

Evolution of Moral Valence in Lyrics Over Time

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Introduction

Music influences our values and perception towards certain issues such as social justice and equality. Lyrics communicate moral rhetoric to advocate for societal changes, but also to promote (or protest) sexism and gender discrimination (Betti et al., 2023). Recent works elaborated on the link between individuals' moral values and their lyrical preferences (Preniqi et al., 2022). Here we investigate using natural language processing how moral values are conveyed through music lyrics over time and how historical events impact these portrayals. We sought to analyse the expression of moral rhetoric in music lyrics throughout a period and with respect to artist gender and musical genre while investigating if significant historical events have any correlation with the prevailing moral narratives of popular songs.

Methods

We queried the WASABI database (Meseguer-Brocal et al., 2017) similarly to Betti et al. (2022) for all solo artists, we collected their English song lyrics published between 1960 and 2010, totalling 375,521 songs. We retrieved the Billboard Hot 100 weekly charts for identifying popular songs within the WASABI data. We analysed the imprints of the morality of the lyrics over time using the MoralStrength lexicon (Araque et al., 2020), which predicts moral valence in text across five traits: Care/Harm, Fairness/Cheating, Loyalty/Betrayal, Authority/Subversion and Purity/Degradation (Graham et al., 2013). Additionally, we investigated differences in lyrics' moral content with respect to artist gender and musical genres.

Results

Preliminary results showed that the relative fraction of songs using moral language has increased over time. Lyrics of songs expressing narratives of fairness and authority were especially prominent in hip-hop music by male artists. This resonates with the evolution of rap and hip-hop musical styles on Billboard charts. Female artists expressed the value of care more frequently in their songs, especially in the 70s and 90s, possibly in response to anti-war and anti-discrimination movements of the time. Further, lyrics expressing virtues of sanctity and purity were most prevalent in the early 80s, 90s, and early to mid-2000.

Discussion

Changes in songs moral loadings across time, can uncover intriguing details into how lyrics respond to evolving societies and cultural shifts. In the future, we will present more complex moral prediction models.

Conclusion

Our findings present engaging insights about language usage of moral expression in song lyrics and the evolution of lyrics' narratives in response to societal and political challenges throughout history.

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