Topics of English Sentences
in Expository and Narrative Proses

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Due to the fact that both the subject and the topic can occupy the initial position of the sentence, English subject is always deemed as the UNMARKED TOPIC (Lambrecht, 1994), while the topic is not always the subject. In accordance with Rizzi's (1997) topicalization, both the subject and the topicalized constituents can be topics. Many other languages are found to have multiple topics (Erteschik-Shir, 2007). This study agrees that more than one topic is possible in English. With respect to the order, it finds that the *principle of end-weight*, applies only to the DP subject topics, but not other preposed constituents. The preverbal constituents in the data abide by the topic-comment structure in general. Via the authentic data, we find that the subject topic is prominently DPs. Non-subject topics are PPs, CPs, adverbs, AdvPs, and DPs, among which PPs are prominent in expository texts while CPs are prevailing in narrative proses. The frequent appearance of the PPs is found to be the genre-effect that PPs are compact structures often used as the sentence opener to make the discourse coherent in expository texts. Meanwhile, the conspicuous occurrence of the CPs, inter alia, the control constructions, is due to the characteristics of the chronological linkage in narrative proses.

Keywords: multiple topics, constituents, topic-comment, end-weight principle

1 Introduction

According to Li and Thompson (1976), English is a subject-prominent language which follows the subject-predicate sentence structure. However, it is not supported by other scholars. Kim (2018) claims that English makes use of both subject-predicate and topic-comment structures based on the investigation of the Prepositional Phrases (PPs) while Gundel (1988) finds that topic-comment structure universally exists across languages. As shown

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in (1), *Tom* is the subject as well as the topic of the sentence and *went to school* is the predicate and comment at the same time.

(1)
   a)   [Subject Tom] [Predicate went to school].
                              Subject-Predicate
   b)   [Topic Tom] [Comment went to school].
                              Topic-Comment

Based on the mapping relation of the English subject to the topic as shown in (1), the subject is always deemed as the UNMARKED TOPIC intuitively (Chafe, 1976; Gundel, 1988; Lambrecht, 1994; Prince, 1981). Nevertheless, the topic is not always represented by the subject. Rizzi (1997) and Radford (2009) propose that topicalization is an important way to prepose the constituents such as arguments and adjuncts to the Spec-TopP position and hence makes the element the topic of the sentence. The subject and the preposed constituents in the initial position of the sentence represent the topics in English. Rizzi (2004) considers Determiner Phrase (DP) rather than other preposed constituents the topic because only DP is referential and it is what the sentence is *about.* Other scholars (Chafe, 1976; Erteschik-Shir, 2007; Lambrecht, 1994) regard all the topicalized constituents as topics of the sentence. Considering other topic-prominent languages, apart from DPs, a variety of elements can be topicalized. In other words, various syntactic elements can be realized as topics of the sentence. For example, a topic in a topic-prominent language, such as Chinese, "sets a spatial, temporal, or individual framework within which the main predication holds" (Chafe, 1976), while others are what the sentence is *about*. The different topical properties may define different kinds of topics.

In accordance with Rizzi (1997) and Haegeman (2012), the topicalized constituents are topics which are recursive in a sentence. Although recursiveness of topics or multiple topics have been argued among scholars (Erteschik-Shir, 2007; Krifka, 1992; Lambrecht, 1994), there are more than one topic in a sentence in some languages. For instance, Ostyak and Catalan mark more than one topic syntactically (Erteschik-Shir, 2007, p. 22).

With evidence found in other languages, it is of great interest to explore the topics in English authentic data. This study investigates the topics represented by the preverbal constituents which include the subject and the preposed constituents. The findings are expected to answer the following research questions:

RQ1: Which constituents represent the topics in English?
RQ2: What is the frequency of the topicalized constituents?
RQ3: What factors determine the order of the preverbal topicalized constituents?

2 Literature Review

Regarding the study of the topic, it can typically trace back to the Systemic Functional viewpoint in which the constituents in the initial (preverbal) position are considered *theme*. Mathesius (1939, as cited in Hasan & Fries, 1995) assigns two functions to theme, namely, the known or at least obvious in the given situation; from which the speaker proceeds. Halliday (1985, as cited in Hasan & Fries, 1995) defines theme as "the point of departure for what the speaker is going to say." In English, theme equals the clause initial constituents, which are subcategorized as Textual theme (Conjunctives, e.g. *well, but, then*), Interpersonal theme (Modal adjunct and Finite, e.g. *surely, would*), and Topical theme (subject, e.g. *she, he*) (Hasan & Fries, 1995, p. xxx). Thus, theme refers to all the preverbal elements in the initial position of the sentence. In this regard, topic is similar to Topical theme (i.e. subject) and part of the Interpersonal theme (e.g. adjunct), but the topic excludes the Textual theme. This study focuses on the preverbal topics in line with the topic by Li and Thompson (1976).

From the syntactic perspective, Rizzi (2004) interprets "topic as a kind of higher subject of predication assumed to be contextually familiar which is the specifier of the Topic head." Rizzi (1997) proposes the cartographic way to split the Complementizer Phrase (CP) into Force Phrase, Topic phrase and Focus Phrase etc., which sheds light on the relationship between the subject and the topic in English sentences. Radford (2009) points out that subject locates originally in the Spec-VP position and moves to the Spec-TP position following the VP-Internal Subject Hypothesis (VPISH). In the interrogative clause, the *wh*-pronoun moves from Spec-VP (Verb Phrase) to Spec-TP (Tense Phrase) and then to Spec-CP (Complementizer Phrase) position due to the Question Force of the sentence (Radford, 2009). In line with the *wh*-movement, the subjects of the declarative English sentences can be triggered to move from Spec-VP to the Spec-TP position and then to the Spec-TopP position, also part of the CP, by discourse pragmatic requirement. In order to satisfy the pragmatic requirement as the topic of the sentence, the subject moves to the Spec-TopP position and co-refers to the deleted copy in the subject position pragmatically, which is shown in (2). Thus, the subject is in the Spec-TP position while the topic is in the Spec-TopP position.

(2)
$\quad$ [$_{\text{Spec-Topic}}$ The boy] [$_{\text{Spec-TP}}$ ~~The boy~~] plays badminton every day.

In accordance with Radford (2009), the deleted copy *~~The boy~~* left behind in Spec-TP position is an identical copy of *The boy*, containing the same features as *The boy*, therefore *~~The boy~~* agrees with T while *The boy* satisfies the pragmatic edge feature carried by the Topic head. In (2), *The boy* in the Spec-TopP position is the topic of the sentence, which is *given*, *definite*

(Chafe, 1976; Li & Thompson, 1976) and what the sentence is *about* (Gundel, 1988). Thus, the preposed subject is the *subject topic* for this study.

In terms of the information structure of English sentences, Lambrecht (1994) proposes four types of linearization for the constituents, namely, the topic-comment structure as in (3a), which pragmatically predicates some properties of an established discourse referent; the identificational structure as in (3b), which tends to establish a relation between an argument and the previously activated open proposition; the event-reporting structure as in (3c), which is different from the former two types in that it is an expression which is neither relevant with the activated topic nor with an open proposition; and the background-establishing structure as in (3d), which serves as a scene-setting topic for another proposition.

(3)
   a)   What happened to your car?
       [$_{Topic}$ My car/It] [$_{Comment}$ broke down].
                            Topic-comment structure
   b)   I heard your motorcycle broke down.
       [$_{Focus}$ My car] broke down.
                            Identificational structure
   c)   What happened?
       [$_{Focus}$ My car broke down.]
                          Event-reporting structure
                           (Polinsky, 1999, p. 577)
   d)   What happened to your car this morning?
       [$_{Scene\text{-}setting\ Topic}$ This morning] my car broke down.
                          Background-establishing structure

The types (b) and (c) are initiated with the non-topic constituents, so they are not in the scope for this study. In type (a), the topic is represented by the subject of the sentence. Usually, the subject is the Determiner Phrase (DP), which denotes "the given, definite and presupposed information" (Gundel, 1988). In type (d), i.e. background-establishing type, the topic is the topicalized constituent which provides the temporal and locative information for the main predication (Erteschik-Shir, 2007).

Kim (2018) denotes that the Directional Prepositional Phrase (PP) preposed to the initial position is the topic of the sentence, as shown in example (4).

(4) [Into the room] John ran [~~into the room~~].
                     (Kim, 2018, p. 13)

Likewise, the DP *That kind of behavior* is the verb complement which is topicalized as the topic in (5) to satisfy the edge feature carried by the Topic head of the sentence.

(5) [That kind of behavior], we cannot tolerate [~~that kind of behavior~~] in a civilised society.

(Radford, 2009, p. 326)

Based on the relevant literature, the topic of a sentence can be represented by either the subject or other topicalized constituents. Syntactically, the position of the topicalized constituents is in Spec-TopP position. Pragmatically, topics cover either the properties of *givenness*, *definiteness* and *aboutness* or serve as the scene-setting topics which provide background information for the main predication.

Lambrecht (1994) marks the topicalized constituent as the *secondary topic*, while the subject serves as the *primary topic*. As shown in (6), the topicalized Determiner Phrase (DP) *the product* is the secondary topic, and the subject *I* is the primary topic.

(6)
[secondary topic The product] [primary topic I] feel less good about.

(Lambrecht, 1994, p. 147)

Based on the Preposing Condition, Radford (2009) claims that if the material is preposed to highlight it, the smallest possible maximal projection containing the highlighted material is supposed to be preposed. This is also in support of *Economy Condition* which states that "syntactic structures should contain as few words as possible and syntactic operations should affect as few words as possible" (pp. 65-66). In addition, preposing is constrained by other factors like Functional Head Constraint (FHC), which states that the complement of a certain type of functional head F (e.g. a Determiner or Complementizer) cannot move on its own (without also moving F). Therefore, "DP can be preposed but not NP contained in DP and CP can be preposed but not TP contained in CP" (pp. 65-66). As a result, the potential constituents that can be topicalized are such as DP, CP, PP, AdvP, AP, TP, DP, and VP because they are the maximal projections and they follow FHC.

Hasselgård (2010) discovers that time, space, and contingency adjuncts appear frequently in the initial position of the sentence, although most adjuncts in the initial position are syntactically optional, as demonstrated in (7), (8) and (9), respectively.

(7) <u>In the third century</u> most senators were not Italians.

(PP)

(8) <u>Round Trier</u> Celtic was spoken in the early fifth
century.   (adverb)
(9) <u>If it breaks through to this side</u>, we're sunk. (CP)

Regarding the order of the constituents, Clark and Clark (1977) propose that given information should precede new information. Arnold, Losongco, Wasow and Ginstrom (2000) find that various ordering of the postverbal constituents has been attributed to both the grammatical complexity (e.g. heaviness) and the discourse status (e.g. newness). Heaviness refers to the length or the number of words within the constituent and the syntactic complexity. Quirk, Greenbaum, Leech, and Svartvik (1972) label the order that heavy constituent follows the light ones according to the *principle of end weight* (PEW). Newness means the new information not previously mentioned in the discourse and unfamiliar to the hearer (Radford, 2009).

According to the Principle of End-weight (PEW) and the principle of Early Immediate Constituents (EIC) which states that the human parser prefers linear orders that maximize the IC-to-non-IC ratios of constituent recognition domains (Hawkins, 1994), we would predict that the short constituent precedes the long one, and the relatively easy constituent precedes the more complex constituent, which is typically shown in Heavy NP Shift in (10).

(10)
  a)   John gave [$_{DP}$ a very interesting book] [$_{PP}$ to Mary].
  b)   John gave [$_{PP}$ to Mary] [$_{DP}$ a very interesting book].

The PP *to Mary* is syntactically lighter and shorter than DP *a very interesting book* in (10). The longer and syntactically heavier DP shifts to the rightward position from (10a) to (10b). It is, therefore, believed that speakers tend to prefer (10b) to (10a) when they confront with the complicated constituents in the sentence.

Various constituents are candidates to prepose to the preverbal position. This study probes into the constituents which represent the topics in English sentences, their frequency, as well as the order of these preverbal constituents.

3 Data Collection

This study collected 300 main clauses from *National Geographic* (*NG*) (December 2016) and *The Da Vinci Code* (*DC*) (2003), respectively. *National Geographic* targets large audience worldwide which endorses the acceptability of its language to a large extent. The texts in *National*

Geographic (*NG*) are expository in general. *The Da Vinci Code (DC),* on the other hand*,* was adopted to check the genre-effect.

The data were retrieved from electronic sources as shown below.

National Geographic,

http://www.car.chula.ac.th/;

The Da Vinci Code,

https://archive.org/details/TheDaVinciCode_201812.

Both data are confirmed to be the same as the hard copy. Both *National Geographic* and *The Da Vinci Code* are contemporary English which are comparable with each other. The downloaded PDF texts were converted into word files.

Only the main clauses are explored because topicalization is mainly found in main clauses rather than the embedded clauses in English, as shown in (11).

(11) *When the second chapter my students couldn't
handle, I returned to the intro.
(Emonds, 2004, as cited in Haegeman, 2012, p. 151).

The connectors like *and*, *but*, and *or* are excluded because they are the connections between main clauses. The expletive clause as in (12a) and the clause with the indefinite subject as in (12b) are not included.

(12)
a) There's still time to conserve what's standing for scholars. (*NG*)
b) A voice spoke, chillingly close. (*DC*)

In (12a), the expletive clause is regarded as a non-topic sentence because the expletive subjects *it* and *there* are non-referential and non-deictic (Svenonius, 2002). The indefinite subject in (12b) is considered new information not mentioned in the preceding discourse, so it is not the topic either.

Both the definite subject which specifies given information and the topicalized constituents preceding the subject are analyzed as the topics of the sentence. Multiple topics preceding the subject in English are analyzed as the scene-setting topics, which can be subdivided into Topic 1, Topic 2, Topic 3, and so on, while the topicalized subject is the subject topic, as shown in (13).

(13)
a) [Topic 1 Far off], an alarm began to ring. (DC)
b) [Subject Topic Mike Pauletich] first noticed he had a problem in 2004. (NG)
c) [Topic 1 Instinctively], [Subject Topic he] tried to scramble for cover.

(DC)

d) [Topic 1 In 2015] [Subject Topic he] completed a conservation plan for the ancient city. (NG)

e) [Topic 1Today], [Topic 2 at 74], [Subject Topic Mödl] has a warm smile and a wiry frame. (NG)

In (13a) and (13b), the sentences have one topic which are represented by the topicalized adverb in (13a) and the subject DP in (13b), respectively. There are two topics in (13c) and (13d), which are represented by *Adverb topic +subject topic* and *PP topic +subject topic*. In (13e), there are three preverbal topics, namely, the adverb *Today* and the PP *at 74*, plus the subject topic. In this study, *today*, *now*, *this morning* are considered adverbs (Radford, 2009) when they provide the background information and set the scene for the main clause while *since 1976*, *in 2011*, *at Alaska's Sukok Lake* in the data are Prepositional Phrase (PP).

4 Findings

Within the 300 main clauses in *National Geographic* (*NG*), 263 instances are found with the preverbal topics, as shown in Table 1, while other 37 instances are sentences with non-topics as shown in (12) above. The majority of the topics are represented by the subjects which are 175 instances (66.5%). 86 instances (32.7%) are the scene-setting topics preceding the subject (topic). Two instances (0.8%) are with more than two scene-setting topics.

Table 1. Topics in *National Geographic (NG)*

NG	N	%	Examples
A. Subject topic (ST)	175	66.5	
a. DP	172	98.3	They [Random House] offered me a book deal.
b. CP	3	1.7	Breaking one down takes time.
B. Scene-setting topic	86	32.7	
a. PP	39	45.3	In 1999, I was working for AOL.
b. adverb	20	23.3	Most astonishingly, placebos can work even when the person taking them knows they are placebos.
c. CP	27	31.4	

	N	%	Examples
Complement CP	14	51.9	"Basically, they're big and uncooperative," says Alger.
Adverbial CP	13	48.1	But if parts of structures crumble, Akasheh's database can provide references of how the originals looked.
C. T1+T2+T3 … + (ST)	2	0.8	Today, at 74, Mödl has a warm smile and a wiry frame that looks as if it could survive a charging rhinoceros.

As for the subject topics in *NG*, 172 instances (98.3%) are Determiner Phrases (DPs) whereas only three instances (1.7%) are Complementizer Phrases (CPs). With respect to the scene-setting topics preceding the subject (topic), Preposition Phrases (PPs) are found prominent with 39 instances (45.3%). In addition, 20 instances (23.3%) are adverbs. 27 instances (31.4%) of Complementizer Phrases (CPs) were observed, among which 14 instances (51.9%) are complement CPs while 13 instances (48.1%) are adverbial CPs.

By contrast, within the 300 main clauses in *The Da Vinci Code* (*DC*), 264 instances are observed with the preverbal topics, as shown in Table 2, while other 36 instances are found with non-topic preverbal constituents. Similar to the findings in *NG*, more than half are the subject topics with 178 instances (67.4%). 81 instances (30.7%) are the scene-setting topic preceding the subject (topic), and five instances (1.9%) are with more than two scene-setting topics.

Table 2. Topics in *The Da Vinci Code (DC)*

DC	N	%	Examples
A. Subject Topic (ST)	178	67.4	
a. DP	178	100	He lunged for the nearest painting he could see, a Caravaggio.
B. Scene-setting Topic	81	30.7	
a. PP	10	12.3	With the confident tone of a man of enormous influence, the Teacher explained what was to be done.
b. adverb	20	24.7	Most likely, some religious scholar had trailed him home to pick a fight.
c. DP	2	2.5	But the church, it is a fortress.
d. CP	49	60.5	
Complement CP	20	40.8	"Pain is good, monsieur," the man said.

Adverbial CP	29	59.2	When the curator had finished <u>speaking</u>, his assailant smiled smugly.
C.T1+T2+T3+… + (ST)	5	1.9	<u>Suddenly</u>, <u>now</u>, <u>despite all the precautions</u>... <u>despite all the fail-safes.</u>.. <u>Jacques Saunière</u> was the only remaining link, the sole guardian of one of the most powerful secrets ever kept.

In line with the results in *NG*, all 178 instances of the subject topics are Determiner Phrases (DPs) in *DC*. Regarding the scene-setting topics, the most prominent are the CPs with 49 instances (60.5%). In particular, the adverbial CPs are 29 instances (59.2%) while the complement CPs are 20 instances (40.8%). There are 20 instances (24.7%) of adverbs which is consistent with that in *NG*. Unlike that in *NG*, only 10 instances (12.3%) of PPs are found in *DC*. Interestingly, two instances (2.5%) of DPs are found preceding the subject (topic) as Topic 1.

Regarding the subject topics, the majority are light DPs in both *NG* and *DC*. Only three instances of CPs were found in *NG*. The weight of the subject topics are based on the word number, as shown in Table 3.

Table 3. The Weight of the Subject Topics in *NG* and *DC*

No. of words	0	1-3	4-15	Total
DP (NG)	4	135	33	172
CP (NG)		1	2	3
DP (DC)	6	149	23	178

The majority of the DPs are composed of one to three words, with 135 instances (78.5%) in *NG* and 149 instances (83.7%) in *DC*, respectively. DPs with over four words were sporadically found in the data. In particular, four instances in *NG* and six instances in *DC* are found with the covert subject in the subjectless sentences as in (14a) and the imperative sentences as in (14b).

(14)
    a)   And (he) walked. (NG)
    b)   (You) Tell me where it is hidden. (DC)

5 Discussion

The findings reveal that the majority of the subject topics are DPs in both *NG* and *DC*, which supports the claim that subject is the UNMARKED TOPIC in English (Lambrecht, 1994). The scene-setting topics preceding the subject

topic are represented by various constituents, such as PPs, adverbs, DPs, and CPs. The subject topics in both genres are light DPs and their linearization order with other constituents in a sentence abides by PEW and EIC, but these principles do not apply to the order of multiple topics in the sentence.

5.1 Subject topics

DPs and CPs are typical constituents in the subject position of declarative English sentences. Subject topic is the topicalization of the subject which is believed to move from Spec-TP position to Spec-TopP position. It is in turn expected that subject topics are DPs and CPs.

The DP subject topics, as the majority, are light DPs ranging from one to three words, or with covert subject in the subjectless and the imperative sentences. The covert subjects in the initial position of the sentences are found to be recoverable from the preceding clause (Reiman, 1994, p. 150), as shown in (15).

(15)
  a)   <u>He</u> walked. (14a) And (<u>he</u>) walked. (NG)
  b)   <u>The man</u> glanced down at his weapon, looking almost amused. <u>He</u> reached for a second clip […], but then (<u>he</u>) seemed to reconsider, smirking calmly at Saunière's gut. (DC)

In (15), the subjects can be inferred and predicted from the previous discourse. Compared with the nouns and the pronouns, like *the man* and *he* in the preceding clause, the covert subjects function to code the continuous topics (Reiman, 1994) which make the discourse more coherent.

Additionally, imperatives in *DC* are also found with the covert subject, which is shown in (16).

(16)
  a)   "(You) Do not move."
  b)   "Now (you) tell me where it is."
  c)   "(You) Tell me where it is hidden."
  d)   "So, my pupil, (you) tell me what I must know."

The imperatives have an optional subject (covert or overt representation), and the overt subject is restricted to second person DP *you*, and third person indefinite quantified DPs (Zhang, 1990). The covert subjects of imperative sentences in (16) refer to the addressee *you* which is light and easy to recover. The restriction of the imperative subjects is due to the fact that the referent of the specified subject is either the addressee or among the addressees (e.g. Platzack & Rosengren, 1997; Potsdam, 1998; Schmerling, 1982; as cited in Zanuttini, 2008, p. 207). The covert subject in the

imperatives is seen as the *wh*-trace of an empty topic operator (Beukema & Coopmans, 1989, as cited in Han, 2019, p. 245), so the covert subject *you* in the imperatives is considered the topic of the sentence.

Having a closer look, we find that the DPs in the data are simple pronouns denoting the person or the object in the previous discourse, the name of a person or agency, plural DPs, proper names, and so on, as demonstrated in (17) from *NG* and (18) from *DC*.

(17)
a) <u>You</u> need gas to melt snow.
b) <u>Nalini Nadkarni</u> is comfortable in both.
c) <u>Dinosaurs</u> are more of a mythical creature to kids in my country.
d) <u>The Martian</u> was one of those serials.

(18)
a) <u>You</u> are lying.
b) <u>Langdon</u> still felt fuzzy.
c) <u>His irises</u> were pink with dark red pupils.
d) <u>*Boston Magazine*</u> clearly has a gift for fiction.

The DP subject topics in (17) and (18) are representative in the data which are lighter and easier to recognize than the constituents following them. Therefore, the word order of the DP subject topics with other constituents in a sentence conforms to PEW and EIC.

Although most of the subject topics are light DPs, we also found some heavy DP subject topics, shown in (19) and the CP subject topics in *NG* as in (20).

(19)
a) <u>One of these hot spots, now California's Monterey Bay National Marine Sanctuary</u>, is featured in Block's 2016 science documentary, Blue Serengeti. (NG)
b) <u>The curator's true identity, along with the identities of his three sénéchaux</u>, was almost as sacred as the ancient secret they protected. (DC)

(20)
a) But <u>winnowing 19 days of food and supplies to fit into a 60-pound backpack</u> is still daunting. (NG)
b) <u>Keeping your mate extraordinarily close—as in permanently fused to your body</u>—has its advantages. (NG)

The DP subject topics in (19) are heavier than the predicate, with the word length ratios as 12: 9 words in (19a) and 12:10 in (19b), respectively. In (20), the subject topics are CPs, which are heavier and syntactically more complicated than the predicate in the sentence. Thus, the heavy DP subject topics and the CP subject topics do not follow the end-weight principle and EIC principle.

In accordance with Collins (1994), English normally avoids the CP subjects followed by a relatively light main predicate. The appearance of the non-extraposed CP subject topics in (20) is due to the fact that the CP subject topics express the given information mentioned in the previous discourse as demonstrated in (21).

(21)
    a)   With 30 years' experience, <u>he has his training regimen down to a science</u>. **(20a) But <u>winnowing 19 days of food and supplies to fit into a 60-pound backpack </u>is still daunting.**

    b)   ROMANTIC ATTACHMENT **(20b) <u>Keeping your mate extraordinarily close—as in permanently fused to your body</u>—has its advantages.**

The non-extraposed CP subject *winnowing 19 days of food and supplies* […] in (20a) is inferable from the relevant information of the preceding clause as *his training regimen down to a science.* The CP subject in (20b) refers back to the title *Romantic Attachment*.

The DP subjects, namely, the definite DPs, the pronouns and the covert subjects are identified as the topics of the sentences which refer back to the preceding discourse and are recoverable from the context. The occurrence of the heavy DP and CP subjects in the initial position of the sentence is due to the topic status which makes the discourse coherent. The order of the DP subject topics with other constituents in the sentence abides by the end-weight principle except a few heavy DP and CP subject topics. The frequent mapping of the subject into the topic and the predicate into the comment of the English sentences in the data proves the claim that the subject is the UNMARKED TOPIC in English declarative sentences (Lambrecht, 1994).

5.2 Multiple topics

Apart from the subject topics, scene-setting topics preceding the subject are also found in the data. These scene-setting topics are realized by topicalization of the adjuncts in the sentence.

Adjuncts presumably favor the initial and the final positions of the sentence according to the contextual factors (Hasselgård, 2010). The adjunct in the initial position is assumed to represent given information. More

specifically, if the adjuncts contain anaphoric references or provide necessary background information for the rest of the sentence, they usually occupy the initial position, which contributes to the cohesion and coherence of the discourse.

5.2.1 Scene-setting topics as PPs

Prepositional Phrases (PPs) are typically longer than DPs in English, so the relative ordering [DP PP] is supposed to be more frequent than [PP DP] in a sentence based on EIC principle (Hawkins, 1992). On the contrary, in the sentences with multiple topics, PPs are usually preceding DPs in the data. In other words, the longer PPs position themselves before the short DPs, as shown in (22) and (23).

(22)
    a)   <u>With 30 years' experience,</u> <u>he</u> has his training regimen down to a science. (NG)

    b)   <u>After earning a Ph.D. in education from the University of Pittsburgh</u>, <u>Ntaiya</u> decided to pay it forward. (NG)

(23)
    a)   <u>Around his temples, the gray highlights</u> were advancing, making their way deeper into his thicket of coarse black hair. (DC)

    b)   <u>With the confident tone of a man of enormous influence, the Teacher</u> explained what was to be done. (DC)

PPs are longer and heavier than DPs in both (22) and (23), so the order of the preverbal constituents contradicts the governing of end-weight principle and EIC. Instead, the topicalized PPs provide background information, inter alia, a spatial, temporal, or individual framework for the main predication (Chafe, 1976). The preposed PP adjuncts in the sentences refer back to the previous discourse, as demonstrated in (24) and (25).

(24)
    a)   <u>After three attempts</u> failed because of severe weather, Lonnie Dupre […]. Dupre, a 2004 Rolex laureate, <u>is now planning another challenge</u> […]. (**22a**) **<u>With 30 years' experience</u>, he has his training regimen down to a science.**

    b)   But she eventually persuaded her family and her village of Enoosaen to <u>allow her to leave and get an education</u>. **(22b) <u>After earning a Ph.D. in education from the University of Pittsburgh</u>, <u>Ntaiya</u> decided to pay it forward.**

(25)

    a)   <u>His usually sharp blue eyes</u> looked hazy and drawn tonight. […] **(23a) <u>Around his temples, the gray highlights</u> were advancing, making their way deeper into his thicket of coarse black hair.**

    b)   "[…] <u>You must retrieve the stone for me. Immediately. Tonight. You understand the stakes.</u>" **(23b) <u>With the confident tone of a man of enormous influence, the Teacher</u> explained what was to be done.**

The scene-setting topics represented by PPs in the initial position of the sentences facilitate the sentences to follow the given-new information structure and make the discourse more coherent.

Therefore, the preposing of the PP adjuncts in both *NG* and *DC* is due to the topic status of the PPs. To follow the given-new information structure (i.e. topic-comment structure) and make the discourse coherent are the primary motivations for the PP topicalization. As English is a language with the relatively fixed word order (Lehmann, 1992), topicalization of the PPs is a way to rearrange the information carried by the constituents in the initial position of the sentence.

The conspicuous occurrence of the PPs in *NG* (39 instances)*,* but not in *DC* (10 instances) is partly due to the genre-effect, as PPs are compact structures often used in academic writing to avoid repetition (Hinkel, 2004, as cited in Deveci, 2019, p. 255). PPs are usually used as the sentence openers in expository writing because of the scene-setting topic status of the PPs which make the discourse coherent and easy to process.

5.2.2 Scene-setting topics as adverbs
Adverbs are typical adjuncts of a sentence. A given adverb may occupy different positions (Bonami, Godard, & Kampers-Manhe, 2004), as shown in (26). In particular, the initial and the final positions are presumably favored.

(26)

    a)   <u>Evidently</u> John has eaten the beans.
    b)   John <u>evidently</u> has eaten the beans.
    c)   John has <u>evidently</u> eaten the beans.
    d)   John has eaten the beans, <u>evidently</u>.
         (Delfitto, 2006, p. 97)

In (26), the adverb *evidently* appears in different positions with different semantic interpretations. The configurations where the adverbs occur sentence-initially as in (27) are derived by the application of A-bar movement to the adverbs (Delfitto, 2006). That is to say, the adverbs are preposed to the initial position on purpose.

(27) <u>Often</u> Gianni ~~often~~ meets Mary on vacation.

In the data, adverbs are prevailingly found in the initial position of the sentence, which function as the scene-setting topics of the sentence, as demonstrated in (28).

(28)
a) <u>Today</u> evidence is still emerging of the earliest known human ancestors to venture outside Africa. (NG)
b) <u>There</u> the larvae hatch and fatten on plankton. (NG)
c) <u>Instinctively,</u> he tried to scramble for cover. (DC)

In (28), the adverbs *today*, *there,* and *instinctively* are preposed to the initial position of the sentences to be the scene-setting topics. In (28a), *today* sets the temporal framework, and *there* in (28b), provides the spatial background. In (28c), *instinctively* offers the manner of the main predication.

Aside from the scene-setting topic status of the adverbs, *today* in (28a) also plays a role in forming a contrast with the time *more than 25 years ago* aforementioned in the preceding clause as in (29a). Similarly, in (28b), *there* refers back to *the ocean's upper reaches* mentioned in the previous clause as in (29b), which makes the discourse coherent. And in (28c), *instinctively* echoes the preceding depiction of the curator, as shown in (29c). Hence, the adverbs in (28) also function as the cohesive devices to make the discourse coherent.

(29)
a) Scientists found 1.8-million-year-old fossils in Dmanisi, Georgia, <u>more than 25 years ago</u>. **(28a) <u>Today</u> evidence is still emerging of the earliest known human ancestors to venture outside Africa.**
b) The buoyant mass of fertilized eggs slowly rises to <u>the ocean's upper reaches</u>. **(28b) <u>There</u> the larvae hatch and fatten on plankton.**
c) <u>Saunière now realized his sénéchaux</u> […]. <u>In an instant, the curator grasped the true horror of the situation</u>. <u>If I die, the truth will be lost forever</u>. **(28c) <u>Instinctively,</u> he tried to scramble for cover.**

Therefore, the adverbs preposing is due to their topic status which helps realize the given-new (topic-comment) structure of the sentence. The preposed adverbs provide given information denoting the temporal, spatial and manner condition for the following main prediction, which also play a significant role in making the discourse more coherent.

5.2.3 Scene-setting topics as adverbial CPs

Similar to adverbs which are single words or phrases to modify the predicate or the main clause, adverbial CPs are considered adjuncts functioning as adverbial or ad-sentential modifiers (Thompson & Longacre, 1985, as cited in Diessel, 2001, p. 435). They serve to provide given or background information for the main clause.

Concerning the position of the adverbial CPs, it is common to place the adverbial CPs either before or after the main clause (Diessel, 2001). The adverbial CPs in the data are found prominently in the initial position, as shown in (30).

(30)
- a) <u>When the female's eggs are ready</u>, she signals the male. (NG)
- b) <u>If I die</u>, the truth will be lost forever. (DC)
- c) <u>Figuring he had carpal tunnel syndrome</u>, he went to the doctor. (NG)
- d) <u>Shivering</u>, he pulled himself to his feet. (DC)

In (30a), the adverbial CP specifies time for the main clause and in (30b), the adverbial CP identifies the condition for the main predication. In (30c) and (30d), the adverbial CPs are control constructions which modify the main clause, specifying the reason/cause, and addition/accompanying, respectively. The null subjects of (30c) and (30d) are identified consistently with the subjects of the main clauses.

In accordance with Kortmann (1995, as cited in Killie, 2006, p. 448), English control clauses (e.g. 30c & 30d) can refer to time, condition, cause, concession, contrast, instrument, manner, purpose, result, addition/accompanying circumstance, exemplification/specification, etc. Normally, the subject of a control clause co-refers to the subject of the main clause, but English control clause may have its own subject (ibid), as demonstrated in (31).

(31) <u>Strictly speaking,</u> Parkinson's had never been reversed in humans. (NG)

In (31), the subject of the control clause is arbitrary PRO[1], which is distinct from the subject of the main clause *Parkinson*. However, the control clause functions as the modifier and it sets the frame for the main predication.

In addition to the sentential internal function where the adverbial CPs are scene-setting topics establishing the frame for the main clause, the

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[1] A clause with a null PRO subject is called a control clause (Radford, 2009, p. 94), as shown in the example below.

e.g. We$_i$ would like [PRO$_i$ to stay].

adverbial CPs also refer back to the information mentioned in the previous discourse, as shown in (32).

(32)
a) <u>This sexual parasitism bears fruit</u>. **(30a) <u>When the female's eggs are ready</u>, she signals the male.**
b) <u>The attacker aimed his gun again</u>. **(30b) <u>If I die</u>, the truth will be lost forever.**
c) <u>His hand shook a little</u>, and, strangest of all, <u>his wife noticed he never smiled anymore</u>. **(30c) <u>Figuring he had carpal tunnel syndrome</u>, he went to the doctor.**
d) <u>Suddenly, now, despite all the precautions... despite all the fail-safes... Jacques Saunière was the only remaining link, the sole guardian of one of the most powerful secrets ever kept</u>. **(30d) <u>Shivering</u>, he pulled himself to his feet.**

The adverbial CPs are preposed before the main clause due to the scene-setting topic status, which provides the background frame for the main clause. The adverbial CPs also look back to the information in the previous clauses which connect the discourse coherently. The topicalized adverbial CPs help the sentence follow the topic-comment structure.

The frequent appearance of the adverbial CPs in *DC* (29 instances) rather than those in *NG* (14 instances) is partly due to the characteristics of the narrative proses which closely follow the time sequence. Among the 29 instances of the adverbial CPs, the majority are control clauses (13 instances) and the adverbial CPs (five instances) denoting the time.

5.2.4 Topic 1 as complement CPs
Besides the adverbial CPs, the other type of CPs in the data is the complement CP. The difference between the adverbial CPs and the complement CPs lies in that the adverbial CPs as the scene-setting topics are the topicalized adjuncts while the complement CPs are the topicalized arguments.

Complement CPs function as core arguments of a predicate, which is obligatory for transitive verbs (Noonan, 1985, as cited in Diessel, 2001, p. 435). Canonically, the complement CP is supposed to follow the verb, as shown in (33).

(33)
a) She answered, <u>"he might be right."</u>
b) He says, <u>"she is a good teacher."</u>

However, complement CP topicalization is found in both *NG* and *DC*, as seen in (34).

(34)
  a)   "<u>Basically, they're big and uncooperative,</u>" says Alger. (NG)
  b)   "<u>Pain is good, monsieur,</u>" the man said. (DC)

In (34), the underlined complement CPs move to the spec-TopP position of the main clause and serve as the topics of the sentences. Compared with the complement CPs in (33), the complement CPs in (34) are in the initial position of the sentence which refer back to the preceding clause as demonstrated in (35).

(35)
  a)   For one thing, <u>jackfruit—from the family that includes breadfruit, figs, and mulberries—oozes a sticky, white substance when cut, and breaking one down takes time</u>. **(34a) "Basically, they're big and uncooperative," says Alger.**
  b)   For fifteen minutes, he would survive <u>as his stomach acids seeped into his chest cavity, slowly poisoning him from within</u>. **(34b) "Pain is good, monsieur," the man said.**

Both complement CPs are the arguments of the main verb *say*. The inversion of the subject-verb, for instance *says Alger*, occurs under the same conditions as the subject-verb order in reporting clause[2]. The conditions of inversion reflect the weight and communicative importance of the subject versus the verb. Specifically, whichever is placed last is relatively more prominent (Biber, Johansson, Leech, Conrad, & Finegan, 1999). In (34), the preposing of the complement CPs to the initial position is to follow the topic-comment structure of the sentence and make the discourse cogently connected. The complement CPs echo the information given in the previous discourse which is much easier for the hearer to process.

5.2.5 Topic 1 as DP

Compared with topicalization, dislocation is not so common in English (Gundel, 1988). The distinct feature of the dislocation is that the resumptive pronoun left in the sentence which co-refers to the dislocated DP in the initial position, as shown in (36).

(36)
  a)   <u>The woman</u>, she came yesterday.
         (Left-Dislocation, SUBJ)
  b)   <u>The man</u>, she saw <u>him</u>.

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[2] This clause is termed as "reporting clause", which is appended to direct reports of a person's speech or thought (Biber, Johansson, Leech, Conrad, & Finegan, 1999, p. 921).

(Left-Dislocation, OBJ)

c)   The woman, (~~the woman~~) came yesterday.

(Topicalization, SUBJ)

d)   The man, she saw (~~the man~~).

(Topicalization, OBJ)

(Givón, 1988, p. 246)

Both the left-dislocation and the topicalization in (36) prepose the subject or the object to the Spec-TopP position, which make the preposed DP the topic of the sentence. Unlike the left dislocation where the fronted DP co-refers with the resumptive pronoun, topicalized DP co-refers with the deleted copy in the sentence. As the left dislocation appears often in casual, informal English (Gundel, 1988), only two instances of the left-dislocation were found in *DC*, as in (37).

(37)
a)   "But <u>the church</u>, <u>it</u> is a fortress. Especially at night."
b)   "but <u>a man like this</u> ... I cannot presume the authority to stop <u>him</u>."

In (37a), *the church* is left-dislocated, and it co-refers to the resumptive pronoun *it* in the full sentence followed the dislocated DP. In (37b), *a man like this* is fronted from the complement position of the verb *stop* to the Spec-TopP position. Similar to topicalization, left dislocation makes the preposed constituent the topic of the sentence. The preposed DP in (37a) is similar to the subject topic fronting, but it co-refers with the resumptive *it* in the subject position, instead of the delete copy. In (37b), the preposed object DP co-refers to the pronoun *him* in the object position of the main predication. In the same vein, dislocation is also a movement to prepose the topic of the sentence to the initial position of the sentence.

5.2.6 T1+T2+T3…+ (subject topic/ ST)
Over two scene-setting topics preceding the subject were occasionally found in the data, as shown in (38).

(38)
a)   [T1Since May 2009], [T2when she opened the Kakenya Center for Excellence, a girls boarding school in Enoosaen for fourth to eighth graders], nearly 280 girls have attended.

(NG) **PP + Adverbial CP**
b)   [T1Today], [T2 at 74], [ST Mödl] has a warm smile and a wiry frame that looks as if it could survive a charging rhinoceros.

(NG) **Adverb + PP + ST**
c)   [T1Suddenly], [T2now], [T3despite all the precautions] ...

[T4despite all the fail-safes] ... [ST Jacques Saunière] was the only remaining link, the sole guardian of one of the most powerful secrets ever kept.

(DC) **Adverb + Adverb + PP + PP + ST**

d)   [T1Tonight], [T2three thousand miles from home], [ST the accolade] had resurfaced to haunt him at the lecture he had given.

(DC) **Adverb + Adverb + ST**

Based on the semantic meaning of the adverbs, Ernst (2007) proposes the following ordering of adverbs, as in (39).

(39)

Speech-act (e.g. frankly) >Evaluative (e.g. luckily) > Epistemic (e.g. probably) > Subject-oriented (cleverly) > Manner (loudly)

Compared with the order of the adverbs in (39), no such consistent pattern is tied to the topicalized adverbs and PPs in multiple topics. It suggests that the semantic meaning of the adverbs is not sufficient to elaborate the occurrence of the multiple topics preceding the subject.

The appearance of the multiple topics is idiosyncratic which follows the topic-comment structure of the sentence. The multiple topics in the data exhibit the following hierarchies as in (40).

(40)
   a)   NG: PP > Adverb > Complement CP > AdvP
   b)   DC: AdvP > Adverb > Complement CP > PP
            > DP

In both *NG* and *DC*, DPs are prevailingly found as the subject topics. In multiple topics, PPs, adverbs, CPs and DPs are preposed to the initial position preceding the subject (topic), among which PPs are prominent in *NG* and the adverbial CPs are frequent in *DC* due to the genre effect. PPs are compact structure often used as the sentence opener in expository writing to avoid repetition. Adverbial CPs occur frequently in DC is the result of the characteristics of the narrative texts which usually follow the chronological sequence. Both the subject topics and the multiple topics facilitate the sentences to follow the topic-comment structure, meanwhile, they also make the discourse coherent.

Regarding the word order of the topics, the DP subject topics usually abide by the PEW and EIC, except some heavy DP and the CP subject topics. Unlike the DP subject topics, the order of the scene-setting topics, the complement CP topics and the dislocated DP topics preceding the subject

(topics) do not follow the PEW and EIC. Instead, their order is governed by their topic status and the topic-comment structure of the sentence.

6 Conclusion

The subject and the topic frequently occur in the initial position of the English declarative sentence, so the subject is considered the UNMARKED TOPIC based on the psychological intuition (Lambrecht, 1994). This study supports this claim via the investigation of the mapping relation between the subject and the topic in authentic context. Syntactically, the subject is in the Spec-TP position while the topic is in the Spec-TopP position (Rizzi, 1997). Due to the pragmatic requirement of the topic-comment structure, the subject moves from Spec-TP to Spec-TopP position. It finds that the subject topics are dominantly DPs while CPs are also occasionally found in *NG*.

This study also agrees that multiple topics in English are possible and further explores the discourse reasons for the multiple topics. Scene-setting topics are prominent in the data which are realized by adjuncts topicalization. They establish the temporal, spatial and manner frame for the main predication. They also refer back to the information in the previous clauses which make the discourse coherent. The multiple topics preceding the subject (topics) are PPs, adverbs, DPs, CPs, among which PPs are prominent in expository texts and CPs are salient in narrative proses due to the genre effect. PPs are compact structures which frequently appear in expository writing to avoid repetition. As the scene-setting topic, PPs are often used as the sentence opener to make the discourse coherent. CPs, inter alia, the adverbial CPs which occur often in the narrative writing are due to the characteristics of the chronological linkage. Over two scene-setting topics in a sentence are also occasionally found, which are represented by *Adverb +PP +Subject Topic* or *Adverb+ Adverb+ Subject Topic*. These topics follow the topic-comment structure of the sentence. Subject topics and the scene-setting topics contribute to the coherence of the discourse.

Regarding the word order of the topics, the DP subject topics usually abide by the end-weight principle (PEW) and Early Immediate Constituent principle (EIC). Multiple topics in English do not directly relate to these principles, but they always follow the topic-comment information structure.

This study adds to the literature of the topic-comment exploration and the preverbal word order research. It reveals that in written English, multiple topics preposing is an important way to make the discourse coherent. Meanwhile, the investigation of the constituents which represent topics in authentic context sheds light on the writing of English language, especially in expository and narrative proses. PPs as the scene-setting topics are popular in expository writing while control clauses and time adverbial CPs are prominent in narrative writing. Further studies on various genres are needed

to corroborate the claims, for example, the topics of English sentences in academic writing, description, and argumentation essays.

References

Arnold, J. E., Losongco, A., Wasow, T., & Ginstrom, R. (2000). Heaviness vs. newness: The effects of structural complexity and discourse status on constituent ordering. *Language*, *76*(1), 28-55.

Biber, D., Johansson, S., Leech, G., Conrad, S., & Finegan, E. (1999). *Longman grammar of spoken and written English.* Harlow: Pearson Education Limited.

Bonami, O., Godard, D., & Kampers-Manhe, B. (2004). Adverb classification. In F. Corblin, & H. de Swart (Eds.), *Handbook of French semantics* (pp. 143-184). Stanford, CA: CSLI Publications.

Chafe, W. (1976). Givenness, contractiveness, definiteness, subjects, topics, and point of view. In C. N. Li (Ed.), *Subject and topic* (pp. 26-56). New York: Academic Press.

Clark, H. H., & Clark, E. V. (1977). *Psychology and language: An introduction to psycholinguistics*. London: Harcourt Brace Jovanovich Ltd.

Collins, P. (1994). Extraposition in English. *Functions of Language*, *1*(1), 7-24.

Delfitto, D. (2006). Adverb classes and adverb placement. In M. Everaert, & H. C. V. Riemsdijk (Eds.), *The Wiley Blackwell Companion to syntax* (2nd edition, pp. 83-120). Oxford: Blackwell Publishing.

Deveci, T. (2019). Sentence openers in academic writing: A comparison between seminar texts and students' reflective writing papers. *Journal of Language and Linguistic Studies*, *15*(1), 247-261.

Diessel, H. (2001). The ordering distribution of main and adverbial clauses: A typological study. *Language*, *77*(3), 433-455.

Ernst, T. (2007). On the role of semantics in a theory of adverb syntax. *Lingua*, *117*(6), 1008-1033.

Erteschik-Shir, N. (2007). *Information structure: The syntax-discourse interface* (Vol. 3). New York: Oxford University Press.

Givón, T. (1988). The pragmatics of word order: Predictability, importance and attention. In M. Hammond, E. A. Moravcsik, & J. Wirth (Eds.), *Studies in syntactic typology* (pp. 243-284). Amsterdam: John Benjamins Publishing Company.

Gundel, J. K. (1988). Universals of topic-comment structure. *Studies in Syntactic Typology*, *17*(1), 209-239.

Haegeman, L. (2012). *Adverbial clauses, main clause phenomena, and composition of the left periphery: The cartography of syntactic structures* (Vol. 8). New York: Oxford University Press.

Han, C. H. (2019). Imperatives. In P. Portner, C. Maienborn, & K. von Heusinger (Eds.), *Semantics-sentence and information structure* (pp. 225-249). Berlin/Boston: De Gruyter Mouton.

Hasan, R., & Fries, P. H. (Eds.). (1995). *On subject and theme: a discourse functional perspective* (Vol. 118). Amsterdam/Philadelphia: John Benjamins Publishing.

Hasselgård, H. (2010). *Adjunct adverbials in English*. New York: Cambridge University Press.

Hawkins, J. A. (1992). Syntactic weight versus information structure in word order variation. In J. Jacobs (Ed.), *Informationsstruktur und grammatik* (pp. 196-219). Wiesbaden: VS Verlag für Sozialwissenschaften.

Hawkins, J. A. (1994). *A performance theory of order and constituency* (Vol. 73). New York: Cambridge University Press.

Killie, K. (2006). Internal and external factors in language change: Present participle converbs in English and Norwegian. *Neuphilologische Mitteilungen*, *107*(4), 447-469.

Kim, K. S. (2018). Preposed PPs and three types of clausal structures in English. *Studies in Modern Grammar*, *100*, 145-164.

Krifka, M. (1992). A compositional semantics for multiple focus constructions. In J. Jacobs (Ed.), *Informationsstruktur und grammatik* (pp. 17-53). Wiesbaden: VS Verlag für Sozialwissenschaften.

Lambrecht, K. (1994). *Information structure and sentence form: Topic, focus, and the mental representations of discourse referents*. New York: Cambridge University Press.

Lehmann, C. (1992). Word order change by grammaticalization. In M. Gerritsen, & D. Stein (Eds.), *Internal and external factors in syntactic change* (pp. 395-416). Berlin: Walter de Gruyter.

Li, C. N., & Thompson S. A., (1976). Subject and topic: a new typology of language. In C. N. Li (Ed.), *Subject and topic* (pp. 457-489). New York: Academic Press.

Polinsky, M. (1999). Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents. *Language, 75*(3), 567-582.

Prince, E. F. (1981). Toward a taxonomy of given-new information. In P. Cole (Ed.), *Radical pragmatics* (pp. 223-255). New York: Academic Press.

Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1972). *A grammar of contemporary English*. London: Longman Group.

Radford, A. (2009). *Analysing English sentences: A minimalist approach*. New York: Cambridge University Press.

Reiman, P. W. (1994). Subjectless sentences in English. In S. C. Herring, & J. C. Paolillo (Eds.), *UTA working papers in linguistics* volume 1 (pp. 141-152). Arlington: The University of Texas.

Rizzi, L. (1997). The fine structure of the left periphery. In L. Haegeman (Ed.), *Elements of grammar: Handbook in generative syntax* (pp. 281-337). Dordrecht: Springer.

Rizzi, L. (2004). On the cartography of syntactic structures. In L. Rizzi (Ed.), *The structure of CP and IP: The cartography of syntactic structures,* volume 2 (pp. 3-15). New York: Oxford University Press.

Svenonius, P. (Ed.). (2002). *Subjects, expletives, and the EPP*. New York: Oxford University Press.

Zanuttini, R. (2008). Encoding the addressee in the syntax: Evidence from English imperative subjects. *Natural Language & Linguistic Theory*, *26*(1), 185-218.

Zhang, S. (1990). *The status of imperatives in theories of grammar* (Doctoral dissertation). University of Arizona.

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