

# A secret, two-note formula tugs heartstrings in movies

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David Oyelowo stars as Martin Luther King Jr. and Carmen Ejogo as Coretta Scott King in the movie “Selma.” Credit: Paramount Pictures

Can a few seconds' worth of music convey the triumph of civil rights hero Martin Luther King Jr., the price he paid to achieve it and yet presage the struggles to come in our own time?

University of Kansas Associate Professor of Music Brad Osborn believes that's exactly what composer Jason Moran accomplished in the

2015 film "Selma," and that's just one example of the emotional power of a musical figure called "SdTT," or Sub-dominant Tritone, that Osborn outlines in a new paper.

"In examining the same SdTT motif in a number of different films, I aim to shed light on the essence of a complex and multivalent web of emotions it signifies," Osborn writes in the paper, published in the journal *Current Musicology*. "But what about the SdTT makes it musically suited to emotionally charged uses?"

Osborn says it has to do with the tension between what our minds—raised on Western, classically derived musical scales—expect the melody to do next and what actually happens.

Osborn writes that the SdTT forces the seventh note of the scale (that's "ti" in the mnemonic lyric of the "Sound of Music" song do-re-mi-fa-so-la-ti), which we all expect to resolve up to "do," to fall down to the sixth note, "la," because of the unique distance of an augmented fourth between the subdominant bass note ("fa") and "ti."

Osborn explained in the paper: "To be sure, embellishing fourths are very common in diatonic [music](#). However, while most embellishing fourths in diatonic music are perfect, in the SdTT (as the name suggests), the fourth is augmented." The subdominant tritone, he wrote, works "due to its unique tension between ... a scalar 'magnetism' to resolve its top note upwards by semitone, and a contrapuntal obligation ... to resolve its top note down by step." This pulling of a note in two different directions is the perfect musical accompaniment for characters in films who find themselves tugged by opposing emotional forces.

Osborn starts the paper by exploring this tension, which he identifies in the instrumental "Laura Palmer's Theme" by composer Angelo Badalamenti from the cult TV series "Twin Peaks."

"All of these musical features give rise, semiotically, to the various emotional possibilities for the SdTT," Osborn wrote. "In its scalar magnetism—its desire to resolve upward to the tonic—it signifies longing and striving—but a longing for something that is in the opposite direction from the target of its contrapuntal obligations, the perfect musical accompaniment to unrequited love."

As for "Selma," Osborn wrote that, in the typical manner, the composer has reserved the use of SdTT for the film's conclusion. He wrote that Moran "uses the SdTT to express the complicated emotions we see on the faces of Martin Luther and Coretta Scott King at the end of the film" as they watch then-President Lyndon Johnson sign the Voting Rights Act of 1965.

"In Selma," Osborn wrote, "the top note of this figure, the tritone suspension, might represent the violent and deadly struggle that the Kings and other African Americans have endured, while the consonant third to which it resolves represents a feeling of accomplishment, a hope that this law might put an end to the voter discrimination that had kept African Americans from the polls. However, the added dissonance in a suspended perfect fourth over the dominant that follows might be heard as a partial negation to that relief. MLK and CSK know that although the battle is won, the war for racial equality is far from over."

In addition to "Twin Peaks" and "Selma," Osborn's paper includes links to audio-video clips of other uses of SdTT in films such as "Field of Dreams," "Love Actually" and "Room." He also compiles an appendix of 98 [films](#), stretching back to "Snow White and the Seven Dwarfs" in 1937, whose soundtracks employ the SdTT, noting in what song or place it occurs. He also includes lists of SdTT in both classical and popular music.

In the paper's conclusion, Osborn identified the range of emotions he

believes are stirred up by the use of SdTT.

He wrote: "This special musical structure thus analogizes its special narrational associations in film and television music, including longing, nostalgia, melancholy and unrequited love."

**More information:** Osborn, B. (2021). The Subdominant Tritone in Film and Television Music. *Current Musicology*, 107, 62–92.

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