

## Mandarin *gěi* as an argument introducer

### Thematic and expletive uses\*

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#### 1. INTRODUCTION: THE PARTICLE *GĚI* AND ITS USES

- The Mandarin Chinese particle *gěi* has received a lot of attention in the generative literature, but no consensus has yet been reached as regards its categorial status and exact syntactico-semantic contribution.
- The lack of agreement on a correct analysis is due to the particle's capacity to appear in a wide range of disparate constructions.
- This disparity in use has given rise to conflicting views on how to properly characterize the particle: *gěi* has variously been treated as a preposition, a (light) verb, an applicative head, and a complementizer (see, among many others, Huang & Ahrens 1999, Ting & Chang 2004, Her 2006, Paul & Whitman 2010, Georgala 2012, or Lin & Huang 2015).
- In what seems to be its original etymological use, *gěi* functions as a transfer-of-possession verb analogous to the English *give* in the double object construction (DOC).

(1) *Tā gěi wǒ yī běn shū.*  
3SG GEI 1SG one CL book.  
'S/he gave me a book.'

- In the DOC, *gěi* can optionally have another verb adjoined to it to yield a complex predicate, as in (2).

(2) *Tā sòng-gěi wǒ yī běn shū.*  
3SG give-GEI 1SG one CL book  
'S/he gave me a book (as a gift).'

- Mandarin Chinese also has a construction parallel to the English prepositional dative construction (PDC) when it comes to surface structure in which the order goal-theme is inverted with respect to the DOC. In this construction, *gěi* appears post-verbally between the theme and the goal.

(3) *Tā sòng yī běn shū gěi wǒ.*  
3SG send one CL book GEI 1SG  
'S/He sent a book to me.'

- *Gěi* can also appear preverbally. In this case, the argument immediately following the particle can have a variety of meanings, beneficiary being a typical one, as in (4).

(4) *Wǒ gěi tā tí xínglǐ.*  
1SG GEI 3SG carry luggage  
'I carry the luggage for him/her.'  
(Adapted from Badan 2021: 204, (19))

- The final construction that this paper examines involves a further instance of pre-verbal *gěi*. As has been noted in the literature (Xu 1994), and as native speakers confirm, in the colloquial dialects of Beijing sentences like (5) are ambiguous between an active and a passive reading.

(5) *Lǐ Sì gěi Xiǎo Wáng zhuāzhù le.*  
Li Si GEI Xiao Wang catch ASP  
'Lisi caught Xiao Wang / Lisi was caught by Xiao Wang.'  
(Adapted from Xu 1994: 122, (22))

- In (5), the pre-*gěi* argument, *Lǐ Sì*, can either be interpreted as the agent or the theme of the event. If *Lǐ Sì* receives the interpretation of agent, then the post-*gěi* argument, *Xiǎo Wáng*, will be interpreted as a theme; conversely, if *Lǐ Sì* is a theme, *Xiǎo Wáng* will receive an agent interpretation.
- The table below summarizes the constructions that will be of interest in this paper.

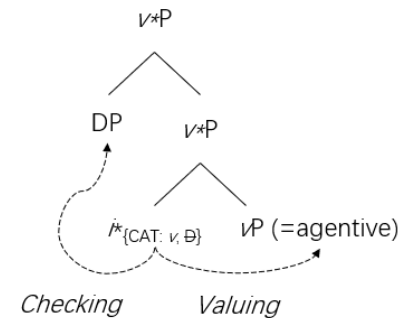
Construction	Example	Surface structure
DOC	(1) and (2)	Agent (V)- <i>gěi</i> Recipient Theme
PDC	(3)	Agent V Theme <i>gěi</i> Goal
Benefactive	(4)	Agent <i>gěi</i> Beneficiary V
Passive-active	(5)	DP <sub>1</sub> <i>gěi</i> DP <sub>2</sub> V Agent <i>gěi</i> Theme V / Theme <i>gěi</i> Agent V

## 2. THE “SINGLE ARGUMENT-INTRODUCING HEAD” HYPOTHESIS

- Wood & Marantz (2017) [W&M] seek to reduce the inventory of functional heads made available by UG by subsuming categories like Voice, Applicative, or  $\rho$  under the same argument-introducing head, which they refer to as  $\acute{v}$ .
- Syntactically, this head's job is to introduce a DP in the structure.  $\acute{v}$  is categorially underspecified: its category is dependent on the syntactic context in which it is merged.
- Semantically,  $\acute{v}$  is also underspecified. Generally, what this head does is introduce a new participant and give it the interpretation implied by the first element it has merged with.

- For example, when  $\acute{v}$  has an agentive  $\nu P$  as its complement, as in (6a), the interpretation of the introduced DP will be agent. In this case,  $\acute{v}$  receives the agentive alloform interpretation (6b), and is equivalent to traditional active Voice (Kratzer 1996).

(6) a.



b.  $\acute{v}$  ↔  $\lambda x\lambda e.AGENT(x, e) / \_\_\_ [agentive \nu P]$

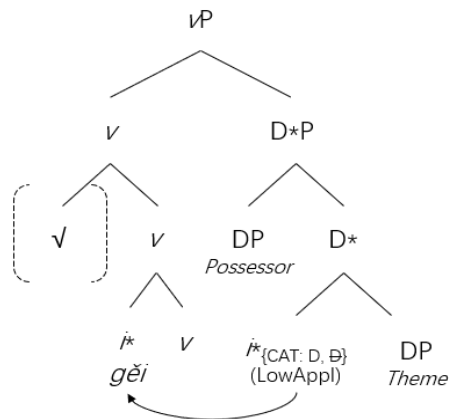
- $\acute{v}$  can also have a root adjoined to it, in which case the interpretation assigned to the introduced DP will be that implied by the conceptual semantics of the root.
- $\acute{v}$  can also have an expletive use, in which case the introduced DP will be successfully integrated into the semantic representation if it can saturate a role which has remained unsaturated lower in the structure.
- A final property that W&M assign to  $\acute{v}$  is that it closes off the extended projection of the first element it has merged with (indicated by the \* sign). Thus, in (6a) above  $\acute{v}$  closes off the extended projection of the verb.

## 3. GĚI AS AN UNDERSPECIFIED ARGUMENT INTRODUCER

- This paper contends that *gěi* is the realization of a highly underspecified argument-introducing head ( $\acute{v}$ ) in the constructions under study.
- Let us start by accounting for the DOC and the PDC.

- It has been noted in the literature that there exist subtle semantic differences between the DOC and the PDC: e.g., whereas the DOC seems to entail successful transfer of possession, this is not necessarily the case for the PDC (Zhu 1979; Georgala, Paul & Whitman 2008, Jiang 2016; *pace* Yu 2020).
- Based on this empirical observation, I propose that the DOC involves what has traditionally been referred to as a Low Applicative (Pylkkänen 2002, Cuervo 2003; *cf.* Harley 2002). In the theory developed by W&M, Low Applicative corresponds to  $\acute{\nu}$  when it relates two DPs. The specifier of  $\acute{\nu}$  ends up being interpreted as the possessor of the theme, which appears in the complement position of the head. In this case,  $\acute{\nu}$  (LowAppl) closes off the extended projection of D (see Kayne 2024).
- I assume that the lower  $\acute{\nu}$  head raises up to adjoin to the verbalizing head  $\nu$ . In this configuration,  $\nu$  remains silent and  $\acute{\nu}$  ends up being pronounced as *gěi*.
- Optionally, the complex  $\nu$  head can have a root externally merged to it, which will provide phonetic and encyclopedic content.

(7)

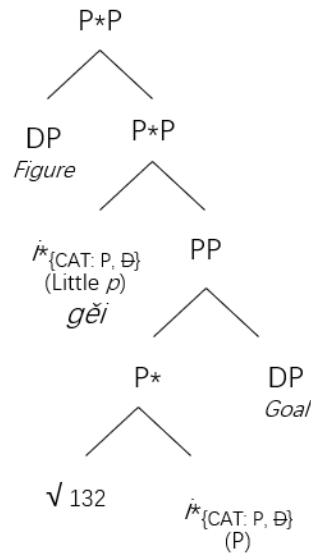


Structure of the DOC

- For the PDC, I propose a structure involving a PP in  $\nu$ -complement position. Under W&M's account, PPs are composed of two layers. The lower layer involves  $\acute{\nu}$  with a root adjoined to it. The complement of  $\acute{\nu}$  ends up checking the D feature on  $\acute{\nu}$  and the head's category value is set as P by default. The interpretation of the DP will be that implied by the semantics of the root.
- I propose that Chinese PDCs involve an abstract root, which I arbitrarily refer to as  $\sqrt{132}$ , with goal semantics that crucially does not involve transfer of possession<sup>1</sup>. An important point to comment on is that the conceptual content of this root may not necessarily be the same as the root associated with the English preposition *to*. It is an empirical fact that languages vary in their inventory of prepositions; English *to* can sometimes correspond to Mandarin *gěi*, and some others to Mandarin *dào*.
- On top of this internal layer another instance of  $\acute{\nu}$  is merged. The category of  $\acute{\nu}$  is valued as P, and a DP is merged in the specifier position to check its D feature. The interpretation of the added DP will be figure.  $\acute{\nu}$ , in this case, is equivalent to little *p*.
- To account for word-order facts, I propose that when two instances of  $\acute{\nu}$  appear in the extended projection of the same element, only one of them, the higher one, ends up being pronounced as *gěi* (see Ackema & Neeleman 2004 for a similar proposal that relies on prosodic domains).
- The syntactic derivation for a Mandarin PDC appears in (8).

<sup>1</sup> It has been noted in the literature that transfer-of-possession may also be introduced independently by the lexical core (the root) of a verb (see, e.g., Beavers & Koontz-Garboden 2020)

(8)



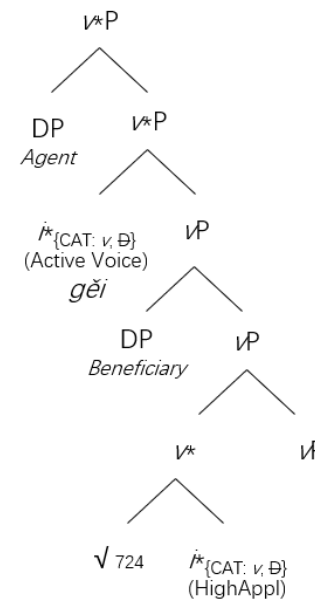
Structure of the PDC

- The next construction that the present proposal accounts for is the Benefactive one, which involves an instance of pre-verbal *gěi*. I analyze the construction in question as involving what has traditionally received the name of High Applicative (Pylkkänen 2002).
- W&M argue that High Applicative constructions are instances of  $\checkmark$  with a root adjoined to it merged on top of a  $\nu P$ . The interpretation that the added DP receives emanates from the particular semantics of the root involved ( $\checkmark$  724 is a root with benefactive semantics).
- Semantically, High Applicative heads are similar to Prepositions in the sense that the role they assign to the DP in question depends on the conceptual content of the root.
- On top of the High Applicative a further instance of  $\checkmark$  is merged that introduces the Agent (events of, e.g., carrying luggage for someone are

construed as involving an agent) and closes off the extended projection of the verb.

- The structure I propose for the Benefactive construction in Mandarin Chinese appears in (9).

(9)

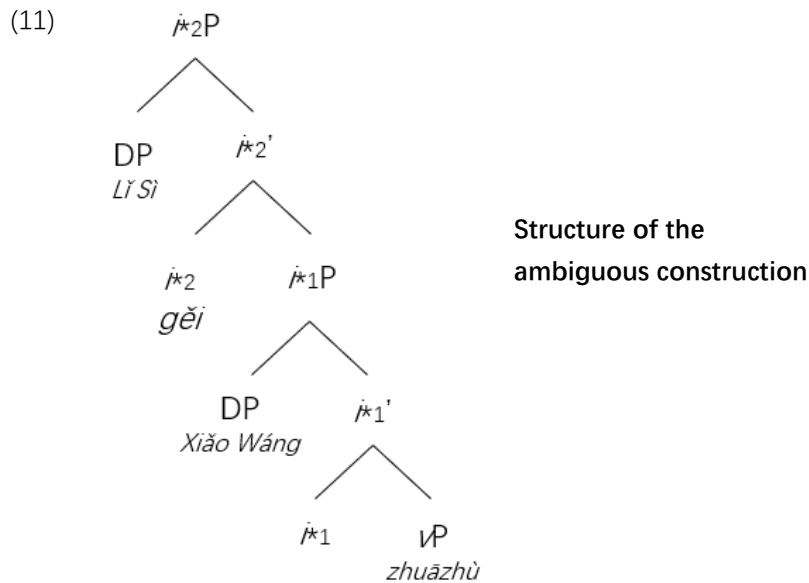


Structure of the Benefactive construction

- I argue that the same Spell-Out rules apply in the cases of (8) and (9). Specifically for the case of (9), the construction involves two instances of  $\checkmark$  valued as  $\nu$ , and because there are two items with matching features in the same domain, only the higher one ends up being pronounced. This yields the correct word order: Agent *gěi* Beneficiary VP.
- Finally, I propose that the active-passive ambiguous construction involves two instances of bare  $\checkmark$  on top of the VP, where either of the two ends up receiving an expletive interpretation.

- The ambiguity arises at the level of semantic calculation and is not structural or lexical.
- The present proposal relies on the assumption that in Mandarin Chinese the internal Patient role associated with eventive predicates (*zhuāzhù* in (6), repeated here as (10) for convenience) may remain unsaturated in the lower portion of the VP.

(10) *Lǐ Sì gěi Xiǎo Wáng zhuāzhù le.*  
 Li Si GEI Xiao Wang catch ASP  
 'Lisi caught Xiao Wang / Lisi was caught by Xiao Wang.'



- When the first instance of *i\** is merged, it can have two possible interpretations: it either receives an expletive interpretation, in which case the added DP will saturate the lower Patient role (active interpretation); or

it receives the agentive allosetime (inasmuch as events of catching someone are construed as agentive), in which case the introduced DP will be interpreted as an agent (passive interpretation).

- The second instance of *i\** will have the remaining relevant interpretation: agentive allosetime in the active reading and expletive in the passive reading. (12) shows the semantic calculation for both readings.

(12) a. Active interpretation

$[[vP]] = \lambda x \lambda e [\text{CATCH}(e)(x)]$   
 $[[i^*_1]] \leftrightarrow \lambda x.x$  (expletive)  
 $[[i^*_1']] = [[vP]]$   
 $[[i^*_1P]] = \lambda e [\text{CATCH}(e)(\text{Xiao Wang})]$   
 $[[i^*_2]] = \lambda y \lambda e [\text{AGENT}(e)(y)]$  (agentive allosetime)  
 $[[i^*_2']] = \lambda y \lambda e [\text{AGENT}(e)(y) \ \& \ \text{CATCH}(e)(\text{Xiao Wang})]$   
 $[[i^*_2P]] = \lambda e [\text{AGENT}(e)(\text{Li Si}) \ \& \ \text{CATCH}(e)(\text{Xiao Wang})]$

b. Passive interpretation

$[[vP]] = \lambda y \lambda e [\text{CATCH}(e)(y)]$   
 $[[i^*_1]] = \lambda x \lambda e [\text{AGENT}(e)(x)]$  (agentive allosetime)  
 $[[i^*_1']] = \lambda x \lambda y \lambda e [\text{AGENT}(e)(x) \ \& \ \text{CATCH}(e)(y)]$   
 $[[i^*_1P]] = \lambda y \lambda e [\text{AGENT}(e)(\text{Xiao Wang}) \ \& \ \text{CATCH}(e)(y)]$   
 $[[i^*_2]] \leftrightarrow \lambda x.x$  (expletive)  
 $[[i^*_2']] = [[i^*_1P]]$   
 $[[i^*_2P]] = \lambda e [\text{AGENT}(e)(\text{Xiao Wang}) \ \& \ \text{CATCH}(e)(\text{Li Si})].$

- Because it is the Patient role that remains unsaturated, an interesting prediction that the present proposal makes is that predicates involving other roles cannot participate in the ambiguous construction. As Xu (1994)

discusses, this prediction seems to be borne. For example, the construction in question is not available with stative predicates (13) or with unergative predicates that only have an external argument (14). In both cases there is no Patient role that can remain unsaturated.

(13) a. \**Tā gěi xuéshēngmen ài (zhe).*

3SG GEI students love ASP

Intended: 'He is loved by the students.'

b. \**Xuéshēngmen gěi tā ài (zhe).*

students GEI 3SG love ASP

Intended: 'The students love him/her.'

(14) \**Wǒmen gěi bìyè le.*

1PL GEI graduate ASP

Intended: 'We (were) graduated.'

- At this point the question arises of why the Patient role can remain unsaturated. There must be something special about the position in which Patients are merged in Mandarin Chinese that accounts for this: it can either remain unfilled or, alternatively, it can host an element which cannot receive a semantic role. This is probably a structural matter.
- Crucially, the present account deviates from W&M's original proposal because in (11) above the first instance of bare  $\acute{A}$  merged on top of the  $\nu P$  does not close off the extended projection of the verb.
- The intuitive explanation is that when the first DP is introduced the argument structure of the predicate is still not complete (see den Dikken 2006, 2007, 2023); it is when the second, higher DP is introduced that the predicate-argument structure is complete. It is the higher instance of  $\acute{A}$ , then, that closes off the extended projection of the verb.

- I remain agnostic as to what is the syntactic underpinning of this. What is clear is that W&M's theory is very restrictive when it comes to the number of instances of bare  $\acute{A}$  that can be found above the  $\nu P$  before the extended projection is closed off: just one. The study of Mandarin *gěi* seems to pose an empirical challenge to this restriction. One wonders if Mandarin *bǎ*-constructions, in which both the agent and the theme appear pre-verbally (15), also pose a similar challenge to the original proposal by W&M. The question remains open for future research.

(15) *Xuéshēng bǎ zhōngwén zuòyè xiě hǎo le.*

student BA Chinese homework write good ASP

'The student has finished his Chinese homework.'

#### 4. CONCLUSIONS

- This paper has provided a novel account of the Chinese Mandarin particle *gěi* and its multiplicity of uses. In particular, *gěi* has been analyzed as the overt realization of a single lexical item, namely W&M's abstract argument-introducing head  $\acute{A}$ .
- An advantage of the present proposal is that it does not rely on the existence of different *gěi* heads in the lexicon to account for the observed phenomena. UG is made simpler by reducing the inventory of functional heads, in consonance with minimalist/biolinguistic ideals.
- Moreover, under the present account the burden of the explanation falls on the interpretive system of LF, which is also a desirable result in minimalist/biolinguistic terms.
- If the analysis put forth here is on the right track, the present proposal also shows that syntax is truly autonomous from semantics: the same syntactic structure can be assigned different meanings at the LF interface.

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## REFERENCES

- Ackema, Peter, and Ad Neeleman. 2004. *Beyond Morphology: Interface Conditions on Word Formation*. Oxford: Oxford University Press.
- Badan, Linda. 2021. Gei: Towards a unified account. In *Give constructions across languages*. CAL 29, ed. Myriam Bouveret, 195–222. Amsterdam: John Benjamins.
- Beavers, John and Andrew Koontz-Garboden. 2020. *The Roots of Verbal Meaning*. Oxford: Oxford University Press.
- Cuervo, M. Cristina. 2003. Datives at Large. Doctoral dissertation, MIT.
- Dikken, Marcel den. 2006. *Relators and linkers: The syntax of predication, predicate inversion, and copulas*. Cambridge, MA: MIT Press.
- Dikken, Marcel den. 2007. Phase extension: Contours of a theory of the role of head movement in phrasal extraction. *Theoretical Linguistics* 33:1–41.
- Dikken, Marcel den. 2023. High and Low Applicatives of Unaccusatives: Dependent Case and the Phase. *Linguistic Inquiry* 54(3): 479–503.
- Georgala, Effi. 2011. Applicatives in their Structural and Thematic Function: A Minimalist Account of Multitransitivity. Doctoral Dissertation, Cornell University.
- Georgala, Effi, Waltraud Paul and John Whitman. 2008. Expletive and Thematic Applicatives. In *Proceedings of the 26th West Coast Conference on Formal Linguistics (WCCFL 26)*, ed. C. B. Chang, and H. J. Haynie, 181–189. Somerville, MA: Cascadilla Proceedings Project
- Harley, Heidi. 2002. Possession and the double object construction. *Linguistic Variation Yearbook* 2: 31–70.
- Her, One-Soon. 2006. Justifying part-of-speech assignments for Mandarin gei. *Lingua* 116(8): 1274–1302.
- Huang, Chu-Ren, and Kathleen Ahrens 1999. The function and category of *gei* in Mandarin ditransitive constructions. *Journal of Chinese Linguistics* 27(2): 1–26.
- Jiang, Bi'er. 2016. *Gei* and the double object construction in Mandarin Chinese. *Toronto Working Papers in Linguistics (TWPL), Volume 36*.
- Kayne, Richard. 2024. The DP-Internal Origin of Datives. Ms.
- Kratzer, Angelika (1996). Severing the external argument from its verb. In *Phrase Structure and the Lexicon*, ed. J. Rooryck and L. Zaring, 109–137. Dordrecht: Kluwer.
- Lin, Tzong-Hong Jonah, and Yu-Shan Huang. 2015. Structures of the Mandarin gei constructions. *Journal of East Asian Linguistics*, 24(3), 309–338.
- Paul, Waltraud, and John Whitman. 2010. Applicative Structure and Mandarin Ditransitives. In *Argument Structure and Syntactic Relations: A Cross-Linguistic Perspective*, ed. Maia Duguine, Susana Huidobro and Nerea Madariaga, 261–282. Amsterdam: John Benjamins.
- Pylkkänen, Liina. 2002. Introducing Arguments. Doctoral dissertation, MIT.
- Ting, Jen, and Miller Chang. 2004. The category of *gei* in Mandarin Chinese and grammaticalization. *Taiwan Journal of Linguistics* 2(2), 45–74.
- Wood, Jim, and Alec Marantz. 2017. The interpretation of external arguments. In *The verbal domain*, ed. R. D'Alessandro, I. Franco, and A. J. Gallego, 255–278. Oxford: OUP.
- Xu, Dan. 1994. The status of marker *gei* in Mandarin Chinese. *Journal of Chinese Linguistics* 22(2), 362–394.
- Yu, Jianrong. 2020. Giving Verbs More Arguments in Mandarin Chinese. *University of Pennsylvania Working Papers in Linguistics* 26(1), 26
- Zhu, Dexi. 1979. Yǔ dòngcí gei xiāngguān de jùfǎ wèntí [Sentences containing the verb gei]. *Fangyan* 1979, n°2: 81–87.