with verbs of communication and which refers to the speech act itself and one which is typical of MoS verbs, corresponding to the emitted sound. A verb such as *whisper* would then have the structure below:

- (44) *whisper* [x SAY <WHISPER> Y]

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<sup>4</sup> But she shouted it [my clarification].

According to Kogusuri, it is precisely this manner component which is responsible for the distinct syntactic behaviour (i.e. extraction from the post-verbal clause or complementizer omission) that these verbs evince.

However, Kogusuri acknowledges several instances where MoS verbs behave on a par with verbs of communication. For instance, he argues that if information on the manner in which the message was sent has been previously given in the discourse, then the complementizer can be omitted, as in (45):

- (45) a. Using a very serious whisper, what did John whisper to you that Clark was?  
 b. Using a very serious whisper, John whispered to me Clark was Superman.

(examples from Kogusuri 2009)

While Kogusuri's (2009) analysis seems to correctly predict not only the ban on extraction and complementizer omission, but also the variable behaviour these verbs evince, there are several problems which his account, as well as other semantic proposals, seems to face.

First of all, such a line of analysis would predict that MoS verbs behave similarly crosslinguistically. According to Levin & Rappaport (2015), languages use "similar types of conceptual components". If MoS verbs have two components and if it is the manner component which is responsible for the ban on the syntactic phenomena under discussion, MoS verbs should, for instance, ban extraction from their postverbal clause across languages. Examples such as the one in (46a) and (46b) show that in Romanian extraction of both arguments and adjuncts is possible<sup>5</sup>:

- (46) a. Ce a șoptit că citea Maria?  
 what has whispered that read Maria  
 'What did she whisper that Maria read?'  
 b. Unde a șoptit că vrea să locuiască?  
 where has whispered that wants SĂ live  
 'Where did she whisper that she wanted to live?'

One more argument that Kogusuri brings in favour of the manner component analysis is that, when modified by manner adverbials, even verbs of communication ban extraction and complementizer omission, behaving therefore on a par with MoS verbs:

- (47) a. \*What did he say loudly that John would buy <what>?  
 b. \*John said very loudly Mary is a genius.

(examples from Kogusuri 2009)

<sup>5</sup> For a description of MoS verbs in Romanian, Italian and German, as well as for preliminary data coming from Spanish, Polish, Lithuanian and Romanian-Hungarian see Stoica (2019).

Kogusuri further states that if any other type of adverbial intervened between the verb and the complement, extraction would be possible:

- (48) They said last year the economy would be better by now.  
(example from Kogusuri 2009)

There are two further issues that these examples raise: first of all, a sentence such as the one in (47b) is in fact grammatical in English. The presence of intervening material between the verb in the matrix and the clausal complement, as is the case in (47b), favours the use of an overt complementizer, it does not syntactically require it (see Cornilescu 2003 and references therein). Moreover, the semantics of the intervening material is immaterial in such cases; any intervening material will favour *that* retention. Sentences such as the ones in (47a) could be ruled out simply because they represent an instance of extraction out of a shifted clause.

In addition to that, the issue of crosslinguistic variation still holds: examples such as the one in (49) show that, in Romanian, verbs of communication allow extraction irrespective of the intervening material between the verbs and the complement:

- (49) a. Ce ți- a spus Ion că o să citească Vasile?  
what you has said Ion that will read Vasile?  
'What did Ion tell you that Vasile would read?'
- b. Ce ți- a spus Ion **în șoaptă** că o să citească Vasile?  
what you has said Ion in whisper that will read Vasile  
'What did Ion tell you whispering that Vasile would read?'
- c. Ce ți- a spus Ion **pe balcon** că o să citească Vasile?  
what you has said Ion on balcony that will read Vasile  
'What did you tell you on the balcony that Vasile would read?'
- d. Ce ți- a spus Ion **ieri** că o să citească Vasile?  
what you has said Ion yesterday that will read Vasile  
'What did Ion tell you yesterday that Vasile would read?'

As mentioned, these analyses capture very well the first part of Zwicky's definition of MoS verbs, namely that they have a manner component, but there are at least two aspects which make an exclusively semantic analysis undesirable.

First of all, it seems to raise the issue of cross-linguistic variation – if we could account for their behaviour exclusively in semantic terms, we should see the same type of behaviour cross-linguistically. However, as mentioned above, languages such as Romanian<sup>6</sup> allow extraction of both arguments and adjuncts from the post-verbal clause and this seems to be the case for other languages as well, such as Spanish, Italian, Romanian-Hungarian, some varieties of German, etc (for examples, see Stoica 2019). Naturally, a more extensive analysis of such verbs in these languages is needed in order to reveal more on their structure.

<sup>6</sup> For an account for this cross-linguistic variation, see Stoica (2019).

The second short-coming of these analyses is the fact that they do not make any reference to the noise which is emitted, which, as seen, is an important aspect and truly distinguishes them from other verbs of communication.

One more aspect that is worth mentioning and that needs further investigation is Erteschik-Shir's observation according to which frequency plays an important role in the behaviour of these verbs. Remember that she claims that when more frequent verbs are used, extraction is more readily acceptable. This idea is of particular interest especially in the light of recent studies on extraction (Featherson 2005), which argue that factors different from the syntactic ones (e.g. processing factors, frequency, etc.) influence the availability of extraction. I leave this for further research.

Before concluding this paper, let us briefly go over some of the syntactic accounts put forth and see in what way their reasoning can raise further questions.

## 6. MoS verbs as island inducers: Syntactic accounts

As previously mentioned, one common feature of the syntactic accounts proposed is identifying a nominal element in the structure of MoS verbs, corresponding to the emitted sound. As was seen, this was a crucial component of my analysis as well. The main difference is that, while these analyses argue that extraction is banned on account of the CP being either an adjunct or an appositive, my proposal is that in fact it occupies a subject position. In this section I will present some of these analyses with respect to extraction from the post-verbal clause of MoS verbs.

### 6.1 MoS verbs and the adjunct account

Unlike the semantic accounts presented above, many of the syntactic analyses put forth regarding MoS verbs and island effects consider the post-verbal clause to be an adjunct.

Arguments in favour of such a proposal would be the fact that, unlike the case of verbs of communication, with MoS verbs the CP is optional, as can be seen in (50) below:

- (50) a. Mary screamed.  
b. \*Mary said.

The impossibility of the CP to undergo passivization has been taken as another hallmark of their adjunct status:

- (51) a. It is said that adjuncts are islands.  
b. \* It was shouted by all the students that the test was too difficult.

The same intuition holds for topicalization as well, as in (52), where only the CP following a verb of communication can be moved:

- (52) a. That Ingrid was upset, John knew.  
 b. \*That he was scared, Ben shouted.

If the CP is an adjunct, then extraction is banned on account of the Empty Category Principle. Stowell (1981) argues that in a sentence such as the one in (53), the complementizer cannot theta-govern the trace, nor antecedent govern it. The trace being left ungoverned, yields a violation of the ECP.

- (53) \*Who are you whining <who> has come?

(example from Stowell 1981)

Similarly to Zwicky's intuition, Stowell argues that in the case of MoS verbs what is emphasized is not the speech act itself, but rather the noise emitted and its physical properties:

One wonders whether some principle of core grammar might be involved. Notice that these verbs all intrinsically identify some aspect of the physical nature of their thematic objects. Thus "whisper" means "utter a whisper-like sound", "shout" means "to utter a loud noise", etc. Suppose now that this property of identifying the nature of the thematic object within the lexical specification of the verb has the effect of absorbing the thematic object position, making it unavailable in principle for strict subcategorization. This would imply that the clausal complements of non-bridge verbs are not actually assigned a thematic role in the conventional sense, but rather are interpreted as adjuncts to the entire VP (Stowell 1981: 354).

The author then puts forth an account where a sentence such as the one in (54a) should have the representation in (54b).

- (54) a. John shouted to leave.  
 b. John uttered a shout, conveying the message to leave.

If this analysis were on the right track, the ban on extraction would readily follow from the adjunct status of the CP. However, there are at least two issues which arise: first of all, the idea according to which the CP is an adjunct has in fact been challenged in the literature. While the CP is indeed optional, there are also cases where MoS verbs take DP complements, as was seen above. What's more, when used transitively, passivization is possible, which shows that the DP is "a true argument" of the verb. According to Kogusuri (2009: 191), when the Agent *by*-phrase is omitted, passivization of the object of MoS verbs is fully acceptable:

- (55) a. John whispered a message to his accomplice.  
 b. We have all heard of the party game where a message is whispered from one person to the next.

(example taken from BNC)

Secondly, this syntactic account does not address those instances where extraction is indeed allowed. We saw however that this issue can be resolved if we postulate two types of MoS verbs.

Still, what is extremely relevant and which ended up being a valuable observation in my analysis as well is Stowell's intuition that the focus on the physical properties of the emitted sound is not just a matter of interpretation, but can also be syntactically relevant and formalized; in his words, "some *principle of core grammar* might be involved" (Stowell 1981: 364).

## 6.2 MoS verbs and the appositive analysis

Another analysis which tries to account for the behaviour of MoS verbs in structural terms is that put forth by Snyder (1992). Briefly, he argues that, in general, CPs can be either arguments, adjuncts or appositives. This relation will determine the availability of certain phenomena, extraction for example being allowed only when the CP is an argument, namely when we can infer a propositional attitude that the speaker or the subject show in relation with the content of the CP.

Sharing Stowell's intuition, Snyder (1992: 3) argues that there is a nominal element in the structure of MoS verbs, corresponding to the emitted sound, so a verb such as *grunt* would have the structure in (56) below:

(56) [V (make)) ] [ NP (a) [NP grunt]]

In such a case, the CP merely expresses the "informational content of the NP, independent of anyone's propositional attitude towards this content", yielding a relation of apposition with the verb.

Snyder's (1992) analysis can seemingly explain the ban on extraction from the clausal complement of a MoS verb on account of the Complex NP Constraint (Ross 1967). However, this proposal seems to be questioned by the empirical data discussed by Ross himself. Briefly, when discussing complementizer omission, Ross (1967) argues that constructions of the type *v + N* behave, in fact, on a par with lexical verbs, not with lexical verbs followed by nominals.

- (57) a. I am making the claim ?(that) the company squandered the money.  
 b. I have hopes (that) the company will squander the money.  
 c. I have a feeling (that) the company will squander the money.  
 d. I made a proposal \*(that) we squander the money.

(examples from Ross 1967)

If this were on the right track, then an analysis on the lines of Snyder (1992) should, in fact, predict that MoS verbs behave on a par with simple verbs with respect to the Complex NP Constraint, contrary to the empirical data outlined above, failing thus to explain the ban on extraction from the postverbal clause.

Briefly, while the analyses above try to account for the ban on extraction from the post-verbal clause of an MoS verb, their variable behaviour was not unaccounted for. We saw however that postulating the existence of two classes of MoS verbs solves this issue. Still, the intuition that both Stowell and Snyder share, that there is some type of nominal element in the structure of these verbs, corresponding to the emitted noise, proved to be crucial for my own proposal.

## 7. Conclusions

As was seen in the beginning of this paper, MoS verbs (usually) induce strong island effects. The main goal of this paper was to account for their behaviour, while trying to reconcile two lines of analyses present in the literature: on the one hand, those that take the semantic route argue in favour of a manner component, an added layer of meaning which causes MoS verbs to be heavier than verbs of communication, while syntacticians claim that what blocks extraction is a nominal element in the structure of these verbs, corresponding to the emitted sound.

At first sight, these two views seem to contradict the MRC put forth by Levin and Rappaport, as the same verb should not be able to lexicalize both meaning and result. I argue that this apparent violation can be avoided if we view MoS verbs as a class with two subclasses: on the one hand, they are proper manner verbs (*whisper* → say something in a whispery manner), but they can also be verbs of internal creation (*whisper* → utter a whisper). I further argued that these two subclasses have, in fact, different structures: when MoS verbs are proper manner verbs, the root is simply adjoined to the verb and what surfaces as the direct object occupies in fact a complement position; in such cases, extraction is freely allowed. On the other hand, when they are verbs of internal creation, the root functions as the head of a small clause, leaving what surfaces as the direct object (be it a DP or a CP) in the subject position of this small clause, a position from which extraction is indeed banned. This way, the variable grammaticality judgements often found in the literature can be straightforwardly accounted for, not on the basis of contexts or pragmatics, but rather in a structural fashion.

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