

Language of music really is universal, study finds

March 19 2009

Native African people who have never even listened to the radio before can nonetheless pick up on happy, sad, and fearful emotions in Western music, according to a new report published online on March 19th in *Current Biology*. The result shows that the expression of those three basic emotions in music can be universally recognized, the researchers said.

"These findings could explain why Western [music](#) has been so successful in global music distribution, even in music cultures that do not as strongly emphasize the role of [emotional expression](#) in their music," said Thomas Fritz of the Max-Planck-Institute for Human Cognitive and [Brain](#) Sciences.

The expression of emotions is a basic feature of Western music, and the capacity of music to convey emotional expressions is often regarded as a prerequisite to its appreciation in Western cultures, the researchers explained. In other musical traditions, however, music is often appreciated for other qualities, such as group coordination in rituals.

In the new study, Fritz, Stefan Koelsch, and their colleagues wanted to find out whether the emotional aspects of Western music could be appreciated by people who had no prior exposure to it. Previous studies had asked similar questions about people with little experience with a particular musical form, for instance Westerners listening to Hindustani music, they said. But to really get at musical universals requires participants who are completely naïve to Western music.

Fritz enlisted members of the Mafa, one of about 250 ethnic groups in Cameroon. He traveled to the extreme north of the Mandara mountain ranges, where they live, with a laptop and sun collector to supply electricity in his backpack.

Their studies showed that both Western and Mafa listeners, who had never before heard Western music, could recognize emotional expressions of happiness, sadness, and fear in the music more often than would be expected by chance. However, they report that the Mafa showed considerable variability in their performance, with two of twenty-one study participants performing at chance level.

Both groups relied on similar characteristics of music to make those calls; both Mafas and Westerners relied on temporal cues and on mode for their judgment of emotional expressions, although this pattern was more marked in Western listeners.

By manipulating music, the researchers also found that both Western listeners and African listeners find original music more pleasant than altered versions. That preference is probably explained in part by the increased sensory dissonance of the manipulated tunes.

"In conclusion," the researchers wrote, "both Mafa and Western listeners showed an ability to recognize the three basic emotional expressions tested in this study from Western music above chance level. This indicates that these emotional expressions conveyed by the Western musical excerpts can be universally recognized, similar to the largely universal recognition of human emotional facial expression and emotional prosody." Prosody refers to the rhythm, stress, and intonation of connected speech.

Source: Cell Press ([news](#) : [web](#))

Citation: Language of music really is universal, study finds (2009, March 19) retrieved 18 April 2024 from <https://medicalxpress.com/news/2009-03-language-music-universal.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.