Music And Language

A set of thirty six questions and answers pertaining to the second chapter in the book, Musical Perceptions, edited by Rita Aiello and John A. Sloboda. The topics which the questions and answers cover include, the similarities between music and language, a detailed section of the concepts that music shares with language, and the constructive creative aspects of both music and language. The distinction between homophonic and contrapuntal is made, as well as, the supporting theories of the relationship between music and language and how we analyze both is detailed within the questions and answer set.
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.

Two aspects that have an inherent structure (grammar) and evolve over a temporal continuum, which exude innate expressions of human capacities are music and language.

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?

The principle inspiration for Bernstein’s work during his session of Norton lectures is the composer Charles Ives.

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?

The two researchers that published a groundbreaking work in 1983 within the field of music cognition inspired by Bernstein’s lectures are Lerdahl & Jackendoff. The name of the published research was A General Theory of Tonal Music.

4. What are categorical perceptions? Give a nice definition.

Categorical perceptions pertaining to music are the way in which individuals’ structure and group their sensations of sound.

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?

Linguistics defines a phoneme as the smallest divisional unit of sound utilized to form significant contrasts between utterances.

7. What is generally considered to be the musical analog of the linguistic phoneme?

The musical aspect that is generally considered to be the analog of the linguistic phoneme is the musical note.
8. What does the phrase phoneme restoration refer to?

The phrase phoneme restoration refers to the ability of the listener to utilize their previous knowledge and experiences to fill in missing pieces and gaps in an utterance.

9. What does the phrase musical restoration refer to?

The phrase musical restoration refers to the ability of a music listener to use previous experiences and knowledge to replace and create mentally missing aspects of a note sequence. For example, one could hear all the notes in an ascending C major scale when played even though a particular note was not played.

10. Listening to music is

(a) a passive process
(b) an active process

11. What does the phrase "musical syntax" refer to?

The phrase musical syntax refers to an individual’s predetermined system of rules which they use to make sense of acoustic input.

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?

The difference between homophonic music and contrapuntal music is that homophonic music involves only a single melody along with an accompaniment while contrapuntal music uses counterpoint, which consists of two or more melodic strands heard simultaneously.

13. In reading a score, musicians tend to commit proof readers errors. What does this mean?

The meaning behind the aspect of musicians tendency to commit proof reader errors is that they can hear the right structure and notes in their mind but not actually play them, giving direct support to the theory of musical restoration.

14. In one sentence, state the main conclusion of the phrase boundary experiments, such as reported by Tan, Aiello, and Bever (1985).

The main conclusion of the phrase boundary experiments is that humans tend to process material that belongs to one phrase more efficiently than material that integrates two phrases.

15. In one sentence, state the main conclusion of "click experiments" such as that reported by
Fodor and Bever (1965).

The main conclusion of the click experiments is that humans use the same strategies to process both verbal and musical sequences due to the grammatical structure of the stimuli.

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.

What I found interesting is the almost exponential relationship between the two, where you can slightly alter surface structure and have it greatly impact deep structure in a sentence. Also the concept that you can change surface structure greatly and only alter deep structure slightly is interesting.

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 born in 1868 in Vyshnivchyk in Austria Hungary. He was considered a child prodigy of music and was sent to study under Carl Milkiu a student of Chopin. His theory of musical analysis called Schenkarian analysis which is based on long structures of music. The relationship between his analysis and Chomsky's is that one deals with melody and harmony and the other with surface structure and deep structure, two relationships that share many similarities.

18. Briefly describe the relationship between Chomsky's work and Schenker's work, as perceived by Leonard Bernstein.

Schenker’s analysis trace the happenings of a piece of music to a chordal structure similar to Chomsky’s analysis where he traces what we hear as surface structure to the deep structure of language.

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?

Her assertion is that music is far more flexible and ambiguous than language, a specific harmonic structure can give rise to countless melodies and the same melody can be harmonized by several different harmonies.

20. A grammar is a set of rules capable of generating an aspect of structure in either language or music. (True or False)

21. Grammars are collections of strategies that can be used for understanding and producing either linguistic sentences or musical melodies. (True or False)

22. Musical grammars have been produced for

(a) generating Swedish Nursery songs
(b) generating J. S. Bach's chorals
(c) generating chord progressions in jazz
(d) the setting of words to Gregorian chants
(e) 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.

A **theory that takes into account musical grouping, meter, time span reduction, and prolongation reduction based upon Schenkarian analysis mixed with Chomskian transformational grammar to explain a general theory for generating tonal music.**

24. Aiello astutely points out that musical grammars have advanced the study of music cognition in significant ways, yet fail to capture the essential elements of music. What, precisely, is she referring to when she makes this claim?

Aiello is referring to the inadequacy of musical grammars to exude the uniqueness of musical elements such as, reactions to music, both emotional and aesthetic.

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 "literature" are replaced by the word "music"? In a sentence or two, say why you think what you think.

I think the given sentence is less apt with music replacing literature because for me personally it is easier to translate, assimilate, and analyze complex layered music compared to equally complex literature. Everyone can listen to complex music and get something out of it, but when many people read complex literature with jargon they cannot understand they get nothing out of the experience.

26. At which of the following levels does the analogy between language and music appear to break down most noticeably?

(a) phonetic
(b) syntactic
(c) semantic

27. State one issue which underscores the difficulty in relating linguistic semantics to musical semantics.

The widely accepted meanings of word combinations in linguistic semantics can only be interpreted a few ways while musical semantics can be interpreted many ways. This I
believe is due to how our brain processes music compared to language and the fact that music has such a strong link to emotion for us makes the semantic meaning vary greatly from individual to individual.

28. In listening to music, the meaning can be derived from

(a) the intellectual appreciation of the musical elements
(b) the emotional, aesthetic realign that results in the appreciation of the stylistic characteristics of the music
(c) the "Darling, they are playing our tune" phenomenon
(d) all of the above

29. What is the "Darling they are playing our tune" phenomenon?

This phenomenon is the personal association of humans to a particular melody or tune where they relate the musical experience to a specific time, place, emotion, and/or person.

30. How is listening to music like looking into a prism?

We appreciate music by looking and experiencing it in different ways, but we can only do this one aspect at a time similar to a single beam of light entering a prism and refracting the entire visible color spectrum.

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 a wealth of different resonances and echoes that Eco is alluding to?

The perspective of past experiences with a familiar musical tune might be a way in which one individual can differ greatly in their musical experience from another. Also the fact that people perceive and think differently could be another factor, such as a blind person listening to music compared to a deaf person which listens to music through tactile vibrations. The brains of both individuals are very differently adapted to their specific needs and processes music in very distinct ways.

32. In one sentence, summarize Meyer's answer to the question "Why do we listen to music?" in a way that reflects the essence of his 1956 book Emotion and Meaning in Music.

The reason we listen to music is it confirms our expectations, listening to music activates our desire, action, satisfaction cycles in a way activating tendencies, inhibiting them and then resolving them.

33. In one sentence, summarize Minsky's answer to the question "Why do we listen to music?" in a way that reflects the essence of his 1981 article Music, Mind, and Meaning.
Minsky states that listening to music activates a sort of nostalgic quality by prompting us to relate it to prior knowledge and experience, we like certain tunes because they resemble other tunes we like. I can relate to this description, it is a very interesting and new way to look at musical preference.

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 accusing in the music. (True or False)

35. What song is intertextually referenced by Mahler in his First Symphony, and how is this intellectual referencing interesting from a listening perspective?

The theme of Frere Jacques can be heard at the beginning of the third movement of Mahler’s First Symphony. This familiar melody may present us with a completely unexpected and different meaning due to the context in which it is heard.

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.

Hevner and Wedin are two accredited psychologists that study the effects of music on people. They asserted that although musical meaning is not uniform and may change over time when prompted humans assign similar titles and meanings to musical excerpts.

Deryck Cooke was a famous musicologist that worked for BBC and prepared a performers version of Mahler’s unfinished symphony. He proposed that the intervals of the diagnostic scale suggested different emotional qualities.

John Sloboda is a musical psychologist which draws together psychologists, neuroscientists and academic musicians, which focuses on the psychological aspects of musical performance. He researched how emotional reaction relates to specific musical events and discovered that emotional reactions can be linked to specific musical structures.