

## **Information Structure in English, Mandarin Chinese and Taiwanese Southern Min: Argument Realization of Ditransitive Objects**

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This study investigates the discourse-pragmatic properties of ditransitive constructions in English, Mandarin Chinese (MC) and Taiwanese Southern Min (TSM) based on argument realization patterns of the ditransitive objects in discourse contexts. The specific focuses are on the conditioning factors of two linguistic phenomena: word ordering variation and argument omission. Three main corpus-based observations are developed. First, the favored positions of overt objects were found to be largely conditioned by the informational-statuses they carry. Second, contra to the traditional prescriptive view that English, which is a non-pro-drop language, does not allow zero pronominals in the argument positions of finite clauses, under closer observation, the data reveals that even in English, ditransitive arguments carrying Hearer-Old, Discourse-Old or Inferrable information can surface as zero anaphora, given that recoverability of unexpressed elements can be carried out by addressees provided with sufficient background or discourse information. This indicates the significant role that information structure plays in the surface argument realization of nominal objects.

### **1. Introduction**

The last few decades have witnessed a growing interest in research on the cognitive and pragmatic nature of human communication. Particular attention has been paid to the effects of cognitive and pragmatic factors on language use. One of the most important approaches to this problem involves the concept of Information Structure (Halliday 1967), which asserts that coherent discourse is organized into ‘information units’ (ibid.: 200). A core issue concerns the nature of the syntax-pragmatics interface, in particular “how information is ‘packaged’ in a sentence by taking into account what is understood to be the listener’s and speaker’s common ground” (Goldberg 2014). Messages conveying identical truth conditions have been observed to be expressed through distinct grammatical constructions characterized by varying pragmatic functions. These “pragmatically specialized constructions” (Gregory & Michaelis 2001) tend to constitute “marked” ways of indicating certain discourse functions, inviting the addressee to consider the speaker’s possible motivation for using an apparently non-canonical, “uneconomic” construction (Searle et al. 1980). The most notable cases of pragmatically

marked constructions include topicalization and left-dislocation, as illustrated by the following examples provided by Goldberg (2014), cited from Lambrecht (2001):

- (1) a. Left-dislocation:           A single ticket, she bought it yesterday.  
       b. Topicalization:           A single ticket, she bought yesterday.

This minimal pair of clauses, though expressing the same truth-conditional information, are argued to serve distinct pragmatic-discourse functions: the nominal in the left-dislocation construction is new to the hearer, while its counterpart in the topicalization construction is likely to be previously mentioned (Gregory and Michaelis 2001, Goldberg 2014). From this example, we can see that nominals with different informational-statuses can occur in distinct syntactic structures. In Information Structure research, therefore, it is necessary to pin down the association between (i) the specific grammatical positions in which certain nominals occur and (ii) the informational states of the referents denoted by the nominal arguments in the associated discourse.

In addition to pragmatically marked constructions, in ordinary syntactic structures, it has also been observed that word order is relevant to determining the discourse-pragmatic characteristics of a nominal referring expression. Specifically, the syntactic position in which a nominal phrase (NP) occurs is strongly associated with a given informational status. For example, an NP in canonical subject position tends to be definite (Li and Thompson 1976, Givón 1976) and carry old information (Chafe 1976), while an NP in a non-canonical subject position, such as an existential construction, tends to be indefinite and new to the addressee's attention (Prince 1992). The contrast can be illustrated by the following sentences.

- (2) a. The/\*A man is jogging in the park.  
       b. There is a/\*the man jogging in the park.

To study the interactions between word order of NPs and their pragmatic nature, we must first understand the informational status of discourse entities denoted by NPs. Different types of nominal informational states have been proposed and discussed in the literature. In his seminal work, Chafe (1976) identifies several key information-structural components of discourse, many of which have been further investigated in a subsequence of studies, including the following dichotomies: Given/Old vs. New; Focus vs. Background; Topic vs. Comment (Zimmermann & Féry 2009).

In addition to these pairs of information-structural categories, it has also been pointed out that in successful communication, information exchanges are conducted following certain discourse principles which ease short-term memory load in information processing. The principles include 1) the Given-Before-New Principle (Gundel 1988), also known as the Old-to-New Principle (Tang 2011, 2012), 2) the One New Idea Constraint (Chafe 1987), and 3) Heaviness.

Ditransitives are an ideal conduit for the study of word order variation, given their well-known participation in the double-object and prepositional dative forms, illustrated by the following sentences. The former variant is referred to here as ‘Double Object Construction’ (DOC) and the latter ‘Prepositional Dative Construction’ (PDC). The research questions that this study pursues include both empirical and theoretical points of inquiry, as listed below.

- (3) a. In natural speech, what are the distributional patterns of ditransitive arguments in English, MC and TSM?
- b. What are the discourse principles governing these patterns? Which are universal and which are language-specific?
- c. How do these principles shed light on general information-structural theories and typological linguistics?

## 2. Word Ordering Variation and Argument Omission

Two of the key issues in Information Structure concerning surface argument realization are constituent ordering variation and (c)overt forms of nominal arguments. Ditransitive arguments serve as one platform for research into these issues, since in actual language use, speakers can highlight or background the three participants bearing varying informational-statuses by implicitly or explicitly expressing them as well as by ordering them in a certain way.

Ditransitives are an ideal conduit for the study of word order variation, given their well-known participation in the double-object and prepositional dative forms, illustrated by the following sentences. The former variant is referred to here as ‘Double Object Construction’ (DOC) and the latter ‘Prepositional Dative Construction’ (PDC), illustrated by the English examples below, noted their counterparts in MC and TSM are alike.

- (4) a. DOC: I sent her a book.
- b. PDC: I sent a book to her.

In the DOC, the indirect object (IO) precedes the direct object (DO), and both the objects are unmarked. In the PDC, the order is reversed, i.e. the IO follows the DO; besides, while the DO is unmarked, the IO is marked by a Recipient marker. Whereas the two variants, DOC and PDC, are both common in English, MC, and TSM<sup>1</sup>, a third variant is found in MC and TSM, without a corresponding construction in English, as illustrated below.

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<sup>1</sup> The MC examples are 我送她一本書 *wo<sup>3</sup> song<sup>4</sup> ta<sup>1</sup> yi<sup>1</sup> ben<sup>3</sup> shu<sup>1</sup>* (DOC) and 我送一本書給她 *wo<sup>3</sup> song<sup>4</sup> yi<sup>1</sup> ben<sup>3</sup> shu<sup>1</sup> gei<sup>3</sup> ta<sup>1</sup>* (PDC). The TSM counterparts are 我送伊一本書 *gua<sup>2</sup> sang<sup>2</sup> i<sup>1</sup> tsit<sup>8</sup> bun<sup>2</sup> tshet<sup>4</sup>* and 我送一本書予伊 *gua<sup>2</sup> sang<sup>2</sup> tsit<sup>8</sup> bun<sup>2</sup> tshet<sup>4</sup> hoo<sup>7</sup> i<sup>1</sup>*. Details will be given later.

- (5) a. 我 送 給 她 一 朵 花 (MC)  
 wo<sup>1</sup> song<sup>4</sup> gei<sup>3</sup> ta<sup>1</sup> yi<sup>1</sup> duo<sup>3</sup> hua<sup>1</sup>  
 1SG<sup>2</sup> send give 3SG one CL flower  
 ‘I gave her a flower.’
- b. 我 送 予 伊 一 蕊 花 (TSM)  
 gua<sup>2</sup> sang<sup>3</sup> hoo<sup>7</sup> i<sup>1</sup> tsit<sup>8</sup> liu<sup>2</sup> hue<sup>1</sup>  
 1SG send give 3SG one CL flower  
 ‘I gave her a flower.’

This pattern resembles the common DOC in its surface structure, with one distinction: an additional element immediately following the ditransitive verb. This additional element is fixed and is phonologically identical to the prototypical ditransitive verb in MC and TSM, which is standardly used to express possessional transfer events without specifying the manner of transfer: the form of this default ditransitive is gei<sup>3</sup> 給 ‘give’ (MC) and hoo<sup>7</sup> 予 ‘give’ (TSM). In the present study, I will follow Cheng et al. (1999) in indicating this third syntactic variant as DOC-2, and referring the common DOC as DOC-1.

In the literature of ditransitive verbs and constructions, the most widely discussed topic concerns ‘dative alternation’, which have been investigated from two empirical and theoretical perspectives. The first issue is empirical: which verbs can and which verbs cannot participate in dative alternation? (e.g. Gropen et al. 1989, Levin 1993) The second issue is theoretical: is the apparent ‘alternation’ truly alternation from one syntactic pattern to another? That is, are the syntactic variants structurally and semantically related to each other or are they in fact independent from each other? (e.g. Goldberg 1995, 2006, Rappaport Hovav and Levin 2008, F. Liu 2006) Past accounts have relied heavily on intuitive contrasts or elicited data, with the result that a certain amount of disagreement has arisen concerning grammaticality/acceptability judgments, as well as the limited scope of research and potential bias arising from various linguistic and non-linguistic factors (Bresnan and Nikitina 2003). To counteract these potential problems and focus specifically on potential discourse factors in language use, the data analyzed in the present study are all taken from corpora of actual (television script) conversations between interlocutors. The English data are taken from *Friends*, a popular American TV series that aired from 1994 to 2004. Dialogue within the sitcom primarily takes place

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<sup>2</sup> The abbreviations used in this papers include: 1SG (First person singular pronouns), 2SG (Second person singular pronouns), 3SG (Third person singular pronouns), ACC (Accusative markers introducing Theme or Patient in disposal construction, such as ba<sup>3</sup> 把 in MC and ka<sup>7</sup> 共 or tsiong<sup>1</sup> 將 in TSM), AM (Agent markers in passive construction, such as bei<sup>4</sup> 被 in MC and hoo<sup>7</sup> 予 in TSM), ASP (Aspect markers), COP (Copolcoa), CAU (causative markers), CL (Classifiers, including nominal and verbal classifiers), COM (Comitative markers), POSS (Possessive markers), and SFP (Sentence final particle).

among the six main characters who have been close friends for years, three female and three male<sup>3</sup>: Rachel Green, Monica Geller, Phoebe Buffay, Joey Tribbiani, Chandler Bing, and Ross Geller. The first two seasons, which comprise of 48 episodes, each of which lasts about 22 minutes, were chosen as the English database. The MC and TSM conversational data used in this study are extracted from dialogues found in the scripts of two Taiwanese TV programs: 白先勇 Kenneth Hsien-yung Pai's *Niezi* 孽子 ("Crystal Boys")<sup>4</sup> and 吳豐秋 Feng-Qui Wu's *Houshan Ri Xian Zhao* 後山日先照 ("The Sun Shines First Behind the Mountain")<sup>5</sup>, both produced and aired by Public Television Service, Taiwan. The former first aired in 2003 and the latter in 2002. Both TV programs comprise 20 episodes, each of which lasts about 50 minutes.

The second issue addressed in this study involves argument omission. In spoken environments, particularly in face-to-face conversation, certain constituents are frequently left unexpressed. In the following excerpt extracted from the fourth episode of the first season of *Friends*, the character Ross has been sent to a hospital emergency room by his friends Joey and Chandler after being unexpectedly hit on the nose by a hockey puck. After checking in at the E.R. counter, Ross discovers with dismay that the puck is missing. Turning to his friends for inquiry, he realizes that a kid in the room has picked up the puck and kept it with him. Ross then asks the kid to return the puck 'Gimme!' In this apparently complete clause, not only is the subject null (standard in English in the imperative mood), but the direct object is also covert, a fact that seem to violate the prescriptive rules concerning the prototypical ditransitive verb give. Why is it that in "real life" situations, the Theme argument of give can be left unexpressed? This is one of the questions the present study will to pursue.

### 3. Informational Statures

Within a communicative context, the speaker's assumptions concerning the addressee's background knowledge determine what information is treated as "given" and what information is considered to be "new" (e.g. Chafe 1987). Much recent scholarship has demonstrated that the syntactic position occupied by an NP bears a certain correlation with the kind of information it carries. For example, NPs in Subject position tend to be definite (Prince 1992: 297-298), while Topic NPs tend to carry old information (Li and Thompson 1976). According to Prince (1992), a finer distinction can be made about the information status of discourse entities. These contrasts pertain specifically to (i) the speaker's assumption about the hearer's knowledge state and (ii) the information state within the discourse context.

The first distinction can be labeled *Hearer-old versus Hearer-new* (Prince 1992: 301-303). As the name suggests, "Hearer-old" information is information that the speaker

<sup>3</sup> [http://friends.wikia.com/wiki/Friends\\_Wiki](http://friends.wikia.com/wiki/Friends_Wiki)

<sup>4</sup> <http://web.pts.org.tw/~web01/boys/#>

<sup>5</sup> <http://web.pts.org.tw/~web01/sunshine/>

assumes the addressee possesses and that will allow the addressee to identify the entity designated by the NP. By contrast, “Hearer-new” information describes any kind of mental entity that the speaker assumes “not to be already known to the hearer” (*ibid.*: 302). Whether an entity in the information context is considered Hearer-old or Hearer-new can be ascertained based on the speaker’s choice of linguistic expression when referring to that entity.

(6) a. **The Use of Proper Name to Refer to Hearer-old Information**

I’m waiting for it to be noon so I can call Sandy Thompson. (*ibid.*: 301, ex. (11))

b. **The Use of Indefinite NP to Refer to Hearer-new Information**

I’m waiting for it to be noon so I can call someone in California. (*ibid.*, ex. (12))

As can be seen from the minimal pair above, different linguistic forms are exploited to package different kinds of information. Generally speaking, definite NPs, pronouns, and proper names carry Hearer-old information, while indefinite NPs carry Hearer-new information.

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The second information-status distinction concerns discourse structure. In this context, a three-way distinction is made between *Discourse-old*, *Discourse-new*, and *Inferrable* information (Prince 1992: 303-308). An NP carrying Discourse-old information is one “that has already been evoked in the prior discourse-stretch,” whereas a Discourse-new NP “has not previously occurred in the prior discourse-stretch” (*ibid.*: 303). The Discourse-old versus Discourse-new distinction depends on the structure and stage of the discourse itself. In the discourse-initial stage, NPs are most likely to be Discourse-new. Once an NP has been mentioned in the discourse, it becomes Discourse-old in later stages. Linguistically speaking, pronouns are one typical device used to mark Discourse-old entities.

The third type of information, **Inferrable** information, is held by NPs whose referents are assumed to be identifiable by the hearer “based on the speaker’s beliefs about the hearer’s beliefs and reasoning ability” (*ibid.*: 304). Prince’s classic example of Inferrable information is shown below.

(7) He passed by the Bastille and the door was painted purple. (*ibid.*: 305, ex. (17b))

The NP *the door* has never been mentioned in prior discourse. However, the speaker assumes the addressee is able to infer the reference “the door [of the Bastille]” based on his or her basic reasoning ability and knowledge of buildings. The NP *the door* therefore carries Inferrable information. In this study, the notions *Hearer-old vs. Hearer-new* and

*Discourse-old*, *Discourse-new* and *Inferrable* are used to describe and analyze ditransitive arguments in the corpora.

#### 4. Prototypicality of Ditransitive Constructions

One of the most prototypical ditransitive constructions is the DOC. In English, there is only one type of DOC. In MC and TSM, there are two sub-types of DOCs, termed as DOC-1 and DOC-2 in the present study; the former consists of only one ditransitive verb and the latter consists of two subsequent ditransitive verbs. Admittedly, DOC-1 is a legitimate ditransitive construction in all three languages as observed in the literature. Intriguingly, as the table presented in the last sub-section shows, DOC-1 occurred much more often than the other five patterns in English and MC, but the frequency of DOC-1 in the corpora of TSM is less than that of PDC. The investigation in discourse contexts shows that the DOC-1 is frequently used to package new DO. In other words, the DOC-1 tends to occur at the beginning parts of a thematic paragraph, as shown in the following data sets.

(8) One Excerpt in English (taken from F4.8)

- Chandler: Hey, by any chance did either of you pick uh Rachel for your secret Santa,  
           ‘cause I wanna trade for her.
- Phoebe: I picked her! Oh thank God you want her! Ooh!
- Chandler: Wow! Why do you want to get rid of her so badly?
- Phoebe: Because she exchanges every gift she ever gets, it’s like impossible to get her something she likes. Come on, let’s trade!
- Chandler: Oh that’s not true! I got her that backpack and she loved it! I remember how much she was crying the day when that big dog ran off with it...(notices the look on Monica and Phoebe’s faces.) Oh, there was no big dog. All right this sucks! I already got her this briefcase, and I had R.G. put on it...(Phoebe looks confused.) Her initials...
- Phoebe: Ohh.
- Monica: Well, maybe you could give it to somebody else. Ooh, like Ross Geller.

In the conversational exchanges above, there are four clauses expressing transferring events, indicated by the arrows. As is evidenced from the discourse context, the IOs in the first three instances carry Discourse-Old information and that in the last instance carry Discourse-New information; on the contrary, the DOs in the first three instances carry Discourse-Old information and that in the last instance carry Discourse-New information. Specifically, the first three IOs, surface as the third person singular pronoun *her*, which refers to Rachel, have already been mentioned in the first utterance. The IOs, therefore, carry Discourse-Old information. The final IO, *somebody else*, on the contrary, carries Discourse-New information, as it refers to a new discourse entity never mentioned before and unknown to the addressee. As for the DOs in the four clauses, the first three

all surface as full NPs, and the last one pronoun *it*. The first three DOs carry Discourse-New information, and the last one carries Discourse-Old information. This distributional pattern can be illustrated by the following table.

Obj Clause	IO		DO	
	Linguistic Form	IS	Linguistic Form	IS
#1: DOC	Pronouns (her)	Discourse-Old	Full NP ( <i>something she likes</i> )	Discourse-New
#2: DOC			Full NP ( <i>that backpack</i> )	
#3: DOC			Full NP ( <i>this briefcase</i> )	
#4: PDC	Full NP ( <i>somebody else</i> )	Discourse-New	Pronouns ( <i>it</i> )	Discourse-Old

Table 1 Informational-Statuses (IS) of Ditransitive Objects

As can be seen from this table, the DOC introduces old IO and new DO, and the PDC introduces new IO and old DO. This finding echoes several previous studies, such as Goldberg (2006: 148), in suggesting the DO in the DOC carries new or accessible information, while the IO in this construction bears old information, thus functioning as the secondary topic in the clause.

While the DOC-1 is a prototypical ditransitive construction in the three languages, the DOC-2 does not exist in English, and is rarely found in the corpora of MC and TSM. DOC-2 has received abundant attention in the research of MC. Previous research has focused on arguing about a) the grammatical status of the second ditransitive verb in this structure, b) any possible transformational relations between this structure and Prepositional Dative Construction, and c) similarities and differences concerning constructional meanings between DOC-2 and other ditransitive constructions. Extremely little attention has been paid to the distributional patterns of ditransitive constructions, including DOC-2, in actual language use. A survey based on the MC and TSM reveals that DOC-2 in its canonical format (Subj+V<sub>1</sub>+V<sub>2</sub>+IO+DO) was actually seldom used. When *gei*<sup>3</sup> 給 (MC)/*hoo*<sup>7</sup> 予 (TSM) is immediately adjacent to ditransitive verbs forming V-GIVE sequence, DO normally occurred before the V-GIVE sequence rather than after it. This rarity of the DOC-2 in its canonical format is also reported by Chen (2005) in her corpus-based survey of TSM narratives. It seems therefore the low frequency of the DOC-2 is true at least both in face-to-face conversations and narratives.

Last but not least, the PDC shows cross-linguistic difference: The PDC in English introduces old DO, but that in MC and TSM introduces new DOs. Compare the following sets of data:

(9) a. PDC in English

→ Rachel: I guess this<sub>i</sub> belongs to you. And thank you for giving it<sub>i</sub> to me.

Barry: Well, thank you for giving it back. (F1.2)

b. PDC in MC

- 耕土：我一到台北就馬上寫信給妳。妳要回信給我喔。  
*wo<sup>3</sup> yi<sup>1</sup> dao<sup>4</sup> tai<sup>2</sup>-bei<sup>3</sup> jiu<sup>4</sup> ma<sup>3</sup>-shang<sup>4</sup> xie<sup>3</sup> xin<sup>4</sup> gei<sup>3</sup> ni<sup>3</sup> ni<sup>3</sup> yao<sup>4</sup> hui<sup>2</sup> xin<sup>4</sup> gei<sup>3</sup> wo<sup>3</sup> o*  
 1SG once arrive Taipei ADV immediately write letter give 2SG  
 2SG need return mail give 1SG SFP  
 ‘I’ll write you a mail as soon as I arrive at Taipei. You’ll reply my mail!’
- 雅慧：那我現在就先念一封古人的信給你聽。(H18)  
*na<sup>4</sup> wo<sup>3</sup> xian<sup>4</sup>-zat<sup>4</sup> jiu<sup>4</sup> xian<sup>1</sup> nian<sup>4</sup> yi<sup>4</sup> feng<sup>1</sup> gu<sup>3</sup>-ren<sup>2</sup> de xin<sup>4</sup> gei<sup>3</sup> ni<sup>3</sup> ting<sup>1</sup>*  
 then 1SG now then first read one CL ancient.people NOMI letter  
 give 2SG listen  
 ‘Then I’m now reading a letter written by ancient people to you.’

c. PDC in TSM

- 耕州：ni 桑,攏無郎恰我耍,你恰我耍好無?  
*ni-san long<sup>2</sup> bo<sup>5</sup> lang<sup>5</sup> kah<sup>4</sup> gua<sup>2</sup> sng<sup>2</sup> li<sup>2</sup> kah<sup>4</sup> gua<sup>2</sup> sng<sup>2</sup> ho<sup>2</sup> bo<sup>5</sup>*  
 brother all NEG people with 1SG play 2SG with 1SG play well NEG  
 ‘Brother. No one’s playing with me. Will you play with me?’
- 耕河：ni 桑佇寫功課,無閒啦。耕土,你提金珠子予伊耍。(H1)  
*ni-san ti<sup>7</sup> sia<sup>2</sup> kong<sup>1</sup>-kho<sup>3</sup> bo<sup>5</sup> ing<sup>5</sup> lah<sup>4</sup>*  
*king<sup>1</sup>-thoo<sup>2</sup> li<sup>2</sup> theh<sup>8</sup> kim<sup>1</sup>-tsu<sup>1</sup>-a<sup>2</sup> hoo<sup>7</sup> i<sup>1</sup> sng<sup>2</sup>*  
 brother PROG write homework NEG available  
 name 2SG bring gold.ball.DIM give 3SG play  
 ‘I’m writing my homework. I’m not available. Geng-tu, bring him a ball  
 for him to play.’

In the English example, the DO in the PDC which surfaces as pronoun *it*, carries Discourse-Old, as it co-indexed with its antecedent *this*, which is mentioned in the previous clause. In the MC and TSM examples, on the contrary, the DOs in the PDC surfaced as either bare NPs *xin<sup>4</sup>* 信 ‘letter’ (MC)/*kim<sup>1</sup>-tsu<sup>1</sup>-a<sup>2</sup>* ‘golden ball’ (TSM), or an indefinite NP *yi<sup>4</sup> feng<sup>1</sup> gu<sup>3</sup>-ren<sup>2</sup> de xin<sup>4</sup>* 一封古人的信 ‘a letter written by ancient people’. The grammatical markings of bare NPs and indefinite NPs suggest relatively new information. Notice that although the second appearance of *xin<sup>4</sup>* 信 ‘letter’ in the MC data seems to indicate Discourse-Old information, however, the discourse referents of the two tokens of *xin<sup>4</sup>* 信 ‘letter’ are distinct: the first one is supposedly being written by the speaker Geng-tu 耕土 and the other one replied by the addressee Ya-hui 雅慧. These two DOs therefore both carry Discourse-New information.

## 5. Null IOs and DOs

In the examples to be presented here, both the ditransitive objects were surfaced as zero pronominals. They share the identical pragmatic-discourse characteristics with the null IOs and null DOs discussed in the previous two sub-sections.

To begin with, both Recipient and Theme in the example below are non-specific entities in the transferring event. They, as a result, carry Inferrable information.

(10) Null DOs and IOs carrying Inferrable information

Monica: This is so typical. Y'know, we give  $\emptyset_{[Recipient]}$   $\emptyset_{[Theme]}$ , and we give  $\emptyset_{[Recipient]}$   $\emptyset_{[Theme]}$ , and we give  $\emptyset_{[Recipient]}$   $\emptyset_{[Theme]}$ . And then- we just get nothing back!  
(F1.11)

When the referent does not refer to a specific entity but carries generic meaning, i.e., carrying Inferrable information, it can be expressed by a zero form, despite the absence of a proper antecedent, as long as the speaker assumes the addressee is able to figure out the referent for the absent arguments.

In the next conversation exchanges, an interesting phenomenon is observed. On the one hand, among the multiple occurrences of the verb *pue*<sup>5</sup> 賠 ‘compensate’, some Theme arguments were realized as a full NP *tsinn*<sup>5</sup> 錢 ‘money’ and some as zero pronominals. On the other hand, the Recipient argument was firstly realized as a zero form, then a full NP *kok*<sup>4</sup>-*ka*<sup>1</sup> 國家 ‘country’, and then a zero pronominal.

(11) 滿堂：耕山仔乞予軍校退學啦，閣乞予人押轉來啦！

*king*<sup>1</sup>-*san*<sup>1</sup>-*a* *khit*<sup>4</sup>-*hoo*<sup>7</sup> *kun*<sup>1</sup>-*hau*<sup>7</sup> *the*<sup>3</sup>-*hak*<sup>8</sup> *lah*<sup>4</sup> *kho*<sup>4</sup> *khit*<sup>4</sup>-*hoo*<sup>7</sup> *lang*<sup>5</sup> *ah*<sup>4</sup> *tng*<sup>2</sup>-*lai*<sup>5</sup> *lah*<sup>4</sup>  
name AM military.school flunk SFP also AM people escort DC SFP

彩雲：啊轉來嘛好啊，轉來厝內嘛較有人通照顧。

*ah*<sup>4</sup> *tng*<sup>2</sup>-*lai*<sup>5</sup> *ma*<sup>7</sup> *ho*<sup>3</sup> *ah*<sup>4</sup> *tng*<sup>2</sup>-*lai*<sup>5</sup> *tshu*<sup>3</sup>-*lai*<sup>7</sup> *ma*<sup>7</sup> *kah*<sup>4</sup> *u*<sup>7</sup> *lang*<sup>5</sup> *thang*<sup>1</sup> *tsiau*<sup>3</sup>-*kaa*<sup>3</sup>  
DM return also well return house.inside also more have people can take.care

→滿堂：講較簡單啦！退學啊，是愛賠  $\emptyset_{[Recipient]i}$  錢<sub>j</sub>呢！

*kong*<sup>2</sup> *kah*<sup>4</sup> *kan*<sup>2</sup>-*tan*<sup>1</sup> *lah*<sup>4</sup> *the*<sup>3</sup>-*hak*<sup>8</sup> *ah*<sup>4</sup> *si*<sup>7</sup> *ai*<sup>3</sup> *pue*<sup>5</sup> *tsinn*<sup>5</sup> *neh*<sup>4</sup>  
say more easy SFP flunk SFP FM need compensate money SFP

伊食的啊，帶的啊，穿的啊，攏是愛賠錢<sub>j</sub>予國家<sub>i</sub>呢！加起來是袂少錢呢！

*i*<sup>1</sup> *tsiah*<sup>8</sup> *e*<sup>5</sup> *ah*<sup>4</sup> *tua*<sup>3</sup> *e*<sup>5</sup> *ah*<sup>4</sup> *tshing*<sup>7</sup> *e*<sup>5</sup> *ah*<sup>4</sup> *long*<sup>2</sup> *si*<sup>7</sup> *ai*<sup>3</sup> *pue*<sup>5</sup> *tsinn*<sup>5</sup> *hoo*<sup>7</sup> *kok*<sup>4</sup>-*ka*<sup>1</sup> *neh*<sup>4</sup> *ka*<sup>1</sup> *khi*<sup>3</sup>-*lai*<sup>5</sup> *si*<sup>7</sup> *be*<sup>7</sup> *tsio*<sup>2</sup> *tsinn*<sup>5</sup> *neh*<sup>4</sup>

3SG eat NOMI SFP bring NOMI SFP wear NOMI SFP all FM need compensate money give country SFP add INCH FM will NEG money SFP

→招治：賠  $\emptyset_{[Recipient]i}$   $\emptyset_{[Theme]j}$  就賠  $\emptyset_{[Recipient]i}$   $\emptyset_{[Theme]j}$  啊，就算講賠  $\emptyset_{[Recipient]i}$  錢<sub>j</sub>呼，嘛愛共我的囡仔換轉來啦！

*to*<sup>7</sup>-*sng*<sup>3</sup> *kong*<sup>2</sup> *pue*<sup>5</sup> *tsinn*<sup>5</sup> *hoo*<sup>4</sup> *ma*<sup>7</sup> *ai*<sup>3</sup> *ka*<sup>7</sup> *gua*<sup>2</sup> *e*<sup>5</sup> *gin*<sup>2</sup>-*a*<sup>2</sup> *uann*<sup>7</sup> *tng*<sup>2</sup>-*lai*<sup>5</sup> *lah*<sup>4</sup>  
even say compensate money SFP also need ACC 1SG NOMI child exchange DC SFP

- ‘Buan-tng: King-san was flunk by the military school. He was even escorted back.  
 Tsio-ti: It’s nice for him to come back. It’s easier to have people look after him in the household.  
 Buan-tng: It’s easy for you to say. We need to compensate money once he was flunk by school. We need to compensate every penny he spent on eating, bringing, and wearing. That’s a lot of money.  
 Tsio-ti: Then we just pay the country! Even though we need to compensate the country, I still will have my child back.’ (H15)

It is possible that in the first mention of the compensating event, the speaker Buan-tng 滿堂 emphasized the Theme *tsinn*<sup>5</sup> 錢 ‘money’, and then in the second mention, he wished to specify the Recipient of the compensating event *kok*<sup>4</sup>-*ka*<sup>1</sup> 國家 ‘country’ in addition to the Theme *tsinn*<sup>5</sup> 錢 ‘money’. In this second occurrence of the verb *pue*<sup>5</sup> 賠 ‘compensate’ therefore, both objects were expressed by full NPs. On hearing her husband’s complaint, Tsio-ti 招治 argued back by asserting that no matter how much money they needed to compensate whoever it was, she would want her son back, which is her priority in this event. As a result, neither Theme nor Recipient was specified in her utterance. Her next utterances focused on the fact that money is what they needed to compensate the country, and therefore *tsinn*<sup>5</sup> 錢 ‘money’ was continuously maintained in the utterances to form a topic chain, while the Recipient was left unexpressed.

From the discussion above, it seems that the speaker’s choice about emphasizing one or two ditransitive object results in the various selection of linguistic forms. The speaker can just emphasize on the event itself, regardless of who the Recipient is and what the Theme is. In this scenario, only the verb stands out. This echoes back to Goldberg’s (2001) “Omission under Low Discourse Prominence” principle, which asserts that (*ibid.*: 514):

Omission of the patient argument is possible when the patient argument is construed to be deemphasized in the discourse vis a vis the action. That is, omission is possible when the patient argument is not topical (or focal) in the discourse, and the action is particularly emphasized (via repetition, strong affective stance, discourse topicality, contrastive focus, etc).

In the dialogue in (11), strong affective stance seems to be the cause for emphasizing the action and deemphasizing both objects, as the mother was eager to have her son back regardless how much she needs to compensate whoever it is. Speakers’ choices of using overt or covert forms to express the objects depend not only on the informational-status of the discourse entities but also on the emphasis the speakers choose to make on the event or on the participant(s) in the event.

## 6. Conclusion

The present study has provided an empirical description of the surface realization patterns of ditransitive objects in face-to-face conversation of English, MC and TSM. The need for a research on **word ordering variation** and **argument omission** based on a data-driven analysis in discourse contexts is emphasized. It shows how three-place predicates serve as one ideal candidate for study at the pragmatics-syntax interface, given their large number of arguments, multiple possible syntactic locations, and various surface forms.

Significantly, the study has shown that cross-linguistically, non-inherent ditransitive verbs are more restricted in distribution. Moreover, a comparison across the three languages investigated here has revealed an asymmetric distributional pattern with respect to complement configurations. Specifically, the non-inherent ditransitive verbs in English can only occur in the DOC, but not the PDC. The MC and TSM equivalents, on the contrary, can only occur in the PDC, but hardly the DOC. Furthermore, a comparison of the argument structure constructions recurrently observed in the corpora of English, MC and TSM, as well as the preferred positions that ditransitive objects of these three languages has revealed that the favored positions of overt objects were found to be largely conditioned by the informational-statuses they carry. The distributional patterns have also shown a cross-linguistic distinction. In English, new DOs occur in the DOC and old DOs occur in the PDC. The DOs in PDC therefore often surface as pronouns. Generic or non-specific DOs and IOs, on the other hand, are frequently realized as zero anaphors. In MC and TSM, on the other hand, new DOs can occur in the DOC or the PDC, while old DOs predominantly occur in preverbal positions, including Topicalization, Object Fronting, and Disposal Construction. The findings carry theoretical implication in the study of pragmatic characteristics of syntactic constructions. While pragmatically marked constructions, such as Topicalization, have attracted much attention from linguistics to investigate their discourse properties and constraints, linguists have rarely paid attention to pragmatically ‘neutral’ constructions, such as the DOC and the PDC, with respect to their communicative functions. Corpus-based scrutiny with sufficient contextual information contributes to investigations concerning constructions’ pragmatic characteristics. Finally, the distributional patterns of null ditransitive arguments show that distinct to overt objects, null objects were found to carry most often Discourse-Old information, then Inferrables, and finally Hearer-Old information. For zero objects with Discourse-Old information, the antecedent occurred in prior linguistic contexts. Significantly, the coreferential relations between the zero anaphors and their previously occurred antecedents are not always restricted within clause boundaries. Often in the face-to-face communications, antecedents are much likely to be mentioned several clauses away. In the study of discourse, therefore, the examination of zero anaphors and their coreferential antecedents needs to be done in a larger context.

To summarize, ditransitive verbs and constructions serve as an ideal conduit for investigating overt and covert argument realization. While in the conceptual structure,

three participants are involved in transfer events, in actual language use, speakers can choose to highlight or background the participants with varying informational-statuses by implicitly or explicitly expressing them as well as by ordering them in a certain way. Studying the argument realization pattern of ditransitive arguments within a discourse reveals the information structure in the language. The present study found that phonologically unsaturated fragments often occur in face-to-face interactions. Recoverability of unexpressed elements can be done by addressees given sufficient discourse information. The significant role that information structure plays in argument realization is difficult to be observed without discourse context, as the interrelationships among nominal objects go beyond clause boundary.

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