

FUNCTIONAL CONVERSIONS OF PHRASEOLOGICAL UNITS WORKING AS PREPOSITIONS: THE CASE OF GROUP PREPOSITIONS EXPRESSING CONCESSION

Ai Inoue

Department of Foreign Languages, National Defense Academy, Japan

ABSTRACT: *This research presents examples from corpora where ‘in spite of’ directly follows clauses and behaves like a conjunction although the phenomenon has not been widely acknowledged and has been regarded as a mistake. This study empirically investigates whether ‘in spite of’ and other group prepositions expressing concession cause a functional shift from a preposition to a conjunction without causing any morphological changes. The research procedure is as follows: (i) The frequency of [in spite of + SV] in universally available corpora is shown from synchronic and diachronic perspectives; (ii) it is clarified how [in spite of + SV] is used in context, semantically and syntactically; (iii) what influences the establishment and functional conversion of [in spite of + SV] into a conjunction is explained; and (iv) whether other phraseological units expressing concession express the same phenomenon as [in spite of + SV] is explored based on quantitative and qualitative viewpoints.*

KEYWORDS: Phraseology, Phraseological Units, Corpus-Based Research, Group Prepositions, Concession, Functional Shift, Conjunction

INTRODUCTION

With the current era of rapid change, new vocabularies and word combinations (i.e. phraseological units, henceforth PU(s)¹) have been generated. Similar with the new vocabularies and word combinations, newly observed linguistic phenomena in English, which are beyond the existing English rules and theories, are easily found in PUs. They are classified into the following two cases: (i) the meaning and function of a PU changes with the altering of its form and (ii) a PU causes semantic and functional change without any altering of its form. As one of the studies of (i), Yagi and Inoue (2004) account for elliptical phenomena and the consequent functional conversion from a conjunction to a preposition of PUs expressing concession such as *regardless of* or *in spite of*. Also, Sumiyoshi (2005) argues that *on account of* expressing reason has both prepositional and conjunctive usages and has two variants, *on*

account and *account of*, which are thought to be derived from *on account of*, and that *on account* is used as both a preposition and a conjunction whereas *account of* is only used as a preposition. On the other hand, research regarding (ii) has not been widely addressed as far as I have investigated previous research. However, it is not difficult to observe examples of (ii) in corpora. In these cases, *in spite of* directly follows clauses and behaves like a conjunction, such as in *State regulators and legislators have begun an inquiry into why rates have not declined in spite of a law passed last year intended to lower premiums* (COCA, 2008, News). However, the phenomenon has not been widely acknowledged and has been regarded as a mistake in previous studies. Hence, this study pays attention to a group preposition, *in spite of*, and investigates examples of (ii) as observed in group prepositions expressing concession (e.g. *regardless of*) and other group prepositions that consist of a pattern [preposition 1 + noun + preposition 2] such as *in case of* and *on behalf of*, adopting an empirical perspective.

This paper is organised as follows. Section 1 gives a brief overview of the study. Section 2 summarises previous research on *in spite of*, prepositions and the functional conversion of PUs. Section 3 introduces the data used in the study, and Section 4 describes the methodology. Section 5 shows the usage of *in spite of* + SV. The functional change of group prepositions indicating concession other than *in spite of* is the focal point of Section 6. Section 7 deals with the functional change from a preposition to a conjunction in the case of group prepositions other than those used as a concession, like *on behalf of* and *by means of*. The implication and application of the study results are shown in Section 8. The conclusion is drawn in Section 9.

PREVIOUS RESEARCH

This section introduces previous research on *in spite of*, group prepositions and PUs with altering of their forms working as prepositions and conjunctions.

In Spite Of

It has been extensively acknowledged that *in spite of* is used to mean concession, to work as a group preposition and to behave the same as *despite*. When *in spite of* follows clauses, the pattern *in spite of the fact that* is admitted, and it has been regarded as a mistake that *in spite of* directly follows clauses.

Dictionaries

Below, (1) shows the descriptions of *in spite of* in English and English-Japanese dictionaries. The excerpt in (2) is quoted from Database of Analysed Texts of English (DANTE). The examples in (3) are observed in *OED*² and are classified into elements following *in spite of*: (3a) is *in spite of* + a noun phrase (henceforth, NP), (3b) is *in spite of the fact that* and (3c) is *in spite of* + oneself.

- (1) a. **in spite of sth** referring to a fact that makes something else surprising =DESPITE:
In spite of feeling tired, we decided to go out. ♦ *a sweet smile in spite of all her problems.* ♦ **in spite of the fact that** *The house will certainly sell, in spite of the fact that it's overpriced.* (MED²)

- b. **in spite of sth** without being affected or prevented by something **[SYN] despite**: *We went out in spite of the rain.* | *Kelly loved her husband in spite of the fact that he drank too much.* (LDCE⁶)

- c. You use **in spite of** to introduce a fact which makes the rest of the statement you are making seem surprising. □ *Their love of life comes in spite of, almost in defiance of, considerable hardship.* (COB⁸)

- d. *He continued to play, in spite of being badly injured* (✗ *in spite of he has badly injured.*) (Longman)

- e. *In spite of* behaves like a preposition, so it is not acceptable ✗ *They went out in spite of it was raining*, whereas *in spite of the fact that it was raining* is acceptable. (original in Japanese) (Youth)

- (2) **COMPOUND** *in spite of* **[prep] despite** ⇔ *Thus, in spite of the cordial welcome which that Spaniard had given to Victor Marchand and his soldiers, the young officer held himself perpetually on his guard.* ⇔ *'In spite of 70 years of Communism, the Azeri people have kept their customs and the Islamic religion', he added.* ⇔ *In spite of his preaching and miracles, they refused to be converted unless at least one of them could see for himself the punishments of the wicked and the rewards of the good.* (DANTE)

- (3) a. 1940 Jrnl. Exper. Psychol. XXVI. 233 The oscillations of hedonic tone in his case are slight, and the tone rises continuously from the beginning, *in spite of* pain and fatigue.

- b. 1986 Daily Tel. 8 Sept. 3/2 *In spite of* the fact that many people are bitten annually by ticks in the New Forest, it is extremely rare for any of them to develop Lyme disease.
- c. 1914 G. B. Shaw Pygmalion 1, in Nash's Mag. Nov. 152/2 The Note Taker (whipping out his book). Heavens! what a sound!..Ah—ah—ah—ow—ow—ow—oo! The Flower Girl (tickled by the performance, and laughing *in spite of* herself).
Garn! (OED²)

Grammar Books

Similar with the descriptions of *in spite of* in dictionaries, the grammar books featured in (4) to (13) regard *in spite of* both as a preposition and as a phraseological unit expressing concession.

- (4) a. He won the race $\left. \begin{array}{l} \text{in spite of} \\ \text{despite} \end{array} \right\}$ his injured leg. (Quirk *et al.* 1985: 565)
- b. I admire him, *in spite of his faults*. (Quirk *et al.* 1985: 705)

- (5) *In spite of* is used as a preposition. **In spite of + noun** means more or less the same as **although + clause**.

We went out in spite of the rain. (= ... although it was raining.)

We understood him in spite of his accent. (= ... although he had a strong accent.)

In spite of is the opposite of *because of*. Compare:

She passed her exams in spite of her terrible teacher.

She passed her exams because of her wonderful teacher.

In spite of can be followed by an –ing form.

In spite of having a headache, I enjoyed the film.

In spite of cannot be followed directly by a *that*-clause. Instead, one can use *in spite of the fact that*.

*He is good company, **in spite of the fact that** he talks all the time.*

This is rather heavy: *although* means the same, and is more common. In more formal English, *despite* can be used in the same way as *in spite of*. (Swan 2016)

- (6) in spite of + NP (Aarts 2011: 158)
- (7) in spite of the fact/ that (Celce-Murcia and Larsen-Freeman 2015: 500, 545)
- (8) In spite of the fact that there is one more can of beer here, I'm leaving.
(Yasui (ed.) 1996: 292)
- (9) a. They started in spite of the heavy rain. (Yasui 2007: 210)
- b. He insisted on going in spite of the storm. (Yasui 2007: 239)
- c. They marched on **in spite of the heavy snow**. (Yasui 2007: 522)

Huddleston and Pullum (2002) show (11) through explaining that *in spite of* + NP is 'one of the most fossilised expressions'.

- (10) a. [*In spite of* / *Despite* the recession], travel agents seem to be doing well.
- b. [*In spite of* / *Despite* having grown up in Paris], Sonia doesn't speak French.
(Huddleston and Pullum 2002: 736)

- (11) ***In spite of these criticisms***, it is generally accepted that trade-off models do offer some valuable insights. (ACAD) (Biber *et al.* 1999: 788)

- (12) in spite of + a noun, a gerund, the fact that (Ishibashi (ed.)1966: 799f.)

- (13) a. *In spite of* [*Regardless of*, *Notwithstanding*, *For all*] the rain he went out.
(Watanabe (ed.)1976: 670)

- b. *In spite of* [*Regardless*, *With all*, *For all*] his faults, I love him still. (*ibid.*)

- c. *In spite of* [*Regardless of, Notwithstanding*] the fact that there were so many present, no one offered help to him. (Watanabe (ed.) 1976: 671)

As (13) shows, Watanabe (1976) admits that *regardless of, notwithstanding* and *for all* may be used in the same place as *in spite of*.

To summarise, it is widely agreed that *in spite of* works as a preposition expressing concession, may be substituted with *despite* and directly follows a NP or *the fact that*-clause.

Prepositions

It has not been made clear in previous research on prepositions that *in spite of* is either a complex preposition or a group preposition. Before discussing the matter, this section describes the types of prepositions.

Prepositions can be classified into three types: (i) a polysemous single preposition like *at, in, and of*, (ii) a polysemous complex prepositions consisting of two prepositions like *into, onto, within* and *until* and (iii) a monosemous group preposition² formed by a preposition and a word like *according to, apart from, in accordance with, with regard to, due to, because of, result of, in agreement with, in case of*, etc. It is clear from the three types that *in spite of* is a group preposition.

Group prepositions are further classified into the following three types, (a) [a preposition 1 + a noun + a preposition 2] (e.g. *by means of, in addition to*), (b) [a adjective/ adverb/ conjunction + a preposition] (e.g. *ahead of, because of*), and (c) others (e.g. *as far as, as for, thanks to*).

Quirk *et al.* (1985: 669) refer to a group preposition as a complex preposition and admit two-word sequences and three-word sequences. Also, Quirk *et al.* (1985: 671) explain a group preposition as follows. (Please note that the complex preposition in Quirk *et al.* (1985) is a group preposition in this study).

In the strict definition, a complex preposition is a sequence that is indivisible both in terms of syntax and in terms of meaning, ... Rather, there is a scale of ‘cohesiveness’ running from a sequence which behaves in every way like a simple preposition, to one which behaves in every way like a set of grammatically separate units.

Quirk *et al.* (1985: 671) present the nine criteria in (14) to judge whether a word combination formed by [a preposition 1 + a noun + a preposition 2] is a group preposition.

- (14) a. Prep 2 can be varied: *on the shelf at* (but not: **in spite for*)
- b. The noun can be varied as between singular and plural: *on the shelves by (the door)* (but not: **in spites of*)
- c. The noun can be varied in respect of determiners: *on a / the shelf by; on shelves by (the door)* (but not: ** in a / the spite of*)
- d. Prep 1 can be varied: *under the shelf by (the door)* (but not: **for spite of*)
- e. Prep + complement can be replaced by a possessiveness pronoun: *on the surface of the table ~ on its surface* (but *in spite of the result ~ * in its spite*)
- f. Prep 2 + complement can be omitted: *on the shelf* (but not: **in spite*)
- g. Prep 2 + complement can be replaced by a demonstrative: *on that shelf* (but not: **in that spite*)
- h. The noun can be placed by nouns of related meaning: *on the ledge by (the door)* (but not: **in malice of*)
- i. The noun can be freely modified by adjectives: *on the low shelf by (the door)* (but not: **in evident spite of*)

The pattern [a group preposition + a clause] has not been accepted as far as my investigation on *in spite of* has determined. However, as (15) shows, Quirk *et al.* (1985) mention that the two prepositions *about* and *without* work as a conjunction in informal speech, but the pattern [a preposition + a clause] is not acceptable in (15a, b). Also, the pattern [a preposition + a clause] is recently observed by in the example [on account (of) + a clause] observed in informal speech.

- (15) *About* and *without* are used as subordinators for finite clauses in informal style but are not generally considered acceptable:

- a. ?She explained to us *about there's nothing for teenagers to do in the village*.

- b. ?We can't even read in our bedroom *without one of the children comes barging in wanting something*.

They are among recent examples of a continuing trend to use prepositions also as subordinators. *On account (of)* <esp AmE>, another recent example, has achieved somewhat greater acceptability in informal style:

I can't come now *on account (of)* *I have to look after my baby brother*.

(Quirk *et al.* 1985: 999)

Yagi and Inoue (2004)

Yagi and Inoue (2004) argue that group prepositions, one of the PUs, expressing concession like *regardless of* and *irrespective of* abbreviate the prepositions of the components and then behave like either a preposition, a conjunction or an adverb positioned at the end of a clause. Before entering directly into a discussion of the elliptical phenomena and functional conversion of the PUs, we start by observing how *no matter* and *whatever* are used as prepositions (see Yagi and Inoue (2004: 158ff). *In spite of*, which is the focal point of the study, is used in the three syntactic patterns shown in (16): *in spite* + NP, *in spite* + a nominal clause (henceforth, NC) and *in spite* working as an adverb at the end of a clause.

- (16) a. Robin Collomb, author of the guide, warned that in spite its comparatively low altitude of 4,026 metres... (BNC; Yagi and Inoue 2004: 168)

- b. '... in spite he makes himself understood don't get me wrong.'

(WordBanks; *ibid.*)

- c. 'They all get' 'Well' '... their come-uppance, they do in spite.'

(BNC; *ibid.*)

The structures of PUs implying concession are summarised in Table 2. Table 1 shows the original functions each PU has.

Table 1. List of the original complementation of PUs expressing concession (original in Japanese).
(Yagi and Inoue 2004: 170)

	+ wh clause	+ NP	+ NC	adverb
regardless of	○	○	○	×
irrespective of	○	○	○	×
irregardless of	○	○	○	×
in spite of	○	○	○	×

Table 2. List of new function of PUs implying concession obtained in Yagi and Inoue (2004).
(*ibid.*)

	+ wh clause	+ NP	+ NC	+ adverb
no matter	○	○	×	×
whatever	×	○	○	×
regardless	○	×	×	○
irregardless	○	○	×	○
in spite	×	○	○	○
despite	○	○	○	○
irrespective	○	○	○	○
notwithstanding	○	○	○	○

We conclude that the reason PUs are used as concession cause the functional change is due to the analogy of *no matter* + NP and *whatever* + NP/ NC (analogy is a linguistic phenomenon in which semantically similar words or phrases affect the syntactic functions of the others).

Sumiyoshi (2005)

Sumiyoshi (2005) focuses on one of the group prepositions, *on account of*, expressing reason and shows that *on account of* has variants and is used as a conjunction. He admits the three variants of *on account of*: (a) *on account* + NP /wh ... / (NP) doing, (b) *on account* + (that) clauses and (c) *account of* + clauses. Variant (a) has a prepositional usage, and variants (b) and (c) have a conjunctive usage. BNC, which he used as the data source, reveals that the pattern [*on account of* + NP / wh ... / (NP) doing] is used most frequently, while variants (a) and (b)

are not found. In (17), [*on account of* + clauses] is observed three times ((17a)), variant (b) is found three times ((17b)) and variant (c) (17c) is quoted from a paper.

(17) a. I had to sleep in the same room as loads of them **on account of** we said I was his secretary. (BNC: G1D 466; Sumiyoshi 2005: 120)

b. Someone once said he'd have known me anywhere by the voice but he'd have passed me by in the street **on account** I look much better in person than I do on the telly. (BNC: H9Y137; Sumiyoshi 2005:120f.)

c. **Account of you think** you're tough you're going up to State Prison where you'll have to prove it.

(E. Leonard, 1994 (U.S.); Burchfield 1996: 15-16; Sumiyoshi 2005: 113)

He mentions that [*on account of* + clauses] and [*account of* + clauses] are used to mean external, which shows the correlation between an event A and an event B, and that [*account of* + clauses] is used to mean rhetorical, which shows no correlation between an event A and an event B and exaggerates event B.

To summarise the previous research on group prepositions, such as Yagi and Inoue (2004) and Sumiyoshi (2005), it is safe to mention that group prepositions cause a functional change through their morphological transformations.

Data

Thanks to the advancement of the Internet, new corpora are available. I collected data from corpora which are universally available: the Corpus of Contemporary American English (COCA), British National Corpus (BNC), WordBanksOnline (WB) and Corpus of Historical American English (COHA). The first three corpora are used to investigate [in spite of + SV] from a synchronic perspective, while the last corpus is used for a diachronic standpoint. Please see the Notes³ for the dates of access. In Section 5.2, data obtained from COCA and COHA show the register where each example is used. The abbreviation ACAD stands for academic, FIC for fiction, MAG for magazine, SP for spoken, WR for written and NW for news.

Basic Theory and Research Methods

This study is descriptive research which attempts to examine linguistic phenomena concretely and does not depend on any major linguistic theory. The basic thesis on which this research is

based is the theory of semantic syntax, i.e. the meaning of a word or a phrase is closely related to the syntactic feature of the word or the phrase.

The research methods used to examine [in spite of/ other group prepositions + SV] are as follows. From a quantitative viewpoint, I randomly choose 100 examples of [in spite of / other group prepositions + SV] (50 examples from spoken English and 50 examples from written English) in each decade in COCA. However, since no 50 examples from spoken English are found, I make an adjustment into 100 examples in sum by randomly choosing more than 50 examples from written English. When using COHA, I examine the 500 examples of [in spite of / other group prepositions + SV], which are electronically chosen using FIND SAMPLE. The examples in Section 5.2 exclude cases of [in spite of + SV]. For example, ‘Thus, a person who fails to succeed in spite of hard work is said to be troubled by his inner head’ (see Idowu 1994: 181-2). (COCA, 2008, ACAD). In this case, the sentence is structured as ‘a person [[who fails to succeed] [in spite of hard work]] is said to be troubled by his inner head’ and the subject of ‘is said to be...’ is ‘a person’; thus, *in spite of* does not directly follow a SV.

In spite of + SV

Quantitative Results

In BNC, [in spite of + SV] is found twice out of the 2692 examples of *in spite of*. In the case of WB, [in spite of + SV] is observe three times out of the 1399 examples of *in spite of*. *In spite of* appears 7755 times in COCA. I counted the frequency of [in spite of + SV] in 100 examples of each decade. The results are shown in Table 3. Please note that Table 3 does not include the decade when no examples of [in spite of + SV] are found.

Table 3. The number of [in spite of + SV] in 100 examples of each decade in COCA.

in spite of + SV	written	spoken	sum
1991	1	1	2
1992	1	0	1
1993	0	1	1
1998	1	0	1
1999	1	0	1
2000	1	0	1
2001	1	0	1

2003	0	1	1
2008	0/56	1/44	1
2010	1/56	0/44	1
2013	0/34	4/66	4
2015	4/75	0/25	4

It is clear that instances of [in spite of + SV] are increasing. To minutely examine Table 3, Figure 1 illustrates the frequency of [in spite of + SV] in two registers (i.e. written and spoken) and Figure 2 shows that of [in spite of + SV] in each decade.

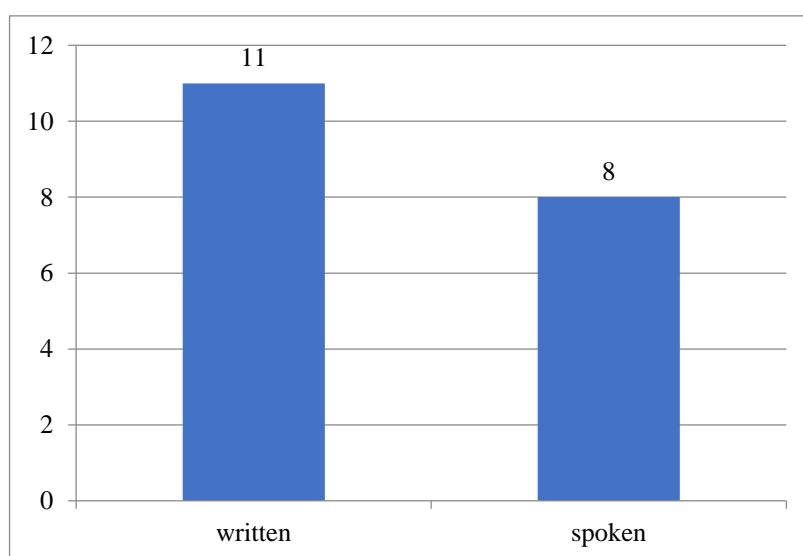


Figure 1. Frequency of [in spite of + SV] in two registers (written and spoken).

Figure 1 reveals that [in spite of +SV] is not a minor error because it is observed in written English.

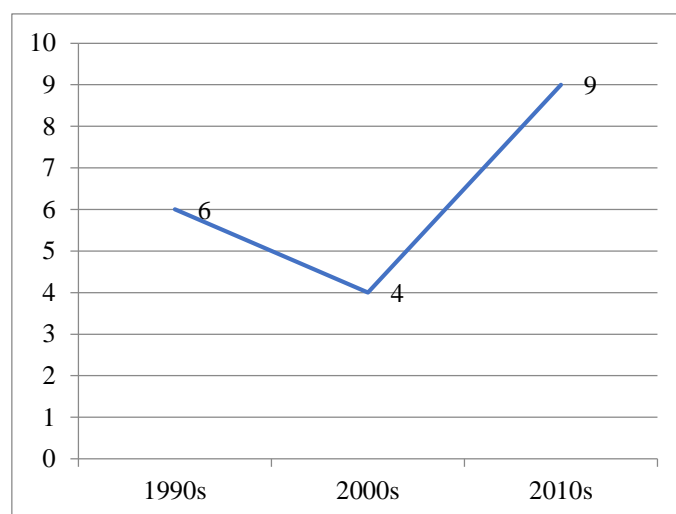


Figure 2. The number of instances of [in spite of + SV] in each decade.

The analysis of Figure 2 shows that [in spite of + SV] is gaining acceptance because the frequency of [in spite of + SV] doubled in 5 years (from 2010 to 2015) compared to that in the 2010s. Table 4 shows whether the analysis is supported from a historic perspective (i.e. COHA). As in Table 3, the decade is not included when [in spite of + SV] is not found.

Table 4. Frequency of [in spite of + SV] in each decade in COHA.

1820s	1/333	1920s	4
1840s	1	1940s	1
1850s	1	1950s	1
1860s	1	1970s	1
1880s	1	1990s	6
1890s	1	2000s	4/475
1900s	2		

Supporting the idea that [in spite of + SV] is being used more often, as indicated by Table 4, Figure 3 reveals the transition of [in spite of + SV].

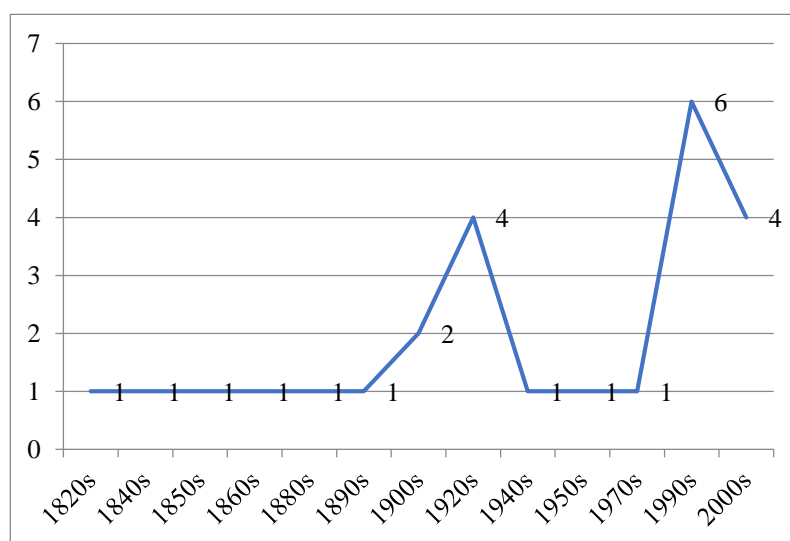


Figure 3. Transition of the frequency of [in spite of + SV].

The diachronic and synchronic results reveal that [in spite of + SV] is not used as a mistake and that the frequency of [in spite of + SV] has increased from the 20th century and continues to increase today.

Qualitative Results

This section carefully examines the examples of [in spite of + SV] obtained from the corpora. The examples shown in (18) are observed in COCA and BNC (italicised by the author as in the following). The examples in (18) do not include instances of [in spite of + SV] which appeared from the 1810s to the 1900s (i.e. late modern English)⁴ and from the 1900s and 1990s (i.e. present-day English) in COHA.

- (18) a. However, King's Regulations forbade black men from serving in the British Army during the First World War. *In spite of* this, black recruits could be found in all branches of the armed forces either by accident or due to local recruitment oversights.
(COCA, 2013, MAG)

- b. State officials have also seized on the outcry over soaring insurance rates. State regulators and legislators have begun an inquiry into why rates have not declined *in spite of* a law passed last year intended to lower premiums.

(COCA, 2008, NW)

- c. The problem is, we don't know how deep the iceberg is. Are we at the tip of the iceberg? Are we halfway down? I don't think we even know that yet.

ZAHN: *In spite of* what you say is some progress the Saudis have made, this clearly has got to be an affront to them, hasn't it, to say their country is not safe enough for the U.S. Embassy or U.S. consulate offices?

(COCA, 2003, SP)

- d. I WENT TO AUSTRIA TO FIND out how you build a bicycle like Josef's. The closest I came to an answer was figuring out that things happen not because but *in spite of* Nasty monks don't make you smarter.

(COCA, 2001, MAG)

- e. In this still picturesque village, beloved and painted by generations of English as well as French artists, so charmingly, proudly and absurdly known as the Venice of Provence—it is built on the Lagoon of Berre, west of Marseille—most of the inhabitants still live by fishing, and *in spite of* tremendous industrial development round about it is still comparatively unspoilt.

(BNC, 1987, WR)

Example (18) syntactically represents that [in spite of + SV] is used either at the middle or the beginning of a sentence and that indicative mood (e.g. present, past and future) is used in SV. Semantically, [in spite of + SV] is used to express concession, like *in spite of*. Of the examples in (18), (18d) is a quite interesting example in that [in spite of + SV] is located at B in a correlative conjunction [not only A but also B] and the *because*-clause is located at A. To put it differently, it is safe to mention that [in spite of + SV] is regarded the same as the *because*-clause. Please observe (19).

- (19) a. The moose struggled slowly by, fairly worried and exhausted by the chase, while the boatmen threw a cord rapidly around his antlers, and *in spite of* his furious struggles at last captured him alive. (COHA, 1849, FIC)
- b. The two countries, thus separated, continued to preserve their constitutional liberties against the machinations of the Court of Vienna, and *in spite of* intrigue and

violence remained, under the rule of the absolute Austrian Emperor, as independent States. (COHA, 1851, MAG)

c. How the Bungalow Boys received their title and how they retained the right to it *in spite of* much opposition makes a lively narrative for lively boys. (COHA, 1863, FIC)

d. Every moment she expected to hear the crash of the pursuers breaking through the brush. On the ranch she had lived largely an outdoor life, and *in spite of* her slenderness was lithe and agile. (COHA, 1921, FIC)

e. That research on this resource has survived *in spite of* federal neglect is a tribute to a band of dedicated men and women who have worked for the most part on isolated projects with too little financing,

(COHA, 1973, MAG)

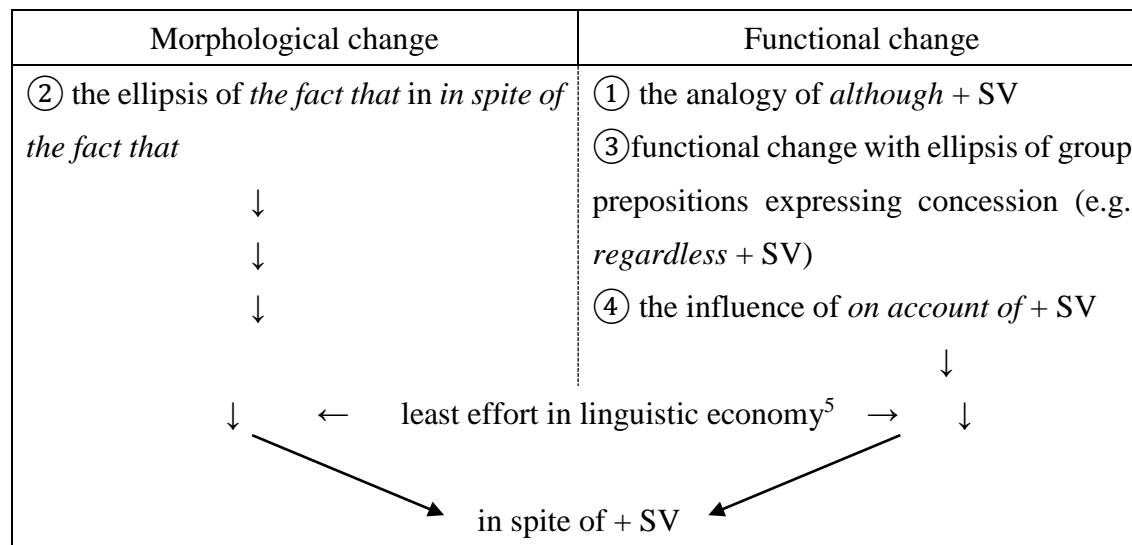
The instances in (19) are observed only in the middle of a sentence, which is solely different from the examples in (18). Regardless of the time period of English, the quantitative analysis of [in spite of + SV] shows that indicative mood is used in the SV of [in spite of + SV] and has no semantic change.

What Influences the Formation of [in spite of + SV]?

The diachronic and synchronic results described in Section 5.2 lead to the consideration that [in spite of + SV] is formed in the following four ways: ① the analogy of [although + SV] (because *although* is semantically the same as *in spite of*, as mentioned in (5)), ② the ellipsis of *the fact that* in [in spite of the fact that + SV] (the SV in [in spite of the fact that + SV] is indicative mood, which is the same as the SV in [in spite of + SV] shown in (18) and (19)), ③ the influence of the functional conversion (from a preposition to a conjunction) of the variants of PUs expressing concession (i.e. *regardless* + SV, *in spite* + SV) and ④ the influence of the functional conversion into a conjunction of the group preposition *on account of*. In ③, the functional change is caused by a change in the form of the group prepositions, but [in spite of + SV] changes the function of *in spite of* into a conjunction without clipping the preposition *of*.

The diagram in (20) sums up what is explained above.

(20)



It has not been widely accepted in previous research that *in spite of* directly follows clauses, but thanks to the working of ①, ②, ③ and ④, *in spite of* causes morphological and functional changes in the pattern [in spite of + SV] and the pattern has gradually begun to be accepted. This study considers the why this phenomenon emerges: As Yagi and Inoue (2004) state, the abbreviated group prepositions like *regardless* and *in spite* might be regarded as a mistake and cause semantic and functional misunderstandings although they appear in written English, but *in spite of* retains its original meaning if it does not alter its form at all. Then, *in spite of* comes to directly follow clauses with the influence of ①, ② and ④ and to change its function with the help of ①, ③ and ④. When this is viewed from the least effort in linguistic economy, it is easier to change the function of *in spite of* by retaining its original form than by changing its form. The essential purpose of languages is to accurately convey meanings, and [in spite of + SV] does this by retaining the original meaning and form of *in spite of* with least effort, although [in spite of + SV] is beyond the existing grammatical rules or theories.

Group Prepositions Indicating Concession Other Than *In Spite Of* – *Regardless Of*, *Despite*, *Irrespective Of*, *Notwithstanding*

It is the focal point of this section that group prepositions used as concession other than *in spite of* evolve into a conjunction from a preposition, as indicated by data collected from the corpora. Table 5 summarises the results.

Table 5. Existence or non-existence of the conjunctive usage of group prepositions expressing concession.

	○ or ✕ □		○ or ✕ □
regardless of	○	irrespective of	○
irregardless of	✕	notwithstanding	○
despite	✕		

As represented in Table 5, group prepositions other than *irregardless of* and *despite* have a conjunctive usage in addition to their original prepositional usages. The examples of each group preposition used as a conjunction are shown in (21) to (23). Example (21) shows [regardless of + SV], while (22) shows [irrespective of + SV] and (23) shows [notwithstanding + SV].

(21) a. The Bishop of Gloucester claimed in June 1988 that ‘wealth gained *regardless of* the welfare of the rest of the community is difficult to justify’.
(BNC, 1991, WR)

b. It claims corporately the divine right to decide what is right for the Irish people *regardless of* what the Irish people think is right. (WB, 1996, WR)

c. Child abuse is demonstrably a problem in Irish society, *regardless of* who commits the offence.
(WB, 2005, WR)

(22) GREEN FLAG protection covers your car, *irrespective of* who drives it.
(WB, 1995, WR)

(23) a. *Notwithstanding* all participants agreed that parent involvement is significant through reading acquisition processes. (COCA, 2015, ACAD)

b. The belief of the City Council is that, *notwithstanding* there are clearly difficult traffic problems in the city, there is more opportunity to encourage people to use other more environmentally friendly modes of travel by locating development in and on the edge of the main urban area,
....
(BNC, 1993, WR)

- c. The remedy had to be to put the claimant in the same position as the mother. That was appropriate *notwithstanding* the secretary of state would end up paying twice.
(WB, 2005, WR)

An interesting question arises from the above examples and Table 5: why do *irregardless of* and *despite* not have a conjunctive usage? The answer is that because they have low frequency, they do not have the opportunity to gain a new function as a conjunction. It is easy to assume that [irregardless of + SV] and [despite + SV] have the potential to be observed due to the working of analogy to [group prepositions used as concession + SV].

From a historic standpoint, I investigated the pattern [group prepositions used as concession + SV] in Table 5 as observed in COHA. Figure 4 shows the results for [regardless of + SV], and it is clear that [regardless of + SV] is increasingly used today. The percentage of [irrespective of + SV] in each decade is shown in Figure 5, and it is worth noting that [irrespective of + SV] is observed in data from the 1920s to 1960s but not in more recent data. Lastly, Figure 6 deals with [notwithstanding + SV]. I carefully examined *notwithstanding* using the function FIND SAMPLE from the 1830s to 1890s. Figure 6 shows [notwithstanding + SV] is currently decreasing in use.

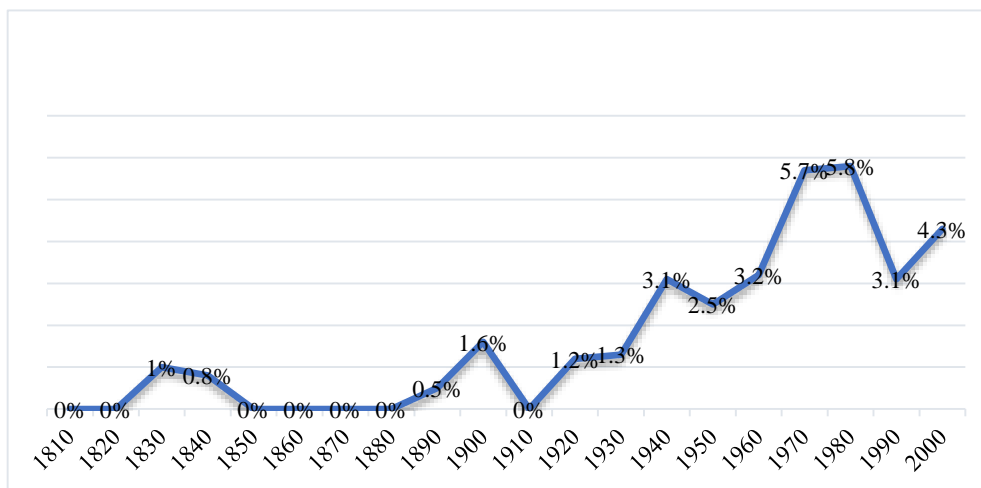


Figure 4. Percentage of [regardless of + SV] in COHA.

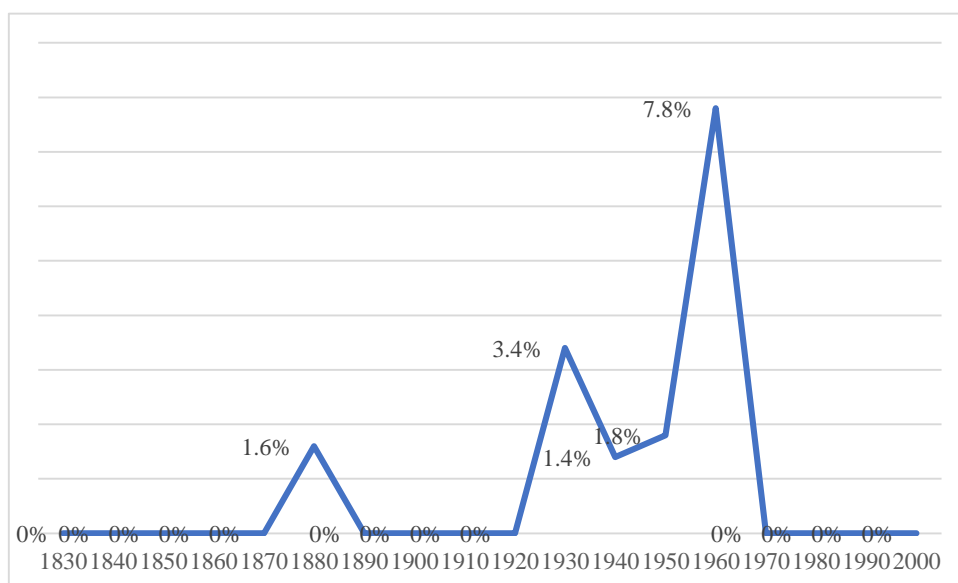


Figure 5. Percentage of [irrespective of + SV] in COHA.

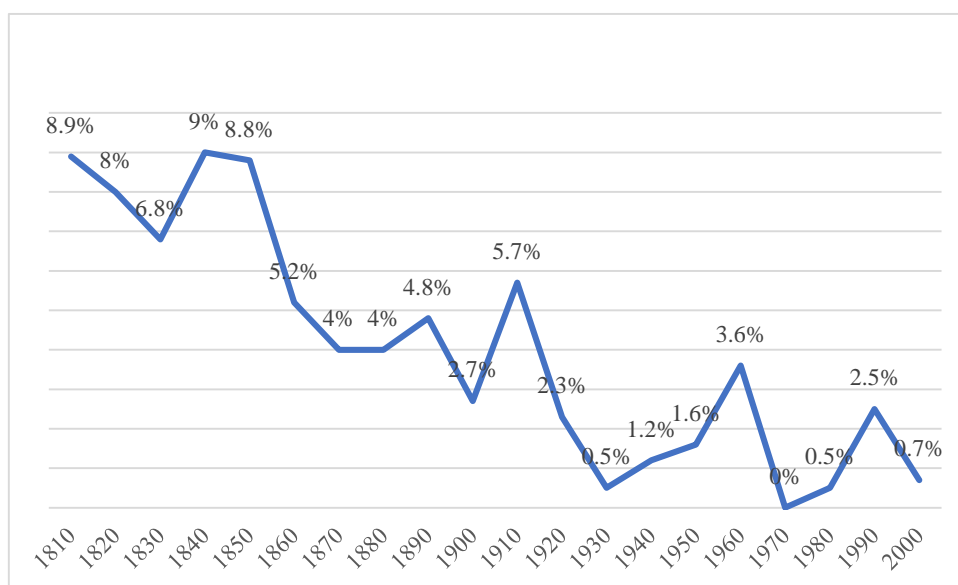


Figure 6. Percentage of [notwithstanding + SV] in COHA.

Other Group Prepositions Such as *In Case Of* and *On Behalf Of*

I chose five group prepositions, *on behalf of*, *in case of*, *by means of*, *for the purpose of* and *on the basis of*, which have the same construction ([Prep 1 + N/ NP + Prep 2]) as *in spite of* and

examined data from the corpora where each group preposition directly follows clauses. Table 6 shows the frequency of each group preposition in the corpora.

Table 6. Frequency of five group prepositions which have the construction ([Prep 1+ N/ NP + Prep 2]) in COCA, BNC and WB.

	COCA	BNC	WB	sum
on behalf of	7393	2700	1786	11879
in case of	1478	373	252	2057
by means of	2613	1553	291	4457
for the purpose of	2327	899	232	3548
on the basis of	8661	3000	1118	12779

For each of the group prepositions shown in Table 6, I examined 1000 examples using FIND SAMPLE in COCA, all examples that are used less than 500 times in BNC and WB, and 500 examples used more than 500 times in BNC and WB. In cases where the group prepositions are used more than 1000 times in BNC and WB, I examined 1000 examples.

As the result of the investigation, only a single example [in case of + SV] is observed, shown in (24).

- (24) Mr-ZOMA: And the player (sic. players) were put under pressure and it was real bad *in case of* they lose or they miss a penalty shot or any, you know, thing, or they get... (unintelligible). (COCA, 2004, SP)

In (24), [In case of + SV] might be made as a slip of the tongue because it appears in spoken English. Since no examples of [group prepositions shown in Table 6 + SV] are found in the corpora, it is safe to conclude that only group prepositions used as concession directly follow clauses. It might appear that group prepositions other than the ones discussed in the study tend to co-occur with clauses like *on account of* + SV.

Discussion and Implications of the Study

The fact that *in spite of* and other semantically similar group prepositions work as a conjunction is due to the result of analogy. In addition, our language activities emphasise conveying the meanings of a sentence or a PU than the part-of-speech of a sentence or a PU, so it should come

as no surprise to find that only group prepositions indicating concession change into a conjunction from a preposition beyond the framework of parts-of-speech. It is not laborious to have a new usage without altering the forms of the group prepositions. The principle underpinning the newly observed phenomenon in this study can be accounted for by least economy, which is one of the rules in linguistic economy.

The phenomenon revealed in the study would apply to other PUs provided that PUs are semantically independent and there are multiple PUs that are semantically the same. Also, the phenomenon creates the new possibility of phraseological research.

CONCLUSION

I have shown that group prepositions expressing concession cause a functional change from a preposition to a conjunction while retaining their original forms. This might be regarded as unacceptable if one takes the stance that every linguistic phenomenon is explained by English grammatical rules or theories. However, if one argues against the stance, the phenomenon discussed in this study is the most effective linguistic one. Currently, the phenomenon is only applicable to PUs expressing concession, but it may be observed in other PUs.

Acknowledgment

This research was made possible by the Grant-in-Aid for Young Scientists (B) (Grant number 17K13480). I would like to thank the Japan Society for the Promotion of Science.

REFERENCES

Notes

- ¹ The study defines PUs as word combinations consisting of at least two existing words.
- ² Quirk *et al.* (1985), Akimoto (199, 2002, 2005), Quirk & Mulholland (1968), Hoffman (2001, 2004, 2005) and Tottie and Hoffman (2001) refer to group prepositions as complex prepositions and define group prepositions as a preposition composed of a preposition and a noun. The studies argue the grammaticalisation of group prepositions. Huddleston and Pullum (2002) refer to a group preposition as ‘an idiomatic and fossilised expression’. Complex prepositions used in Quirk *et al.* (1985), Akimoto

(1999, 2002, 2005), Quirk & Mulholland (1968), Hoffman (2001, 2004, 2005) and Tottie and Hoffman (2001) are addressed as group prepositions.

³ I accessed the corpora on Oct. 19, 26, 29, 30 and 31 and Nov. 6, 7, 8, 21, 23, 27 and 28 in 2017.

⁴ English is classified into the following four periods: Old English from 450 to 1100, Middle English from 1100 to 1500, Modern English from 1500 to 1900 (early modern English from 1500 to 1700, late modern English from 1700 to 1900) and Present-day English from 1900 to today.

⁵ Linguistic economy has two principles: the principle of least effort and the principle of redundancy. The essential role of a language is to maintain effective communication. These two principles are thought to be responsible for changes in languages without giving a false impression of the essential role. For example, we tend to choose and use an easier and simpler way of saying things such as *pirate version* because of the underlying principle of least effort. In contrast, we can find examples such as *until to Friday*, which are somewhat excessive. It is quite safe to assume that the speaker must have thought that *until Friday* might give a false impression to the hearer, so he/she added *to*, which functions similarly as *until*. That is, wordy expressions such as *until to Friday* appear as a consequence of the underlying principle of economy.

Corpora

BNC: British National Corpus (retrieved through the Shougakan Corpus Network)

COCA: Corpus of Contemporary of American English

COHA: Corpus of Historical American English

DANTE: Database of Analysed Texts of English

WB: WordBanksOnline (retrieved through the Shougakan Corpus Network)

Dictionaries

COB⁸: *Collins COBUILD Advanced Learner's Dictionary*, 8th edition. 2014. Glasgow: HarperCollins Publishers.

LDCE⁶: *Longman Dictionary of Contemporary English*. 6th edition. 2014. London: Longman.

Longman: *Longman English-Japanese Dictionary*. 2006. Tokyo: Kiriara Syoten.

MED²: *Macmillan English Dictionary for Advanced Learners*. New edition. 2007. Oxford: Macmillan Education.

OED²: *Oxford English Dictionary on Historical Principle 2nd edition on CD-ROM*. (Version 2.0) 2000. Oxford: Oxford University Press.

Youth: Youth Progressive English-Japanese Dictionary. 2004. Tokyo: Shougakukan.

Books and Papers

Aarts, B. (2011) *Oxford Modern English Grammar*, Oxford University Press, Oxford.

Akimoto, M. (1999) Idiomatization and grammaticalization of complex prepositions, In (Eds, Shin Ja J. Hwang and Arle, R. L.) *The Twenty-second LACUS Forum XXV*, pp. 389-397.

Akimoto, M. (2002) *Bupouka to Idioms (Grammaticalization and Idioms)*, Hitsuji Shyobou, Tokyo.

Akimoto, M. (2005) 'Fukugouzentishi nitsuite' ('About complex prepositions'). *Eigo Goho Bunpo Kenkyu (Research on English Grammar and Usage)*. Kaitakusha, Tokyo, 12 pp. 5-18.

Ando, S. (2005) *Gendai Eibunpou Kougi (Lectures on Modern English Grammar)*, Kaitakusha, Tokyo.

Biber, D., Johansson, S., Leech, G., Conrad, S. and Finegan, E. (1999) *Longman Grammar of Spoken and Written English*, Longman, London.

Celce-Murcia, M. and Larsen-Freeman, D. (2015) *The Grammar Book*, Third edition, Heinle & Heinle Publishers, U.S.

Cowie, A. P. (1999) *English Dictionaries for Foreign Learners: A History*, Oxford University Press, Oxford.

Hoffman, S. (2001) In (hot) pursuit of data: Complex prepositions in late modern English, In *New Frontiers of Corpus Research*. (Eds, Collins, P. and Smith, A.) Rodopi, Amsterdam, pp. 127-146.

Hoffman, S. (2004) Are low-frequency complex prepositions grammaticalized?: On the limits of corpus data – and the importance of intuition, In *Corpus Approaches to Grammaticalization in English*. (Eds, Lindquist, H. and Mair, C.) JohnBenjamins Publishing Company, Amsterdam, pp. 171-200.

Hoffman, S. (2005) *Grammaticalization and English Complex Prepositions: A Corpus-Based Study*, Routledge, London.

Huddleston, R. and Pullum, G. K. (2002) *The Cambridge Grammar of the English Language*, Cambridge University Press, Cambridge.

Ishibashim, K. (ed.). (1966) *Eigo Gohou Daijiten (A Dictionary of Current English Usage* · I) Taishyukansyoten, Tokyo.

Konishi, T. (ed.) (2006) *Gendai Eigo Gohou Jiten (Sanseido's Dictionary of Present-day English Usage)*, Sanseido, Tokyo.

- Moon, R. (1998) *Fixed Expressions and Idioms in English*, Clarendon Press, Oxford.
- Quirk, R. and Mulholland, J. (1968) Complex prepositions and related sequences, In *Essays on the English Language: Medieval and Modern*. (Ed, Quirk, R.) Longman, London, pp. 148-160.
- Quirk, R., Greenbaum, S., Leech, G. and Svartvik, J. (1985) *A Comprehensive Grammar of the English Language*, Longman, London.
- Sumiyoshi, M. (2005) 'Riyuu wo arawasu on account of – zentishi youhou to setsuzokushi youhou' (*On account of* expressing reason – its prepositional and conjunctive usage). *Eigo Goho Bunpo Kenkyu* (Research on English Grammar and Usage), Kaitakusha, Tokyo, 12 pp. 110-124.
- Swan, M. (2016) *Practical English Usage*, Fourth edition, Oxford University Press, Oxford.
- Tottie, G. and Hoffman, S. (2001) Based on: From dangling participle to complex prepositions, In *A Wealth of English*. (Ed, Aijmer, K.) Gothenburg University, Gothenburg, pp. 1-12.
- Watanebe, T. (ed.) (1976) *Zoku • Eigo Goho Daijiten* (A Dictionary of Current English Usage • II), Taishyukansyoten, Tokyo.
- Yagi, K. and Inoue, A. (2004) 'Jyoho wo arawasu seikuhyougen ni tomonau syouryakugensho to kinoutenkan' (Elliptical phenomena and the consequent functional conversion from a conjunction to a preposition of phraseological units expressing concession). *Eigo Goho Bunpou Kenkyu* (Research on English Grammar and Usage), Kaitakusha, Tokyo, 11 pp. 158-173.
- Yasui, M. (ed.) (1996) *Reikai Gendai Eibunpou Jiten* (The Taishukan Explanatory Dictionary of Contemporary English Grammar), Taishyukansyoten, Tokyo.
- Yasui, M. (2007) *Kaiteiban Eibunpou Souran* (A Better Guide to English Grammar), Kaitakusha, Tokyo.