Music and the Brain from Descartes to Helmholtz
Carmel Raz

I have often asked myself: Is it because certain persons are mad, that they interest themselves in music, or is it that music has driven them mad?
– Hector Berlioz

Musical strings always accommodate themselves to, and lean towards the state into which they were last put… Let us suppose something analogous to this to take place in the component molecules of the brain.
– David Hartley

Description

This undergraduate seminar offers historical and critical perspectives on music and the brain between approximately 1660 and 1870. Through engaging with scholarship and primary sources from disciplines including musicology, philosophy, and the history of science and medicine, we will focus on the role of music in shifting understandings of mental states, aesthetic ideals, methods of treatment, and questions of sensation, attention, and cognition. We will examine the role of resonance and vibration in various models of mental activity, conceptualizations of music as a healing or destabilizing medium, as well as the role of musical instruments and sounds in different philosophical and physiological theories of the body. Based on our readings and investigations, students will develop new strategies for engaging with music from analytical, historical, and scientific perspectives. The course is intended to foster interdisciplinary engagement between musicology, the history of science and medicine, and disability studies, providing students with critical tools to examine constructions of music and the brain in various contexts.

Assignments and Grading Breakdown:

1. Final paper (ca. 15-20 pages) and presentation (50% of grade)
2. Active class participation (20% of grade)
   • Come to class prepared to discuss and critique the readings assigned each week.
3. 2 short writing assignments in weeks 6 and 9 (ca. 750 words). (15% of grade).
4. Introduction of one primary and one secondary source in class (15% of grade)
   • Specific excerpts will be assigned in class.

Policies:

• No computers, tablets, or phones in the classroom.
• Email me ahead of time if you are going to be late / absent.
• Office hours by appointment (room 313 at the Heyman Center)
• There is no required textbook for the class — I will post all texts online.
UNIT 1: TUNING THE MIND

Week 1: Introductions and Stakes


Week 2: Music as a Model for the Nervous System

Secondary Sources


Primary Sources [selections]

- David Hartley, Observations on Man, his Frame, his Duty, and his Expectations (London: Thomas Tegg & Son, 1834).

Week 3: Music and Medicine (I)

Secondary Sources


Primary Source: Richard Brocklesby, Reflections of Antient and Modern Musick, with the Application to the Cure of Diseases (London: M. Cooper, 1749), pp. 1-31.

Week 4: Music and Medicine (II)


UNIT 2: MUSIC AND MADNESS

Week 5: Mesmerism

Week 6: Madness, Mad Scenes, and Somnambulists
Secondary sources
• 1st Response Paper Due
Listen to Donizetti and Handel’s mad scenes. Compare and contrast the works, noting musical elements used by each composer to connote madness. Contextualize these devices historically.
  o Gaetano Donizetti Lucia di Lammermoor (1835), mad scene (act 3).
  o Georg F. Handel, Orlando Furioso (1733), mad scene (act 2)

Week 7: Music and Psychiatry
Secondary sources
Primary sources: Berlioz, Symphonie Fantastique; Offenbach, Les Contes d’Hoffmann

Week 8: Dance Manias
Primary Sources [selections] Adolphe Adam, Giselle (mad scene, act 1)
UNIT 3: DIAGNOSING MUSIC AND MUSICIANS

Week 9: Pathological Music?
Primary Source: Peter Joseph Schneider, case study from *System einer medizinischen Musik* (1835) [I will provide the translation]
- 2nd Response Paper Due
Discuss Schneider’s treatment of Lina. What types of decisions is he making? What are they based on? How would a patient with these symptoms be treated today?

Week 10: “Sick” Composers

Week 11: Neurological Diversity
Radiolab podcast on Anne Addams and Maurice Ravel
Primary sources [selections]: Maurice Ravel, *Bolero*

Week 12: Helmholtz
Primary sources: selections from Helmholtz, TBD