

On Music and Musical Perception
Vishnu Bachani, 26 May 2017

Q: What is music?

A: Organised sound.

Q: Organised by whom, i.e., by what principles of organisation?

A: Musical organisation is not natural, it is cultural. In fact, it is a mirror of the way in which a culture projects order onto the universe. It is impossible to deliberately organize sounds without an implicit observation of ordering principles: otherwise, there is no basis for the organisation and we are simply left with noise. Different cultures have different metaphors and therefore different ways of ordering and parsing reality. Every piece of music consists of abstract structural relationships projected onto the sound world. *What* and *how* music means, whether the meaning is abstract or concrete, is encoded in these relationships.¹

Q: If a music theorist can accurately perceive and identify a certain musical gesture (e.g., a cadence) in a given piece and furthermore articulate his/her response to it, that suggests that music can/does indeed invoke a psychological response. But what about someone who does not know what, e.g., a cadence is? Do they still perceive it even if they are unable to articulate it? Doesn't this difference prove that everyone listens differently?

A: Indeed, there are several levels of listening, and a listener more familiar with the characteristic gestures of a given musical idiom will naturally have a stronger ability to perceive them. However, it is important to understand the distinction between knowledge of **how something works** and knowledge of **what something means**. Music is a language (though one without an injective relationship between lexical indices and their semantic counterparts as is typical of spoken languages), so consider the fact that spoken languages are not taught systematically but rather are internalised, even in utero.² And by the time a child is fluent in a language, (s)he still cannot draw a diagram of all the parts of speech, identify all the grammatical and mechanical functions, etc., so it is clear that something can be understood without a comprehension of its construction or causality.

As far as what expression a particular musical gesture (e.g., a cadence) conveys, that is a language which is developed culturally over time. Regarding the untrained audience: their training comes from their history of immersion in the culture. For example, Anton Bruckner's (1824-1896) audience had the means to process the ethos of his musical gestures because the music used and extended upon the same linguistic patterns as his predecessors (e.g., Ludwig van Beethoven, 1770-1827), with whom his audiences were familiar.

The pervasiveness of the tonal idiom (that is, the principle of musical organization often referred to as *tonality*³ that employs pitch centers in a hierarchical system) across most musical genres in the

21st century West makes it such that many of these centuries-old gestures can be used effectively without the exigency for explicit definition or justification anew in every piece.⁴ Of course, there is no *global* language or theory of music, but tonality remains ubiquitous in large swathes of the world's musical cultures for several reasons (beyond European colonialism).⁵

Q: How do musical gestures actually work to create specific effects? How do we know that listeners hear these effects in the music instead of just hearing an intangible amalgam of sounds?

A: As Richard Wagner (1813-1883), the German composer best remembered for his operas, wrote,

“Nothing should remain for the synthesizing intellect to do in the face of a performance of a dramatic work of art...In drama, we must become *knowers* through *feeling*. This feeling...understands no other language but its own. Things which can be explained only by the infinite accommodations of the intellect are incomprehensible and disturbing to the feeling.”⁶

Though Wagner does not explain precisely what he means by “feeling,” history has shown that his music dramas have been successful on this front, i.e., in arousing emotional responses. And a close analysis of Wagner’s music does indeed show how the tonal idiom is exploited in order to achieve precisely calculated effects (in Wagner’s case, the effects are subservient to the drama of his operas). An explanation of these idiosyncratic compositional schemata, while deeply insightful and very fascinating, necessarily requires considerable music-theoretical terminology and is beyond the scope of this brief exposition.⁷

How gestures really work is a question for psychologists of music rather than theorists of music (whose job is to study the building blocks of music rather than their means of expression or their geneses). That is, it is a question concerned with the science of perception rather than the art of music. Accordingly, a scientific experimental model would need to be developed and executed to test a hypothesis and observe results (which indeed occurs across many modern studies in music psychology).⁸

Q: If a listener is to become a “knower through feeling,” doesn’t that eliminate the need for the theoretical and analytical study of music? After all, anything that is known by feeling should be opaque to the “synthesizing intellect.”

A: Analysis remains important and relevant because the “synthesizing intellect” still has work to do, specifically, in *what* feelings have been aroused and *why*. A thorough analysis of a work of music, that is, resolving it into its component parts, should engender the obverse process (composition) with a knowledge of how each component of the work functions structurally.

Q: What does the average listener “learn” by listening to music?

A: In my opinion, our intuitive experience of music is somewhat instructive, although not in a tangible or concrete sense. The “knowledge” being conferred in listening to music is an implicit

understanding of the ordering principles being employed in that given piece. A composition is a constructed universe, and as such it makes a statement about the nature of reality, and how the universe is ordered. Listeners will like things they agree with, hence why it is common to characterise a piece of music as something that one “likes” or “does not like.” The subconscious retention of these ordering principles informs our listening of other music and makes it possible to intuitively parse more complex gestures, even if we do not have the vocabulary to elucidate them. Hence this is how we can indeed become “knowers through feeling,” as the “feeling” referred to here is that implicit understanding of ordering principles. Naturally, this is an extremely simplified view of the complicated question of music's function and should by no means be taken as fact: it is a mere sketch of an opinion.

Q: What is the point of music theory? Why create labels for musical gestures if theory has no answer as to what their precise function is or how they achieve that function?

A: Music theory is a study for musicians who use it in order to compose and perform. It is unnecessary for listeners to externalize music in that way, and they do not need to learn it any more than they need to learn about fluid mechanics in order to drink water from the tap or learn about iambic pentameter in order to enjoy poetry. That being said, it **can** aid listeners' appreciation of music in the same way that a study of German and Latin grammar can improve one's appreciation of Shakespeare (as he borrows grammatical patterns from other languages from time to time), but it is by no means necessary.

Listeners are not affected by music theory any more than they are affected by grammar in their daily lives. They simply perceive unconsciously. In order for a piece of music to “work,” it has to be internally self-consistent and/or work with materials that are generally well-known.

Footnotes/Sources

- 1) Sourced/adapted from personal correspondence with [Marshall Tuttle](#), 2017.
- 2) Bachani, Vishnu. Response to [How does instrumental music cause emotional responses?](#) Quora, 2017.
- 3) An exceptionally concise overview of tonality written by University of Illinois at Urbana-Champaign professor Sever Tipei can be found [here](#).
- 4) Various sources corroborate this, e.g., [Cowie, Fiona](#) (2008), [McElroy, Molly](#) (2013), [Skwarecki, Beth](#) (2013).
- 5) Further information on the genesis of the tonal system and possible reasons for its relatively global prevalence can be found in [Music, Analysis, Experience: New Perspectives in Musical Semiotics](#) (ed. Costantino Maeder and Mark Reybrouck, Leuven University Press, 2015), while a detailed study of the perception of tonal music and its syntax can be found in [A Generative Theory of Tonal Music](#) (Fred Lerdahl and Ray Jackendoff, MIT Press, 1996).
- 6) Wagner, Richard. [Opera and Drama](#), Trans. William Ashton Ellis, 1893. Lincoln: University of Nebraska Press, 1995.
- 7) An excellent monograph on Wagner's music is Marshall Tuttle's [Musical Structures in Wagnerian Opera](#) (The Edwin Mellen Press, 2000).
- 8) [The Oxford Handbook of Music Psychology](#) (Oxford University Press, 2008) is a good resource.