

Rhythm detector. A digital tool to identify free verse prosody

Initiative: "Mixed Methods" in den Geisteswissenschaften?

Ausschreibung: Projekte

Bewilligung: 06.12.2016

Laufzeit: 3 Jahre

Projekt-Website: <https://www.geisteswissenschaften.fu-berlin.de/v/rhythricalizer/index.html>

At least 80 per cent of modern and postmodern poems have neither rhyme nor metrical schemes such as iambic or trochaic meter. But this does not mean that they lack any rhythmical features. Modern poets like Whitman, the Imagists, the Beat poets, and contemporary Slam poets have developed a post-metrical idea of prosody that employs rhythmical features of everyday language, prose, and musical styles including jazz and hip hop. The project aims at verifying this hypothesis by applying digital pattern recognition techniques to a corpus of modern and postmodern poems as read aloud by the original authors. To this end, the four major online portals for spoken poetry will be analyzed. Making use of the vastly improved prosody detection available in speech processing technology today, the project will identify rhythmical features through methods including phrase break prediction, prosodic phrasing, spoken document analysis, and fluency/disfluency modeling. In a first step, the philological sub-project will define rhythmical patterns based on a comparison of the textual line arrangement with the prosodic phrasing of the poet's voice. Then the digital sub-project will develop an automatic pattern recognition tool, based on machine learning techniques, that is then capable of analyzing further material. The overall aim is to develop a methodology and a software tool for prosody detection, a RHYTHMICALIZER for modern free verse poetry.

Projektbeteiligte

Priv.-Doz. Dr. Burkhard Meyer-Sickendiek

Freie Universität Berlin

Fachbereich Philosophie und Geisteswissenschaften

Institut für Deutsche und Niederländische

Philologie

Berlin

Prof. Dr. Manfred Stede

Universität Potsdam

USF Kognitionswissenschaften

Department Linguistik

Angewandte Computerlinguistik

Postdam

Prof. Dr. Claudia Müller-Birn

Freie Universität Berlin

Fachbereich Mathematik und Informatik

Institut für Informatik

Berlin

Dr. Timo Baumann

Universität Hamburg

MIN Fakultät

Fachbereich Informatik

Arbeitsbereich Natürlichsprachliche Systeme

Hamburg