

Eric Clarke, *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning*. Oxford: Oxford University Press, 2005. ISBN 0-19-515194-1 (hardcover) \$45.00.

The subtitle of Eric Clarke's *Ways of Listening: An Ecological Approach to the Perception of Musical Meaning* accurately describes the purpose of the book. The ecological theory of perception developed by James Gibson in the 1960s and 70s is used to define the possible meanings that can be gleaned from a musical performance. As Clarke points out in the introduction, he is not the first to apply Gibson's theory to music perception.[1] But Clarke is the first to devote an entire book to the explication and application of ecological perceptual theory to music.

The introduction sets up the reasons for using Gibson's ecological theory to explain musical meaning, by comparing it to philosophical approaches to musical meaning and "information processing" approaches to music perception. Clarke emphasizes that the act of listening is key to his theory of musical meaning, unlike the semiotics of Agawu or the hermeneutics of Kramer. But at the same time, this perceptual theory does not rely solely upon the bottom-up processing hierarchy emphasized by most music cognition theories such as Narmour (1999) and Temperley (2001). As Clarke explains it, "perception must be understood as a relationship between environmentally available information and the capacities, sensitivities, and interests of a perceiver." (p. 91)

Gibson's ecological model of perception assumes that structure is inherent in the environment, not a construction within the mind. A musical sound is determined by the physical properties of the producing instrument, such as shape, mass, and density. These properties are communicated in the produced sound, with which our auditory system resonates. Ecological theory claims that this resonance informs us as to pitch, rhythm, and instrument identification, not a complex decoding of the stimulus. Clarke mentions three factors that make this claim "both more realistic and more interesting: the relationship between perception and action; adaptation; and perceptual learning." (p. 19). In ecological theory, resonance is the active engagement of a person with its environment, shown by actions spurred by perceptions. Turning towards a sound, focusing on an object, these actions are caused by perceptions and help sharpen the perceptions in an interactive loop. Adaptation in ecological theory is not just changes in the perceiving organism. Instead, adaptation describes the interactive changes in the perceiver and in the environment. Humans adapt materials to make musical instruments, and then adapt themselves to play these instruments or to listen to the music in different ways (concerts, iPods, rituals, etc.) This adaptation is of the entire human race, or at least of human cultures, but ecological theory also describes changes made to individuals through interactions with the environment. The development of musical perceptions is considered a sensitization due to exploratory actions, such as vocalization. These learning actions can be passive or directed.

To use ecological perception theory to determine musical meaning, Clarke identifies properties of musical sounds that "afford" certain meanings. Affordance is a term coined by Gibson to describe the purposes or uses of various objects as communicated by stimulus. As an example, a chair affords sitting, taming lions, and knocking down bad guys. Clarke uses this concept to show how listeners can glean meaning from a musical performance. Note that he either stipulates a specific listener and a specific performance, or gives ranges of possible meanings dependent upon the context of the performance and the listener. As an example, Clarke shows how Jimi Hendrix's "Star Spangled Banner" contains various factors that communicate an ironic instability, in three different domains of perceptual meaning: cultural practices, motive and pitch, and quality of sound (p.48-61). A listener does not have to clue in to all of these factors to get the meaning of instability, and Clarke specifies that there is no hierarchical arrangement of these factors.

Clarke compares ecological theory to Agawu's topics and Hatten's semiotics, showing how similar the concepts are. The difference lies in defining the environmental context for the listener. Hatten tried to describe the listening environment of Beethoven's contemporaries, and Agawu's listeners reside in the eighteenth century. Clarke's goal is to capture the possible meanings available to the twenty-first century listener, who resides in a very different environment.

On the other hand, the great majority of twenty-first century listeners are probably not at all attuned to those characteristics of the music, but are attuned to others—by virtue of the significant changes in musical culture and sensibility that have taken place in the intervening centuries. To confine my account only to the kinds of topics that Agawu and

others discuss ignores those other perceptible attributes. Since my principal aim in this chapter is to discuss “what there is to be heard” in this movement, and to explain how it is that those things can be heard, anything that people can and do hear is grist to my mill: analysts, commentators, and most obviously myself. (p. 163)

Earlier in this same paragraph Clarke admits that his approach is a compromise between culturally-based recommendations on how to listen to specific types of music and empirical determinations of how specific populations listen to specific types of music. While this compromise does yield some interesting analyses, overall it seems to suffer from the weaknesses of both approaches. Clarke’s descriptions lack the empirical rigor of standard psychological models but also shy away from the strong statements of the musicological analyses.

Clarke’s analysis of Jimi Hendrix’s “Star Spangled Banner” valiantly lists all the possible references Clarke can think of, including one that he had originally missed as British listener.[2] But I found myself wondering if Clarke had missed some possibilities, given the lack of empirical research. He suggests that the Rock treatment of the anthem specifies a breakdown of genre identity. But today it is quite common to hear all sorts of genre-crossing arrangements of the national anthem, from Beyonce Knowles to Wynton Marsalis to the Dixie Chicks. This would suggest that modern listeners would not regard a “rockified” national anthem as an indication of instability. Clarke does acknowledge that not all of his listed factors will be perceived, nor are they all necessary to get the meaning. But I found the lack of empirical support to be unsettling. On the opposite end, Clarke’s analysis of the first movement of Beethoven’s String Quartet in A minor, Op. 132, loses a strong sense of narrative, as Clarke is too careful in listing a whole slew of possible ways to hear this movement.

I think this book raises some very interesting ideas, particularly on the interaction of musical structure with musical perception. Clarke devotes a chapter to this debate, starting with the apparent conflict between ecological perception theory and the notion of autonomous music. He delves into philosophy, empirical studies, and compositional theory to describe two viewpoints. In one, autonomy is real, creating a “virtual world” with sonic features that can be determined using ecological theory. In the other, autonomy is an illusion that permeates our culture such that it must be accounted for in ecological analyses (p. 154). While Clarke presents both viewpoints on an equal footing, the former perspective has support from other sections of the book. The chapter on musical motion foreshadows the notion of a virtual world by adapting McAdams’ notion of a “virtual source”[3] for recorded music to a virtual environment in which either musical objects or the listener moves (p. 71-76). Clarke also utilizes the concept of “subject-position” from cultural studies to explain the different types of relationships the listener can have with the virtual world of the music, as either an outsider or assuming the role of a virtual character. Clarke does not make the virtual nature of this environment explicit, but he does treat as real the virtual characters that reside in the lyrics of songs by Zappa and Harvey/Parish, and discusses the deliberate of the music/composer: “Listening becomes self-conscious, and one is aware of the manipulative possibilities of musical material” (p. 120).

This book can serve as an excellent introduction to ecological perception theory. It is also useful in raising questions about musical motion and the interaction of the listener with the music. Clarke uses language that can be understood by musicians and psychologists, though it does refer to some more obscure popular music that may not be familiar to the typical music theorist or cognition specialist.

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Notes

[1] Clarke provides a comprehensive history of previous ecologically based theories of music perception on page 6.

[2] Hendrix quotes the bugle call “Taps” at 2:42, which Clarke originally heard as merely arpeggiation. (p. 57)

[3] McAdams posits that when we hear a recording of a sound, we perceive the original source of the sound rather than the loudspeakers or headphones that physically reproduce that sound. This perceived source is a virtual source, as it is not physically present.

References

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