High vs. Low 'Again': Mandarin You vs. Zai and Cantonese -Faan vs. -Gwo*

Yuyang Liu and Ka-Fai Yip

Yale University

Abstract

This paper discusses the exceptional scopal behavior of Mandarin preverbal *you* 'again' and Cantonese postverbal *-faan* 'again' in comparison with other 'again'-type elements in Mandarin and Cantonese, including *zai* and *-gwo*. It reveals that this exceptional scopal behavior is determined by the position of 'again' and the size of the embedded clause. The paper suggests that Mandarin and Cantonese 'again' has two positions: one associated with outer aspect above vP and one associated with inner aspect below vP. It also proposes that nonfinite clauses can be as small as vP and lack an outer aspect. It suggests that the exceptional scopal behavior is a result of the syntactic association with outer aspect across vP, which is only possible for high 'again'.

Key words

again, exceptional scopal behavior, finiteness, split-aspect approach, Chinese languages

^{*} We are grateful to Ka-Wing Chan, Sheila Shu-Laam Chan, Zhuo Chen, Margaret Chui-Yi Lee, Tommy Tsz-Ming Lee, Irene Yi, Sunhao Yu, and Zhenghao Zhou for Mandarin and Cantonese data and judgments. We also thank Mineharu Nakayama for his editorial support and for his patience throughout the process. For invaluable discussion and feedback, we thank Cheng-Teh James Huang, Zhipeng Nick Huang, Sze-Wing Tang, the anonymous Buckeye East Asian Linguistics (BEAL) Forum reviewers, and our audience at Workshop on Cantonese (WOC) 22 and BEAL Forum 5. All errors are our own.

1. Introduction

The scopal behavior of Mandarin you 'again' has been found to be exceptional (Liu 2021, to appear, C.-T. J. Huang 2022), as shown by the naturally occurring example in (1). In (1b), you is positioned before the matrix predicate and separated from the embedded clause. However, based on the context provided in (1a), it appears that you is influencing the embedded predicate rather than the matrix predicate.

(1) a. Context

Zheng Qiuhong de ku xi heji, ku de wo you xiangxin aiqing le! Jueshi Qianjin li Zheng Qiuhong de ku xi zhende hen rang ren xin teng, ...

'The collection of crying scenes by Jade Cheng made me believe in love again! Jade Cheng's crying scenes in *Lust for Gold* were really heartbreaking; ...'

b. You rang [wo xiangxin-le aiqing]!
again let 1SG believe-PFV love
'[The scenes] let me again believe in love!'
Not: '[The scenes] again let me believe in love!'

narrow (let > again)
#wide (#again > let)

To felicitously utter (1b), it is not necessary for there to have been a prior event or person that caused the speaker to believe in love. Simply the fact that the speaker believed in love before is enough. In other words, in this scenario, the repeated event is the act of believing rather than the act of being made to believe, even though at first glance, on the surface, it does not seem that *you* occupies a position in which it could modify 'believe'. This exceptional scopal behavior is illustrated in (2a). This paper also demonstrates that some postverbal 'again'-type element in Cantonese displays a similar pattern but in the opposite direction: in Cantonese, embedded 'again' can take an exceptional scope over the matrix predicate (2b).

We found that this exceptional scopal behavior, despite being highly dependent on context, is determined by two syntactic factors: the position of 'again' and the size of the embedded clause. We discovered that both of these factors are closely linked to an aspect phrase (AspP). Based on this observation, we make two proposals to explain the exceptional scopal behavior of 'again'-type elements in Mandarin and Cantonese. First, we suggest that there are two potential surface positions of Mandarin and Cantonese 'again'. Second, we propose that Mandarin and Cantonese nonfinite clauses may be as small as vP, lacking an AspP to allow for high 'again'.

Section 2 examines the characteristics of preverbal 'again' in Mandarin. Section 3 provides an analysis for the exceptional scopal behavior of Mandarin preverbal 'again'. Section 4 expands on the examples and analysis to include postverbal 'again' in Cantonese. Section 5 concludes.

2. Preverbal 'again' in Mandarin and the exceptional scopal behavior

In Mandarin, there are two preverbal adverbs that convey the meaning of 'again': *you* and *zai*. Section 2.1 presents additional data on whether *you* and *zai* exhibit the scope skipping effect. Section 2.2 introduces the distinct properties of *you* and *zai* and examines the correlation between these properties and whether they display exceptional scopal behavior.

2.1 Scopal behavior of preverbal you and zai in Mandarin

Liu (2021, to appear) and C.-T. J. Huang (2022) reported that when Mandarin preverbal *you* 'again' appears in the matrix clause, it can take narrow scope and directly apply to the embedded predicate. In (3a), although *you* comes before the matrix verb 'want', it is understood as if it is attached to the embedded clause, resulting in a felicitous utterance in the (a) context of (3). Metaphorically, the scope of the main clause predicate is "skipped" by *you*, as in (2a). It is worth noting that the other Mandarin 'again', *zai*, does not enable the same scope skipping effect: (3b) is not felicitous in the given (b) context. (3) leads us to the generalization in (4).

(3) Context (adapted from Lin and Liu 2009): Want > again > go

Yesterday, Xiaoming took a business trip to Hong Kong for work, despite not wanting to travel, as he was compelled by his boss. Unfortunately, he did not complete the work before returning. (a) Today, worried about getting fired for not finishing the work, he wants to go back to Hong Kong again to finish it. (b) Today, it is thought that he will want to go back to Hong Kong again to finish it.

a. Xiaoming you xiang [qu Xianggang].
Xiaoming again want go Hong.Kong
'Xiaoming wants to again go to Hong Kong.'
Not: 'Xiaoming again wants to go to Hong Kong.'

want > again

#again > want

b. #Xiaoming hui <u>zai</u> xiang [qu Xianggang]. Xiaoming will again want go Hong.Kong 'Xiaoming will again want to go to Hong Kong.'

#again > want

Not: 'Xiaoming will want to again go to Hong Kong.'

*want > again

(4) **Generalization 1.** The exceptional scopal behavior of Mandarin 'again' is found with <u>you</u> but not with <u>zai</u>.

It is also discovered that the scope skipping effect observed with *you* depends on the choice of matrix verbs: only nonfinite-clause taking predicates allow *you* to skip scope. In (5), we have a context that is compatible with a target sentence where the matrix verb is 'believe' and scopes over *you*. In this context, *you* preceding the matrix verb is infelicitous (5a), in contrast to (5b), where embedded *you* can produce the intended interpretation.

(5) *Context:* Believe > again > appear

Xiaoming initially did not believe in the existence of coronavirus during the 2003 SARS outbreak, thinking that it was just a flu. After the outbreak, there were no reported cases of coronavirus until the COVID-19 outbreak in 2019. By that time, Xiaoming had become an epidemiologist and collected a sample containing the COVID-19 virus, leading him to believe that there had appeared coronavirus, and it appeared again.

- a. #Xiaoming <u>you</u> xiangxin [chuxian-le guanzhuangbingdu].
 - Xiaoming again believe appear-PFV coronavirus 'Xiaoming again believes that there appeared coronavirus.'

#again > believe *believe > again

Not: 'Xiaoming believes that there again appeared coronavirus.'

00110.0

b. Xiaoming xiangxin [you chuxian-le guanzhuangbingdu].

Xiaoming believe again appear-PFV coronavirus

'Xiaoming believes that there again appeared coronavirus.'

believe > again

In Mandarin, 'believe' differs from 'want' in taking finite clause complements, which are presumably CPs (C.-T. J. Huang 2022), while 'want' takes nonfinite clause complements (e.g., TPs or vPs). An examination shows that the narrow scope interpretation of *you* is allowed only with nonfinite clause taking predicates (6a) but not with finite clause taking predicates (6b). This means that *you* cannot "skip" across a finite clause boundary. Hence, we can generalize that the scope skipping of *you* is limited to nonfinite clause taking predicates (7).

- (6) a. Nonfinite clause taking predicates, which allow matrix you to take narrow scope bi 'force', dasuan 'intend', jihua 'plan', jueding 'decide', mingling 'order', quan 'urge', rang 'let', shefa 'try', tingzhi 'stop', tiyi 'propose', tuijian 'recommend', weixie 'threat', xiang 'want', xuanze 'choose', zhunbei 'prepare', etc.
 - b. Finite clause taking predicates, which disallow matrix you to take narrow scope faxian 'discover', fouren 'deny', gaosu 'tell', huaiyi 'suspect', queren 'confirm', renwei 'think', shengming 'declare', shuo 'say', xiangxin 'believe', zhidao 'know', etc.

 (Liu to appear, cf. C.-T. J. Huang 2022:24)
- (7) **Generalization 2.** The exceptional scopal behavior of Mandarin 'again' can cross <u>nonfinite</u> clause boundaries but not finite clause boundaries.
- 2.2 Independent properties of Mandarin 'again'

A contrast between *you* and *zai*, observed by Lin and Liu (2009), is their ability to be embedded by nonfinite clause taking predicates (e.g., *keyi* 'be permitted'). Whereas *you* cannot surface in an embedded nonfinite clause (8a), *zai* can (8b). On the other hand, both *you* and *zai* can be embedded by finite clause taking predicates, such as *xiangxin* 'believe' (8c).

- (8) a. *Xiaoming keyi [you lai] le.

 Xiaoming be.permitted again come PERF

 Intended: 'Xiaoming has been permitted to again come.' (Lin and Liu 2009:1186)
 - b. Xiaoming keyi [zai qu Taibei].

 Xiaoming be.permitted again go Taipei

 'Xiaoming is permitted to again go to Taipei.' (Lin and Liu 2009:1195)
 - c. Xiaoming xiangxin [you chuxian-le guanzhuangbingdu] / [hui zai Xiaoming believe again appear-PFV coronavirus will again chuxian guanzhuangbingdu].

 appear coronavirus

'Xiaoming believes that there again appeared/will again appear coronavirus.'

The compatibility with the scope skipping effect of 'again'-type elements and their embeddability can be correlated based on the observations in (8) as stated in (9).

(9) **Correlation 1.** In Mandarin, an 'again'-type element exhibits exceptional scopal behavior *iff* it cannot surface in an embedded nonfinite clause.

Another contrast between *you* and *zai* is their compatibility with aspectual elements. Only *you* can be used with predicates that have aspect affixes, such as the perfective suffix *-le* as in (10–11), from which a new correlation is observed as stated in (12).

- (10)Jingdu. Jiu you qu-le (11)*Jiu (yijing) qu-le Jingdu. zai so again go-PFV Kyoto already Kyoto so again go-PFV 'So, [I] went to Kyoto again.' Intended: 'So, [I] (already) went to Kyoto again.'
- (12) **Correlation 2.** In Mandarin, an 'again'-type element exhibits the exceptional scopal behavior *iff* it is compatible with aspectual elements.

3. Proposal

Our proposal for the exceptional scopal behavior of *you* consists of two components. First, we propose that there are two surface positions for 'again' in Mandarin: high 'again' associates with and moves to AspP, whereas low 'again' does not move and remains within vP (cf. Lin and Liu 2009). Second, following C.-T. J. Huang (2022) and Liu (to appear), we adopt the assumption that nonfinite clauses can be as small as vP and lack AspP.

3.1 Movement of you to AspP

Regarding the first component of our proposal, we suggest that both *you* and *zai* are base-generated at the vP level, but they surface in different positions (cf. Lin and Liu 2009). We argue that *you* surfaces at the AspP level, whereas *zai* stays within the vP in which it is base-generated (13).

(13)
$$\left[\text{TP T } \left[\text{AspP } (you) \right. \right] \text{Asp } \left[\text{vP } (zai) \right. \text{ V-V } \left[\text{VP } \dots \right] \right]$$

Following Liu (2021, to appear), we attribute the association of *you* with AspP to a movement of *you*. For example, in (3a), *Xiaoming you xiang qu Xianggang* 'Xiaoming wants to again go to Hong Kong', *you* is proposed to be base-generated in the embedded vP with an aspect feature that must be checked by specifier-head agreement with the closest Asp⁰ probe. Since the embedded clause does not contain an AspP according to the second component of our proposal, *you* moves to the specifier position of the matrix AspP in overt syntax in order to check its aspect feature. At LF, *you* reconstructs and yields the narrow scope reading, "skipping" the scope of the matrix predicate 'want'. To illustrate, figure 1 sketches the derivation of (3a).

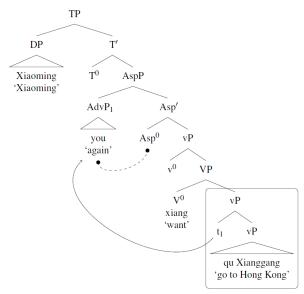


Figure 1: Derivation of an example for the scope skipping of you

Unlike *you*, we propose that *zai* does not move or reconstruct. It is always interpreted locally in its base-generated position at the vP level and does not exhibit exceptional scopal behavior.

3.2 Aspect and finiteness in Mandarin

It has been observed that in Mandarin, when aspect suffixes like the experiential suffix *-guo* are embedded in a nonfinite clause, they take scope over the matrix predicate (C.-T. J. Huang 1989, 2022, Li 1990, Lin 2006, Grano 2014, Z. N. Huang 2018). This phenomenon, known as *aspect lowering*, is not found when the aspect suffix is embedded in a finite clause (14).

- (14) a. Zhangsan (congqian) quan Lisi [jie-guo yan]. nonfinite clause Zhangsan before urge Lisi quit-EXP cigarette 'Zhangsan has urged Lisi to quit smoking (before).' high interpretation Not: 'Zhangsan urged Lisi to have quit smoking (before).'
 - b. Zhangsan shuo [Lisi jie-guo yan]. finite clause
 Zhangsan say Lisi quit-EXP cigarette

 'Zhangsan says that Lisi has quit smoking.' low interpretation
 Not: 'Zhangsan has said that Lisi quit smoking.'

(C.-T. J. Huang 2022:32, adapted)

Aspect lowering offers crucial evidence for the structure of nonfinite clauses in Mandarin. It has been proposed that Mandarin nonfinite clauses lack a local AspP and may be as small as vPs (C.-T. J. Huang 2022, Liu to appear). This means that aspect suffixes need to be licensed by the matrix Asp⁰ through agreement, thus acquiring the matrix scope (15).

This distinction observed in aspect lowering between finite and nonfinite clause taking predicates confirms our claim about the difference in size between finite and nonfinite clauses. Finite clause taking predicates take CP complements (containing AspP), whereas nonfinite clause taking predicates may take vP complements (not containing AspP).

4. Postverbal 'again' in Cantonese and a unified analysis

Different from Mandarin, Cantonese marks 'again' by two postverbal elements in addition to the preverbal *jau* (counterpart of *you*) and *zoi* (counterpart of *zai*): *-faan* and *-gwo*. They both presume that a related event has occurred before with different specifications on the relation between the previous and present events. As given in (16), *-faan* has a repetitive reading, besides resumption and restitutive readings (Tang 2001, Cheung 2007, Peng 2010, i.a.). As exemplified by (17), *-gwo* expresses a repetitive reading with a sense of "fixing" undesirable outcomes of previous events, which should be distinguished from its experiential aspect use (Cheung 2007, i.a.).

The Cantonese pattern is striking in such a way that not only an exceptional scope behavior similar to Mandarin preverbal 'again' is observed for postverbal 'again', but its availability is also subject to the two syntactic factors that we identified for Mandarin: the position of 'again' and the size of the embedded clause. In the following, we first describe the scopal behavior of *-faan* in contrast to *-gwo* in section 4.1, test their syntactic positions under a split-aspect approach in section 4.2, and finally provide the analysis for Cantonese that parallels Mandarin in section 4.3.

4.1 Scopal behavior of postverbal -faan and -gwo in Cantonese

The exceptional scopal behavior of 'again' in Cantonese involves wide scope of an embedded postverbal 'again' across a clause boundary, schematized in (18). Here, 'again' is pronounced low but interpreted high, mirroring Mandarin *you*, which may be pronounced high but interpreted low.

(18) Postverbal 'again' in Cantonese
[V_{matrix} ... [V_{embedded}-'again' ... low pronunciation but high interpretation

When -faan and -gwo attach to embedded predicates, only -faan may take scope over the matrix predicate, as shown in (19a). The embedded predicate denotes an event that cannot be repeated (i.e., killing the boss), favoring the plausible wide scope reading of repeated (or resumed) desire. In contrast, -gwo cannot take scope over 'want'. Only the infelicitous narrow scope reading 'killing the boss again' is available in (19b).

(19) Context: Again > want > kill

When Ming was a gangster, he always wanted to murder his maniac boss, but he never tried to. He no longer wanted to do that after he left the gang. Today, he met his boss on the street, who insulted and slapped him. Ming is so angry that he wants to kill him again.

- a. Aaming (jau) soeng [(#jau / #zoi) deoilam-<u>faan</u> keoi daailou].

 Ming again want again again kill-again 3sG boss
 'Ming again wants to (#again) kill his boss.' again > want, #want > again
- b. #Aaming (jau) soeng [(#jau / #zoi) deoilam-gwo keoi daailou].

 Ming again want again again kill-again 3sG boss

 'Ming wants to again kill his boss.'

 *again > want, #want > again

Interestingly, the wide scope reading of embedded *-faan* disappears with finite clause taking predicates like 'believe' in (20). It can only be obtained by attaching *-faan* to the matrix 'believe'.

(20) a. *Context*: Again > believe > exist Ming quit being a Christian years ago. Today, he had a traffic accident and heard God's voice when he was badly injured. He once again believes that God exists.

b. #Aaming (jau) seon [(#jau / #zoi) jau-<u>faan</u> san].

Ming again believe again again exist-again God

'Ming believes that there is again God.'

*again > believe, #believe > again

This sensitivity to finiteness is exactly what we have seen for the scope skipping effect of *you*. The generalization holds across a wide range of embedding predicates as in (21): the wide scope interpretation of *-faan* is only allowed with nonfinite clause taking predicates.

- (21) a. Nonfinite clause taking predicates, which allow embedded -faan to take wide scope bik 'force', hyun 'urge', giu 'ask', ceng 'invite', paai 'send', soeng 'want', daasyun 'intend', gaiwaak 'plan', zeonbei 'prepare', hoici 'start', hoji 'may', gam 'dare', etc.
 - b. Finite-clause taking predicates, which disallow embedded -faan to take wide scope jingwai 'consider', soengseon 'believe', geidak 'remember', gong 'say', syunbou 'declare', honang 'be possible', etc.

4.2 Cantonese high vs. low 'again' under a split-aspect approach

Given the parallel of Cantonese postverbal 'again' to Mandarin preverbal 'again', we anticipate an analysis that also draws on high vs. low positions. However, -faan and -gwo can both be embedded. Also, they both cannot follow aspect suffixes like perfective -zo (22). Nevertheless, we witness a difference regarding whether -zo may be preceded by postverbal 'again'. While it is unacceptable for -faan to precede -zo as in (22a), -zo may marginally precede -gwo in (22b). The latter is also attested in naturally occurring data, such as (23).

- (22) a. jau tai(*-<u>faan</u>)-zo(*-<u>faan</u>) bun syu again read-again-PFV-again CLF book 'have read the book again'
 - b. zoi tai(?-gwo)-zo(*-gwo) bun syu again read-again-PFV-again CLF book 'have read the book again'
- (23) cungsan se-gwo-zo Baaijanzung ge daisaam dyun goci again write-again-PFV Bayernhymne GE third line lyrics 'rewrote the third line of the lyrics of Bayernhymne' (8/26/2013 Wikipedia)

We further observe an asymmetry of their compatibility with phase complements (PCs). PCs refer to the phase/stage of an action (Chao 1965), such as *hou2/hão* in *so2-hou2/suŏ-hão* 'locked properly'. Only *-faan* but not *-gwo* is able to follow PCs, as illustrated in (24–25).

(24) seng-jat-seng jau fan-zoek-<u>faan</u> (25) *zoi fan-zoek-<u>gwo</u> wake-one-wake again sleep-ACHV-again again sleep-ACHV-again wake up a little bit and fall asleep again' Intended: 'fall asleep again'

We can locate the position of *-faan* and *-gwo* under a split-aspect approach (Gu 1995, Tsai 2008, Lu, Lipták, and Sybesma 2019; Lee and Pan 2022, i.a.). PCs are analyzed as at the inner aspect layer within vP, whereas the outer aspect is hosted by aspect suffixes and is higher than vP. Since *-faan* can follow PCs and is incompatible with aspect suffixes (i.e., PC < {aspect suffixes, *-faan*}), it is reasonable to treat *-faan* as associating with the outer aspect. On the other hand, *-gwo* cannot cooccur with PCs but may precede aspect suffixes (i.e., {PC, *-gwo*} < aspect suffixes), suggesting an inner aspect position as in (26). Note that the positions only reflect syntactically associated positions, but not necessarily the base-generated positions. Under the lexicalist hypothesis, suffixlike elements form a word with the verbal stem before entering syntax (e.g., Gu 1995). That is, suffixes are base-generated in V⁰, and associate with aspect heads by agreement or LF movement.

(26) ... [AspP-outer (-faan/aspect suffix) ... [vP ... [AspP-inner (-gwo/PC) ... [vP ...

4.3 Wide scope -faan agreeing with outer AspP

We propose that in Cantonese, both *-faan* and *-gwo* are base-generated in the vP layer, as part of V^0 under the lexicalist hypothesis. Just like aspect suffixes, *-faan* agrees with the outer aspect head outside vP; in contrast, *-gwo* only agrees with the inner aspect head inside vP (27). As illustrated in (28a), when *-faan* is embedded, it may agree with the matrix outer Asp^0 to take wide scope over the matrix predicate (like 'want'). This agreement is not available for *-gwo* due to the presence of the inner Asp^0 in the embedded vP, leading to the lack of readings. The agreement of *-faan* is blocked across a finite clause boundary on a par with aspect lowering (28b). This can explain why *-faan* cannot take wide scope over finite clause taking predicates like 'believe'.

The analysis in (28) for Cantonese resembles the analysis for Mandarin in section 3. High 'again' you and -faan associate with Asp⁰ across vP boundaries (either by movement or agreement), whereas low 'again' zai and -gwo do not. The parallelism extends to their relative positions with inner and outer aspects. Only you but not zai may cooccur with aspect suffixes, suggesting that you is higher than the outer Asp⁰ and zai is lower. Regarding the inner Asp⁰, zai can cooccur with PCs like -diao in (29) and is thus higher than the inner Asp⁰. We suggest that you is associated with the specifier position of the outer AspP, and zai the inner. Together with -faan and -gwo, we get a cartography of the positions of Mandarin and Cantonese 'again' in (30).

- (29) na ge reng hui <u>zai</u> mai-diao Minecraft de hundan that CLF still will again sell-ACHV Minecraft DE jerk 'that jerk who will still sell Minecraft again.' (8/31/2015 news)
- (30) Cartography of 'again'-type elements in Chinese languages
 ... [AspP-outer (you) [Asp'-outer (-faan) ... [vp ... [AspP-inner (zai) [Asp'-inner (-gwo) ... [vp ...

5. Conclusion

We observed that Mandarin *you* and Cantonese *-faan* exhibit exceptional scopal behavior, whereas Mandarin *zai* and Cantonese *-gwo* do not. This behavior was found to be linked to whether the 'again'-type element can be embedded by nonfinite clauses and whether they are compatible with aspectual elements. To explain this behavior, we adopted the split-aspect approach and suggested that nonfinite clauses may not have an outer AspP but only a vP. Using phase complement tests, we determined the surface positions of 'again'-type elements in Mandarin and Cantonese: *you* and *-faan* are associated with the outer AspP and *zai* and *-gwo* with the inner AspP.

References

Chao, Yuen-Ren. (1965) A Grammar of Spoken Chinese. Berkeley, CA: University of California Press.

- Cheung, Hung-Nin Samuel (張洪年). (2007) *Xianggang Yueyu Yufa de Yanjiu (Zengding Ban)* (香港粵語語法的研究(增訂版)) [A Grammar of Cantonese as Spoken in Hong Kong (Revised Edition)]. Hong Kong: The Chinese University of Hong Kong Press (香港中文大學出版社).
- Grano, Thomas. (2014) Control without Finiteness Contrasts: Aspect and Complement Size in Mandarin Chinese. Ms., Indiana University, Bloomington.
- Gu, Yang. (1995) Aspect Licensing, Verb Movement and Feature Checking. *Cahiers de Linguistique Asie Orientale* 24.1, 49–83.
- Huang, Cheng-Teh James. (1989) Pro-Drop in Chinese: A Generalized Control Theory. In Osvaldo Jaeggli and Kenneth Safir (eds.), *The Null Subject Parameter*. 185–214. Dordrecht: Kluwer.
- Huang, Cheng-Teh James. (2022) Finiteness, Opacity and Chinese Clausal Architecture. In Andrew Simpson (ed.), *New Explorations in Chinese Theoretical Syntax: Studies in Honor of Yen-Hui Audrey Li*. 17–76. Amsterdam: John Benjamins.
- Huang, Zhipeng Nick. (2018) Control Complements in Mandarin Chinese: Implications for Restructuring and the Chinese Finiteness Debate. *Journal of East Asian Linguistics* 27.4, 347–376.
- Lee, Tommy Tsz-Ming and Victor Junnan Pan. (2022) The Privileged Status of Phases: Licensing VP Movement and Ellipsis in Mandarin and Cantonese. Ms., University of Southern California and the Chinese University of Hong Kong.
- Li, Yen-Hui Audrey. (1990) Order and Constituency in Mandarin Chinese. Dordrecht: Kluwer.
- Lin, Jo-Wang. (2006) Time in a Language without Tense: The Case of Chinese. *Journal of Semantics* 23.1, 1–53.
- Lin, Tzong-Hong Jonah and Chi-Ming Louis Liu. (2009) 'Again' and 'Again': A Grammatical Analysis of *You* and *Zai* in Mandarin Chinese. *Linguistics* 47.5, 1183–1210.
- Liu, Yuyang. (2021) 'Again' Skipping in Mandarin Chinese. Bachelor's thesis, University of Massachusetts, Amherst.
- Liu, Yuyang. (To appear) 'Again' Skipping in Mandarin Chinese: A Syntactic Approach. In *Proceedings of the 40th West Coast Conference on Formal Linguistics*. Somerville, MA: Cascadilla Press.
- Lu, Man, Anikó Lipták, and Rint Sybesma. (2019) A Structural Account of the Difference between Achievements and Accomplishments: Evidence from Changsha Xiang Chinese. *Journal of East Asian Linguistics* 28.3, 279–306.
- Peng, Xiaochuan (彭小川). (2010) Guangzhouhua Zhuci Yanjiu (廣州話助詞研究) [Particle Research in Cantonese]. Guangzhou: Jinan University Press (暨南大學出版社).
- Tang, Sze-Wing (鄧思穎). (2001) Yueyu Zhuci "Faan" de Yingyong Tiaojian (粵語助詞「翻」的應用條件) [Application Conditions of the Cantonese Particle "-Faan"]. *Zhongguo Yuwen Tongxun* (中國語文通訊) [Newsletter of Chinese Language] 60, 50–55.
- Tsai, Wei-Tien Dylan. (2008) Tense Anchoring in Chinese. Lingua 118.5, 675–686.

yuyang.liu.yl2472@yale.edu kafai.yip@yale.edu