

CSC 490

Question Set 2

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A set of questions based on chapter 2 of Aiello's Musical Perceptions.

1. Name two things that have an inherent structure and evolve over a temporal continuum, both of which are meaningful, and both of which are innate expressions of human capacities.
 - Music and language both fill these specifications.
2. In 1974, Leonard Bernstein devoted the Norton lectures which he delivered at Harvard University to a comparison of the origins of music and language and to an exploration of the similarities in the ways in which we create and process them. Who was the principle inspiration for Bernstein's work in this area?
 - Noam Chomsky served as the inspiration for these works.
3. In 1983 two researchers published a groundbreaking work within the field of music cognition that was inspired by Bernstein's 1974 Norton lectures. Who were they? And what was the name of their work?
 - Lerdahl and Jackendoff published their "Generative Theory of Tonal Music" in 1983.
4. What is "categorical perception"? Give a nice definition.
 - Categorical perception is the mind's ability to categorize tokens of audible information (syllables or notes) virtually error-free.
5. Which of the following is a true statement?
 - a) Musicians categorize musical sounds more accurately than nonmusicians.
 - b) Native speakers categorize speech sounds that are phonemic in their language more accurately than nonspeakers do.
 - c) **Both of the above.**
6. How does the linguist define a phoneme?
 - A phoneme is the smallest phonetic unit, comparable to a letter in the alphabet.
7. What is generally considered to be the musical analog to the linguistic phoneme?
 - A musical note is roughly analogous to a phoneme.
8. What does the phrase "phoneme restoration" refer to?
 - "Phoneme restoration" is the mind's ability to restore a missing phoneme based upon expectation and experience with the language.
9. What does the phrase "musical restoration" refer to?
 - "Musical restoration" the process of restoring missing notes based on expectation and experience with the scale and style or genre of music.
10. Listening to music is
 - a) A passive process
 - b) **An active process**
11. What does the phrase "musical syntax" refer to?
 - A "musical syntax" is a collection of rules that helps the listener makes sense of a piece of music.
12. In sight-reading music, experienced readers identify significant structural units and scan them differently, according to whether the music is homophonic or contrapuntal. What is the difference between homophonic music and contrapuntal music?
 - Homophonic music forms chords with multiple melodies, where contrapuntal music has concurrent, disjoint melodies.
13. In reading a score, musicians tend to commit "proof readers" errors. What does this mean?

- The experienced musician may subconsciously read a note differently than what is written simply because the note that's written is "wrong" for the style or scale of the piece.
14. In one sentence, state the main conclusion of "phase boundary experiments", such as that reported by Tan, Aiello, and Bever(1985).
 - The "phase boundary experiments" found that subjects had a very hard time noticing a two note probe that straddled between two phrases of a piece of music.
 15. In one sentence, state the main conclusion of "click experiments", such as that reported by Fedor and Bever(1965).
 - The "click experiments" found that clicks placed in music or speech are perceived as "migrating" down towards the boundary of the phrase.
 16. Noam Chomsky is well-known for many things, among them emphasizing the distinction between surface structure and deep structure in language. In just a few sentences, say something interesting about this two-level model of language.
 - The most interesting thing about this model of language is that the same sentence can have multiple meanings if the deep structure is ambiguous, yet two completely different sentences will mean the same thing if they have the same deep structure.
 17. Provide a four sentence biographical sketch of Heinrich Schenker and his work. Devote two sentences to the person and two sentences to his work.
 - Heinrich Schenker was an Austria-Hungarian music theorist. He was very adept at piano, and also at theorizing about the foundations and processes of music. His work spawned a branch of music analysis called Schenkerian analysis. His analysis involves showing different layers of varying meaning within a piece of music.
 18. Briefly, describe the relationship between Chomsky's work and Schenker's work, as perceived by Leonard Bernstein.
 - To Bernstein, Schenker's work traced chord structures as Chomsky's work traced sentence structures.
 19. Aiello proposes a relationship between deep structure and surface structure in melody that is a bit different from the one Bernstein proposes, at least in the way she articulates it. What is her proposal?
 - Aiello proposes that a specific harmony progression can give rise to multiple melodies, and also that a specific melody can produce multiple harmonies.
 20. A grammar is a set of rules capable of generating an aspect of structure in either language or music. (True or False)
 - True, but with reservations. In language, it ensures that a phrase will make sense. In music, it does no such thing—no promise of aesthetic reaction or meaning.
 21. Grammars are collections of strategies that can be used for understanding and producing either linguistic sentences or musical melodies. (True or False)
 - True
 22. Musical grammars have been produced for ...
 - Generating Swedish Nursery songs
 - Generating J.S. Bach's chorals
 - Generating chord progressions in jazz
 - The setting of words to Gregorian chant

- **All of the above**
23. Suppose you were asked by T.C. Mits about Fred Lerdahl and Ray Jackendoff's Generative Theory of Tonal Music, GTTM. In just a few sentences, do your best to give him an informative, satisfying answer.
- GTTM outlined the theory that music is interpreted in the mind with a structure of a recursive tree. The layers of musical meaning passively emerge under the layer of aural stimulation that the listener actively hears.
24. Aiello astutely points out that musical grammars, while they have advanced the study of music cognition in significant ways, fail to capture essential elements of music. What, precisely, is she referring to when she makes this claim?
- Aiello is referring to the fact that there are certain aspects of music that simply cannot be captured within a "grammar" structure, and that any psychology of music would have to account for these aspects.
25. Isaac Bashevis Singer wrote the following about literature: "The very essence of literature is the war between emotion and intellect. When literature becomes too intellectual – when it begins to ignore the passions, the emotions – it becomes sterile, silly, and actually without any substance." Do you think that this sentence is *more* or *less* apt when the instances of the word "literature" are replaced by the word "music"? (Choose one – no fence sitting!) In a sentence or two, say why you think what you think.
- I believe that this statement would be less appropriate in regards to music due to the fact that the genres of progressive rock and progressive metal, along with jazz fusion, are constantly evolving and finding new and exciting ways to engage the listener intellectually in finding meaning within the song.
26. At which of the following levels does the analogy between language and music appear to break down most noticeably?
- Phonetic
 - Syntactic
 - **Semantic**
27. State one issue which underscores the difficulty in relating linguistic semantics to musical semantics.
- Musical semantics do not hold consistent meaning like linguistic semantics do. The same deep structure in a language will always mean the same thing, while the same musical structure will mean different things based upon the listener's interpretation.
28. In listening to music, the meaning can be derived from ...
- The intellectual appreciation of the musical elements
 - The emotional, aesthetic reaction that results in the appreciation of the stylistic characteristics of the music
 - The "*Darling, they are playing our tune*" phenomenon
 - **All of the above**
29. What is the "*Darling, they are playing our tune*" phenomenon?
- This phenomenon is the relation of a piece of music to a certain place or event.
30. How is listening to music like looking into a prism?
- "to appreciate its light, we view it from different angles since we may only observe the prism's light one way at a time."

31. In the book *The Open Work*, Umberto Eco (1989) writes: “the form of the work of art gains its aesthetic validity precisely in proportion to the number of different perspectives from which it can be viewed and understood. These give it a wealth of different resonances and echoes without impairing its original essence.” What are some of the perspectives from which a piece of music might be viewed and understood which give it the wealth of different resonances and echoes that Eco is alluding to?
- A piece of music can be viewed at face value—a simple listen through, not picking it apart. It can also be viewed and analyzed for its fundamental parts—harmony, scale, time, etc. Also, the piece may be viewed as a message, where the listener actively tries to interpret it. All of these seem valid to me.
32. In one sentence, summarize Meyer’s answer to the question “Why do we listen to music?” on a way that reflects the essence of his 1956 book *Emotion and Meaning in Music*.
- We listen to music simply because it has meaning to us on a deeply emotional level, allowing us to enjoy it because it means something.
33. In one sentence, summarize Minsky’s answer to the question “Why do we listen to music?” on a way that reflects the essence of his 1981 article *Music, Mind, and Meaning*.
- We listen to music because it is similar to other things we like, and touches our other thoughts in very profound ways.
34. In the views of both Meyer and Minsky (and virtually anyone else who has thought about the matter), the listener must search for musical meaning by constantly interpreting what is occurring in the music. (True or False).
- True, albeit subconsciously.
35. What song is intertextually referenced by Mahler in his First Symphony, and how is this intertextual referencing interesting from a listening perspective?
- Mahler references “Frère Jacques” in his First Symphony. This referencing is interesting because it presents a challenge to the listener—hold on to the familiar representation, or respect Mahler’s interpretation?
36. In the penultimate section of the chapter, Aiello references three significant contributors to ideas associated with meaning in music. Write a two sentence biography of each person, devoting one sentence to the person and one to characterizing their work.
- Deryck Cooke was a British musicologist. He proposed that the specific intervals in scales give rise to specific emotional responses.
 - John Sloboda was a professor at Keele University. He wondered if emotion could be tied to specific musical happenings.
 - Suzanne Langer was an American art philosopher. She found that music was neither cause nor cure for emotions, but rather an expression of them.