## Multiple sources in the emergence of Mandarin [bi N hai N] comparative constructions

Meili Liu, KU Leuven, meili.liu@kuleuven.be

Hubert Cuyckens, KU Leuven, hubert.cuyckens@kuleuven.be

Fangqiong Zhan, Nanyang Technological University Singapore, zhjade2000@gmail.com

**Key words**: multiple source construction, comparative construction, [bi N hai N], analogy, Mandarin Chinese

This paper focuses on two unconventional comparative constructions in Mandarin: [bi  $N_i$  hai  $N_i$ ] and [bi  $N_i$  hai  $N_j$ ], as exemplified in (1) and (2):

(1) 我这心里比阳光还阳光!

Wo zhe xinli	bi	yangguang	hai	yangguang! (BCC)
I this heart.in	BI	sunshine	HAI	sunshine!
COMPAREE	COMPARATIVE	STANDARD	DEGREE	DIMENSION
	MARKER	OF COMPARISON	ADVERB	OF COMPARISON
'My boart is even more suppy than the supl'				

'My heart is even more sunny than the sun!'

(2) 真是天才, 比白痴还天才!

*Zhen shi tiancai, <u>bi baizhi hai tiancai</u>.* Really is genius, <u>BI idiot HAI genius</u>.

'What a genius, an even better genius than the idiots.'

They are unconventional in that the item expressing the dimension along which the comparison is made (i.e., the second occurrence of *yangguang* in (1), *tiancai* in (2)) is a Noun rather than an adjective/predicate expressing gradability. In (1), the nouns expressing the dimension-of-comparison and the standard-of-comparison are formally identical; in (2), they are different.

Filling a gap in previous studies (e.g., Yang, 2011; Cheng, 2013), the present study – which is couched within a Diachronic Construction Grammar framework – centers on the emergence of [bi  $N_i$  hai  $N_i$ ] and [bi  $N_i$  hai  $N_j$ ] as well as their underlying mechanisms. It draws on a quantitative analysis of corpus data taken from the BCC corpus.

We contend that the [bi N<sub>i</sub> hai N<sub>i</sub>] construction emerges by analogy from the conventional comparative construction [bi N hai A], which conveys that, compared to a standard-of-comparison (N), a comparee takes an even higher position on a scale expressed by A. Through analogical reasoning, speakers then transfer this meaning to a formally similar structure with, in its dimension-of-comparison slot, a Noun that is identical to the Noun in the standard-of-comparison slot. The adoption of the scalar meaning of A by a N, which is in essence non-scalar, can be viewed as coercion (Lauwers & Willems, 2011). What motivates this coercion is the Noun's metonymic shift from 'entity' to 'entity's attributes. What may further have facilitated the extension from [bi N hai A] to [bi N<sub>i</sub> hai N<sub>i</sub>] is that the latter may have inherited the nominal feature from an already existent construction [adverb N]. A collexeme analysis we carried out indicates that the nouns most significantly attracted to [adverb N], and to [bi N<sub>i</sub> hai N<sub>i</sub>] are semantically similar. At a more schematic level, the extension A > N observed in [bi N hai A] > [bi N<sub>i</sub> hai N<sub>i</sub>] may be modeled (formally and semantically) on the existing development in Mandarin from [adverb A] to [adverb N]; this is a shift-cum-coercion from scalar Adjective > Noun when preceded by

an adverb denoting intensification (e.g., 'too', 'very').

Analogical extension and inheritance also underlie the subsequent development from [bi N<sub>i</sub> hai N<sub>i</sub>] (and indirectly also from [bi N hai A]) to [bi N<sub>i</sub> hai N<sub>j</sub>].

Importantly, the analogical relations (or links) between [bi N hai A], [bi N<sub>i</sub> hai N<sub>i</sub>], and [bi Ni hai N<sub>j</sub>], as well as those between [adverb A] > [adverb N] hold in the horizontal dimension of the constructional network, as illustrated in Figure 1. This study thus illustrates that, contra Goldberg (1995), constructions need not be related taxonomically for a construction to motivate another. That is, it corroborates the view that lateral relations also play an important role in language change (see Zehentner & Traugott 2020: 174). Moreover, we argue that at the origin of [bi N hai N] lie multiple sources: [bi N hai A], [adverb N], and the development [adverb A] > [adverb N].

## References

- Cheng, Y. 2013. "Bi X hai X" goushi de yansheng jizhi yu dongyin [The derivative mechanisms and motivations of the structure of bi X hai X]). *Hanyu Xuexi* [Chinese Language Learning] (1), 59– 64.
- Goldberg, A. 1995. *Constructions: A Construction Grammar Approach to Argument Structure*. Chicago: the University of Chicago Press.
- Lauwers, P. Willems, D. 2011. Coercion: Definition and challenges, current approaches, and new trends. *Linguistics* 49(6). 1219-1235.
- Yang, Y. 2011. Bi N hai N goushi tanxi [On the Construction bi N hai N]. *Zhejiang Xuekan* [Zhejiang Academic Journal], (4), 105–109.
- Zehentner, E. & Traugott, E. C. 2020. Constructional networks and the development of benefactive ditransitives in English. In Lotte Sommerer & Elena Smirnova (Eds.). Nodes and Networks in Diachronic Construction Grammar. Amsterdam/Philadelphia: John Benjamins Publishing Company: 167-212.

## The corpus exploited:

The corpus of Beijing Language and Culture University Corpus Center (BCC), which includes nearly 15 billion Chinese characters; its website is as follows: http://bcc.blcu.edu.cn



Figure 1 The constuctional network of [bi N hai N]