IS MUSIC A LANGUAGE? PERSPECTIVES AND EVIDENCE

Upper-Level Course Proposal

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Overview: This course engages the centuries-old debate about music's ability to communicate, and investigates the types of evidence available to this discourse. We will look into the various ways scholars have argued for and against music's connection to language, ranging from the philosophical to the neurological. We begin with a historical review of the topic, considering the viewpoints of philosophers such as Rousseau, Nietzsche, and Hegel as well as composers such as Wagner and Bernstein, focusing on the sorts of evidence they use to make their arguments. We will then consider how contemporary scholars tackle this issue by engaging with varying types of evidence, including the neurological, philosophical, psychological, and computational. We will scrutinize the sorts of knowledge we can gain through such endeavors, and directly examine the various methodologies available to the authors by viewing actual fMRIs, participating in a mock psychological study, and sifting through the results of a computational data-mining experiment.

In this course, you will learn to:

- Understand the types of questions asked by scholars about music and its language-like capacity, along with the evidence used to answer these questions.
- Understand the philosophical, psychological, computational, and neuro-scientific tools used in this research literature.
- Write critically about the questions and evidence used in this discourse, as well as the boundaries of these methods.
- Produce your own research question and test it using some type of evidence engaged with in this class.

Prerequisites: *either* basic music theory *o*r basic linguistics

Assignments will include weekly readings involving between 40 and 70 pages per week. During weeks in which the reading is especially technical, there may be fewer pages. You will also write weekly short essays in which you critically engage with the readings, commenting upon their use of evidence and comparing the authors' methodologies (2-3 double-spaced pages). All students will be also be expected to complete a research project at the end of term that poses a research question that can be tested using some type of evidence studied in this class. The paper will include a section engaging with meta-theoretical issues (i.e. connecting your work to human cognition, recognizing the boundaries of empirical research, etc.).

Sample Reading List, By Topic:

1) The Historic Debate, Primary Sources:

Vincenzo Galilei. 1581. *Dialogue on Ancient and Modern Music*. Excerpts.
Giulio Cesare Monteverdi. 1607. "Dichiaratione," introduction to the *Fifth Book of Madrigrals* by Claudio Monteverdi.
Jean-Baptiste Dubos. 1748. *Critical Reflections of Poetry, Painting, and Music.* Excerpts.
Jean-Jacques Rousseau. 1781. *Essay on the Origin of Languages*. Excerpts
E.T.A. Hoffmann. 1810. "Review of Beethoven's Symphony No. 5 in C minor."
G.W.F. Hegel. 1818. "Aesthetics: Lectures on Fine Art."
Richard Wagner. 1849. "On Music and Drama." Excerpts.
Eduard Hanslick. 1854. *The Beautiful in Music*. Excerpts.

Friedrich Nietzsche. 1888. *Nietzsche contra Wagner.* Excerpts.
Martin Heidegger, 1950. "The Origin of the Work of Art" in *Poetry, Language, Thought.*
Roland Barthes, 1961. "The Death of the Author" and "From Work to Text" in *Image—Music—Text.*

2) Psychological models of musical language

Noam Chomsky. 1957. *Syntactic Structures*. Excerpts.
Leonard Bernstein. 1972. "The Norton Lectures." Excerpts.
Fred Lerdahl and Ray Jackendoff. 1983. *A Generative Theory of Tonal Music*. Excerpts.
Marvin Minsky. 1981. "Music, Mind and Meaning." *Computer Music Journal.* 5/3. pp. 28-44.
David Lewin. 1986. "Music Phenomenology and Modes of Perception." *Music Perception 3/4*. pp. 327-392.
Nicholas Cook. 2001. "Theorizing Musical Meaning," *Music Theory Spectrum* 23, pp. 170-95.
Charles 0. Nussbaum. 2007. *The Musical Representation: Meaning, Ontology, and Emotion.* Excerpts.

3) Semiotics and musical communication

Jean-Jacques Nattiez. 1987. *Music and Discourse: Toward a Semiology of Music*. Excerpts.
V. Kofi Agawu. 1991. *Playing with Signs.* Excerpts.
Robert Hatten. 1994. *Musical Meaning in Beethoven*. Excerpts.
Naomi Cumming. 2001. *The Sonic Self: Musical Subjectivity and Signification (Advances in Semiotics)*

4) Neuroscience, the Exposure Effect, and musical language

J.R. Saffran. 2003. "Musical learning and language development." in *Annals of the New York Academy of Sciences,* 999, pp. 397-401.
Psyche Loui *et al.* 2009. "A Generalized Mechanism for Perception of Pitch Patterns." *The Journal of Neuroscience,* 29/2, pp. 454–459
Marcus Pearce *et al.* 2010. "Unsupervised statistical learning underpins computational, behavioural, and neural manifestations of musical expectation." *NeuroImage*. 50/1, pp. 302-313.
Aniruddh Patel. 2010. *Music, Language, and the Brain*. Excerpts.

5) Computational Modeling of Musical Communication

Leonard Meyer. 1967. "Meaning in Music and Information Theory," from *Music, the Arts, and Ideas*.
Dmitri Tymoczko. 2011. *A Geometry Of Music: Harmony and Counterpoint in the Extended Common Practice.* Chapt 1,7.
Aniruddh Patel, et al. 2006. "Comparing the rhythm and melody of speech and music: The case of British English and French." *Journal of The Acoustical Society of America.* 119/5.
Cohen, Joel E. 1962. "Information Theory and Music," *Behavioral Science*, 7:2, pp.137-163.
Temperley, David. 2007. *Music and Probability*. Chapt 1, 7, 10.