

Book Reviews & Summaries

Tom Cochrane, Bernardino Fantini, and Klaus R. Scherer, eds. *The Emotional Power of Music: Multidisciplinary Perspectives on Musical Arousal, Expression, and Social Control*. Series in Affective Science. Oxford: Oxford University Press, 2013.

Despite the historical changes in understanding philosophy and music, both disciplines are connected in various ways. In Pythagorean philosophy, the so called music of the world was one of the key metaphysical and epistemological concepts because it showed the harmony of the universe justifying the mathematical methods of understanding it. Contrary to Pythagoreans, Plato did not see a rational order in music, just destructive emotions endangering social life; that is why he argued it should be controlled by the state. Aristotle had a similar view, he believed music can negatively affect the human mind, and although admittedly it is a vital element of upbringing, it must be controlled by the authorities. Music has never stopped being a subject of philosophical scrutiny, with all its peculiar focuses, regardless of how it was, and is, perceived in wide social circles and what kinds of functions are attributed to it. The most basic philosophical issues are ontological problems concerning how a piece of music exists, its structure, its relation to other branches of art like literature, film, or theatre. Ontological problems are not just theoretical, they affect laws concerning for example ownership; how a piece of music exists (score or performance) and who is its author (composer or performer) determines rights to copy and sell.

Epistemological problems concerning the perception of a work of music are a separate issue. One of them is the function of emotions both in creating music and in recognizing its value. A detailed analysis of the perception of music has an even broader meaning as shown in the analyses of time consciousness done by Edmund Husserl, which are based on the

perception of time in listening to music. Epistemological problems also concern the question of whether music expresses ideas and whether one can discuss its truthfulness. There was a number of thinkers claiming that music reveals deeper truths, which cannot be expressed in the conceptual language of science or in the symbolic language of poetry. In the medieval school of the Victorines it was believed that music reveals the secret of God, while Ludwig Wittgenstein thought that with music one can show those truths which cannot be expressed with language. Frank Ramsey, the author of the first translation of *Tractatus logico-philosophicus* into English, made fun of Wittgenstein's opinions. He is reported to have parodied the seventh thesis of *Tractatus* in an allusion to Wittgenstein's exceptional music skills, of imitating complicated composing by whistling. Ramsey allegedly said, that what cannot be said, also cannot be whistled. One may presume that music should not be interpreted semantically as a sequence of sounds does not describe anything.

Axiological problems, concerning values expressed by music and its effect on human behavior, are another group of philosophical problems. Music is used in religious rituals (building a sense of loftiness and transcendence), important social events (uniting citizens), even in war (spurring soldiers on to fight). A specific type of music often becomes a tool of integration for various social groups or even generations, expressing their fears, frustrations, rebellions and aims. This was manifested by both German fascism, which used music by Richard Wagner to manipulate society, and postwar youth movements in Western Europe and the United States, whose symbol was Woodstock. The popularity of music results in it being one of the important branches of business; however, the music industry—while bringing huge profits—is also struggling with the problem of illegal broadcasting, copying, and selling of music.

All the mentioned issues are subject to detailed analyses in the reviewed collection of essays *The Emotional Power of Music*. The subject matter of individual articles is diverse, ranging from philosophical issues (the structure of a piece of music), neurophysiologic (the influence of music on the nervous system) to social (using music to manipulate people). Besides expert musicological studies of specific works, the book also contains interviews with professional musicians, about their work and the meaning of music in their life. Regardless of the differences in character and content of various essays, the main theme of the reviewed collection is—like the title says—the emotional power of music.

The book contains twenty-one articles and three interviews altogether; it is divided into three parts, each preceded by an instructive introduction

by its editor. Section 1 ("Musical Expressiveness") concerns the means by which the listener can recognize music as a representation of specific emotional qualities. Section 2 ("Emotion Elicitation") discusses the neurophysiologic and psychological research on the mechanisms invoking emotional reactions to music in people. Section 3 ("The Power of Music") concerns music as a tool of affecting human behavior in social life, in different historical eras, and the political and legal issues. The book concludes with an appendix containing scores and cantata lyrics, supplementing the article "Gender Ambivalence and the Expression of Passions in the Performances of Early Roman Cantatas by Castrati and Female Singers" by Christine Jeanneret. The reviewed book can be useful not only to musicologists, but also to philosophers and historians, since it contains both detailed analyses concerning perception of music, and historical information about the views about music of a range of thinkers. The last topic, often omitted in studies of the history of philosophy as too detailed, was discussed rather broadly in this book. However, the reviewed work should be most significant to philosophers of mind, since it shows the cognitive role of emotions and the mechanisms of their arising.

The book begins the article "Sad Flowers: Analyzing Affective Trajectory in Schubert's 'Trockne Blumen'" (7–21). Using Schubert's song, the author shows how the technical measures taken by the composer (who only works with sound) result in a feeling of sadness in the listeners. This is achieved mostly with slow tempo and low tune, which are purely musical effects independent from the accompanying lyrics. Even though Schubert's song was composed to Müller's lyric, its content does not affect invoking emotions, which is proved by the fact that listeners, who do not understand German, also experience sadness. Spitzer also stresses that emotions are not a derivative element of music, created in the listeners' mind under the influence of other circumstances, but its constructive trait.

This claim is supported by the opinions of musicians themselves, from the interviews conducted by Tom Cochrane, "Composing the Expressive Qualities of Music: Interviews with Jean-Claude Risset, Brian Ferneyhough, and Carter Burwell" (23–40). Risset believes that music invokes emotions even though it cannot be created in an emotional state. However, the emotional character of music results in the possibility to see it as a religious phenomenon, since it is capable of uniting people and even invoking awareness of a transcendent being, turning the mind to the conceptually unbelievable. That is why it should not be translated into the language of words; such a translation is unnecessary, since everyone can understand it regardless. Despite that, Risset argues, the full emotional

value of a work of music can only be recognized by a person with developed musical hearing. Brian Ferneyhough, Cochrane's other interlocutor, believes that music does not invoke regular emotions experienced every day, but special experiences which can be called "musical emotions." This means that the sadness we experience when listening to music is different than the sadness experienced after the loss of a loved one, or life misfortunes. A work of music also does not express the emotions of its composer, however they can influence the creative process, for example triggering interest in a theme. The third interviewed musician, Carter Burwell, who composes film music, believes it is an essential element of the movie; on one hand it explains the complexity of the plot and the characters' actions, on the other—invokes emotions in the viewer.

Daniel Leech-Wilkinson presents a different view in the article "The Emotional Power of Musical Performance" (41–54). He brings attention to the problem of authorship, since it is difficult to decide whether the composer, or the performer, is the author of a work of music. This is not just a theoretical problem, but a practical one and concerns the issue of fees and the rights to copying and selling music. From the emotional point of view, performance seems more important than the score, because it is not the musical notation that invokes emotions, but the sequence of sounds based on it. That is why performance has to be recognized as an important part of the work. Leech-Wilkinson argues that different performances can invoke different reactions, which depend on the listeners' attitude, their sensitivity, and the situation in which they find themselves. Often, a work that used to move us in the past, now invokes no emotions at all, because the context changed. This proves that music not only exists in many different ways, but also affects the human mind in different ways. However, in that case it is also possible that people will react emotionally to the score itself, like some mathematicians react to the beauty and simplicity of equations.

The next article "The Singer's Paradox: On Authenticity in Emotional Expression on the Opera Stage" (53–73) was written by Klaus R. Scherer, a music scholar, with contributions from opera singers: Thomas Moser, Gillian Keith, Lucy Schauer, Bruno Taddia, and Christoph Prégardien. According to Moser, a singer does not express their own emotions on stage, but that of the character they are playing. Therefore they have to know the emotions but should not feel them while performing. Similarly, Keith believes that experiencing specific emotions in life makes it easier to express them on stage, whereas Schauer says that the goal of an opera singer is to accurately reproduce the emotions of the character, and in order to do that one has to identify with them. A singer has to forget about themselves

and assume the memories and the way of experiencing the world, from the character. Taddia (who is not only a singer, but also a philosopher) stresses that the technical skills are not enough to reproduce someone else's emotions; the artist has to identify with the characters to experience the world with their senses. The singer's paradox is solved differently by Prégardien, who differentiates between the artist's emotions and the portrayal of the character's emotions. A singer experiences their own emotions, while pretending to experience the character's; it is not as difficult, as it would seem, since in real life we all pretend, showing different emotions than those we actually experience. However, it is possible—like Scherer suggests—that the singer's paradox, imitating the characters emotions, has no solution.

In the next article, "On the Resistance of the Instrument" (75–83), Tom Cochrane analyzes the technical conditions of music, related to the instrument's resistance. According to the author, both the type of instrument, and the material from which it was made, is a crucial element of music, influencing its emotional value. The artist not only has to recognize emotional states, which they want to express (or invoke in the listeners), but also overcome the instrument's resistance, making it obedient. That is why working with an instrument is an important factor of the artist's self-knowledge, and even a source of pleasure, which comes from creating and performing music.

The next article, "Gender Ambivalence and the Expression of Passions in the Performances of Early Roman Cantatas by Castrati and Female Singers" (85–99), is a historical study, whose author, Christine Jeanneret, researches seventeenth century cantatas. These works of music were performed for a select audience, mostly men. A female voice invoked strong, erotic (sometimes even ecstatic) experiences in the listeners; it was sometimes imitated by castrated men, prepared to do this from childhood. Additional emotional value came from the erotic gestures of singers, so that cantatas were not just songs about love, they also imitated it. Madrigals had a different function; their emotional aspects are described by Claude Victor Palisca in the last article from section 1, titled "The Ethos of Modes during the Renaissance" (103–14). These songs usually expressed negative emotions experienced by people, like sadness, loneliness, and fear of death.

The problem of music's emotional influence was described in more detail in section 2. Klaus R. Scherer and Eduardo Coutinho in "How Music Creates Emotion: A Multifactoral Process Approach" (121–45) highlight the multi-layered influence of music on its listeners. External factors, like the listeners mood, life situation, earlier experiences, or where the piece is performed (music invokes different emotions in a concert hall, than in

a church) are all important. Therefore, if music influences the listener in various ways, then they do not necessarily have to feel sad when listening to sad music. The aim of music is not to invoke emotions practical form the point of everyday life, but esthetic and cognitive emotions.

Luca Zopelli, in the article “‘Mors stupebit’: Multiple Levels of Fear-arousing Mechanisms in Verdi’s ‘Messa da Requiem’” (147–53), also supports the multi-factor explanation of music’s influence. Verdi’s work shows the tragic aspect of religious life, invoking fear of God’s wrath in the listener. This goal is reached solely through musical means, because the sound of drums is so clear that the listener experiences is organically, which is apparent in the body shivering.

Jenefer Robinson discusses the main theories of music’s influence on the listener in “Three Theories of Emotion—Three Routes for Musical Arousal” (155–68). According to the cognitive theories, a person’s emotions are a reaction to the recognized factors important to survival; therefore sadness is a reaction to losing something or someone, anger comes from the feeling of harm. This means, that a person can feel worried listening to worrying music, or saddened—listening to sad music. In the spirit of another theory (which could be called “habitual”) emotions are not the result of knowing the world, but of the readiness to react specifically to external events. Therefore, emotions are specific tendencies to act, which are activated in contact with the environment; this suggests that musical emotions are awakened when listening to music. The third theory (which could be called behavioral) identifies emotions with the body’s reactions; if music influences different aspects of the body (nervous system, motor functions), than physiological states have to be considered in triggering emotional states. According to Robinson, every described theory shows only a fraction of the truth, and therefore one has to consider all of them.

Stephen Davis discusses a similar problem in “Music-to-listener Emotional Contagion” (169–76) by describing the phenomenon of “emotional contagion.” He believes that music has emotional and expressional traits regardless from its influence on the listener; it is sad in itself, not sad because it makes the listener sad. (Just like the landscape or the weather can be sad). A person perceiving emotion can get infected by it, becoming sad by listening to sad music. However, Davis argues that music is not the object of the emotions it invokes, because the listener does not consider it worth pity or compassion. The object of emotions invoked by music is hard to pinpoint, because human emotional reactions are complicated and surprising to the people having them; a person often does not understand why they are sad. According to Davis, one of the reasons for emotions is a mir-

roring response, which does not come from recognizing a specific event or state of affairs; people are afraid of a monster on screen, which they know is not real. Likewise, music can invoke sadness without an object.

In the article "Empathy, Enaction, and Shared Musical Experience: Evidence from Infant Cognition" (177–96) Joel Krueger studies the link between body movement and music. Since a child reacts to music from the moment of birth (visible in the reactions of their body), it can be considered a spontaneous listener, whose perceptions is not yet distorted by cultural influences. This suggests that music invokes emphatic reactions, and therefore can be used as a tool to build unity between people; listening to music together creates a union of feelings and thoughts.

On the other hand, Lincoln John Colling and William Forde Thompson take up the issue of music shaping emotions in "Music, Action, and Affect" (197–212). Sensory impressions are the main reason for emotional reactions, because we are never passive in experiencing music; listening to music is always accompanied by body motions, even if they are involuntary. Similarly, the artist's movements on stage influence the perception of the piece, becoming an additional emotional impression and invoking mimicking reactions in the audience. This suggests that music can be a tool of manipulating human behavior.

Wiebke Trost and Patrick Vuilleumier study the neurophysiologic basis for emotions invoked by music in the article "Rhythmic Entrainment as a Mechanism for Emotion Induction by Music: A Neurophysiological Perspective" (213–25). According to the authors, the rhythmic processes influence the human body and are a mechanism of invoking emotions. The more metric a song is, the more synchronized with music the internal body rhythms become. It is even possible for music to affect heartbeat or breathing. These are not automatic processes, physiological and emotional changes also depend on factors like the condition the body is in, sensitivity, artistic preferences or previous familiarity with the particular piece.

Stefan Koelsch analyzes positive emotions invoked by listening to music in "Striking a Chord in the Brain: Neurophysiological Correlates of Music-evoked Positive Emotions" (227–49). The author believes that music can have a good influence on the human body by invoking positive emotions, which have a favorable influence on life functions connected to survival. There is no doubt that one of the positive emotions is the feeling of community which comes from listening to music together. Music is therefore an important social phenomenon, which is further illustrated in the articles from Section 3 of the book.

Bernardino Fantini in "Forms of Thought between Music and Science"

(257–69) analyzes music as a metaphor for non-musical phenomena. He argues that music, medicine, and philosophy use (in the same historical eras) similar (or even identical) concepts and metaphors; for example arrow, mechanism, harmony, or cycle, known from the past. These words are not just rhetorical devices, they also have a heuristic meaning, which shows the use of a concept, important in one area of studies, in another. The similarity of metaphors shows that different areas of culture are based on the same ideas, presenting similar ways of thinking. This proves not only the historical conditions of human thinking, but also the existence of universal models of interpreting the world.

The next article—“Control and the Science of Affect: Music and Power in the Medieval and Renaissance Periods” (271–86) by Laurence Wuidar—is a review of different musical concepts from ancient times until baroque. The article discusses the views of, among others, Plato, Aristotle, St. Augustine, St. Bernard from Clairvaux, and Campanella on the emotional role of music; it also takes up the topic of links between music and religion (including music and demonology). Because of its emotional influence, music was often subject to control (both political and religious), as it was believed to have the power to convince people to do not just good, but also evil.

The topic of the next article “The Psychotropic Power of Music during the Renaissance” (287–306) by Brenno Boccadoro is similar – it focuses on the views of Neoplatonists. They believed that music influences the inferior (sensual) parts of the soul, which are not subject to will; therefore it can have a positive effect on the body, which is a kind of polyphony aiming at harmony.

Penelope Gonk also studies the role of music as a tool of social control in “Music as a Means of Social Control: Some Examples of Practice and Theory in Early Modern Europe” (307–13). The effect of music on emotions was discussed even during the Renaissance, but it was during the Enlightenment that the psychological and physical grounds for this influence were studied. The discoveries were accompanied by laws, which regulated both the professional status of musicians, and the social influence of music. The Academy of Poetry and Music was established in France, in 1570, because the king believed music should be controlled (as it has such an impact on people); the queen of England, Elisabeth I had minstrels licensed (1572). During the 16th century, the psychological influence of music on people was stressed, while the physiological aspects were ignored. The later discovery of music’s influence on the nervous system revealed the broad perspective of manipulating people. They were clearly noticed by a Scott, John Gregory in the 18th century, who considered mu-

sis an important tool in upbringing, as a way to shape a child character and sensitivity. On the other hand, Jackie Pigeaud writes, in “The Tradition of Ancient Music Therapy in the 18th Century” (315–27), that in the 18th century the impact of music on animal’s nervous system was proved, by noticing that certain types of music can calm enraged elephants.

In the next article, “On Nostalgia” (329–40), Jean Starobinski analyzes the phenomenon of nostalgia. By describing different ways of understanding it throughout history (as a state of the soul, or an illness of the body), the author argues that it was usually seen as suffering due to the lost past. Since music invokes memories, it is one of the factors contributing to nostalgia. The author also notices the link between nostalgia and the frequency of corporal punishment; the less it was used on sailors, the less frequent cases of nostalgia appeared among them.

In the last article in the book, “Emotions, Identity, and Copyright Control: The Constitutive Role of Affect Attunement and its Implications for the Ontology of Music” (341–56), Ulrik Volgsten discusses the role of music in creating personal identity. The author believes that music is not just a sequence of sounds, but also an important factor of human self-knowledge, since they build their identity not only with words, but also with music. This process is both individual and social, some groups choose a specific type of music as their identifier. Music is therefore not just art, but also a lifestyle; however using it freely is restricted by copyright laws, which limits its public broadcasting.

The reviewed collection, *The Emotional Power of Music*, presents the multi-dimensional picture of music as an important element of human life. The multi-disciplinary character of the book is visible not only in showing the variety of areas of research studying the emotional aspects of music (musicology, psychology, neurophysiology, sociology, philosophy, history) but also the variety of theories, which attempt to explain the links between music and emotions. It should also be mentioned, that—because of limited technical jargon and adding artists’ comments—the book is not only addressed to people professionally interested in the links between music and emotions, but to a broader audience. Therefore, the editors’ hope that it will be useful to both experts and people searching for an instructive introduction to the discussed issues is justified.¹

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1. Translated by Agnieszka Ziemińska. The translation was reviewed by the Language Editor.