Polycardinalities and Emergent Complexity in Math Rock and Math Metal

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This file includes the abstract, keyword list, bibliography, and related material for the video essay, "Polycardinalities and Emergent Complexity in Math Rock and Math Metal" by Calder Hannan and Timothy JS. This video-essay may be found at https://vimeo.com/societymusictheory/smtv124hannan

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Abstract for
Polycardinalities and Emergent Complexity in Math Rock and Math Metal

by Calder Hannan and Timothy JS, *SMT-V* 12.4

Music in which two or more patterns occur at the same time has long fascinated theorists. In this video essay, we introduce the term polycardinality to formalize this space. In particular, we focus on situations in math metal and math rock in which patterns—of rhythm, pitch, text, articulation, and other musical dimensions—are mapped onto each other rather than being simply superimposed.

Short Keyword List

isorhythm, metal, rhythm and meter

Extensive Keyword List

isorhythm, metal, math metal, math rock, complexity, rhythm and meter, patterns, polycardinality, metal music theory, Vola, Inmazes, Palm, Mirror Mirror, Car Bomb, Garrucha, Spirit of Poison, waveform, w^w^^w^w, meta, Intronaut, Killing Birds with Stones, Habitual Levitations, Kayo Dot, Library Subterranean, Coffins on Io, Botch, Afghamistam, Anthology of Dead Ends, analysis, public music theory, Pop Descriptivist, Greg Kubacki

About the Authors

Calder Hannan is Assistant Professor of Music Theory at Indiana University, where his research focuses on popular music, and in particular the extreme edges of metal. He writes and plays guitar in the metal bands Florid Ekstasis and Aphelion Entity, and shares his research for a public audience on the YouTube channel Metal Music Theory.

Timothy JS is a musician and independent music theory scholar. On his YouTube channel, "The Pop Descriptivist," he analyzes music from a variety of genres, with a particular focus on functional harmony, impressionistic harmony, unusual time signatures, and polymeters. He also creates microtonal music under the name Trauma Triad.

Discography and Filmography

Botch. "Afghamistam." Track 5 on *An Anthology of Dead Ends*. Sargent House, 2002.

Car Bomb. "Garrucha." Track 5 on *w^w^^w^w*. Car Bomb, 2012.

Car Bomb. "Spirit of Poison." Track 8 on *w^w^^w^w*. Car Bomb, 2012.

Intronaut. "Killing Birds with Stones." Track 1 on *Habitual Levitations: Instilling Words with Tones.* Century Media, 2013.

Kayo Dot. "Library Subterranean." Track 4 on *Coffins on Io*. The Flenser, 2014.

Palm. "Mirror Mirror." Track 10 on *Nicks and Grazes*. Saddle Creek, 2022.

Vola. "Inmazes." Track 10 on *Inmazes*. Mascot Records, 2016.

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