

## Themes to instruments: Non-canonical arguments in Mandarin RVCs<sup>1</sup>

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### 1 Introduction

- In English non-selected resultative constructions, the object solely denotes the *holder* of the result state but not the *theme* of the dynamic means event, as illustrated by fake-reflexives in (1) (see Beavers 2012 for an overview).<sup>2</sup>

(1) *Kim drank herself unconscious.*
- Notably, non-selected resultative constructions disallow an overt realization of the theme as either subject (2a) or (in)direct object (2b/c).

(2) a. # *The wine drank Kim unconscious.*  
b. # *Kim drank the wine unconscious.*  
c. # *Kim drank the wine herself unconscious.*
- Parallel to English, Mandarin exhibits non-selected resultative verbal compounds (RVCs) in which the holder of the result state does not equate to the theme of the means event (Liu 2021, C.-T. Huang 2006, J. Lin 2004 i.a., see Tham 2015 for an overview).

(3) *Zhangsan he-zui-le.*  
Zhangsan drink-drunk-ASP  
'Zhangsan got drunk from drinking..' (J. Lin 2004: 135)
- In contrast to English, Mandarin RVCs allow the overt realizations of the theme in either subject or object position (also Williams 2014, 2008), challenging a uniform analysis of argument structure in resultatives cross-linguistically.

(4) a. *Zhangsan he-zui-le jiu.*      b. *Jiu he-zui-le Zhangsan.*  
Zhangsan drink-drunk-ASP wine      wine drink-drunk-ASP Zhangsan  
'Zhangsan got drunk from drinking wine.'      'The wine made Zhangsan drunk from drinking.'  
(J. Lin 2004: 100)      (J. Lin 2004: 135)
- In this talk, I revisit the status of theme arguments in non-selected RVCs based on the novel observation that in English, such themes can actually be overtly realized as instrumental PP-arguments (see appendix for additional data from German).

(5) *Kim drank herself unconscious with two bottles of vodka.*
- While instrumental arguments in English must be introduced by a prepositional phrase, instrumental arguments in Mandarin may appear as so-called *non-canonical arguments* (NCAs) in either subject or object position in complementary distribution with agent or theme arguments, respectively (Zhang 2022, 2018, Y.-H. Li 2014, T.-H. Lin 2001 i.a.).

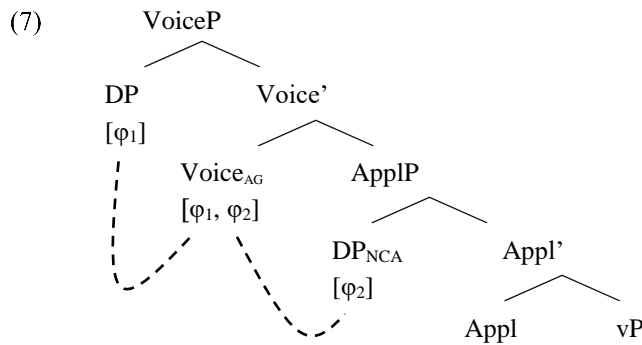
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<sup>2</sup> In this talk, I will use the term “selected” only metaphorically to refer to constructions in that the holder argument can or must be understood as the theme of the means predicate without the implying any direct syntactic or semantic relationship (cf. Kratzer 2005, Hoekstra 1988, also Levin 2020 for discussion).

- (6) a. *Zhangsan he xiao-bei.*                      b. *Xiao-bei he lücha.*  
 Zhangsan drink small-cup                      small-cup drink green.tea  
 ‘Zhangsan drinks with small cups.’                      ‘Small cups are used to drink tea.’  
 (Y.-H. Li 2014: 309)

- Developing an analysis of NCAs as non-recursive high applicatives that introduce instrumental arguments on top of the vP (also Y. Li 2022, Sun 2009, cf. Jerro 2021, Nie 2020, Pylkkänen 2008), I propose that their distribution follows from limited licensing capacities in the verbal domain in Mandarin (cf. Sheehan & van der Wal 2018).



- Re-analyzing themes in non-selected RVCs as oblique/instrumental arguments, I show that argument structure and word order alternations follow from three independently motivated and cross-linguistically attested phenomena.
  - **anti-agentivity**, i.e. the availability of unaccusative manner verbs in the absence of an agent argument (Martin et al. forthcoming, cf. Carvalho 2016 on Braz. Portuguese);
  - **non-recursive applicatives**, i.e. the absence of a nominal licensing feature on Appl which requires applied arguments to be licensed by Voice (cf. Nie 2020); and
  - **pseudo-noun incorporation**, i.e. structurally reduced bare NPs that escape nominal licensing (H.-L. Huang 2018, cf. Massam 2001).
- Consequently, the contrast between English and Mandarin can be ultimately reduced to the absence of (high) applicatives in English (Pylkkänen 2008) and does not provide a challenge to a uniform analysis of argument structure in resultative constructions.

## Outline

1. Introduction
2. Themes in non-selected RVCs in Mandarin
3. Oblique/Instrumental themes in non-selected resultatives in English
4. Instrumental NCAs as high applicatives
5. Themes as NCAs in RVCs
6. Conclusion

## 2 Themes in Mandarin non-selected RVCs

- In this section, I provide a brief overview of non-selected resultatives, focusing on the unavailability of theme arguments in English and their presence in Mandarin. Crucially, the latter correlates with the absence of agentive semantics.

## 2.1 Non-selected resultatives in English

- Resultative constructions differ in whether the *holder* of the result state, which is overtly realized, must be understood as *theme* argument of the dynamic means predicate (see Beavers 2012 for an overview).
    - In *selected* resultatives, the *holder* of the result state must be understood as the *theme* of the means predicate as which it can function also outside of resultative construction.
- (8) a. *Kim wiped the table clean.* SELECTED  
 b. *Kim wiped the table.*  
 c. *The table is clean.*
- In *non-selected* resultatives, the *holder* of the result state cannot be understood as the *theme* of the means predicate, as which it is also infelicitous outside of the construction.
- (9) a. *Kim drank herself unconscious.* FAKE-REFLEXIVES  
 b. # *Kim drank herself.*  
 c. *Kim is unconscious.*
- (10) a. *Kim sang Robyn asleep.* NON-SELECTED  
 b. # *Kim sang Robyn.*  
 c. *Robyn is asleep.*
- Crucially, the theme argument of the means predicate cannot be overtly realized as the subject, direct or indirect object of non-selected resultatives in English.

- (11) a. # *The wine drank Kim unconscious.*  
 b. # *Kim drank the wine unconscious.*  
 c. # *Kim drank the wine herself unconscious.*

⇒ In non-selected resultatives, the holder does not correspond to the theme.

## 2.2 Non-selected resultatives in Mandarin

- In Mandarin, resultative semantics is primarily expressed via RVCs that like English, exhibit selected and non-selected variants depending on whether the holder of the result state is understood to be theme of the means event (Liu 2021, Williams 2008, C.-T. Huang 2006, J. Lin 2004 *i.a.*).
- (12) *Zhangsan xi-ganjing-le yifu.* SELECTED  
 Zhangsan wash-clean-ASP clothes  
 ‘Zhangsan washed the clothes clean.’
- (13) *Zhangsan ku-shi-le shoupa.* NON-SELECTED  
 Zhangsan cry-wet-ASP handkerchief  
 ‘Zhangsan cried the handkerchief wet.’
- Unlike English, Mandarin RVCs can appear in agentless unaccusative constructions in which the holder argument is promoted to subject position, as indicated by the infelicity of agent-oriented modifiers like *guyi* ‘intentionally’.

- (14) a. *Yifu (#guyi) xi-ganjing-le.*  
 clothes intentionally wash-clean-ASP  
 ‘The clothes got clean from washing it (\*intentionally).’

- b. *Shuopa (#guyi) ku-shi-le.*  
 handkerchief intentionally cry-wet-ASP  
 ‘The handkerchief got wet from crying (#intentionally).’

- Such unaccusative resultatives also express a meaning similar to fake-reflexives in English where the animate subject is the *holder* of the result state but also understood to be the *agent* of the means predicate.

- (15) *Zhangsan (#guyi) he-zui-le.*  
 Zhangsan intentionally drink-drunk-ASP  
 ‘Zhangsan got drunk from drinking.’

⇒ Mandarin RVCs exhibit agentless unaccusative non-selected variants.

### 2.3 Agentless non-selected RVCs with themes in subjects and objects

- In contrast to non-selected resultatives in English (11a/b), agentless non-selected RVCs allow the theme argument of the means predicate to be realized in either pre-verbal subject or post-verbal object position (Liu 2021, C.-T. Huang 2006, J. Lin 2004 *i.a.*).

- (16) *Na ping jiu (#guyi) he-zui-le Zhangsan.* THEME-VERB-HOLDER  
 DEM bottle wine intentionally drink-drunk-ASP Zhangsan  
 ‘That bottle of wine made Zhangsan drunk from drinking it (#intentionally).’

- (17) *Zhangsan (#guyi) he-zui-le jiu.* HOLDER-VERB-THEME  
 Zhangsan intentionally drink-drunk-ASP wine  
 ‘Zhangsan got (#intentionally) drunk from drinking (\*that bottle of) wine.’

- Depending on their syntactic position, such overt themes differ in their referentiality as only post-verbal themes reject demonstratives and are obligatorily non-referential.

- (18) *Zhangsan he-zui-le (\*na-ping) jiu.*  
 Zhangsan drink-drunk-ASP that-bottle wine  
 ‘Zhangsan got drunk from drinking (\*that bottle of) wine.’

⇒ Agentless non-selected RVCs allow their themes to be overtly expressed.

### 2.4 Summary

- In Mandarin non-selected RVCs, the theme of the means event can be overtly realized in either the pre-verbal subject or post-verbal object position, challenging a uniform analysis of theme arguments in non-selected resultatives.
- Crucially however, such theme arguments are in complementary distribution with agentive semantics and their interpretation is influenced by their syntactic position, i.e. post-verbal seems must be non-referential.
- In the following, I revisit the status of such theme arguments and argue that they have the status of syntactically oblique arguments.

## 3 Instrumental themes in English non-selected resultatives

- As noted above, themes of means predicates in non-selected resultative constructions in English cannot be overtly realized as subjects or objects but are understood from the context.

- (19) a. # *The wine drank Kim unconscious.*  
 b. # *Kim drank the wine unconscious.*

(20) *Kim sang (# a lullaby) Robyn asleep.*

- However, themes of non-selected resultatives can actually be introduced as oblique arguments within an instrumental *with*-phrase.<sup>3</sup>

- (21) a. *Kim drank herself unconscious **with two bottles of vodka.***  
 b. *Kim sang Robyn asleep **with a lullaby.***

- Notably, the presence of oblique/instrumental themes appears to be restricted to resultative constructions as oblique/instrumental themes are infelicitous outside of such constructions.

- (22) a. *Kim drank (#**with**) two bottles of vodka.*  
 b. *Kim sang (#**with**) a lullaby.*

- The general intuition here is that the theme argument of the means predicate functions as a facilitating condition, similar to other types of instruments in a causal chain (Levin 2020, Kratzer 2005, Wolff 2003).

(23) *Kim pounded the metal flat **with a hammer.***

⇒ Themes of the means predicate can be realized as oblique instrumental arguments.

#### 4 Instruments as NCAs in Mandarin

- While instruments must be introduced as PPs in English, Mandarin allows instrumental DPs to combine directly with the verb as so-called *non-canonical arguments* (NCAs), which are in complementary distribution with either agent or theme arguments (Zhang 2018, Y.-H. Li 2014, T.-H. Lin 2001 *i.a.*).

- (24) a. *Zhangsan he lücha.* AGENT-VERB-THEME  
 Zhangsan drink green.tea  
 ‘Zhangsan drinks tea.’
- b. *Zhangsan he xiao-bei.* AGENT-VERB-INSTRUMENT  
 Zhangsan drink small-cup  
 ‘Zhangsan drinks with small cups.’
- c. *Xiao-bei he lücha.* INSTRUMENT-VERB-THEME  
 small-cup drink green.tea  
 ‘Small cups are used to drink tea.’ (Y.-H. Li 2014: 309)
- d. *Lücha he xiao-bei.* THEME-VERB-INSTRUMENT  
 green.tea drink small-cups  
 ‘Green tea is drunk by small cups.’ (Y.-H. Li 2014: 309)

- In this section, I lay out a novel analysis of NCAs as high applicatives that are base-generated between the *vP* and the *VoiceP*, with argument structure and word order alternations following from independent syntactic operations.

<sup>3</sup> Note that the distribution of oblique/instrumental themes in non-selected resultatives seems to be restricted to certain sub-classes (cf. Levin 2020) and requires further investigation.

(i) *Kim popped the can open with the lid.*

#### 4.1 Non-canonical arguments as non-recursive applicatives

- Despite their complementary distribution (25), Zhang (2022, 2018) demonstrates that non-canonical object (NCO) are not base-generated in the same syntactic position as themes, which occupy the internal argument position within the  $vP$ .

(25) *Zhangsan he xiao-bei / liucha.*  
 Zhangsan drink small-cup green.tea  
 ‘Zhangsan drinks tea / with small cups.’

- One of her diagnostics comes from agentless presuppositions of the repetitive modifier like *you* ‘again’ (Zhang 2022, cf. Smith & Yu 2022, Bale 2007 for a detailed analysis), where ‘again’ scopes over the event denoted by the verb to the exclusion of the agent.

(26) a. *Nana qie-le na zhang da-bing.*  
 Nana cut-ASP DEM CLF big-pancake  
 ‘Nana cut that big pancake.’  
 b. *Lili you qie-le na zhang da-bing.*  
 Lili again cut-ASP DEM CLF big-pancake  
 ‘Lili cut that big pancake again.’ (Zhang 2022: 85)

- Notably, such a reading is only felicitous in the presence of an internal argument, as indicated by the infelicity of agentless presuppositions of *you* ‘again’ with unergative verbs that lack a  $vP$ -internal argument.

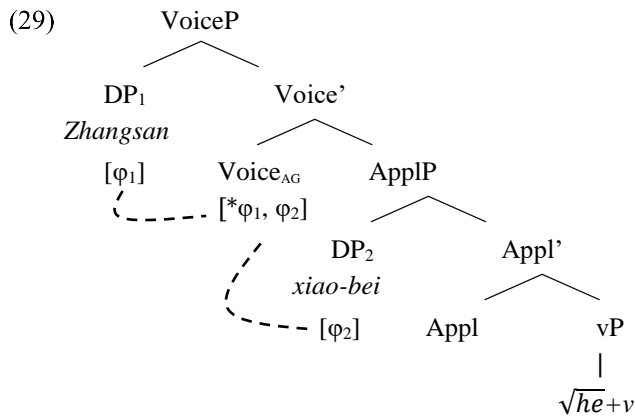
(27) a. *Nana youyong-le.*  
 Nana swim-ASP  
 ‘Nana swam.’  
 b. # *Lili you youyong-le.*  
 Lili again swim-ASP  
 ‘Lili swam again.’ (Zhang 2022: 86)

- Crucially, NCOs pattern with unergative predicates and reject agentless presuppositions, which suggest that the instrumental argument does not occupy the same position as the theme but are merged outside of the  $vP$ .

(28) a. *Nana qie-le na ba da-dao.*  
 Nana cut-ASP DEM CLF big-knife  
 ‘Nana cut with that big knife.’  
 b. # *Lili you qie-le na ba da-dao*  
 Lili again cut-ASP DEM CLF big-knife  
 ‘Lili cut with that big knife again.’ (Zhang 2022: 90)

- NCOs can thus be analyzed as applied arguments that are base-generated in the specifier of a (silent) high Appl(icative) head, a position that is linked instrumental arguments cross-linguistically (also Y. Li 2022, Sun 2009, cf. Jerro 2021, Pykkänen 2008).
- Adopting Nie’s (2020) of non-recursive applicatives, Appl is unable to license the DP in its specifier (via abstract  $\phi$ -agreement), which instead must be licensed by Voice (cf. Sheehan & van der Wal 2018 on nominal licensing).
- As transitive Voice is only able to license two DPs, the complementary distribution of NCOs and themes reflects the limited licensing capacities in verbal domain in Mandarin, ruling out ditransitive structures (cf. T.-H. Lin 2001 for a similar intuition).<sup>4</sup>

<sup>4</sup> For non-recursive ditransitive applicatives as in Tagalog, Nie (2020) argues that  $v$  is able to license the theme argument directly, allowing the addition of a single applied argument to transitive predicates.



⇒ Instrumental NCAs are non-recursive high applicatives.

## 4.2 Anti-agentivity

- Instrumental NCAs are also observed in subject position where they are in complementary distribution with agents (Y. Li 2022, Y.-H. Li 2014).

(30) *Zhangsan / xiao-bei he lücha.*  
 Zhangsan small-cup drink green.tea  
 ‘Zhangsan drinks tea.’ / ‘Small cups are used to drink tea.’

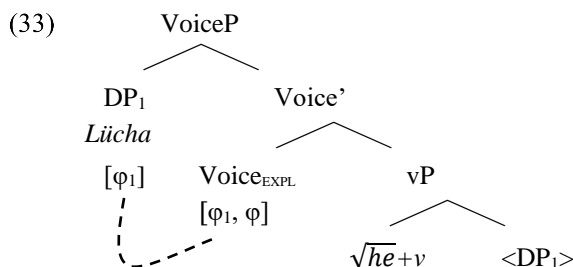
- Crucially, the presence of instrumental non-canonical subjects (NCS) correlates with the absence of agentive semantics more generally, as indicated by the infelicity of agent-oriented modifiers like *guyi* ‘intentionally’ (Y. Li 2022, Y.-H. Li 2014, also Her 2009).

(31) *Xiao-bei (#guyi) he lücha.*  
 small-cup intentionally drink green.tea  
 ‘Small cups are (#intentionally) used to drink tea.’

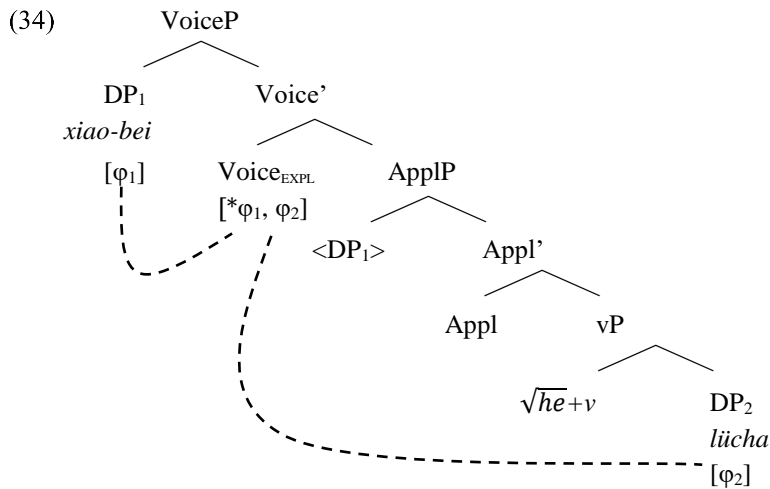
- NCSs thus mirror anti-agentive constructions in which manner verbs appear in intransitive unaccusative structures that lack both agentive semantics and an external argument (Martin et al. forthcoming, cf. Carvalho 2016 on Brazilian Portuguese).

(32) *Lücha (#guyi) he-le.*  
 green.tea intentionally drink-ASP  
 ‘The tea was (#intentionally) drunk.’

- Parallel to anticausatives, I assume that anti-agentives contain an expletive Voice head that does not introduce agentive semantics but solely licenses the internal argument, i.e. the theme, which is raised to subject position (cf. Nie 2020, Schäfer 2007).



- In the absence of agentive semantics, NCS are merged in Spec, ApplP on top of the vP in an antiagentive configuration, where they are licensed by expletive transitive Voice and promoted to the preverbal subject position.



⇒ Agentless NCA constructions are anti-agentive.<sup>5</sup>

### 4.3 Pseudo noun incorporation

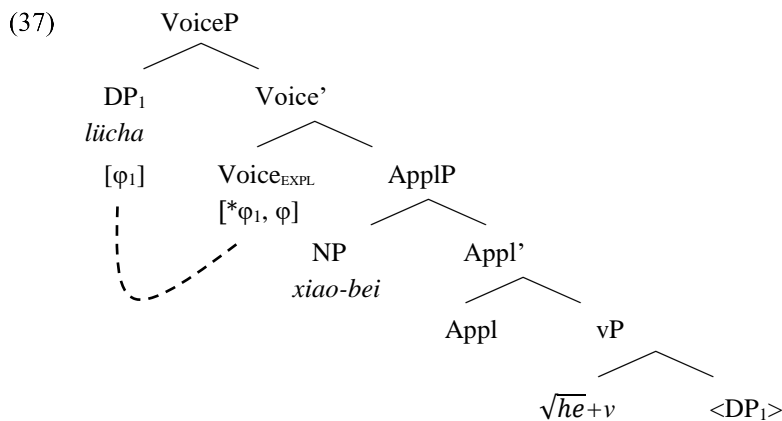
- Finally, NCAs and themes can appear in reversed order with theme occupying the pre-verbal subject position and the NCA the post-verbal object position (Y. Li 2022, Y.-H. Li 2014), seemingly violating locality constraints on A-movement.

(35) *Lücha (#guyi) he xiao-bei.*  
 green.tea intentionally drink small-cups  
 ‘Green tea is (#intentionally) drunk with small cups.’

- Yet, post-verbal NCAs with theme subject differ from NCOs with agentive subjects in that they show properties of pseudo-noun incorporation (PNI; Y.-H. Li 2014), i.e. they reject demonstratives (36a), are non-referential, and do not undergo A'-movement.

(36) *Lücha he (\*nei-ge) xiao-bei.*  
 green.tea drink DEM-CLF small-cups  
 ‘Green tea is drunk with (#these) small cups.’

- Adopting Massam’s (2001) analysis of PNI (cf. H.-L. Huang 2018), I assume that such post-verbal NCAs are merged as structurally reduced NP arguments that escape nominal licensing and therefore allow the internal theme argument move to subject position.



⇒ Non-referential NCAs in post-verbal position are applied arguments subject to PNI.

<sup>5</sup> While anti-agentives are similar to passives in not projecting an external argument, they differ in whether the predicate entails or just imply agentive semantics (Martin et al. forthcoming for discussion).



#### 4.4 Summary

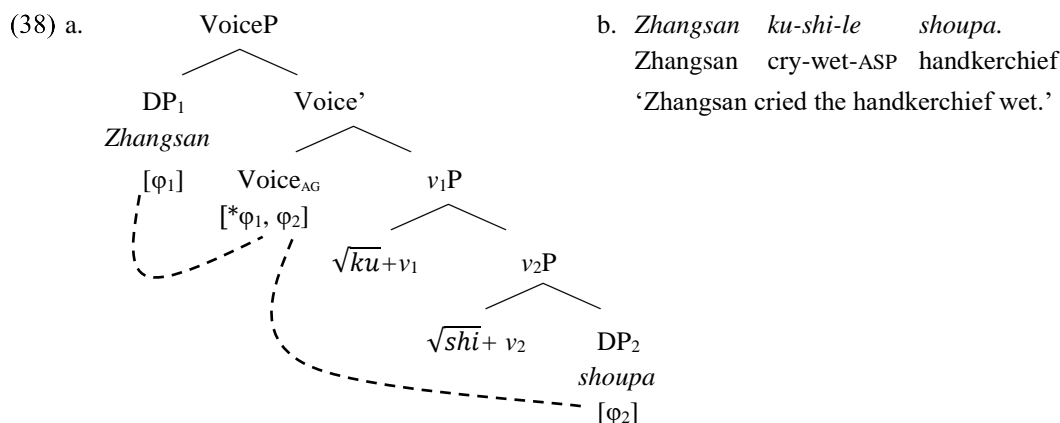
- Mandarin exhibits non-recursive applicatives (NCAs) in which instrumental argument can be introduced in Spec, ApplP but are licensed by transitive Voice, accounting for the complementary distribution of applied arguments and either agent or theme.
- Additional word order alternations follow from a language specific combination of cross-linguistically attested phenomena, i.e. anti-agentivity and PNI.

#### 5 Themes as NCAs in non-selected RVCs

- Against oblique/instrumental themes in English non-selected resultatives, I propose an analysis of themes in Mandarin non-selected RVCs as NCAs.

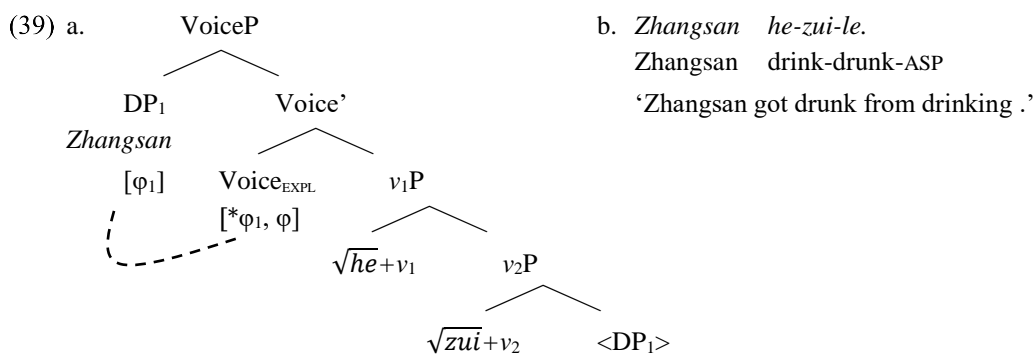
##### 5.1 Non-selected RVCs with agent subject and holder object

- Adopting a small clause analysis for Mandarin RVCs, I assume that the means predicate takes a resultative small clause as its complement, including the holder argument (Hopperdietzel 2022, Liu 2021, C.-T. Huang 2006, cf. Kratzer 2005, Hoekstra 1988).<sup>6</sup>
- In theme-less transitive non-selected resultatives, the *holder* argument in the post-verbal object position is merged within the lower vP-small clause with the *agent* argument introduced by an agentive Voice, which licenses both arguments.



##### 5.2 Non-selected resultatives with holder subject: Anti-agentivity

- In the absence of agentive semantics, agentless non-selected RVCs with holder subjects qualify as unaccusative anti-agentive constructions (Liu 2021, C.-T. Huang 2006).

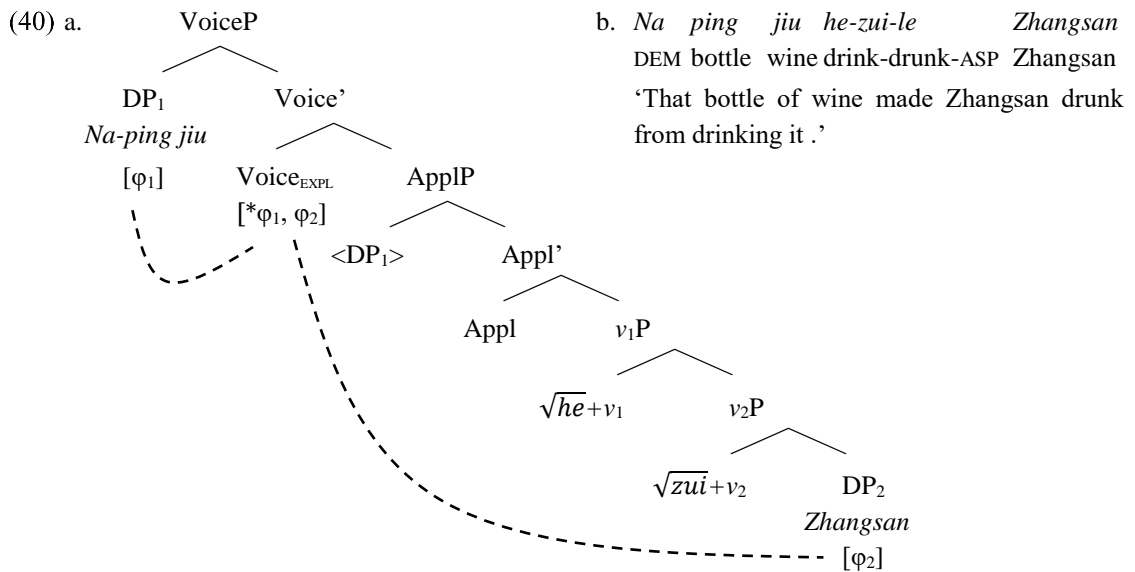


<sup>6</sup> The same reasoning holds for alternative analysis of resultative constructions, e.g. complex predicate approaches.

- Here, the holder argument, which is base-generated vP-internally, is promoted to the pre-verbal subject position via nominal licensing by an expletive Voice head that is void of agentive semantics.

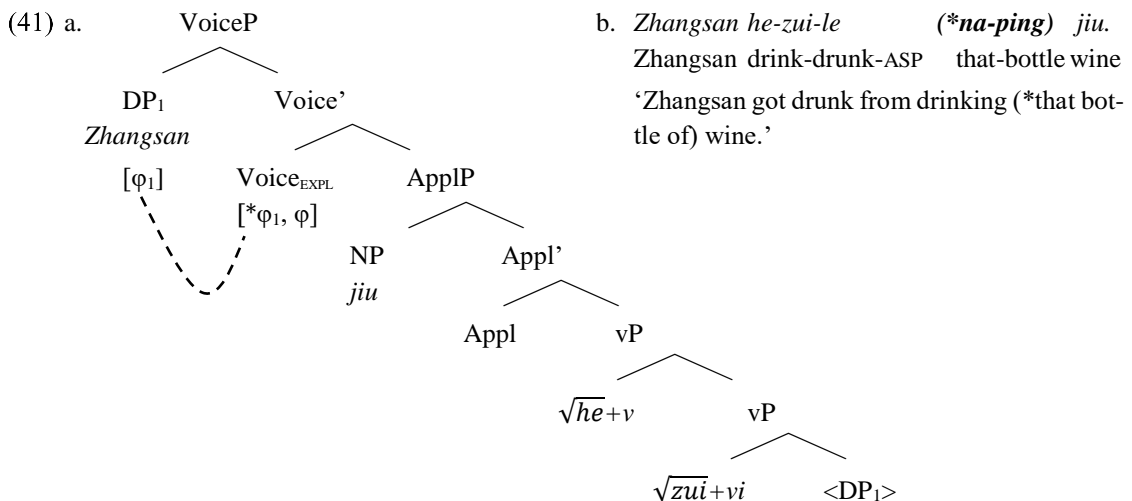
### 5.3 Non-selected RVCs with theme and holder object: High applicatives

- With the observation that themes in English non-selected resultatives can be introduced in the same way as instrumental arguments, I analyze themes in non-selected RVCs parallel to instrumental NCAs, i.e. as applied argument on top of an anti-agentive vP.
- The presence of the applied theme thus blocks the promotion of the holder argument to the subject position, which instead occupies the post-verbal object position.



### 5.4 Non-selected RVCs with holder subject and theme object: PNI

- In post-verbal position with a holder subject, theme arguments in non-selected RVCs show properties of PNI, i.e. being non-referential and reject demonstratives.
- Here, the theme merges as a structurally reduced NP in Spec, ApplP, escaping nominal licensing and allowing the holder argument to be promoted to subject position.



⇒ Themes in Mandarin non-selected RVCs are high applicatives.

## 6 Conclusion

- In this talk, I have investigated the status of theme arguments of the means predicate in non-selected resultatives, presenting novel evidence that such themes can actually be realized as oblique instrumental arguments.
- Developing a novel analysis of (instrumental) NCAs as non-recursive high applicatives, I have reanalyzed themes in non-selected RVCs in Mandarin as applied arguments that merge to anti-agentive resultative structures.
- Word order alternations then follow from pseudo incorporation of the applied theme, explaining its non-referential status in post-verbal object but not in pre-verbal subject position.
- Consequently, an analysis of theme arguments as NCAs unifies the two phenomena in Mandarin, and suggests that the variation between Mandarin and English can be ultimately reduced to the (un)availability of high applicatives (cf. Pylkkänen 2008 on the absence of high applicatives in English).

### Appendix: Instrumental themes in German

- Like English, German non-selected resultatives constructions allow their theme argument to be realized as oblique instrumental PPs (here: *mit*-phrases) (42c/43c) but not as DP (42b/43b) which is ungrammatical outside of the construction (42d/43d).

- (42) a. *Kim trank sich bewusstlos.* FAKE-REFLEXIVE  
'Kim drank themselves unconscious.'
- b. # *Kim trank (sich) zwei Flaschen Vodka bewusstlos.*  
'Kim drank (themselves) two bottles of Vodka unconscious.'
- c. *Kim trank sich mit zwei Flaschen Vodka bewusstlos.*  
'Kim drank themselves unconscious with two bottles of Vodka.'
- d. *Kim trank (#mit) zwei Flaschen Vodka.*  
'Kim drank (#with) two bottles of Vodka.'
- (43) a. *Kim sang Robyn in den Schlaf* NON-SELECTED  
'Kim sang Robyn to sleep.'
- b. # *Kim sang ein(em) Schlaflied Robyn in den Schlaf.*  
'Kim sang a lullaby Robyn to sleep.'
- c. *Kim sang Robyn mit einem Schlaflied in den Schlaf.*  
'Kim sang Robyn to sleep with a lullaby.'
- d. *Kim sang (#mit) ein(#em) Schlaflied.*  
'Kim sang (#with) a lullaby.'

## References:

- Bale, Alan C. 2007. Quantifiers and verb phrases: An exploration of propositional complexity. *Natural Language & Linguistic Theory* 25(3), 447-483.
- Beavers, John. 2012. Resultative constructions. In Robert Binnick (ed.), *The Oxford handbook of tense and aspect*, 908-933. Oxford: Oxford University Press.
- Carvalho, Janayna. 2016. What causes the alternation of agentive verbs in Brazilian Portuguese? *University of Pennsylvania Working Papers in Linguistics* 22(1), 61-70.
- Her, One-Soon. 2009. Apparent subject-object inversion in Chinese. *Linguistics* 47(5), 1143-1181.
- Hoekstra, Teun. 1988. Small clause results *Lingua* 74, 101-139.
- Hopperdietzel, Jens. 2022. Talmy's typology in serializing languages: Variations on a VP. *Glossa* 7(1). DOI: <https://doi.org/10.16995/glossa.7686>
- Huang, C.-T. James. 2006. Resultatives and unaccusatives: A parametric view. *Bulletin of the Chinese Linguistic Society of Japan* 253, 1-43.
- Huang, Hsi-Lun. 2018. Revisiting pseudo-incorporation: Post-verbal non-referential bare NPs in Mandarin. *Proceedings of the 35th West Coast Conference on Formal Linguistics (WCCFL35)*, 203-213.
- Jerro, Kyle. 2021. Applied objects and the syntax-semantics interface. *Journal of Linguistics* 57(2), 365-403.
- Kratzer, Angelika. 2005. Building resultatives. In Claudia Maienborn & Angelika Wöllstein (eds.), *Event arguments: Foundations and applications*, 177-212. Tübingen: Niemeyer.
- Levin, Beth. 2020. Resultatives and constraints on concealed causatives. In Elitzur Bar-Asher Siegal & Nora Boneh (eds.), *Perspectives on causation: Selected papers from the Jerusalem 2017 Workshop*. Dordrecht: Springer.
- Li, Yafei. 2022. Noncanonical arguments via the high applicative. In Andrew Simpson (ed.), *New explorations in Chinese theoretical syntax*, 331-356. Amsterdam: Benjamins.
- Li, Yen-Hui Audrey. 2014. Thematic hierarchy and derivational economy. *Language and Linguistics* 15(3), 295-339.
- Lin, Jimmy. 2004. *Event structure and the encoding of arguments: The syntax of the Mandarin and English verb phrase*. PhD thesis, Massachusetts Institute of Technology, Cambridge, MA.
- Lin, Tzong-Hong Jonah. 2001. *Light verb syntax and the theory of phrase structure*. PhD thesis, University of California, Irvine.
- Liu, Jianxun. 2021. *The syntax of V-V resultatives in Mandarin Chinese*. Singapore: Springer.
- Martin, Fabienne, Hongyuan Sun, Jinhong Liu & Hamida Demirdache. forthcoming. On the zero-change construal of causative simple verbs in Mandarin Chinese. *Proceedings of TripleA7*.
- Massam, Diane. 2001. Pseudo noun incorporation in Niuean. *Natural Language & Linguistic Theory* 19(1), 153-197.
- Nie, Yining. 2020. *Licensing arguments*. PhD thesis, New York University.
- Pylkkänen, Liina. 2008. *Introducing arguments*. Cambridge, MA: MIT Press.
- Schäfer, Florian. 2007. *On the nature of anticausative morphology: External arguments in change-of-state contexts*. PhD thesis, University of Stuttgart.
- Sheehan, Michelle & Jenneke van der Wal. 2018. Nominal licensing in caseless languages. *Journal of Linguistics* 54(3), 527-589.
- Smith, Ryan Walter & Jianrong Yu. 2022. Agentless presuppositions and the semantics of verbal roots. *Natural Language and Linguistic Theory* 40, 857-909.
- Sun, Tianqi. 2009. On oblique objects in Chinese. *Chinese Language Learning* 3, 70-77.
- Tham, Shiao Wei. 2015. Resultative verb compounds in Mandarin. In William S.-Y. Wang & Chaofen Sun (eds.), *The Oxford handbook of Chinese linguistics*, 306-319. Oxford: Oxford University Press.
- Williams, Alexander. 2014. Agents in Mandarin and Igbo resultatives. In Audrey Li, Andrew Simpson & Dylan T. Wei-Tien (eds.), *Chinese syntax in a cross-linguistic perspective*, 270-299. Oxford: Oxford University Press.
- Williams, Alexander. 2008. Patients in Igbo and Mandarin. In Johannes Dölling, Tatjana Heyde-Zybatow & Martin Schäfer (eds.), *Event structures in linguistic form and interpretation*, 3-30. Berlin: deGruyter.
- Wolff, Phillip. 2003. Direct causation in the linguistic coding and individuation of causal events. *Cognition* 88(1), 1-48.
- Zhang, Niina N. 2022. Agentless presupposition and implicit non-canonical objects in Mandarin. *Cahiers de Linguistique Asie Orientale* 51, 81-104.
- Zhang, Niina N. 2018. Non-canonical objects as event kind-classifying elements. *Natural Language & Linguistic Theory* 36(4), 1395-1437.