On Introducing Applicative Arguments in Mandarin Chinese:

Where Syntactic Cartography and Distributed Morphology Meet

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This paper focuses on a single item, *gei*, often translated as 'give' in Chinese. While *gei* appears in a ditransitive construction as a lexical verb (1a), it can also function like a preposition or applicative head that introduces an affectee that suffers from a kind of loss (1b) as well as a benefactor (1c).

(1)   a.

Zhangsan	gei	le	Lisi	yi	ben	shu
Zhangsan	give	Perf.	Lisi	one	CL	book.

'Zhangsan gave Lisi a book.'

b.

Zhangsan	gei	wo	chi	le	wu	wan

huntun.

Zhangsan	GEI	I	eat	Perf.	five	bowl

wonton.

'I suffered from the loss of five bowls of wontons eaten by Zhangsan)'(affectee)

c.

Zhsangsan	gei	zhege	xuexiao	juan	le

yibaiwan.

Zhangsan	GEI	this	school	donate	Perf.	one

million

'Zhangsan donated one million to this school.'(benefactor)

There are asymmetries between the two *gei*-marked applied argument constructions. First, the constituent [*gei*+benefactor] can be fronted to the sentence initial position, but this operation is banned if *gei* introduces an affectee instead. Second, when *gei* is unavailable, the matrix verb can precede the affectee to form a ditransitive-like sentence as in (2a), but this is impossible if the applied argument is a benefactor (2b):

(2)   a.

Zhangsan	chi	le	wo	wu	wan	huntun.
Zhangsan	eat	Perf.	I	five	bowl	wonton.

b.

*Zhsangsan	juan	le	zhege	xuexiao		yibaiwan.
Zhangsan	donate	Perf	this	school		one million

Research questions: why can the single item *gei* take different functions such as lexical verb, Appl head for benefactor (Appl$_{\text{BENEFACTOR}}$) and Appl head for affectee (Appl$_{\text{AFFECTEE}}$)? What underlies the asymmetries between Appl$_{\text{BENEFACTOR}}$ and Appl$_{\text{AFFECTEE}}$?

Hypothesis and analysis: We aim to delineate the cartography of the syntactic structures that encodes the events involving different types of applied arguments. We also draw on insights from Distributed Morphology (Wood & Marantz 2017; Marantz 2022) to explain how a single item in the lexicon takes different categories and gets inserted in different syntactic positions. Following the assumption in Marantz (2022) that both an Appl and P head in the traditional sense might be the result of an abstract *i head merging with a Root, we argue *gei* is a Root in

the lexicon, which can be merged with different *i heads to take different categories and functions. Apart from serving as a Root of a lexical verb as in (1a), it is also merged with a p head to form a concrete P that is roughly equivalent to *for* in English and with a high Appl head to form a phonologically overt Appl head to introduce an affectee. *gei* in (1c) is a preposition (like *for*), and the [*gei*+benefactor] constituent is therefore a PP that can be fronted as expected. In (1b) *gei* is really a high App head which introduces an affectee (hence Appl$_{\text{AFFECTEE}}$). Since Appl head is not a P head, here *gei* and the affecttee DP do not even form a constituent, and therefore cannot be fronted. The *gei*-affectee word order is the result of raising *gei* over the affectee to a higher *v* head (similar to the Pred head in Cheng & Sybesman 2015). Following Cheng & Sybesma (2015) and Tsai (2018), an Appl head in Chinese can be null, and when this happens, the matrix verb will move into this App head, which will finally move into the highest voice head. Since the benefactor is introduced by a preposition *gei*, which is not an Appl head and cannot be null, the verb cannot move into the position that precedes the benefactor, hence the ungrammaticality of (2b). In the affectee sentence in (2a), the Appl$_{\text{AFFECTEE}}$ is null, and the matrix verb moves into this position which finally lands in the voice position.