Math, Music and Identity, Spring 2015 Reading Questions for *Musicophilia*

There are rare humans who, like the Overlords, may lack the neural apparatus for appreciating tones or melodies. But for virtually all of us, music has great power, whether or not we seek it out or think of ourselves as particularly "musical." This propensity to music — this "musicophilia" — shows itself in infancy, is manifest and central in every culture, and probably goes back to the very beginnings of our species. ... [I]t lies so deep in human nature that one is tempted to think of it as innate.

— Oliver Sacks (from the Preface of *Musicophilia*)

Chapters to read: 1-5, 8, 9, 14-16, 29

- 1. There are numerous references in the book to composers, pieces, authors, and concepts that we have discussed over the course of the year. There's even a reference to bell ringing! Make a note of some of these as you read and be prepared to share your favorites with the class.
- 2. In Chapter 2, Sacks describes a few cases where seizures lead to "hauntingly familiar" music. What is going in the brain? Do these subjects hear "new" music, perhaps receiving a creative jolt of inspiration, or are they just experiencing music from their early years, long since forgotten? Is this some type of musical "ESP"? Why is musician Eric Markowitz scared to analyze the music he hears during a seizure? How does he confront this issue in his song-writing?
- 3. Did any of Sacks' stories about musical imagery (Ch. 4) resonate with you? Do you often have "music playing in your head"? What kind? If you are musically inclined, can you play a piece in your head without hearing it? Can you follow a score and "hear" a piece of music? Does this help you become a better performer? Is it part of your practice routine? Is it possible to get enjoyment from "playing" music in the brain only?
- 4. What is a "brainworm"? (Ch. 5) Do you often experience them? To what degree and how do they typically arise for you (musical or verbal, type of music, etc.)? Sacks argues that they are likely more common in modern times. Do you agree? What is the point of the footnote on pp. 52–53?
- 5. Regarding absolute pitch (Ch. 9), do you think musicians with absolute pitch prefer playing in our modern equally-tempered tuning system or using older systems like just intonation? Perhaps the particular tuning system is irrelevant? How does one's upbringing influence this choice? Why is it hard for people with absolute pitch to experience dissonance or consonance in musical intervals? Why do young musicians from China have a much greater propensity toward absolute pitch than musical children in the U.S.? What do you make of the "tantalizing" hypothesis Sacks discusses at the end of the chapter?

- 6. Sacks discusses several different types of memory in reference to the fascinating story of Clive (Ch. 15), including semantic memory, procedural/performance memory, event/episodic memory, implicit versus explicit memory, emotional memory, motor/muscle memory, and fixed action patterns. What is the meaning of each of these? Which kinds of memory has Clive lost and which has he managed to retain? How is it possible for Clive, who cannot remember anything for more than a few seconds, to perform on the piano or organ, or conduct a choir with such a high musical aptitude? Sacks claims that, "Remembering music, listening to it, or playing it, is entirely in the present" (p. 228). What does he mean by this and how does this relate to Clive's story? Do you agree with Sacks?
- 7. What is "melodic intonation therapy" (MIT) and how has it been used to help patients with aphasia? (Ch. 16) Which side of the brain is stimulated by MIT? Why is this surprising given the relative success of MIT?
- 8. What is the difference between music therapy for patients with speech disorders versus those with dementia? (Ch. 29) What is the failed musical therapy described by Sacks that he tried with Greg "the last hippie"? (This was also attempted by writer Mary Ellen Geist with her father Woody.) What does this failure reveal about the way our memory functions? What is Sacks' personal view on the existence of a "self" in patients with dementia and how has music therapy helped support this view?
- 9. Although there is no concluding chapter in the book (sadly), what are some of the prevailing themes and key points that you think are important to retain? What stories or concepts had the most profound impact on you? What might you want to learn more about?