

An Evaluation of Poemage

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Abstract—This paper is a visualization evaluation of the program Poemage, created by Nina McCurdy, Julie Lein, Katharine Coles, and Miriah Meyer from the University of Utah. We will evaluate the effectiveness of this visualization as well as suggest future implementations that could enhance the application.

Index Terms—Visualization in the humanities, design studies, text and document data, graph/network data

1 INTRODUCTION

The work presented here yields the following benefits and contributions:

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2 RELATED WORK

Close reading through computational means is a very difficult problem to tackle due to its large problem set and complexity by nature. Most design decisions for computational close reading tend to focus on a specific area of interest within close reading, for example sound or rhyme. Nina McCurdy from The University of Utah wrote: “Close reading covers a broad range of tasks, encompasses varying styles of analysis, allows many different points of entry, and accepts an extensive range of sometimes radically divergent interpretations” when describing the complexity of text analysis [4].

There have been numerous previous projects trying to tackle close reading via visualization and computation like E-Margin [3], Serendip [1], and Myopia [2]. The Poemage team took a slightly different course during their development by focusing on sounds and creating a program that could “automatically sonify a poem” [4]. All previous projects address the problem of close reading as an interpretation of text at the level of individual words in order to interpret and examine literary context. A large issue with addressing this problem is that it is usually done in an academic setting where someone is trying to “teach” the literature, and hand written evaluations tend to be messy and difficult to understand. These close reading visualization projects attempt to help visualize textual interpretations so that it can be taught and evaluated easily and effectively.

We wanted to branch off from the Poemage style of using drawn ellipses to highlight words of interest and search for other methods of text highlighting that may increase the effectiveness of the visualization. We sought to highlight individual syllables or letters that applied to the filtered rhyme scheme or rhyme rule rather than circling the entire word. There has been extensive research on text highlighting techniques conducted by the information visualization community. A paper from IEEE Transactions on Visualization and Computer Graphics states that “Text highlighting is important in any scenario where close reading (sequential word-by-word reading) is required and text annotations exist, that should be made accessible to the reader” [5]. We wanted to explore the possibilities of using background coloring to target different parts of a single word to beautify the user interface as a whole and enhance the effectiveness of the Poemage program. By using different background colors used to target specific letters and syllables, the user will be able to clearly identify the sonic devices being targeted and

be able to see where in the word it is present. The issue of where in the word the sonic device is located is not expressed through the use of drawn ellipses in the current version of Poemage, and users become overpowered with clutter and complexity when multiple filters are applied.

3 METHOD

3.1 Method Overview

3.2 Usability Evaluation

3.3 Poemage With Different Languages

4 ENHANCEMENTS

5 RESULTS AND PERFORMANCE

5.1 Method Overview

5.2 Usability Evaluation

5.3 Poemage With Different Languages

5.4 Performance Analysis

6 CONCLUSIONS AND FUTURE WORK

ACKNOWLEDGMENTS

The authors wish to thank Nina McCurdy and the faculty at The University of Utah that built the Poemage program as well as professor Eugene Zhang and teaching assistant Islam Al Musaly.

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