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The Wordless Book as a Data Visualization of Religious Narrative

The Wordless Book is an Evangelical tract and teaching tool that was invented in 1866 as a method of communicating the Gospel to illiterate or non-English-speaking people. The tract consists of only three, wordless pages that were colored black, red, and white, and each page is symbolic of the distilled essence of the Gospel message. The black page represents the sin present in the heart of the unbeliever, the red page is representative of the blood of Christ that pours out over the sins of the world, and the white page is symbolic of the newfound purity of those who accept Christ. In "The Wordless Book: The Visual and Material Culture of Evangelism in Victorian Britain." Dominic Janes recognizes *The Wordless Book*'s ability to visually represent a non-visual concept in a way that does not sacrifice the Victorian Evangelical devotion to combating the idolatry recognized in the icons of the High-Anglican and Catholic Churches (37). The abstract visualization of the Gospel message is not dissimilar from the Victorian use of graphs, charts, and maps to visually represent data that is non-geometrical in nature. Pictorial representations of statistical data were being popularized by a variety of figures throughout the Victorian Era; these figures include individuals such as William Playfair, Florence Nightingale, William Farr, and Charles Booth ("Worth a thousand..." 1-3). There are similarities between the use of data visualizations whose purpose was to incite political change in Victorian England and *The Wordless Book's* ability to translate the Evangelical message to a wider audience; the study of *The Wordless Book* as a data visualization of religious narrative suggests that there is an overlap of understanding between scientific and religious notions of visual rhetoric in Victorian England.

The Economist article, "Worth a thousand words," describes how aesthetically approachable representations of statistical data give a voice to a formerly impenetrable amount of facts and figures. The article points out that the pictographic work of some statisticians was used as a "beautiful and persuasive call to action (2)." Scottish engineer William Playfair is commonly credited with inventing the modern notion of the "data visualization." Described as a controversial "scoundrel" in his own time, the statistician used elaborately shaded graphs to describe economic issues such as the price of wheat versus the wage of a typical mechanic, and comparisons of unfair British tax rates (3-4). Victorians such as Playfair recognized data visualizations' ability to tell a story to an audience who were incapable of sifting through large amounts of raw data to find tangible meaning. Data visualizations create a narrative for their data, a narrative that a common reader can understand and respond to. By broadening the appeal or "readability" of large data sets by dressing them in pie charts and colored line graphs, the Victorian statisticians hoped to argue for the visibility of social issues they found pressing.

Similarly *The Wordless Book* attempted to reach a larger demographic by abstracting the information that the tract wishes to convey and then rearranging that information in a visually appealing and approachable fashion. Baptist preacher Charles Spurgeon invented *The Wordless Book* as a "visual catechism" that could be used to evangelize individuals in orphanages, urban missions, Sunday Schools, and China (Janes 26). Spurgeon utilized the teaching tool to convince a plethora of unchurched, poor Victorians of the emotionally charged truths of Evangelical Christianity. Victorian statisticians used their geometric representations of hard figures to advocate for social change in regards to healthcare, poverty, crime etc.; they searched for "converts" to their own political narrative while the Evangelicals searched for literal, religious

converts. Both groups simplified their data and created narrative through visual abstraction to reach wider swaths of potential listeners.

One data visualization that has striking similarities to *The Wordless Book* is Florence Nightingale's "Rose" of soldier mortality rates. Nightingale, the famed nurse and organizer who revolutionized hospitals through her emphasis on sanitation and organization, compiled death rates of soldiers who died of wounds (represented by the color red), of preventable diseases (blue), and of what she labeled "other" (black) throughout the course of two years ("Worth a thousand..." 2). Nightingale visually represented the magnitude of the mortality rates by placing multicolored wedges in two circular patterns and then labeling each wedge with a month between April 1854 and March 1855 and between April 1855 and March 1856. The multicolored bars that make up each wedge are of varying sizes to represent the number of men killed by each of the three causes of death. Nightingale utilized color to clearly delineate between major causes of death to convince a wider public of the dangers of preventable disease on the battlefield. There is a beautiful simplicity in Nightingale's representation of a subject as grisly as the mortality rates of soldiers, and in the same way, *The Wordless Book* attempts to simplify information by using color to represent three different aspects of a cohesive argument. Nightingale uses shape and color to argue for the more effective treatment of preventable diseases, while Spurgeon uses color to make a case for Evangelicalism; there is even an overlap between the colors used (black and red).

Charles Booth is another Victorian statistician who utilized color to tell the story of his contemporary society, but instead of representing soldier mortality rates, Booth's colored maps illustrate the lines between the rich and poor in London. Booth collected data concerning the income of the population of London and then published a color-coded map detailing the

distribution of wealth across the city ("What were..."). Booth's *Maps Descriptive of London Poverty* (more colloquially known as Booth's "poverty maps") were published in his *Inquiry into the Life and Labour of London* between 1886 and 1903 ("What were..."); the maps describe the income of nearly every home in the city by color coding the residences based on the household wealth. The colors range from black, symbolizing what Booth labels as "the vicious, semi-criminal" poor, to gold, which is the placeholder for the wealthy residents. Booth's result is a collage of math and color that successfully demonstrates the surprising proximity of the rich and poor and calls attention to the troubling income inequality that plagued Victorian Britain.

Though it was initially published two decades after *The Wordless Book*, the grand scale of Booth's poverty maps (along with Nightingale's mortality "Roses") demonstrates a Victorian affinity for the use of a color as a symbolic medium for representing non-artistic information, and *The Wordless Book* takes advantage of this affinity (and helps propagate it) by using color to represent its own "data."

The main objection to the idea that *The Wordless Book* can be read as a permutation of the Victorian data visualization is the fact that *The Wordless Book* is not representative of any mathematical or statistical data, but Spurgeon's own theological leanings may quell this concern. Theologically, Spurgeon was a Reformed Baptist, a branch of Evangelicalism with deeply Calvinistic leanings. Calvinistic aesthetic leanings even influenced *The Wordless Book*'s use of symbolic color as opposed to iconographic representations of Christian figures (Janes 34). The Calvinistic nature of Spurgeon's theology also made him a believer in a penal substitutionary method of atonement, a theological concept that interprets Christ's death as a type of "payment" necessary to assuage the wrath of an angry God against whom humanity incurred debt through its sin (Robinson). In the penal substitutionary theory of atonement, there are definite, clear-cut

measures that must be satisfied for man to reach heaven; salvation is treated as a solvable equation. Man's sin causes God's anger, God's anger demands justice, and then God's anger subsides through Christ's perfect sacrifice. *The Wordless Book* directly follows the substitutionary theory of atonement, a theory that is decidedly logical and "mathematic" in its theology. The substitutionary theory of atonement can be viewed as a simple mathematical formula that is visually represented by *The Wordless Book*, and the clinical nature of the theological subject matter make the tract comparable to some of the statistical data visualizations of its time, albeit a significantly simpler example of the power of those data visualizations.

Spurgeon and other supporters of *The Wordless Book* were also criticized by their contemporaries due to the intellectual limitations of their broad appeal to the Victorian emotion, and there is at least one example of similar criticisms being levied against another Victorian data visualization. In "Crediting his critics' concerns: Remaking John Snow's map of Broad Street cholera, 1854," Tom Koch and Kenneth Denike explore the objections that many of Snow's contemporaries had with his famous map of the 1854 cholera outbreak in the St. James, Westminster section of London. Snow's map linked the majority of cholera cases to a single water pump in the neighborhood, and his (factual) suggestion was that cholera is a waterborne illness (Denike and Koch 1246). The authors also point out that Snow's argument was unconvincing to most of his contemporaries who were certain that cholera traveled through the air; the authors state that Snow could have strengthened his waterborne argument by making a few additional, simple, statistical analyses (Denike and Koch 1247-49). Snow relied on the strength of his visual argument to make his case for him, which cost him the support of many of the scientists of his day. In a similar fashion, other branches of Christianity within Victorian Britain criticized Evangelical arguments, including *The Wordless Book*, for the notion that the

Bible is simple and self-explanatory. High-Church Anglicans, specifically Tractarians, devoted their energy to explaining and arguing the intricacies of Christianity, and many of them rejected the emotional appeal of Evangelicals who felt the Gospel could be broken down into just three colored pages (Poston 411). Naturally, an amount of nuance and detail is lost when an argument made through a visual medium is intended to simplify content for a mass audience. For Snow, his map was not able to capture the statistical complexities that other Victorian statisticians desired, and Spurgeon's *Wordless Book* oversimplified the Gospel message for many devoted Anglicans.

The Wordless Book distills a message down to its basic components and then relays that message to the widest audience possible by visually representing each component (sin, sacrifice, and redemption) through a solid color. The process of pictorially representing information by making it visually appealing and simple is also apparent in the popular data visualizations of the Victorian Era that argued for social progress. Though The Wordless Book is not attempting to accomplish the scientific and social work valued by the Victorian statisticians, the tract's methodology is similar enough to the work of Nightingale, Snow, and Booth to warrant the consideration that the religious "text" should be treated a form of the Victorian data visualization. If The Wordless Book is accepted as an example of "data visualization," then the scholarly lines separating conceptions of Victorian religious and scientific cultures become blurred by the fact that both camps were working out of similar understandings of abstract visual rhetoric.

Works Cited

- Janes, Dominic. "The Wordless Book: The Visual and Material Culture of Evangelism in Victorian Britain." *Material Religion: The Journal of Objects, Art, and Belief.* 12.1 (2016): 26-49. Academic Search Complete. Web. 14 Oct. 2016.
- Koch, Tom, and Kenneth Denike. "Crediting His Critics Concerns: Remaking John Snow's Map of Broad Street Cholera, 1854." *Elsevier: Social Science and Medicine*. 69 (2009): 1246-251. Web. 8 Dec. 2016.
- Poston, Lawrence. "Newman's Tractarian Homiletics." *Anglican Theological Review* 87.3 (2005): 399-421. Religion and Philosophy Collection. Web. 12 Oct. 2016.
- Robinson, B. A. "The Penal Theory A.k.a. The Penal Substitution Theory." Religious Tolerance.

 Ontario Consultants on Religious Tolerance, 12 Apr. 2004. Web. 8 Dec. 2016.
- "What Were the Poverty Maps?" Charles Booth's London: Poverty Maps and Police Notebooks.

 London School of Economics and Political Science, 2016. Web. 8 Dec. 2016.
- "Worth a thousand words." *The Economist*. The Economist Newspaper Ltd., 19 Dec. 2007. Web. 8 Dec. 2016.