

A Scoping Study of the Syntactic Structures of Passive and Lexical *Get*

Hyoma SUZUKI^{a*} & Kazuma KIMURA^b

^a*Undergraduate student, Aoyama Gakuin University, Japan*

^b*Graduate student, University of Tsukuba, Japan*

*hyomasuzuki0702@icloud.com

Abstract: This paper examines the syntactic structure of English *get* in terms of decompositional approach and gives a try to providing empirical and experimental evidence for the idea. English has two types of *get*; main verb *get* (cf. *I got a book*) and auxiliary-like *get* (cf. *I got arrested*). Harley (2002) argues that English *get* is morpho-syntactically decomposed into *become* and P in the same fashion as the Kayne's (1993) analysis of auxiliary *have*. However, in the first place, it is not clear whether the original idea is validated. Thus, to consolidate this hypothesis, this paper examines a finer-grained syntactic diagnosis of these decomposed structures. Specifically, we show that the specifier of PP in decompositional structures of auxiliary *have* and *get* is missing based on the evidence from the distribution of Universal Floating Quantifiers (UFQs). We reached to the tentative conclusion that the lack of the position contributes to the auxiliary meaning of *get* and *have*. To verify this, an acceptability judgment task experiment was conducted. The results didn't firmly espouse our prediction, but interestingly they suggested that the acceptability of VP ellipsis in auxiliary-like *get* degraded more sharply than main verb one, which offers a fascinating issue for future research.

Keywords: *Get* passives, Decomposition, Acceptability Judgement Task (AJT), VP-ellipsis

1. Introduction

This paper focuses on the syntactic properties of English *get* and *have* from theoretical and experimental perspectives. It is well known that English *get* can be used as either a main verb or an auxiliary verb as shown below. The case in which lexical verbs apparently function as an auxiliary is true of the one of English *have* as in (2).

- (1) a. I got a book.
b. I got arrested / happy.
- (2) a. I have a book.
b. John has broken the window. (Kayne 1993:112)

In the syntactic literature, *get* and *have* can be captured under syntactic decomposition approach along the line of Distributed Morphology (Freeze (1992), Kayne (1993)). Specifically, Harley (2002) argues English *get* is compositionally formed from an abstract P and an abstract verbal head *become*; Freeze (1992) says *have* is decomposed into an abstract P and *be*.

This study argues that this decomposition approach properly captures the syntactic structures of English *get* and *have* and the distribution of floating quantifiers in *get* and *have* sentences. Given that these verbs are decomposed into multiple functional heads, namely a verbal domain and a prepositional domain, we hypothesize that the specifier of empty P is absent in auxiliary verbs. The semantic difference between auxiliaries and main verbs lies in the syntactic configuration of complement PP. To verify this, we conducted an acceptability judgment task experiment. Our predictions are not firmly supported by the results. They suggest, however, that the acceptability of VP ellipsis in passive *get* degrades compared with possessive *get*.

This paper is organized as follows: Section 2 makes the proposal of this paper clear and gives the empirical evidence of the absence of the specifier position of PP by examining the distribution of Universal Floating Quantifiers (UFQs) in *get* and *have* sentences. Section 3 presents the details of the acceptability judgment task experiment and the results of that. Section 4 discusses a further topic. In section 5, concluding remarks are provided.

2. Proposal and Supporting Arguments

2.1 *Decomposed functional heads*

Freeze (1992) argues that possession *have* is decomposed into an abstract P + *be* based on extensive cross-linguistic data (cf. (3a)). In Kayne (1993), it is proposed that the decompositional idea by Freeze is also applied to the structure of auxiliary *have*. Harley (2002) argues that decomposition approach also holds for English *get*; *get* is decomposed into a P + *become* as in (3b). Although proposed functional heads vary depending on the analysis, there is a general agreement on the mapping of these functional heads into syntactic structures.^[1] For example, the structure of a sentence *John has broken the window* posited in Kayne (1993) is illustrated in (4).

- (3) a. HAVE \rightarrow v_{BE} + P
 b. GET \rightarrow v_{BECOME} + P
- (4) [TP [DP John]_i [VP [V_{BE} have [PP t_i [P' P [VP broken the window]]]]]]
 (Kayne (1993), slightly modified)

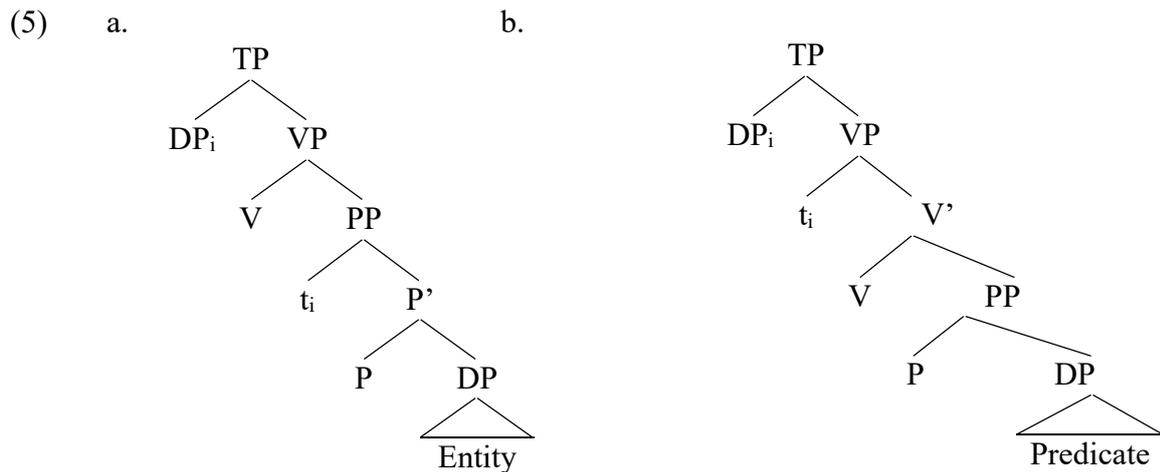
Notice that a verbal head takes a PP as its complement, which locally licenses the relation between the subject DP and the predicate. The P head is incorporated into the verbal head in a head-movement fashion (Baker (1988)). This line of analysis has been widely accepted and has been applied to various cross-linguistic data (see den Dikken (2006), Levinson (2011)).

2.2 *Issues and proposal*

Nevertheless, the Kayne's extension of auxiliary verbs into the decomposition approach seems to lack of support. The validity of the decomposed structures comes from just theoretical requirements without any empirical support. Kayne (1993) states that "the analyses proposed for possessive *have* can and should be generalized to auxiliary *have* (underlines are mine)". It seems that this generalization is solely motivated by the beauty of theory: the replacing a N head in possessives with a verbal one is *conceptually* preferred, since the syntax of auxiliaries and lexical verbs falls under a unified analysis. In Kayne (1993) and subsequent works, however, the theoretical exploration has never been achieved let alone empirical supporting.

To bridge this gap, we aim to examine the finer-grained syntactic structures of auxiliary(-like) and lexical *get*. Specifically, our focus now turns to the empirical validity of the prepositional complement of decomposed syntax. We propose the following structures for

auxiliary *get* and lexical *get* respectively.



Notice that the specifier of PP is present in the case of lexical verb (5a) but absent in the case of auxiliary (5b). While in the former case, the P head takes two entities in its complement and specifier, the latter case indicates that it takes a predicate usually categorized as VP or AP.

It is assumed that each syntactic configuration yields the different semantic composition of PP domain as described in a formal semantic tradition (*e* denotes an entity and *t* a truth value).

- (6) a. $P \rightarrow \langle \langle e, \langle e, t \rangle \rangle, e \rangle$ (lexical verb)
 b. $P \rightarrow \langle \langle e, t \rangle, \langle e, t \rangle \rangle$ (auxiliary)

In (6a), the P head takes an entity as its input and returns a $\langle e, \langle e, t \rangle \rangle$ type predicate, and then takes another entity. Finally, it returns a $\langle e, t \rangle$ type predicate, which is provided for a further semantic composition in a TP domain. Put it more simply, this P head is assumed to license the relationship between two entities. In (6b), on the other hand, the P head takes a $\langle e, t \rangle$ type predicate as its first input, and returns the same type of predicate. This P head plays a role in connecting a complement predicate to a VP/TP domain.

In sum, we argue that the application of decompositional idea by Kayne into auxiliary *have* has not been well supported empirically, providing some empirical evidence for it by examining the syntactic structure of *get* and we suggest that the difference in configuration of PP makes the difference in meaning. In 2.3, we examine the distinct distribution of Universal Floating Quantifiers (UFQs) in *get* and *have* sentences and demonstrate that assuming the absence of the specifier position of PP explains the difference.

2.3 Universal Floating Quantifiers (UFQs)

It is a well-known fact that some types of quantifiers can be syntactically separated from the noun it modifies. In English, universal quantifiers such as *all*, *both* and *each* are allowed to behave as floating quantifiers, which are called Universal Floating Quantifiers (UFQs). In the case *They will all have been invited to the party*, the UFQ *all* modifies *they* in a position separated from *all*. We focus on the syntactic position in which UFQs can be stranded. Relevant to the current issue (or our interest) is the sentences with a UFQ.

- (7) a. *They got all arrested. (cf. They did all get arrested.) (Fleisher 2008:2)
 b. Linguists have all read aspects.

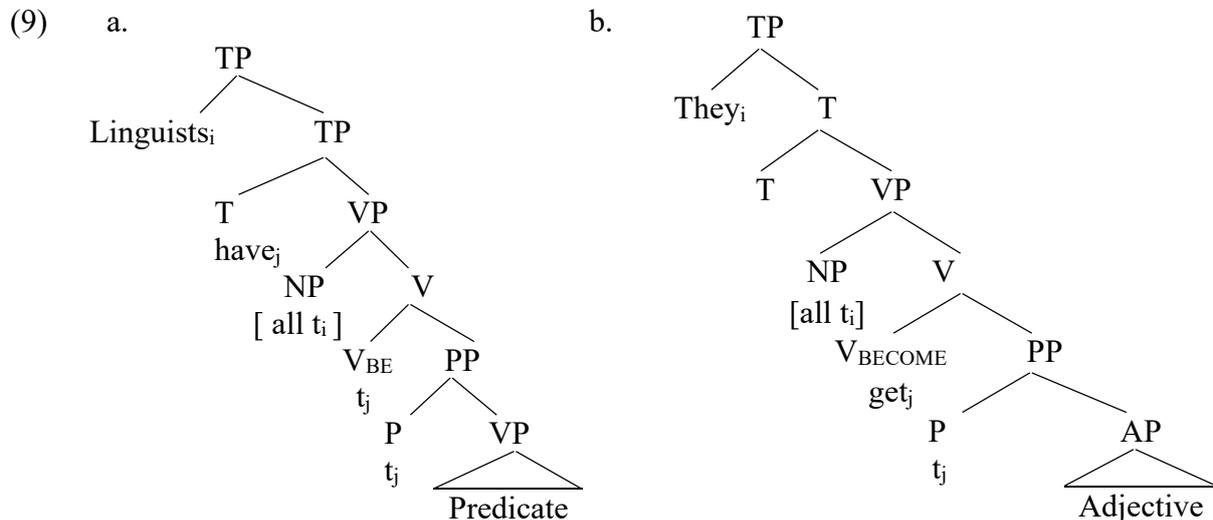
The fact that the sentence in (7a) is unacceptable strongly suggests that the UFQs *all* in *get* passives cannot appear in the post-auxiliary position.

Following Boskovic (2004), FQs cannot be stranded in the θ -position, in which a nominal element is assigned a thematic role (traditionally described as the specifier of VP or AP). This makes the contrast between (7a) and (7b) mysterious, because they would be the same in that *all* strands in the θ -position if the derivations are assumed as illustrated as in (8).

- (8) a. [TP Linguistics_i [VP have [VP [NP all t_i] [V read] [NP aspects]]]]]
 b. [TP They_i [VP [V get] [AP [NP all t_i] [arrested]]]]]]

These derivations are not predicated on the decompositional structure in that both *get* and *have* are externalized as a lexical verb rather than the composition of two functional heads. The relevant position is the specifier of AP (*arrested*) in the case of (8a) and the specifier of VP (*read aspects*) in the case of (8b).

To explain the contrast, we presuppose structures, where *have* and *get* are decompositional captured as in (7a, b): *have* is comprised of *be* + P; *get* is composed of *become* + P. Under decompositional approach, the contrast is captured by focusing on the syntactic position of FQ *all* in *have* sentence and the landing site of the verbal head movement. DPs with an UFQ can only strand in Spec-VP since Spec-PP is absent in both structures. Furthermore, we assume that V-to-T movement is absent in *get*. Thus, in (9a), the stranded quantifier occupies the post auxiliary position since the V head crosses over the quantified NP. In (9b), however, it does not stay at that position since *get* does not move to T head overtly.



This, to some extent, supports the idea that the PP-specifier is present only in lexical verbs and that auxiliary status arises from a structure lacking the specifier position of PP.

So far, we have discussed syntactic properties of auxiliary and lexical *get*. The central part of our proposal is that the complement PP lacks its specifier position in the case of auxiliary but does not in the case of lexical verb.

3. Implications and Experiment

This section will be devoted to discussing further implications induced from our proposal by reviewing a more complicated or manipulated case. Based on the discussion, we conduct an acceptability judgement experiment to test whether the presence/absence of PP's specifier is

experiment to examine whether this prediction is correct.

3.3 *Experiment*

In this experiment, we test whether the original syntactic positions of the subject in *get* and *have* sentences influence the interpretation of bound pronouns in the elided VP domain. We conducted an acceptability judgement task (AJT), targeting twenty English native speakers.

3.3.1 *Design and Materials*

A $2 \times 2 \times 2$ experimental design with two factors was implemented: verb (two levels: *get*, *have*), function of verbs (two levels: lexical verb, auxiliary), bound pronoun reading (two levels: sloppy, strict).

- (14) a. John got his book, and Bill did too.
b. John got arrested by his friends, and Bill did too.
c. John has his book, and Bill does too.
d. John has arrested his girlfriend, and Bill has too.

Notice that each sentence is assigned two interpretations (sloppy and strict). For example, (13a) possibly has two readings: *Bill got Bill's book* or *Bill got John's book*. 8 experimental target sentences were created with 16 filler sentences. Filler sentences include normal VP-ellipsis ones with a verb other than *get* and *have* (e.g., *love*). All the filler sentences form a sentential coordinated structure for the purpose of making surface forms of experimental sentences consistent.

3.3.2 *Participants*

Twenty English native speakers participated in this experiment, who are all recruited through Amazon Mechanical Turk. All participants were those who is living in the United States. They were paid \$5 for approximately 20 minutes to complete the whole session of the experiment.

3.3.3 *Procedure*

The experiment was run on the web-based platform PCIbexFarm (Zehr and Schwarz (2022)). After training session, all 24 sentences were presented in a randomized order and participants are required to evaluate all the sentences in terms of a 5-point Likert scale (in which 1 is completely unnatural, 5 is completely natural).

Each sentence is presented with an intended interpretation as the following examples.

- (15) a. John got his book, and Bill did too. (Intended: What Bill got was Bill's book)
b. John got his book, and Bill did too. (Intended: What Bill got was John's book)

Notice that intended meanings are shown in a paraphrased form: pseudo-cleft style (*What* Subj Pred *was* DP). In the instruction part, participants are informed to evaluate the sentences given an intended meaning assigned to each sentence.

3.3.4 *Results*

The mean acceptability scores of *get* and *have* sentences per four conditions are summarized in Figure 1. It shows that auxiliary verbs are judged worse than lexical verbs in both conditions

(mean acceptability: Aux, 3.28; Lexical verb, 3.88). Linear mixed effects (LME) models were adopted to analyze the effects of each factor using *lme4* package in the R software environment. Note that, in dummy coding, *get*, *auxiliary*, and *sloppy reading* were set as the reference level. When analyzed, the acceptability scores were standardized. The analyses of the standardized acceptability scores are summarized in Table 1.

Figure 1. The mean acceptability scores per four conditions (error bars indicate standard deviation)

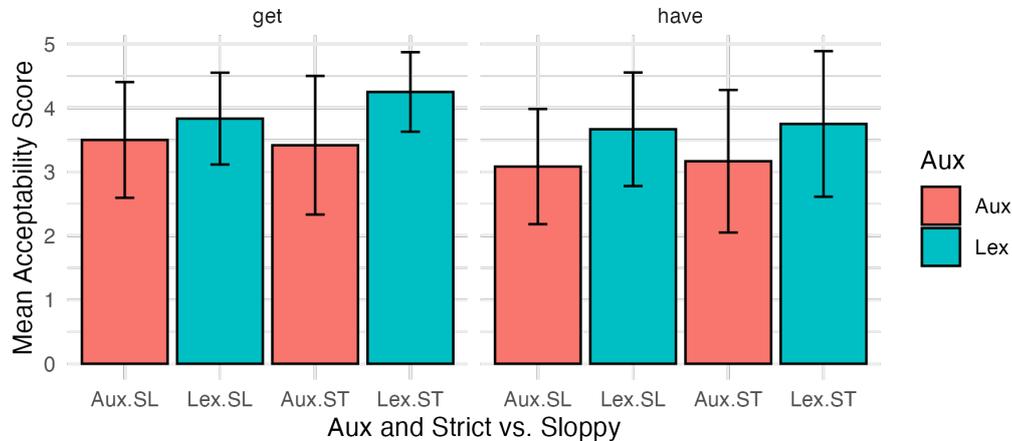


Table 1

Fixed effects from the LME. (Significance codes: *=0.05, ** = 0.01, *** = 0.001)

Fixed effects	Estimate	t value	P (> t)
(Intercept)	0.3920	1.764	0.08896
Verbtype	-0.339	-2.149	0.00346*
Aux	-0.593	-3.760	0.00032***
Reading	0.1271	0.806	0.42277

model: lmer (Value ~ Verb + Aux + Reading + (1 | Subject) + (1 | Sentence), data = data)

The effect of verb type reached significance (Estimate = -0.339, $t = -2.149$, $p < 0.00346$), which indicates that sentences containing *have* degrade acceptability sharply. In addition, the scores in the auxiliary condition were significantly low (Estimate = -0.593, $t = -3.760$, $p < 0.00032$).

To investigate whether the latter effect holds for both verb types, we further analyzed its effect with the verb type condition fixed. This revealed that the effect was observed only in the *get* condition (Estimate = -0.0593, $t = -2.872$, $p < 0.00698$), but not in the *have* condition (Estimate = -0.593, $t = -2.33$, $p < 0.258$, entire results were omitted due to space limitation).

Table 2

Fixed effects from the LME for each factor under the *get* condition.

Fixed effects	Estimate	t value	P (> t)
(Intercept)	0.0741	0.266	0.79266
Aux	-0.0593	-2.872	0.00698**
Reading	0.1271	0.410	0.68419

model: lmer (Value ~ Verb + Aux + Reading + (1 | Subject) + (1 | Sentence), data = subset (data, Verb == 1))

Neither condition showed a significant effect of the Reading condition, nor was there an interaction with the Aux condition (in the entire analysis; Estimate = 0.1271, $t = 0.806$, $p < 0.4227$, and in the *get* condition; Estimate = 0.1271, $t = 0.410$, $p < 0.6841$).

3.4 Discussion

The main result of this experiment is that the difference between lexical verb and auxiliary did

remains operative to some extent.

5. Concluding Remarks

This paper has investigated the complement structures of lexical and auxiliary *get* and *have* within the decompositional approach. We focused on the prepositional complement, which previous research has insufficiently addressed. It is proposed that lexical *get* is derived from the full-fledged PP with its specifier position projected while auxiliary *get* is results from a down-sized PP lacking its specifier position. Based on this examination and its underlying assumptions, we conducted an acceptability judgement experiment to test the predictions on the interpretations of bound pronoun in VP-ellipsis environment. Although the results did not support the predictions, they revealed, surprisingly, that VP-ellipsis with auxiliary *get* is not consistently preferred.

Providing empirical evidence in support of the PP-complement analysis, such as through refinements in experimental design is required. We need further investigation into VP-ellipsis sentences involving *get* passives, including gapping and psuedogapping. These phenomena have long been controversial in syntactic theory, and it is necessary to examine whether they should be accounted for by allowing ATB-movement or solely by VP-deletion. Specifically, by examining the relationship between V-to-T movement and VP-ellipsis (Johnson (1996, 2009)), we can gain not only insights into the morphosyntactic properties of *get* passives in English but also a broader understanding of syntactic theory. If this line of research proves successful, then it could constitute a significant advancement in syntactic research.

Notes

- [1] Previous studies have proposed various functional categories such as FP (Ritter and Rosen (1997)) and Appl (Kim (2012)), but for convenience, this paper uses the PP complement. Please note that, even if other functional categories are assumed, it does not affect the central argument of this paper.
- [2] As for the second remnants in (18), *by John* and *that book*, we assume that these are escaped from the elided VP in a rightward movement fashion (cf. Orth and Yoshida (in press)).
- [3] We thank Daniel Plesniak (SNU) for providing the judgements.
- [4] Since our informant gave 5 to (18a), and 1 to (19), we judged that the contrast between them is clearcut: the former is grammatically perfect, and the latter totally ungrammatical.

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