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Article

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# Exploring occurrences of verb phrase ellipsis in journalistic discourse and in a sample of modern American fiction

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#### **Abstract**

Verb Phrase Ellipsis (VPE) is a prevailing syntactic phenomenon, yet only a few studies have focused on its occurrences and most of these have been concerned with only a single genre. This study compares two genres: journalistic discourse and modern American fiction, in a sample size of approximately 260,000 words, in terms of their uses of VPE. On the assumption that there is such a thing as differential typological and ontological resources of syntax, these two genres are expected to be constituted by sufficiently distinct syntactic resources. VPE was found to occur three times more frequently in modern American fiction than in journalistic discourse. This suggests that VPE in modern American fiction is driven by such factors as the heightening of emotion, engaging readers and challenging readers' minds. However, VPE is less common in journalistic discourse, the ellipsis being considered bad form for journalists. Nonetheless, this marginal use can still also elicit emotional responses from readers and be used as a deterrent to face-threatening behavior.

KEYWORDS: ELLIPSIS; JOURNALISTIC DISCOURSE; MODERN AMERICAN FICTION; VP ELLIPSIS

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#### 1 Introduction

Ellipsis is a fundamental phenomenon in comprehending any written or spoken utterance, requiring 're-evaluation of recently processed constituents, which often necessitates retrieval of information about the elided constituent from memory' (Martin and McElre 2009: 1). Since the missing constituent's meaning must be recovered using the information provided by the attendant sentence or discourse context, elliptical gaps pose a challenge to the human sentence comprehension system (Boxell *et al.* 2017: 555). Against this backdrop, research is needed to account for these challenges in different text types. Ellipsis is, in fact, a central syntactic force that accounts for underlying principles and implications elsewhere in the linguistics spectrum – for example, in semantics, pragmatics, reference, inference, salience, cognitive status and discourse coherence (Kehler and Ward 2004; Hadidi 2016).

This study looks at verb phrase ellipsis (VPE) in journalistic discourse and modern American fiction using Bos and Spenader's (2011) model, which is comprehensive for our purposes. We compared these two genres because they lie on opposite ends of a continuum. Journalistic discourse presents itself as communicating factual information and conveying an 'objective' truth, whereas fiction is subjective and imaginative. In this article, we aimed to answer the following question: What are the distinctions and implications of the use of verb phrase ellipsis in two different genres, namely journalistic discourse and modern American fiction?

The paper begins with a literature review covering discussing ellipsis and verb phrase ellipsis, followed by a comparison of three major studies in this field. The method used to conduct the present study is then described. Next, to render the chosen framework more tangible, the analyzed data and the framework-based examples are presented. The findings are then interpreted, and potential discussion topics suggested.

#### 2 Literature review

Ellipsis is one of the five cohesive devices classified by Halliday and Hasan (1976: 4) which has impact on the cohesion and coherence of discourse. As Ward and Birner (2004: 153) observe, 'one of the primary factors contributing to the coherence of a discourse is the existence of informational links between the current utterance and the prior context'. In ellipsis, too, we should make relations between the ellipsis site and its possible antecedent in the context. Nielsen (2005: 27) defines ellipsis as 'an anaphoric process where a syntactic constituent is left unexpressed but can be reconstructed from an antecedent in the context'.

Bublitz (2011: 39) distinguishes three kinds of ellipsis: nominal ellipsis, clausal ellipsis and verb phrase ellipsis (VPE). VPE is a term evoked in relation

to instances of anaphora in which a missing predicate can find an antecedent in the surrounding discourse (Johnson 2001). Putting it differently, Jacobson (2008, cited in Boxell *et al.* 2017: 575) proposed that 'VPE is actually transitive verb ellipsis, with the auxiliary functioning like a free pronoun in search for an antecedent'; this antecedent, Jacobson explains, is the missing verb or verbal complex's meaning, which can be discerned from the discourse. Therefore, analyzing VPE requires the use of contextual information to be able to interpret the incomplete clause of a sentence by identifying the antecedent verb phrase. In order to interpret the elided VP, we need to identify its antecedent.

There are numerous debates and angles on the recoverability of ellipsis. Johnson (2008: 1) refers to ellipsis as 'the consummate crowd-pleaser'. Different scholars interpret it differently in their attempts to resolve the missing elements. For instance, for anaphora scholars, ellipsis is a context-sensitive component; like a pronoun, it gets its meaning from context (Johnson 2008: 1). For the syntactician, the elided material needs to be syntactically recovered (Nielsen 2005; Poppels and Kehler 2017). Those advocating for a structural identity constraint argue that structural nonidentity can lead to degradation (Kim and Runner 2018: 3–4). In fact, the syntactic approach has a tendency to under-generate, ignoring confirmed cases in which an omitted part lacks a grammatically suitable antecedent (Frazier and Clifton 2006: 3).

Other scholars have claimed that elided VPs have no structural substitutions and, instead, that they take their antecedents from semantically matched elements (Kim and Runner 2018: 4). The semantic approach focuses on recovering meaning rather than copying a syntactic element (Poppels and Kehler 2017; Hardt 1997). This approach appears to over-generate, as it assigns meaning to ellipsis in the absence of a formally or syntactically appropriate antecedent (Frazier and Clifton 2006: 3).

Another approach is the composite model, which maintains that neither a syntactic nor a semantic approach alone can account for elided material and its meaning, and which proposes a combination of syntactic-semantic ellipsis recovery (Kehler and Ward 2004). In fact, in this approach, the syntactic combinatory operations 'build' (i.e., define as well-formed) surface syntactic expressions, while the semantics works in tandem to supply a model-theoretic interpretation for each expression as it is 'built' in the syntax (Jacobson 2008: 30).

Scholars therefore evidently have varying perspectives on the recoverability of ellipsis. We assume that retrieving information is far more complicated than categorizing it into one of the above-mentioned groups. Many factors, such as culture, being a native or non-native speaker and personality styles could play a role, necessitating more research to confirm its validity. For instance, Martin and McElree (2009) assume that the meaning of the missing component is

retrieved directly from the discourse context, with no linguistic structure recovered at the gap site, while Boxell *et al.* (2017) find that native speakers tend to resolve antecedent-contained ellipsis syntactically, whereas non-native speakers are more reliant on semantic resolution.

# 2.1 Previous corpus-based studies of VPE

Three earlier studies have annotated corpus examples of VPE to develop automatic resolution systems: those of Hardt (1997), Nielsen (2005) and Bos and Spenader (2011). We briefly review these here.

Hardt (1997) used two methods to detect VPE automatically in sections of the *Wall Street Journal* (*WSJ*) and the Brown corpus from the Penn Treebank, spanning 4,799,845 words. He automatically found 644 examples of VPE in the parsed corpora of Penn Treebank and then manually annotated their source clauses, finding 260 instances of VPE in the *WSJ* and 384 in the Brown corpus. In the *WSJ* corpus, VPEs were located by searching for 'empty VP' patterns in the gold-standard parse trees. However, locating VPE in the Brown section of Treebank was detected by searching for sentences with an auxiliary verb but no main verb. He manually analyzed 155,000 words, 3.2% of Treebank, to assess identification criteria, finding that 27 examples went unnoticed. Based on this, one can assume that, all in all, about 810 sentences may have gone unnoticed in Hardt's model (Hardt 1997; Bos and Spenader 2011: 466).

Nielsen (2005) manually annotated VPE on three corpora: fourteen sections of the British National Corpus (BNC), seven sections of the *WSJ* and eight sections of the Brown Corpus, in total spanning a corpus size of 1,124,000 words. He found 1500 instances of VPE distributed differently between the *WSJ* texts and the BNC and Brown texts, with one VPE for every 77 sentences in the *WSJ* texts, which was approximately half the rate of VPE in the BNC and Brown texts (Nielson 2005; Bos and Spenader 2011: 466–467).

The study by Bos and Spenader (2011) concerns semi-automatic annotation of all 25 sections of the *WSJ*. They found 487 instances of VPE and 67 cases of related phenomena such as 'do so' anaphora. They annotated both the antecedent and its syntactic form, as well as the syntactic pattern connecting the source clause and target clause of each instance of VPE. Similarly, this study also uses a composite approach to determine VPE.

The first two studies differ in their approach. Nielsen (2005) takes a syntactic approach in which the elided parts were recovered through the structure, whereas Hardt (1997) takes a semantic approach where VPE was recovered by recourse to meaning. This accounted for the differences in the examples used in the annotations. However, according to Bos and Spenader (2011), the place of a semantic or a syntactic approach is irrelevant to the identification of standard VPE; hence they were theory-neutral in their annotation.

# 3 Data and methodology

The corpus for the present study comprised samples from two genres: a sample of American journalistic discourse, and a sample of modern American fiction. The former is represented by *Newsweek*, the *New York Times*, the *Atlantic* and *Time*, as established and widely read newspapers and magazines, while the latter is represented by *Twilight*, a novel by Stephenie Meyer (and the first in a series also called 'Twilight'). As noted above, we chose these two genres for comparison based on the idea that they can be thought of, hypothetically, as lying on opposite ends of a continuum. The contrast has been noted: fiction writers have created 'texts designed to engage the reader's mind and emotions in ways that journalism never could' (Connery 1986: 114).

In the case of journalistic discourse, 141 articles from the sources were chosen randomly from the years 2017–2018. The number of words comprising this corpus is approximately 130,000.

The novel was published in 2005 by Little, Brown and Company, and the plot depicts Bella and Edward's fraught, vacillating but profound romance. In developing the novel's Gothic romantic themes, which involve the supernatural, the lexical items and the semantic content of utterances take on important functions, but there are also many instances in the novel when silence expresses more content than words, mostly through syntactic ellipsis. The effect of eliding one or some parts of the utterance may be that it engages the reader in suspense-filled exploratory reading by allowing variational reader responses (Black 2006) along the lines of a necessary pragmatic inference component through 'ellipsis unpacking' and reference resolution, as discussed by Levinson (2000).

The novel was selected based on the researchers' own interest and the fact that it is historically a best-selling novel that has attracted the attention of readers from different countries worldwide. It has been translated into 38 different languages, has won many literary awards and is known to have connected deeply to the hearts and emotions of millions of readers (as well as inspiring a extremely popular film). The popularity of this work of fiction could be the product of its being exemplary of modern American literature and the specific genre of romantic fantasy, rich in its variety of linguistic structures and meanings typical of modern American writing styles. The need for rigorous manual analysis did not allow for more samples of modern fiction to be included in this study.

This study used a small-scale corpus; this could be criticized as providing too little to count as a true corpus, but its size means that its data are much more focused to pedagogical purposes and implications (Ghadessy *et al.* 2001; O'Keeffe e *et al.* 2007). The value of manual data analysis should not be under-

estimated, as it produces more accurate results than automated searches, and this study is an attempt to illustrate this. After extracting the frequencies using the AntConc concordance program, we manually annotated VPE triggers, the start and end of the antecedent and the antecedent syntactic type. We found 390 instances of VPE in only 260,000 words, as well as 19 cases of related phenomena such as *do so* anaphora, whereas Hardt (1997) found 644 instances of VPE in 4,799,845 words, Neilson (2005) found 1500 VPE instances among 1,124,000 words, and Bos and Spenader (2011) found just 487 instances of VPE across all sections of the *WSJ* corpus.

# 3.1 Analytical procedure

Following Bos and Spenader (2011), our annotation was carried out in three stages: in the first stage, we tagged auxiliary and modal verbs that potentially trigger VPE (Bos and Spenader 2011: 473); in the second stage, we selected the antecedent for each annotated VPE in the previous stage; and in the third stage, we added the type of information to all selected VPEs with the antecedent. These stages were conducted manually using Adobe Acrobat Reader DC.

For purposes of brevity, we have defined the boundaries of our annotation and the elliptical phenomena that were considered and those that were not. The main concern was classical VPE, where the target clause is reduced to one of the three auxiliary verbs *do*, *have* or *be*, or a modal verb (Bos and Spenader 2011: 467). The instances of VPE triggered by the infinitival *to* were considered too. Table 1 shows all verb forms that potentially serve as a VPE trigger in our study corpus.

Of course, classifying VP ellipsis is a traditionally thorny task; sometimes elliptical constructions have a VP as antecedent, but the analyst does not consider it VPE, and sometimes elliptical constructions look like VPE, but they do not have a VP as antecedent. In this respect, we adopted the framework of Bos and Spenader (2011), which deals with this complex classification problem in a systematic way, making a selection by taking prototypical VPE examples as the starting point, and including and excluding closely related phenomena based on choices that the researchers believed were useful and related to earlier annotation work.

We also followed these authors (Bos and Spenader 2011: 468–469) in not considering 'gapping', 'stripping' or 'sluicing', because, in these constructions, no auxiliary or modal verb is left in the target clause in order to trigger VPE. For example, 'Gapping is not an ellipsis at all, but is instead a perverse instance of movement. What Gapping does share with VP Ellipsis is the ability to form unorthodox constituents' (Johnson 2008: 12). In fact, it is a special instance of across-the-board movement (Johnson 2009: 289), like *Sam ate bread, and* 

Туре	Instances
Auxiliary	do, don't, does, doesn't, did, didn't, done, doing
Auxiliary	am, 'm, are, aren't, ain't, is, 's, isn't, was, wasn't, were, 're, weren't, be, been
Auxiliary	have, 've, haven't, has, 's, hasn't, had, 'd, hadn't
Modal	can, cannot, can't
Modal	could, couldn't
Modal	may, may not
Modal	must, mustn't
Modal	might, mightn't
Modal	will, won't
Modal	would, wouldn't
Modal	shall, shan't
Modal	should, shouldn't
Semi-modal	need, needn't
Semi-modal	dare, daren't
Semi-modal	ought, oughtn't
Infinitival	to

**Table 1:** Auxiliary and modal verbs considered as VPE triggers (Bos and Spenader 2011: 468)

others ate rice; the main verb in the source clause is not repeated in the target clause, with at least two constituents left.

'Stripping', or bare argument construction, strands one constituent in a verb-free environment, but maintains a property associated with VPE, namely, the polarity markers too or not, as in 'Jane gave presents to John, but not [e] to Geoff' and 'Jane loves to study rocks, and John [e] too' (Gengel 2007: 37, formatting amended).

Sluicing is considered 'ellipsis of the sentential complement to an interrogative complementizer hosting a *wh*-phrase', as in '*Jack bought something, but I don't know what*' (Merchant 2008: 132, italics added). The elliptical instances investigated in this study are presented in the following sections.

# 3.1.1 Predicative ellipsis

VPE is sometimes characterized as *post-auxiliary ellipsis*, in light of examples like *Jeff is taller than Mike, and Chris is* \_\_\_\_\_ *too*, where the elided element may not be a VP (Kim and Runner 2018: 2).

According to Bos and Spenader (2011: 469), the predicative ellipsis is similar to standard cases of VPE (Examples 1–3). However, a closer examination reveals that the elliptical material does not cover a full VP, but rather an adjective phrase (Example 1), a noun phrase (Example 2) or a prepositional phrase (Example 3).

#### Example 1a

The administration may simply have been more [\_{ap} concerned about its public image] then than it is concerned about its public image now. (Journalistic discourse)

# Example 1b

'I'm never [anangry with you] — how could I be angry with you? [...]' (Twilight)

# Example 2a

If they look back through this history to trace their connection with those days by blood, they find they have none, they cannot carry themselves back into that glorious epoch and make themselves feel that they are part of us, but when they look through that old Declaration of Independence they find that those old men say that, 'We hold these truths to be self-evident, that all men are created equal,' and then they feel that moral sentiment taught in that day evidences their relation to those men, that it is the father of all moral principle in them, and that they have a right to claim it as though they were [  $_{\rm np}$  blood of the blood, and flesh of the flesh of the men who wrote that Declaration], (loud and long-continued applause) and so they are blood of the blood, and flesh of the flesh of the men who wrote that Declaration. (Journalistic discourse)

# Example 2b

'But that's not really  $[_{np}$  the point at the moment].'
'Then what is the point at the moment?' (Twilight)

# Example 3a

The mural is one of 20 depicting U.S. presidents, including Barack Obama, accompanied by inspiring quotes, the San Antonio *Express-News* reports. Most of the presidents' quotes are  $[_{pp}$  about immigration], though Trump's is not about immigration. (Journalistic discourse)

# Example 3b

'I thought she was [pp in Florida].'
'She is in Florida— but she's coming home soo

'She is in Florida— but she's coming home soon, and she can't come back to that house while ...' (Twilight)

We considered these constructions in our annotation because in the VPE literature, similar examples were mentioned together with other cases of VPE. This also enabled us to separate these cases from ordinary cases of VPE. It is important to note that these examples mostly occur with *be* forms (Bos and Spenader 2011: 469).

#### 3.1.2 Antecedent-contained deletion

Antecedent-contained deletion (ACD) is a special case of the verb phrase (Syrett and Lidz 2009: 69). What makes ACD unique, though, is that the elided VP is contained in its antecedent. This is shown in Example 4.

# **Example 4a**

'It is a decision that sends a very strong message that asylum law is not going to [

tv provide the protection that it has provided] in the past,' said Gilman. (Journalistic discourse)

# **Example 4b**

I tried to [ to maintain what dignity I could maintain] as I got into his car. (Twilight)

ACDs give rise to an 'infinite regress' problem (i.e., a recursive loop) (Boxell *et al.* 2017: 555), or what we tend to call a 'vicious circle', in which any attempt to resolve the ellipsis with this antecedent VP results in another elided VP (Syrett and Lidz 2009: 70).

# 3.1.3 Comparative and equative constructions

We considered comparative constructions or comparative deletions containing elided verb phrases where the target clause contains an auxiliary or modal verb, as illustrated by Example 5.

# Example 5a

Arline T. Geronimus, an expert on health disparities at the University of Michigan, has found that African Americans [ $_{vp}$  have more stress-related wear and tear in their bodies] than white people do have stress-related wear and tear in their bodies, and the difference widens with age. (Journalistic discourse)

#### Example 5b

'You tell me — I'm sure you [<sub>yp</sub> hear] it better than I do hear! (Twilight)

According to Bos and Spenader (2011: 477) the comparative construction can be generalized over the following patterns:

 Also included is the equative construction, as shown in Example 6.

# Example 6a

Black children today [ $_{vp}$ see twice as many soda and candy ads] as white children do see soda and candy ads. (Journalistic discourse)

# Example 6b

I wasn't as [ <sub>ap</sub> eager to escape Forks] as I should be <del>eager to escape Forks</del>, as any normal, sane person would be <del>eager to escape Forks</del>. (*Twilight*)

Equative constructions can be generalized over the following patterns, according to Bos and Spenader (2011: 478):

# 3.1.4 Pseudogapping

Pseudogapping is a type of VPE in which a lexical verb under an auxiliary is removed, leaving its own complement(s) behind (Johnson 2009: 289; Kubota and Levine 2017: 213), as in Example 7.

#### Example 7a

If the Justice Department takes up the referral from the New York attorney general, Democrats and government watchdog groups can be expected to [ to call for Attorney General Jeff Sessions to recuse himself] — as he did call for Attorney General Jeff Sessions to recuse himself from the investigation of Russian meddling — because of his involvement in the Trump campaign. (Journalistic discourse)

#### Example 7b

He [ tved dropped his head into his hands], as he had dropped his head into his hands that night in Port Angeles. (*Twilight*)

There are clear similarities between pseudogapping, gapping and VPE. The lexical verb is absent in both pseudogapping and gapping, leaving some (or all) of its complements as remnants; however, in pseudogapping, an auxiliary in the elided clause must be present (as in VPE), whereas no auxiliary is found in gapping. Gapping is also distinct from the other two in that it is only applicable in coordination situations (Kubota and Levine 2017: 213).

# 3.1.5 Comparative sub-deletion

Comparative sub-deletion structures, as exemplified by Example 8 below, are similar to pseudogapping constructions in that they also elide the main verb but retain an auxiliary and an object argument

# **Example 8**

'But if I had stood by, he would have killed you right then,' he said with hopeless frustration. "I thought ... I didn't [ $_{tv}$  smell] the same to the others ... as I do-smell to you,' I said hesitantly. (*Twilight*)

The difference is that they always occur in comparative or equative constructions (Bos and Spenader 2011: 471). Comparative sub-deletion happens when a focused constituent in the *than-*clause is not omitted, because it differs from its equivalent in the main clause. In other words, the constituents being compared are distinct. We included comparative sub-deletion structures in the corpus mark-up, but we did not distinguish between pseudogapping and comparative sub-deletion explicitly.

# 3.1.6 Subject-auxiliary inversion

As the label implies, the order of subject and auxiliary is reversed here. We considered five cases of subject–auxiliary inversion: subordinated clauses starting with *as* (Example 9); comparative (and equative) structures (Example 10); clauses headed by *neither* or *nor* (Example 11); tag questions (Example 12); and pre-verbal *so* (Example 13) (Bos and Spenader 2011: 471).

# **Example 9**

One study in New York found that the number of African Americans who lived in a given area [  $_{\rm vp}$  increased], as did the distance to the nearest clothing store, pharmacy, electronics store, office-supply store increase. Meanwhile, one type of establishment drew nearer: fast-food restaurants. (Journalistic discourse)

# Example 10

When I noted that America's adversaries [ $_{vp}$  seem far less destabilized by Trump] than do America's allies seem far less destabilized by Trump, this official argued for strategic patience. (Journalistic discourse)

# Example 11

'I couldn't [ $_{vp}$  sleep],' I confessed, automatically swinging my hair around my shoulder to provide some measure of cover. 'Neither could I sleep,' he teased as he started the engine. (*Twilight*)

#### Example 12

'I did [ $_{\rm vp}$ mention that you looked very nice], didn't I mention that you looked very nice?' I verified. (*Twiliqht*)

# Example 13

Our government has [  $_{vped}$  been patient with the President and his protectionist agenda]. So too have Canadians been patient with the President and his protectionist agenda, but this is getting tiresome.

# 3.1.7 Other constructions with VPE functions: *So, likewise, same, opposite*

A number of phenomena with VP antecedents seem to share many of the characteristics of VPE, particularly a group of constructions sometimes termed *do X* anaphora (Bos and Spenader 2011: 472). One of the examples of the *do X* anaphora is *do so* instances, of which are considered cases of VPE with VP as their antecedent, as in Example 14.

# Example 14

'No, definitely not,' I whispered. I was tremendously grateful to Jacob, and eager to make him as happy as possible. I winked at him, carefully turning away from Mike to do so. He smiled, elated by my inept flirting.

In addition to *do so* constructions, one could consider, as we did, the construction *do the same* (Example 15), as such constructions share many characteristics with VPEs:

#### Example 15a

'I am honored to join a team whose mission is to help fulfill the President's promises to the American people, while helping elect officials who will do the same,' Spicer said in a statement. (Journalistic discourse)

# Example 15b

'Look, that's not an issue either,' I finally muttered; my voice was as unconvincing as it always was when I lied. 'Renée has always made the choices that work for her—she'd want me to do the same." (Twilight)

# 3.1.8 Bare VP Ellipsis

Referred to as 'bare VPE' in order to distinguish instances from the general term 'VPE', bare VPE is another category characterized by a finite auxiliary in front of the elided part of the structure (Gengel 2007: 29–30) (Example 16).

# Example 16a

Cold War presidents—including Republicans like Richard Nixon and Ronald Reagan—[<sub>vped</sub> negotiated with the U.S.S.R.] But when they did <del>negotiate with the U.S.S.R</del>, conservative intellectuals and activists often compared them to Neville Chamberlain. (Journalistic Discourse)

# **Example 16b**

'You don't [ $_{vp}$  have to leave],' I said wistfully. He smiled at my glum expression. 'Actually, I do have to leave [...].' (Twilight)

This category has been added because there are examples that could not be placed in any of the categories above (predicative ellipsis, antecedent-contained deletion, comparative construction, comparative sub-deletion, pseudogapping, subject-auxiliary inversion, and do so). Furthermore, it can also be built backward, with the ellipsis site in the first part of the sentence (Gengel 2007: 29–30).

# 4 Findings

In total, we found 307 instances of VPE and four examples of related phenomena such as *do so* in the whole of *Twilight*. Table 2 maps out the proportion of tokens that were cases of VPE for each trigger, VPE frequency and also the percentage of each trigger in the sample of modern American fiction.

With regard to the range of possible VPE triggers (Table 2), the auxiliary be (27%) appears to be most frequently used, followed by do (26%) and infinitival to (10%). Some of the modal verbs were frequently found to trigger VPE, some rarely and some never. In addition, almost none of the semi-modal verbs were found to trigger VPE. Among all auxiliary and modal verbs, surprisingly, shall emerged as the most frequently used VPE trigger, followed by may and should. The pattern with shall might be due to the dialectal variation between British English and most dialects of American English, the latter reported to evidence rare uses of it, if at all. After the dominance of modal verbs as usual VPE triggers, do emerged as the most frequent trigger among the auxiliaries. In the whole corpus of journalistic discourse, there were 83 instances of VPE and 15 examples of related phenomena (do X anaphora). Table 3 maps out the proportion of tokens that were cases of VPE for each trigger, VPE frequency and also the percentage of each trigger in the sample of journalistic discourse.

The auxiliary do (in 43% of the cases) was the most frequent VPE trigger in this corpus, after which comes be (31%). Auxiliary verbs were found to trigger VPE more frequently than modals and semi-modals did. It is noteworthy that some modal verbs rarely triggered VPE and some never triggered any

**Table 2:** Frequency of VPE triggers in the modern prose fiction, per token and per actual VPE

Trigger	Token Frequency	VPE Frequency	Percentage
Be	5,520	84	1.52
То	3,493	31	0.88
Have	1396	23	1.64
Do	1,235	82	6.63
Could	630	24	3.80
Would	429	8	1.86
Can	223	20	8.96
Will	154	14	9.09
Should	118	16	13.55
Might	60	1	1.66
Need	60	0	0
Must	50	0	0
May	17	3	17.64
Shall	5	1	20
Ought	4	0	0
Dare	1	0	0

**Table 3:** Frequency of VPE triggers in journalistic discourse, per token and per actual VPE

Trigger	Token Frequency	VPE Frequency	Percentage
То	3736	4	0.10
Be	3222	26	0.80
Have	1719	7	0.40
Do	611	36	5.89
Would	410	0	0
Will	361	3	0.83
Can	225	4	1.70
Could	203	3	1.47
May	155	0	0
Should	98	0	0
Might	63	0	0
Need	47	0	0
Must	29	0	0
Ought	7	0	0
Dare	5	0	0
Shall	2	0	0

VPE. In addition to some modal verbs, none of the semi-modals triggered any instances of VPE. In our corpus, the auxiliary *do* was found to be the most frequent VPE trigger of all, followed by the modal verb *can*, which seems to be a relatively common trigger after *do*. It is interesting to report that the same results were found in respect to VPE triggers by Bos and Spenader (2011) in their corpus of the *Wall Street Journal*.

One prominent difference observed between the modern American fiction corpus and the journalistic discourse corpus was, of course, the number of VPE instances, which in *Twilight* was found to be more than three times than that of journalistic discourse. Modern American fiction accounted for 79% of the whole instances found in this study, while journalistic discourse only 21% of the whole VPE instances.

Figure 1 illustrates the high frequency of VPE triggers in modern American fiction over journalistic discourse. It also shows that modal verbs (*shall, may, should*) in English fiction and an auxiliary verb (*do*) in journalistic discourse occur at higher frequencies.

Table 4 shows the distribution of the syntactic category of the antecedent split by VPE trigger type.

Looking first at antecedent type, we see that VP is the most frequent syntactic category, followed by adjective phrase (AP) and, surprisingly, transitive verbs (TV). Preposition phrase (PP) turns out to be the least frequent category. Transitive verbs are almost entirely made up of cases of antecedent-contained deletion, pseudogapping and comparative sub-deletion. Predicative ellipsis, comprising the types AP, NP and PP, mostly occurs with auxiliary *be*, but we also found five instances of these with infinitival *to*.

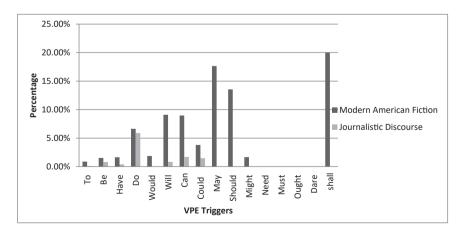


Figure 1: Comparison of the two genres in terms of occurrences of VPE triggers

	VP	VP-ng	VP-ed	AP	TV	NP	TV-ed	PP	TV-ng	Total
Do	38	3	25	0	8	0	5	0	3	82
Ве	0	9	0	53	0	17	0	4	1	84
Have	6	0	8	0	1	0	6	0	2	23
То	22	1	1	1	2	4	0	0	0	31
Can	18	0	0	0	2	0	0	0	0	20
Will	14	0	0	0	0	0	0	0	0	14
Would	5	0	2	0	1	0	0	0	0	8
Could	9	1	13	0	1	0	0	0	0	24
Should	9	2	3	0	1	0	1	0	0	16
Might	1	0	0	0	0	0	0	0	0	1
May	2	0	1	0	0	0	0	0	0	3
Shall	1	0	0	0	0	0	0	0	0	1
Same	1	0	2	0	0	0	0	0	0	3
So	0	0	1	0	0	0	0	0	0	1

**Table 4:** Distribution of VP ellipsis in *Twilight*, sorted by antecedent syntactic type

The percentage of each VPE category that appears in modern prose fiction is outlined in Table 5.

**Table 5:** Frequency of each VPE category in modern prose fiction

	Percentage
Predicative Ellipsis	25.48
Antecedent-contained deletion	5.48
Comparative and equative constructions	12.25
Pseudo gapping and Comparative subdeletion	5.79
Subject auxiliary inversion	10.32
So, same	1.29
Bare Verb Phrase Ellipsis	39.35

According to Table 5, it was found that bare VPE turned out to be the most frequent structure. Next in line in terms of frequency were predicative ellipsis and comparative and equative constructions, respectively. Also, *do so* anaphora, antecedent-contained deletion, pseudogapping and comparative sub-deletion, respectively, displayed the lowest frequencies. In addition, there were also four cases in which the antecedents were in place of cataphora – that is, after the ellipsis, as in Example 17.

# Example 17

'May I lift you?' she asked. 'You're the first one to ask permission.' I smiled wryly. She [ $_{vped}$  lifted me] in her slender arms as easily as Emmett had, shielding me protectively, and then we flew out the door, leaving the lights bright behind us.

The distribution of VP ellipsis in journalistic discourse is seen in Table 6, organized according to the syntactic type of the antecedent.

**Table 6:** Distribution of VP ellipsis in journalistic discourse, sorted by antecedent syntactic type

	VP	VP-ng	VP-ed	AP	TV	NP	TV-ed	PP	TV-ng	Total
Do	20	3	9	0	3	1	0	0	0	36
Be	0	3	2	14	0	4	1	2	0	26
Have	2	0	2	0	1	2	0	0	0	7
То	1	0	2	0	1	0	0	0	0	4
Can	1	0	0	0	0	0	0	0	3	4
Will	2	0	0	0	1	0	0	0	0	3
Could	1	1	1	0	0	0	0	0	0	3
Same	2	1	0	0	0	0	0	0	0	3
So	7	2	3	0	0	0	0	0	0	12
	36	10	19	14	6	7	1	2	3	98

As seen in Table 6, VP is the most frequent syntactic category (72%) followed by AP, TV and PP, as in the sample from modern American fiction. Here, transitive verbs (TV) amount to 10 in total, among 98 instances. In the case of AP, NP and PP types expected to occur with auxiliary *be*, we found two examples occurring with auxiliaries other than *be*.

In journalistic discourse, too, we found 30 cases of bare VPE, such as in Example 18.

#### Example 18

So the state asks people who haven't voted in two years to [ $_{vp}$  confirm their eligibility]. If they do confirm their eligibility, or if they show up to vote over the next four years, voters remain registered. If they do nothing, their names eventually fall off the list of registered voters.

The frequency of each category of VPE in journalistic discourse is indicated in Table 7.

	Percentage
Predicative Ellipsis	23.46
Antecedent-contained deletion	4.08
Comparative and equative constructions	14.28
Pseudo gapping and Comparative subdeletion	6.12
Subject auxiliary inversion	6.12
So, same	15.03
Bare Verb Phrase Ellipsis	30.61

Table 7: Frequency of each VPE category in journalistic discourse

As can be seen in Table 7, bare VPE has the highest frequency of all in journalistic discourse. Next was predicative ellipsis, *do so/same*, and comparative and equative constructions, respectively. Antecedent-contained deletion, pseudogapping and comparative sub-deletion were among the least frequent ones.

Figure 2 compares the two genres with regard to their antecedent syntactic type. The figure shows that VP was the most frequent type in both genres, after which lies AP. The frequency of TV type is very low in journalistic discourse compared to *Twilight*.

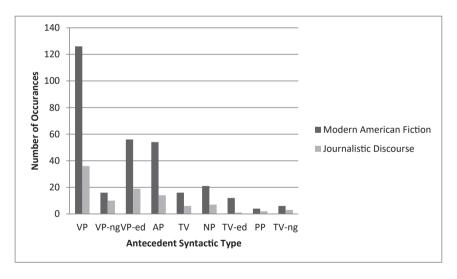


Figure 2: Comparison of antecedent syntactic type in two genres

Figure 3 also shows which VPE categories result in more elliptical structures and which ones do not.

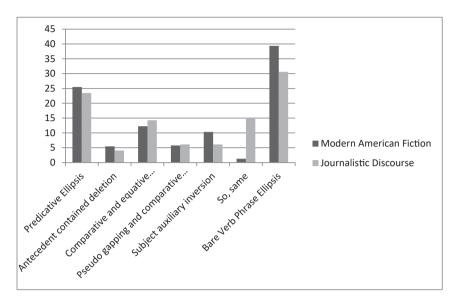


Figure 3: Comparison of VPE categories in two different genres

As can be seen, apart from pure VPE structures, predicative ellipsis results in more instances of elliptical structures than the other categories do. However, there is comparative sub-deletion that gives rise to fewer elliptical structures. There was also a noticeable difference observed between the two genre samples in the uses of *do so/do the same* category, at about 15% in journalistic discourse and 1.29% in modern American fiction.

#### 5 Discussion

'Ellipsis is an invitation to think other/wise', as observed by Walker (2020: 8). He also maintains that elliptical thinking resists a constitutive and necessary in/completeness and cannot absolutely be contained, categorized and cataloged under the current regimes of thought. Indeed, this incompleteness opens up new horizons for thinking and imagining human beings other/wise (Walker 2020: 7–8). As such, ellipsis and VPE can be good means of practicing critical thinking.

# 5.1 Ellipsis as heightening of emotions: Reader engagement

Setting out to explore the VPE characteristics in samples from two different genres, we brought to light the differences in the amount of ellipsis that occurred. Our sample of modern American fiction, the novel *Twilight*, deployed

three times as many VPE instances as the chosen sample from journalistic discourse. This finding is significant, as it suggests the existence of a set of stylistic, pragmatic and discursive forces in this widely read Gothic romance, which makes for such prominent use of ellipsis, at least as opposed to the sample of established and widely read journalistic discourse considered here.

Ellipsis, the intentional use of incomplete sentences, appears quite frequently in the novels. Ellipsis denotes silence in various forms – a lapse, pause or textual omission of some sort. In modern fiction, the frequent use of ellipsis signals a heightening of emotion or action (Toner 2015). In order to make the flow of a novel interesting to readers, it seems that writers use different forms of ellipsis, of which VPE is one modification. Using open-ended sentences and letting readers complete the vacuum created by the ellipsis is much like completing a puzzle in which some parts come across as being more obvious, providing direction and clues for the deciphering of others. Following Goodman (1967), reading is a 'psycholinguistic guessing game', and the role of ellipsis in this regard is even more pronounced, leading to the stimulation of the mind. Furthermore, making it merely exciting to read, this aspect of modern fiction is geared to engaging readers in the process of reading and enjoying a text. Also, as Toner (2015: 5) reminds us, 'not saying something often says it better'.

In a similar and related vein, another force behind the higher frequency of ellipsis in modern fiction could be the greater taken-for-granted extent of shared pragmatic and world knowledge assumed *a priori* between the characters in the novel (Black 2006), accounting for the frequent encounter of the reader with VPE instances in modern prose fiction. This higher frequency of VPE in fiction once again confirms that fiction writers create texts to engage the reader's mind and emotions in ways that journalism never can (Connery 1986: 114).

# 5.2 Ellipsis as mitigation of face-threatening acts

Regarding the use of VPE in journalistic discourse, Berariu and Peterlicean (2016: 192) consider ellipsis as an unusually structured sentence in which some aspects are simply not mentioned; the meaning, nevertheless, is coherent, thorough and to the point. Thus, one of the forces feeding into the relatively frequent occurrence of ellipsis in journalistic discourse is the mitigation of face-threatening acts. In particular, by omitting a portion of the message, the addresser establishes a relationship with the addressee, which helps to soften the face-threatening act (Al-Duleimi 2013: 135).

But why is VPE less frequent in journalistic discourse than in modern fiction? Nielsen (2005: 67) argues that using ellipsis is considered 'bad form' for journalists. It might seem that journalists, and party- and ideology-partisan writers, have to be more selective and discrete in their uses of VPE, because using VPE

too often may result in the audience being turned off and disenchanted with the discourse producer. Audiences for serious journalism are not primarily seeking entertainment or literary pleasure; unlike when reading fiction, the purpose is more likely to discover what will constitute and determine their concrete welfare, future, employment and social condition in a more immediate sense (Charteris-Black 2011). Such will be their motivation to listen to or read discourse produced by the press. Excessive use of ellipsis and VPE may result in journalists coming across as a smooth-tongued glib word-mongerers, only after enthusing, impressing and, presumably, deceiving the masses into falling in line with their perspective on economic, political and social reality, spoon-fed to them in the magazine article and media.

# 5.3 Domination of different VPE triggers in the two genres

As observed above, on the one hand, modal verbs (*shall*, *may* and *should*) in modern American fiction display a higher frequency in triggering VPE. Modal verbs are used to express functions such as permission, ability, obligation, prohibition, lack of necessity, advice, possibility and probability. On the other hand, in journalistic discourse, it was the auxiliary verb *do* that triggered many VPE instances. This pattern is to be expected, assuming that the cumulative fictional context and world built up in modern fiction play a considerable role, giving rise to the more frequent omission of parts that can be understood and contextually reconstructed, such as in getting permission, stating hypothetical possibilities and scenarios, and so on (e.g. 'Shall we go?' he asked, rising fluidly).

Although it is difficult to imagine journalistic discourse without any references to possibilities or future outcomes, this kind of text mostly has to do with actions and facts rather than permissions or possibilities. The journalistic discourse mostly concerns past actions or things done by other politicians assumed to be known to the reader (e.g. *They* [ <sub>vped</sub> treated them] more like Trump does treat them).

# 5.4 Empirical vs. formal studies of ellipsis

Our frequency results were, in some cases, predictable in respect to formal linguistics. For example, antecedent-contained deletion and comparative subdeletion were not expected to be very frequent; and indeed, they were not found to be so in either of the genres. We also found that predicative ellipsis and comparative and equative constructions were frequent with VPE; in fact, they seem to facilitate the use of VPE. However, as Bos and Spenader (2011) found, these structures are seldom used to show ellipsis phenomena.

In theoretical linguistics, there is a body of research involving two sentences conjoined with *and* where the second sentence is marked by the presupposition trigger *too* (Bos and Spenader 2011). But in all the 409 instances of VPE, we

found only one case with too (I intuitively [ $_{vped}$ knew] — and sensed he did know, too).

Moreover, we found some cases where the antecedents did not occur before the ellipsis but rather after it. In fact, they turned out to function like cataphora, in that, first, it was the ellipsis that appeared, and then its antecedent (Hardt 1997). This highlights the fact that in linguistic theory, most of the time, the ellipsis has been defined as referring back to something, but as empirical studies show, there are cases in which the antecedent appears after the ellipsis.

# 6 Conclusion

The purpose of this study was to look into the frequency of verb phrase ellipsis and the types of VPE triggers in two different genres. As a result, this study and subsequent ones exploring the relevant questions will have theoretical and practical implications, in that they will aid in the development of understandings of syntactic resources in various discourse types and also promote critical thinking. Also, further research on VPE patterns can be undertaken on corpora from other genres, with differences or similarities emerging that could be tied back to the variations in pragmatic and discursive forces in these genres.

There have also been consistent calls and attempts to incorporate the broad range of ellipsis phenomena in syntax into foreign-language education curricula. This study has implications for the foreign language classroom in terms of the awareness of types and categories that post-intermediate learners need to grasp if the goals of acquiring critical and autonomous reading skills are to be met and possible impediments to do with ellipsis-related reading difficulties avoided, in the long-term and at every step of the comprehension process.

In addition, this work provides useful data for future eye-tracking research to determine whether the missing material is reconstructed syntactically or semantically – a contentious issue among theoretical approaches to ellipsis phenomena.

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