

The development of antonymous compound *chi-zao* in Chinese: A constructionalization approach

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Compounding is a common phenomenon in word formation of world languages. In Mandarin Chinese, the headless compound *chi-zao* ‘late-early=sooner or later’ is an adjective-adjective adverb concerning time. However, previous studies have not yet focused on this compound, nor have they provided insights into theories regarding grammaticalization by examining Chinese cases.

This research reports on the historical change and cognitive processes of *chi-zao* as evidence to support the constructionalization framework (Traugott & Trousdale, 2013), a new approach incorporating construction grammar (Goldberg, 1995) into grammaticalization. It is argued that “constructionalization is the creation of form_{new}-meaning_{new} of signs. It forms new type nodes, which have new syntax or morphology and meaning in the linguistic network and is accompanied by changes in degree of schematicity, productivity, and compositionality” (p. 22). The CCL corpus (http://ccl.pku.edu.cn:8080/ccl_corpus/) and classical Chinese literature were examined to trace the historical data of *chi-zao*. I also used R statistics to compute its token frequency at different stages. My two research questions are: (i) How are the semantic and syntactic changes of *chi-zao* embodied on its path to constructionalization? (ii) What cognitive processes are manifested in the constructionalization of *chi-zao*?

By adopting the constructionalization approach, I argue that the diachronic change of *chi-zao* provides evidence that constructionalization is at work in the compound level. Figure 1 shows the form change is a gradual condensation from the antithesis structure (Medieval Chinese) as source construction in (1) to a nominal phrase (Pre-Modern Chinese) in (2) and then to a compound (Modern Chinese) in (3). Meanwhile, *chi zao* as a nominal phrase has been converted to compound adverb *chi-zao*, and the temporal meaning of *chi zao* (lateness and earliness) has been bleached into epistemic modality found in “sooner or later” denoted by *chi-zao*. The constructionalization happens when the dominant productivity (98.14% in Figure 3) of *chi-zao* causes it to become more schematic and less compositional, and over time it becomes aligned to the characteristics of the adverb schema. The unidirectional route of change indicates the creation of *chi-zao* as a construction is not just a change of one morpheme, but a change on the construction as a whole in different stages. Cognitive processes like subjectification (Traugott, 1995) shows the temporal interpretation (e.g. (2)) as the meaning of *chi (he) zao* is replaced with epistemic modality (*chi-zao* in (3)), allowing for expressing a speaker’s belief as to whether the proposition expressed is inevitable. The frequency effect (Bybee, 2003) explains the dominant use (98.14% in Figure 3) of *chi-zao* at third stage contributes to its change from nominal phrase to modal adverb in the constructionalization. Metaphor (Lakoff & Johnson, 1980) in Figure 2 demonstrates the source domain (TIME) is mapped onto the target domain (QUALITY), leading to the conventional usage of *chi-zao* as a modal adverb today.

The diachronic change of A-A compound *chi-zao* implies the constructionalization framework: 1) constructionalization as a new framework connects three motivations: subjectivity, frequency, and metaphor; 2) the operation of constructionalization is at work not only at the sentential and phrasal level but also at the lower level (e.g., compounds); 3) the rhetoric (antithesis) as an output of language use plays a part in the emergence of constructionalization regarding compounding. The finding sheds light on the morphological study of exocentric or headless compounds in Mandarin and beyond.

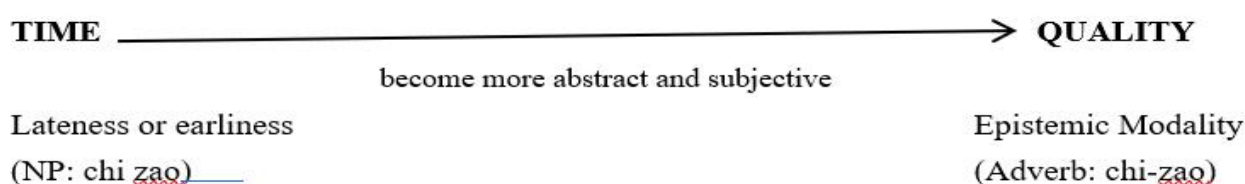


Figure 2 The categorial metaphor QUALITY IS TIME

Examples:

(1) *sai-kou yun sheng huo hou chi, yan zhong he li jun xing zao.*

frontier smoke rise fire wait late smoke inside crane cry army set.off early

‘It is a long-lasting fire as the smoke rises above the frontier fortress, but the army sets off early as cranes cry in the smoke.’ (Tang dynasty: Medieval Chinese)

(2) *jiu-shi jin-fan bu si, chi (he) zao shao-bu-de shi yi si.*

although this-time not die late or early cannot-do-without is one death

‘Although you do not die this time, death will come to you at either a late or early time.’
(Ming dynasty: Pre-Modern Chinese)

(3) *zhe-shi chi-zao zhong yao Wan-sui zuozhu.*

this-thing sooner or later ultimately need emperor handle

‘Sooner or later this thing needs the emperor to handle.’ (Qing dynasty: Modern Chinese)

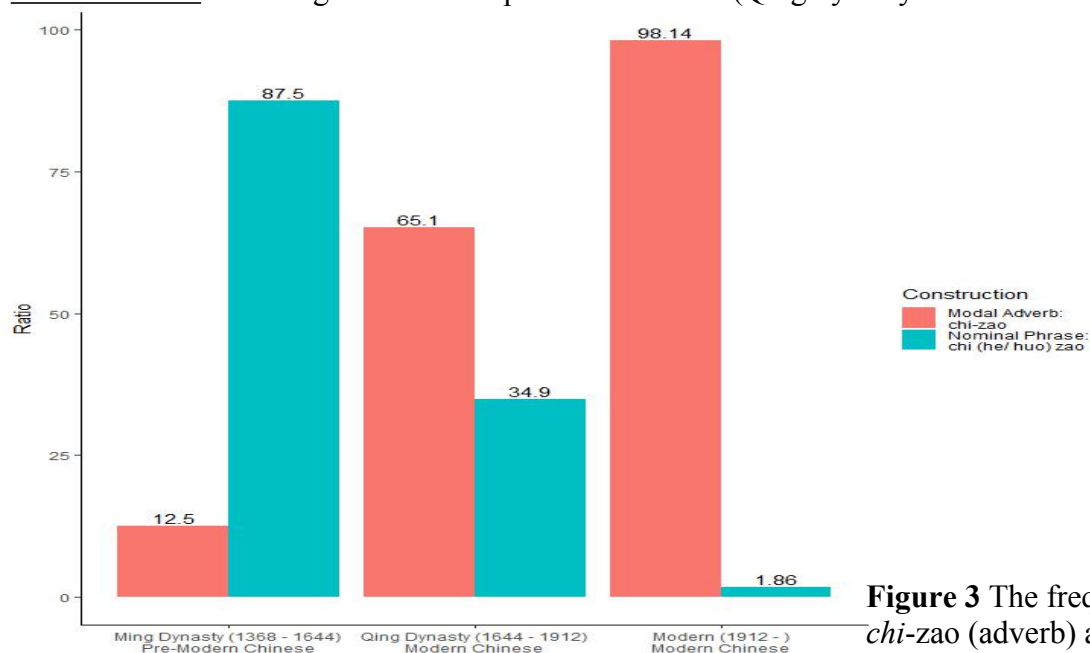


Figure 3 The frequency distribution of *chi-zao* (adverb) and *chi zao* (NP)

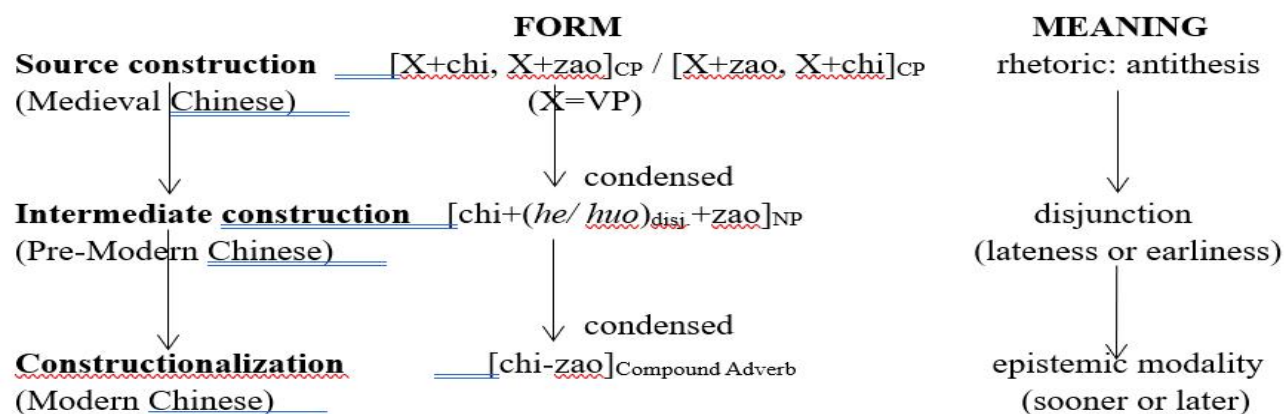


Figure 1 Grammatical constructionalization of *chi-zao* in Chinese

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