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Brena Zhao, BM Thesis Presentation

"Paths of Ambiguity: Mapping Wagner's Harmonic Language in Fourier Space"

Abstract:
Wagner's music is often recognized for its rich harmonies and rapidly shifting tonal areas. By allowing unstable harmonies to remain unresolved, Wagner's harmonic language expresses unsatisfiable desire and prolonged longing. While these innovations create new possibilities for chromatic exploration, they also present analytical challenges, especially when modulation and the need for expressiveness lead to implied tonicizations without tonic chords.

This paper offers new perspectives on Wagner's harmony through the lens of the discrete Fourier transform (DFT). The paper demonstrates how the magnitude of Fourier coefficients provides insights into the intervallic structure of Wagner's harmony, using the six harmonic properties suggested by Quinn (2007), Yust (2015, 2016), and Amiot (2016). The paper also extends the work of Yust and Amiot to show how two-dimensional Fourier phase spaces allow for visualizations of both local harmonic progressions and larger-scale progressions between tonal areas, highlighting relationships between chords or tonal areas in the progression without presumed key context. I propose criteria for selecting suitable Fourier phase spaces for musical analysis and introduce the web-based DFT calculator and visualizer I built to support the analysis. Using examples from Die Walküre, the paper shows how visual patterns of local progressions with implied tonicizations may suggest interpretations correlated to—or different from—traditional analysis and how Fourier phase spaces present multilayered relationships between tonal areas. In the end, I suggest the DFT does not resolve ambiguity, but rather offers multiple ways to visualize and engage with the complexities of Wagner's harmonic world. The proliferation of these "paths of ambiguity," I argue, is ultimately what gives Wagner's music its power.