

Immediate Anteriority Construction in Cantonese

Abstract

This study explores the immediate anteriority ("IMANTE") construction in Cantonese, in which two events form an 'as soon as' relationship. By collecting examples from corpora, three types of IMANTE construction are categorized, based on the subordinate events: (i) achievement; (ii) completion point of a durational event, and (iii) inchoative point of a durational event. This study argues that (iii) is the default usage of a subordinate event when it is durational because it is unmarked and historically emerged earlier than (ii). Second, (iii) is seemingly a defining property of IMANTE besides "zero-time interval between two events".

Construction de l'antériorité immédiate en cantonais

Résumé

Cette étude explore la construction d'antériorité immédiate ("IMANTE ") en cantonais, dans laquelle deux événements forment une relation "dès que". En recueillant des exemples dans des corpus, trois types de construction IMANTE sont catégorisés, en fonction des événements subordonnés : (i) réalisation ; (ii) point d'achèvement d'un événement temporel, et (iii) point inchoatif d'un événement temporel. Cette étude soutient que (iii) est l'usage par défaut de la subordonnée durative parce qu'elle n'est pas marquée et qu'elle est apparue historiquement plus tôt que (ii). Deuxièmement, (iii) est apparemment une propriété définissant IMANTE en plus de "l'intervalle de temps zéro entre deux événements".

1 Introduction

An immediate anteriority function is a temporal relation of "as soon as P, then Q" or "P immediately precedes Q" (Kortmann 1997; "IMANTE" henceforth). Event P is the event in the subordinate clause which temporally precedes the event in the main clause ("event Q" henceforth) immediately. Following Kortmann's definition, the term *Immediate Anteriority Construction* is used primitively: it is a construction which contains two events including a preceding event and a following event. IMANTE construction includes markers in the subordinate clause and/or main clause. In Cantonese, the subordinate clause is marked by the IMANTE subordinator *jat1* ("—" which is grammaticalized from numeral 'one') while the main clause is marked by 就 'then'.

(1) 春天 一 到 樹葉 就 起手 開 咯

ceon1tin1 jat1 dou3 syu6jip6 zau6 hei2sau2 hoi1 lo3

Spring IMANTE arrive leaf then start grow SFP

‘As soon as Spring arrives, then the leaf starts to grow.’ (ECCT 1888)¹

IMANTE is understudied compared to other temporal functions such as ‘before’ and ‘after’ (Haspelmath 1997, Hetterle 2015, Olguin Martinez 2022), although an IMANTE subordinator is attested cross-linguistically.

This study aims at exploring the IMANTE construction in Cantonese. To approach this construction, this study collects natural language examples from text, corpora and internet forums in order to maximally reflect the natural usage of IMANTE construction (§3.1).

For general linguistic, this study ideally paves the way for other linguists to study the IMANTE function in other languages. IMANTE is one of the basic temporal functions but received limited attention. The functions explored in this study can potentially be applied to study the same function in other languages. Furthermore, this study aims at refining the definition of IMANTE, by proposing that not only zero-time interval between two events is the key feature of IMANTE, but also the existence of inchoative event P makes IMANTE different from the ‘after’ function (§5.3.2). This definition can be followed or refined by linguists, partially solving the infamous issue in linguistics—the inconsistent usage of jargons.

This study is organized as follow: section 2 provides the theoretical background of the IMANTE construction. Section 3 provides the research method, including the data sources, notation and data selections. Section 4 provide the general properties of the IMANTE construction. Section 5 describes the three usages of IMANTE marker including the achievement event P (5.1), completion event P (5.2) and inchoative event P (5.3). Section 5.3.1 argues that inchoative event P is the unmarked usage when the subordinate event is durational. Section 5.3.2 proves that inchoative event P is one of the key differences between IMANTE and after. Section 6 examines the similarity and differences between the IMANTE construction in Cantonese and Mandarin. Section 7 concludes the study.

2 Theoretical background of IMANTE construction

¹ The Cantonese examples are romanized in the Jyutping system.

Immediate anteriority (IMANTE; also called *contact anteriority* (Nedjalkov 1998: 423)) is a temporal function which denotes “as soon as P, then Q” or “P immediately precedes Q” (§1). In other words, the event in the subordinate clause (i.e., event P) is temporally followed by the event in the main clause (i.e., event Q) without any time interval in between (Kobozeva 2020). IMANTE is a *relative temporal* function (Nedjalkov 1998), that is, an event Q is in relation to the event P as opposed to the utterance time. In other words, events in an IMANTE construction can occur in any temporal domain such as past, present and future.

The zero-time interval required by an IMANTE subordinator not only based on real life scenarios, but partially relies on speakers/writers’ evaluation.

(2) *As soon as I dropped the phone, it broke.*

(3) *As soon as spring arrives, flowers bloom.*

In (2), the real-world temporal interval between *dropped the phone* and *it broke* is near to zero. By contrast, in (3), the *flowers* do not *bloom* right after the moment Spring arrives—the zero-time interval is decided by the speakers/writers.

Although IMANTE is understudied in Western linguistics, it has received some attention in Chinese linguistics. The “*Yī...jiù*” construction in Mandarin Chinese, as the counterpart of “*jat1...zau6*” in Cantonese, has mainly two types: (a) examples with a predicate shared by both subordinate and main clauses and (b) examples with a different predicate for each clause (吕叔湘 1980, 施笑淦 1985, 王晓凌 2015). They spot that for type (a), the same predicate in the main clause needs to be accompanied by an element indicating the duration of the predicate (上午 ‘morning’ is the duration of 出去 ‘go out’ (4)). *Yī* in this example is numeral ‘one’ (§1).

(4)	一	出去	就	出去	一	上午
	<i>yī</i>	<i>chū qù</i>	<i>jiù</i>	<i>chū qù</i>	<i>yí</i>	<i>shàng wǔ</i>
	One	Out-go	then	Out-go	one	morning

‘In a single going-out, X went out for a morning.’ (王晓凌 2015: 94; the phonetic representation follows Mandarin Chinese)

On the other hand, type (b) does not require a duration of the subordinate predicate, and *yī* functions as IMANTE.

(5 一 坐 就 痛
)

yī *zuò* *jiù* *tòng*
IMANTE sit then painful

‘As soon as X sits, then X feels painful.’ (王晓凌 2015, 95; example in Mandarin Chinese)

In Cantonese, examples with a predicate shared by two clauses (similar to (4)) are not limited to indicate the duration of predicate, but also the result of the predicate.

(6) 一 割 割親 手
jat1 *got3* *got3-* *sau2*
can1
IMANTE cut cut-ADVS hand

‘As soon as X cuts, X cuts X’s hand.’ (He 1923)

This study focuses on the typology of IMANTE construction associated with event types (§4), hence examples similar to (6) would not be discussed further. Future study is encouraged on this matter.

3 Method

This study aims at capturing the natural language use of IMANTE construction by examining examples from Cantonese corpora, texts and internet forums. They contain atypical instances such as examples with two subordinators—IMANTE *jat1* and (以)前 ‘before’ which are semantically ambivalent (§5.2.1). If the source of an example is underspecified, the example is artificial. Grammatical judgement is based on the author’s native speaker intuition, although it would be minimally used.

3.1 Data

The examples are collected from the Early Cantonese Colloquial Texts: A Database (ECCT), Early Cantonese Tagged Database (ECTD), The Linguistic Corpus of Mid-20th Century Hong Kong Cantonese (CHKC), Hong Kong Cantonese corpus (HKCC), Childe Cantonese Lee/Wong/Leung Corpus (Lee-Wong-Leung) and Speech in Cantonese and English Corpus (SpiCE).

In addition to the corpora, this study collects examples from two texts of early Cantonese: *Beginning Cantonese* (1906) by O. F. Wisner and *Canton Language School Primer* (1923) by He Chunbao.

This study also collect data from the HKGolden and LIHKG internet forums. Both internet forums are used in Hong Kong, reflecting the use of Hong Kong Cantonese. Although Cantonese is a spoken language, it is expressed in written form in both forums.

3.2 *Excluding pure ‘whenever’ and ‘one’ jat1*

In Cantonese, *jat1* has three senses: ‘one’, IMANTE and ‘whenever’ (Matthews and Yip 2011). Numeral ‘one’ grammaticalized into IMANTE in Old Chinese, then the IMANTE *jat1* in Cantonese grammaticalized to ‘whenever’ (Lui 2022). Since these senses are conventionalized, they can sometimes co-occur in an example, triggering semantic ambiguity (Heine 2002). This study treats the subordinator *jat1* with the IMANTE sense but not ‘one’ or ‘whenever’ unless it is further specified. Examples with pure ‘one’ or ‘whenever’ sense are excluded.

As a numeral, *jat1* means ‘one’ even before a predicate. The structure is “*jat1* predicate predicate”, and tends to omit 就 ‘then’ before the second predicate. The second predicate is followed by the duration of the verb (7), or a quantified object (8).

- (7) 一 訓 訓 十 個 鐘
jat1 fan3 fan3 sap6 go3 zung1
 one sleep sleep ten CL hour
 ‘In a single sleeping, X sleeps for ten hours.’

- (8) 一 食 食 十 幾 隻 雞蛋
jat1 sik6 sik6 sap6 gei2 zek3 gai1dan2
 one eat eat ten serval CL egg
 ‘In a single eating, X eats ten-ish eggs.’

Since (7) and (8) only involve one event, they cannot be an IMANTE construction, hence are excluded.

In some examples, the subordinator *jat1* must be ‘whenever’ while IMANTE is impossible, i.e., examples with a permanent state modifying a generic (巴士站 ‘bus stop’ (9)) and indefinite subject (一個人 ‘a person’ (10)) in the subordinate clauses.

- (9) 巴士 站 一 遠 就 唔 方便
baa1si2 zaam6 jat1 jyun5 zau6 m4 fong1bin6
 bus station whenever far then NEG convenient

‘Whenever bus stations are far, then it is inconvenient.’

(10 一 個 人 一 醜 就 冇 人 鍾意
)
jat1 go3 jan4 jat1 cau2 zau6 mou jan4 zung1ji3
 5
 one CL perso whenever ugly then NEG perso like
 n r n

‘Whenever a person is ugly, then no people like him/her.’

Since both 遠 ‘far’ and 醜 ‘ugly’ are permanent states which do not change throughout the period, they do not have inchoative or completion point that can be followed by an event Q, hence the IMANTE function is backgrounded.

There are two ways to distinguish IMANTE and ‘whenever’. First, ‘whenever’ cannot be used in a one-off event. For instance, ‘As soon as Joe ate an apple yesterday, then he vomited’ is a specific past event which happened once only. Without a tense system, whether *jat1* modifies a one-off event requires the discourse context to infer. Second, a permanent state cannot pass the delimitative test (Francis and Matthews 2005, 295): a “predicate predicate 吓” construction denoting “do something for a while” which is temporally bounded, therefore it is not compatible with a permanent state. For example, 巴士站遠遠吓 ‘the bus stop is far for a while’ is ungrammatical because 遠 ‘far’ is a permanent state, and *jat1* in (2) is ‘whenever’ rather than IMANTE.

3.3 Notation

To help readers navigate through the study, the event structures of some examples are formally represented. The time flow is from left to right. For instance, if a point A is placed on the right side of a point B, point A occurs later than point B. Events which are a point in time (e.g., achievement, completion and inchoative points (§4)) are presented vertically by lines. Durational events are presented horizontally. If two events are marked by IMANTE *jat1* and form an IMANTE sequence, they are connected by a dotted line (Figure 1).

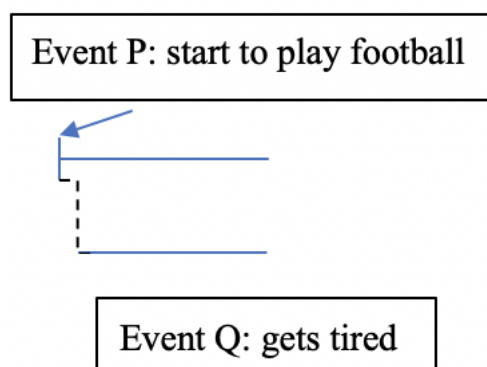


FIGURE 1 The event structure of *As soon as he plays football, he gets tired.*

4 *General properties of the IMANTE construction in Cantonese*

In Cantonese, the IMANTE construction generally consists of two clauses: a subordinate clause and main clause. “An event P temporally precedes an event Q” is iconically reflected by the syntactic order of “a subordinate clause precedes a main clause” (Tai 1983). The exceptions are examples with a subordinate clause as an increment (Lui 2022) which follows the main clause. Following Nichols (1986), the IMANTE construction is double-marked: the subordinate clause is marked by the dependent marker *jat1*; the main clause is generally marked by the head marker 就 ‘then’.

The subordinate clause is marked by an IMANTE subordinator *jat1* which is grammaticalized from and homophonous to the numeral ‘one’. It occupies the second position of the subordinate clause, following a topic/subject. *Jat1* occupies the first position of the clause if the topic/subject is covert, e.g., implied by the discourse context or being an impersonal subject such as ‘weather’. Following *jat1*, a predicate can be preposed by a negator, enabling the internal structure of a subordinate clause as:

(topic/subject) jat1 (NEG) predicate

The main clause tends to be marked by 就 ‘then’, although it is not necessary (§3.2). Similar to *jat1*, 就 follows a topic/subject if available, and precedes the predicate which can be negated. The internal structure of a main clause is:

(topic/subject) 就 (NEG) predicate

4.1 *The main-clause marker 就 ‘then’*

In the IMANTE construction, 就 ‘then’ appears in most examples. If we remove 就 in an example, it usually triggers ungrammaticality.

- (11) *— 黒 Ø 訓
jat1 *hak1* *fan3*
 IMANTE black sleep

Intended: 'As soon as the sky is dark, X sleeps.'

This ungrammaticality is probably due to the capability of IMANTE construction including more than two events.

- | | | | | | | | |
|------|-------------------|-------------|-----------------|-------------------------------|--|-------------|-------------|
| (12) | 佢 | 一 | 知道 | 傷心 | 病-起上嚟 | 就 | 好 |
| | <i>keoi5</i> | <i>jat1</i> | <i>zi1-dou3</i> | <i>seong1-</i>
<i>sam1</i> | <i>beng6-</i>
<i>hei2soeng5lai4</i> | <i>zau6</i> | <i>hou2</i> |
| | 3SG | IMANTE | know | sad | Sick-INCH | then | very |
| | 論盡 | | | | | | |
| | <i>leon6zeon6</i> | | | | | | |
| | clumsy | | | | | | |

'As soon as s/he knows, gets sad, starts to sick, then (the situation) turns problematic.' (CHKC 1962)

In (12), 知道 'know', 傷心 'sad' and 病 'sick' form a temporal sequence, but only the main clause is marked by 就 'then'. In other words, the ungrammaticality of (11) is probably due to the expectation to have a main clause following 訓 'sleep' which is marked by 就 'then'. E.g., 'As soon as the sky is dark, X sleeps, then snores'. IMANTE construction with more than two clauses is not the focus of this study. Further study is encouraged.

This ungrammaticality does not entail that 就 ‘then’ is not omissible. Examples without it is more common in spoken corpora (e.g., HKCC, SpiCE) than in written data (e.g., He (1923)) because non-declaratives are more common in discourse (Biber et al. 1999), having a different clausal structure from declaratives. The main clause can be a question (13), or a direct quotation (14).

- (13) 一 返-到 學校 訓教 啦?
jat1 faan1-dou3 hok6haau6 fan3gaau3 laa1
 IMANTE return-arrive school sleep Q
 ‘As soon as (you) arrive school, you sleep?’ (Lee-Wong-Leung 1999)

- (14) 你 一 去-到, “喂 拉斯維加斯 呢?”
nei5 jat1 heoi3- wai3 laai1si1wai4gaa1si1 ne4
dou3
 2SG IMANTE go-arrive VOC Las.Vegas Q
 ‘As soon as you arrived, “Hey, where is Las Vegas?”’ (SpiCE 2018-2022)

Furthermore, 就 ‘then’ being a head marker (i.e., marking the main clause) can be replaced by adverbs such as 咪 ‘then’, 又 ‘again’, 即刻 ‘immediately’ and 都 ‘also’. This can be explained by their semantic coherence with 就 ‘then’ and *jat1*. For 咪 and 即刻, they are semantically similar to 就 ‘then’: the former means ‘then’ but with an additional sense of ‘of course’ (Matthews and Yip 2011); the latter is similar to 就 because they both have the ‘immediate’ sense (Nancarrow and Luke 1998: 108).

- (15) 一 踩 咪 中招
jat1 caai2 mai6 zung3ziu1
 IMANTE step then got.hit
 ‘As soon as I step, then I must step on dogs’ shit.’ (HKCC 1997-8)

- (16) 一 飲-完 即刻 擰-埋 痛
jat1 jam2-jyun4 zik1hak1 laa2-maai4 tung3
 IMANTE drink-finish immediately twist-close painful
 ‘As soon as X finished drinking, X immediately feels the twisting pain.’ (HKCC 1997-8)

For 又 ‘again’ and 都 ‘also’, they are semantically similar to *jat1*. As beforementioned (§3.2), both the ‘whenever’ and IMANTE senses of *jat1* can co-occur in an example. Both 又 and 都 indicate iterative events, similar to ‘whenever’.

- (17) 一 返-去 第一 個 禮拜 又
jat1 faan1-heoi3 dai6jat1 go3 lai5baai3 jau6
 IMANTE return-go first CL week Again
 要 測驗 啊
jiu3 caak1jim6 aa3
 need exam SFP

‘As soon as I return, I have to take an exam again in the first week.’ (modified from HKCC (1997-8) in terms of the syntactic order of two clauses)

- (18) 佢 一 講 咩 都 話 俊俊 㗎
 keoi5 jat1 gong2 me1 dou1 waa6 zeon3zeon3 gaa3
 3SG IMANTE speak anything also say J SFP
 ‘As soon as he speaks, he also says Junjun.’ (Lee-Wong-Leung 1999)

As seen in (15—18), all these adverbials occupy the same position of 就—they follow a topic/subject (if available) and precede a predicate. Since these adverbials are semantically similar to 就 ‘then’ and jat1, and occupy the same syntactic position as 就, they can replace it and serve to indicate a main clause.

5 The typology of IMANTE construction

This section differentiates three types of IMANTE construction based on the event types of event P, namely: achievement as an event P (5.1); completion point of a durational event as an event P (5.2); inchoative point of a durational event as an event P (5.3).

5.1 *Achievement as an event P*

An achievement event P refers to an achievement event which is followed by an event Q. An achievement predicate is punctual and telic (Vendler 1957), such as 到 ‘arrive’ (19) and 死 ‘die’ (20). These predicates are not compatible with progressive marker 緊 (Lee 2012: 32) or continuous marker 住 because they modify durative predicates.

- (19) 春天 一 到 就 起手 暖 咯
 ceon1tin1 jat1 dou3 zau6 hei2sau2 nyun5 lo3
 Spring IMANTE arrive then start Warm SFP
 ‘As soon as Spring arrives, then it starts to get warm.’ (ECTD 1888)

- (20) 一 死-咗 咋 即刻 名-利-雙-收
 jat1 sei2-zo2 zaa3 zik1hak1 ming4-lei6-soeng1-sau1
 IMANTE die-PFV SFP Immediately Fame- interest- both- get
 ‘As soon as you die, immediately get both fame and interest!’ (CHKC 1965)

- (21) 一 凍-親 就 會 咳
 jat1 dung3-can1 zau6 wui2 kat1
 IMANTE cold- ADVS then AUX cough
 ‘As soon as (I) get cold, then I will cough.’ (LIHKG 2022)

In (21), 凍 ‘cold’ is accompanied by the adversative particle 親, forming an achievement because it is not compatible with the imperfective marker 起度 which focuses on the internal structure of an event (Yang and Yip 2004, Comrie 1976).

The event structure of (20) is in Figure 2.

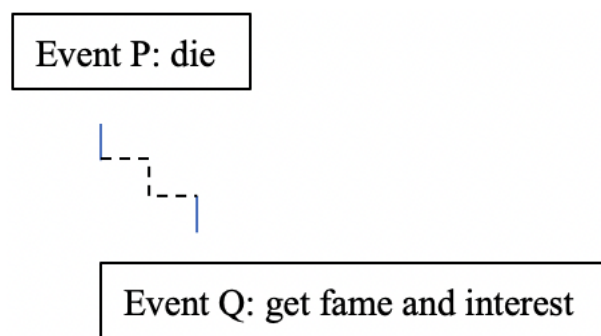


FIGURE 2 event structure of (20)

5.2 Completion point of a durational event as an event P

The second major type of event P is the completion point of a durational event (“completion event P”). Note that examples with completion events Q are the rarest (table 1).

- (22) 一 講-咗 唔 使 講 過
jat1 gong2-zo2 m4 sai2 gong2 gwo3
 IMANTE say-PFV NEG need say again
 ‘As soon as you said (it), you do not need to say again.’ (ECTD 1902)

- (23) 一 食-完 飯 就 要 去 㗎 啦
jat1 sik6-jyun4 faan6 zau6 jiu3 heoi3 gaa3 laa3
 IMANTE eat-finish meal then need go SFP SFP
 ‘As soon as we finish eating, we have to go.’ (Wisner 1906)

In (22), 講 ‘say’ is marked by a perfective marker 咗 which indicates “a completed event” (Francis and Matthews 2005), therefore the durational predicate 講 ‘say’ is followed by 講過 ‘say again’ without temporal overlap. Similarly, in (23), the resultative particle 完 ‘finish’ marks the endpoint of the subordinate event 食飯 ‘eat’, forming an accomplishment (Figure 3).

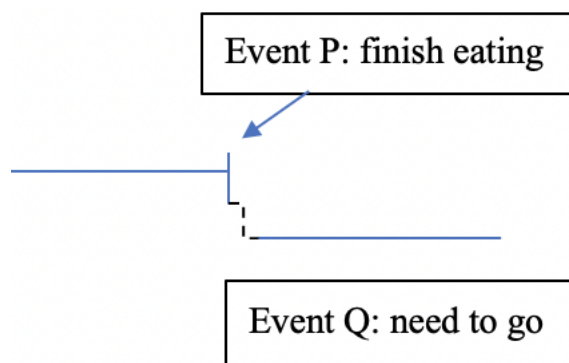


FIGURE 3 event structure of (23)

In Figure 3, the vertical line indicates the completion point of 食飯 ‘eat a meal’. It is temporally followed by 要去 ‘need to go’ without any temporal overlap.

5.2.1 *jat1*...前 ‘Right before doing something’

The trickiest type of completion event P is examples with a subordinator (之)前 ‘before’, as in (24).

- (24) 一 做 功課 前 就 好 焦慮
jat1 zou6 gung1fo3 cin4 zau6 hou2 ziu1lei6
 IMANTE do homework before then very anxious
 ‘Right before I do homework, I feel anxious.’ (LIHKG 2021)

At first glance, *jat1* seems to mean ‘whenever’ only and excludes IMANTE reading because of the semantic ambivalence between ‘before’ and IMANTE. (之)前 ‘before’ indicates the event order of ‘Q > P’ (“>” indicates the left event happens earlier than the right event) whereas IMANTE indicates the event order of ‘P > Q’. For instance, controlled by IMANTE *jat1*, (25) has an event order of ‘返到屋企 ‘arrive home’ > 想訓覺 ‘want to sleep’’. By contrast, controlled by 前 ‘before’, (26) has the event order of ‘想訓覺 ‘want to sleep’ > 返到屋企 ‘arrive home’’. Since their event orders are opposite, IMANTE *jat1* and 前 ‘before’ are unlikely to co-exist, hence *jat1* is more likely to mean ‘whenever’ in (24).

- (25) 我 一 返-到 屋企 就 想 訓覺
ngo5 jat1 faan1-dou3 nguk1kei5 zau6 soeng2 fan3gaau3
 1SG IMANTE Return-arrive home then want sleep
 ‘As soon as I arrive home, then I want to sleep.’

- (26) 我 返-到 屋企 前 就 想 訓覺

ngo5 faan1-dou3 nguk1kei2 cin4 zau6 soeng2 fan3gaau3
 1SG return-arrive home before then want sleep
 ‘Before I arrive home, then I want to sleep’.

Nonetheless, a unique example is attested (27).

(27 一 出事 前 就 登錄-咗
)

jat1 ceot1si6 cin4 zau6 dang1luk6-zo2
 IMANTE have.problem before then Register-PFV

‘Right before (the game) had problems, I registered (an account).’ (HKGolden 2013)

(27) refers to one specific past event which is not compatible with ‘whenever’ because ‘whenever’ refers to events that occur iteratively. If *jat1* is not ‘whenever’, it should mean ‘as soon as’.

The solution to (27) is that IMANTE *jat1* takes scope of the subordinate clause controlled by (之)前 ‘before’. In (28) which is modified from (27), IMANTE *jat1* is first removed. 前 ‘before’ controls the verb phrase 出事 ‘had problem’, as indicated by the bracket.

(28 [出事] 前 就 登錄-咗
)

Have.problem before then Register-PFV

‘Before [(the game) had problem], I registered (an account).’ (modified from (25))

Since 前 ‘before’ does not specify the time gap between 出事 ‘have problem’ and 登錄咗 ‘registered’, i.e., the speaker/writer could register an account five minutes, ten days or two weeks before the game had problem, 出事前 ‘before having problem’ indicates a time zone within which 登錄咗 ‘registered’ could occur at any time. Note that two events in Figure 4 are not connected by any dotted line because they do not form an ‘as soon as’-relationship:

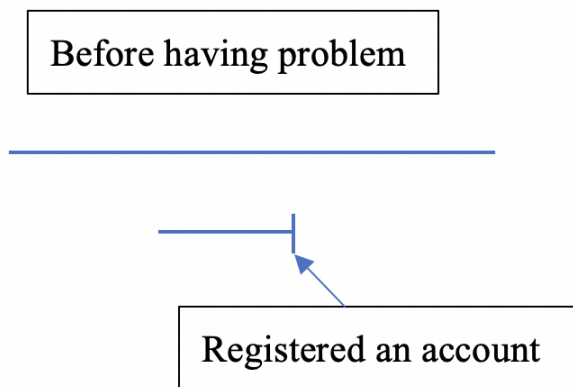


FIGURE 4 event structure of (28)

After adding IMANTE *jat1* into (28), *jat1* takes scope of the whole subordinate clause including 前 ‘before’, as indicated by the bracket. The bracketed interpretation in English reflects the bracketing of (29). See (27) for the natural English interpretation:

(29) 一 [[出事] 前] 就 登錄-咗
IMANTE have.problem before then Register-PFV

Bracketed interpretation: ‘As soon as [before [(the game) had problem]], I registered an account.’

With IMANTE *jat1*, the time interval between 出事 ‘had problem’ and 登錄咗 ‘registered’ is specified to be zero, denoting ‘right before the game had problem, then I registered’. In other words, the end point of 出事前 ‘before having problem’ is marked as event P (Figure 5), therefore it is a case of completion event P.

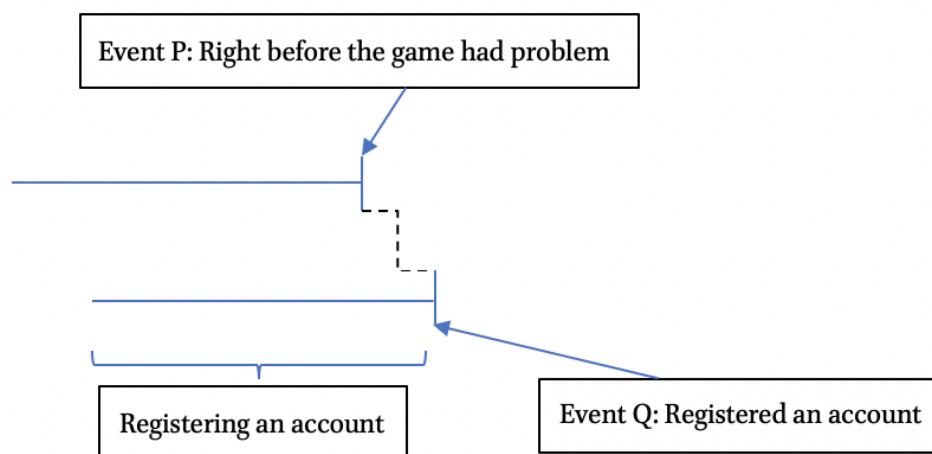


FIGURE 5 event structure of (27) and (29)

It is important to note that although the event order in the real-life scenario is ‘registered an account’ then ‘the game had problem’, the event order in the IMANTE construction is rather abstract: the event P ‘right before the game had problem’, i.e., the completion point of the time frame ‘before the game had problem’, is temporally followed by the event Q ‘registered an account’, i.e., the completion point of registering.

Note that this “*jat1...前*” construction is a novel usage, with the earliest example attested in HKCC (1997-8) and became more popular since 2010s. Speakers may prefer (30) with 啱啱 ‘just’ over “*jat1...前*” which may be considered ungrammatical by some speakers:

- (30) 出事 前 啱啱 登錄-咗
ceot1si6 cin4 ngaam1ngaam1 dang1luk6-zo2
 have.problem before just Register-PFV
 ‘I registered (an account) just before (the game) had a problem.’

In summary, *jat1* in the “*jat1...前*” construction functions as IMANTE. Instead of two subordinators having equal control over the verb phrase, 前 ‘before’ controls the VP, then the whole subordinate clause of 前 is controlled by *jat1*.

5.3 *Inchoative point of a durational event as an event P*

The second major type of event P is the inchoative point of a durational event (“inchoative event P”). The durational event is usually in the form of a durative predicate (31—35). Note that inchoative event P is the most frequent usage (table 1):

- (31) 一 忙-起上嚟 我 就 唔 理
jat1 mong4-hei2soeng5lai4 ngo5 zau6 m4 lei5
 IMANTE Busy-INCH 1SG then NEG care
 ‘As soon as I start to be busy, then I do not care.’ (SpiCE 2018-2022)

- (32) 病人 一 食 就 嘔
beng6jan4 jat1 sik6 zau6 au2
 patient IMANTE eat then vomit
 ‘As soon as patients eat, they vomit.’ (He 1923)

- (33) 一 黑-(咗) 就 門 門 嘅 咯
jat1 hak1-zo2 zau6 saan1 mun4 ge3 lo3
 IMANTE Black-PFV then close door SFP SFP

‘As soon as the sky is dark, then (the shop) closes.’ (Wisner 1906)

- (34) 你 一 望-(住) 嗰 啲 節目 係
nei3 jat1 mong6-zyu6s go2 di1 zit3muk6 hai6
 2SG IMANTE Look-CONT DEM CL show COP
 流 口水 㗎
lau4 hau2seoi2 gaa3
 flow saliva SFP

‘As soon as you are looking at those shows, you are watering!’ (HKCC 1997-1998)

- (35) 一 做-(緊) 野 就 唔 會 睇 電話
jat1 zou6-gan2 je5 zau6 m4 wui2 tai2 din6waa2
 IMANTE do-PROG thing then NEG AUX look phone

‘As soon as I am working, I do not look at my phone.’ (LIHKG 2017)

The starting points of the durational predicates in (31—35) are inchoative events P. In (31), 忙 ‘busy’ is overtly marked by an inchoative marker 起上嚟. In (33), when the stative predicate 黑 ‘black’ is marked by the perfective marker 咗, it indicates a change of state reading, that is, the inchoative point of being ‘black’ (Francis and Matthews 2006). In (34), 望 ‘look’ is attached by the continuous marker 住, denoting a state. In (35), 做 ‘do’ is attached by a progressive marker 緊 which denotes a dynamic and durational event. Examples with 住 and 緊 are scarce. All aspectual markers are omittable as in (32).

Different from completion and achievement events P, examples with inchoative events P always demonstrates temporal overlap between the subordinate predicate and the event Q (Figure 6):

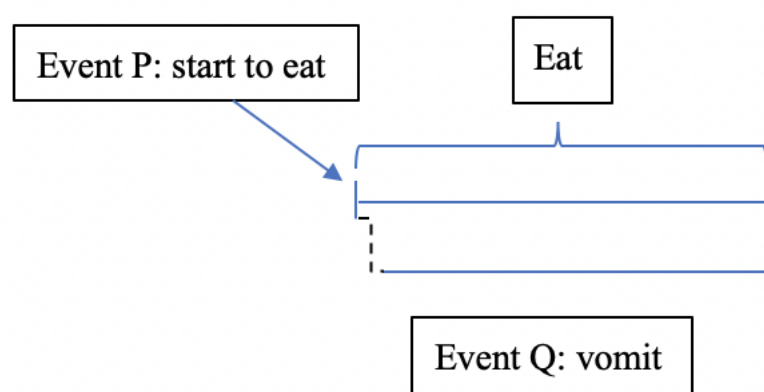


FIGURE 6 event structure of (32)

Figure 6 shows that only the starting point of 食 ‘eat’ forms a temporal sequence with 嘔 ‘vomit’, while the remaining part of ‘eat’ temporally overlap with ‘vomit’.

Besides controlling a verb phrase, *jat1* can take scope of a relativized noun phrase (36):

(36)	一	[入夥	個	日]NP	有	幾	個
	<i>jat1</i>	<i>jap6fo2</i>	<i>go2</i>	<i>jat6</i>	<i>jau5</i>	<i>gei2</i>	<i>go3</i>
	IMANTE	move.in	DEM	day	have	some	CL
	乞兒	喺	門口	處	攤	錢	
	<i>hat1ji1</i>	<i>hai2</i>	<i>mun4hau2</i>	<i>cyu3</i>	<i>lo2</i>	<i>cin2</i>	
	beggar	LOC	entrance	place	take	money	

‘As soon as the day of moving into a new house, some beggars are begging for money at the entrance.’ (Wisner 1906)

入夥 ‘move into’ is a relative clause modifying 個日 ‘that day’. The starting point of the ‘day’ is marked as an inchoative event P. Although an anonymous reader considers *jat1* to be ‘while’ because the beggars were begging for money during that day, ‘while’ is a contextual interpretation owing to the partial temporal overlap between two events (see Figure 6). Accompanied by the ‘while’ interpretation, the IMANTE sense remains primary.

5.3.1 Inchoative event P being the default usage with durational event

One finding throughout the Cantonese corpora is that inchoative event P seems to be the default usage when the subordinate event is durational. This defaultness can be assessed by three aspects—markedness, frequency and historical origin.

In terms of markedness, inchoative event P tends to be unmarked while completion event P tends to be marked. Although inchoative event P is sometimes accompanied by an inchoative marker 起(上嚟), examples with this marker are rare. By contrast, examples with completion events P tend to be marked by a resultative particle 完 ‘finish’, perfective marker 咗 and subordinator (之)前 ‘before’ (§5.2). More importantly, when the durational event in the subordinate clause is unmarked, the reading is automatically inchoative event P (38):

(37)	一	食-完	佢	就	嚟
	<i>jat1</i>	<i>sik6-jyun4</i>	<i>keoi5</i>	<i>zau6</i>	<i>lai4</i>
	IMANTE	Eat-finish	3SG	then	come

‘As soon as (I) finished eating, then s/he came.’ (He 1923)

- (38) 一 食-Ø 佢 就 嚟
jat1 sik6 keoi5 zau6 lai4
 IMANTE eat 3 SG then come

‘As soon as (I) ate, then s/he came.’ (modified from (37))

By comparing the minimal pair of (37) and (38), (38) with an inchoative event P is unmarked whereas (37) requires 完 ‘finish’ to mark the completion point of 食 ‘eat’. This is in line with the high frequency of inchoative event P and low frequency of completion event P (Table 1)².

TABLE 1 the frequency of three usages of IMANTE construction in different data sources

	Achievement event P	Completion event P	Inchoative event P
ECCT	5	0	5
ECTD	8	8	9
CHKC	171	25	100
HKCC	13	12	19
Lee-Wong- Leung	12	5	17
SpiCE	10	5	8
<i>Beginning Cantonese (1906)</i>	5	7	12
<i>Canton Language School Primer (1923)</i>	8	2	17
HKGolden	8	3	10
LIHKG	10	7	42
Net frequencies	250	74	239

²A *Chinese and English Phrase Book in the Canton Dialect* and the first and third editions of *Cantonese Made Easy* are recorded in ECCT and ECTD. A given example shared by these corpora is counted as one token as opposed to two in ECCT.

Regarding durational events in the subordinate clauses³, table 1 shows that the most frequent usage is the inchoative event P whereas the rarest usage is the completion event P⁴. This finding echoes the finding of inchoative event P being unmarked: shorter expression is associated with higher frequency (Haspelmath 2021; see also Zipf 1935, although the work focuses on words instead of constructions). Since inchoative event P is more frequent and tends to be unmarked, it is more predictable than completion event P (Haiman 1983), rendering it to be the default usage when the subordinate event is durational.

It is worth noting that examples with 返 ‘return’ in the subordinate clause are the only cases which violate the tendency of “unmarked durational event automatically denotes the inchoative event P reading”:

- (39) 一 返-嚟 就 返工
jat1 faan1-lai4 zau6 faan1gung1
 IMANTE return- then work
 come
 ‘As soon as you arrive, then you work.’ (HKCC 1997-8)

In (39), the subject studied overseas then returned to Hong Kong and worked. Although 返嚟 ‘return’ without 到 ‘arrive’ should mean ‘set out’, i.e., starting point of returning (Matthews and Yip 2011: 162), it is interpreted as ‘arrive’ (i.e., the completion point of ‘return’) because the subject can only work after arriving Hong Kong as opposed to work while returning, e.g., in a flight. In other words, (39) is a case of “whole for part” metonymy which the whole process of 返 ‘return’ represents the ‘arrive’ point. If a

³ The frequencies of achievement event P and inchoative event P are very similar. Since this section only concerns the durational event in the subordinate clause, achievement event P is not explored further.

⁴ The principles of classifying three types of IMANTE are as follow: an achievement event P cannot be marked by the resultative particles 完 ‘finish’ because 完 only attaches to durational events, forming an accomplishment. E.g., *到完 ‘finish arriving’. For examples with a durational event in the subordinate clause, an inchoative event P is sometimes marked by aspectual markers discussed in section 5.3. A relativized NP can also be an inchoative event P. By contrast, a completion event P is usually marked by 完 ‘finish’, (以)前 ‘before’ and perfective 咗 when the predicate is dynamic. 返 ‘return’ sometimes denotes ‘arrive’ (i.e., the completion point of ‘return’) even without being marked by 到 ‘arrive’ (see (39)).

situation is unambiguous, as in (39), 到 ‘arrive’ indicating arrival/completion may not be necessary owing to the ease of production.

Historically, inchoative event P appeared much earlier than completion event P. Numeral ‘one’ in other Sinitic varieties is also homophonous to their IMANTE subordinators counterparts. It is likely that the numeral ‘one’ grammaticalized into IMANTE subordinator in Classical Chinese, then this pattern was inherited by Sinitic varieties (Lui 2022). The corpora of Old Chinese and Middle Chinese do not contain examples with completion events P which are indicated by any resultative particle, perfective marker, 前 ‘before’ or directional particle similar to -到 ‘arrive’. Instead, most examples contain inchoative event P. In (40) in Old Chinese, without any inchoative marker, the starting point of 怒 ‘angry’ is temporally followed by 懼 ‘afraid’. In (41) in Middle Chinese, the water spills out after the starting point of 沸 ‘boil’:

(40)	一	怒	而	諸侯	懼
	<i>yī</i>	<i>nù</i>	<i>ér</i>	<i>zhūhóu</i>	<i>jù</i>
	IMANTE	angry	then	seigneur	afraid

‘As soon as (the king) is angry, then the seigneurs are afraid.’ (孟子/滕文公篇第三 from the Academia Sinica Tagged Corpus of Old Chinese; following Mandarin pronunciation)

(41)	一	沸	即	灑	出
	<i>yī</i>	<i>fèi</i>	<i>jí</i>	<i>sǎ</i>	<i>chū</i>
	IMANTE	boil	immediately	spill	out

‘As soon as (the water) boils, it will immediately spill out.’ (齊民要術校釋/卷四種棗第三十三 from the Academia Sinica Tagged Corpus of Middle Chinese; Following Mandarin pronunciation)

If inchoative event P emerged earlier than completion event P, it is likely to be more frequent (Zipf 1949: 121), in turn more predictable than the latter.

In summary, inchoative event P is the default usage when the subordinate event is durational because (i) it tends to be unmarked whereas completion event P is usually marked; (ii) it is more frequent than completion event P; and (iii) it historically appeared much earlier than completion event P.

5.3.2 Inchoative event P being the definition of IMANTE

After discussing the default status of inchoative event P, this study argues that inchoative event P may be a defining difference between IMANTE and ‘after’. At first glance, the temporal function ‘after’ is different from IMANTE in terms of temporal intervals: ‘after’ does not specify the temporal interval between two events whereas IMANTE requires a “zero-time interval” between them (§2). Similarly, Heberlein (2011:257) considers IMANTE as ‘after’ with an additional feature of “proximative”. Under this definition, IMANTE is equal to ‘immediately after’. This theory is applicable to achievement event P:

- (42) 一 到 九 點 就 食 晚餐 咯
jat1 dou3 gau2 dim2 zau6 sik6 maan5caan1 lo3
 IMANTE arrive nine O'clock then eat dinner SFP
 ‘As soon as nine O'clock arrives, then X eats dinner.’ (ECCT 1888)

- (43) 到 九 點 之後 就 即刻 食 晚餐
dou3 gau2 dim2 zi1hau6 zau6 zik1hak1 sik6 maan5caan1
 Arrive nine o'clock after then immediately eat dinner
 咯
lo3
 SFP
 ‘Immediately after no one O'clock arrives, then X eats dinner’. (Modified from (42))

(42) and (43) denote a similar meaning. Nonetheless, examples with inchoative event P show that zero-time interval is not the only key feature of IMANTE.

- (44) 我 一 讀書 就 想 訓
ngo5 jat1 duk6syu1 zau6 soeng2 fan3
 1SG IMANTE study then want sleep
 ‘As soon as I study, then I want to sleep’

- (45) 我 讀書 之後 就 即刻 想 訓
ngo5 duk6syu1 zi1hau6 zau6 zik1hak1 soeng2 fan3
 1SG study after then immediately want sleep
 ‘Immediately after I study, then I want to sleep.’

In (44), 我 1SG wants to sleep right after the studying starts. By contrast, in (45), the studying needs to be completed, then immediately followed by the urge to sleep. Hence, IMANTE is not merely an ‘after’ function with zero-time interval between two events. On

top of that, an IMANTE marker can mark the inchoative point of a durational event when it is unmarked.

Although this phenomenon is applicable in Cantonese and English (based on the author's personal knowledge and the translation above), whether inchoative event P is another key feature of IMANTE function requires cross-linguistic investigation. Section 6 will try to examine whether this pattern exists in Mandarin.

6 On the application of IMANTE construction in Mandarin

This section preliminarily examines whether the typology of IMANTE can be applied to Mandarin and whether there are typological differences between these varieties. Further cross-linguistic study is encouraged.

In general, three prototypical usages of IMANTE can be found in Mandarin: achievement event P (46), completion event P (47) and inchoative event P (48):

- (46) 一 到 晚上 就 会 一直 咳嗽
yī dào wǎnshàng jiù huì yìzhí késòu
 IMANTE arrive night then AUX continuously cough
 'As soon as night arrives, then X continuously coughs,' (黄叶笛 2020)

- (47) 一 吃-完 就 逃 回-了 房间
yī chī-wán jiù táo huí-le fángjiān
 IMANTE Eat-finish then Escape return-PFV Room
 'As soon as X finished eating, then X escaped back to the room.' (周洋 2017)

- (48) 她 一 说话 台下 就 鸦雀无声
tā yī shuōhuà táixià jiù yāquèwúshēng
 2SG.F IMANTE speak audience then silent
 'As soon as she spoke, the audience was silent.' (黄叶笛 2020)

- (49) 她 说话 以後 台下 立刻 鸦雀无声
tā shuōhuà yǐhòu táixià lìkè yāquèwúshēng
 2SG.F speak after audience immediately silent
 'Immediately after she spoke, the audience was silent.' (Modified from (48))

Similar to the markedness observed in section 5.3.1, the completion event P is marked by 完 'finish' (47) whereas the inchoative event P is unmarked (48). Furthermore, similar to the finding of section 5.3.2, (49) and (48) denote different meanings: the

audience became silent after the start of speech in (48), but after the whole speech in (49). Given that both varieties grammatically overlap in many aspects (Matthews and Yip 2011), these three usages and related patterns are unsurprisingly shared. However, the “IMANTE...前” construction does not exist in Mandarin, to the author’s knowledge and based on the corpora examination, e.g., PolyU of Spoken Chinese. Given the progressive language contact between Hong Kong Cantonese and Mandarin, this construction may be borrowed from the former to the latter.

7 Conclusion

This study explores the immediate anteriority (“IMANTE”) construction in Cantonese. Three usages based on the subordinate events are categorized: an achievement, a completion point of a durational event (“completion event P”), and an inchoative point of a durational event (“inchoative event P”). IMANTE subordinator *jat1* can co-occur with the subordinator 前 ‘before’, denoting the ‘right before V’ reading. This study argues that inchoative event P is the default usage when the subordinate event is durational because it is unmarked and historically emerges earlier than completion event P. It also shows that “zero-time interval” is not the only criteria of IMANTE—capable of denoting inchoative event P when unmarked is another key feature of IMANTE.

Abbreviation

IMANTE = immediate anteriority; ADVS= Adversative

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