

## Review

*Music and Embodied Cognition: Listening, Moving, Feeling and Thinking*, by Arnie Cox. Bloomington: Indiana University Press, 2016. 286 pp., including two Appendices, Endnotes, Bibliography, Index.

A non-fiction tour-de-force can be recognized by the fascination it exerts. Speaking of literature—whether fiction or non-fiction—the test is *addiction*: when the reader cannot put down a book until reaching its last page. Another test is the sheer exhilaration one feels while reading, being compelled to step out for just one moment and simply breathe, trying to cope with a head full of new ideas and connotations. For this particular reader, all the above symptoms were apparent in the process of reading Arnie Cox’s *Music and Embodied Cognition*. The sheer wealth of ideas, copiously discussed and explained, is both overwhelming and exciting.

Opening with a personal “confession” about the emotional and—yes, embodied—ways in which he himself perceived music as a student, Cox’s book is nevertheless committed to a strict methodological approach. The book is divided into three parts, framed by an introduction and two appendices. The first part offers a theoretical background, the basis on which Cox’s ideas about our understanding and interpretation of music through embodiment, imitation, and metaphorical thinking are built. This first part includes three chapters: “Mimetic Comprehension” (in general); “Mimetic Comprehension of Music,” and “Metaphor and Related Means of Reasoning.” Here, the two main ideas, which form the core of the book, are presented: mimetic action (whether active or imagined) and comprehension based on conceptual metaphors (mainly applying the conceptual metaphor theories of George Lakoff and Mark Johnson). The second part, “Spatial Conceptions,” seems to focus on the range of sound frequencies as a conceptualized metaphorical space, rooted in our embodied perceptions. Like the first part, this part, too, consists of three chapters: “Pitch Height”; “Temporal Motion and Musical Motion,” and “Perspectives on Musical Motion.” The very titles of these chapters clarify that, for Cox, Musical Space includes the element of time. After all, music seems to move through time. We, often experiencing music as “moving through it” (more on this below!), can no more separate musical time from musical space than we can separate the experience of human life, dependent on beginning and ending time, which exists in space. Indeed, these two aspects of human perception and conception are interlaced throughout the discussion, a very commendable—and clearly conscious—decision, to pay the cost of theoretical purity for the sake of gaining an applicable description of meaningful musical experience. The third part of the book, as its title states, goes “Beyond Musical Space.” This part consists of four chapters, the last one actually offering a “Review and Implications” of the whole book. This part deals with “Music and the External Senses”; “Musical Affect,” and “Applications,” the latter raising some interesting ideas related to music education.

Beyond its primary focus on Mimetic Motor Action (MMA) and Mimetic Motor Imagery (MMI) on one hand, offering the starting point of Cox’s discussion, a considerable part of the book discusses possible applications and ramifications of the Conceptual Metaphor Theory. While not being the first of its kind, this theory’s application to music

is fascinating, offering a new and fresh approach to the analysis of music perception and interpretation.

Two additional ideas that appear in the book are worth noting and, probably, deserve some expansion: Cox's observations on the "tripartite subjectivity," where the "quasi-first-person, participatory experience" is "entwined with the second- and quasi-third-person observatory experiences related to nonmimetic anticipation" (pp. 181–2). The temptation to stop reading, for just one moment, to choose any musical excerpt, and listen to it three times, adopting a first-person, second-person, and third-person attitude respectively, should definitely be succumbed to: the listener may discover a whole new world of musical meanings, all extracted from the very same sounds.

Cox's interest in music education, mainly at the higher education levels, becomes more palpable toward the end of the book. Here, he offers his "eight avenues of musical affect" (p. 178 ff.), cross referencing them, in "Applications," the book's final section, with five musical components (an approach he applies to Webern's op. 5 No. 4: pages 202–203). He thus creates a grid of forty possible interpretations, and offers a fresh (and quite applicable) view of music analysis based on aural, embodied, and metaphoric intuition and cognition.

As mentioned above, Cox is meticulously methodical and analytical in his approach to the question of music signification based on embodiment. For example, he specifies twenty principles as an introduction to the mimetic hypothesis (p. 13), each of which he proceeds to discuss in detail. He presents four types of mimetic behavior: Comprehension, Participation, Engagement and Representation (p. 15). This approach convincingly offers, through thorough explanations, examples, and in-depth enlightening discussion, an appreciation of the ideas presented in the book. It also leads to unexpected assertions. For example, and unsurprisingly, he opposes "mimetic participation" to "aesthetic distance." His argument, however, highlights the complexity of the musical signification process: these two opposing poles can take place simultaneously and on the same musical phenomenon, regardless and in spite of their opposition.

In his discussion, Cox refers to neurological, aesthetic, psychological, and even linguistic studies. This almost overwhelming wealth and width of bibliographic resources, representing various ways of thought and approach to human cultural phenomena (for which music, sometimes, seems almost to be just a case study) makes the book a particularly stimulating read and provides a rich list of resources for further investigation and production of new connections and ideas.

Cox's ideas are an original combination of various theories, leading him to new conclusions and a fresh approach to music signification. Part of his comments can relate to musical gesture theories, such as those of Lidov (1987) and Hatten (1999, 2004). Others relate to theories of expectation, from Meyer (1956, 1967) to Huron (2006). The further value of Cox's discussion is in the addition of factors and their combination into a meaningful complex: metaphors in music were discussed previously (for example, Hatten 1994, 2012; Spitzer 2004). Here, however, the reader is presented with a deep and compound analysis of the metaphorical, gestural, and mimetic aspects of his tripartite subjectivities, all contributing to the process of music perception, understanding, and interpretation.

Cox's insistence on a scrupulous subdivision of his text into subheadings (and sub-subheadings) is very helpful, since his book offers not only an exciting read but also a

continuous reference source. The careful marking of each subdivision is particularly valuable since it provides the basis for a lengthy discussion of complexities, proceeding from general discussions to music-specific ones, from primary, bodily perceptions to the sophisticated analysis of combined cultural, psychological, and biological phenomena.

One unfortunate technical aspect of this book, however, is its appalling copyediting errors, which are quite unexpected from such a respectable publisher as Indiana University Press, particularly in its prestigious *Musical Meaning and Interpretation* series—and very disappointing. Beyond typos, which are a normal phenomenon in any publication, there are some major faults. For example, following the now common practice of printing endnotes instead of footnotes (needless to say, a practice more convenient to the publisher than to the reader), all the notes of the book are gathered on pages 237–55. In order to facilitate the reader's orientation, however, each page is marked with the following helpful indication: "Notes to pages 000-000" [sic!]. Even further on the carelessness scale of inadvertent copyediting, the comment left at the top of page 198 blazes out in bold capital letters: "I can't tell if you want non-mimetic deleted or not." Really.

Bottom line, though, and in spite of the apparent imperfections, the content of the book and its organization of ideas are exemplary. *Music and Embodied Cognition* offers a cornucopia of inspiring ideas and a rich research reference, and it deserves to be read and re-read by musicians, musicologists, music students, and music educators alike.

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