

Metrical Evaluations of the Attic Dialect: A Constructivist Approach

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During the first centuries CE, the landscape of the Roman Empire is polyvalent. It consists of native Romans who can be fluent in Latin and Greek, Greeks who are Roman citizens, other easterners who are potentially trilingual and have also assumed Roman citizenship, and even Christians, who identify themselves as Roman citizens but with a different religious identity. It comes as no surprise that identity, both individual and civic, are constantly reshaped. So the question that arises is whether native speakers can be distinguished from the others as well as how language and its evolution influences people's perception of identity. In this project I study classical Attic dialect and its reappearance at the time of the High Empire and develop computational techniques and linguistic metrics to quantify the Atticism and Greekness of the, what is now, Imperial Attic dialect.

This study is the result of a compilation and interpretation of data that derive from Classical studies, but are studied and analyzed using computational linguistics, Treebank annotation, and the development and post-processing of metrics. Language, whether it is human or machine, follows a particular structure and grammatical conventions. The only way to examine it closely and determine particular attributes, one needs to resort to quantification methods. Language may be generally considered a literary and social medium. However, should one consider solely this aspect, he/she misses its constructional framework as well as its multiple possible meanings and nuances. Therefore, the purpose of this work is to employ computational methods so as to analyze a particular form of Ancient Greek language that is Attic Greek, "measure" its attributes, and explore the socio-political connotations that its reuse had in the era of the High Empire. I contend that such a concrete, minute, and scientifically-based study of the language, which can be achieved by means beyond the simple philological analysis, can actually apprise us of its significance and explain the preponderance that Greek and proper diction had at the time. Ultimately, I argue that this approach can elucidate perspectives and considerations of the most malleable human characteristic, namely identity.

To this end, I examine Dionysius's of Halicarnassus appreciations of orators and their attributes – particularly Lysias, Isocrates, and Demosthenes – as well as orators of the Imperial era – Dio of Prusa, Lucian, and Aelius Aristides – and then proceed with Treebank annotation and machine learning algorithms in order to parameterize quantifiably philological and stylistic attributes, purporting to specify rhetorical *leitmotifs* throughout classical Attic orators and orators of the Imperial era.

More specifically, I present a unified node-based metric formulation for implementing various syntactical construction metrics, indicative of the syntactical attributes of Atticism as it first appeared in fifth-century Greek oratory and was later revived by Imperial Greek authors. Using Dionysius of Halicarnassus and his appreciations of oratory and orators as a frame of reference and then expanding his inferences on works of the Imperial era, I attempt to parameterize Atticism as a phenomenon. The developed metrics were applied to syntactically annotated texts of six authors, which were then comparatively examined using Principal Component Analysis.