Speaking for the Silence: a Voice Splitting Analysis of Mandarin *gěi*

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The word *gěi* "give" in Mandarin can be used in a host of contructions; as a verb (1a), as a verbal suffix (1b), as a preverbal benefactor marker (1c), as a postverbal recipient marker (1d), as a linker in purposive clauses (1e), as a passive marker (1f), a causative marker (1g), and as an affectee marker (1h). Only the verbal (1a), benefactor (1c), recipient (1d), and purposive (1e) marking versions of *gěi* are compatible with progressive apsect (PROG). True passive (*bèi*) and causative (*ràng*) morphology is (i) compatible with PROG and (ii) incompatible with passive/causative *gěi* (2).

(1) a. *Zhāngsān (zhèngzài) gěi Lǐsì yī-gè lǐwù.*
Zhangsan PROG give Lisi one-CL gift
'Zhangsan { gave / is giving } Lisi a gift.'
b. *Zhāngsān (%zhèngzài) jì gěi Lǐsì yī-fēng xìn.*
Zhangsan PROG send GEI Lisi one-CL letter
'Zhangsan {sent / *is sending} a letter to Lisi.'
c. *Zhāngsān (zhèngzài) gěi Lǐsì xiě zuòyè.*
Zhangsan PROG GEI Lisi write homework
'Zhangsan {did / is doing} homework for Lisi.'
d. *Zhāngsān (zhèngzài) jì yī-fēng xìn gěi Lǐsì.*
Zhangsan PROG send one-CL letter GEI Lisi
'Zhangsan {sent / is sending} a letter to Lisi.'
e. *Zhāngsān (zhèngzài) chàng yī-shǒu gē gěi Lǐsì tīng.*
Zhangsan PROG sing one-CL song GEI Lisi listen
'Zhangsan {sang / is singing} a song for Lisi to listen to.'
f. *Zhāngsān (*zhèngzài) gěi (Lǐsì) cháoxiào-le.*
Zhangsan PROG GEI Lisi laugh-PFV
'Zhangsan was laughed at (by Lisi).'
g. *Zhāngsān (*zhèngzài) gěi Lǐsì chī zhè-gè píngguǒ.*
Zhangsan PROG GEI Lisi eat this-CL apple
'Zhangsan made Lisi eat this apple.'
h. *Zhāngsān (*zhèngzài) gěi Lǐsì pǎo-(le).*
Zhangsan PROG GEI Lisi run-PFV
'Zhangsan {ran / *is running} out on Lisi.'

(2) a. *Zhāngsān (zhèngzài) (*gěi) bèi (Lǐsì) cháoxiào.*
Zhangsan PROG GEI PASS Lisi laugh
'Zhangsan {was laughed / is being laughed} at (by Lisi).'
b. *Zhāngsān (zhèngzài) (*gěi) ràng Lǐsì chī zhè-gè píngguǒ.*
Zhangsan PROG GEI CAUS Lisi eat this-CL apple
'Zhangsan {made/is making} Lisi eat this apple.'

If *gěi* is a multifunctional item with different categorial identities and semantic functions (Li and Thompson 1989; Her 2006), what causes the contrast in compatibility of progessive aspect between *gěi*-passives and causatives and 'true' passives and causatives? If *gěi* is a single entry in terms of its

different uses (Lin and Huang 2015; Badan 2021), why does *gěi* differ in compatibility with PROG across constructions? Can we maintain the single *gěi* approach under such a contrast?

Our Proposal has three assumptions: (i) *gěi* is a functional head which projects above null theta-role licensing heads, similar to Wurmbrand's (2021) $\text{Voice}_{\text{Morph}}$-head, (ii) *gěi* forms a instantaneous event, making it incompatible with progressive, and (iii) structures in which *gěi* and PROG co-occur contain two subevents, such that co-occuring PROG and *gěi* target different subevents.

Wurmbrand (2021) assumes that the voice domain of a language may be decomposed into a covert agent-introducing head ($\text{Voice}_{\text{Agent}}$) and a morphologically overt voice marking head ($\text{Voice}_{\text{Morph}}$). We extend this notion to theta roles generally, and assume theta role introduction may compose of two phrases: θ-ArgP and θ-MorphP respectively (3). We take *gěi* to categorically be θ-Morph^0, combining with a covert-headed θ-ArgP — headed by Voice (Kratzer 1996), Cause (Key 2013; Harley 2017), or P_{Have} (Harley 2002, 2007; Harley and Jung 2015). Passive *bèi* and causative *ràng* are also such heads but are restricted to combining with VoiceP and CauseP respectively, thus *gěi* can covary but not cooccur with *bèi* and *ràng* (2).

(3) [$_{\theta\text{-MorphP}}$ {*gěi/bèi/ràng*} [$_{\theta\text{-ArgP}}$ Voice/Cause/P_{Have}/etc. [. . .]]]

We propose that *gěi* takes a verbal predicate f and describes event e as denoting the *commencement* of an event e' for which $f(e')$ is true. A commencement event $\textsc{comm}(e, e')$ is an instantaneous event which causes and occurs immediately before the event it commences.

(4) a. $\textsc{comm}(e, e') = \neg\exists t_i[i \subset \tau(e)] \wedge \neg\exists t_i'[\tau(e) < i' \wedge i' < \tau(e')] \wedge \textsc{caus}(e, e')$
b. $[\![\textit{gěi}]\!] = \lambda f_{\langle v,t\rangle}\lambda e_v.\exists e_v'[\textsc{comm}(e, e') \wedge f(e')]$
c. $[\![\textsc{prog}]\!] = \lambda f_{\langle v,t\rangle}\lambda t_i.\exists e_v[t \subset \tau(e) \wedge f(e)]$

By denoting an instantaneous event, *commencement* events — and thus the resulting verbal predicate — is incompatible with progressive aspect (Beavers 2010, 2013).

We explain the compatibility of *gěi* and PROG as the result of the verbal predicate introducing new subevents for which PROG is compatible. For instance, we assume that the verbal usage of *gěi* (1a) is formed by the combination of two theta licensing heads P_{Have} and v_{Cause} (Harley 2002). v_{Cause} introduces a causing event, for which the caused event is the commencement event denoted by *gěi*. While the commencement event is instantaneous, the cause of the commencement is not, and can thus co-occur with progressive aspect. When the upper causing event is not present, we correctly predict that prog is no longer available (5).

(5) *Zhè-běn shū (*zhèngzài) gěi Zhāngsān.*
this-CL book PROG GEI Zhangsan
'This book is (*being) for Zhangsan.'

We take suffixal *gěi* (1b) to be a similar case where *gěi* targets a recipient theta-role introduced by P_{Have}, licensed by the main verb. The event denoted by *gěi* is not compatible with PROG while the main verb is. The indeterminacy of the compatibility of PROG with *gěi* results from the headedness of the V-*gěi* combination: if the suffix *gěi* is the head of the V-*gěi* compound, the structure is incompatible with PROG; if the other verb is the head of the compound, PROG is compatible. The benefactive *gěi* in (1c) is located above the benefactor theta head, which projects above VoiceP or AspP; PROG can thus be encoded below *gěi*, targetting the 'commenced' event. Purposive *gěi* (1e) is included in a non-finite CP (Lin and Huang 2015), in which *gěi* combines with Voice in the

embedded event, rather than the matrix event, allowing a co-occurrence with PROG. Post-verbal *gěi* (1d) is equivalent to purposive *gěi* with a covert P_{Have} as the embedded predicate. *Gěi* used in passive (1f), causative (1g), and affectee (1h) constructions combines above the passive voice, causer, and affectee theta-role introducers and forms a commencement event; no additional subevent is formed above these constructions and so the projection is incompatible with PROG.

This proposal attributes the different usages of *gěi* to the different syntactic environments in which the same syntactic element, the θ-Morph^0 head is realized. In addition, this θ-Morph^0 head is dedicated to encoding an instantaneous, commencement subevent in the event structure. By this means, we can give up the various labels of *gěi* and unite them with a single syntax-semantic mechanism. Such an analysis predicts that the decomposed structure of theta-introducers should appear in other languages; we suggest that Sevgi's (2021) analysis of ASL verbal classifiers as functional heads which introduce theta roles may be on this track; we suggest that verbal classifiers in languages like ASL and Innu (Drapeau and Lambert-Brétière 2011) may be overt instantiations of θ-Morph^0 which agree with the specifier of their embedded θ-ArgP. In this typology, Mandarin instantiates a language with overt but non-agreeing θ-Morph^{0}s, filling a typological gap of non-agreeing verbal classifiers.

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