

## Negotiating close and distant reading: Heteroglossia and networks in Zadie Smith's *White Teeth*

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Although there are some similarities between close and distant reading, with both methods aiming to keep the author out of the equation and instead focusing on the text, they are traditionally seen as polar opposites. The former focusing on a fine-grained or detailed analysis of typically small amounts of text, and the latter relying on providing an automated analysis of large amounts of texts, in order to find general patterns or trends. Close reading then, can be seen as looking at a more detailed level, whereas distant reading looks at the bigger picture, moving away from the microscopic level and instead using a lens with as wide an angle as possible, in order to come to an interpretation.

In our current project, we aim at identifying approaches and techniques that allow us to move in between these two extremes with the aim of getting to the fine-grained information of close reading using distant reading techniques. In order to do this, we consider distant reading approaches that help with the close reading of large amounts of texts. As Stephen Ramsay argues, in *Reading Machines* (2011), what he calls algorithmic criticism can shed a new light on ways of interpreting an existing text:

It is not that such matters as redemptive worldviews and Marxist readings of texts can be arrived at algorithmically, but simply that algorithmic transformation can provide the alternative visions that give rise to such readings (Ramsay, 2011: 16).

This shows that digital tools for interpreting texts can offer the same types of analyses, but on a much bigger scale. This would be in line with what Moretti sees as distant reading. A type of analysis which is freed of interpretation, which is, in his words “independent of interpretation” (2003: 72), whereas Rosenthal (2017: 4) argues that what he calls narrative (the story in a novel, the fabula if you will) and data inform one another and it is this dialogue that leads to meaningful interpretation. However, is narrative truly the same as a close reading and interpretation?

Previously (Aurnhammer et al. 2017), we investigated the automatic analysis of a Reddit thread using LDA as a distant reading technique and compared the results against the manual close reading results of the posts. As the automatic analysis not always corresponds exactly to the manual annotation, there may be limitations to its practical use. In particular, we found that for different questions that one may tackle using close reading, different distant reading techniques are required. In this context, we experiment with several distant reading techniques with the ultimate aim to develop a toolkit that can be used to perform close reading more efficiently. Currently, we are experimenting with different tools that can be part of this toolkit.

As our second attempt at using distant reading techniques for close reading, we look at the book *Reading Machines* (2011), in which Stephen Ramsay offers different methods to engage in algorithmic criticism, criticism derived from algorithmic manipulation of text. We will explore the possibilities of such a critical and explorative approach by analyzing Zadie Smith's novel *White Teeth* (2000). This novel figures a large number of characters with different ethnic and cultural backgrounds, and we intend to investigate how these characters enter into relationships with each other. Is there a democratic distribution of character's voices, or is there a hierarchical structure with one main character and an array of minor characters? Moreover, on a more practical level, this novel has been interpreted rather

extensively, which will help with our own analysis combining the two methods of close and distant reading. Can the combination of the two lead us to a new, and possibly surprising, analysis of the novel, or will it corroborate previous interpretations?

In pursuing this question, we make use of a mixed method of close reading and network analysis. We analyze the different relations between the characters with an eye to ambiguities, irony, and other stylistic and formal elements and make use of Mikhail Bakhtin's (1981) theory of heteroglossia in literature for this part on close reading. Bakhtin's notion of heteroglossia entails that works of art are comprised of several different voices, which enter into a dialogue with one another, but also with the reader. This is compared against quantitative network analysis (distant reading). We automatically identify characters using Named Entity Recognition (NER) and determine the frequency of occurrence of the characters' names in the novel. These results are then fed into Gephi, a network visualizations and statistics program and we use Texttexture to create a network visualization of the text. We then compare the outcome of the distant reading of *White Teeth* to that of the close reading, and reflect on the advantages and disadvantages of both approaches. Although similar computational analyses has been carried out before, the approach is original in its combination with close reading. The innovative aspect of this research lies in its combination with Bakhtinian heteroglossia with (quantitative) network analysis (quantitatively), thus uniting two traditions often thought separately: that of Digital Humanities and the continental, (post-)structuralist tradition of critical theory.

By way of a conclusion, we make a claim for an integrated approach to close and distant reading.

## References

- Aurnhammer, C., I. Cuppen, I. Van de Ven, & M. van Zaanen. (2017). Analyzing reading strategies: bridging the gap between close and distant reading. *Conference proceedings DH/Benelux 2017*.
- Bakhtin, M. (1981). *The Dialogic Imagination [English translation]*. Austin/London: The University of Texas Press.
- Moretti, F. (2003). Graphs, Maps, Trees: Abstract Models for Literary History. *New Left Review*, 24, 67-93.
- Ramsay, S. (2011). *Reading Machines: toward an algorithmic criticism*. Urbana: University of Illinois Press.
- Rosenthal, J. (2017). Introduction: "Narrative against data". *Genre* 50 (1), 1-18. doi: 10.1215/00166928-3761312
- Smith, Z. (2000). *White Teeth*. London: Penguin Books.