

The *Journal of Chinese Linguistics* vol.47, no.2 (June 2019): 497–530

© 2019 by the Journal of Chinese Linguistics. ISSN 0091-3723/ Chinese evolution in recent 150 years: A diachronic study of word frequency in *The Gospel of Mark*.

By Cong Zhang and Haitao Liu. All rights reserved.

## CHINESE EVOLUTION IN RECENT 150 YEARS: A DIACHRONIC STUDY OF WORD FREQUENCY IN *THE GOSPEL OF MARK*

Cong Zhang<sup>1,2</sup> Haitao Liu<sup>2,3</sup>

Zhejiang University of Finance and Economics<sup>1</sup>; Zhejiang University<sup>2</sup>;

Guangdong University of Foreign Studies<sup>3</sup>

### ABSTRACT

This study quantitatively investigated word frequencies in parallel Chinese texts at three different periods, namely, Classical Chinese (1855), Beijing Mandarin (1908) and Modern Mandarin (2010), attempting to shed some light on the evolution of the Chinese language over the last 150 years. With the evolution of Chinese: both the types and tokens increased diachronically, and sharp changes can be found in the high-frequency function words, vocabulary richness, and the distribution of word classes. The syntactic structure has also become increasingly complex. In addition, although the length of words (measured in character) has increased diachronically, disyllabic words have not always been preponderant in Chinese after the opium war of 1840–1842. The results show that the complication is a crucial trend in the evolution process of Chinese.

---

**Acknowledgments** We thank the anonymous reviewers for valuable suggestions and comments, and Chunshan Xu, Jin Cong and Ruina Chen for insightful comments. This work is partly supported by the National Social Science Foundation of China (11&ZD188).

**Cong Zhang** (张聰) [zhangco1079@163.com]; School of Humanities and Communications, Zhejiang University of Finance and Economics, Xueyuan Street No.18, Xiasha Higher Education Park, CN-310018, Hangzhou, P.R.China.

 <https://orcid.org/0000-0001-5616-0626>

**Haitao Liu** (刘海涛; author for correspondence) [htliu@163.com]; School of International Studies, Zhejiang University, No. 866 Yuhangtang Road, CN-310058, Hangzhou, P.R. China.

 <https://orcid.org/0000-0003-1724-4418>

- WBFW (Weiban Banben Fanyi Weiyuanhui 委办版本翻译委员会), trans. 1855. *Xinyue quanshu* 新约全书 (The New Testament—Delegate's Version). Hong Kong: Yinghua shuyuan.
- WU, C. 武春野. 2014. “*Beijingguanhua*” yu Hanyu de jindai zhuanbian “北京官话”与汉语的近代转变 (“Beijing Mandarin” and the modern change of Chinese). Shandong: Shandong jiaoyu chubanshe.
- XHYFW (Xin Hanyu Yiben Fanyi Weiyuanhui 新汉语译本翻译委员会), trans. 2010. *Shengjing xinyue quanshu xin Hanyu yiben* 圣经新约全书新汉语译本 (Holy Bible—New Testament contemporary Chinese version). Hanyu shengjing xiehui youxian gongsi.
- XU, S. 徐时仪. 2015. *Hanyu baihuashi* 汉语白话史 (The history of Chinese dialect), second edition. Beijing: Beijingdaxue chubanshe.
- ZIPF, G. K. 1935. *The Psycho-Biology of Language: An Introduction to Dynamic Philology*. Boston: Houghton Mifflin.
- . 1949. *Human Behavior and the Principle of Least Effort*. New York: Addison-Wesley.

## 近 150 年汉语的演化——基于《马可福音》词频的历时研究

张聪<sup>1,2</sup> 刘海涛<sup>2,3</sup>

浙江财经大学<sup>1</sup> 浙江大学<sup>2</sup> 广东外语外贸大学<sup>3</sup>

### 摘要

本文通过对文言（1855）、北京官话（1908）和现代汉语（2010）三个不同时期马可福音译本的量化调查，从词汇的角度展示了近 150 年汉语的演化。随着汉语的演化，马可福音中词的种类和数量显著增加；高频虚词、词汇丰富度和词类分布也发生了很大的变化；句法结构变得越来越复杂；尽管词变得越来越长，鸦片战争后复音词并不总是占优势。结果显示，复杂化是汉语演化过程中的一个重要趋势。

### 关键词

语言演化 汉语 词频 马可福音 定量方法