Proceedings of the 10th International Conference on Arts and Humanities, Vol. 10, Issue 1, 2023, pp. 95-105

ISSN 2357 – 2744 online
DOI: https://doi.org/10.17501/23572744.2023.10106

THE *bei* CONSTRUCTIONS IN CANTONESE: A CORPUS-DRIVEN STUDY

Wong PW*

Caritas Institute of Higher Education, Hong Kong

Abstract: This paper aims to analyze the Cantonese *bei* constructions with a 'corpus-driven' approach. *Bei* is a polysemous word with the following meanings: (a) *Bei* means 'give', which can take two nominal objects. (b) *Bei* is an indirect object marker. (c) *Bei* is a beneficiary marker. (d) *Bei* is a causative verb that means 'allow', forming a serial verb construction with another verb. (e) *Bei* is a passive marker in a passive construction. In this paper, around 800 examples of Cantonese *bei* constructions have been extracted from two corpora: Hong Kong Cantonese Corpus and Hong Kong Cantonese Adult Language Corpus. They are the Cantonese corpora freely available on the internet and reflect the usage of Hong Kong Cantonese in the 1990s. It is found that *bei* is always followed by one noun phrase, sometimes by two noun phrases, but there are a few patterns involving an ellipsis of the direct object or/and the indirect object, which were seldom addressed in previous studies of double object constructions involving *bei*. Cantonese *bei* constructions may result in an ambiguity of causative and passive constructions, of which the syntactic subject can be interpreted as semantic roles as "causer" or "affectee". The interpretation often depends on pragmatic and contextual factors, which can be examined by the attested language data of the corpora.

Keywords: linguistics, Cantonese, bei constructions, corpus-driven.

Introduction

Cantonese is a dialect or a language variety of Chinese which receives much attention from linguists. While Matthews & Yip (2011) have written a book on the comprehensive grammar of Cantonese, some linguists focused on the contrastive study of Cantonese with Mandarin Chinese, for examples, on double object constructions (Tang, 1998, 2003) and passive constructions (Gao & Zhang, 2003). Such constructions always involve "*bei*" in Cantonese called "Cantonese *bei* constructions".

Tang (1998) focused on the Cantonese reverted order of a direct object and an indirect object, in contrast to the word order of double object constructions of Mandarin Chinese. Matthews and Yip (2011) were interested in the relative position of direct and indirect objects. However, those are rather simplistic views of the double constructions, which have overlooked a variety of patterns to be revealed by real-world language data. Few attention has been paid to other related grammatical functions of *bei*, such as causative constructions and serial verb constructions. Most data used in those studies were based on linguists' retrospection with few empirical evidence. Hence, Wong (2009) has made a corpus-driven contrastive study of Putonghua *gei* constructions and Cantonese *bei* constructions. Both *gei* and *bei* mean "give" involving double objects and passive meaning. That is why linguists are interested in the comparison of the two syntactic constructions. Wong (2009) has generalized 16 patterns of Putonghua *gei* constructions, compared with which "there is a lower

*Corresponding Author' s Email: pwwong@cihe.edu.hk

incidence of Cantonese *bei* co-occurring with another verb." (p.77). Moreover, Cantonese *bei* is more frequently used as a passive marker and a verb meaning 'allow'. Following Wong (2009), the current study applies the corpus-driven approach to study *bei* constructions. While Wong used one Putonghua corpus and one Cantonese corpus, aiming at the comparison of the syntactic constructions of Putonghua and Cantonese, the present study would like to use two Cantonese corpora, focusing on Cantonese *bei* constructions. In addition to correcting a few discrepancies of the data presented in Wong (2009), this paper would find out the most commonly used pattern of *bei* and the preferred patterns of dative constructions (or referred to as "double object constructions") according to the statistics collected from the corpora.

This paper is also interested in the ambiguity of causative and passive constructions of Cantonese *bei* (Chin, 2011). Having extracted data from corpora of early Cantonese and modern Cantonese, Chin studied the grammaticalization path of a variety of *bei* constructions and discussed how the causative verb *bei* is related to the passive marker *bei*. Such investigation involves diachronic language data, which the current study could hardly tackle with due to time constraint. Instead, this paper aims to extract examples from modern Cantonese corpora to examine the pragmatic and contextual factors that help resolve the ambiguity of causative and passive constructions of Cantonese *bei*.

Material and Methods

A corpus-driven approach is adopted in this paper. It is the methodology whereby the corpus serves as an empirical basis from which researchers extract the data and detect linguistic phenomena without prior assumptions and expectations (Tognini-Bonelli, 2001). Corpus data not only provide us with quantitative and qualitative information to examine how language is used, but also help find out lexical and grammatical patterns and new patterns and topics for research.

Two corpora are used in this study to provide observable linguistic evidence that reveals a range of grammatical patterns. The corpora are freely available on the internet and reflect the usage of Hong Kong Cantonese in the 1990s, as illustrated below:

(1) Hong Kong Cantonese Corpus [HKCanCorp], which consists of around 230000 Chinese words (Luke & Wong, 2015). Its collection of recordings includes 51 texts of spontaneous speech and 42 radio programmes featuring 2 to 4 speakers, with one monologue included. The texts were word-segmented and annotated with part-of-speech tagging and Cantonese pronunciation using the romanization scheme of the Linguistic Society of Hong Kong [LSHK].

(2) Hong Kong Cantonese Adult Language Corpus [HKCAC] (Leung & Law, 2001) is an adult language corpus of spoken Hong Kong Cantonese. It has collected spontaneous speech recorded from phone-in programs and forums on the radio in Hong Kong. The database represents the speech of 69 speakers in addition to the program hosts, and has approximately 170000 characters, amounting to around 100000 words. The romanization scheme is the International Phonetic Alphabet [IPA], but the transcriptions presented in this paper are converted to the scheme of LSHK. Wong (2009) has used this corpus to find out 13 patterns of Cantonese *bei* constructions, while this paper will use both HKCanCorp and HKCAC to calculate the statistics and extract examples for analysis and discussion.

In total, 807 occurrences of *bei* constructions have been observed, which help reveal various patterns of Cantonese *bei* constructions used in Hong Kong. Each Cantonese example is presented with four lines in this paper: Chinese characters, Cantonese transcriptions, glosses and translation. The convention will be illustrated in the following section.

Transcriptions and glosses of the Cantonese examples

The Cantonese *bei* is transcribed as "bei^{2}", using the scheme of the Linguistic Society of Hong Kong [LSHK], by which "2" represents a high-rising tone. Each Cantonese example in this paper is presented with a line of glosses, including linguistic terms shown in Table 1. Some abbreviations of syntactic constructions that are often used in this paper are listed in Table 2. "NP" (Noun Phrase) is frequently used in this paper. Double object constructions involve several NPs. "NP1" is the subject, whereas "NP2" is the direct object (DO), and "NP3" is the indirect object (IO).

Table 1. The Linguistic Terms Used in Glosses of Cantonese Examples

ASP :	aspect marker of a verb
CL :	Classifier
PRT :	Particle
PASSIVE :	Passive marker
BA :	Disposal marker

Table 2. Some Abbreviations of Syntactic Constructions in This Paper

DO :	Direct Object
IO :	Indirect Object
NP :	Noun Phrase
VP :	Verb Phrase
V :	Verb

The Cantonese *bei* is often written as "畀" or "俾" and there is no standardization of the written form. The former is used in HKCAC, whereas the latter is adopted in HKCanCorp. Instead of addressing the debate which characterize to represent *bei*, this paper will put it aside and use the transcription "*bei^{2}*" to represent the word. With the help of glosses of Cantonese examples, this study would give readers better understanding of the linguistic features of "*bei^{2}*" in Cantonese.

Results and Discussion

Various meanings of Bei

Bei in Cantonese is a polysemous word with various meanings (Chin, 2011), as summarized in Table 3: (a) *Bei* is a dative verb that means 'to give', which can take two nominal objects. In the first example, "bei^{2}" (give) is a dative verb that requires two objects: (i) the direct object "go^{3} mung^{6} soeng^{2}" (the dream) and (ii) the indirect object "nei^{5}" (you).

(b) *Bei* is an indirect object marker. In the second example, "sung^{3}" (give) is the dative verb while "bei^{2}" functions like the preposition "to" that marks the indirect object "keoi^{5}" (her/him).

(c) *Bei* is a beneficiary marker. In the third example, "maai[5]" (buy) is not a dative verb and does not require an indirect object. The 'bei NP' ("bei[2] keoi[5]"), which functions like "to her/him" is attached, to add a piece of information that "keoi[5]" (her/him) is the one who benefits from the "buying" event.

(d) *Bei* is a causative verb that means 'permission', forming a serial verb construction with another verb. In the example, there is the verb "haau[2]" (exam) following the 'bei NP' ("bei[2] ngo[5] dei[6]")(allow us), which forms the meaning: "to allow us to sit for an exam".

(e) *Bei* is a passive marker. In the example of a passive construction, the 'bei NP' ("bei[2] gaa[3] ce[1]") indicates that it is "gaa[3] ce[1]" (the vehicle) that knocked down "aa[3] po[4]" (the old woman).

It is suggested that *bei* may perform as an instrument marker (Chin, 2011). Chin has listed some examples but most of them were taken from early Cantonese or other Cantonese dialects such as Taishan (台山) and Siyi (四邑), which are not relevant to the current study. "Bei[2] sam[1] gei[1]" (**畀心機**), which literally means 'to use one heart' is perhaps the only example found in modern Cantonese corpora. However, it is a fixed expression which will not be counted as a type of *bei* constructions.

Table 3. Cantonese Examples Illustrating Various Meanings of "bei"

(a) Dative verb 'give'	其 實 佢 係 俾 咗 個 夢 想 你 囉。 kei4sat6 keoi5 hai6 bei2-zo2 go3 mung6soeng2 nei5 lo1 。 In fact, he is give ASP CL dream you PRT "In fact, he has given you a dream."
(b) Indirect object marker	又 送 花 俾 佢 吖嗎。 jau6 sung3 faa1 bei2 keoi5 aa1maa3. also give flowers to her PRT. "(Someone) also gives flowers to her."
(c) Beneficiary marker	你 買 俾 邊 個 啊？ nei5 maai5 bei2 bin1 go3 aa3 ？ You buy for whom PRT? "Whom do you buy (this) for?"
(d) Causative 'allow / let'	連 考 試 都 唔 俾 我 哋 考。 lin4 haau2 si3 dou1 m4 bei2 ngo5dei2 haau2 . Even exam all not allow us exam "(Someone) does not allow us to sit for the exam."
(e) Passive marker	阿 婆 嗷就 畀 車 撞到。 aa3 po4 gam2zau6 bei2 ce1 zong6 dou2 . Old woman then PASSIVE vehicle knock down "Then, the old woman was knocked down by a vehicle."

Corpora provide attested data for linguists' generalization

Table 4 lists Patterns 1 to 4 of *bei* constructions. Some linguists regard them as the four patterns of Cantonese dative constructions (e.g., Tang, 1998), in which NP1 is the subject, whereas NP2 is the direct object (DO) and NP3 is the indirect object (IO). There are 807 occurrences of *bei* constructions in the two corpora and statistics are calculated accordingly in the last column of Table 4.

It is found that Pattern 1 is the most frequent pattern (13.6%) among the four according to the statistics shown in Table 4. This perhaps could provide supporting evidence to Tang's (1998) intuition that Pattern 1 is the basic pattern of Cantonese dative constructions. However, there are only 2 cases of Pattern 2 in the 2 corpora. It may be regarded as a possible but an infrequently occurring pattern, according to current empirical language data. It should be noted that Wong (2009) has combined patterns 2 and 3 into one, and thus the case of sparse data was not noted in previous studies.

In a theoretical perspective, "bei^{2}" is attached to the preceding verb in Pattern 2 and linguists were interested in the debate if it may form a part of a complex verb or not. Following Tang (1998), in this paper, "bei^{2}" is regarded as a preposition that forms a post-verbal adverbial preposition phrase with the following NP in Pattern 2. However, the sparse data found in the 2 corpora could hardly provide useful information for discussing the analysis of Tang (1998).

Table 4. Patterns 1 – 4 of Cantonese Dative Constructions

	Examples	HKCanCorp	HKCAC	Statistic
Pattern 1: NP1 + V + NP2 + bei + NP3	佢 送 禮物 俾 你。 keoi5 sung3 lai5 mat6 bei2 nei5. He give present to you. "He gives a present to you."	60	50	110 (13.6%)
Pattern 2: NP1 + V-bei + NP3 + NP2	嗷 Jacky Chueng 會 帶 畀 你 壓力 呀 。 gam2 Jacky Chueng wui2 daai3-bei2 nei5 aat4lik6 aa3. Then Jacky Chueng will bring-to you pressure PRT "Then Jacky Cheung will put pressure on you."	1	1	2 (0.2%)
Pattern 3: NP1 + bei + NP3 + NP2	佢 就 俾 我 種 感覺 呢 … keoi5 zau6 bei2 ngo5 zung2 gam2gok3 ne1 … He thus give me CL feeling PRT "He gives me a feeling that …"	6	15	21 (2.6%)
Pattern 4: NP1 + bei + NP2 + NP3	…嗷 就 畀 個 地址 我。 gam2 zau6 bei2 go3 dei6 zi2 ngo5 . Then then give CL address me "Then, give me your address."	27	34	61 (7.6%)

Just like the case of Standard Chinese, the subject (NP1) of a Cantonese sentence can be omitted in speech when it is understood in the context. Such an example is shown in Pattern 4.

There is a discussion among Cantonese linguists regarding the preference of Pattern 3 and Pattern 4 which have a different word order of DO and IO after the dative verb "bei^{2}". It is found that pattern 4 is preferred according to the statistics shown in Table 4. Tang (1998) suggested that Pattern 3 is not frequently used but may be adopted when there is a long NP2 (DO). Wong (2009) suggested that when NP2 (DO) has long and complex elements, it tends to come at the end of a clause. Such a tendency is called the principle of end-weight (Hawkins, 2000; Wason, 1997). A few relevant examples are listed in Table 5. There are 8 occurrences of long NP2 (DO) in the HKCanCorp, among which 3 cases adopt Pattern 3 (40%) while 5 cases adopt Pattern 4 (60%). Thus, contrary to the expectation of such linguists as Tang (1998), Pattern 4 is still preferred no matter how long the NP2

(DO) is. However, there are so little relevant data that it is hard to make a concluding remark of the preference of Patterns 3 and 4.

Table 5. The Comparison of Pattern 3 and Pattern 4 When NP2 (DO) is Long

	Examples	Statistics in the HKCanCorp
Pattern 3: NP1 + bei + NP3 + NP2	俾個 社會 好 少少嘅 嘢。 bei2 go3 se5wui2 hou2 siu2siu2ge3 je5 give CL society good little thing .give the society something better."	6 occurrences (When NP2 is long: 3 cases)
Pattern 4: NP1 + bei + NP2 + NP3	我 已經 俾咗 好多 次 機會 佢。 ngo5 ji5ging1 bei2-zo2 hou2 do1 ci3 gei1wui6 keoi5 . I already give ASP much times opportunities him "I have already given him many opportunities."	27 occurrences (When NP2 is long: 5 cases)

Patterns found in corpora but seldom discussed in previous studies

Table 6 indicates some varieties of patterns due to an omission of NPs, which received few attention from Cantonese linguists in previous studies. A postverbal NP can be omitted when it is understood in context. For examples, NP3 (IO) is omitted in pattern 5, while NP2 (DO) is omitted in pattern 6. Both objects are omitted in pattern 7. Patterns 8 and 9 involve the fronting of the direct objects. In the example of pattern 8, "ni^{1} jat^{1} fan^{6} lai^{5} mat^{6}" (the present) is moved to the position preceding the dative verb "sung^{3}" (give). Examples of this pattern always involve a change of possession of things and the verb meaning 'give'. Pattern 9 indicating a co-occurrence of "zoeng^{1}" and "bei^{2}" did not receive much attention from previous studies. This pattern is so infrequently occurring that it does not appear in HKCanCorp, whereas six occurrences were observed in HKCAC. It is found that when the transmission of message is involved, it is more likely to employ Pattern 9. The original position of the direct object (DO) is always located after the main verb. The disposal marker "zoeng^{1}" shown in Table 6 is a device to move the DO "go^{3} zan^{1} soeng^{3}" (the truth) to the position preceding the verb "waa^{6}-bei^{2}" (tell).

Table 6. Varieties Due to an Omission of NP (One or Two)

	Examples	HKCanCorp	HKCAC	Statistic
Pattern 5: NP1 + bei + NP2 (+ V)	你 畀 個 題目 嚟 呀。 nei5 bei2 go3 tai4muk6 lai4 aa3. You give CL topic come PRT "You give (me) a topic."	30	28	58 (7.2%)
Pattern 6: NP1 + bei/V-bei + NP3	你 真係 借 畀 朋 友。 nei5 zan1 hai6 ze3 bei2 pang4 jau5. You really lend to friend "You really lent (it) to your friend."	54	35	89 (11.0%)
Pattern 7: NP1 + bei/V-bei	唔 俾 都 得 架。 m4 bei2 dou1 dak1 gaa3. not giving also fine PRT.	17	9	26 (3.2%)

	"It's fine not to give (something) (to someone)."			
Pattern 8: NP2 + bei/V-bei + NP3 (+ V)	嗰 呢一 份 禮 物 會 送 畀 我 啲 聽 眾。 gam2 ni1 jat1 fan6 lai5mat6 wui2 sung3-bei2 ngo5di1 ting3 zung3. Then this one CL present will give-to my audience. "Then (I) will give this present to my audience."	14	5	19 (2.4%)
Pattern 9: NP1 + zoeng + NP2 + bei/V-bei + NP3 (+ V)	我 只係 將 個 真相 話 畀 你 知 喎。 ngo5 zi2hai6 zoeng1 go3 zan1soeng3 waa6-bei2 nei5zi1 wo3. I just BA CL truth tell-to you know PRT "What I do is just telling you the truth."	0	6	6 (0.7%)

"Bei + NP" meaning "if"

"Bei[2]" has the intrinsic meaning of 'give' in Cantonese which often marks the following NP as the indirect object, as shown in the patterns discussed in the above sections. However, there are some occurrences that "bei[2]" means "if". In the first example of Table 7, "bei[2] ngo[5]" has the literal meaning of "give me", but this phrase functions like "if it were me". In the second example, a particle "zoek[6]" is attached to "bei[2]" which does not affect its function of making an if-hypothesis. Most previous studies of Cantonese *bei* including Wong (2009) have overlooked pattern 10 though there is only one occurrence in HKCAC. More examples are found in HKCanCorp, but pattern 10 is still considered as an infrequent pattern as shown by the statistics of Table 7.

Table 7. Examples When "Bei + NP" Means "If"

	Examples	HKCanCorp	HKCAC	Statistic
Pattern 10: Bei + NP OR: Bei-zoek + NP	俾 我，我 都 會 留低 啊。 bei2 ngo5 , ngo5 dou1 wui2 lau4dai1 aa3. If me, I also will remain PRT "If it were me, I would remain (here)." 不 過 如 果 俾着 我， 我 都 會… bat1gwo3 jyu4gwo2 bei2zoek6 ngo5, ngo5 dou1 wui2 However if if me, I also will "However if it were me, I would (do so)."	7	1	8 (1.0%)

Bei to form a serial verb Construction

Bei may co-occur with another verb to form a serial verb construction. The example of Table 8 indicates that there is another verb "tai[2]" (see) after the 'bei NP' in Pattern 11 and the function of "bei[2]" is like the preposition of "for" in English. Similar to the finding of Wong (2009), Pattern 11 is the most frequent pattern for Cantonese *bei* constructions in current study, as it accounts for 25.2% of the total occurrences of *bei*. Table 9 shows the comparison of the surface structure of Pattern 1 with that Pattern 11, which differs in the presence of the final verb only. The main verb "si[3] gei[1]" (test machine) is not a dative verb and thus does not have an intrinsic meaning of who gets the goods or

service. The phrase "bei^{2} ngo^{5} dei^{3} tai^{2}", which has the syntax of 'bei NP V', means "the subject does something to get someone know something". The final verb "tai^{2}" (see) cannot be deleted to form Pattern 1.

Table 8. Examples of a Serial Verb Construction Involving "bei"

	Examples	HKCanCorp	HKCAC	Statistic
Pattern 11: NP1 + V + NP2 + bei + NP3 + V	最 初 佢 話 試 機 俾 我 哋 睇 呢。 zeoi3co1 keoi5 waa6 si3 gei1 bei2 ngo5dei3 tai2 ne1. At first he said test machine for us see PRT "At first, he said he would show us the machine."	112	91	203 (25.2%)

Table 9. Comparison of the Structure of Pattern 1 with That of Pattern 11

	Structures	Occurrences in the 2 corpora
Pattern 1:	NP1 + V + NP2 + bei + NP3	110 (13.6%)
Pattern 11:	NP1 + V + NP2 + bei + NP3 + V	203 (25.2%)

Causative constructions and Passive constructions

Pattern 12 of Table 10 shows an example of a causative construction, which may be treated as a kind of serial verb construction. Following Chin (2011), Cantonese causative is regarded as a periphrastic type, as "the causing event and the caused event are expressed in different clauses" (p.538). In the example of pattern 12, it is noted that "bei^{2}" does not express the meaning of (someone) causing him to do this one. Instead, the example has the permissive meaning of 'allow'. Permission is considered as a subtype of causation. NP1 is the subject or the "causer" of the action, while NP2 is the direct object (always 'animate') who is allowed/caused by NP1 to do something (as indicated by the following VP). In the example of pattern 12, the subject is omitted as it is understood from context. "Keoi^{5}" (Him) is the one who is allowed to do something ("zou^{6} nei^{1} jat^{1} go^{3}").

Table 10. Causative and Passive Constructions of "Bei"

	Examples	HKCanCorp	HKCAC	Statistic
Pattern 12: NP1 + bei + NP2 + VP	而家 畀 佢 做 呢 一 個 Ji4gaa1 bei2 keoi5 zou6 nei1 jat1 go3. Now allow him do this one CL "Now (someone) allows him to do this one."	45	24	69 (8.6%)
Pattern 13: NP2 + bei + NP1 + VP	佢 可 能 畀 人 呃 喇。 keoi5 ho2nang4 bei2 jan4 aak1 laa3. He likely PASSIVE person cheat PRT "It is likely that he has been cheated."	73	57	130 (16.1%)

In such a passive construction as Pattern 13, the subject 'NP2' is the logical object, which is "the affectee" of the action. In the example, "keoi^{5}" (he) is the one cheated by someone and thus the "affectee". The object 'NP1' is the logical subject, which is the doer of the action "cheating".

The surface structure of Patterns 12 and 13 is the same, as demonstrated by the word order of "bei + NP + VP" in Table 11. Cantonese *bei* constructions may result in an ambiguity of causative and passive meanings, while the syntactic subject can be interpreted as the causer of a causative construction or the affectee of a passive construction. The interpretation often depends on pragmatic and contextual factors (Chin, 2011).

The causative reading of the sentence in Table 11 is interpreted as "you intend to allow the action of biting to be carried out by it (the cat)". For the passive reading, "you" are the victim in the event and do not have a control over the action of biting. As Cantonese passives tend to be adversative, Chin (2011) stated that the passive reading is obtained when the VP indicates an unfavourable event to the syntactic subject "you". This paper suggests that there should be the case of "causative passive" besides "adversative passive". Having an investigation of the context of the sentence shown in Table 11, it is found that when "you" play with "your" pet (which is "a cat"), "you" often lift its lip up and touch its teeth, and "let it bite (you) gently for no reason". Thus, in addition to the passive interpretation, the causative meaning "allow" can be found as well. Corpora provide us with attested language data to help examine such an ambiguity.

Table 11. An Example of an Ambiguity of Causative and Passive Interpretations

NP + bei + NP + VP	你 抵死 啊， 無 端 端 畀 佢 咬。 nei5 dai2sei2 aa3, mou4dyun1dyun1 bei2 keoi5 ngaau5 . You deserved PRT, for no reason let/PASSIVE it bite "You deserved this. Why let it bite you for no reason?"

Whether the "Bei VP" pattern exists in Cantonese passive constructions

As shown in Pattern 13, Cantonese *bei* passive always has a NP denoting the logical subject that precedes a VP. However, Wong (2009) found 5 occurrences of "bei VP" without the presence of the agentive NP (logical subject), just like the counterpart passive constructions of Putonghua, and she regarded them as fixed expressions. The current study has examined such type of construction as shown in Table 12 and found that the passive "bei VP" pattern does not exist in the HKCAC corpus, from which Wong (2009) has extracted data. The HKCAC corpus was stored in Microsoft Excel files of the version utilized in 1998. It was found that when opening such files in Microsoft Windows 11, some Cantonese characters could not be displayed properly and turned to be blank spaces. After the technical problem of encoding Cantonese characters has been resolved, when the sentence shown in Table 12 was retrieved, the blank space located between "bei" and "VP" displayed correctly as "嘢" (things). This technical issue may have misled Wong (2009) to claim that Cantonese *bei* passive has the pattern of "bei VP". Such type of discrepancy has been corrected in this paper before calculating the statistics of various patterns of Cantonese *bei* constructions.

Table 12. An Example of Cantonese Bei Passive Constructions Using "bei VP" (Wong, 2009)

NP + bei + VP	都 畀 搞 囉。 dou1 bei2 gau2 lo1. All PASSIVE haunt PRT "All were haunted."

Conclusion

There are 13 patterns of Cantonese *bei* constructions, as found in two Cantonese corpora. Different from Wong (2009) that combined Pattern 2 and Pattern 3 into one, the current study regards them as two different patterns, since they are two of the four basic patterns of Cantonese dative constructions. Previous studies focused on Patterns 1 to 4 that involve dative meanings with double objects, while corpora provide us with attested data to find out their features in real-life language uses. There may sometimes be two NPs following *bei*, but for most cases, there is one NP, when *bei* is a beneficiary marker functioning like "to/for" in dative constructions or when there is an ellipsis of the indirect objects or direct object as they are understood from the context.

Bei can co-occur with another verb, forming a serial verb construction in Cantonese, which is found to be the most frequently occurring pattern, similar to the findings of Wong (2009). However, Wong has overlooked the pattern in which *bei* functions like a conjunction "if" and has mistakenly counted "bei VP" as a pattern for Cantonese *bei* passive due to the interference of the technical issue of encoding Cantonese characters. The current study has made correction of such discrepancies before calculating descriptive statistics.

Bei may function as a verb meaning 'give' or 'allow' and serve as a passive marker. Cantonese *bei* constructions may result in an ambiguity of causative constructions and passive constructions. A corpus is the tool to help examine contextual aspects, which are often considered in the interpretation of causative, passive or causative passive readings in this paper.

This paper has demonstrated the use of corpora to study syntactic constructions. 807 occurrences of Cantonese *bei* constructions have been observed but patterns 2, 9 and 10 have spare naturally occurring language data that we can hardly figure out the details of their syntactic features. It is a limitation of the present study. There is a need to target at patterns 2, 9 and 10 when collecting Cantonese data for further studies and build up language database for certain syntactic constructions to study *bei* constructions in depth. It is hoped that the results of the present study may shed light on the corpus-driven approach for Cantonese study and help us observe the similarities and diversities in various syntactic constructions.

References

Chin, A. C. (2011). Grammaticalization of the Cantonese double object verb [pei^{35}] 畀 in typological and areal perspectives. Language and Linguistics, 12 (3), 529-563.

Gao, R. & Zhang, Y. X. (2003). Guangzhouhua de Beidongju [The Passive constructions of Cantonese]. In Zhan Bohui (ed.), Proceedings of the 8th International Conference on Yue Dialects, 558-569. Chinese Academy of Social Sciences. (In Chinese)

Hawkins, J. (2000). The relative order of prepositional phrases in English: Going beyond manner-place-time. Language Variation and Change, 11 (3), 231-266.

Leung, M. T. & Law, S. P. (2001). HKCAC: The Hong Kong Cantonese adult language corpus. International Journal of Corpus Linguistics, 6 (2), 305-325.

Luke, K. K. & Wong, M. L.Y. (2015). The Hong Kong Cantonese corpus: Design and uses. Journal of Chinese Linguistics Monograph Series, 312-333.

Matthews, S. & Yip, V. (2011). Cantonese: A Comprehensive Grammar (2nd Edition). Routledge.

Tang, S. W. (1998). On the 'inverted' double object construction. In S. Matthews (ed.), Studies in Cantonese Linguistics, 35-52. Linguistic Society of Hong Kong.

Tang, S. W. (2003). Hanyu Fangyan Yufa de Canshu Lilun [A Parametric Theory of Chinese Dialectal Grammar]. Peking University Press. (In Chinese)

Tognini-Bonelli, E. (2001). Corpus linguistics at work. J. Benjamins.

Wason, T. (1997). Remarks on grammatical weight. Language Variation and Change, 9 (1), 231-266.

Wong, M. L. Y. (2009). Gei constructions in Mandarin Chinese and bei constructions in Cantonese: A corpus-driven contrastive study. International Journal of Corpus Linguistics, 14 (1), 60-80.