

Glottometrics 42

2018

RAM-Verlag

ISSN 2625-8226

Glottometrics

Indexed in ESCI by Thomson Reuters and SCOPUS by Elsevier

Glottometrics ist eine unregelmäßig erscheinende Zeitschrift (2-3 Ausgaben pro Jahr) für die quantitative Erforschung von Sprache und Text.

Beiträge in Deutsch oder Englisch sollten an einen der Herausgeber in einem gängigen Textverarbeitungssystem (vorrangig WORD) geschickt werden.

Glottometrics kann aus dem **Internet** heruntergeladen werden (**Open Access**), auf **CD-ROM** (PDF-Format) oder als **Druckversion** bestellt werden.

Glottometrics is a scientific journal for the quantitative research on language and text published at irregular intervals (2-3 times a year).

Contributions in English or German written with a common text processing system (preferably WORD) should be sent to one of the editors.

Glottometrics can be downloaded from the **Internet (Open Access)**, obtained on **CD-ROM** (as PDF-file) or in form of **printed copies**.

Herausgeber – Editors

G. Altmann	Univ. Bochum (Germany)	ram-verlag@t-online.de
K.-H. Best	Univ. Göttingen (Germany)	kbest@gwdg.de
R. Čech	Univ. Ostrava (Czech Republic)	cechradek@gmail.com
F. Fan	Univ. Dalian (China)	Fanfengxiang@yahoo.com
E. Kelih	Univ. Vienna (Austria)	emmerich.kelih@univie.ac.at
R. Köhler	Univ. Trier (Germany)	koehler@uni-trier.de
H. Liu	Univ. Zhejiang (China)	lhtzju@gmail.com
J. Mačutek	Univ. Bratislava (Slovakia)	jmacutek@yahoo.com
A. Mehler	Univ. Frankfurt (Germany)	amehler@em.uni-frankfurt.de
M. Místecký	Univ. Ostrava (Czech Republic)	MMistecky@seznam.cz
G. Wimmer	Univ. Bratislava (Slovakia)	wimmer@mat.savba.sk
P. Zörnig	Univ. Brasilia (Brasilia)	peter@unb.br

External academic peers for Glottometrics

Prof. Dr. Haruko Sanada

Rissho University, Tokyo, Japan (<http://www.ris.ac.jp/en/>);

Link to Prof. Dr. Sanada: [http://researchmap.jp/read0128740/?lang=english](http://researchmap.jp/read0128740/?lang=english;);

<mailto:hsanada@ris.ac.jp>

Prof. Dr. Thorsten Roelcke

TU Berlin, Berlin, Germany (<http://www.tu-berlin.de/>)

Link to Prof. Dr. Roelcke: [http://www.daf.tu-](http://www.daf.tu-berlin.de/menue/deutsch_als_fremd_und_fachsprache/mitarbeiter/professoren_und_pds/prof_dr_thorsten_roelcke)

[berlin.de/menue/deutsch_als_fremd_und_fachsprache/mitarbeiter/professoren_und_pds/prof_dr_thorsten_roelcke](http://www.daf.tu-berlin.de/menue/deutsch_als_fremd_und_fachsprache/mitarbeiter/professoren_und_pds/prof_dr_thorsten_roelcke)

<mailto:Thosten.Roelcke@tu-berlin.de>

Bestellungen der CD-ROM oder der gedruckten Form sind zu richten an

Orders for CD-ROM or printed copies to RAM-Verlag RAM-Verlag@t-online.de

Herunterladen/ Downloading: <https://www.ram-verlag.eu/journals-e-journals/glottometrics/>

Die Deutsche Bibliothek – CIP-Einheitsaufnahme

Glottometrics. 42 (2018), Lüdenscheid: RAM-Verlag, 2017. Erscheint unregelmäßig.

Diese elektronische Ressource ist im Internet unter der Adresse

<https://www.ram-verlag.eu/journals-e-journals/glottometrics/> verfügbar (Open Access).

Bibliographische Deskription nach 42 (2018)

ISSN 2625-8226

Glottometrics 42, 2018

Abstracts

Xu Yingying, Yu Yang, Fan Fengxiang,
Quantitative Linguistics and R.

1-12

Abstract. R is a vectorized language with combined features of a high-level computer language and dedicated software package. It has a wide range of string manipulation and pattern matching capabilities, of which its regular expressions are particularly useful. It provides a full-range of easy-to-use math and statistic functions. In addition, there are also versatile plotting systems for data visualization. It is a powerful tool for quantitative linguistic computing.

Otto Rottmann

On Word Length in German and Polish

13-20

Abstract. Word length is one of the most examined properties of language. It can be measured in terms of syllable or morpheme numbers. In the present article we bring some new models

Michal Místecký, Sergey Andreev, Gabriel Altmann

Piotrowski Law in Sequences of Activity and Attributiveness:
A Four-Language Survey

21-38

Abstract. The present study investigates the possibility of applying Piotrowski Law, a general mathematical principle of historical change in language, on two types of binary sequences – the activity strings, which consist of adjectives and verbs, and adnominal strings, comprising attributes and genitives. The fit is tested on various samples (sonnets, long poems, newspaper texts) written in Czech, Russian, English, and French. In the interpretation part, some ways of further research are sketched, including general employments in the theory of linguistic laws and parameter analyses. As to the latter, the study emphasises their use in testing the hypotheses on texts and in their classifications.

Emmerich Kelih, Sergey Andreev, Gabriel Altmann

Polysemy of some Parts of Speech

39-45

Abstract. The article analyzes the distribution of polysemy with nouns, verbs and adjectives in German, Russian, Slovak, Italian and Hungarian. An adequate model has been found and the problems of data collection, computation and modeling were discussed.

Sergey Andreev

Adnominal Valency Motifs in Sonnets

46-55

Abstract. Adnominal characteristics form an important element of syntactic structure of a sentence, being important both for its formal and semantic organization. One of possible approaches to the study of attributive relations consists in analyzing nouns from the point of view of their adnominal collocability. The number of attributes modifying nouns reflects their adnominal valencies, strings of

which form the basis for the quantitative analysis of text structure. This article is devoted to capturing – in Russian sonnets – the distribution of adnominal valency sequences, modelled into motifs, by mathematical functions. The exponential function plus 1 demonstrates a very good fit.

Sergey Andreev

A Study of Russian Adnominals

56-74

Abstract. In the present article, the development of adnominal types in Russian will be studied. On the selected texts from 1965 to 2008, the use of adnominals in terms of frequencies and the development of motif types are studied.

Gabriel Altmann

The Nature and Hierarchy of Belza-Chains

75-85

Abstract. Belza-chains are uninterrupted sequences of any type of linguistic entities. Their study shows the inertia of some kind of entities. Their length may be captured by usual functions.

Karl-Heinz Best, Gabriel Altmann

Word Length with G. Herdan

86-90

To the memory of G. Herdan who died 16. 10. 1968