Comparing the Incomparable: Introducing Natural Graphematics and Categories for the Comparison of Diverse Writing Systems

Dimitrios Meletis, University of Graz

Even as Saussure’s dogma of the “tyranny of writing” recedes farther into the past, writing systems remain a subject at the margins of linguistics. Although much has been accomplished in the interdisciplinary area of writing systems research, or grapholinguistics, most major contributions to the field are of exclusively descriptive nature. As a result, Watt’s (1998:118) observations are still true today: there exists no theory of writing that can explain “why each […] writing system is the way it is, instead of some other way, and why all such systems have in common what they have in common”. The reasons for this are that valuable grapholinguistic findings from the various disciplines interested in writing – aside from linguistics, these are history, psychology, pedagogy, and many others – often fail to reference one another and are not embedded in a larger context. An overarching theoretical framework remains a desideratum, as do shared concepts and terminology that would allow the comparison of typologically diverse writing systems. For precisely these reasons, endeavors such as a comparison of the Chinese and German writing systems remain unfeasible. Provocative claims such as “some writing systems are better than others” (Rogers, 1995:31) are, against this background, ultimately untestable.

Based on Meletis (2018), this talk introduces the core tenets of Natural Graphematics as an explanatory theoretical framework that makes possible the comparison of writing systems. It is positioned in the framework of Naturalness Theory and modeled after its subbranch of Natural Morphology. In Natural Morphology (Dressler et al., 1987), the semiotic structure of signs is assumed to have a bearing on how they are cognitively processed by humans, with structures that are cognitively processed with less effort being termed natural, giving the approach its name. As writing systems are semiotic systems linking the visual units of scripts (= signifiers) with linguistic units (= signifieds), the semiotic parameters of Natural Morphology can be fruitfully transferred to graphematics. Accordingly, parameters such as transparency (a grapheme is transparent if it only corresponds with one linguistic unit, e.g. German <f> only corresponds to /f/) prove to be useful categories for the description and comparison of the graphematic module of writing systems. In this talk, the parameters of iconicity, diagrammaticity, indexicality, transparency, compositional transparency, positional transparency, and figure—ground will be presented and illustrated with examples from a variety of diverse writing systems.

While the investigation of how these parameters are reflected in different writing systems descriptively evaluates their linguistic fit, i.e. how well they fit their respective languages, in a next step, the processing fit of these parameters can be assessed with the help of external evidence such as data from literacy acquisition and the history of writing. Here, the central question reads: How do the structural features of writing systems affect their processing by humans? The processing fit also gives Natural Graphematics its explanatory force, as it does not stop at describing structures, but strives to explain how human pressure has shaped them and how they affect humans. In sum, taken together, the naturalness parameters and their linguistic and processing fits introduced in this talk offer instruments for the evaluation of writing systems. This presents a remarkable step in the development of a theory of writing.


