

Rethinking postverbal ‘acquire’ and related constructions in Cantonese: Polyfunctionality and parameters

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Abstract: This paper revisits a well-established areal phenomenon in Mainland Southeast Asia and Northern Europe involving an element, ACQ(UIRE), that functions as a lexical verb meaning ‘to get or acquire’ and appears, as a functional item, in numerous seemingly unrelated constructions such as modal constructions, resultatives, descriptive complementation, and focus constructions. This paper presents a generative framework for the postverbal ACQ-structures in Hong Kong Cantonese involving the marker *dak1*. The proposed framework takes into account four readings of postverbal ACQ-sentences, namely potential, permission, descriptive and focus, and argues that all postverbal ACQ-structures in Cantonese share the same basic configuration in which the ACQ heads a ν P-internal ModP which expresses possibility modality and selects a small clause XP. The postverbal ACQ takes an AspP as complement which indicates the (non-)realisation of the projected endpoint. The interpretational difference and other structural variations are boiled down to the three parameters realised in featural terms as: $[\pm\text{Realised}]$ on Asp^0 , $[\pm\text{Possibility}]$ and $[\pm\text{Deontic}]$ on Mod^0 . The analysis also provides an explanation for several long-standing issues, including the verb-copying phenomenon, the co-occurrence of *dak1* with the modal auxiliary *ho2ji5*, the distribution of the A-not-A form and negation, and the across-the-board aspectual incompatibility in postverbal ACQ-structures. The parametric framework demonstrates how apparently unrelated ACQ-constructions are closely connected with each other and provide a testable model to account for cross-linguistic variation found in other ACQ languages.

Keywords: ACQ(UIRE), featural parameters, possibility modality, realisation, small clause, focus

1 Introduction

This paper revisits a well-established areal phenomenon in Mainland Southeast Asia (MSEA) involving an element that functions as a lexical verb meaning ‘to get, acquire, obtain’ – or ‘come to have’ in Enfield’s (2003) terminology – and, at the same time, as a functional element that appears in numerous seemingly unrelated constructions such as modal constructions, resultatives, descriptive complementation, and focus constructions. This paper follows Enfield (2003) and subsequent literature on the topic (*i.a.* Sybesma 2008; Kwok, Chin & Tsou 2011) in referring to this element as ‘ACQ’.¹ Typologically, ACQ and its related constructions are robustly attested in two hotbeds: Mainland Southeast Asia (Enfield 2001a, 2003) and Northern Europe (van der Auwera, Kehayov & Vittrant 2009). In the latter area, ACQ functions primarily as a modal; van der Auwera et al. (2009) have thus argued for a specific modality type, ‘acquisitive modal’ for this family of modals (see also Sparvoli (2017) for an account of acquisitive modals in Chinese). In MSEA, ACQ carries a more diverse range of functions, including: (i) a main verb meaning ‘come to have’, (ii) a postverb with modal function resembling the English *can*, (iii) a marker for postverbal complementation or clause coordinating structures, and (iv) a preverb that carries aspectual function of ‘finite’ and ‘attained’ (see Enfield 2003 for a comprehensive survey including some discussion on Cantonese).

¹ The gloss, ‘ACQ’ was first adopted in Sybesma (2008) short for ‘ACQUIRE’ in Enfield (2003). The adoption of ‘ACQ’ in this paper also makes reference to van der Auwera et al.’s (2009) coinage of the modality type, ‘acquisitive modal’, to refer to the family of modal elements in a number of Northern European languages that goes back to the verb meaning ‘to get, acquire’.

This paper examines the functions of ACQ in contemporary Cantonese (Hong Kong variety, henceforth ‘Cantonese’)² realised as *dak1*. The Cantonese ACQ, *dak1*, means ‘to get, acquire’ as a lexical verb. Sybesma (2008) specifies that *dak1* as a verb is always restricted to a non-agentive meaning. It is also noted that lexical *dak* has become de-lexicalised and fossilised since it rarely exists independently without the achievement suffix *dou2* (or *dou3*)³ in contemporary Cantonese, except in fixed expressions (see also van der Auwera et al. 2009). Sentences in (1) illustrate the pattern.

- (1) a. *li1 bou6 din6jing2 dak1-gwo3 zoeng2*
 this CL movie ACQ-EXP prize
 ‘This movie has won a prize.’
 b. *ngo5-dei6 dak1-dou dai6-jat1 ming4*
 1-PL ACQ-SUCC ORD-one name
 ‘We got first.’ (Sybesma 2008: 230)
 c. [*dak1 mat6 mou4 so2 jung6*], *bat1jyu4 gyun1 bei2 jan5 laa1*
 ACQ thing no place use why.not donate give people SFP
 ‘Having a thing of no use, why not donate it to others.’

(1a) is unnatural as a Cantonese sentence and it strongly resembles the Mandarin counterpart *dé-guo jiǎng* ‘has won a prize’; in Cantonese, the verb *lo2* ‘to take’ (an agentive transitive verb) is normally used in this context. With the achievement marker *dou* suffixed on *dak1*, the sentence in (1b) is more acceptable among Cantonese speakers, but the natural choice of verb is still *lo2* rather than *dak1*. It is in proverbs like (1c), as indicated by the square brackets, that *dak1* plays a fully lexical role on its own, expressing the acquisition (and implied ownership) of something (*mat6* ‘thing’). So, it is reasonable to suggest that ACQ has been grammaticalized and is losing its function as a lexical verb in Cantonese. This paper, therefore, concentrates on the structural properties of ACQ as a functional item, particularly when it appears in postverbal position.⁴

As a functional item, the postverbal ACQ, and sentences in which it appears, can receive three core readings. The three readings are potential, permission, and descriptive, as illustrated in examples (2) to (4) respectively.

² Hong Kong Cantonese is a variety of Standard Cantonese, which closely resembles other standard Cantonese varieties spoken in Guangzhou and Macau.

³ Matthews & Yip (1994, 2011) have not indicated the tone for *dou*, but for the examples of *dou* appearing in resultative and extent complements given in their Cantonese grammar, native speakers would pronounce that as *dou3* (mid-level tone) instead of *dou2* (high-rising tone). Therefore, I suggest that *dou3* is also an achievement marker. In fact, the difference in tone between *dou2* and *dou3* does create a contrast in meaning. In both examples below, it can be assumed that the speaker already knew about the hearer’s intention of buying the new phone, but in example (i), *dou2* signals an additional meaning of a potential risk of not being able to buy the phone (e.g. the phone is a limited edition). Example (ii) with *dou3* does not carry such ability meaning, but it is more related to whether the hearer has really bought the new phone in the end (e.g. the hearer is known to be indecisive).

- (i) *nei5 jau5 mou5 mai5-dou2 bou6 san1 din6waa2aa3?*
 you have not.have buy-DOU CL new phone Q
 ‘Did you manage to buy the new phone?’
 (ii) *nei5 jau5 mou5 mai5-dou3 bou6 san1 din6waa2aa3?*
 you have not.have buy-DOU CL new phone Q
 ‘Did you buy the new phone?’

For ease of exposition, I will not mark the tone on *dou* in the rest of the discussion, and *dou* (= *dou2* and *dou3*) will be glossed as SUCC for success/achievement.

⁴ A note on the data used. Examples taken from the literature are largely adopted in-tact, with a few exceptions made for the sake of consistency: (i) all occurrences of *dak1* and its counterparts in other languages are glossed as ACQ; (ii) all Cantonese examples are transcribed in Jyutping (the system designed by the Linguistic Society of Hong Kong), the Mandarin examples in standard pinyin, and examples from other languages follow the transcription used in the published sources where they are drawn from. In terms of grammaticality judgment, the Cantonese sentences have been checked with 13 native speakers of Hong Kong Cantonese, the Mandarin sentences are based on the judgments of two native speakers from mainland China. Examples from languages other than these two are adopted from the published sources, and the judgments are used as reported there.

- (2) *keoi5 tai2 dak1 ming4 sau2 si1*
 3.SG read ACQ understand CL poem
 ‘S/he can (= is able to) understand the poem.’ – potential
- (3) *keoi5 zaa1 dak1 li1 gaa3 ce1*
 3.SG drive ACQ this CL car
 ‘S/he can (= is allowed to) drive this car.’ (Cheng & Sybesma 2004: 428) – permission
- (4) *keoi5 paau2 dak1 hou2 faai3*
 3.SG run ACQ very fast
 ‘S/he runs very fast.’ – descriptive

The central claim of this paper is that the structural configuration for all Cantonese postverbal ACQ-sentences remains constant, and the different interpretations are derived from the featural specification on the functional heads and the nature of the endpoint-denoting small clause. In brief, I will propose that the postverbal ACQ in Cantonese is an exceptional possibility modal embedded within the vP. The Mod head carries the [+Possibility] and [±Deontic] modal feature. The Mod⁰ takes an AspP as complement which is the functional projection that introduces the small clause (XP) in the form of a simple subject-predicate structure. The XP provides an endpoint to the event described in lexical verb in V⁰. The Asp head itself carries a [±Realised] feature which specifies whether the endpoint has been reached. The interpretations of postverbal ACQ-sentences are then compositionally generated in the syntactic derivation.

The organisation of this paper is as follows. Section 2 reviews major proposals made on the different readings found in Cantonese postverbal ACQ-sentences. Where relevant and where no proposal has been made on Cantonese, proposals made on the ACQ in Mandarin will also be discussed. Section 3 presents the core formal analysis within a featural parametric framework to capture the apparent variation and deep connection between the postverbal ACQ-structures. Further application of the proposed analysis will be illustrated in section 4, including the aspectual incompatible across all postverbal ACQ-sentences, the linearization process, and the interaction with focus in postverbal ACQ-sentences. Finally, section 5 concludes the discussion with a remark on the cross-linguistic implications of the proposed framework.

2 Previous literature on Cantonese postverbal ACQ-sentences

2.1 The modal readings

Cross-linguistically, the ACQ has been mostly treated as a modal (see Simpson 2001 on MSEA languages; Cheng & Sybesma 2003, 2004 on Cantonese and Mandarin; Sybesma 2008 on Zhuang and other MSEA languages; Xie 2012 on Mandarin; Meisterernst 2019 on Archaic and Middle Chinese *i.a.*). In Chinese, for instance, the Mandarin ACQ *de/dé/děi* has been regarded as a modal auxiliary verb meaning ‘can, may, be able to’ (Wu 2001; Li 2004; Xie 2012; Chappell & Peyraube 2016; Sparvoli 2017, *i.a.*). The same has been suggested for Cantonese *dak1* (see Cheung 1972; Matthews & Yip 1994, 2011; Simpson 2001; Cheng & Sybesma 2003; 2004; Sybesma 2008; Kwok, Chin & Tsou 2011). The modal status of *dak1* has been grounded on its structural and semantic properties.

First and foremost, the ACQ has also been analysed as modal for the fact that it expresses matrix modality as with canonical modals. Cheng and Sybesma have demonstrated the matrix scope of *dak1* with data involving Free Choice Items (FCIs) as shown in (5) (2003: 15).

- (5) a. **bin1-go3 jan5 dou1 jap6-zo2 lei4*
 which-CL person all enter-PFV come
 intended: ‘All people came in.’ or ‘Anybody came in.’
- b. *bin1-go3 jan5 dou1 ho2ji5 jap6 lei4*
 which-CL person all can enter come

- ‘Anybody can come in.’
- c. *bin1-go3* *jan5* *dou1* *jap6* *dak1* *lei4*
 which-CL person all enter ACQ come
 ‘Anybody can come in.’

Expressions with definite wh-phrases occurring with *dou1* ‘all’ have been argued in Cheng (2002) to be FCIs in Cantonese, and ‘*bin1*-CL NP...*dou1*’ is one such expression. But FCIs are only licensed in non-veridical contexts, including intensional, habitual, generic and modal sentences (Giannakidou 1998, *et seq.*), which explains the ungrammaticality of (5a) as the FCI cannot appear with a perfective-marked predicate. Moreover, the fact that the canonical modal auxiliary *ho2ji5* ‘can’ (which appears in the normal preverbal position) and the ACQ *dak1* (which takes the exceptional postverbal position) can both license a FCI reading ‘**anybody** can come in’ carries two important implications: (i) *dak1* like *ho2ji5* is a modal element – hence non-veridical, and (ii) *dak1* also takes matrix scope – otherwise it cannot license the FCI readings with the definite wh-phrase in the matrix subject position.

In terms of semantics, the postverbal ACQ-sentences can trigger two possibility modality readings: potential and permission. First, consider the sentences in (6). Both sentences express the subject’s ability to reach a certain state (P2) in the event described in P1.⁵ In (6a), the reading of the poem is able to reach the state of comprehension by the subject *keoi5* ‘s/he’. The P2 is subject-referring since both the reading and the understanding are done by the same agent *keoi5* ‘s/he’; Liu (2004) termed it ‘potential-resultative’ when the agent of P1 equals the agent of P2, while Cheng (2007) has referred to similar structures as ‘subject-result’. On the other hand, in (6b), the subject *keoi5* ‘s/he’ is the agent of the action in P1 *lo2* ‘to take’ but the endpoint *hei2* ‘up’ in P2 is undergone by ‘this box of books’, not the subject, so here the P2 is ‘object-referring’ – alternatively referred to as potential-causative in Liu (2004) when the agent of P1 is not the agent of P2, and Cheng (2007) has referred to such readings as ‘object-result’.

(6) Potential

- a. *keoi5* *tai2* *dak1* *ming4* *sau2* *si1* (=2)
 3.SG read ACQ understand CL poem
 ‘S/he is able to understand the poem.’
- b. *keoi5* *lo2* *dak1* *hei2* *li1* *soengl* *syul*
 3.SG take ACQ up this box book
 ‘S/he is able to lift this box of books.’ (Cheng & Sybesma 2004: 421)

At this point, a terminological clarification has to be made on ‘potential’ and ‘ability’ modality, since the Mandarin counterparts of sentences in (6) have also been regarded as expressing ‘ability modality’ (Tsai 2001; Li 2004; Wu 2004; Xie 2012). Theoretically, ‘ability’ is a more commonly used label (Bybee, Perkins & Pagliuca 1994; see also the inclusion of *Mod_{ability}* in the cartographic hierarchy of functional categories in Cinque 1999, 2006). In Bybee et al.’s modality classification, ability modality belongs to one of the ‘agent-oriented’ modalities. Specifically, ‘ability’ refers to a situation where “the agent of the verb has the mental or physical ability to complete the action of the main verb” (1994: 319). Sybesma (2008) has proposed to distinguish between ability and potential modality based on the notion of telicity. He suggests that potentiality concerns the ability to reach the projected endpoint, so it is necessarily the case that potential modality goes with telic events. Ability modality, however, can involve atelic events. The classification has been illustrated by the English sentence “he can wipe the table clean” and its negative form “he cannot wipe the table clean”. Both sentences exemplify potential modality not ability modality, because the meaning expressed concerns whether the subject can perform the action of *wipe* to achieve the projected endpoint of making *the table clean*, but does not concern the subject’s ability to perform the wiping action per se. By this definition,

⁵ For all sentences involving two predicates, I adopt the terminology in Liu (2004) in referring to the first predicate as P1, and the one embedded deeper in the structure as P2.

Sybesma suggests that Cantonese postverbal ACQ only expresses potential modality. This analysis is indeed confirmed by the following Cantonese sentences in (7).

- (7) a. *keoi5 gong2 dak1 jat6man2*
 3.SG speak ACQ Japanese
 (i) *S/he is able to speak Japanese.
 (ii) S/he is allowed to speak Japanese.
- b. *keoi5 {*dak1}gong2 jat6man2 {*dak1}*
 3.SG ACQ speak Japanese ACQ
 intended: 'S/he is able to speak Japanese.' (adapted from Sybesma 2008: 222)⁶
- c. *keoi5 sik1 gong2 jat6man2*
 3.SG know speak Japanese
 (i) 'S/he is able to speak Japanese.' (= S/he knows how to speak Japanese)
 (ii) *S/he is allowed to speak Japanese.

The sentences in (7) involve an atelic event of speaking Japanese and, as suggested in Sybesma (2008), *dak1* is indeed incompatible with the atelic event to express any potential modality readings, that is 's/he is able to speak Japanese' (7a). To express ability modality involving an atelic event (e.g. speak Japanese) in Cantonese, a preverbal modal *sik1* 'know' is needed as in (7c).

There are two important points to note in (7). Firstly, the fact that *dak1* in (7a) fails to express potential modality while *sik1* in (7c) can is not conditioned by the linear distribution of the markers. As shown in (7b), if *dak1* is placed preverbally or in sentence-final position, the sentence will be ill-formed.⁷ Secondly, the sentence in (7a) is actually not ill-formed, only that it is unable to produce a

⁶ In this paper, the curly brackets indicate the different positions an item may appear in a sentence, but does not indicate co-occurrence.

⁷ A reviewer has brought to my attention that it may produce an archaistic effect if *dak1* is placed in preverbal position to yield a permission reading, as illustrated in (i) and (ii) below.

- (i) *ngo5 dak1 gong2 jat6man2*
 I ACQ speak Japanese
 'I am allowed to speak Japanese.'
- (ii) *ngo5 dak1-m4-dak1 gong2 jat6man2?*
 I ACQ-not-ACQ speak Japanese
 'Am I allowed to speak Japanese?'

Based on native speaker judgments, structures such as (i) and (ii) are not acceptable in present-day Hong Kong Cantonese. To express the permission reading, the ACQ must be placed immediately after the verb *gong2* 'to speak'. In polar questions, only the verb *gong2* 'speak' can take the A-not-A form, in which case the structure will be 'I speak-not-speak ACQ Japanese'.

Interestingly, structures where the ACQ appears in preverbal position are in fact attested in Early Cantonese. Based on the Early Cantonese Tagged Database (HKUST 2012) which has collected the Cantonese textual materials from 1870s to 1930s, there are a handful of examples where *dak1* as an auxiliary appears in preverbal position, both in affirmative and negative structures; examples (iii) and (iv) are two cases in point.

- (iii) *nei5 zi3gan2 m4 hou2 gong2 gwo3 jan5 zi1, daan6 heoi3 bei2*
 you importantly not good speak to people know but go give
gwo3 zai3si1 tai2, jan1wai5 nei5 dak1 git3zing6, jiu3 ji1
 to priest see because you ACQ cleansing need follow
mo1sai1-ge3 fan1fu3
 Moses-POSS instruction
 'Importantly, do not let people know, but go and let the priests see (you), because you need to be cleansed, and need to follow Moses' instructions.' (Mark 1: 44; 1872)
- (iv) *je4soul m4 dak1 hin2jin4 jap6 sing4*
 Jesus not ACQ openly enter city
 'Jesus cannot enter the city openly.' (Mark 1: 45; 1872)

However, the two examples of preverbal *dak1* in Early Cantonese are not entirely the same as the examples provided by the reviewer presumably from another Cantonese variety. Firstly, in sentence (iii), *dak1* expresses necessity rather than possibility, precisely, it is deontic necessity (i.e. obligation) instead of deontic possibility (permission). Sentence (iv) does express deontic possibility but it is in the negative form, i.e. prohibition. As for the A-not-A form, based on the corpus search, there is no example of *dak1* being targeted for the A-not-A form. There are two possible explanations. First, it could be the case that Hong Kong Cantonese (or standard Cantonese more generally) does not allow *dak1* as an auxiliary to be

potential modality reading (i.e. be able to), but it is completely grammatical in expressing permission ‘s/he is allowed to speak Japanese’. We will discuss the ‘permission’ reading of postverbal-ACQ sentences presently and how the two modality readings have been derived in existing analyses later in this subsection.

Permission (a.k.a. deontic root modality (*a la* Palmer 1974, 1986), and ‘deontic possibility’ in van der Auwera & Plungian (1998)) is another modality reading found in Cantonese postverbal ACQ-sentences, as exemplified in (8).

(8) Permission

- a. *keoi5 zaal dak1 li1 gaa3 cel* (=3)
 3.SG drive ACQ this CL car
 (i) ‘S/he is allowed to drive this car.’ (Cheng & Sybesma 2004: 428)
 (ii) * ‘S/he is able to drive this car.’
- b. *keoi5 haang4 dak1 jap6 heoi3*
 3.SG walk ACQ in go
 (i) ‘S/he is allowed to walk in there.’
 (ii) ‘S/he is able to walk in there.’ (ibid: 421)
- c. *keoi5 zaal dak1 li1 gaa3 cel jap6 lei4*
 3.SG drive ACQ this CL car in come
 (i) ‘S/he is allowed to drive this car in here.’
 (ii) ? ‘S/he is able to drive this car in here.’

When expressing permission, the postverbal ACQ can be followed by a nominal (8a), a P2 (8b) or both (8c). But in all three sentences, *dak1* describes that the subject is allowed to carry out the action in P1 to the projected target: in (8a), the permission is to perform the action of driving on the object *li1 gaa3 cel* ‘this car’; in (8b), the subject is allowed to perform the walking action to reach the endpoint of entering a certain space away from the speaker, *jap6 heoi3* ‘in go/in there’; and in (8c), the subject is permitted to drive the car specified to the direction towards the speaker, *jap6 lei4* ‘in come/in here’. Crucially, the two sentences, (8b) and (8c), which involve a P2 are ambiguous between a permission and a potential reading.

Cheng & Sybesma (2004) have suggested that a postverbal ACQ-sentence may trigger both potential and permission readings when P2 is a ‘plus-type’ resultative predicate (e.g. *jap6 lei4* ‘in come’, *ceot1 heoi3* ‘out go’). In their analysis, they have reported that when ACQ is followed by a nominal and no P2 is present, then only the permission reading is available (8a), and when the P2 is a ‘simple’ resultative predicate (e.g. *hei2* ‘up’, *ceot1* ‘out’), then only the potential reading is available (6). The ‘simple’ and ‘plus-type’ resultative predicates are distinguished by the absence and presence of a *lei4* ‘come’/ *heoi3* ‘go’ element after the resultative predicate.

To disambiguate the two modality readings, Cheng & Sybesma (2004) have proposed two modality positions: Mod1⁰ (between I⁰ and V⁰) and Mod2⁰ (contained in the VP). The higher Mod1⁰ which sits in the matrix clause is the position for canonical modals and for *dak1* when it expresses permission modality – Cheng and Sybesma also suggest Mod1 to be the position for preverbal ACQ in Chinese varieties that still have one. The lower Mod2⁰ is the head of a small clause (ModP2) which is embedded within VP. This lower modal position can only be occupied by ACQ, and when the ACQ is

focused in questions. A second explanation is that A-not-A questions are very rare in 19th century Cantonese – the common structure for a polar question is to use the standard negator and/or question particle as shown in (v) – therefore, the period in which *dak1* can take preverbal positions and that in which A-not-A questions prevail do not coincide, hence *dak1-m4-dak1* has not been attested.

- (v) *ngo5 so2 sau6 ge3 sai2lai5, nei5 sau6 dak1 m4 nei1?*
 I that endure GEN baptism you endure ACQ not Q
 ‘The baptism that I endure, can you endure it?’ (Mark 10: 38; 1872)

present in Mod2⁰ it expresses potential modality. Their proposed syntactic configuration for (6b) is presented in (9) as an example.

- (9) [_{TP} *keoi* [_{Mod1} Ø [_V *lo* [_{Mod2} ***dak*** [_{Asp} *hei* [_{XP} *li soeng syu ti*]]]]]]

An unambiguous potential reading is derived as follows. The endpoint of the event in P1 is encoded in the XP, which has a simple subject-predicate structure typical of a small clause. Here the ‘subject’ is the theme that undergoes the action in P1 and eventually reaches the endpoint in P2. This resultative small clause is first embedded by an aspectual projection that indicates whether the endpoint has been successfully realised or not. Cheng & Sybesma (2004), adopting the analysis in Sybesma (1999), suggest that this VP-internal Asp⁰ encodes the ‘realisation’ of an event. Therefore, in the case of unambiguous potential ACQ-sentences, this Asp⁰ position is the landing site for P2 which raises from the XP. The modality reading is introduced by the projection of ModP2 when the ACQ is present and base-generated in Mod2⁰. The interpretation is then derived compositionally as: P1 is able to realise the endpoint P2. An unambiguous permission reading is suggested to have the ACQ base-generated in the higher Mod1⁰ and the P1 takes a nominal complement, so the reading is composed as: it is allowed that P1.

The two modality readings become ambiguous when P2 is a ‘plus-type’ resultative predicate (8b) in which case a nominal may intervene between the ACQ and P2 (8c). Cheng & Sybesma (2004) argues that while ‘simple’ resultative predicates obligatorily raise to Asp⁰ in order to be adjunct to the ACQ for feature-checking with ACQ and Asp⁰ (as illustrated in (9)); ‘plus-type’ resultative predicates, on the other hand, do not have that requirement, possibly due to the presence of the ‘come/go’ element as it is assumed to be aspect-related. Therefore, with a ‘simple’ resultative P2, the ACQ must be base-generated in the lower potential Mod2⁰, but with a ‘plus-type’ resultative P2, the ACQ can be base-generated either in the higher permission Mod1⁰ or the lower potential Mod2⁰. The syntactic derivation of the two modal readings in (8c) are represented in (10).

- (10) *keoi5 zaa1 **dak1** li1 gaa3 cel jap6 lei4*
 3.SG drive ACQ this CL car in come
 (i) ‘S/he is allowed to drive this car in here.’ – permission
 [_{TP} *keoi* [_{Mod1} *zaa-dak* [_V ~~*zaa*~~ [_{Mod2} Ø [_{Asp} Ø [_{XP} [_{NP} *li gaa ce*] [_X *jap lei*]]]]]]]]]
 (ii) ‘S/he is able to drive this car in here.’ – potential
 [_{TP} *keoi* [_{Mod1} Ø [_V *zaa* [_{Mod2} ***dak*** [_{Asp} Ø [_{XP} [_{NP} *li gaa ce*] [_X *jap lei*]]]]]]]]]

The analysis in Cheng & Sybesma (2004) provides a neat account of how the potential and permission readings are derived and how ambiguity between the two modality readings may arise. However, since the proposal depends on the assumption that ACQ may occupy two different Mod positions, it may run into difficulty in accounting for sentences where ACQ co-occurs with canonical modal *ho2ji5* ‘can’, especially with the permission reading (11). Since the higher Mod1⁰ is argued to be the position for canonical modals and permission ACQ, it is unclear how sentences such as (11c) can be derived in Cheng & Sybesma's (2004) analysis.

- (11) a. *keoi5 bun1 **dak1** zoengl solfaa2jap6 lei4*
 3.SG carry ACQ CL sofa in come
 b. *keoi5 **ho2ji5** bun1 zoengl solfaa2jap6 lei4*
 3.SG can carry CL sofa in come
 c. *keoi5 **ho2ji5** bun1 **dak1** zoengl solfaa2jap6 lei4*
 3.SG can move ACQ CL sofa in come
 All: ‘S/he can (=is allowed to) carry the sofa in here.’

To preview the core proposal of this paper, I will argue in section 3 that the Cantonese ACQ is base-generated within the vP in both potential and permission readings. The proposed analysis then accounts for structures like (11c) by modal concord between the canonical modal *ho2ji5* in TP and the ACQ in the vP (see section 3.2.4 for details).

2.2 The non-modal readings

Apart from modality, postverbal ACQ-sentences in Cantonese can also describe the manner in which an event happens as in (4) repeated below or the endpoint of an event (12) (Matthews & Yip 2011: 175). For instance, in (4), *dak1* is followed by a P2 that describes the speed (i.e. *hou2 faai3* ‘very fast’) in which the running in P1 takes place. In (12), the P2 that follows *dak1* describes the endpoint state of being *hou2 baau2* ‘very full’ in the eating event of P1.

- (4) *keoi5 paau2 dak1 hou2 faai3*
 3.SG run ACQ very fast
 ‘S/he runs very fast.’

- (12) *keoi5 sik6 dak1 hou2 baau2*
 3.SG eat ACQ very full
 ‘S/he is full after eating.’ (Matthews & Yip 2011: 176)

In Liu’s (2004) classification of Mandarin complex predicate structures, the Mandarin counterparts of (4) and (12) are grouped under Class III, which is further subdivided in terms of the predicate type of P2 – individual-level (i-level) predicate or stage-level (s-level) predicate (Carlson 1977). Specifically, Liu suggests that an i-level P2 yields a ‘descriptive’ reading, while a s-level P2 produces a resultative or causative reading, depending on the theta-role assignment conditions described in section 2.1.⁸ Briefly, i-level predicates express properties of individuals that are permanent or largely stable, and thus not temporally or spatially bound. Three main types of i-level predicates include (i) stative verbs (e.g. *know, love, hate*) (versus s-level *run, jump, kick*), (ii) predicative NPs (e.g. *be a man, be animals*), and (iii) adjectives (e.g. *intelligent, tall, green*) (versus s-level *drunk, sick, available*) (cf. Carlson 1977; Carlson & Pelletier 1995). S-level predicates, in contrast, concern transient, episodic properties of an individual.

Though Liu’s classification offers a systematic way to distinguish between descriptive readings and resultative/causative readings, characterising the P2 in sentences (4) and (12) – *hou2 faai3* ‘very fast’ and *hou2 baau2* ‘very full’ – as i-level predicates is problematic. As discussed in Chierchia (1995), i-level predicates differ from stative predicates in that the former remains stable and valid regardless of time. Applying this diagnostic, the P2 in (4) and (12) stands in clear contrast from a typical i-level predicate like *gou1* ‘tall’, in the sense that *gou1* cannot be temporally modified (13) but *faai3* ‘fast’ and *baau2* ‘full’ can be (14).

- (13) *keoi5 (*zeoi1 baal1si2go2 zan6 |*ji5gaa2) hou2 gou1*
 3.SG chase bus that time |now very tall
 (i) *‘S/he is very tall when catching a bus.’
 (ii) *‘S/he is very tall now.’

- (14) a. *keoi5 (zeoi1 baal1si2go2 zan6) hou2 faai3*
 3.SG chase bus that time very fast
 ‘S/he is very fast when catching a bus.’
 b. *keoi5 (ji5gaa2) hou2 baau2*
 3.SG now very full

⁸ There are numerous ways of classifying the structures which Liu (2004) grouped under Class III. Li & Thompson (1981: Ch. 22) have referred to all structures in this class as ‘complex stative construction’ and the difference in interpretation are treated as ‘inferred meanings’. Where the complement following the ACQ is an AP, the structure has been regarded as an ‘(extent) adverbial construction’ (Ross 1984; Huang & Mangione 1985; Matthews & Yip 1994; 2011), ‘descriptive complement construction’ (Huang 1988), ‘manner V-*de* construction’ (Huang, Li & Li 2009) and ‘descriptive V-*de* construction’ (Miao 2010; Tsai 2018).

‘S/he is full now.’

Tsai (2018) has also argued that the AP in Mandarin ‘descriptive V-*de* constructions’ is always [–dynamic] as it denotes a property, either a property of a series of events or a one-time episodic event. The [–dynamic] feature on AP then agrees with a null Aspect head that immediately c-commands the AP and carries the same [–dynamic] feature. Tsai’s proposal of a [–dynamic] means to capture what previous studies have observed as a semantic difference between sentences with preverbal adverbials and descriptive postverbal ACQ-sentences: the former is found to always refer to an action, while the latter carries a stative, habitual or generic reading over the ‘manner’ of the event described in the predicate of V-*de*, treating it as ‘a state of affairs’ (cf. Li & Thompson 1981; Ross 1984; Huang 1988; Ernst 1996). In this paper, I follow Tsai in arguing for the same [–dynamic] feature in the AP complement of postverbal ACQ-sentences and that an Agree relation can be established between the AP and the Asp head that c-commands it, but details of how a ‘descriptive’ reading is derived and the difference between preverbal APs and post-ACQ APs will be discussed in section 3.3.

In the literature on Mandarin, the descriptive reading of postverbal ACQ-sentences does not only contrast with the resultative or causative reading in terms of the nature of P2 (i.e. [–dynamic] vs. [+dynamic]) but that the structural status of ACQ itself has also been argued to be different. Huang, Li & Li (2009), for instance, have suggested that in resultative and causative readings the matrix verb and ACQ *de* forms a constituent, whereas in descriptive reading the ACQ forms a syntactic constituent with the AP where it is base-generated, and only forms a phonological word with the matrix verb at PF. More importantly, Liu (2004) and Tsai (2018) have both argued that the ACQ in Mandarin descriptive V-*de* sentences is a nominaliser that adjoins to the matrix verb and turns the [V-*de*] complex into a nominalised event argument predicated over by the AP. The argument is made on the observation that the AP appears not to be describing the matrix subject and the possibility of the AP modifying a covert generic object should be ruled out because unergative verbs such as *tiào* ‘jump’ in Mandarin (*tiu3* in Cantonese) cannot take any object (Liu 2004).

Building on the assumption that [P1-ACQ] in descriptive ACQ-sentences is a nominalised event argument, Tsai (2018) suggests that the AP is what is asserted and focused while the rest of the sentence is presupposed (see also Li 1963; Liu 1982; Li & Thompson 1981: Ch. 22; Ernst 1996). Hence, to formalise the difference between descriptive postverbal ACQ-sentences and preverbal adverbial modification, Tsai suggested that their difference can be captured in event quantification (cf. Herburger 2000): the preverbal adverbial modification has a ‘flat’ representation as (15) whereas the ACQ-structure expresses a structured event quantification (16) (Tsai 2018: 77); the logical form of the examples are presented in (15b) and (16b).

- (15) a. *tā hěn gāoxìng-de wán-zhe*
 he very happy-ADV play-DUR
 ‘He is playing very happily.’

b. $\exists e$ (ag(*e*, he) & play(*e*) & happy(*e*))

- (16) a. *tā wán-de hěn gāoxìng*
 he play-ACQ very happy
 ‘He is very happy from playing.’

b. $[\exists e: \text{ag}(e, \text{he}) \& \text{play}(e)] \text{happy}(e) \& \text{ag}(e, \text{he}) \& \text{play}(e)$

Assuming the Davidsonian event argument, the three parts of a focused sentence are: (i) the existential quantifier over events ($\exists$), with the exact quantifier determined by the context and (temporal) modifier present⁹; (ii) restriction on the scope of $\exists$; and (iii) the scope of $\exists$. In the ‘flat’

⁹ The quantifier in a descriptive ACQ-structure, according to Tsai (2018), can be the generic operator (Gen), to capture the generic/habitual interpretation often generated in these sentences.

structure as (15), the existential quantification ($\exists e$) takes scope over the agent ‘he’ ($ag(e, he)$), the playing event ($play(e)$), and the adverbial ‘happy’ ($happy(e)$), with no restriction on the existential quantification, hence no part of the sentence is focused. In contrast, the example in (16) is analysed as a focused structure, with the existential quantification scope restricted to the agent ‘he’ and the event of playing, as indicated by the squared brackets. Tsai suggests that in the case of ‘descriptive’ postverbal ACQ-structures like (16), the content within the restriction is the presupposed information that exists regardless of the assertion, while the content outside of the restriction is the assertion. So, the new non-presupposed information is the adverbial ‘happy’ ($happy(e)$). Mapping the semantic representation in (16b) to the sentence in (16a), the focused information in the logical form corresponds to the constituent following the Mandarin ACQ *de*, i.e. the AP *hěn gāoxìng* ‘very happy’.

The analysis in Tsai (2018) has provided important insights in terms of the aspectual nature of the AP in descriptive ACQ-sentences (i.e. [–dynamic]). And the observations made regarding the difference between preverbal manner adverbials and the AP in postverbal ACQ-sentences are highly relevant to accounting for the structural properties of postverbal ACQ-sentences. However, there are three empirical findings left unaddressed in previous proposals. Firstly, Cantonese postverbal ACQ-sentences in which the P2 is an AP consistently receive two interpretations: descriptive and potential, the former is always the stronger reading but the modal reading is consistently present as shown in (17). It is unclear how that ambiguity can be accommodated in previous proposals.

- (17) *keoi5 paau2 dak1 (hou2) faai3*
 3.SG run ACQ very fast
 (i) ‘S/he runs very fast.’ – descriptive
 (ii) ? ‘S/he is able to run very fast.’ – potential

Secondly, the difference between the APs that appear preverbally and those that appear after the ACQ does not only limit to their interpretation (i.e. $\pm$ dynamic). It has been found that not all APs which can appear in a postverbal ACQ-sentence can appear in the preverbal position, as illustrated in (18).

- (18) a. *keoi5 coeng3 dak1 [hou2 hou2teng1]*
 3.SG sing ACQ very good.to.hear
 ‘S/he sings very well.’
 b. **keoi5 [hou2 hou2teng1]-gam2 coeng3*
 3.SG very good.to.hear-ADV sing
 intended: ‘S/he sings very well.’ (= sings in a very pleasant manner)

Finally, the ACQ is obligatory for grammaticality in a ‘descriptive’ reading, but its presence/absence only makes an interpretational difference in other readings, as shown in (19) with *dak1* removed from examples discussed in section 2 so far.

- (19) a. **keoi5 coeng3 hou2 hou2teng1*
 3.SG sing very good.to.hear
 intended: ‘s/he sings very well.’
 b. *keoi5 lo2 hei2 li1 soeng1 syu1*
 3.SG take up this box book
 (i) ‘S/he takes up this box of books.’
 (ii) # ‘S/he is able to take up this box of books.’
 c. *keoi5 zaa1 li1 gaa3 cel*
 3.SG drive this CL car
 (i) ‘S/he drives this car.’
 (ii) # ‘S/he is allowed to drive this car.’

The core proposal to be laid out in the next section will address these issues. To preview, I will argue that the descriptive and potential readings are closely connected by the implicature that if x is achieved, then x is able to be achieved, hence the active ambiguity. The difference between the AP in

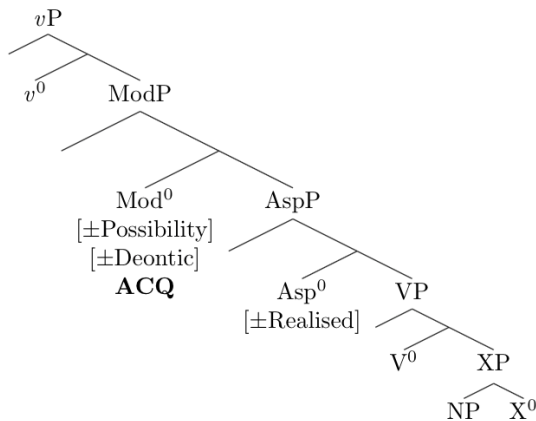
preverbal position and that in postverbal ACQ-sentences is accounted for by the fact that the APs concerned come in (at least) two different types: manner modifiers and result modifiers, and only the former can appear preverbally while both are compatible with the postverbal ACQ-structure, which is quite revealing in terms of the nature of the small clause in postverbal ACQ-sentences. Finally, the exceptional obligatoriness of ACQ in ‘descriptive’ readings boils down to the c-selection of the verb (P1).

3 The core proposal

3.1 The postverbal ACQ structure: a unification

The structural analysis argued for in this paper is set within the Minimalist framework (Chomsky 1995), and assumes with previous studies that, in Chinese, the subject is in Spec-Top(ic)P in the left periphery (Rizzi 1997), though whether the subject is base-generated in TopP (*a la* Li & Thompson 1981; Cheng 1995) or has cyclically raised from Spec- ν P¹⁰ to Spec-TP and ultimately lands in the left periphery (*a la* Liu 2004; Tsai 2015) is not the concern of the present proposal, and I will therefore take an open approach to that issue. I also follow the ν P hypothesis and the standard assumption of V-to- ν raising. Since the syntactic analysis of postverbal ACQ-sentences to be proposed would only concern the structure within the ν P, so the syntactic configurations in the rest of the discussion would only include projections within the ν P, unless otherwise necessary. Under the theoretical framework outlined above, I argue for the basic configuration in (20) for all postverbal ACQ-sentences in Cantonese.

(20) The proposed structure



Examining the structure from bottom up (as will be assumed for syntactic derivations), the lexical layer is defined by the VP which, in postverbal ACQ-sentences, embeds an XP. Conceptually, this XP marks the final endpoint of the event encoded in V⁰. Structurally, the XP is mostly (and maximally) a small clause with a simple subject (NP)-predicate (X⁰) structure, but the exact content of XP varies with the readings produced by the postverbal ACQ-sentences and will be discussed in detail in sections 3.2 and 3.3.

The VP is in turn c-commanded by two functional layers before the entire event structure is enclosed by the ν P. Immediately to the left of the VP is an Asp(ect)P. The proposed framework follows Travis

¹⁰ It has also been proposed that the ν only introduces causative semantics and the external argument is realised in VoiceP (Pylkkänen 2008; Harley 2013; Harley 2017; Ramchand 2017; Sybesma 2021a; Sybesma 2021b). Since the exact position for external argument is not at the core of the present discussion, and that both views share the understanding that the ν P marks the edge of the event, I will present the proposed syntactic analysis of postverbal ACQ-sentences up to the ν P, while remaining open towards the issue of external argument licensing site.

(2010) in postulating an aspectual projection above VP¹¹ which expresses a meaning similar to ‘be/become’. More precisely, I postulate a [Realised] feature on Asp⁰, following Sybesma (1999) and Cheng & Sybesma (2004). The postulation of a [Realised] aspectual feature concurs with the remark made in Sybesma (2008: fn. 27) that temporal-aspectual information encoded in a structure comes in two tiers, a higher tier in CP/IP and a lower tier embedded in the VP, the latter of which encodes information related to the realisation and completion (or non-completion) of the event, while the former anchors the temporal reference of the sentence to the discourse. It would also be highly congruent with the position for AspP2 proposed in Tsai’s (2008) three-layered aspectual model of Mandarin. According to Tsai (2008), Asp2⁰ is the position for perfective *le*, which is projected between VP and vP. In fact, in Travis’s (2010) theory of Inner Aspect, the Asp⁰ between the two verbs can be featurally specified as [±Definite] which is a formalisation of telicity in her theory. All three existing conceptualisations of this lower Asp⁰ coincide in that it should be an aspect that introduces a final endpoint to the event and hence marking the event as completed (or terminated) or not. For our present discussion, I postulate this [Realised] feature on the lower Asp⁰ to make the semantic composition of the different postverbal ACQ readings more apparent. I would, however, have to leave the precise interaction between the lower Asp⁰ and the higher/outer Asp⁰ in the T-domain, as well as the relationship between realisation, telicity, perfectivity and definiteness for future research. Hence, with V⁰ ultimately raised and landing in v⁰, having the Asp⁰ c-commanding the VP and the XP would then encode: a final endpoint of the event is (not) reached (whether it has been reached or not depends on the featural valuation of [Realised] on Asp⁰).

Moreover, I argue that the postverbal ACQ is an exceptional modal element in the sense that it selects for an endpoint-denoting XP and is generated within vP. Technically, the ACQ expresses possibility modality and is base-generated as the head of a vP-internal Mod(al)P which is projected to the left of AspP. The possibility modality semantics is formalised as a [Possibility] feature. Within the category of possibility modality, I argue that the ACQ can be further specified in terms of expressing deontic or non-deontic modality as captured by the [Deontic] feature. The postulation of these modality feature is motivated by established theories of modality; here I illustrate with van der Auwera and Plungian’s (1998) Modality Map (MM) model.

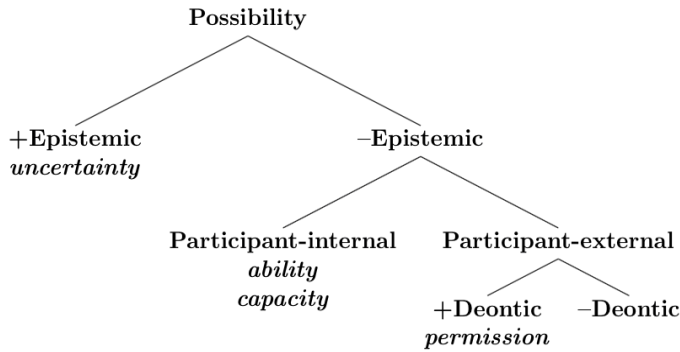
According to van der Auwera et al. (1998), the modal taxonomy takes possibility and necessity as the two paradigmatic variants. Within possibility and necessity, respectively, are four subdomains: participant-internal modality, participant-external modality, deontic modality, and epistemic modality. Precisely, deontic modality is a special class of participant-external modality¹², and these four subdomains can be understood to form two broad categories, epistemic and non-epistemic modality. Of greater relevance to our discussion of Cantonese ACQ is the classification of possibility modality,¹³ so that half of the MM classification has been schematised in (21) (adapted from *ibid*: 82).

(21) Possibility modal taxonomy in the MM model

¹¹ In Travis’s analysis, this is the lower V₂P position which takes an XP as complement. The XP in her analysis also marks the endpoint of the event. In her Inner Aspect analysis, there are two VPs, the higher one introduces the external argument and is to the left of AspP, the lower one (V₂P) introduces the theme argument and is embedded in the AspP. The AspP sandwiched between the two VPs encodes Inner Aspect (formal realisation of Aktionsart and specifiable as [±Definite]) and expresses a meaning similar to ‘be/become’ (2010: 5).

¹² Sparvoli (2017) describes the non-deontic participant-external modality in the MM model as ‘circumstantial participant-external modality’.

¹³ In Mandarin, the ACQ can be realised as *děi/dé/de*, and it can express both possibility and necessity. Since the focus of this paper is only on Cantonese ACQ and the Cantonese ACQ cannot express necessity unlike its Mandarin counterparts, our discussion of modality taxonomy will only concentrate on possibility modality.



In the MM model, ‘participant-internal modality’ (P-I) refers to “a kind of possibility or necessity internal to a participant engaged in the state of affairs” (ibid: 80); in the case of possibility, it concerns the participant’s ability or capacity (22a). Opposite to ‘participant-internal modality’ is possibility or necessity that comes from the circumstances external to the participant (if there is any) engaged in the state of affairs; this is termed ‘participant-external modality’ (P-E) in the model. Example (22b) expresses ‘participant-external possibility’. Within ‘participant-external modality’, the MM model has included a special proper subset, ‘deontic modality’, which is defined as “the enabling or compelling circumstances external to the participant as some person(s), often the speaker, and/or as some social or ethical norm(s) permitting or obliging the participant to engage in the state of affairs” (ibid: 81); in other words, deontic possibility is permission (22c). Finally, as standardly understood, ‘epistemic modality’ in the MM model refers to “a judgment of the speaker: a proposition is judged to be uncertain or probable relative to some judgment(s)” (ibid: 81). Here, uncertainty about a proposition is epistemic possibility (22d).¹⁴

- (22) a. Boris **can** get by with sleeping five hours a night. – P-I possibility
 b. To get to the station, you **can** take bus 66. – P-E possibility
 c. John **may** leave now. – deontic possibility
 d. John **may** have arrived. – epistemic possibility

Consider the Cantonese translation of the sentences in (22) below.

- (23) a. Boris **ho2ji5** mui5 maan5 fan3 m5 go3 zong1 zau6 gau3
 Boris can every night sleep five CL hour then enough

¹⁴ Similar empirical observations have been made in other theories of modality, but the classifications are done differently. Bybee, Perkins & Pagliuca (1994), for instance, have classified ‘ability’, ‘root possibility’ and ‘permission’ under agent-oriented modality. In their proposal, these three types of modality all concern the possibility for the agent to complete the action of the main verb. Crucially, ‘ability’ and ‘root possibility’ differ in the source of enabling factors for completion of the action; with the former, the enabling factors are ‘agent-internal’, while in the latter, the enabling factors can be either ‘agent-internal’ or ‘agent-external’. Bybee et al. state that permission is a special instance of root possibility where the enabling conditions only concern agent-external conditions. Translating Bybee et al.’s (1994) theory of modality to the MM model, what is described as ‘ability’ would correspond to ‘participant-internal possibility’ in the MM model, and ‘root possibility’ seems to encompass both ‘participant-internal possibility’ and ‘participant-external possibility’. ‘Permission’ in Bybee et al.’s theory would be ‘deontic possibility’ in the MM model. Palmer (2001) offers another way of classifying these modalities. First and foremost, these modalities are grouped under ‘event modality’ (vs. ‘propositional modality’) which describes the speaker’s attitude towards a future event. Within ‘event modality’, Palmer has proposed a two-way distinction between ‘deontic’ (including permissive, obligative, commissive) and ‘dynamic’ (including abilitve and volitive). The distinction between the two is again depending on the source of conditioning factors: individual-external for deontic modality and individual-internal for dynamic modality. It has been noted that the conditioning factors for deontic modality can be some authority from the external world, but most typically the conditioning factor comes from the speaker, hence the conceptualisation of ‘deontic modality’ as ‘directives’ in Searle (1983:166). In gist, the MM model has drawn from Bybee et al. (1994) the concept of different types of ‘possibility’ modality, and share with Palmer (2001) and his early works the concept of ‘deontic’ modality as a subclass of event modality, and taken from both theories the idea of agent-internal vs. agent-external modality. So, this paper takes the MM model as a key reference in view of its being a systematic blend of previous key literature.

- ‘Boris can get by with sleeping five hours a night.’ – P-I possibility
- b. *heoi3 ce1 zaam6, nei5 ho2ji5 daap3 luk6-sap6-luk6 hou6 baa1si2*
 go car station you can take six-ten-six number bus
 ‘To get to the station, you can take bus 66.’ – P-E possibility
- c. *John ho2ji5 zau2 laa3*
 John can go SFP
 ‘John may leave now.’ – deontic possibility
- d. *John ho2neng4 dou3(-zo2) laa3*
 John may arrive-PFV SFP
 ‘John may have arrived.’ – epistemic possibility

To capture the meaning of the original English sentences with canonical modals in Cantonese, we find that *ho2ji5* ‘can’ is the modal auxiliary for all non-epistemic sentences (corresponding to ‘root possibility’ in Bybee et al. (1994)), while *ho2neng4* ‘may’ is used in the epistemic modality sentence in (23d). As mentioned in section 2.1, Cheng & Sybesma (2003) has made a crucial observation that the ACQ *dak1* can co-occur with the canonical modal *ho2ji5*, and indeed *dak1* and *ho2ji5* can both stand alone to express exactly the same modality readings of ‘potential’ and ‘permission’ (see example 11). Therefore, it is reasonable to assume that *dak1* can be used in sentences (23a-c) where *ho2ji5* can occur. The result of replacing *ho2ji5* with *dak1* (in postverbal position) is presented in (24).

- (24) a. # *Boris mui5 maan5 fan3 (dak1) m5 go3 zong1 dou1 gau3*
 Boris every night sleep ACQ five CL hour also enough
 ‘Boris can get by with sleeping five hours a night.’ – P-I possibility
- b. ? *heoi3 ce1 zaam6, nei5 daap3 dak1 66 hou6 baa1si2*
 go car station you take ACQ 66 number bus
 ‘To get to the station, you can take bus 66.’ – P-E possibility
- c. *John zau2 dak1 laa3*
 John go ACQ SFP
 ‘John may leave now.’ – deontic possibility
- d. **John dou3 dak1 laa3*
 John arrive ACQ SFP
 ‘John may have arrived.’ – epistemic possibility

The sentences in (24) reveal that the pattern is less straightforward than assumed. Starting with the simplest case, in (24c), we see a paraphrase of (23c) with *dak1* placed immediately after the verb *zau2* ‘to go’ and the sentence yields a permission reading of ‘John may leave now’ or ‘John is allowed to leave now’. This confirms that the ACQ *dak1* fits in the MM model as ‘deontic possibility’. (24d) is ill-formed as expected because *dak1*, similar to *ho2ji5*, cannot express epistemic modality. The sentences in (24a) and (24b) are more complicated. (24a) is a well-formed sentence but the P-I possibility (i.e. ‘be able to’) reading is not produced by *dak1* (as reflected in its optionality) but by the adverbial *dou1 gau5* ‘also enough’. But with *dak1* present, a restrictive reading of ‘only’ is added, and the sentence would then mean ‘Boris can get by with sleeping *only* five hours a night’. In other words, *dak1* in (24a) is not expressing P-I possibility. Finally, in (24b), the sentence does mean ‘it is possible that you take bus 66’, but it is rather marginal.

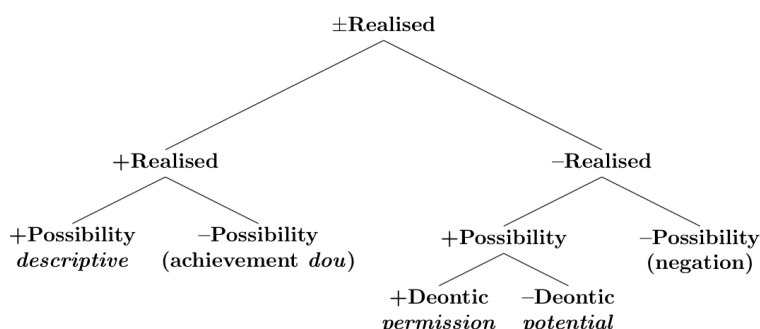
The complications observed when *dak1* appears in P-I and P-E (non-deontic) possibility sentences can be accounted for by the fact that *dak1* expresses potential modality rather than ability modality (Sybesma 2008), as discussed in section 2.1. Since the sentence in (24b) concerns an atelic event (*taking bus 66*), *dak1* cannot produce a potential reading, and the context also rules out a permission reading, so the presence of *dak1* renders the sentence marginal. In (24a), the sleeping event is quantified by in terms of duration (i.e. five hours), but does not involve any endpoint state, so the potential reading is weak. We will return to *dak1*’s restrictive reading of ‘only’ in section 4.3.1.

Therefore, the proposed structure postulates two modality features for the ACQ readings, [Possibility] and [Deontic], to capture the difference between the two modality readings. These two features on

Mod⁰ will also be significant in formalising the connectedness and difference between these two modality readings and other non-modal readings available in Cantonese postverbal ACQ-sentences. Overall, with the verb in V⁰ landed in v⁰, the entire postverbal ACQ configuration within the vP reads: the event described in the verb has the possibility (either by internal or external enabling factors) to realise the projected endpoint in XP.

Another key claim in this paper is that the different readings are generated by different parameter settings along a feature hierarchy that follows intuitively from the formal structure proposed in (20) and illustrated above. The featural parameter hierarchy is sketched below.

(25) Proposed featural parameter hierarchy



In gist, the featural parameter hierarchy is composed of the three features postulated in the syntactic structure of postverbal ACQ-sentences, namely [±Realised] on Asp⁰, and [±Possibility] and [±Deontic] on Mod⁰. All three features can be valued positively (+) or negatively (−) (i.e. binary valuation). The parameter setting procedure proceeds as follows. The procedure is again conducted from the bottom of the syntactic configuration upwards, so the first feature to be valued is the [Realised] feature on Asp⁰, that is, the first question to ask is ‘is the endpoint realised?’: if yes, the [Realised] feature will be marked as positive, otherwise, it would be negative. A [+Realised] feature then prompts the question of ‘is the realised endpoint a projected endpoint of the speaker?’ This question looks at whether speaker’s attitude towards the possibility of the future event – in this case, the endpoint of the event – is relevant (*a la* Palmer’s ‘event modality’). If the question is answered positively, then possibility modality is involved, and the [+Possibility] feature is present in Mod⁰; a negative answer to this question would mean that no speaker attitude is involved (i.e. no event modality is involved). In fact, I would argue that if no speaker attitude is involved, then no ModP will be projected and the ACQ will not be present in the structure; we will see evidence of this in section 3.3 in the comparison of *dak1* and the achievement marker *dou*.

Returning to the first question of ‘is the endpoint realised?’, here if the answer is ‘no’ and the Asp⁰ specified with a [−Realised] feature, the next question to ask is ‘is it possible to realise the endpoint of the event?’ – a positive answer will be realised as [+Possibility] on Mod⁰ and a negative answer will, I argue, signal negation meaning ‘impossibility’. Assuming that ‘it is possible to realise the endpoint of the event’ (i.e. [+Possibility]), a final question is prompted: ‘is the realisation of the endpoint of the event externally conditioned?’, if yes then a [+Deontic] feature is in place on Mod⁰, otherwise it would be marked as [−Deontic]. Based on the syntactic structure and the feature hierarchy outlined above, the rest of section 3 will detail how the different readings and ambiguities are derived within the proposed framework.

3.2 Deriving the modal reading: [−Realised] [+Possibility]

Following the featural parameter hierarchy laid out in section 3.1, the two modality readings as introduced in section 2.1 are formalised as having a [−Realised] feature on Asp⁰ and a [+Possibility] feature on Mod⁰ which the ACQ instantiates. But exactly how the two different modality readings are derived, what triggers the ambiguity between ‘potential’ and ‘permission’ readings, and thus, how to disambiguate them will be illustrated presently in this subsection.

//

3.2.1 Deriving a ‘potential’ reading

First, reconsider the two potential ACQ-sentences shown in (6), repeated below.

(6) Potential

- a. *keoi5 tai2 dak1 ming4 sau2 si1*
 3.SG read ACQ understand CL poem
 ‘S/he is able to understand the poem.’
- b. *keoi5 lo2 dak1 hei2 li1 soeng1 syul*
 3.SG take ACQ up this box book
 ‘S/he is able to lift this box of books.’ (Cheng & Sybesma 2004: 421)

The potential reading is derived as follows. The P1 preceding the ACQ (*tai2* ‘read’ in (6a) and *lo2* ‘take’ in (6b)) is base-generated in V^0 which takes a small clause complement, XP. Within the XP, the ‘subject’ NP would be *sau2 si1* ‘the poem’ in (6a) and *li1 soeng1 syul* ‘this box of books’ in (6b), and the P2 *ming4* ‘understand’ and *hei2* ‘up’ are base-generated as the predicate head of the small clause XP. The adjacency of V^0 and the NP within the small clause allows for case and theta assignment, since the NP is both the ‘subject’ of P2 in X^0 and the object of P1 in V^0 . Since P2 is the projected endpoint of the event in P1, it needs to check the [Realised] feature with Asp^0 . Here head movement is necessary from X^0 through V^0 to Asp^0 due to locality constraints, and also to check the [V] feature with V^0 . The Asp^0 is now instantiated as the P2 and valued as [–Realised] because the projected endpoint of the event has not been realised yet. The ACQ is then inserted to the structure as the Mod head with a [+Possibility] feature. Since the events described in the sentences in (6) – comprehending a poem (6a) and lifting a box of books (6b) – concern the individual’s own mental and physical capacity, a [–Deontic] feature is specified for Mod^0 . Finally, the P1 in V^0 raises cyclically to v^0 . The meaning of the clause (up to the vP) is then compositionally read as: it is possible by individual-internal capacity that P1 realises the projected endpoint P2, hence a ‘potential’ reading, unambiguously. The derivation of (6a) and (6b) are represented in (26).

- (26) a. [_v *tai* [_{Mod} *dak* [_{Asp} *ming* [_v ~~*tai*~~ [_{XP} [_{NP} *sau si*] [_x ~~*ming*~~]]]]]]]
 b. [_v *lo* [_{Mod} *dak* [_{Asp} *hei* [_v ~~*lo*~~ [_{XP} [_{NP} *li soeng syu*]] [_x ~~*hei*~~]]]]]]]
 [+Possibility] [–Realised]
 [–Deontic]

3.2.2 Deriving a ‘permission’ reading

As mentioned in section 2.1, an unambiguous permission postverbal ACQ-sentence differs from that of a potential reading in one key area, that is, the P2 is absent, as shown in (3) repeated here.

- (3) *keoi5 zaa1 dak1 li1 gaa3 cel*
 3.SG drive ACQ this CL car
 ‘S/he is allowed to drive this car.’ (Cheng & Sybesma 2004: 428)

So, in a sentence as (3), the XP at the bottom on the derivation, is an NP (in the case of (3), a DP). The XP here is both the complement of V^0 and the endpoint of the event, with the ‘endpoint’ understood as where the action described in V^0 can be performed on. The rest of the derivation is similar to that described for potential readings: an $AspP$ is projected to the left of VP with a [–Realised] feature on Asp^0 and the ACQ is inserted to Mod^0 with a [+Possibility] feature. Then what generates a permission reading is the [+Deontic] feature that the Mod^0 carries, which formalises the fact that the possibility of realising the event is conditioned by individual-external factors, particularly by the granting of permission to the individual for the performance of the event. The sentence in (3) can be formally represented as below:

- (27) [_v *zaa* [_{Mod} *dak* [_{Asp} $\emptyset$ [_v ~~*zaa*~~ [_{XP=NP} *li gaa ce*]]]]]]]

[+Possibility] [–Realised]
[+Deontic]

In fact, a [+Deontic] [+Possibility] modality is only compatible with a [–Realised] aspect, since deontic possibility concerns the granting of permission and the moment the permission is granted marks the beginning of the possibility for the individual to perform the action/event; prior to that the individual cannot perform the action/event, not due his/her internal abilities but for the lack of authority and permission. Therefore, the [±Deontic] is irrelevant if not inappropriate on the [+Realised] side of the featural parameter hierarchy in (25). Further, the fact that no P2 is required in permission readings is not surprising. Unlike the expression of potential modality, the meaning expressed in permission postverbal ACQ-sentences fits naturally in the theories of modality examined in section 3.1 as ‘permission’ (Bybee et al. 1994), ‘deontic possibility’ (van der Auwera & Plungian 1998) or ‘deontic modality’ (Palmer 2001), meaning that postverbal ACQ-sentences such as (3) are direct counterparts to the English sentence ‘S/he **can** drive this car’ with *can* being a deontic modal. The potential readings, however, constitute a special class of ability modality construction (if not a separate class of modality entirely) which concerns not the individual’s ability in performing the action per se, but whether the action performed can reach a certain projected endpoint. Therefore, the value on the [Deontic] feature makes a primary distinction in terms of the semantics of the postverbal ACQ-sentences (potential vs. permission), and the semantic distinction in turn produces different structural requirements on what the endpoint XP can be realised as.

3.2.3 Why ambiguous?

Indeed, ambiguity between the potential and permission readings arises when a complex P2 (a.k.a. ‘plus-type’ resultative predicate in Cheng & Sybesma 2004) is present, particularly in the absence of an NP in the small clause.

- (28) a. *keoi5 haang4 **dak1** jap6 heoi3*
3.SG walk ACQ in go
(i) ‘S/he is allowed to walk in there.’
(ii) ‘S/he is able to walk in there.’ (Cheng & Sybesma 2004: 421)
- b. *keoi5 zaa1 **dak1** li1 gaa3 ce1 jap6 lei4*
3.SG drive ACQ this CL car in come
(i) ‘S/he is allowed to drive this car in here.’
(ii) ? ‘S/he is able to drive this car in here.’

Following Cheng & Sybesma (2004), I assume that a complex P2, such as *jap6 heoi3* ‘in go’, *ceot1 lei4* ‘out come’, is base-generated as the predicate head of the small clause XP, but need not raise to Asp^0 for feature checking possibly due to the presence of the verbal element of *go/come* which already satisfies the [V] and [Asp] feature checking requirement of the directional element that it compounds with. The formal structures of the sentences in (28) are presented in (29).

- (29) a. [_v *haang* [_{Mod} ***dak*** [_{Asp} $\emptyset$ [_v ~~*haang*~~ [_{XP} [_{NP} (*pro*)] *jap heoi*]]]]]]
b. [_v *zaa* [_{Mod} ***dak*** [_{Asp} $\emptyset$ [_v ~~*zaa*~~ [_{XP} [_{NP} *li gaa ce*] *jap lei*]]]]]]
[+Possibility] [–Realised]
[±Deontic]

The difference between simple and complex P2 creates an interpretational consequence. I suggest that the presence of a P2 makes a potential reading possible. Then, since a simple P2 (e.g. *hei2* ‘up’, *ceot1* ‘out’, *ming4* ‘understand’) obligatorily raises to Asp^0 , though the feature on Asp^0 is valued as [–Realised], it also allows for a [+Realised] implicature. In contrast, because a complex P2 does not raise to Asp^0 the null- Asp head specified as [–Realised] leaves no room for alternative interpretation, so a strictly [–Realised] Asp^0 makes way for a [±Deontic] feature on Mod^0 , hence the ambiguity between ‘potential’ and ‘permission’ readings. This analysis is indeed borne out in the judgments made by the native Cantonese speakers. While interpreting sentences with simple P2 as in (6), the

implicature that the projected endpoint has already been reached (i.e. [+Realised]) is highly salient. But such a [+Realised] implicature is never found with complex P2 sentences like those in (28). Such an observation bears significant implications on our analysis of the relation between descriptive and potential readings as well, as will be laid out in section 3.3.1.

3.2.4 Modal concord

A final issue to be addressed regarding modality readings is the co-occurrence of the postverbal ACQ with canonical modals like *ho2ji5* ‘can’, as exemplified in (30) and (31).

- (30) a. *keoi5 ho2ji5 lo2 hei2 li1 soengl syul*
 3.SG can take up this box book
 b. *keoi5 lo2 dak1 hei2 li1 soengl syul*
 3.SG take ACQ up this box book
 c. *keoi5 ho2ji5 lo2 dak1 hei2 li1 soengl syul*
 3.SG can take ACQ up this box book
 All: ‘S/he can (=is able to) lift this box of books.’ (Cheng & Sybesma 2003)

- (31) a. *keoi5 zaa1 dak1 li1 gaa3 cel*
 3.SG drive ACQ this CL car
 b. *keoi5 ho2ji5 zaa1 li1 gaa3 cel*
 3.SG can drive this CL car
 c. *keoi5 ho2ji5 zaa1 dak1 li1 gaa3 cel*
 3.SG can drive ACQ this CL car
 All: ‘S/he can (=is allowed to) drive this car.’

In Cheng & Sybesma's (2004) configuration, canonical modals are housed in the preverbal Mod1⁰ as with the permission ACQ, since their distinction between permission and potential ACQ readings depends on the postulation of two modality projections, preverbal and postverbal respectively, it is unclear how sentences like (31c) can be derived without having *ho2ji5* and *dak1* competing for the same structural slot. The dangling question can now be resolved with the proposed analysis. I suggest that *ho2ji5* is base-generated in the T-domain as standardly assumed for modals, while *dak1* as an exceptional modal element is always positioned in the Mod⁰ within the vP. Examples (30c) and (31c) are formally represented below:

- (32) [_{TP} *keoi* [_{Mod} *hoji* [_v *lo* [_{Mod} *dak* [_{Asp} *hei* [_v ~~to~~ [_{XP} [_{NP} *li soeng syu*] ~~hei~~]]]]]]]
 [+Possibility] [+Possibility] [–Realised]
 [–Deontic] [–Deontic]
- (33) [_{TP} *keoi* [_{Mod} *hoji* [_v *zaa* [_{Mod} *dak* [_{Asp} $\emptyset$ [_v ~~zaa~~ [_{XP=NP} *li gaa ce*]]]]]]]
 [+Possibility] [+Possibility] [–Realised]
 [+Deontic] [+Deontic]

I then argue for a modal concord between *ho2ji5* ‘can’ and *dak1*, based on the three defining properties stated in Zeijlstra (2007) (see also Geurts & Huitink 2006), namely (i) modal concord must be established between a modal auxiliary and another modal element; (ii) the two modal elements in concord must match in modal type (epistemic vs. deontic) and quantificational force (existential vs. universal); and (iii) modal concord is not obligatory and creates an emphatic effect when present. The ACQ *dak1* is an exceptional modal element that comes in concord with the canonical modal auxiliary *ho2ji5* when they co-occur in the structure. Both of them allow a potential (dynamic root modality or participant-internal possibility) reading (see example (30)) and a permission (deontic root modality or deontic possibility) reading (see example (31)), which shows that they belong to the same modal

type(s) and the same existential quantificational force (similar to English *may* and *can*).¹⁵ Their concord is not obligatory as *dak1* and *ho2ji5* can both stand alone in expression of a modal interpretation (as seen in examples 30-31), their co-occurrence only reinforces the modality meaning.

This analysis is, in fact, more in line with the ‘forked modality’ proposal in Cheng & Sybesma (2003) where the ACQ in both Mandarin and Cantonese is a defective modal, and the two modal parts (*ho2ji5* and *dak1*) yield one modality operator at the LF interface. As a possible LF operation, Cheng & Sybesma (2003) analysed the relationship between *ho2ji5* and *dak1* in terms of a ‘reversed’ Split Sign Hypothesis. The Split Sign Hypothesis considers the interaction between modality and negation in English (e.g. *can’t*) as having a ‘merged’ PF sign but not necessarily a ‘merged’ LF element (Cormack & Smith 1999, 2002). Cheng and Sybesma have, thus, suggested that the situation in (30-31) is the reverse, that is, “the PF sign is split but the LF part is joined” (2003: 21). Technically, in their analysis, *dak1* is considered a defective modal and its presence in the postverbal Mod2⁰ necessitates the projection of the higher preverbal Mod1P even though the higher modal may not be pronounced (as seen in the optionality of *ho2ji5* in (30b) and (31b)). I would, however, refrain from assuming a silent Mod1⁰ for the licensing of *dak1* in the proposed analysis, but argues that *dak1* itself comes with the modality features. In fact, the ‘defectiveness’ of *dak1* should be understood as an exceptionality. Such exceptionality lies in the fact that *dak1* always concerns the possibility of reaching a project endpoint in the event of P1, which can be an explanation for its appearance within the vP

3.3 Deriving the ‘descriptive’ reading: [+Realised] [+Possibility]

On the [+Realised] side of the featural parameter hierarchy, the ACQ *dak1* instantiates a [+Possibility] reading which is commonly characterised as ‘descriptive’. The general observation in the literature is that a ‘descriptive’ postverbal ACQ-sentence has an AP as P2. Sentences such as (4) repeated below are often cited as a typical case in point.

- (4) *keoi5 paau2 dak1 hou2 faai3*
 3.SG run ACQ very fast
 ‘S/he runs very fast.’

The derivation of (4) in the proposed formal analysis is as follows. The AP *hou2 faai3* ‘very fast’ is base-generated as the predicate of the XP, and it carries a [–Dynamic] feature indicating that it is stative and describing a property rather than an event (*a la* Tsai 2018). Within the XP, since the P1 *paau2* ‘to run’ is an unergative verb, no overt object is required, so the externalised structure shows the ACQ immediately followed by the AP. More discussion will be done in section 3.3.2 on what exactly the AP describes and on the issue of object realisation in descriptive readings. The P1, as would be familiar by now, is introduced in the V⁰ that scopes over the XP. The functional layers are then projected with Asp⁰ specified as [–Dynamic] as well as [+Realised]. The [–Dynamic] aspectual feature agrees with that on AP, producing the semantics that the endpoint *state* is realised. The ACQ is then inserted to Mod⁰ specified as [+Possibility]. This time the [±Deontic] feature is irrelevant, because [+Deontic] modality is incompatible with [+Realised] aspect as explicated in section 3.2.2.

¹⁵ It is worth noting that though *dak1* can co-occur with other modality elements (e.g. *jat1ding6* ‘must’), there may not be a modal concord since the two elements do not match in quantification force (e.g. though *jat1ding6* and *dak1* can both express possibility, *jat1ding6* ‘must’ carries a universal quantification force while *dak1* carries an existential quantification force, so no modal concord can be established), or if the modal element that co-occurs with *dak1* is not a modal auxiliary (e.g. *jat1ding6* is a modal adverb ((Li & Thompson 1981; Li 2004; Matthews & Yip 2011)). In cases where *dak1* co-occurs with another modal element but no modal concord can be established, then the sentence has two modalities expressed as illustrated by Zeijlstra’s (2007: 323) English examples below:

- (i) It **must necessarily** be the case. (epistemic & universal quantification force → modal concord)
- (ii) It **may necessarily** be the case. (epistemic BUT existential vs. universal quantification force → * modal concord)

(34) *ngo5 paau2 dak1 |dou hou2 faai3*
 I run ACQ SUCC very fast
 'I run/ran very fast.'

The contrast between (34) and (35) lies in whether the P2 describes a *projected* endpoint of the event. More precisely, the P2 in (34) can describe an endpoint that the speaker has deemed possible, so the sentences can be understood as ‘P1 has the projected possibility P2 achieved’. But such a speaker attitude is not relevant to the P2 in (35), and the P2 simply describes the result that has happened to be realised. Note that in (34), the P2 can be interpreted as either the projected endpoint of P1 or not, so both the ACQ and the achievement marker *dou* can follow P1 to yield the two readings respectively. Crucially, the distinction here is not one between positive result and negative result, but whether the speaker has any judgment towards the possible realisation of a certain endpoint; example (36) illustrates the point. Though the P2 *hou2 wat6dat6* ‘very ugly’ has a negative meaning, (36) is still grammatical with the ACO.

Precisely, the subtle but significant contrast between *dakl* and *dou* is captured by the fact that *dakl* instantiates [+Possibility] but *dou* does not – I would argue that *dou* represents [+Realised] [–Possibility] in the feature hierarchy in (25). When an endpoint is realised, *dakl* indicates the presence of speaker attitude towards the realisation of such an endpoint. Therefore, the syntactic derivation of example (4) is as represented in (37), and the structure reads as: the event P1 has realised the projected endpoint state P2, hence a ‘descriptive’ reading.

3.3.1 Descriptive-potential ambiguity is achievement-ability implicature

Interestingly, the same ambiguity arises with the so-called ‘descriptive’ postverbal ACQ-sentences where the endpoint XP contains an AP. As mentioned in section 2.2, these sentences often activate two interpretations: a stronger (basically unanimous) ‘descriptive’ reading of ‘P1 has reached the state in the AP’, and a secondary ‘potential’ reading of ‘P1 is able to reach the state in the AP’. The pattern is presented in examples (19) and (38-39).

- (19) *keoi5 paau2 dak1 hou2 faai3*
 3.SG run ACQ very fast
 (i) ‘S/he runs very fast.’ – descriptive
 (ii) ‘S/he is able to run very fast.’ – potential
- (38) *zek3 maa5lau1 tiu3 dak1 hou2 gou1*
 CL monkey jump ACQ very high
 (i) ‘The monkey jumps very high.’ – descriptive
 (ii) ‘The monkey is able to jump very high.’ – potential
- (39) *maa4maa1sai2 dak1 di1 saam1 hou2 gon1zeng6*
 mum wash ACQ CL.PL clothes very clean
 (i) ‘Mum washes the clothes very clean.’ – descriptive
 (ii) ‘Mum is able to wash the clothes very clean.’ – potential

There are several ways of disambiguating the two readings mentioned in the literature. First, Tang (2002: 302) has suggested that the presence and absence of the degree marker *hou2* ‘very’ may determine the reading of the sentence: with a degree marker, the sentence is unambiguously ‘descriptive’, but once the degree marker is removed, the ‘potential’ reading is available. The data collected in this study, however, contradicted this hypothesis in that with or without the degree marker, sentences such as (19, 38-39) above are ambiguous between a descriptive and potential reading. Furthermore, it has been found that even sentences characterised as ‘descriptive’ stand the FCI-licensing test (Cheng & Sybesma 2003) as illustrated in (40). The pattern reveals that postverbal ACQ-sentences with an AP as P2 can still be interpreted as non-veridical (in this case, modal).¹⁶

- (40) *bin1-go3 jan5 dou1 paau2 dak1 hou2 faai3*
 which-CL person all run ACQ very fast
 ‘Anyone can run very fast.’

Second, Hu (2010) reported a ‘positive meaning constraint’ that may suppress the potential reading in Mandarin postverbal ACQ-sentences. Specifically, when the AP involved in a postverbal ACQ-sentence carries negative meaning (e.g. Mandarin *móhú* ‘unclear’ vs. *qīngchǔ* ‘clear’) (see also Liu 1980; Zhang 1999), the potential reading is lost. This observation may in fact be partial. Consider the example below:

- (41) *keoi5 faa3 zong1 faa3 dak1 hou2 hong2bou3*
 3.SG put make.up put ACQ very scary
 (i) ‘S/he puts on very scary makeup.’
 (ii) ‘S/he is able to put on very scary makeup.’

Hu’s analysis predicts that the sentence in (41) with a negatively connoted AP *hong2bou3* ‘scary’ would rule out the potential reading. However, given the right context, the potential reading can be fully acceptable. For instance, the potential reading in (41) is acceptable under the context that the speaker is discussing where to get the most scary makeup for a Halloween Party, and the subject *keoi5* here is famous for doing that. In other words, the descriptive reading is always available whenever a postverbal ACQ-sentence contains an AP, and so long as that AP is the projected endpoint to be achieved, the potential reading is also active, whether the AP is positively or negatively connoted.

¹⁶ Participants consulted in this study find the sentence in (40) marginally acceptable, and the acceptability improved when the degree marker is absent. This can be an indicator that the presence of a degree marker creates a preference for the descriptive reading, making the non-veridical (modal) reading in (40) slightly marginal. But the licensing of FCI-items aside, as shown in (19) and (38-39), postverbal ACQ-sentences with or without a degree marker can trigger both descriptive and potential readings when the P2 is an AP.

Therefore, a more reliable way of disambiguating between a descriptive and potential reading should be the distribution of sentence-final particles.¹⁷ Precisely, for the same postverbal ACQ-sentence involving an AP as P2, the presence of the sentence-final particle *aa3* will eliminate the potential reading, while the presence of *gaa3* will suppress the descriptive reading. The two contexts and sentences in (42) and (43) illustrate the pattern.

(42) Context: On Sports Day, Mary is cheering for Karen who is running a 100-metre race. Watching

Karen runs towards the finish line at great speed, Mary said:

*keoi5 paau2 dak1 hou2 faai3 {aa3 | *gaa3}*

3.SG run ACQ very fast SFP SFP

(i) ‘S/he runs very fast.’ – descriptive

(ii) #‘S/he is able to run very fast.’ – potential

(43) Context: Karen left a party early to catch the last bus home. Later, Jim discusses with Mary if Karen should be able to catch the bus. Mary responded:

*keoi5 paau2 dak1 hou2 faai3 {*aa3 | gaa3}*

3.SG run ACQ very fast SFP SFP

(i) #‘S/he runs very fast.’ – descriptive

(ii) ‘S/he is able to run very fast.’ – potential

The context in (42) depicts a currently occurring situation of which the sentence uttered by Mary describes, in other words, only a descriptive reading is appropriate. Indeed, in such context, only *gaa3* can appear. The contrary is the case in (43) where Mary is not describing Karen’s current running action – Karen has already left the party and Mary is not witnessing her running to the bus station – but Karen’s potential for running fast, possibly based on previous experience. In this context, only the potential reading is appropriate, and the fact that only *aa3* is compatible with the postverbal ACQ-sentence in (43) confirms the pattern.

To account for this active ambiguity between descriptive and potential reading as well as the consistent preference in interpretation, I argue that ‘having done x implies the ability to do x’. In other words, the descriptive reading implies the potential reading in such ACQ sentences and the implied reading should naturally be the weaker reading. The analysis concurs with Bybee et al. (1994) in that one of most common etymological sources of ability modality expressions comes from expressions of anterior or perfective (e.g. Lao *dai* ‘can, did, already’ – which is a cognate of *dak1* in Cantonese and *de* in Mandarin, Nung *ngut* for ability modality and anterior, and Worora *kole* for ability modality and ‘finished’). Bybee et al. underlined the common sense of successful attainment of a goal in many of the lexical sources of ability modality, and the connection between expressions of anterior or perfective and ability modality could be that “successful completion implies and in fact demonstrates ability” (1994: 191).

Because of the close and natural connection between achievement and ability, the two-way implicature between [–Realised] [+Possibility] and [+Realised] [+Possibility] readings is robustly attested: when the P2 is a simple resultative predicate, the potential ([–Realised]) reading is primary but a resultative, i.e. [+Realised], reading is implied; when the P2 is an AP, the descriptive ([+Realised]) reading is primary and a potential ([–Realised]) reading is implied.

3.3.2 What is the AP describing?

3.3.2.1 A discourse salient object

¹⁷ I thank an anonymous reviewer for pointing me to this clear empirical indicator.

The general observation in the literature is that even when the P1 involved is transitive, the object can be (and are mostly) left unspecified (44a), and when the object is specified, there are two possibilities: (i) the object appears to the left of P1 by the process of ‘verb-copying’ (a.k.a. P1-copying in Liu 2004) (44b), or (ii) the object appears in a post-ACQ position preceding the AP (44c).

- (44) a. *keoi5 zaa1 dak1 hou2 ding6*
 3.SG drive ACQ very steady
 ‘S/he drives very steadily.’
 b. *keoi5 [zaa1 ce1] zaa1 dak1 hou2 ding6*
 3.SG drive car drive ACQ very steady
 ‘S/he drives (the car) very steadily.’
 c. *keoi5 zaa1 dak1 [gaa3 ce1] hou2 ding6*
 3.SG drive ACQ CL car very steady
 ‘S/he drives the car very steadily.’

Based on sentences such as (44a) and its unergative counterpart in (17) with *paau2* ‘to run’, it has been argued in previous literature that the AP actually describes the event in P1, and for that to be structurally possible, the ACQ has been argued as a nominaliser that turns the [P1-ACQ] complex into a nominalised event argument of the AP (Liu 2004; Tsai 2018) (see also the discussion in section 2.2). Nevertheless, within the formal framework proposed in section 3.1, an alternative analysis of descriptive postverbal-ACQ sentences is possible which does not resort to treating the ACQ as a nominaliser. Concretely, I put forward the following claim: the AP in postverbal ACQ-sentences is always modifying a discourse salient object, whether it is covertly or overtly realised in the XP.

We will first examine cases where no overt object is specified as illustrated in (45).

- (45) a. *keoi5 se2 dak1 hou2 hou2*
 3.SG write ACQ very good
 ‘S/he writes very well.’
 b. *keoi5 se2 dak1 hou2 hoilsam1*
 3.SG write ACQ very happy
 ‘S/he writes very happily.’
 c. *keoi5 siu3 dak1 hou2 leng3*
 3.SG smile ACQ very beautiful
 ‘S/he smiles beautifully.’
 d. *keoi5 saang1 dak1 hou2 goul*
 3.SG grow ACQ very tall
 ‘S/he (or it) is very tall.’

In all four sentences, the AP appears to modify the event in P1 (e.g. the writing event is done in a very happy manner, the smiling is done very beautifully). However, on close examination of the events involved, what the AP is modifying is not the event in P1 but the participant or product of the event in P1. For instance, in (45a), it is not the writing action (e.g. the posture as s/he writes) that is *hou2* ‘good’, but what is produced in the writing action (e.g. a play, a poem) that is *hou2* ‘good’; this is a case of ‘object’-reference where the AP modifies the object (theme) ‘understood’ in the event in P1. The sentence (45b) is a case of ‘subject’-reference where it is not the writing action itself that is *hoilsam1* ‘happy’, but the one doing the writing action that is happy, i.e. the subject (agent) *keoi5*.

Examples (45c) and (45d) with intransitive P1 are more complicated. The P1 *siu3* ‘smile/laugh’ in (45c) is an unergative verb so there is normally no overt object. Indeed, Liu (2004: 185) has clearly stated that the reason for him to refrain from suggesting that there is a “covert general object” to be modified by the AP is precisely because it seems impossible for unergative verbs (e.g. to jump, to smile) to take any object – hence his proposal that the ACQ is a nominaliser in descriptive ACQ-structures. However, similar to (45a) and (45b), it is not the smiling action that is *leng3* ‘beautiful’, but the smile or the face wearing that smile ‘produced’ in the smiling event that is beautiful. Likewise,

in (45d), which is an idiomatic expression describing the body figure of a person. In (45d), *gou1* ‘tall’ does not describe the event of being born in P1 (*saang1* ‘born, grow’), but the product of the event of birth or growth – the physical body of the person being described or the product of growth (e.g. a plant that has grown to be very tall) – hence the idiomatic reading, when the subject is human, of ‘s/he is tall’ rather than ‘s/he is being born in a very tall manner’ which is anomalous.

Therefore, I propose that for descriptive ACQ-sentences with intransitive P1, the entity that the AP modifies is a discourse salient object, e.g. a smile produced by smiling, a person’s physical body produced by being born. Precisely, with intransitive P1 as in (45c), the interpretation should be read as ‘s/he smiled a beautiful smile’. The same analysis applies to other intransitive predicates, such as jump a jump, run a run (cf. the VO compounds *paau2-pou6* ‘run-step = run’ and *haang4-lou6* ‘walk-road = walk’ in Cantonese). Formally, I suggest that in postverbal ACQ-sentences with an AP as P2, the XP is still in a subject-predicate small clause structure, where the AP is the predicate. Importantly, when P1 is an intransitive verb as exemplified in (19, 39, 45c, 45d), or when the P1 is a transitive verb but the object is not overtly realised as in (44a, 45a, 45b), the AP modifies a covert *pro* (the subject of the XP small clause) which is then interpreted as the discourse salient object (e.g. the smile produced in the smiling event).

3.3.2.2 The definiteness constraint

Secondly, the proposal that the AP modifies the discourse salient object applies equally well on sentences with a covert object and those with an overt object as in (46).

- (46) a. *keoi5 zaa1 dak1 [*(gaa3) ce1] hou2 ding6*
 3.SG drive ACQ CL car very steady
 ‘S/he drives the car very steadily.’
 b. *keoi5 zaa1 [(gaa3) ce1] zaa1 dak1 hou2 ding6*
 3.SG drive CL car drive ACQ very steady
 ‘S/he drives the car very steadily.’ (adapted from Matthews & Yip 2011: 204)

Example (46) illustrates the two strategies to realise the object of a transitive P1 overtly: (46a) has the object following the ACQ while in the (46b) the object is introduced by the verb-copying strategy and appears before the ACQ. The choice of strategy creates a clear difference in the definiteness of the object. In the verb-copying strategy, the object can be a bare noun or a classifier phrase; but without verb-copying, the object must not be a bare noun. In Cantonese, bare common nouns are generic indefinites and classifier phrases are known to be definite (Cheng & Sybesma 1999). In other words, without verb-copying, the overtly realised object must be definite, but such a definiteness requirement is lifted with the presence of verb-copying. I thus propose that in non-verb-copying sentences such (46a), the object is base-generated in the XP to be the subject of the small clause – it is also the object of P1 if P1 is transitive – modified by the AP. The definiteness requirement then follows from the fact that the subject of the small clause has to be discourse salient. The pattern in (46) shows that the discourse saliency applies to both overtly realised objects in non-verb-copying structures as well as to covert objects (particularly when the P1 is intransitive).

Why is the definiteness constraint removed in verb-copying sentences like (46b)? I follow Liu (2004) in analysing that, in cases of verb-copying, the VO combination is in Spec-TopP (with the subject in a higher TopP), which is in line with the general view that the VO constituent preceding P1 is an adjunct (Huang 1982; 1992; Liu 2004; Cheng 2007; Tsai 2018). Technically, I adopt Cheng’s (2007) approach in explaining the mechanism behind verb-copying in terms of Sideward Movement (see Nunes 2001, 2004). Sideward Movement is an operation based on the intuition that Move can be decomposed into two parts, copy and merge. It then follows that the two parts of Move can be done separately, which enables the copy to merge either with the structure where it is copied from or with some other syntactic elements. Assuming the framework of movement and multiple copies in Nunes (2004), the verb copying process can be analysed within the proposed formal framework as follows. In sentences like (46b), the P1 is first copied before raising from V^0 to v^0 . Instead of merging back to

the original structure, the lower copy of P1 merges ‘sidewardly’ with the object NP (e.g. *ce1* ‘car’ or *gaa3 ce1* ‘the car’). The V-O combination then forms a constituent separately and projects a VP. This VP then subsequently merge ‘sidewardly’ back to the original structure in spec-TopP to the right of the subject but preceding the entire vP where the postverbal ACQ-sentence with the raised copy of P1 in v^0 . Since the copy of P1 in v^0 is spelt out with the rest of the vP as a lower phase, the structure treats the higher copy (P1) and the lower copy (P1-ACQ-XP) as distinct elements, hence both copies of P1 can be phonologically realised without violating the requirement of the Linear Correspondence Axiom (LCA) for Chain reduction – the deletion of constituents of a non-trivial chain in order to produce a linearizable sequence (Kayne 1994).

3.3.2.3 Manner vs. result modification

Finally, the ‘discourse salient object’ proposal also addresses the issue of how to determine whether the AP is subject-referring or object-referring. In doing so, we revisit the issue concerning the difference between preverbal APs and post-ACQ APs and suggest that the two issues are both tied to a fine-grained distinction (manner modification vs. result modification) within the class of AP.

Section 2.2 has introduced the empirical observation that not all APs appearing in postverbal ACQ-sentences can appear as preverbal modifiers. The finding evidently shows that the difference between preverbal AP modification and postverbal ACQ modification is not simply a matter of semantics: a preverbal adverbial structure refers to an action, while the descriptive ACQ-structure carries a stative, habitual or generic reading over the ‘manner’ of the event described in P1, treating it as ‘a state of affairs’ (Li & Thompson 1981; Ross 1984; Huang 1988; Ernst 1996; Tsai 2018). I suggest that there are two types of AP modifiers: manner modifiers and result modifiers, only the former can appear preverbally while both can appear in postverbal ACQ-sentences. Consider examples (47) and (48).

- (47) a. *keoi5 [hou2 daai6seng1]-gam2 coeng3*
 3.SG very loudly-ADV sing
 ‘S/he sings very loudly.’ (=sings in a very loud manner)
 b. **keoi5 [hou2 hou2teng1]-gam2 coeng3* (=18b)
 3.SG very good.to.hear-ADV sing
 intended: ‘S/he sings very well.’ (=sings in a very pleasant manner)
 c. *keoi5 [hou2 jing6zan1]-gam2 zyu2*
 3.SG very seriously-ADV cook
 ‘S/he cooks very seriously.’ (=cooks in a very serious manner)
 d. **keoi5 [hou2 jap6mei6]-gam2 zyu2*
 3.SG very with.flavour-ADV cook
 intended: ‘S/he cooks very flavourly.’ (=cooks in a very flavourly manner)

- (48) a. *keoi5 coeng3 dak1 [hou2 daai6seng1]*
 3.SG sing ACQ very loud
 ‘S/he sings very loudly.’
 b. *keoi5 coeng3 dak1 [hou2 hou2teng1]* (=18a)
 3.SG sing ACQ very good.to.hear
 ‘S/he sings very well.’
 c. *keoi5 zyu2 dak1 [hou2 jing6zan1]*
 3.SG cook ACQ very serious
 ‘S/he cooks very seriously.’
 d. *keoi5 zyu2 dak1 [hou2 jap6mei6]*
 3.SG cook ACQ very with.flavour
 ‘S/he cooks very flavourly.’ (=cooks the food to be flavourly)

Examples (47) and (48) concerns four APs (i.e. *loudly*, *well*, *seriously*, and *flavourly*). In (47) these four APs appeared preverbally and marked by the modification marker *-gam*; in (48) the APs appeared in postverbal ACQ-sentences following the ACQ *dak1*. The sentences in (47) reveal a clear

contrast in well-formedness depending on the meaning of the AP. Specifically, (47a) and (47c) are fully grammatical with the APs *hou2 daai6seng1* ‘very loudly’ and *hou2 jing6zan1* ‘very seriously’, both describing how the events in P1 – *coeng3* ‘to sing’ and *zyu2* ‘to cook’ – are carried out, that is, ‘to sing in a very loud manner’ and ‘to cook in a very serious manner’. Sentences (47b) and (47d), in contrast, are regarded as ill-formed by Cantonese speakers. The APs concerned – *hou2 hou2teng1* ‘very pleasant to hear’ and *hou2 jap6mei6* ‘very flavourly’ – are unacceptable when they appear before the P1. All four APs, however, are fully acceptable when they appear in a postverbal ACQ-sentence as shown in (48). The data here can be accounted for by identifying APs such as *hou2 daai6seng1* ‘very loudly’ and *hou2 jing6zan1* ‘very seriously’ in sentences (a) and (c) as ‘manner modifiers’, while APs like *hou2 hou2teng1* ‘very pleasant to hear’ and *hou2 jap6mei6* ‘very flavourly’ as in sentences (b) and (d) as ‘result modifiers’. Then the contrast in examples (47) and (48) can be captured in the following generalisation: only manner modifiers can appear as preverbal modification, while postverbal ACQ-sentences put no restriction on the type of modifier (i.e. both manner and result modifiers are acceptable).

The reason behind the generalisation can be seen in the contrast between manner and result modifiers presented in (49). Here we take the same four APs and place them in a noun phrase as inner modifiers. The findings show that only ‘result modifiers’ can perform nominal modification without semantic anomaly as in (49b) and (49d), while those which have been regarded as ‘manner modifiers’ (i.e. *hou2 daai6seng1* ‘very loud’ and *hou2 jing6zan1* ‘very serious’) would create a semantically anomalous sentence when used as a nominal modifier as shown in (49a) and (49c).

- (49) a. # *keoi5 coeng3-gan2 sau2 [hou2 daai6seng1]-ge3 go1*
 3.SG sing-PROG CL very loud-GEN song
 ‘S/he is singing a very loud song.’
 b. *keoi5 coeng3-gan2 sau2 [hou2 hou2teng1]-ge3 go1*
 3.SG sing-PROG CL very pleasant.tohear-GEN song
 ‘S/he is singing a very nice song.’
 c. # *keoi5 zyu2-gan2 zek3 [hou2 jing6zan1]-ge3 gail*
 3.SG cook-PROG CL very serious-GEN chicken
 ‘S/he is cooking a very serious chicken.’
 d. *keoi5 zyu2-gan2 zek3 [hou2 jap6mei6]-ge3 gail*
 3.SG cook-PROG CL very with.flavour-GEN chicken
 ‘S/he is cooking a very flavoured chicken.’

I, therefore, account for the generalisation as follows. In preverbal modification, the AP modifies the event, whereas in postverbal-ACQ sentences, the AP modifies the participant of the event (either the agent or the theme); in other words, the APs in preverbal modification are adverbial, while the APs in postverbal ACQ-sentences are adjectival. Since both manner and result modifiers can appear in postverbal ACQ-sentences, I further suggest that in postverbal ACQ-sentences with manner-modifying APs, it is always the agent of P1 being modified, and with result-modifying APs, it is always the theme that is modified. The analysis, therefore, provides a clear criterion for determining whether the AP is subject or object-referring when the object is covert. It also presents a concrete explanation for why preverbal modifications gives a [+dynamic] interpretation and the AP in postverbal ACQ-sentences has a [–dynamic] interpretation.

In sum, the merit of the proposed analysis is that it provides a unified structural analysis of postverbal ACQ-sentences for both modal and non-modal readings. The unification is well-supported by empirical data. Firstly, the Cantonese ACQ in descriptive postverbal ACQ-sentences still instantiates a [+Possibility] Mod⁰, which captures the noted contrast between *dak1* and the achievement marker *dou*; the former concerns a realisation of a projected endpoint with speaker’s attitude involved, while the latter only concerns a realised endpoint with no speaker attitude involved. Secondly, the formal structure of a postverbal ACQ-sentence with a descriptive reading and that with a potential reading should not be fundamentally different, as has been robustly attested that the two readings closely connected and often simultaneously available in the same sentence.

3.3.3 Why is ACQ obligatory?

There is one final issue to address regarding ‘descriptive’ postverbal ACQ-sentences, which is why is the ACQ obligatory in sentences with this reading but not in others (e.g. potential or permission). In fact, the question is best rephrased as why is the ACQ obligatory when the postverbal ACQ-sentence has an AP as P2. The explanation goes back to the intrinsic nature of the ACQ being a modality element that describes the possibility of an event reaching its projected endpoint. In the proposed formal analysis, the event is the P1 base-generated in V^0 (which eventually lands in v^0) and the projected endpoint is the XP (which is essentially a small clause). What makes the ACQ obligatory when an AP appears as the predicate of XP is that the AP is not c-selected by P1, so its presence is licensed only because the endpoint XP is c-selected by the ACQ. Without ACQ, there will not be an XP denoting the endpoint of P1 and there will, therefore, not be any small clause to house the AP or the participant it modifies (either covertly or overtly realised). Therefore, where the ACQ is absent, the AP cannot appear postverbally.

The same c-selection requirement also explains why the absence of ACQ in potential and permission readings would not create a grammaticality issue.

- (19) a. **keoi5 coeng3 hou2 hou2teng1*
 3.SG sing very good.to.hear
 intended: ‘s/he sings very well.’
 b. *keoi5 lo2 hei2 li1 soeng1 syul*
 3.SG take up this box book
 (i) ‘S/he takes up this box of books.’
 (ii) #‘S/he is able to take up this box of books.’
 c. *keoi5 zaa1 li1 gaa3 cel*
 3.SG drive this CL car
 (i) ‘S/he drives this car.’
 (ii) # ‘S/he is allowed to drive this car.’

As shown in example (19) repeated above, without *dak1* the ‘potential’ reading in (19b) is lost. In the absence of *dak1* P1 and P2 are adjacent to each other, and I suggest that since the object *this box of books* is c-selected by P1 and the P2 can still be hosted in Asp^0 , the reading is changed from a ‘potential’ one ([+Possibility] [–Realised]) to a resultative one ([+Realised]) without creating any ungrammaticality. Similarly in (19c), the object *this car* is c-selected by the verb *zaa1* ‘to drive’, so the absence of *dak1* removes the deontic possibility semantics and the sentence can still be well-formed as a simple declarative asserting that ‘s/he drives this car’.

4 Further application of the proposed analysis

4.1 Across-the-board aspectual incompatibility in postverbal ACQ-sentences

It has been noted in previous studies on Mandarin ACQ-sentences that ACQ-sentences are incompatible with aspect-marking across the board (Liu 2004; Tsai 2018). The same incompatibility has been found in Cantonese ACQ-sentences, as illustrated in (50).

- (50) a. *keoi5* [**hai2dou6*] *zaa1* ***dak1*** [**zo2* |**gwo3* |**gan2* |**zyu6* |**dou*]
 3.SG be.loc drive ACQ PFV EXP PROG CONT SUCC
 li1 gaa3 cel
 this CL car
 Original meaning: ‘S/he can (=is allowed to) drive this car.’
 b. *keoi5* [**hai2dou6*] *lo2* ***dak1*** [**zo2* |**gwo3* |**gan2* |**zyu6* |**dou*]
 3.SG be.loc take ACQ PFV EXP PROG CONT SUCC
 hei2 li1 soeng1 syul

- up this box book
 Original meaning: ‘S/he can (=is able to) lift this box of books’
 c. *keoi5* [**hai2dou6*] *paau2* ***dak1*** [**zo2* |**gwo3* |**gan2* |**zyu6* |**dou*]
 3.SG be.loc run ACQ PFV EXP PROG CONT SUCC
hou2 faai3
 very fast
 Original meaning: ‘S/he can (=is able to) lift this box of books’

Liu (2004) and Tsai (2018) have suggested that the incompatibility follows from the analysis of Mandarin *de* in ‘descriptive’ ACQ-sentences as a nominaliser which adjoins to P1 and converts *V-de* as a nominalised event argument predicated over by the AP (P2). As a nominalised event argument, the [V-*de*] complex is thus incompatible with aspect-marking which requires a [+V] element. First and foremost, the discussion in section 3.3.2 has demonstrated how a nominalisation analysis would fall short in accounting for (i) the interpretation of what AP modifies, (ii) the definiteness constraint on the object when it is overtly realised in non-verb-copying contexts, and (iii) the contrast between manner and result modifiers. In lieu of the nominalisation analysis, I have argued for a unified treatment of postverbal ACQ *dak1* as a modal element specified for [+Possibility], which also captures the robust data of descriptive-potential bidirectional ambiguity. But even if the nominalisation account is to be assumed, it is unclear how that explanation can apply to other postverbal ACQ-sentences in Cantonese; as shown in (50), the aspectual incompatibility is found across all types of postverbal ACQ-sentences.

I suggest that the aspectual incompatibility, though attested uniformly across all postverbal ACQ-structures, warrants different explanations for different featural parameter settings concerned. Precisely, in the modal readings, the [–Realised] feature on Asp^0 – instantiated by P2 or not – bars aspect-marking. This concurs with the observation that English modals must be followed by bare infinites (i.e. no tense or aspect marking). The only case where a [+Realised] feature is present on Asp^0 in a postverbal ACQ-sentence is when the sentence expresses a ‘descriptive’ reading. In the ‘descriptive’ sentences, since the AP itself already denotes the endpoint of the event in P1 and the Asp^0 is specified as [+Realised], there is no need for further aspectual marking, and hence the incompatibility with overt aspect markers across the board.

4.2 Linearization and morphological status of postverbal ACQ

Another commonly discussed issue in the literature on postverbal ACQ concerns its morphological status: whether it is a verbal suffix or not. The morphological status of postverbal ACQ carries significant implications on how the linearization of the structure should be done.

It is evident from the examples discussed so far that the ACQ, as a functional item, is always immediately following the verb (see also Sybesma 2008; see also Chao 1968 and Tsai 2018 for a similar observation though with an emphasis on the separability of ACQ with its complement). Their adjacency is illustrated below with the placement of pause (as indicated by (.) in 51a), placeholder (51b), discourse particle (51c)¹⁸ and the impossibility to front an ACQ-phrase (see the contrast between (51d) and (51e)).

- (51) a. *keoi5 coeng3 *{.}* *dak1 {.}* *jau5di1 kei4gwaai3*
 3.SG sing ACQ a.bit strange
 Intended: ‘(The way/manner) s/he sings is a bit strange.’
 b. *keoi5 coeng3 *{dim2 gong2 le1}* *dak1 {dim2 gong2 le1}* *jau5di1 kei4gwaai3*
 3.SG sing how.to say PART ACQ how.to say PART a.bit strange
 Intended: ‘(The way/manner) s/he sings is, how to say, a bit strange.’

¹⁸ Example (49c) has demonstrated the adjacency between the verb and ACQ with an exclamative particle *waa3*, but the same pattern holds for other discourse particles such as *aa4* and *le1*.

- c. *keoi5 coeng3 *{waa3} dak1 {waa3}, hou2 hou2teng1*
 3.SG sing PART ACQ PART very good.to.listen.to
 Intended: ‘S/he sings, oh, so well.’
- d. *hou2 hou2teng1 aa3, keoi5 coeng3 dak1*
 very good.to.listen.toPART 3.SG sing ACQ
 ‘S/he sings very well.’
- e. **dak1 hou2 hou2teng1 aa3, keoi5 coeng3*
 ACQ very good.to.listen.toPART 3.SG sing
 Intended: ‘S/he sings very well.’

However, counterexamples have been reported in Cheung (1972) and Simpson (2001). In both accounts, the apparent counterexamples come from negation. Cheung states that the standard way of negating a postverbal ACQ sentence is to replace *dak1* with the negator *m4* ‘not’, as shown in (52b), but there is a less preferred alternative which is to place the negator between the verb and *dak1* (52c). The contrast is indeed confirmed by the speakers consulted in the present study – negative sentences such as (52b) are considered fully grammatical, and those such as (52c) marginal.

- (52) a. *ngo5 tai2 dak1 ming4 li1 sau2 si1*
 I read ACQ understand this CL poem
 ‘I can understand this poem.’
- b. *ngo5 tai2 m4 ming4 li1 sau2 si1*
 I read not understand this CL poem
 ‘I cannot understand this poem.’
- c. *?ngo5 tai2 m4 dak1 ming4 li1 sau2 si1*
 I read not ACQ understand this CL poem
 ‘I cannot understand this poem.’

In fact, negation is not the only element that can be inserted between the verb and ACQ. In an exclamative structure involving ability, the taboo element *gwai2* ‘ghost’ can appear between the verb and *dak1*, meaning ‘how on earth’, for emphatic purposes.

- (53) a. *ngo5 tai2 gwai2 dak1 ming4 li1 sau2 si1 mel!*
 I read ghost ACQ understand this CL poem SFP
 ‘How on earth can I understand this poem!’
- b. *can4 lou5ban2 gei3 gwai2 dak1 saai3 bak3 gei2 go3*
 Chan boss remember ghost ACQ all hundred some CL
fo2gei3 di1 meng2 mel!
 staff GEN name SFP
 ‘How on earth can Boss Chan remember the names of some hundreds of staff!’

Another diagnostic that questions the suffix status of *dak1* is the fact that it can stand alone as answer to yes-no questions, such as (54) (Simpson 2001). (54a) and (54b) are examples of A-not-A question and particle question respectively. In both cases, *dak1* can be used independently of the verb in positive and negative answers to the questions.¹⁹ This contrasts with other postverbal elements which

¹⁹ This observation also contrasts with the pattern of Mandarin ACQ *de*. Liu has described that *de* cannot stand alone as answer to yes-no questions, as demonstrated here (2004: 141):

- (i) *ni xiě de wán ma?*
 you write ACQ finish Q
 ‘Can you finish writing (it)?’
 A1: **de*
 ACQ
 Intended: ‘Yes, I can.’
 A2: *xiě de wán*
 write ACQ finish

also appear immediately adjacent to the verb, such as the aspectual markers in Cantonese (and Mandarin for that matter), as shown in (55) with the perfective marker *zo2* – the same pattern holds for other aspect markers, e.g. experiential *gwo3* and *jyun4* ‘finish’ (see also Simpson 2001: 114).

- (54) a. *ngo5 jap6-m4-jap6 dak1 lei4 aa3?*
 I enter-not-enter ACQ come Q
 ‘Can I come in?’
 A1: *(jap6) dak1*
 enter ACQ
 ‘Yes.’
 A2: *m4 (jap6) dak1*
 not enter ACQ
 ‘No.’
- b. *ngo5 jap6 dak1 lei4 mei6 aa3?*
 I enter ACQ come not.yet Q
 ‘Can I come in yet?’
 A1: *(jap6) dak1 laa3*
 enter ACQ SFP
 ‘Yes.’
 A2: *mei6 (jap6) dak1 aa3*
 not.yet enter ACQ SFP
 ‘No/not yet.’
- (55) *nei5 tai2-zo2 bun2 syul mei6 aa3?*
 you read-PFV CL book not.yet Q
 ‘Have you read the book yet?’
 A1: **(tai2)-zo2 laa3*
 read-PFV SFP
 ‘Yes.’
 A2: *mei6 (*zo2) aa3*
 not.yet PFV SFP
 ‘No/not yet.’

The two findings – (i) insertion of negation and taboo element allowed between the verb and ACQ, and (ii) ACQ can stand alone as answer to yes-no questions – indicate that the Cantonese ACQ *dak1* may not be a verbal suffix (contra Tang 2002), and rule out the possibility that V and ACQ are merged in the Lexicon and got inserted to the structure as one lexical item. So, how should the postverbal ACQ-sentences be linearized? Cheng & Sybesma (2004) have argued for phonological fusion triggered by [V ACQ] adjacency (cf. Bobaljik 1995). Alternatively, Liu (2004) have analysed [V ACQ] as a serial verb construction.

Following the formal analysis proposed in section 3, the linearization of Cantonese postverbal ACQ-sentences can be delivered as follows. Assuming standard head movement and locality constraint, I suggest that the externalised linear order is a result of P1 raising cyclically from V^0 to Asp^0 to Mod^0 and finally landing in v^0 . However, the cyclic raising of P1 only checks the [V] feature on these functional heads without incorporation of P1 with any element along the way. When the vP is spelt out, the linearized structure would then produce the grammatical word order of [P1 ACQ XP]. The proposed analysis therefore accommodates the exceptional cases which may pose challenge to

‘Yes, I can.’

Simpson (2001) has in fact predicted that Cantonese *dak1* may in time be grammaticalised into a suffix or clitic as well, once *dak1* begins to lose its ability to stand alone as answer-form or its allowance for negation or taboo insertion between it and the verb. At the moment, *dak1* in Cantonese is still not yet a suffix. But by Simpson’s diagnostics, its Mandarin counterpart *de* may have already become a suffix or clitic.

previous accounts – where P1 and ACQ are intervened by negation (though marginal) or by taboo elements as in (53) – by postulating that a Neg⁰ project may be present between v⁰ and Mod⁰, while the taboo element is an adjunct inserted to spec-ModP.

4.3 Postverbal ACQ and focus

A final issue to be addressed concerns the interaction between postverbal ACQ-sentences and focus. This section will first examine how (and whether) postverbal ACQ *dak1* in Cantonese expresses focus, and then discuss how postverbal ACQ-sentences interact with other focus expressions (e.g. question and negation).

4.3.1 Cantonese postverbal *dak1* as focus operator?

It has been documented that the postverbal *dak1* in Hong Kong Cantonese can also express a restrictive meaning similar to *only* in English (Rao, Ouyang & Zhou 1981; Cheng 1997; Zhang & Ni 1999; Luke 1999). Example (56) presents the empirical observation.

- (56) a. *keoi5 zing6haai6 tai2-zo2 saam1 bun2 syu1*
 3.SG only read-PFV three CL book
 b. *keoi5 tai2-zo2 saam1 bun2 syu1 zaa3*
 3.SG read-PFV three CL book SFP
 c. *keoi5 tai2 dak1 saam1 bun2 syu1*
 3.SG read ACQ three CL book
 All: ‘S/he read only three books.’

The three sentences in (56) are synonymous in having a restrictive meaning on the quantity of books the subject has read (in this case, only three). In (56a), the preverbal adverb *zing6haai6* ‘only’ is present. In (56b), the discourse particle *zaa3* is present. Sybesma & Li have reported in their comprehensive account of sentence-final particles in Cantonese that *zaa3* “conveys ‘only’ in the neutral sense of ‘not more than that’ or ‘and not something else as well’” (2007: 1754). So, the fact that the occurrence of *dak1* in (56c), with no other overt markers like *zing6haai6* or *zaa3*, still produces the same restrictive meaning of ‘s/he read only three books’, has been cited as strong evidence that postverbal *dak1* has a similar function as the adverb *only*.

Tang (2002) has suggested that the Cantonese postverbal *dak1* can be a focus operator under two conditions: (i) the element it scopes over is a nominal, and (ii) the nominal contains a cardinal numeral, as illustrated in the grammaticality contrast in (57) and (58).²⁰

- (57) a. *keoi5 tai2 dak1 [(go2) saam1 bun2 syu1]*
 3.SG read ACQ that three CL book
 ‘S/he read only (those) three books.’ (adapted from Tang 2002: 277)
 b. *ngo5 taam3 dak1 keoi5 [loeng5 ci3]*
 I visit ACQ 3.SG two time
 ‘I visit him only twice.’ (ibid: 271)
 c. *ngo5 cam4 maan5 fan3 dak1 [saam1 go3 zung1]*
 I yesterday night sleep ACQ three CL hour
 ‘I slept only for three hours last night.’ (ibid: 270)

²⁰ This contrasts with the focus *dak* which appears preverbally. Lee (1995), in his initial discussion of focus *dak*, has analysed it as a prenominal quantifier, forming a constituent with the nominal that follows it: [_{VP} V [_{NP} *dak* NP]]. The prenominal quantifier analysis is later challenged by Tang (2002) who argues for systematic differences between preverbal and postverbal focus *dak*. Interested readers are referred to Tang’s account for a detailed comparison between the two. The focus of this paper will consistently rest on the postverbal occurrences of *dak*, and leave the preverbal uses for future discussion (see also Enfield 2003; Sybesma 2008 for cross-linguistic comparison between preverbal and postverbal ACQ).

- (58) a. *ngo5 bong1 **dak1** [lou5 jan5gaa1]
 I help ACQ old person
 intended: 'I helped only old people.' (ibid: 279)
- b. *ngo5 gin3 **dak1** [go3 hok6saang1]
 I see ACQ CL student
 intended: 'I meet only the student.' (ibid: 273)
- c. *wong4gaau3sau6 gong2 **dak1** [hou2 maan6]
 Wong professor speak ACQ very slow
 intended: 'Professor Wong speaks only very slow.' (ibid: 272)

Tang has also observed that the postverbal *dak1* creates a boundedness effect on the event described. Example (59) shows that when the postverbal *dak1* is present with a cardinal nominal, the atelic event of crying becomes telic since the cardinal nominal *bun3 fan1zung1* 'half a minute' has set a temporal boundary to the originally atelic activity.

- (59) go3 bi5bi1 haam3 **dak1** bun3 fan1zung1
 CL baby cry ACQ half minute
 'The baby cried only for half a minute.' (ibid: 274)

I elaborate that, following the alternative semantics of focus (Rooth 1985; Rooth 1992, and subsequent literature), the postverbal *dak1* in examples (57) and (59) displays contrastive focus (a.k.a. identificational focus in É. Kiss (1998)). In gist, the presence of a cardinal nominal marks the presence of a scale for quantification. The postverbal *dak1* then picks out the quantity denoted by the numeral or quantifier (e.g. *bun3* 'half') as the ordinary semantic value in contrast with other values in the set (or scale in this case) of alternatives. The contrastive focus demonstrated by postverbal *dak1* also extends to coordinate structures as expected by the coordination diagnostic devised for testing the exhaustive identification effect in contrastive focus (Szabolcsi 1981; É. Kiss 1998).

Consider the nominal coordinate structures in (60) and (61). In (60), the sentences are aspect-marked as perfective by *zo2*, whereas the sentences in (61) are marked by the postverbal ACQ *dak1*. Assuming with Tang (2002) that postverbal *dak1* is a focus operator when preceding a cardinal nominal, if the focus encoded by *dak1* is contrastive focus, we expect to see a clear contrast between (60) and (61) in that while (60b) can be a logical consequence of the coordinate sentence in (60a), (61b) cannot be the logical consequence of (61a), because the focalised object should display exhaustive identification – the focused set is identified as the exhaustive subset of the set of contextually or situationally given elements for which the predicate phrase actually holds (É. Kiss 1998). This prediction is neatly borne out in native speaker judgments.

- (60) a. mui4mui2 maai5-**zo2** loeng5 go3 faan1ke2 tung4 jat1 tiu4 jyu2
 little.sister buy-PFV two CL tomato and one CL fish
 'Little sister only bought two tomatoes and a fish.'
- b. mui4mui2 maai5-**zo2** jat1 tiu4 jyu2
 little.sister buy-PFV one CL fish
 'Little sister only bought a fish.'
- (61) a. mui4mui2 maai5 **dak1** loeng5 go3 faan1ke2 tung4 jat1 tiu4 jyu2
 little.sister buy ACQ two CL tomato and one CL fish
 'Little sister only bought two tomatoes and a fish.'
- b. mui4mui2 maai5 **dak1** jat1 tiu4 jyu2
 little.sister buy ACQ one CL fish
 'Little sister only bought a fish.'

Therefore, it is well-grounded for Tang (2002) to suggest that postverbal *dak1* in sentences such as (57) and (59) expresses focus – contrastive focus, specifically. I argue that the contrastive focus

function of Cantonese postverbal ACQ can and should be accounted for in the proposed formal analysis. The analysis is as follows: semantically, the contrastive focus puts restriction on the exact quantity of items achieved in the event of P1, which can be understood as ‘*x* is only able to achieve *q* of *y* in the event of P1’. In other words, it is a special kind of possibility reading. The possibility concerned here can be conditioned by the agent’s internal ability or by external factors, so it is a case of root possibility (Bybee et al. 1994). According to Tang’s (2002) understanding, the readings produced by these contrastive focused postverbal ACQ-sentences can either be a completed action or not. Therefore, formally, I propose that when the postverbal ACQ-sentence has a cardinal nominal in the XP, there is an additional Foc(us)P projection between *v*P and ModP, and the Foc head carries an uninterpretable modal feature to be checked with the [+Possibility] feature on Mod⁰. Hence, the ACQ in these sentences would raise to Foc⁰ for feature checking, and the [±Realised] feature on Asp⁰ is left unspecified. Most importantly, the cardinal nominal which is also the object of P1 will remain in XP during the syntactic derivation, and only the focalised element of the XP will covertly raise to spec-FocP at LF for the contrastive focus interpretation. The derivation for examples (57a) and (57b) are represented in (62).

- (62) a. [_v *tai* [_{Foc} *dak* [_uMod] [_{Mod} ~~*dak*~~ [+Possibility] [_{Asp} Ø [_v ~~*tai*~~ [_{XP} [*saam bun syu*]^f]]]]]]
- b. [_v *taam* [_{Foc} *dak* [_uMod] [_{Mod} ~~*dak*~~ [+Possibility] [_{Asp} Ø [_v ~~*taam*~~ [_{XP} [*keoi*] [*loeng ci*]^f]]]]]]

The unification of the contrastive focus function of *dak1* under the proposed formal analysis is empirically grounded in that a modality reading is available when where the focus reading is present. The preference between a focus reading and a non-focus modality reading depends on the structure of the NP. The pattern found in the Cantonese speakers’ judgments collected is summarised in Table 2.

Table 2. NP structure and focus-modality ambiguity.

	Focus	Modality
Bare N	*	✓
CL-N	*	?
Num-CL-N	✓	?
Dem-CL-N	?	✓
Dem-Num-CL-N	✓	✓

The observation is that the focus reading of ‘only able to achieve *q* of *y*’ is strongly preferred when the noun phrase contains a numeral – that is, at least of the size of a NumP (i.e. Num-CL-N) – but the modality reading of ‘it is possible to achieve *q* of *y*’ is available as a secondary reading. The two readings become equally active when the NumP is modified by the demonstrative (i.e. Dem-Num-CL-N). But if the noun phrase within the scope of ACQ does not contain a numeral, the modality reading is still available and always preferred, but the focus reading is only (marginally) available when a demonstrative is present with the classifier phrase (i.e. Dem-CL-N). The reason why the presence/absence of a demonstrative makes a difference to the focus vs. non-focus interpretation would be that the demonstrative can also pick out an ordinary semantic value from the set of alternatives. Take the sentence in (63) as an example. The demonstrative *li1* ‘this’ picks out one specific book out of the set of all other books in the context as the only book that the subject has read. The focus semantics involving values on a numeric scale is stronger, but it is also available with deictic expressions.

- (63) *keoi5 tai2 dak1 li1 bun2 syu1*
 3.SG read ACQ this CL book
 ‘S/he read only this book.’

4.3.2 Other related focus phenomena: A-not-A formation and negation scope

Section 4.3.1 has illustrated how the postverbal ACQ may express contrastive focus. In what follows, we probe into the interaction between postverbal ACQ-sentences and other focus strategies, which in turn points to the need of a unified account for all postverbal ACQ-sentence. Specifically, we review two diagnostics – A-not-A formation and negation distribution – used in the Primary vs. Secondary Predication Hypothesis debate on the status of AP in descriptive postverbal ACQ-sentences. The former suggests that the AP is the matrix predicate (see Li & Thompson 1981; Huang & Mangione 1985; Liu 2004; Wei 2006; Tsai 2018 *i.a.*) while the latter has the P1 as the primary predicate (Mei 1978; Huang 1982; 1988; Ross 1984; Cheng 1986; Tang 1990; Ernst 1995; 1996; Shen & Ting 2008; Li 2015 *i.a.*). On revisiting the two diagnostics, I suggest that they are in fact indicators of focus scope, and the data present further support for the unified account of postverbal ACQ-sentences proposed in this paper, though whether they are reliable diagnostics for matrix-verb-hood may be questionable.

First, consider the A-not-A questions in (64).

(64) Mandarin A-not-A questions (Huang 1988: 277)

- a. *zhāngsān xǐhuan-bu-xǐhuan nǐ?*
Zhangsan like-not-like you
'Does Zhangsan like you or not?'
- b. *tāmen pǎo de kuài-bu-kuài?*
they run ACQ fast-not-fast
'Do they run fast?'
- c. **tāmen pǎo-bu-pǎo de kuài?*
they run-not-run ACQ fast
Intended: 'Do they run fast?' – descriptive reading

The observation has been initially made in Chao (1968) that while the A-not-A form is realised on the main verb in (64a), when the ACQ is present, the A-not-A form must be realised on P2 (e.g. *kuài* 'fast') rather than P1 (e.g. *pǎo* 'run'). The data above has often been cited to demonstrate the matrix-verb-hood of P2 in an ACQ-structure, and hence as argument for the Primary Predication Hypothesis with regard to the status of P2.²¹ Now consider the examples in Cantonese.

(65) Cantonese A-not-A

- a. *siu2ming4 zung1-m4-zung1ji3 nei5 aa3?*
Siuming like-not-like you Q
'Does Siuming like you?'
- b. *siu2ming4 paau2 dak1 faai3-m4-faai3 aa3?*
Siuming run ACQ fast-not-fast Q

²¹ Thanks to an anonymous reviewer for pointing out that Mandarin does allow A-not-A formation on P1, as illustrated in the examples below:

- (i) 小明吃不吃得完三碗飯?
xiǎomíng chī-bu-chī de wán sān wǎn fàn?
Xiaomingeat-not-eat ACQ finish three bowl rice
'Is Xiaoming able to finish three bowls of rice?' (potential reading)
- (ii) 小明搬不搬得動這塊石頭?
xiǎomíng bān-bu-bān de dòng zhè kuài shítou?
Xiaomingcarry-not-carry ACQ move this CL rock
'Is Xiaoming able to move this piece of rock?' (potential reading)

The crucial observation in example (62) is that for descriptive ACQ structures, the A-not-A form has to be on P2. Placing the A-not-A on P1 will result in an ACQ structure with potential reading in Mandarin; in Cantonese, A-not-A on P1 will have a potential or permission as shown in (63). Therefore, what A-not-A formation reveals is not so much about matrix-verb-hood, but that different position of A-not-A corresponds to different placement of focus, and hence different readings produced by the ACQ sentences.

- (i) ‘Does Siuming run fast?’ – descriptive
(ii) * ‘Can Siuming run fast?’ – potential or permission
- A1: *faai3 aa3*
fast SFP
- A2: **dak1*
ACQ
Both as ‘yes’
- c. *siu2ming4 paau2-m4-paau2 dak1 faai3 aa3?*
Siuming run-not-run ACQ fast Q
- (i) * ‘Does Siuming run fast?’ – descriptive
(ii) ‘Can Siuming run fast?’ – potential or permission
- A1: **faai3 aa3*
fast SFP
- A2: *dak1*
ACQ
Both as ‘yes’

The questions in (65) are the Cantonese counterparts to the Mandarin questions in (64). Most importantly, the contrast between (65b) and (65c) show that the difference between an A-not-A form on P2 and an A-not-A form on P1 is not the grammaticality of the sentence but the interpretations generated. In (65b), the question asks about the speed in which Siuming runs, i.e. a descriptive reading about the property of Siuming’s running. Whereas, in (65c), the question is not about the speed of the running, but whether it is possible for Siuming to run fast – either because of his physical capacity (e.g. he has twisted his ankle two days ago) or because of the presence/absence of permission granted for him to do so (e.g. doctor’s orders that he should not conduct high intensity sports). Whichever the specific reading (potential or permission) is, the question has a modality reading rather than a descriptive one. The possible short answers to these two questions confirm the generalisation: in (65b), the only possible (affirmative) answer form is to echo the AP *faai3* ‘fast’, while in (64c), the answer should be to echo the ACQ.

Likewise with the distribution of negation *m4* ‘not’, the position of the negator indicates the scope of interpretation. When the negator immediately precedes the AP *faai3*, the negation takes scope only of the AP, meaning ‘not fast’; in this case, *m4* is akin to the English prefix *un-* (e.g. *un-happy*, *un-avoidable*). On the other hand, when the negator immediately precedes P1, it takes scope of the P1 event which the ACQ is attached to, yielding a reading of ‘cannot’.

(66) Cantonese *m4* ‘not’

- a. *siu2ming4 m4 zung1ji3 nei5*
Siuming not like you
‘Siuming does not like you.’
- b. *siu2ming4 paau2 dak1 [m4 faai3]*
Siuming run ACQ not fast
‘Siuming does not run fast.’ – descriptive [ACQ > not]
- c. *siu2ming4 [m4 paau2 dak1] faai3*
Siuming not run ACQ fast
‘Siuming cannot run fast.’ – potential or permission [not > ACQ]

Therefore, I argue that the apparent restriction on A-not-A form and negation placement in postverbal ACQ-structures actually stems from the change in what is presupposed in the question and what is the new information enquired (i.e. focused). So, the A-not-A form and the negation distribution are indicators of the focus scope. While the AP may be ‘focalised’ in descriptive reading as Tsai (2018) has proposed, the same sentence can also have the P1 undergo A-not-A formation or negation only that the interpretation would change from ‘descriptive’ to modal, which once again points to the close connection among the different readings. More importantly, the data highlights the need for a unified formal analysis for postverbal ACQ-sentences so that the reading alternation seen in (65) and (66) can

be easily accommodated by a change in focus position – possibly, focus on the XP for a ‘descriptive’ reading vs. focus on vP for a modal reading.

5 Conclusions

In this paper, I have presented a generative framework for the postverbal ACQ-structures in (Hong Kong) Cantonese. The proposed framework takes into account four readings of postverbal ACQ-sentences, namely potential, permission, descriptive and focus. The paper argues that all postverbal ACQ-structures in Cantonese share the same basic configuration within vP . In gist, the ACQ heads a ModP specified with the [+Possibility] and [$\pm$ Deontic] modality features, and it takes an AspP (with a [$\pm$ Realised] feature) as complement which is the functional projection immediately c-commanding the lexical layer of VP and the small clause XP. The XP describes the projected endpoint to be achieved (if not already achieved) in the event of P1. The postverbal distribution of ACQ is derived by the cyclic head movement of the P1 in V^0 through the functional projections to v^0 .

The interpretation of the postverbal ACQ-sentences is generated by a featural parameter hierarchy composed of three features that appear in the syntactic configuration: [$\pm$ Realised] on Asp⁰ which indicates whether the endpoint in XP has been reached, if yes then a ‘descriptive’ reading is produced, otherwise a modality reading is generated. The second feature is the [$\pm$ Possibility] feature which when the ACQ is present is always specified positively on Mod⁰ – the achievement marker *dou* has been argued as the [–Possibility] counterpart of the ACQ *dak1* in Cantonese. The third feature is the [$\pm$ Deontic] feature on Mod⁰ which distinguishes between ‘potential’ and ‘permission’ readings by means of whether the enabling factor for realising the projected endpoint of P1 comes from within the agent of P1 or from the external world (particularly by the granting of permission). Whenever the [$\pm$ Deontic] parameter is set positively, the [$\pm$ Realised] parameter would be set negatively.

The proposed parametric framework is superior to previous accounts in three ways. First, it presents a wholesome picture on the nature of ACQ, and allows for a unified treatment of the ACQ-sentences as its own class of structures. Second, in terms of structural and semantic properties, the framework effectively accounts for both the common properties share by all postverbal ACQ-structures and the more fine-grained variations observed between the different readings generated. Moreover, a parametric framework provides a highly testable account for cross-linguistic comparative studies. The generalisability of the parameters is of paramount importance to a robustly attested typological and areal phenomenon such as the ACQ. The applicability of the framework goes beyond the Sinitic family (e.g. Mandarin versus Cantonese), but also to the MSEA languages and even the Northern European languages which modal ACQ reading warranted the establishment of a new class of modals, the ‘acquisitive modals’ (van der Auwera et al. 2009).

Indeed, the structural implications of the setting of these parameters can be different in different languages. For instance, within the Sinitic family, the fact that there is no permission reading available in Mandarin can be easily accounted for by the parameter setting that the Mandarin ACQ does not allow for a [+Deontic] feature on Mod⁰. Furthermore, comparing between the Sinitic languages (e.g. Mandarin and Cantonese) and the Northern European languages with a postverbal ACQ, the fact that the former allows for a descriptive or even resultative/causative reading in postverbal ACQ-structures, but the latter does not – only modality readings have been reported in van der Auwera et al. (2009) – can be captured by the more macro parameter setting on the [$\pm$ Realised] feature. In other words, the Sinitic languages allow for a [+Realised] feature but the Northern European languages may not. So, the specifications of the parameters can not only account for the variations observed in the ACQ-sentences within a language (e.g. Cantonese), or within a language family (e.g. Sinitic languages), but has great potential in accounting for cross-linguistic variation which is of paramount importance for such a robustly attested typological phenomenon in MSEA and Northern European languages.

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Abbreviations

1	first person
3	third person
ACQ	acquire marker
ADV	adverbial marker
CL	classifiers
CONT	continuous aspect
DEM	demonstrative
DUR	durative aspect
EXP	experiential aspect
GEN	genitive
LOC	locative
Num	numeral
ORD	ordinal number marker
PRT	particle
PFV	perfective aspect
PL	plural
PROG	progressive aspect
Q	question particle
SFP	sentence-final particle
SG	singular
SUCC	success or achievement marker

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