BOOK REVIEW

Handbook of Music and Emotion

By PATRIK N. JUSLIN & JOHN A. SLOBODA Oxford, UK: Oxford University Press, 2010

Reviewed by W. JAY DOWLING University of Texas at Dallas

Handbook of Music and Emotion, by Patrik N. Juslin and John A. Sloboda, is an excellent book. It is comprehensive and up-to-date, well organized, well written, and stimulating. It is a thorough revision, much expanded, of Juslin and Sloboda's 2001 volume - at 976 pages being almost twice the size and containing 33 chapters. There is much here to interest readers of the previous volume. All but two of the original 20 chapters have been updated, 15 of them by teams including the original authors. One of the omitted chapters was the chapter by the seminal thinker, the late Leonard Meyer, and the other, the theoretically oriented chapter by Scherer and Zentner, is replaced by a chapter by Juslin, Liljeström, Västfjäll, and Lundqvist. Zentner appears as co-author (with Eerola) of a new chapter on self-report measures, and the important new work of Zentner, Grandjean, and Scherer (2008) is reviewed. The 15 entirely new chapters fall into four largely new sections: 1) Measurement, 2) Music Listening, 3) Development, Personality, and Social Factors, and 4) Applications. In short, there is plenty of new material to entice those who own the earlier volume, especially given Oxford University Press's dedication to offering the book in an affordable paperback format.

This book is all the more impressive in being an upto-date summary in such a rapidly growing field as the psychology of music and emotion. Given the rate at which this field is developing, it is not too soon for an expanded treatment. In the past 10 years not only has the literature on traditional topics expanded considerably, but old questions have been explored in new ways and new approaches and methods have appeared. In addition to being comprehensive and timely, the book is well organized overall and in the coordination of the chapters. I would not normally read a book like this cover to cover, but rather dip into particular chapters when thinking about a particular topic. For the latter use, the plentiful cross references and index strike me as very useful, especially in a volume in which there are natural connections among the chapters, and in which different authors have different approaches to a given topic. Read straight through, the organization and coordination were clearly apparent.

The chapters are well written by acknowledged experts in the field, and their treatment of topics is quite generally balanced and inclusive of a broad range of evidence, much of it produced in the last 10 years. The chapters were often stimulating-going beyond the requisite summaries of research to delve into neighboring areas as a result of the broad interests of the authors. For example, in their discussion of the tendency of the brain to develop expectancies, Huron and Margulis (p. 577) cite a study by Johnson and Redish (2007) showing that when rats pause at a choice point in a maze their brain activity reflects their weighing of alternative continuations of the path, which I found fascinating. I wouldn't be surprised if one day something similar were discovered concerning human expectancies in music.

The book's excellence in organization and clarity of writing is all the more to be commended because the topic of emotions and music is especially complicated, and the authors do not dodge the complications. First, consider the different places in which emotions might reside or operate: they might be represented in the music itself (people are consistent in applying emotional labels to music), they might arise in the listener as a response to hearing the music, they might once have been experienced by the composer or performer, or even be experienced during the performance. The emotions that are communicated impinge on the listener not only via the sounds of the music, but in live performances (which of course was how music was always experienced until quite recently in human history) all the senses become involved. All this takes place in a complex cultural context in which the listener understands the music by virtue of (ideally) long periods of prior perceptual learning. This leads to strong individual differences in response. And the emotions that are represented and felt are not static, but are often in a state of flux. (This is especially true of European "classical" music since the second half of the 18th century, when Haydn, followed by Mozart and Beethoven, developed a toolbox of techniques for rapidly shifting the emotional tone of a piece.) But emotions are not just inherent in the piece; they influence our choices of the music we want to encounter. That is, musical preference is not just the

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result of a dry intellectual evaluation, but involves emotional responses of liking.

There is one issue that was hotly debated around the time of the earlier volume that now seems to have been largely settled, and that is the question of whether the emotions found in relation to music are "real" emotions. (See, for example, Konecni's, 2003, review.) Of course, one may define emotions as responses to major emergencies, such as life-threatening situations, and so rule out true emotional responses to music *a priori*. However, the emotional life of humans is richer and more broadly based than that. Considerable converging evidence has been accumulating, from behavioral observations, introspective reports, and neuroscience, showing how closely our emotional reactions in life. As Koelsch, Siebel, and Fritz (p. 331) note:

Listening to music ... elicits changes in autonomic and endocrine activity (physiological arousal), is experienced as pleasant, happy, sad, etc., (subjective feeling), and usually has effects on an individual's motor expression (e.g. smiling, dancing, foot tapping, clapping, or even just premotor activity). In addition, the fact that music can modulate activity in all limbic and paralimbic structures (including core structures of emotional processing, such as the amygdala) shows that music can indeed evoke real emotions.

The question remains concerning what sorts of emotions music represents and evokes, and that question is well addressed in this volume. New methods have been brought to bear on how music functions in everyday life, as contrasted with laboratory settings. This is important, as it is clear that the kinds of answers one gets to that question depends in large measure on the ways in which one poses the question. Among the approaches reviewed in this volume are: the Strong Experiences with Music project described by Gabrielsson (Chapter 20), which draws generalizations from a large collection of case history accounts from people who have been strongly affected by music at various points in their lives; the complementary questionnaire and experience-sampling approaches of Juslin and his co-workers (Chapter 22), in which people describe their most recent encounter with music, and also carry palmtop computers that ask them what they're doing at various moments during the day; and the open-ended approach of Zentner and colleagues (Chapter 8), in which, instead of focusing on a few preselected emotions for listeners to detect in a piece, they start by formulating a list of music-appropriate emotions from the bottom up. These studies with

steadily improving ecological validity have led to some very interesting results. In general, the emotions encountered in relation to music tend to be more positive than those encountered in nonmusical events in life: for example, calm and contentment, happiness, and elation, are more prevalent in response to music, and anger, irritiation, and boredom less prevalent (Chapter 22), and this result was corroborated by the results of Zentner et al. (2008, and Chapter 8). Also interesting was the prevalence of musical encounters in everyday life, being present in 37% of randomly selected periods during the day, with music producing an emotional effect in 64% of those (Chapter 22). Furthermore, college students getting to know one another in a dating situation spend a considerable proportion of time on their initial dates sharing information about their musical preferences, presumably as an efficient way of characterizing themselves (Chapter 24).

To achieve even greater validity, future methods need to go further in addressing the problems (noted by Rosen, 2010, and touched on in this volume) that people can perceive and feel conflicting emotions at the same time, and that emotions represented in music and perceived and felt by the listener can change very rapidly over time. Researchers are beginning to address these problems. For example, Schubert (Chapter 9) provides a much expanded treatment of the use of continuous report methods to address the latter issue. Sloboda (Chapter 18) also calls for more research into the instrumental purposes to which people put music in everyday life, such as to accompany work routines, driving, or exercise, in addition to direct management of emotions.

Points in the book where I strongly disagreed with what was being said were rare. There was one such instance in Chapter 15 by Woody and McPherson, who cite Persson (Chapter 12 of the 2001 volume) as suggesting "mood induction," a sort of method-acting approach in which "a performer may consciously recall specific personal memories in order to experience emotions (while performing) appropriate for the music" (p. 412). Woody and McPherson seemingly approve of this approach, though they doubt that it always works well. (To do it justice, Persson's 2001 treatment is much subtler than the view presented here.) For me, searching for the emotional meanings expressed in the work itself seems a far preferable approach to trying to attach externally generated emotions to it. I think it would be unfortunate if music teachers began to advise their students to conjure up past emotional experiences to get themselves in the mood for playing a piece, rather than focusing on what the piece is telling them.

Throughout the book, and especially in Chapter 22, the authors explore possible causal connections between music and emotional perception and response. This is a very complicated field, since there are almost always multiple causes to be taken into account: the listener's immediate reaction to the sound (as with babies crying and fire sirens), reactions triggered by memories (as with the national anthem), reactions triggered by the twists and turns of musical structure, and reactions to the whole context in which the music is encountered. In trying to tease apart these multiple causal threads, converging operations are necessary, such as those relying on introspective reports, behavioral reactions, and neural processing. It is important in all of this to remember that there is no one way that things work in such a complex field as that of people's encounters with music. The multilayered nature of music itself, and the complex and changing social contexts in which it is experienced, make the understanding of this area exceedingly difficult. Music is an especially positive and pervasive aspect of life, that we often find particularly useful in surprising ways. Here is a book that does justice to the complexity and richness of this field.

Author Note

Correspondence concerning this article should be addressed to W. Jay Dowling, School of Behavioral & Brain Sciences, University of Texas at Dallas, 800 West Campbell Road, Richardson, TX 75080. E-MAIL: jdowling@utdallas.edu

References

- JOHNSON, A., & REDISH, A. D. (2007). Neural ensembles in CA3 transiently encode paths forward of the animal at a decision point. *Journal of Neuroscience*, *27*, 12176–89.
- JUSLIN, P. N., & SLOBODA, J. A. (Eds.). (2001). *Music and emotion: Theory and research*. Oxford, UK: Oxford University Press.
- KONECNI, V. J. (2003). Review of Juslin & Sloboda, *Music and emotion: Theory and research. Music Perception*, 20, 332–341.
- ROSEN, C. (2010). *Music and sentiment*. New Haven: Yale University Press.
- ZENTNER, M. R., GRANDJEAN, D., & SCHERER, K. R. (2008). Emotions evoked by the sound of music: Characterization, classification, and measurement. *Emotion*, *8*, 494–523.