The Expression of Self and Grief in the Nineteenth Century: An Analysis through Distant Readings

Historians have traced changes in emotional expression over the course of history. For example, Stearns and Knapp (1996) chronicled how within Western culture, public expressions of grief in response to death adapted to an evolving cultural context. In the case of music-related expressions of emotions, they speculated about changing attitudes toward grief as reflected in musical lyrics, writing that "in contrast to eighteenth-century songs about death, which were set in the artificial pastoral world of shepherds and written in the third-person, Victorian grief songs were personal and immediate... Literally hundreds of songs about dying girls were published, particularly in the 1860s" (p.136). This paper examines this assertion from the angle of digital humanities and computational musicology.

The nineteenth century is commonly characterized as exhibiting a "romantic" ethos, in which passionate emotions were more commonly expressed (Harré & Parrot, 1996), meaning that any change related to grief songs may simply be reflective of broad changes evident across many genres of music. While Stearns and Knapp limit their claim to songs specifically about death, it is possible that any change of language between the 18th and 19th centuries was general, and not limited to songs about death. This paper therefore examines the full range of song topics, and compares the results to songs specifically about death.

Inspired by Stearns and Knapp, we examine the use of pronouns in lyrics. As we will see later, there are technical problems associated with the use of third-person pronouns. Because of these difficulties, we test the use of first- and second-person pronouns instead. Finally, rather than limit our study to the contrast between 18th- and 19th-century music, we expand our study to include music spanning three centuries. For the purposes of this initial study, we focus on Scottish ballads found in broadsides published between 1650 and 1910.

In further examining Stearns and Knapp's conjecture, we test four hypotheses that successively refine the research question, beginning with more general tests that provide useful contexts for interpreting the subsequent results. Firstly, we examine whether first- and second-person pronouns increase proportional to text length over time. Secondly, we test the conjecture that the greatest increase in first- and second-person pronouns occurs in the nineteenth century. Thirdly, we examine whether first- and second-person pronouns are more pronounced in lyrics dealing with death or sorrow as compared to lyrics dealing with other topics. Lastly, we explore whether first- and second-person pronouns are most pronounced in nineteenth-century lyrics.

Again, note that the Stearns and Knapp conjecture relates to the use of third-person pronouns. In switching our focus, it is important to clarify that we are not claiming that there is a reciprocal relationship between first-/second- and third-person pronoun use. That is, we do not assume that reducing the number of third-person pronouns will necessarily result in an increase in first- or second-person pronouns. Instead, we propose that the Stearns and Knapp claim is principally about the "intimacy" of the language expression. To the extent that first- and second-person pronouns are more intimate, it makes sense to re-interpret the Stearns and Knapp conjecture as better related to first- and second-person pronoun use, rather than to third-person pronouns.

Our study involves assembling a database of 911 ballads spanning 1650 to 1910. Rather than attempting to assemble a representative sample of Western music over the 300-year period, we assembled a single corpus of Scottish ballads. In creating this corpus, we relied principally on the collection of broadsides entitled "The Word on the Street," which was compiled by the

National Library of Scotland. Our corpus is best regarded as a convenience sample rather than a representative sample.

In any utterance or text, a number of issues arise when identifying pronouns. An important distinction relates to the use of plurals. In English, the first-person singular "I" is more intimate than the first-person plural "we." Indeed, Queen Elizabeth I famously used "we" as a way to defuse and depersonalize criticisms, such as "We are not amused" versus "I am not amused." Accordingly, for the purposes of this study, we are more interested in first-person singular, rather than first-person plural pronouns. Similarly, a distinction can be made between second-person singular and second-person plural pronouns. In English, the same word "you" is used for both the singular and plural forms, hence "you" is somewhat ambiguous. In light of the above considerations, we might operationalize our overarching hypotheses with the specific predictions that the pronouns "I" and "we" will both increase in the nineteenth century.

Since our procedure employs automated text-processing methods, many of the above conjectures cannot be tested without human interpretation/intervention. Thus, this study uses computational search techniques to count the pertinent instances in our corpus and follow up with manual techniques. To assure validity, we randomly extracted keyword-in-context passages to give to language-knowledgeable volunteers who will resolve the ambiguity and classify the pronoun use into the appropriate categories (this part of the study is still ongoing).

In music, lyrics are often repeated. In order to avoid undue influence of repetition in our sample of ballads, duplicate text lines are discarded. A duplicate line is defined as an exact repetition of an earlier line, excluding punctuation. In order to test our second hypothesis, we need to identify lyrics that exhibit grief-related subject matter. To this end, we make use of an automated procedure that has the benefit of reducing potential experimenter bias. Specifically, we identify a number of keywords that we deem symptomatic of grief-related content. In English, this includes the words cry, death, die, died, dying, sad, sadness, pain, loss, loose, tears, and lament. Rather than identifying "grief songs," we simply identify "grief passages." Specifically, we tallied the pronouns within close proximity of the a priori grief-related words. Our hope is that this study will contribute to the work on the evolution of grief and sadness in the arts during the long 19th-century, and will provide framework for future scholars in the digital humanities to further explore such stylistic change.

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