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Popular Music is Getting Sadder and Angrier, New Study Finds

An analysis of more than 50 years of song lyrics identifies a dark trend in popular music.

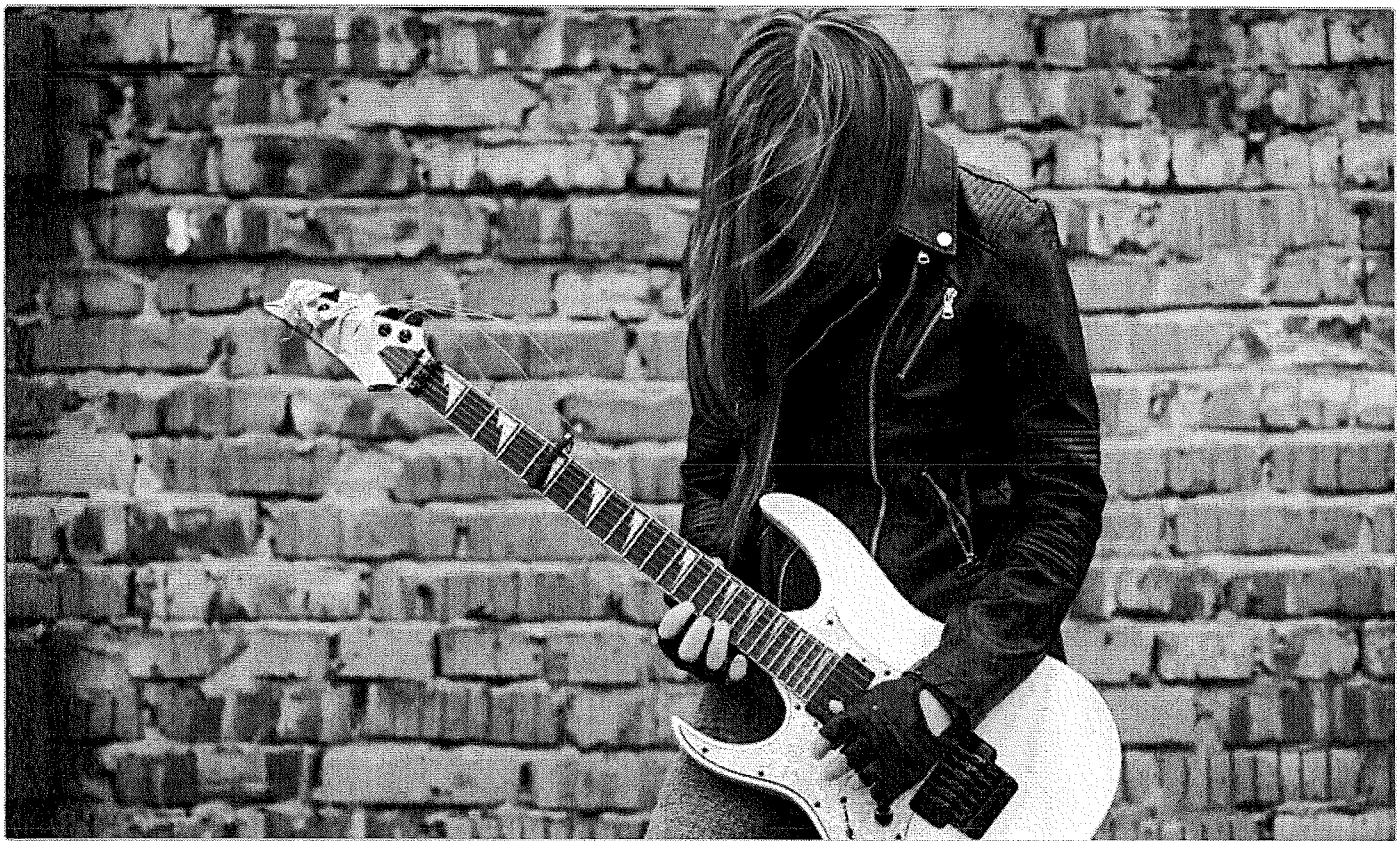


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CULTURE

Thursday, February 7, 2019 - 10:00

Brian Owens, Contributor



(Inside Science) – "Clap along if you feel like happiness is the truth," sings Pharrell Williams in "Happy," but the joyful sentiments in that 2013 hit are becoming rarer, according to a new [analysis of decades of song lyrics](#). The study finds popular music lyrics have become gradually angrier, sadder and more fearful since the 1950s.

Lior Shamir, a computer scientist at Lawrence Technical University in Southfield, Michigan, analyzed the lyrics of more than 6,000 songs using IBM's Watson artificial intelligence platform. The songs came from the Billboard Hot 100 list of each year's most popular songs from 1951 to 2016. Watson can use a combination of psycholinguistics and machine learning to measure the sentiments of any piece of text. The emotions of anger, fear, disgust, joy and sadness were rated within each song and given a score from 0 to 1.

For example, "Turn around, every now and then I get a little bit lonely and you're never coming round" -- the first line of Bonnie Tyler's 1983 hit "[Total Eclipse of the Heart](#)" -- got a sadness score of 0.78. The song as a whole scored 0.52 for sadness and 0.53 for fear, while joy scored just 0.09. The Village People's "[YMCA](#)," released in 1978, on the other hand, scored 0.65 for joy and 0.11 for anger.

Shamir found that the average scores for fear, anger, disgust and sadness in each year's crop of chart-toppers rose gradually and consistently over the decades, while joy declined. The Fats Domino classic "Blueberry Hill," from 1956, has a joy score of 0.89, while Sam Smith's plaintive "Stay With Me," from 2015, got just 0.15 for joy (the aforementioned "Happy" scored 0.79). The angriest song in the database is Busta Rhymes' "Touch It," from 2006, which scores 0.97. In contrast, Madonna's "Borderline," from 1983, is much angrier than most other songs from the 1980s, but scored just 0.35.

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Since the Billboard Hot 100 includes only the most popular songs of each year, the emotions reflect what the public wants to listen to, rather than what musicians in general want to express, Shamir said. He suggests that the trends are related to the role of music in society, and some of the spikes in the data might reflect what was going on in the world at the time.

"During the 1950s the purpose of music was entertainment and fun, and I believe that is related to the more joyful and less angry lyrics," he said. "During the late 1960s and early 1970s music also became a social and political tool, used to express and even advance social activism and political views." The rise of those protest songs brought an increase in anger and disgust.

There are also some more discrete events that may be reflected in the tone of popular music. The sudden drop in fear in 1988 that the analysis revealed could be related to the end of the Cold War, Shamir suggests, while a rise in fear in 1998 and 1999 may reflect anxiety about the impending turn of the millennium.

David Metzger, a music historian at the University of British Columbia in Vancouver, Canada, said this digital mining of lyrics offers a valuable new perspective on the sentiments expressed in music. He is particularly interested in how Shamir's conclusions differ from his own work on emotion in popular music.

"It came as a surprise -- I didn't notice a growing anger, and sadness is always part of music," said Metzger, who studied emotion in popular ballads from the 1950s to the present. "I think modern songs mix emotions much more; we're more interested in the idea of emotional intensity than any particular emotion."

"Total Eclipse of the Heart" is a good example of this, said Metzger. "I was singing it at karaoke last night, and it has sadness to a certain degree, but it also has this feeling of exhilaration to it and a release of emotion."

Some of the difference could be due to Shamir's focus on lyrics.

"Songs are more than just lyrics; there is also music and performance as well," said Metzger. "I try to always keep all three in play."

Metzger said it would be useful to combine the two approaches -- his own low-tech technique of reading old Billboard magazines on microfilm in library basements, and Shamir's AI-driven data mining. "They offer different perspectives, and both are valuable," he said.

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