

**Syntax-Semantic Interface of Cantonese Sentences with Specific
Indefinite Subjects
A Conceptual Semantic Account**

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Noun phrases with particular semantic features or a certain combination of them (i.e. specificity, genericity, definiteness, etc.) are more likely to appear at certain syntactic positions. The present paper takes as a starting point Cantonese, topic prominence language, prefers specific and/or definite subjects (Li, 2013) and syntactic alternation, i.e. passivization, involving specific indefinite noun phrases results in inevitable change in meaning. The special phenomena brought by specific indefinite subject in Cantonese sentences are a result of syntax and semantic interface. A crucial point in my proposal is that the interplay between semantic and syntax is not a one-step process; constructions (more specifically certain constituents) generated from the conceptual semantic structure may contribute extra meaning to its semantic and in turn leads to a change in the conceptual semantic structure.

0. Introduction

Referential properties of noun phrases interact with syntax. Noun phrases with particular semantic features or a certain combination of them (i.e. specificity, genericity, definiteness, etc.) are more likely to appear at certain syntactic positions. The present paper takes as starting point topic prominence languages, such as Cantonese, prefer specific and/or definite subjects (Li, 2013). Against this backdrop, two crucial referential properties, namely specificity and definiteness, of subjects and objects in Cantonese actives and passives are examined. It is shown that while NPs of all combinations of specificity and definiteness are possible as subjects and objects in active sentences, there

is limitation in subjecthood of [+ specific] and [- definite] NPs. This invites questions regarding several aspects of the Conceptual Semantic approach:

1. If requirements of referential properties of NPs change according to the syntactic constructions, how should they be expressed in the conceptual semantic structure?
2. How do the requirements of referential properties of NPs interact with syntax (via the linking theory) that gives a different interpretation for NPs of [+ specific] and [- definite] in passives?

The rest of the paper is arranged as follows. First, I am going to set the background for discussion by listing examples of Cantonese sentences with NPs of 4 different combinations of specificity and definiteness at the subject and object positions. Then, I am going to investigate subjects in typical passives (as oppose to retained object passives) and pinpoint the central issue of discussion.

1. NPs with referential properties in active Cantonese sentences

Matthews and Pacioni (1997) examined the characteristics of Cantonese nouns with different referential features. Generally speaking, NPs with different specificity and definiteness are possible at both subject and object positions and most of them are expressed in the same manner in both positions, except NPs of [+ specific] and [- definite]. Examples are shown below in 1.1 and 1.2. The target NPs in each of the sentences are italicized and bolded.

1.1 Subjects in Cantonese actives

Type 1 + specific, + definite

- (1) ***Aa3 can2*** zing2 wai6 zo2 bou6 gei1¹
 阿陳 整 壞 左 部 機

¹ Symbols and abbreviations used in this paper: * = Ungrammatical; 1st = First Person; 2nd = Second Person; 3rd = Third Person; CL = Classifier; DEM = Demonstrative pronoun; NEG = Negation Marker; SUBJ = Subject; OBJ = Object; Perf = Perfective Aspect; Pass = Passive marker; SG = Singular; part=Particle; ACCOMP=Accomplishment particle. The romanization scheme adopted in this paper is based on the one developed by The Linguistic Society of Hong Kong (2002). There are altogether six tones in this scheme: 1 = high level; 2 = high rising; 3 = mid level; 4 = low falling; 5 = low rising; 6 = low level. The tone is marked as superscript of each romanized character.

Ah Chan make-broken Perf CL machine

Ah Chan broke the machine.

Type 2 +specific, -definite

(2)* **Go3 jan4** zing2 wai6 zo2 bou6 gei1

個 人 整 壞 左 部 機

CL person make-broken Perf. CL machine

Some may argue that unacceptability of the sentence is stemmed from the phonological tendency of disyllabic constitutes in Cantonese. To fulfil this requirement, we may add either an adjective or a demonstrative such as *gwo2 go3*果個 and *nei1 go3*呢個. However, the meaning of the new NPs will be altered as the whole NPs would be interpreted as [+specific] [+definite].

(3) **Gwo2 go3 jan4** zing2 wai6 zo2 bou6 gei1

果 個 人 整 壞 左 部 機

DEM CL person make-broken Perf CL machine

That person broke the machine.

(4) **Go3 sei1 jan4** zing2 wai6 zo2 bou6 gei1

個 衰 人 整 壞 左 部 機

CL bad person make-broken Perf CL machine

That bad person broke the machine.

*Gwo2 go3 jan4*果個人 and *go3 sei1 jan4* 個衰人 are a specific and definite NPs. To express a specific and indefinite noun phrase, an existential morpheme *yau5*有 is required.

(5) **Yau5 (Go3) jan4** zing2 wai6 zo2 bou6 gei1

有 (個) 人 整 壞 左 部 機

Have CL person make-broken Perf CL machine

(There is) a particular someone who broke the machine.

Frawley (1992) points out that existence does not serve as the necessary condition for specificity. In other words, something denoted by a [+specific] NP may or may not exist. A specific and indefinite subject has to be expressed with the existential morpheme *yau5* 有, meaning ‘There is someone who broke the machine’. The requirement of the existential morpheme *yau5* 有 necessarily entails the co-occurrence of specificity and existence². Moreover, specific and indefinite NPs introduced by the existential morpheme *yau5* 有 can only appear in pre-verbal/subject position as the existential phrase [*yau5* 有 (CL) N] cannot appear at the post-verbal/object position. Specific indefinite NPs are expressed differently in object position (see 1.2).

Type 3 - specific, + definite

Non-specific NPs are usually generic NPs. Indefiniteness is expressed with bare NPs without any classifiers or determiners. Sentences with subjects of generic NPs usually denote habitual and factual events.

- (6) *Gwo3 zung2 zoek3 zai2 sik6 juk6 gaa3*
 果 種 雀 仔 食 肉 家
DEM CL bird eat meat part
 That kind of birds eat meat.

Type 4 - specific, - definite

- (7) *zoek3 zai2 sik6 guk1 maai5 gaa3*
 雀 仔 食 穀 米 㗎
Birds eat grains part
 Birds eat grains.

² In Xu’s (1997) study on the limitation of subjecthood and effects of semantic features of NPs in Chinese, he suggests that *yau5* 有 used to introduce an indefinite NP serves two purposes (or at least): 1. create a pragmatic difference; 2. serve as a syntactic marker to get over the definiteness requirement of the subject.

1.2 Objects in Cantonese actives

Type 1 + specific, + definite

- (8) Aa3 can2 zing2 wai6 zo2 ngo5 bou6 gei1
 阿陳 整 壞 左 我 部 機
 Ah Chan make-broken Perf 1st sg. CL machine
 Ah Chan broke the machine.

Type 2 +specific, -definite

- (9) Aa3 can2 daai3 zo2 go3 jan4 lai4, nei5 zi1-m4-zi1 keoi5 hai6 bin1 go3?
 阿陳 帶 左 個人 黎, 你 知-唔-知 佢 係 邊 個?
 Ah Chan bring Perf CL person come, 2ndsg. know-not-know 3rd sg be who
 Ah Chan brought someone (to an event), do you know who he/she is?

Instead of using the existential morpheme *yau5* 有, specific indefinite NPs are expressed with classifiers. ‘Go3 jan4 個人’ in sentence (9) refers to a particular unique person.

Type 3 -specific, +definite

- (10) Jan4 lei6 hai6 gam2 sik6 nei1 zung2 jyu2, sik6-dou3 zau6lai4 zyut6 zung2 laa3
 人 類 係 咁 食 呢 種 魚, 食-到 就黎 絕 種 啦
 Human constantly eat DEM. CL fish, eat-ACCOMP soon extinct part
 Human has too many of this kind of fish to the extent that they will soon extinct.

Type 4 -specific, -definite *zoek3 zai2 sik6 guk1 maai5 gaa3*

- (11) Joek3 zai2 sik6 guk1 mai6 gaa3
 雀 仔 食 穀 米 㗎
 Birds eat grains part.
 Birds eat grains.

2. Evidence of peculiarity of [+specific][-definite] NPs in passivization

As is shown in (2)–(5) above, the expression of a [+specific][−definite] NP leads to a struggle between meaning retaining and syntactic requirement. On one hand, the syntax of Cantonese requests an existential morpheme *yau5*有 before the NP; on the hand, an unwanted change in meaning is resulted because of the syntactic constraint. In what follows, I am going to demonstrate that the disambiguation of [+specific [+definite] NPs through passivization can indeed shed light to the syntax-semantic dilemma of [+specific][−definite] NPs at subject position.

It is widely agreed that passivization is a shift of grammatical relations between thematic roles and grammatical functions. A general description of this shift in Cantonese involves demotion of the subject agent and promotion of the object patient to the subject position³. As passivization involves only a change of mapping of grammatical functions, the referential properties of the argument NPs should be expected to retain in active-passive alternation.

Consider sentence (1) again (copied in (12) below):

Active: (12) Aa3 can2 zing2 wai6 zo2 **bou6 gei1**
 阿 陳 整 壞 左 部 機
 Ah Chan make-broken Perf CL machine
 Ah Chan broke the/a machine.

It is noticed by Cantonese speakers that the object NP *bou6 gei1*部機 has two possible readings, one is [+specific][+definite] and the other is [+specific][−definite]:

Meaning 1: [+specific][+definite] Object

(12-a)Aa3 can2 zing2 wai6 zo2 bou6 gei1
 阿 陳 整 壞 左 部 機
 Ah Chan make-broken Perf CL machine
 Ah Chan broke the machine.

³ The general claim about the shift in grammatical relation does not hold for languages which have impersonal passive such as Dutch and German (Keenan & Dryer 2006). Passives in Finnish shows asymmetrical shift of grammatical relation too (Comrie 1977, Ida Toivonen, p.c).

Meaning 2: [+specific][-definite] Object

(12-b) Aa3 can2 zing2 wai6 zo2 (jat1) bou6 gei1
 阿 陳 整 壞 左 (一) 部 機
 Ah Chan make-broken Perf (one) CL machine
 Ah Chan broke a machine.

When (12-a) and (12-b) are passivized, we get (13-a) and (13-b) respectively.

(13-a) **Bou6 gei1** bei2 aa3 can3 zing2-wai6 zo2
 部 機 畀 阿 陳 整 - 壞 咗
 CL machine PASS Ah Chan make-broken Perf
 The machine was broken by Ah Chan.

*(13-b) **jat1 bou6 gei1** bei2 aa3 can3 zing2-wai6 zo2
 一 部 機 畀 阿 陳 整 - 壞 咗
 One CL **machine** PASS Ah Chan make-broken Perf
A machine was broken by Ah Chan.

The reading with [+specific][+definite] object (i.e. (12a)) produces a corresponding passivized sentence with a [+specific][+definite] subject (i.e. (13a)). However, the same promotion mechanism of the [+specific][-definite] object in the second reading (i.e. (12b)) fails to produce a grammatical sentence (i.e. (13b)).

It is noted that numerals rarely appears at the initial position of a sentence in Cantonese. However, simply dropping the numeral jat1 ‘一’ would give us the same [+specific][+definite] subject NP as in (13-a). To retain the [+specific, -definite] features of the active object, an existential morpheme is required, see (14):

(14) **Jau5 bou6 gei1** bei2 aa3 can3 zing2-wai6 zo2
 有 部 機 畀 阿 陳 整 - 壞 咗
Have CL machine PASS Ah Chan make-broken Perf
There is a particular machine which is broken by Ah Chan.

What is bizarre about the promotion is that while the movement in sentence (12) leads to a change in the referential properties of the NP, fulfilling the syntactic requirement on [+specific, -definite] subject NP (i.e. inserting ‘yau5有’) leads to a change in the semantics. First, sentence (14) emphasizes on the existence of such a broken machine (one that was broken by Ah Chan). Second, sentence (14) behaves differently in negation and interrogative, see sentence (14)-(18) as illustration.

(15) Negation of sentence (13-a)

Bou6 gei1 m4 hai6 bei2 aa3 can3 zing2-wai6 zo2
 部 機 唔係 畀 阿 陳 整 - 壞 咗
 CL machine NEG-be PASS Ah Chan make-broken Perf
 The machine was not broken by Ah Chan.

(16-i) Negation of sentence (13-b)

*Yau5 bou6 gei1 m4-hai6 bei2 aa3 can3 zing2-wai6 zo2
 有 部 機 唔-係 畀 阿 陳 整 - 壞 咗
 Have CL machine NEG-be PASS Ah Chan make-broken Perf

(16-ii) Mou5 jat1 bou6 gei1 hai6 bei2 aa3 can3 zing2-wai6 ge3
 無 一 部 機 係 畀 阿 陳 整 - 壞 嘅
 Not have one CL machine be PASS Ah Chan make-broken part
 There weren't any machines which were broken by Ah Chan.

(17) Interrogative of sentence (13-a)

Bou6 gei1 hai6-m4-hai6 bei2 aa3 can3 zing2-wai6 zo2
 部 機 係-唔-係 畀 阿 陳 整 - 壞 咗
 CL machine be-not-be PASS Ah Chan make-broken Perf
 Was the machine broken by Ah Chan?

(18-i) Interrogative of sentence (13-b)

* Yau5bou6 gei1 hai6-m4-hai6 bei2 aa3 can3 zing2-wai6 zo2
 有 部 機 係-唔-係 畀 阿 陳 整 - 壞 咗

Have CL machine be-not-be PASS Ah Chan make-broken Perf

(18-ii) hai6-m4-hai6 yau5 bou6 gei1 bei2 aa3 can3 zing2-waa16 zo2
 係-唔-係 有 部 機 畀 阿 陳 整 - 壞 咗
 Be-not-be have CL machine PASS Ah Chan make-broken Perf
 Is there a machine which was broken by Ah Chan?

Since passive is generally considered a meaning retaining syntactic alternations, the key which leads to the difference in interpretation and syntactic behaviors is then lies in the referential features of the noun phrase, or more specifically, the interaction between the semantic restriction imposed by the subject noun phrase and the surface syntax. In the following section, I am going to provide an account for the syntax and semantics dilemma brought about by [+specific] [-definite] NP in subject positions. The analysis will be conducted within the Conceptual Semantic framework⁴.

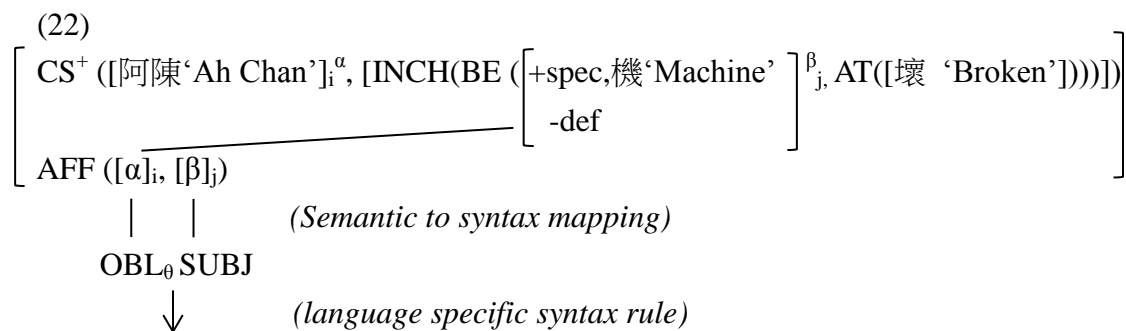
3. A Conceptual Semantic Account

The main idea of my proposal is that the peculiarity of this type of passive is resulted from a two-step interaction between the conceptual structure and the syntax. The originally non-semantic (i.e. only required by the syntax) constituent contributes extra meaning to the construction as a result of mapping from conceptual semantic structure to syntax, and the process in turn leads to a modification back in the conceptual semantic structure. Let's consider sentence (13-b) again (copied in (19) below) and its corresponding conceptual semantic structure is shown in (20):

(19) *jat1 bou6 gei1 bei2 aa3 can3 zing2-waa16 zo2
 一 部 機 畀 阿 陳 整 - 壞 咗
 One CL machine PASS Ah Chan make-broken Perf
 A machine was broken by Ah Chan.

⁴ Lexical features and differences among different types of nouns are expressed independent lexical entries and are incorporated into the conceptual structure headed by the verb through argument fusion.

As shown in (21), the second argument in the AFF tier is bound by the patient with semantic restrictions. When it is mapped to the syntax, the existential morpheme *yau6* 有 is inserted to satisfy the syntactic constraint, i.e. a specific indefinite NP is introduced by *yau6* 有 at preverbal position, see (22) for an illustration.



Insertion of ‘*yau6* 有’ to SUBJ

The above steps gives us sentence (14), copied in (23).

- (23) Yau5bou6 gei1 bei2 aa3 can3 zing2-waai6 zo2
 有 部 機 畀 阿 陳 整 - 壞 咗
 HaveCL machine PASS Ah Chan make-broken Perf
 There is a machine which was stolen by Ah Chan.

Now, that leaves us the latter part of the question: why is there a shift in the focus of meaning in (23) and the syntactic differences exhibited in between passives with specific and indefinite subject and those with NPs with different referential properties (shown in sentence (15)-(18))? I argue that it is caused by a ‘feed-back’ alternation from the surface syntax to the semantic structure. Since ‘有 *yau6*’ carries its own lexical meaning (represent by (24)), the morpheme which is only inserted to fulfil syntax requirement now adds extra meaning to the sentence.

According to Jackendoff (1990), an existential meaning, i.e. *there is*, is represented with the function [STATE]:

- (24) [STATE] → [_{STATE} BE_E ([MACHINE])]

Meaning: There is a machine.

Consider sentence (23) again, we can add a STATE tier, i.e. [_{STATE} BE_E ([機 ‘Machine’])]

stating the existence of an entity identified with the information provided by the CAUSE tier:

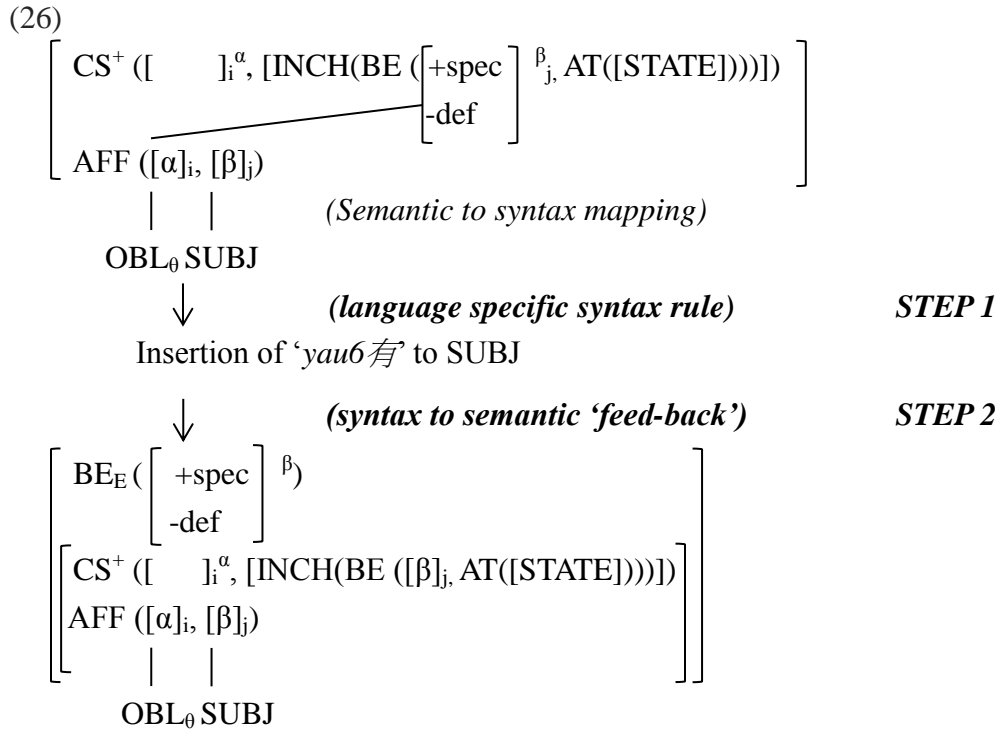
(25)

$$\left[\begin{array}{c} \text{BE}_E \left(\begin{array}{c} +\text{spec} \\ -\text{def} \end{array} \right) \beta) \\ \left[\begin{array}{c} \text{CS}^+ ([\alpha]_i, [\text{INCH}(\text{BE}([\beta]_j, \text{AT}([\text{STATE}])))) \\ \text{AFF}([\alpha]_i, [\beta]_j) \\ | \quad | \\ \text{OBL}_\theta \text{ SUBJ} \end{array} \right] \end{array} \right]$$

The semantic restrictions of argument are stated in the BE_E tier and the argument is bounded with the argument under the inchoative function as represented by the subscription [β]. The shift of focus of semantic meaning can be explained by the change of head function in the conceptual semantic structure.

4. Conclusion

All in all, I argue that the special phenomena brought by specific indefinite subject in Cantonese sentences are a result of syntax and semantic interface. A crucial point in my proposal is that the interplay between semantic and syntax is not a one-step process; constructions (more specifically certain constituents) generated from the conceptual semantic structure may contribute extra meaning to its semantic and in turn leads to a change in the conceptual semantic structure. My overall proposal is illustrated below:



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