

# **Glottometrics 32**

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# Contents/ Abstracts Glottometrics 32, 2015

**Hanna Gnatchuk**

*A quantitative investigation of English compounds in prose texts*

1-8

**Abstract.** The given article deals with a quantitative analysis of English compounds in six novels of the first half of the twentieth century. The objective of the article is twofold: a) we are intended to reveal the most frequent structural patterns of the English compounds statistically; b) it is necessary to determine and measure the cohesion for the English compounds. The material of the research is represented by six novels. Each fifth page has been analyzed there. The results have been statistically processed.

**Cong Zhang, Haitao Liu**

*A quantitative investigation of the genre development of modern Chinese novels*

**Abstract:** This study mainly investigates the genre development of modern Chinese novels since 1919 from a perspective of quantitative linguistics. We choose the *a-index* and *lambda* as our quantitative indicators. Firstly, we test their applicability to distinguish different genres of texts written in Chinese. The results show that both the indicators work, and *lambda* performs better than the *a-index*. Then we obtained the data of modern Chinese novels from 1919 to 2015 with regard to *lambda*. Based on the findings above and the diachronic data, we conclude that the change of the genre characteristics of modern Chinese novels is not significant since 1919.

9-20

**Peter Zörnig, Ioan-Iovitz Popescu, Gabriel Altmann**

*Statistical approach to measure stylistic centrality*

**Abstract.** We first study the formal similarity of texts of the same author using the simplified lambda indicator. A specific indicator is proposed expressing the stylistic centrality of the author based on the rank-frequency distribution of words. After that we make use of a graph theoretical approach, the concept of entropy and study the number of similarities to quantify the centrality.

21-54

**Xiaxing Pan, Hui Qiu, Haitao Liu**

*Golden section in Chinese contemporary poetry*

**Abstract.** Golden section is one of the most famous aesthetic properties in the arts. The present study explores the golden section in Chinese contemporary poetry texts in terms of the 'h-point' on the word-frequency-distribution curves as well as their 'feet'. It demonstrates that the golden section of the selected Chinese poetry is not sitting on the 'h-point', but it is possible for us to investigate the 'feet' of them.

55-62

**Yu Fang, Haitao Liu**

*Probability distribution of interlingual lexical divergences  
in Chinese and English: 道 (dao) and said in Honglouloumeng*

**Abstract:** Previous studies have indicated that divergence exists in translation, which influences the quality of translation; such divergence follows some regularity which can be modeled by a probability distribution. The present article chose one verb *dao* from a Chinese literary classic *Honglouloumeng*, and its English translation *said* to determine whether the frequencies of the two verbs develop according to a diversification process. Furthermore, we tend to find differences between the two English versions of Hawkes and Yang Xianyi regarding *dao*'s translation, and we also investigated the role of the three causes of divergence in the diversification process. The result indicates that both *dao*'s translations and the original text of *said* is in good agreement with the modified right-truncated Zipf-Alekseev distribution. Three major reasons were found for causing differences between the two translations: the nature of language, translators' subjectivity, and context. These are also the three major reasons for the diversification and differences of the two translated versions.

63-87

**Christopher Michels**

*The relationship between word length and compounding activity  
in English*

**Abstract.** In the present article we test the hypothesis concerning the influence of word length on compounding activity and use extensive data contained in dictionaries.

88-98