

## CAUSE cross chronology of Chinese: A corpus-based analysis of Chinese mono-morphemic causatives

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### Theoretical background and research target:

The realization of causation is a recurrent topic in Cognitive Linguistics. It has been studied by Talmy (2000) in terms of force dynamic theory, and by Verhagen & Kemmer (1997) who introduced the so-called (in)direct causation hypothesis for Dutch causatives. Within this general framework, our study reports on a corpus-based diachronic analysis of seven mono-morphemic periphrastic causatives in Chinese, *shǐ*, *lìng*, *ràng*, *jiào1*, *jiào2*, *gěi* and *yào*.

### Research questions:

Applying quantitative methods illustrated in Speelman & Geeraerts (2009) and Levshina (2011), we try to answer the following questions: 1) is there any kind of semantic change of the causatives over time? 2) If there is, how do they change? What factors play a role in the transformation? 3) Is one causation-related concept (for instance, implicativity mentioned by Shibatani 1976) expressed by the same causal auxiliary verb, with similar frequency, in different time periods? 4) if not, are there any preferences of language users? How do they differ as people choose among them?

### Materials and methods:

The data set has been extracted from two corpora, Sheffield Corpus of Chinese (<http://www.hrionline.ac.uk/scc/db/scc/index.jsp>) and UCLA Chinese Corpus (<http://www.lancs.ac.uk/fass/projects/corpus/UCLA/>), which cover chronological spans of mandarin Chinese – ancient, modern and contemporary times. We coded the occurrences of the different causatives with a number of factors, which are assumed in the literature to influence the choice of causative marker, e.g. (in) animateness of Causer/Causee among 37 predictors Levshina (2011) takes into account. Then we used both exploratory (multidimensional scaling) and confirmatory statistical techniques (multinomial logistic regression analysis) to gauge the effect of the different factors on the use of causatives.

### Pilot study:

A preliminary analysis provides evidence that our targets do show diachronic semasiological change and onomasiological variation (in the sense of Geeraerts 2010), such as *shǐ* as the dominant causative through ancient-modern times and yet *ràng* as its replacement in contemporary Chinese. In this talk, these preliminary results will be completed with the results of ongoing analyses involving a broader set of descriptive dimensions than those used in the initial case study.

### Significance and implication:

We believe the relevance of this study is not restricted to understanding Chinese analytic causative constructions per se, but also to cross-linguistic insight in causality. Specifically, a comparison with the (methodologically similar) analysis of Dutch causatives in Speelman & Geeraerts (2009) and Levshina (2011) may reveal cross-linguistic correspondences or contrasts in the linguistic construal of causality. And as a result of practical usefulness of our methodology of Corpus Linguistics in differentiating near-synonyms, these methods are hopefully applicable to future comparable studies as well.

**Key words:** periphrastic causatives, Chinese, semantics, Corpus Linguistics, diachronic study

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