

Issues in Quantitative Linguistics
2

edited by

Emmerich Kelih
Victor Levickij
Yuliya Matskulyak

Dedicated to Reinhard Köhler
on the occasion of his 60th birthday

2011
RAM Verlag

Studies in quantitative linguistics

Editors

Fengxiang Fan (fanfengxiang@yahoo.com)
Emmerich Kelih (emmerich.kelih@uni-graz.at)
Reinhard Köhler (koehler@uni-trier.de)
Ján Mačutek (jmacutek@yahoo.com)
Eric S. Wheeler (wheeler@ericwheeler.ca)

1. U. Strauss, F. Fan, G. Altmann, *Problems in quantitative linguistics 1*. 2008, VIII + 134 pp.
2. V. Altmann, G. Altmann, *Anleitung zu quantitativen Textanalysen. Methoden und Anwendungen*. 2008, IV+193 pp.
3. I.-I. Popescu, J. Mačutek, G. Altmann, *Aspects of word frequencies*. 2009, IV +198 pp.
4. R. Köhler, G. Altmann, *Problems in quantitative linguistics 2*. 2009, VII + 142 pp.
5. R. Köhler (ed.), *Issues in Quantitative Linguistics*. 2009, VI + 205 pp.
6. A. Tuzzi, I.-I. Popescu, G. Altmann, *Quantitative aspects of Italian texts*. 2010, IV+161 pp.
7. F. Fan, Y. Deng, *Quantitative linguistic computing with Perl*. 2010, VIII + 205 pp.
8. I.-I. Popescu et al., *Vectors and codes of text*. 2010, II + 161 pp.
9. F. Fan, *Data processing and management for quantitative linguistics with Foxpro*, 2010, V+233 pp.
10. I.-I. Popescu, R. Čech, G. Altmann, *The lambda-structure of texts*. 2011, II + 181 pp.
11. E. Kelih et al. (eds.), *Issues in Quantitative Linguistics Vol. 2*. 2011, IV + 188 pp.

Gedruckt mit Unterstützung der Karl-Franzens-Universität Graz

ISBN: 978-3-942303-07-1

© Copyright 2011 by RAM-Verlag, D-58515 Lüdenscheid

RAM-Verlag
Stüttinghauser Ringstr. 44
D-58515 Lüdenscheid
RAM-Verlag@t-online.de
<http://ram-verlag.de>

Preface

This volume contains 14 contributions from international scholars from eight countries (Germany, India, Austria, Rumania, Slovakia, Czech Republic, Ukraine, USA). All contributions have their methodological background in quantitative linguistics, although with some overlap to other branches of linguistics like corpus linguistics, cognitive linguistics, and psycholinguistics.

In the first section, “*Lexical Semantics*”, the contributions are devoted to the statistical analysis of collocations (substantives plus modal verbs) in German, to selected problems of the polysemy of semantic fields in English, to the diachronic analysis of semantic concepts in English, and to the statistical analysis of concept structures by means of associative analysis. The common background of these contributions is an attempt at analyzing concepts of cognitive linguistics and cross-cultural linguistics from a statistical and quantitative point of view. All in all, the contributions give a good overview of the methodological and theoretical state of the art in this particular branch of linguistics. This work is a starting point for the formulation of some general deductive hypotheses as usually required in quantitative linguistics.

The second section, “*Text and script analysis*”, contains papers about the frequency structure of texts, based on the analysis of word form frequencies. On the one hand some text indicators are tested empirically, and on the other hand some new quantitative indicators of the thematic concentration in texts are presented. Syntactical issues are discussed on the level of sentence lengths (with a focus on data homogeneity) and selected problems of context comparison are analyzed by the means of combinatorial methods. Two papers are devoted to research of phonetics/semantics (sound symbolism) and to the quantitative analysis of an African script.

The third section, “*Words and word classes*”, contains papers devoted to some morphological and morphosyntactical problems. One paper is a continuation of works within the Göttingen Project on Length Distribution in Linguistics and focuses on word length frequencies in Norwegian. Another paper discusses selected problems of a quantitative classification of part-of-speech systems. Furthermore, German substantive compounds are analyzed with regard to their frequency of occurrence and their combinations with some lexical classes. Finally, one further paper is devoted to the morphological and phonological word structure in Ukrainian and Indonesian, where an interpretation of the parameters of Menzerath’s law is offered.

As a whole, the omnibus volume gives a good overview of the recent development in selected branches of quantitative linguistics and quantitative text analysis. We would like to thank our contributors for their effectiveness and productiveness in the process of editing this second omnibus volume of the “*Studies in Quantitative Linguistics*”.

Emmerich Kelih

Contents

Preface	I
Lexical semantics	
Yesypenko Nadia Cognitive semantics and the corpus-based approach to concept structure	1
Soloviova, Olga Diachronic investigation of the semantic field of ‘size’ in English	22
Drebet, Viktor Der Gebrauch der Substantive mit Modalverben in gegenwärtigen deutschsprachigen Prosawerken	39
Kantemir, Sergej Vergleichende Analyse der polysemen Mikrostrukturen von <i>Land – Volk – Staat</i> und <i>zemlia – narod – derzhava</i> in der deutschen und der ukrainischen Presse	57
Text and script analysis	
Čech, Radek Frequency structure of New Year’s presidential speeches in Czech.. The authorship analysis	75
Inamdar, Atul S.; Prabhu-Ajgaonkar, S.G. A stylostatistical study using the sentence length criterion	88
Lvova, Nadija L. Determining phonetic symbolism of the text	94
Milička, Jiří A combinatorial method for a context comparison	104
Popescu, Ioan-Iovitz; Altmann, Gabriel Thematic concentration in texts	110
Rovenchak, Andriij; Riley, Charles; Sherman, Tombekai Complexity of the Vai script revisited: a frequency study of the syllabary	117

Words and word classes

Best, Karl-Heinz

Wortlängen im Norwegischen

129

Mačutek, Ján; Rovenchak, Andrij

Canonical word forms: Menzerath–Altmann law, phonemic length
and syllabic length

136

Matskulyak, Yuliya

Semantische Besonderheiten der Komponenten in Komposita
mit dem Modell N + N

148

Vulanović, Relja

Classifying parts-of-speech systems by their quantitative properties

170