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Inverted reporting verbs in the sentence-initial position in English: Focus on phrasal verbs*

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ABSTRACT

This paper examines several properties of quotative inversion in English, restricting reporting verbs to phrasal verbs. Contrary to the observations of a number of previous studies, data collected from natural occurrences show that subject-verb inversion in reporting clauses applies to phrasal verbs. In this paper, two points of investigation are identified by reviewing the literature on quotative inversion in the initial position: the validity of the relationships (i) between quotative inversion in the initial position and *Time* magazine writing style, or 'Timestyle' (Ikeda 1992: 270, 390), and (ii) between quotative inversion and the discourse status (newness) and structural complexity (heaviness) of postverbal noun phrases. The relationship between quotative inversion in the initial position and *Time* writing style is then verified using the *Time* Magazine Corpus. The verb-subject order in reporting clauses that use phrasal verbs with *in*, *out*, and *up* is also shown to be compatible with the principles of information flow and end-weight. Finally, this paper suggests three possible functions of quotative inversion in the initial position: "discourse function", "summing-up function", and "dialogic function".

1. Introduction

This paper deals with subject-verb inversion in reporting clauses in English. In the present article, reporting verbs specifically indicate phrasal verbs, not

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simple verbs. A large number of studies have already been conducted for simple verbs such as *say*, *ask*, *explain*, and *write* (Hermon 1979, Green 1980, Biber et al. 1999, Sonoda 2000). Conversely, the previous study of phrasal verbs has been superficial. This paper limits the discussion to phrasal verbs.

The purpose of this paper is threefold. First, the work shows that subject-verb inversion in reporting clauses also applies to phrasal verbs, although some researchers do not allow for this. Second, it clarifies in which sentence position subject-verb inversion in reporting clauses occurs in *Time* magazine, as well as the relationship between *Time* magazine and verb-subject order in the sentence-initial position. Generally, reporting clauses have been shown to occur in the initial, medial, and final positions of a sentence. However, *Time* magazine has a strong preference for inversion in the initial position. The validity of this observation is tested in a later section. Third, the paper examines the properties of postverbal noun phrases in reporting clauses in terms of both discourse status and structural complexity.

This article is organized as follows. In Section 2, I critically review the previous literature. In Section 3, I focus on quotative inversion in the initial position and pose the problems to be discussed in this paper. In Section 4, I present the methodology adopted in this study, offer the results of the investigation, and discuss the data provided. First, I demonstrate the relationship between *Time* magazine and verb-subject order in the sentence-initial position using quantitative analysis. Second, I examine the properties of postverbal subjects independently of the position of the reporting clauses. Then, I suggest three possible functions of quotative inversion in the initial position on the basis of the observations. Lastly there, I comment on the remaining issues and suggest a future direction for the study of the inversion of phrasal verbs as reporting verbs. In Section 5, I deliver several concluding remarks.

2. Phrasal verbs in inverted quotatives

As groundwork for the rest of the paper, I will establish some terminology to make the explanations as clear as possible. Consider the following examples:

- (1) Initial: Mac said, "The milkman is late again".
- (2) Medial: 'Yes', said Harry, 'but I haven't got a licence'. (Rowling 2005: 517)
- (3) Final: 'It's a thought', said Hermione slowly. (Rowling 2005: 438)

The reporting clauses in each sentence are *Mac said, said Harry*, and *said Hermione slowly*. The verb *said* in these examples is called a reporting verb or a quoting verb. Reporting clauses are also called quotatives, quotative clauses, or *inquit*, and subject-verb inversion in reporting clauses, as in (2) and (3), is called quotative inversion or an inverted quotative. The quoted words themselves are referred to as reported clauses, quotes, or quotations. As shown in the above examples, reporting clauses can be used in different positions relative to the quoted material.

We may now proceed to the review of previous studies. First, let us consider the following example¹:

- (4) ?'No, you cannot', went on Mrs Robinson.
- (5) a. "The reason is this", **John went on**.
 - b. *"The reason is this", went John on.
 - c. "The reason is this", went on John.
- (6) a. "She's a sweet, sweet kid, your friend", **Angela went on**.
 - b. ?went on Angela

All of these examples take the phrasal verb went on as the quoting verb. Kahn (1985: 301) argues that, as illustrated in (4), inversion should be avoided when using verbs of greater complexity than the simple said, continued, laughed, replied, wrote, and the like. Suzuki – Yasui (1994: 368) make this point by using the contrast in (5). These authors illustrate the unacceptability of partial or full inversion, as shown in (5b-c). In a similar fashion, exemplifying (6a-b), Sams (2009: 162) expresses her view: "Two-word quoting verbs can ... affect the possibility of quotative inversion". She also states that "The use of the quoting verb went on in an inverted quotative sounds awkward and does not appear" in her data.

Next, let us note the different opinions shown in the following examples:

- (7) a. "Where do you want the concrete?" **called up Fanny** to Max.
 - b. "Don't drop the bricks!" **shouted out Trudy** to Carl.
- (8) "You know", **chipped in Carla**, "she could be Korean".

¹ The emphases added to the example sentences and tables throughout the present paper for the sake of convenience are mine.

Collins – Branigan (1997: 4-5) discuss quotative inversion with those phrasal verbs that are used in verb-subject order, as in (7a-b). These authors do not seem concerned with whether phrasal verbs can be used in this way. Another example (8) is taken from Sams (2009: 162). As we have already seen in (6), she does not accept the use of the phrasal verb *went on* in an inverted quotative. However, she says that there are several "two-word quoting verbs that do appear inverted" in her data; *chipped in, chimed in*, and *put in* all appear as inverted, one example of which is shown in (8). From these data, she suggests that this phenomenon may be a function of *in*, but as Collins – Branigan's examples (7a-b) show, different particles such as *up* and *out* are also used in this context.

It may safely be assumed from these facts that phrasal verbs are used in inversion. This phenomenon is also evident in my own data, obtained from newspapers, online newspaper websites, magazines, and fiction:

- (9) **Sums up IIB's Ariff**: "The idea is not to view tourism products in isolation, but to see Iskandar as an integrated tourism site to encourage longer stays and repeat visits". (*International Herald Tribune*, June 19, 2009)
- (10) "With due respect", **shot back Hayward**, "We drill hundreds of wells around the world". (http://news.therecord.com/article/730809, June 17, 2010)
- (11) "Most Americans like their work, finding it a source of their identity and meaning in life", **points out Laura Carstensen**, a psychology professor at Stanford University and founding director of the Stanford Center on Longevity. (*U. S. News & World Report*, February, 2010)
- (12) 'I well remember myfirst interview with Dumbledore', went on **Professor Trelawney**, in throaty tones. (Rowling 2005: 508)

As is evident from these examples, there is no doubt that phrasal verbs can be inverted in contemporary English usage. From this standpoint, the account may be developed as follows. First, my data show that quotative inversion can occur in any position: initial, medial, or final. Second, the present data and those of previous studies indicate that the second words or the particles of inverted phrasal verbs are *back*, *in*, *out*, *up*, and *on*. Note that verbs using *on* were not accepted as invertible in previous studies. As discussed in the introduction, little is known about the inverted usage of phrasal verbs in reporting clauses. Hence, a complete and thorough discussion of the exact

properties of this usage is beyond the scope of this paper. Instead, I will concentrate on one phenomenon: subject-verb inversion before a quotation, as in (9).

3. Quotative inversion in the initial position

As established in the previous section, the present paper is concerned with quotative inversion occurring in the initial position. Kirchner (1972: 31) calls this usage "absolute inversion", and Schmidt (1980: 11) terms it "journalistic style inversion". I discuss this phenomenon in the following section. In subsection 3.1, we will consider the kind of register in which the inversion is used and introduce *Time* magazine as a possible register. In subsection 3.2, we will concentrate on the motivations for the inverted usage.

3.1 Quotative inversion in the initial position and Timestyle

Contrary, or at least relative, to its frequent occurrence in the medial and final positions, quotative inversion rarely occurs in the initial position (Biber et al. 1999, Sonoda 2000). If this observation is accurate, in what contexts can we find sentence-initial quotative inversion? We will consider this question in terms of register².

As many grammar books indicate, this type of inversion seems to be characteristic of a journalistic style: "journalistic writing" (Quirk et al. 1985: 1024), "news" (Biber et al. 1999: 922), and "written journalism" (Huddleston 2002: 1027; Carter – McCarthy 2006: 818). Kahn (1985: 301) further remarks that the inversion seems to be "associated with American news-magazines in particular", although it "is now fairly common in the journalism of Britain and other English-speaking countries as well". Hartvigson – Jakobsen (1974) and Ikeda (1992) lend support to Kahn's (1985) suggestion. Hartvigson – Jakobsen (1974: 83) report that "Time is a happy hunting ground" for quotative inversion in the initial position, and Ikeda (1992: 270, 390) calls the inversion in question "Timestyle, Timese, or Time style".

Time is a well-known American magazine. The term Timestyle is derived from its "association with *Time* magazine" (Quirk et al. 1985: 276), as "*Time* magazine started to adopt that style" (Lee 2010: 2508). Ikeda (1992:

Fujii (2006) claims that the inversion has its origins in Irish English, but we are not concerned here with origin.

270, 390) points out that an inverted reporting clause in the initial position is a characteristic mannerism of Timestyle and provides an example used in the initial issue of *Time* magazine:

- (13) **Said the Christian Science Monitor:** "It is not difficult to [...]". (*Time*, March 3, 1923)
- (13) is an example of a simple verb inversion. The question now arises: does this pattern hold for phrasal verbs as well? This issue merits further investigation, and we will examine it in Section 4.

3.2 The motivations for quotative inversion in the initial position

It is uncertain whether the low frequency of the phenomenon is directly related to the surprisingly small number of previous studies on the topic, but only a few previous attempts have been made to investigate quotative inversion in the initial position. These studies include those of Fukuchi (1985), Sonoda (1997), and Burchfield (1998). Fukuchi (1985) discusses the relationship between reporting verbs and their preceding linguistic context. To cite one example from Fukuchi (1985):

(14) [...], but M. Feldstein, chairman of the Council of Economic Advisers, publicly maintained that a tax hike was needed. **Said Feldstein, who resigned in July to return to teaching at Harvard**: "The longer the deficits are allowed to persist, the greater are the risks to our economy". (*Time*, January 7, 1985)

To account for this phenomenon (14), Fukuchi (1985) appeals to "the amount (degree) of communicative dynamism" outlined by Firbas (1966: 240). According to Firbas (1966), sentences start with the lowest amount of communicative dynamism and gradually progress to higher degrees.

Let us now consider the example (14), in which Feldstein's speech presentation continues. First, the preposed verb *said* is lower in semantic content than *maintained*, which occurs in the preceding context, because the more specific *maintained* connotes *said*. Second, the subject *Feldstein* is followed by a nondefining relative clause, which is unusually long and adds new information to the subject. Therefore, in (14), the subject is more important than the verb, so the condition of inversion is satisfied.

Sonoda (1997: 20, 23) presents two alternative motives for using an inverted reporting clause in the initial position: the first is "to give variety to these clauses and thereby not to bore the reader by a tactless repetition of the same kind of reporting clause in a series of paragraphs", and the other is "to conclude and summarize a paragraph". The latter is evidenced by showing that the phenomenon tends to appear in the final position in a paragraph.

Sonoda (1997) gathered data from 12 *Time* magazines, 12 *Reader's Digest* magazines, and 10 *Newsweek* magazines published between August 1994 and August 1996, finding 143 instances of quotative inversion in the initial position in the 34 magazines. Moreover, he examined the position of each paragraph in which the phenomenon occurred. The initial, medial, and final positions contained 2, 31, and 103 instances of inversion, respectively; 7 instances constituted single paragraphs by themselves. From the observation that quotative inversion occurs most frequently in the final position of a paragraph, he surmised that quotative inversion is used to conclude and sum up a paragraph. In (15), for example, which organises a single paragraph, ⑤ finishes the discussion and summarises the paragraph (Sonoda 1997: 22-23):

(15) ①After defying gravity for two years, Bombay's soaring real estate market is falling back to earth. ②Prices in some areas are down as much as 40% since 1994, the peak of the boom. ③The opening up of India's economy in 1991 attracted hordes of multinationals, driving some residential and commercial rents to levels higher than Tokyo's. ④Apartments of about 185 sq m in the city's nicest neighborhood were fetching \$2.4 million. ⑤Says Deepak Parekh, chairman of the Housing Development Finance Corporation (H.D.F.C.), India's largest mortgage company: "Prices have just become totally unreasonable in Bombay. They had to come down". (*Time*, July 8, 1996)

Burchfield (1998) also shows two usages of the phenomenon in question: the journalistic convention serves as an eye-catching device and a way to achieve stylistic balance. Example (16) illustrates the latter:

(16) 'Oh', said a man to me, when the news had penetrated our circle of acquaintance, 'I hear they're actually giving you money for it'. **Said another**, 'Do you know – have you any idea – how many books are published in the course of a year?' (Burchfield 1998: 685)

In (16), one person's statement is followed by another. According to Burchfield (1998: 685), in the context of multiple sequential statements, "one *said* formula balances the other". Hence, subject-verb inversion before the direct quotation is stylistically motivated.

The *Time* Magazine Corpus, which we use in the next section, provides the URL of any article that uses the words or phrases being queried, so we can easily find the full text of each relevant article³. That is, we can see the preceding context and examine whether the subjects represent new or old information. Hence, we will focus on postverbal subjects in terms of discourse status and grammatical complexity in 4.2.

4. Method, results, and discussion

This section consists of three parts. In 4.1, I explain the method, object, and procedures of the investigation. I then show the results of the research: the number of occurrences and the positions of the quotative inversions. In 4.2, I analyse the data obtained from the procedures described in 4.1. In 4.3, I suggest three possible functions of quotative inversion in the initial position on the basis of the observations in 4.1 and 4.2: "discourse function", "summing-up function", and "dialogic function".

4.1 A test for Timestyle

First, let us examine the corpus employed in this study: the *Time* Magazine Corpus. This corpus was created and is managed by Mark Davies of Brigham Young University (BYU) and includes more than 100 million words of text in American English. The corpus covers the print edition of *Time* magazine from 1923, when the magazine was launched, to 2006.

The phrasal verbs under investigation were selected not only from those discussed in Section 2 but also from those found in Shimada (1985), Inoue (1990), Barnard (2002), and the data which I collected from natural sources. The particles of these phrasal verbs were limited to *back*, *in*, *out*, *up*, and *on*. The phrasal verbs selected all carry the meaning of saying. The list is as follows:

During my data collection, the full texts were available for free until September 2010, but a paywall was instituted sometime after this point. For those cases in which the URLs were missing, I found and analyzed the full texts by searching the Web or utilizing the print edition.

Particles	Items for Investigation
BACK	answer back, call back, ring back, sass back, shoot back, snap back, talk back, throw back, write back, fire back
DOWN	bear down, cry down, grind down, hold down, howl down, keep down, put down, shout down, talk down
IN	break in, butt in, chime in, chip in, cut in, horn in, put in, step in
OUT	babble out, bark out, bawl out, bellow out, belt out, blab out, blare out, blurt out, bluster out, boom out, breathe out, call out, cry out, falter out, gasp out, grind out, groan out, howl out, jabber out, lisp out, peal out, point out, rap out, rasp out, read out, ring out, roar out, rumble out, scream out, shout out, sing out, snap out, sob out, speak out, spell out, stammer out, thunder out, wheeze out, whine out, yell out
UP	call up, sum up
ON	babble on, blast on, chatter on, count on, drone on, go on, rattle on, sing on, stumble on

Table 1. A list of phrasal verbs for investigation

When searching the corpus, I restricted the tenses of the verbs to the third person present singular and all persons of the past singular and plural. When the verbs' spellings differed between British and American English, I regarded both spellings as objects of investigation. Summarizing the procedure, I first typed a phrasal verb into the search box of the corpus, hit "SEARCH," and then extracted all occurrences from the corpus. Second, I singled out all cases of quotative inversion from these occurrences. It must be noted that I also included instances without quotation marks. As Biber et al. (1999: 921) point out, "quotation marks identifying the reported text are often missing." By including such cases, I covered a wide range of quotative devices such as partial quotation, whether in direct or indirect discourse. The results are shown in Table 2.

Out of the items in Table 1, my investigation found 18 phrasal verbs in quotative inversion. Occurrences of the particles *back*, *in*, *out*, *up*, and *on* were found, but occurrences of *down* were not. A total of 330 instances of quotative inversion were identified; of these inversions, the most common was *sum up*, with 155 instances, followed by *point out* with 46, *shoot back* with 41, and *chime in* with 35. The following examples illustrate these inversions:

(17) a. **Sums up a senior adviser** to the Bush campaign: "[...]". (*Time*, April 20, 1992)

b. "There's four of them right here!" shoots back **Star Jones**, as the audience – almost all female – goes nuts. (*Time*, January 22, 2000)

- c. "We have nothing left", **chimes in a third**. (*Time*, March 2, 1998)
- d. "[...]", **points out Robert Hormats**, vice chairman of Goldman Sachs International and a former State Department official in the Carter Administration. (*Time*, April 21, 2003)

Table 2. The numbers and the positions of quotative inversions

NT.	o. Phrasal Verb		0 -111	Initial			
No.		Occurrences	Quotative Inversion	Connective + V +NP	V +NP	Medial	Final
1	2	3	4	5	6	7	8
1	fire back	110	2		1		1
2	shoot back	209	41		17	6	18
3	snap back	136	7		4	1	2
4	write back	62	2		1	1	
5	break in	483	8		3		5
6	chime in	196	35		17	5	13
7	put in	2838	7	1	2	3	1
8	blurt out	135	2		1		1
9	call out	523	8		2		6
10	cry out	343	4		1	1	2
11	rap out	50	2		1		1
12	ring out	289	2	1			
13	shout out	34	1				
14	sing out	57	2		1		
15	point out	4565	46	7	1	18	20
16	sum up	1423	155	1	117	22	15
17	go on	8089	5		1	3	1
18	rattle on	27	1				1
Total	18	19651	330	10	170	60	90

Table 2 also presents the positional distribution of the quotative inversions. Quotative inversion in the initial position is divided into two groups: a verb-subject type and a connective-verb-subject type. Some examples of the latter are shown below:

- (18) a. But, **put in Paul**: "[...]". (*Time*, June 30, 1960)
 - b. All in all, proudly **sums up the Rev. Nolan B. Harmon**, retired Bishop of Western North Carolina and one of the supervising editors, "[...]". (*Time*, January 22, 1966)

These instances seem rather different from usual quotative inversions in the initial position, but we may regard these structures as what Biber et al. (1999) call "left expansions." According to Biber et al. (1999: 924), "initial reporting clauses often have left expansions, which can also include time adverbials, place adverbials, a specification of the addressee, and *ing*-clauses." Therefore, I classified these instances into the same category as the usual subject-verb inversions before a quotation.

Having considered this special case, we may now turn to the main topic of the analysis. It should be noted from Table 2 that quotative inversion appears more often in the initial position than in the medial and final positions. These results are clearly different from those of Biber et al. (1999) and Sonoda (2000). Biber et al. (1999: 925) point out that "the overwhelming majority of reporting clauses in initial position take subject-verb order," and Sonoda (2000) also found no quotative inversion in the initial position while observing 24 instances and 107 instances of verb-subject order in the sentence-medial and sentence-final positions, respectively. What caused the differences between these results and those of the present study? I believe that the results were influenced by the register: *Time* magazine. The results show that, in terms of quantity, quotative inversion in the initial position is a characteristic expression of *Time* magazine, that is, Timestyle.

4.2 A test for postverbal NPs

In this subsection, I examine the properties of postverbal noun phrases (NPs) in reporting clauses in terms of both "discourse status (newness)" and "structural complexity (heaviness)", as proposed in Arnold – Wasow (2000).

4.2.1 Newness

Newness concerns whether postverbal subjects are explicitly mentioned in the preceding context, or whether their information is new or previously given. The concept is also related to a general pragmatic principle, the "old information first, new information last" principle (Arnold – Wasow (2000: 30) call it "the given before new principle"). We examine whether this principle holds for our data.

In Arnold – Wasow (2000), "newness" is used to refer to the distinctions among given, inferable, and new information, which are based on Prince's (1992) three-way distinction:

An NP is classified as given if its referent has been previously mentioned in the discourse. An NP whose referent has not been explicitly mentioned but could be inferred from something else that was mentioned is classified as inferable. Only NPs whose referents are truly new to the discourse are classified as new. (Arnold – Wasow 2000: 30)

Note that Prince's (1992) and Arnold – Wasow's (2000) distinctions are not always identical with those of the present paper. Therefore, we must confirm our distinctions.

An NP is classified as given information only if the same referent exists in the previous discourse. If this is not the case, the NP is classified as new. Conflict arises over the category *inferrable*⁴. The above extract from Arnold – Wasow (2000) initially seems unproblematic, but *inferrable* is ambiguous and difficult to define because inference is closely related to audience knowledge and varies among individuals. Even if an NP is new to the discourse or has not yet been mentioned, its referent can be old information to the audience. Therefore, the category *inferrable* should be more restrictive.

Although this paper's definition of *inferrable* is similar to Prince's (1992), this definition is rather restrictive, in the same way as that of Kreyer (2006). My data contain several examples in which it is difficult to judge whether an NP is given or new information. To cover such examples, I posit *inferrable* as the immediate information status for convenience. The following examples illustrate this point:

- (19) a. [...] the Communists yelled: "Long live Communism!" [...]. Once again rang out the provocative cry: "Long live Communism!" (*Time*, April 6, 1925)
 - b. [...], seven of the men drew 30 years apiece, only one got less than 20. "Don't worry, Mum, I'm still young", **shouted out one of the men who had received a 25-year sentence**, as guards hustled him away. (*Time*, April 24, 1964)

⁴ Researchers disagree regarding the spellings "inferable" and "inferrable". For example, while Prince (1992) uses "inferrable," Arnold – Wasow (2000) prefer "inferable". I adopt Prince's spelling when referring to the concept in a technical sense.

In (19a), a cry is not mentioned in the previous discourse in the form of an NP. However, we can understand from the preceding discourse that the Communists yelled. The definite NP the provocative cry itself is new to the discourse, but we identify by inference that the Communists' yell was a provocative cry. Hence, the provocative cry is not always new information, and we may regard it as inferrable. In (19b), the NP one of the men may be new to the discourse, but the men have already been mentioned in the previous discourse and are given information. Hence, we may regard one of the men as inferrable. In the present paper, I classify elements as inferrable if they are related to an element in the preceding discourse through a sense relation such as member of or part of, as in (19b)⁵.

Now, we may examine Table 3:

Information status Particles	Given	Inferrable	New	Total
BACK	41	1	9	51
IN	14	0	36	50
OUT	15	6	46	67
UP	56	9	89	154
ON	5	0	1	6
Total	131 (=39.9%)	16 (=4.9%)	181 (=55.2%)	328 (=100%)

Table 3 shows the distribution of the information status of postverbal NPs across particles. Two of the 330 tokens were excluded from the analysis because it was not possible to find the full text of the article and obtain the preceding context. As shown in Table 3, the majority of NPs contained new information. This result might initially seem to conform to the principle of information flow, or the "old information first, new information last" principle, but Table 3 indicates that given information accounts for nearly 40% of the NPs. Therefore, we cannot say that a great contrast exists between given information and new information, indicating that the information status of postverbal subjects is not the only factor influencing inversion.

⁵ Kreyer (2006: 135) uses the category *indirectly retrievable* instead of *inferrable*.

Note that when phrasal verbs with *back* and *on* are used, their subjects tend to carry given information, contrary to those of verbs using *in*, *out*, and *up*. As for *back*, we can identify the referent of the subject from the previous discourse. *Back* has the meaning of *in return* or *reply*. When phrasal verbs with the particle *back* are used, the context is, in many cases, dialogic. We have already identified the speakers or characters from the context. Therefore, the characters or the postverbal subjects are given information.

4.2.2 Heaviness

Heaviness concerns whether the inversion in reporting clauses is related to the length and complexity of NPs. The concept is also closely related to "the principle of end-weight: the tendency for long and complex elements to be placed towards the end of a clause. This eases comprehension by the receiver" (Biber et al. 1999: 898). In this paper, I measure heaviness as the difference in length between verbs and subjects, in terms of number of words, as in Arnold – Wasow (2000).

I tested the relationship between heaviness and inversion using the data in 4.1. The first relationship examined was the relative weight of phrasal verbs and postverbal subjects, testing the idea that the heavier constituent tends to come later than the lighter one. The procedure was applied as follows (cf. Kreyer 2006: 54):

- 1. Count the number of words that form the postverbal subject, S
- 2. Count the number of words that form the phrasal verb, V
- 3. Calculate the difference D=S-V

Consider the following examples:

- (20) a. "What I said was, 'Is anybody at home?'" called out **Pooh** very loudly. (*Time*, December 26, 1960)
 - b. "There is no way of becoming a drama critic", fired back **Shaw** in his first letter. (*Time*, January 2, 1956)
 - c. "There's four of them right here!" shoots back **Star Jones**, as the audience almost all female goes nuts. (*Time*, January 22, 2000)

As shown in (20a-c), in which the Ss are boldfaced, I did not count constituents such as adverbs and adverbial clauses that did not modify NPs. My interest concerned differences in relative weight between Ss and Vs. The Ss in both

(20a) and (20b) have a heaviness measure of 1, while the one in (20c) has a value of 2. The phrasal verbs are composed of two words, so the V value in each example is 2. Hence, the Ds in (20a-c) are -1, -1, and 0, respectively.

The results of the calculations for all of the instances are shown in the following table:

_				
D	-1 or less	0	1 or more	Total
Particles	(Pre-heavy)	(Balanced)	(Post-heavy)	
BACK	30	8	14	52
IN	2	18	30	50
OUT	8	11	48	67
UP	31	26	98	155
ON	1	4	1	6
Total	72	67	191	330

Table 4. The distribution of the difference value D across particles

Table 4 shows the distribution of the difference values. *Pre-heavy* indicates phrasal verbs that are heavier than postverbal subjects, while *post-heavy* indicates verbs that are lighter than the subjects. On average, post-heavy tokens ranked the highest. This result indicates that postverbal subjects tend to be heavier than phrasal verbs and is in agreement with the principle of end-weight.

However, we must separately consider the particle *back*; *back* shows a different tendency from that of *in*, *out*, and *up*, as shown in Table 4. The subjects of verbs using the particle *back*, as already shown in Table 3, tend to bear given information. Furthermore, Table 4 also shows that these subjects tend to be lighter than their verbs, despite being placed after the verbs. This result arises because we can identify the referents of the NPs from the previous discourse, as previously explained in the discussion of Table 3. These subjects also tend to be composed of just one word, such as *Reagan* and *Truman*. Many such proper nouns were found among the 330 tokens, but pronouns such as *she* and *he* were absent.

This analysis also examines whether subject-verb inversion in reporting clauses is related to the length and complexity of subject NPs caused by post-modifiers on these subjects, focusing on relative clauses and appositive phrases. These two elements are used to add information to subjects. I found that 69 of the 330 tokens were of this type, or approximately 21%. This tendency may therefore exist in the data.

4.2.3 The correlation between heaviness and information status

To sum up the discussions of Table 3 and Table 4, when phrasal verbs with *in*, *out*, and *up* are used, the verb-subject order in the reporting clauses is compatible with the principles of information flow and of end-weight, while when phrasal verbs with *back* are used, the same pattern does not hold.

I calculated the correlations between the difference value D and information status, or between Table 3 and Table 4.

Information status D	Given	Inferrable	New	Total
Pre-heavy	72	0	0	72
Balanced	39	8	16	63
Post-heavy	20	8	165	193
Total	131	16	181	328

Table 5. The correlation of the difference value D and information status

It is noteworthy that there is a close connection between the given and preheavy conditions, as well as between the new and post-heavy conditions. When postverbal subjects carry given information, the number of words that form them is few. Conversely, when postverbal subjects bear new information, they are long and complex. Therefore, an interrelation exists between the difference value and information status.

As shown in Table 5, the category of new and post-heavy is the most prevalent. Therefore, we may conclude that when these two conditions are met, the conditions for inversion are satisfied.

4.3 Suggestions and future direction

Throughout Section 4, we have seen the various properties of the linguistic phenomena in question. In 4.1, the relationship between quotative inversion in the initial position and "Timestyle" was proven in quantitative terms using the *Time* Magazine Corpus. In 4.2, the verb-subject order in reporting clauses using phrasal verbs with *in*, *out*, and *up* was shown to be compatible with the principles of information flow and end-weight.

The observations in Section 4 further develop the ideas of Fukuchi (1985), Sonoda (1997), and Burchfield (1998), which were reviewed in 3.2. First, the discussion in 4.2 is closely related to that of Fukuchi (1985). As shown in 4.2, quotative inversion can fulfil the discourse function. Birner (1996), who discusses the relationship between inversion in English and the

discourse function, exempts quotative inversion from her study because the inversion often does not behave in this manner; however, my data show the existence of the function. The second function corresponds to one of Sonoda's (1997) suggestions: quotative inversion in the initial position is used "to conclude and summarize a paragraph". As Table 2 in 4.1 shows, an overwhelming number of inversions of *sum up* were found in the initial position. Interestingly, the lexical meaning of *sum up* lends support to Sonoda's (1997) suggestion. I have therefore termed it the summing-up function. The third function corresponds to one of Burchfield's (1998) suggestions: in the context of multiple sequential statements, "one *said* formula balances the other". This formulation suggests that quotative inversion in the initial position can be used in a dialogic context. The inversion of phrasal verbs with *back* in my data is characteristic of such a context, which I have termed the dialogic function.

The last two of the three functions which I have suggested invite further investigation. The points remain to be proven or tested, and their validity may be left to the debate of future researchers.

5. Concluding remarks

In this article, I have discussed two issues with quotative inversion, with special reference to phrasal verbs. First, I proved the relationship between quotative inversion in the initial position and Timestyle, restricting reporting verbs to phrasal verbs and not considering simple verbs. The data from the *Time* Magazine Corpus indicated that quotative inversion occurred more often in the initial position than in the medial and final positions. Significantly, this result challenges previous research on two points. The first is that phrasal verbs can be used in verb-subject order in reporting clauses, although several previous studies disagree with this claim. The second is that Timestyle also applies to cases of phrasal verbs.

Second, I examined two issues on the basis of the data, including quotative inversion not only in the initial position but also in the medial and final positions. The first is whether postverbal subjects in reporting clauses are mentioned previously. The second is the relationship between heaviness and inversion. I showed that when phrasal verbs with *in*, *out*, and *up* are used, the verb-subject order in the reporting clauses is compatible with the principles of information flow and end-weight. In contrast, when phrasal verbs with *back* are used, the principles are not applied. As a result, a correlation was found between the difference value D and information status.

Furthermore, I suggested the three possible functions of quotative inversion in the initial position in support of the ideas of Fukuchi (1985), Sonoda (1997), and Burchfield (1998), respectively: "discourse function", "summing-up function", and "dialogic function".

Nonetheless, one related problem remains: the case of the phrasal verb *go on*. Several previous studies have pointed out that *go on* cannot be used in verb-subject order in reporting clauses. I touched on this issue briefly in this paper; however, our results do not mean that no inverted usage of *go on* occurs, but simply that the number of occurrences may be very small. Therefore, additional studies of *go on* are required to reach any generalization.

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