Visual Hermeneutics

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Conventional literary research is dominated profoundly by the written word, as text frequently forms both the object and the outcome of academic research. This centrality of text is increasingly attenuated, however, as a consequence of a growing use of computational methods. The essential plasticity and computability of digital text has inspired innovative forms of analysis, and the growing interest in quantification and in statistics has urged literary scholars to explore whether or not the salient features of texts can be clarified and communicated effectively through images (Jessop 2008). As studies in the field of literary criticism generally aim to elucidate the meaning of texts, Sinclair et al. argue that the value of tools for the visualisation of texts can be gauged “by determining how well it supports this interpretative activity” (Sinclair et al. 2013). The field of literary studies does not have a historical tradition of using visual displays such as graphs and charts for the organisation and the dissemination of knowledge, however, and many of the visualisation techniques which are in use at present have been adopted from the social sciences and the natural sciences. Johanna Drucker has emphasised that the standardised visualisation models which originated in statistics and in the empirical sciences unfittingly follow the epistemological assumptions of these disciplines, and she urges scholars to develop graphical displays which represent the “observer co-dependent” nature of data and which expose the “interpretative complexity” of humanistic data (Drucker 2011).

In this paper, the results are presented of a study which aimed to explore the capacity of data visualisations to support hermeneutic processes. The study focused, more specifically, on the interpretation of poetry. During an initial phase of the study, software was developed for the recognition of various literary devices, such as rhyme, alliteration, enjambment, onomatopoeia, refrains and imagery. Additionally, a large number of techniques have been developed for the visual representation of these literary phenomena. Graphical displays can be classified in a variety of ways. Visualisations may differ with respect to the type of data they are based on, the type of processing these data have undergone, and the geometric objects that have been used to assemble the graph. Many of the existing visualisation tools represent data about word frequencies, but, as will be shown, the possibilities for interpretation can generally be extended when data about the vocabulary is combined with data about occurrences of specific literary figures. Visualisations may also display data on different levels of analysis. They can be used to expose patterns within corpora in their entirety, but they may also represent data about individual poems. In the latter case, diagrams and charts can support forms of close reading. Minute examinations of the way in which literary devices have been combined at the level of individual stanzas and individual lines can help scholars to analyse the concrete ways in which formal textual phenomena contribute to the meaning of a poem (Chaturvedi et al. 2012).
An important objective of visualisations is to establish a condensation, and to provide a succinct expression of the data that are available. While linear texts are invariably highly complex and multifaceted phenomena, visualisations typically privilege a limited set of dimensions at the expense of certain other dimensions, allowing for a more concentrated investigation of the aspects that remain. Data visualisations are typically created to marshal surprises. They may expose specific arrangements of sounds or of words which are difficult to see during a close reading of the words of the text. The patterns that emerge often stimulate scholars to examine whether or not the groupings that are generated on statistical grounds also coincide with other divisions, such as those based on theme, genre or date of creation. Such attempts to explain unexpected correlations or conspicuous disassociations can in turn galvanise a hermeneutic engagement with the texts that are rendered graphically.

References


