# Computer-Based Identification of Metric Verse Structures in Literary Prose of Portuguese Language

Joao Queiroz<sup>1</sup>, Ricardo Carvalho<sup>2</sup>, Angelo Loula<sup>3</sup>

## the phenomenon

**Metric verse structures in Portuguese prose** are still a phenomenon unexplored by theory, and history of literature.

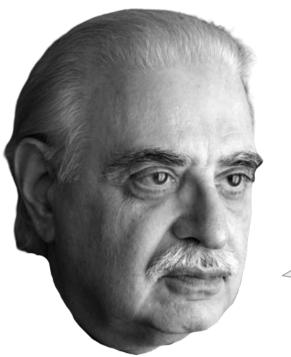
literary prose lies between poetry as such and the common, practical language of communication, and it must not be forgotten that it is incomparably more difficult to analyze an intermediate phenomenon, transition, than studying extreme phenomena.



#### the system

The MIVES (Mining Verse Structure) system was developed for computational scansion of metric verse structures in Portuguese language prose (Carvalho, Loula and Queiroz, 2019). Unlike many computational systems already developed for scansion of metric poems, MIVES was designed to scansion metrical structures in prose, an operation that Augusto de Campos (2010: 14) called "verse-spectral reading."

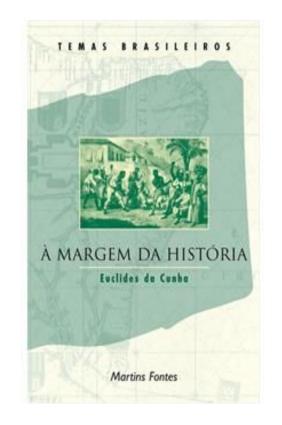


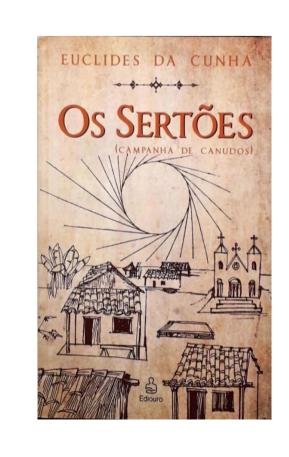


There are, in Euclidean prose, heterometric structures of versification, of varied rhythmic patterns.

Augusto de Campos







#### the results

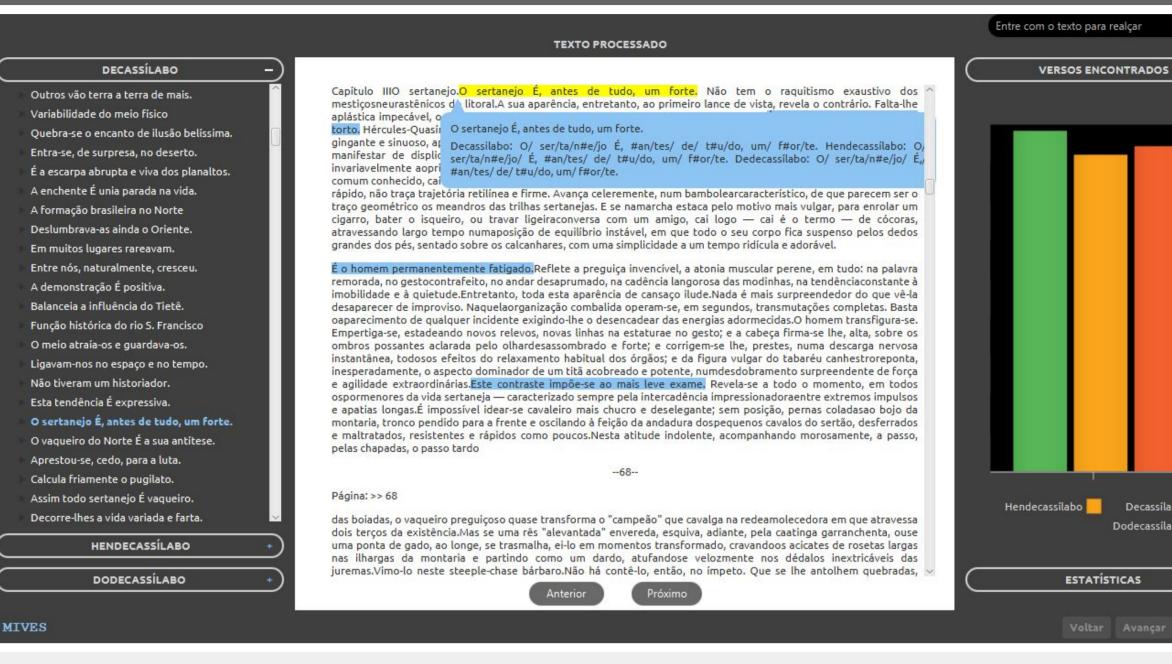


Figure 1: System interface

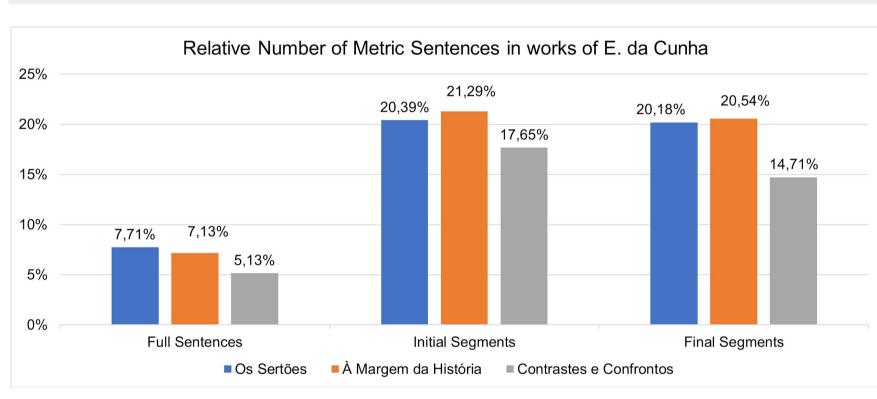
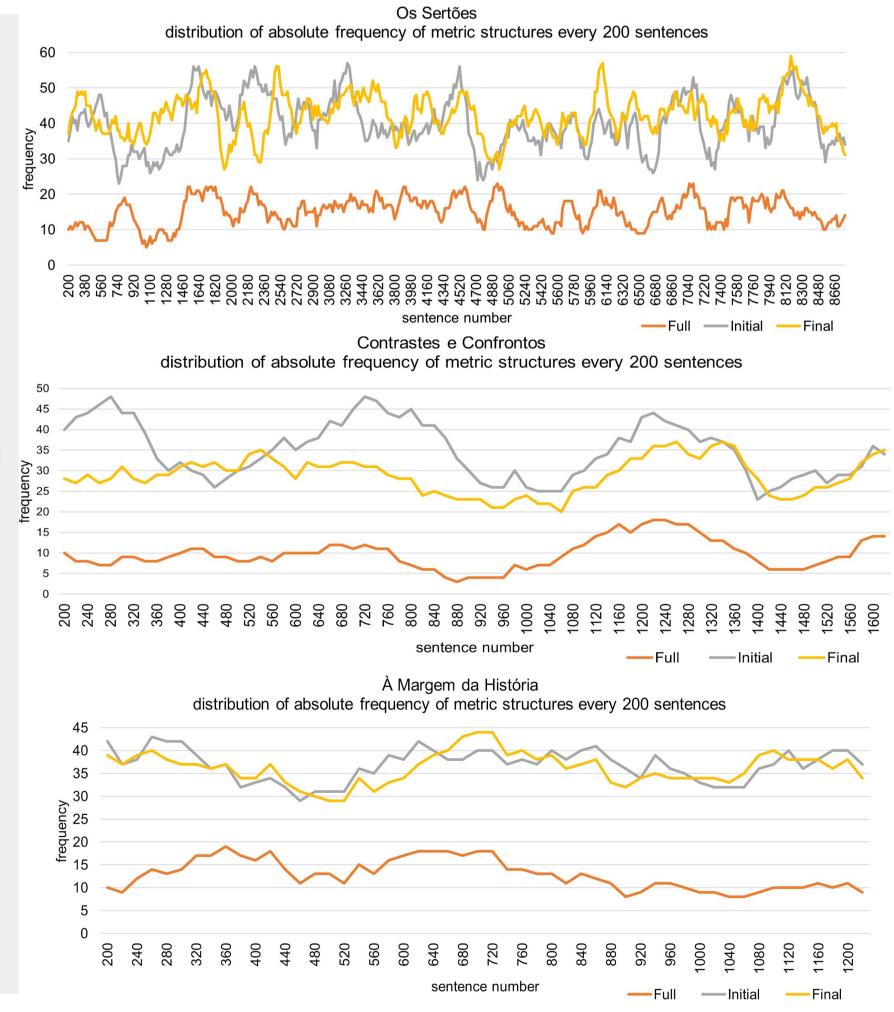


Figure 2: Comparison between three works by Euclides da Cunha - Relative percentage to total sentences. The labels "full", "initial" and "final", refer to the location of the metrical structures in the processed sentence.

Figure 3 - Density of metric sentences along sentences in three works by Euclides da Cunha.

Vertical axis correspond to the number of metric sentences for every 200 sentences. Higher values indicate more metric sentences were identified in a given window of 200 sentences.

Horizontal axis indicate a sentence number along the book corresponding to a reference sentence for the window of 200 sentences. The reference sentence is the las in a given window.



### final comments

Unlike many systems already developed to scansion metrical poems, MIVES was designed to scansion metrical structures in prose, an operation that Augusto de Campos called "verse-spectral reading." The computational automation of this process revealed a surprising density of versification structures in several works by Euclides da Cunha.

