The Doctrine of Affections: Where Art Meets Reason

Sharri K. Hall
Cedarville University, sharrihall@cedarville.edu

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Document Type

Article

Abstract

The Doctrine of Affections was a widespread understanding of music and musicality during the Baroque era. The Doctrine was a result of the philosophy of reason and science as it coincides with music. It aimed to reconcile what man knew about science and the human body, and what man thought he knew about music. It was a reconciliation of practical musicianship and theoretical music which had begun to rise in the time. Though it is generally understood as being apart from Enlightenment thinking, the Doctrine is a result of Enlightenment-style philosophy. As the Enlightenment sought to explain why things occurred in nature, the Doctrine of Affections aimed to explain scientifically man's reaction to music. It presumed that emotions could be represented and elicited through specific figurations of music and it perceived that music could possibly relate with the body humors and remedy illness and imbalance. The Doctrine of Affections directly shapes musical composition through specific modes and tonalities, meters, and rhythms all culminating in the "Baroque" style. Its influence is overwhelmingly present in the music of J.S. Bach and Handel. Affections, in conjunction with the four temperaments and body humors, thusly result in specific emotional reactions in listeners.

Keywords

Music, emotion, Doctrine of Affections, Late Baroque, Enlightenment

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Sharri K Hall
Cedarville University

The Age of Enlightenment describes the period of political and cultural history between the late seventeenth and mid-eighteenth centuries. Music historian Paul Henry Lang describes the Enlightenment as having freed spiritual and practical life from its condition under the authority of the Church. Individuals began to assert their ability to form their own opinions based upon "unprejudiced and undogmatic" thinking. People were relying upon their own thoughts to develop their beliefs about both the natural and the supernatural world. Understandably, this had an unprecedented effect on the thought of arts and sciences and how they relate to each other.[1]

The culmination of Enlightenment thought came about by a collaboration of Locke's and Descartes's schools of thought—perception and empiricism, respectively. The Enlightenment stood for a new order: the disregarding of all things considered irrational and the relying solely on those things easily proven by rationalism and empiricism. This led to the classification of all problems as relating directly either to natural sciences or to mathematical philosophy.[2]

Music did not escape this classification. Because the musical theorists of this era were also the composers of the era, the theoretical reason behind the compositions was connected to the creative process. The composers sought to defend their art by specific assertions of their method.[3] As such, musical composition in the Age of the Enlightenment is a direct result of the philosophy of reason and science as it coincides with music,

[1] Paul Henry Lang, *Music in Western Civilization* (New York: W. W. Norton and Company, 1997), 431.
[2] Ibid., 431–433.
[3] Ibid., 433.

Musical Offerings, vol. 8, no. 2, pp. 51–64.
ISSN 2330-8206 (print); ISSN 2167-3799 (online);

culminating in the Doctrine of Affections. The Doctrine of Affections, which was introduced due to specific, enlightened philosophical thought, directly shaped musical composition in the late baroque era and also directly shaped an understanding of how music affects people.

The Doctrine of Affections, or Doctrine of Affections and Temperaments as it is sometimes called, was rooted in finding scientific reasons to explain our emotional, and sometimes visceral, reactions to sounds and music. The Doctrine of Affections was actually a "revival of the ideas of antiquity."[4] Bartolomeo Ramis de Pareia first suggested music's relationship to the affections in the body in his *Musica practica* (1482), but it was not a well-known concept until Marsilio Ficino published *De vita comparanda*, or *Three Books on Life* (1489), in which he discussed the links between musical modes, bodily temperaments, and planetary harmonies.[5] Gioseffo Zarlino, in his 1558 treatise, claimed that both musicians and physicians should aim to understand the fundamental principles of harmony in order to explore music's effect on the body and soul. He suggested that music could possibly remedy perceived illness or imbalance.[6]

An affection is the state of imbalance that results from the "animal spirits and vapors" that dispose people toward certain emotions.[7] Accordingly, the Doctrine of Affections presumed that an individual's mental states, or emotions, could be represented in music through "certain tonalities and meters as well as by distinct melodic, rhythmic, and harmonic turns and figures."[8] The affections were "the rational connection between tones and the soul."[9] In this way, specific musical formations could suggest and elicit specific emotional responses. The Doctrine of Affections aimed to locate and reproduce these specific musical formations. Specifically, the German view of affections sought to "understand and explain the physiological phenomena"—that of music begetting emotions—alongside an "interest in the structuring principles

[4] Lang, "The Enlightenment and Music," *Eighteenth-Century Studies* 1, no. 1 (1967): 96, doi:10.2307/3031668.
[5] Thomas Christensen, ed., *The Cambridge History of Western Music Theory* (Cambridge: Cambridge University Press, 2002), 226.
[6] Ibid., 226–227.
[7] Claude V. Palisca, *Baroque Music*, 3rd ed. (Upper Saddle River, NJ: Prentice-Hall, 1991), 4.
[8] Lang, "The Enlightenment and Music," 96.
[9] Ibid., 100.

furnished by the rhetorical discipline."[10] They aimed to ascertain whether music alone could be affective and emotive or whether it relied on rhetoric, that is lyrics, to convey emotion.

The Doctrine of Affections in music is a result of great conflict between a desire to understand the world as it appears in music and music's inability to express anything but itself. It reflects a need to see music as both a rational science (as with all other areas of study during the Enlightenment) and an art, without being able to distinctly categorize what the music was trying to express.[11]

Enlightenment thinkers sought to figure out what really made music work. Music theorists made strides in the discovery of music as a science. Tartini discovered the concept of differential tones[12] and, though unsuccessfully, attempted "to derive the intervals of major and minor harmony from a hierarchy of relationships based on harmonic, arithmetic, and geometric proportions."[13] J. J. Quantz, C. P. E. Bach, and L. Mozart would contribute through performance guides that featured instruction on improvisation.[14] Most importantly, Rameau found, in his *Treatise on Harmony* (1722), that each chord had a fundamental bass so that varying orders of three notes were not different chords altogether but simply different inversions of the same chord. His work became the essential source for teaching music theory to music scholars, even to this day.[15] However, this formulaic music left all "practical musicians," as Lang calls them, in a practical quandary. Though these musicians recognized and accepted natural science as the rational, physical, and mathematical foundation of music in harmony, they could not accept it as the "heart and soul" of music.[16]

Accordingly, the theorists, the rational musical philosophers of this era, could not deny that the human soul did respond emotionally to music. They sought, thusly, to create the link between the scientific paradigms of tonal harmony and the forces that shaped humanity's emotional response to music. They found that music could have a psychological

[10] Dietrich Bartel, *Musica Poetica: Musical-Rhetorical Figures in German Baroque Music* (Lincoln, NE: University of Nebraska Press, 1997), 29–30.
[11] Lang, "The Enlightenment and Music," 99.
[12] Christensen, *History of Western Music Theory*, 255.
[13] Ibid., 278.
[14] Ibid., 544–545.
[15] Lang, "The Enlightenment and Music," 99.
[16] Ibid., 100.

impact that compels bodily motion and that it could develop a host of expressive values. They believed that these affections could be universalized and imparted.[17] As such, they searched for a formula that expressed the same feelings and garnered the same result in all listeners. In particular, Johann Mattheson asserted that even "instrumental melodies" could lend themselves to express emotions in the listener, and he eventually created a catalogue of what he believed all composers should know in order to write in an affective manner.[18]

The Doctrine came to break the boundaries of instrumental music. Prior to the conception of the Doctrine, vocal music was commonly thought to be superior to instrumental music because, through the power of words, it was able to convey emotion that instrumental music could not. The Doctrine rejected this dogma, which was projected by Renaissance thinkers and composers, that affection could be sown only through word and poetry. Instead, the Doctrine had to prove itself a "systematic theory" of specific and concrete instructions for the use of notes, intervals, tonal centers, rhythm, and all other standards of music composition, to the effect of creating affection.[19] The desires to ask questions and to replicate results are indicative of Enlightened thought. The Doctrine had to prove, scientifically, that the features of instrumental music could, on their own, produce affections in listeners.

The Age of Enlightenment coincided with the baroque era. As such, compositions of this era reflect the inspiration and style of the Doctrine of Affections. During the baroque era, music was composed "more intensely and dramatically" than ever before. Though these composers recognized physics as a "confirmation of effects observed," they believed it should not be used as a starting point for composition. Music should be, they posed, the result of "artistically manipulated acoustic phenomena" that can be supported by formulas and mathematics.[20] According to Enlightenment philosophical ideal, composers and thinkers wanted to prove this naturally, without forcing results. They thought that a composer's elicitation of affection should come about "not on conscious perception but on a quasi-mechanical reaction to vibrations of

[17] Lang, "The Enlightenment and Music," 100.
[18] Hans Lenneberg, "Johann Mattheson on Affect and Rhetoric in Music (I)," *Journal of Music Theory* 2, no. 1 (1958): 48, doi:10.2307/842930.
[19] Lang, "The Enlightenment and Music," 101.
[20] Ibid., 100.

the sound itself."[21] In the early baroque era, despite the idea that specific musical features elicited specific affections, a composer was never to compose with the intention of using those features to elicit a response. He should only write whatever purely musical ideas might come to mind; any affection that would come about should have been unintentional. The Doctrine of Affections was simply an observation of natural occurrences in music. However, as the theory developed in the early to mid-eighteenth century, composers and theorists such as Mattheson and Rameau would increasingly attribute musical features like key or rhythm to certain affections and, as a result, choose specific musical features to elicit specific responses in the listener.

The spirit of the baroque era called for heightened expressivity, and as a result, the baroque era is known for its exaggeration, ornamentation, and general dramatic flair.[22] It is no surprise, then, that music responding to the affections would be particularly emotive. In the baroque era, the Renaissance ideal that feelings express, *affectus exprimere,* turned into an ideal that feelings move, *affectus movere*. Music could no longer simply present affection but had to move in such ways that the listener was affected emotionally, so that the listener, rather than the text, would "become the object of the composition."[23] The focus of the composition was not the music itself, but whoever would come to listen to it. The goal was no longer to identify the theoretical emotional properties of music, but to identify and provoke emotional responses in the listener. As such, baroque composers had to not only know music theory but also to observe human behavior and analyze psychological phenomena as it related to that theoretical knowledge. Music was not only the outpouring of compositional inspiration but also a rather calculated effort, based on acquired knowledge.[24]

In Renaissance music composition, the primary consideration would have been the mode or key. The eight church modes had been assigned expressive characteristics according to the ethos of the Greek modes. According to Steffano Vanneus, the music theorist who wrote *Recanetum de musica aurea* (1533), each mode had a fundamental affection. The first mode was cheerful, the second woeful, the third sharp

[21] James R. Gaines, *Evening in the Palace of Reason: Bach Meets Frederick the Great in the Age of Enlightenment* (New York: Harper Perennial, 2005), 82.
[22] Bartel, *Musica Poetica*, 32.
[23] Ibid.
[24] Ibid., 35.

and harsh, the fourth loving, the fifth moderate, the sixth pious and devoted, the seventh complaining, and the eighth, mild and sweet.[25]

During the Enlightenment, scholastic enthusiasm encouraged theorists to apply those affective ethos qualities to classical modes. As the church modes expanded into the twelve modern modes which we ascribe to (the Aeolian and Ionian modes based on A and C respectively), theorists began to ascribe joyful and sad qualities to certain modes.[26] As we understand it today, modes which formed a major triad over their final (root) were considered happy, and those that formed a minor triad, sad. Theorist Andreas Herbst defined three "qualitative differentiations" of modes: joyful, sad yet gentle, and harsh. Likewise, Athanasius Kircher defined three fundamental affections: joy, pious submission, and sorrow.[27] Adding even a semi-tone within the notes of a mode could also establish its expressive quality. For example, the Lydian mode was considered harsh because a tritone, known as the devil's triad, sat at the fourth scale degree above the final. However, the addition of a lowered fourth would result in a transposed Ionian mode, making it "happy."[28]

Thus, composers could express various sentiments using the same mode. Later, theorists maintained that composers could express the same affections in even opposing modes. The emotional properties of music could be affected largely by changes in temperaments and tuning. Even then, composers would still carefully set text in a certain mode or key based on those innate expressive qualities.

However, theorists of the day would challenge the thought of innate affective properties in certain modes. Rather, the supposedly expressive properties were not inherent to modes, but modes "could be *used* to express joyful or sad affection."[29] I emphasize the word "used," as Bartel does, to convey that modes and keys were not themselves expressive but had the potential to elicit certain responses. Modes may have possessed a distinct character but were not limited to eliciting any one affection. Thus, compositions in only one mode could produce a variety of affections.[30] A mode's specific character could also elicit any number of

[25] Christensen, *History of Western Music Theory*, 370–375.
[26] Bartel, *Musica Poetica*, 40–41.
[27] Ibid., 41.
[28] Ibid., 42.
[29] Ibid., 44.
[30] Ibid., 44.

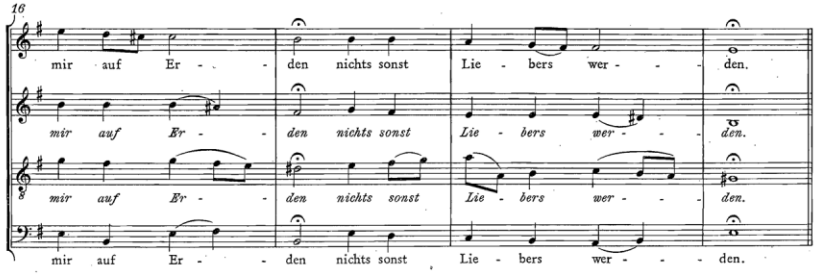
affections based on the listener's own temperament.[31] For example, a piece written in a sad mode could elicit feelings of nostalgia based on the listener's own temperament and experiences. A piece could help someone recall both a poor or sad memory from their childhood, such as falling off a bike, and a happy memory that resulted from it, such as being treated to ice cream afterwards. As such, there is no single Doctrine of Key-Affections because composers and theorists could not agree on any uniformity in affective expressive qualities of tonality.[32]

During the Renaissance, rhythmic variety was important in vocal music "to delight…the listener with a varied but balanced composition."[33] In the baroque era, however, rhythmic variety became a requisite to provoke the affections. It was understood that, just as dynamic levels such as *forte* and *piano* could express emotions, tempi such as *presto*, *adagio*, or *lento* could also express and result in certain affections.[34] A new emphasis on tempi and rhythm begot the baroque dance forms. These dance forms moved the temperaments of listeners to a specific affection, just like stage actors could portray a certain affection. As such, the baroque dance suite was ordered by affection.[35]

The combination of rhythm and tonality (or mode) served to express certain affections. Philosophical thought at the time suggested that the affection of happiness was the true goal of man. It symbolized wholeness, centered in joy, to be found in God alone. As such, music that was written to elicit happiness strived towards the interval of perfect unison to achieve said wholeness.[36] These pieces were typically in triple meter, which symbolized the Trinity, and were in faster tempi.[37] Pieces like this also tended to end in a Picardy third (finishing on a major cadence in a minor key), which symbolized reaching this fullness of joy and total happiness in God.[38] This feature is found overwhelmingly in the music of J. S. Bach, as seen in "Jesu, meine Freude" (Figure 1).

[31] Bartel, *Musica Poetica*, 45–46.
[32] Ibid., 40.
[33] Ibid., 46.
[34] Ibid., 47.
[35] Ibid.
[36] Ibid., 49.
[37] Ibid., 50.
[38] Ibid., 49.

Figure 1: The final phrase (mm. 16–19) of J. S. Bach's "Jesu, meine Freude" (BWV 227) featuring the ending Picardy third.[39]



Likewise, sorrowful affection could be expressed through musical means: syncopation, suspension, and slower tempi. Syncopations would symbolize a disturbance of the wholeness, which would lead to sorrow. Suspensions caused dissonance, which served to symbolize uncertainty. Specifically, semi-tones, because of their small scope and dissonance, could be used to elicit the sad affections.[40] For example, in conjunction with contour, semi-tones descending slowly—a lament bass—could be used to symbolize sorrowful longing or even upcoming death. J. S. Bach's "Crucifixus" from the *Mass in B Minor* (1749) does this well with its succession of lament bass, depicting the pain of Christ's death (Figure 2). It is written in a minor key, which is traditionally thought to depict sadness or mourning. The syncopation in the lament bass adds uncertainty and discomfort as often comes with death, especially the death of a loved one.

More complex affections, such as love, which necessitates both joy (a happy affection) and longing (a sad affection), were much harder to communicate because they required composers to convey both unity and disunity through consonance and dissonance, fast and slow tempi, loud and soft dynamics, and many more contrasts.[41]

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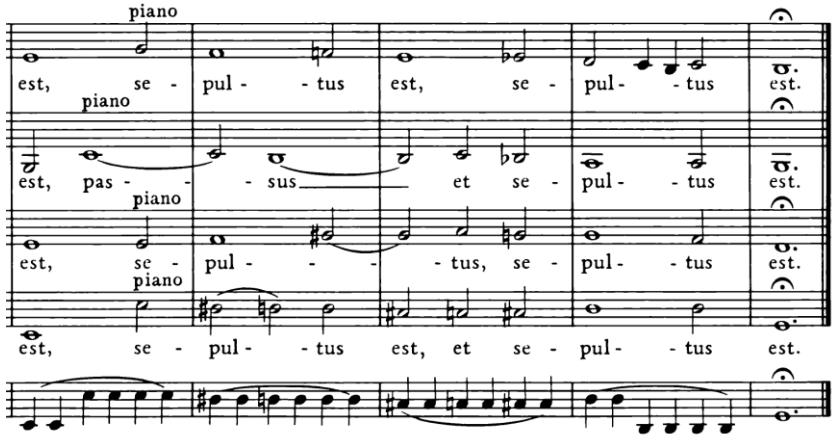
[39] Johann Sebastian Bach, "Jesu meine Freude," in *Neue Ausgabe Sämtlicher Werke*, ser. 3 *Motetten, Choräle, Lieder*, vol. 1 *Motetten*, ed. Konrad Ameln (Kassel, Germany: *Bärenreiter Verlag*, 1965): 77, http://imslp.eu/files/imglnks/euimg/0/08/IMSLP482560-PMLP719625-bachNBAIII,1.pdf.
[40] Bartel, *Musica Poetica*, 48–49.
[41] Ibid., 50.

Figure 2: The final phrase of "Crucifixus" (mm. 49–53) from J. S. Bach's Mass in B Minor (BWV 232), featuring lament bass.[42]



Enlightenment ideals encouraged philosophers and composers to seek what exactly was occurring in the body when an individual listened to music. In his article on music, Johann Sulzer says that there is "a direct connection between the ear and heart;" certain sounds awaken lasting emotion.[43] In the height of the baroque era, René Descartes published his important treatise *Les passions de l'âme* (1649), which detailed a systematic theory of the affections.

According to Descartes, passions are actions of both the soul and the body.[44] In general, they are perceptions, feelings, or emotions that are caused and maintained by the movement of animal spirits. Outside influences can also create a certain affect.[45] For example, incoming stimuli, such as music, could engage the senses, and thus the animal

[42] J. S. Bach, "Crucifixus" in *Neue Ausgabe Sämtlicher Werke*, ser. 2 *Messen, Passionen, Oratorische Werke*, vol. 1 *Messe h-Moll*, ed. Konrad Ameln (Kassel, Germany: *Bärenreiter Verlag*, 1965): 163, mm. 49–53, http://ks.imslp.net/files/imglnks/usimg/e/ed/IMSLP465396-PMLP719625-bachNBAII,1.pdf.

[43] Nancy Kovaleff Baker and Thomas Christensen, eds., *Aesthetics and the Art of Musical Composition in the German Enlightenment: Selected Writings of Johann Georg Sulzer and Heinrich Christoph Koch* (Cambridge: University of Cambridge Press, 1995), 81.

[44] René Descartes, *The Passions of the* Soul, in *Key Philosophical Works*, trans. Elizabeth S. Haldane and G. R. T. Ross (Hertfordshire: Wordsworth Editions Limited, 1997), 359.

[45] Ibid., 379–380.

spirits, to create a passion, or emotion, in an individual. The passions were thought to be caused by animal spirits moving in what is now understood to be the pineal gland. The passions come about as the result of the soul "setting itself to conceive some object," or what the soul does in response to some influence.[46] Likewise, they cause the soul to want the things that are naturally useful to it and therefore dispose the body to bring about said useful things.[47] Descartes also describes the "fight or flight" response. When something that has been previously harmful approaches the body, the passion of apprehension is excited. This passion allows individuals to either flee from that which is decidedly dangerous or to be aggressive towards it and cause its submission.[48]

Accordingly, Greek medical theory taught that different human temperaments governed the physiology of an individual. The four temperaments—melancholic, sanguine, choleric, and phlegmatic—were each associated with an element—earth, air, fire, and water, respectively—and a certain fluid, or humor, produced by an internal organ. Though every individual was understood to produce each of the humors, an individual's personality most strongly reflected the affections which corresponded with the temperament to which they were most predisposed. Individuals thought to be sanguine-tempered were typically more loving and joyful because, as it was understood, their heart was constantly stimulated to produce more blood. Choleric individuals were more prone to anger because their liver produced much yellow bile. Melancholic individuals were more sorrowful; their spleen produced much black bile. Phlegmatic individuals were more peaceful and moderate; their brains produced much phlegm. According to the Enlightenment scholars, an outside stimulus could charge the animal spirits and create an emotional reaction in the individual. For example, if an individual encountered something dangerous, perhaps a wild animal, the passion of fear was excited, causing the individual to run away or perhaps even ignite a humor, perhaps yellow bile, which would project his aggression and adrenaline, causing the individual to fight back.

Enlightenment composers combined what they knew about Greek medical theory and what Descartes proposed about how the passions

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[46] Descartes, *The Passions of the Soul*, trans. Jonathan Bennett (2010), 17, http://www.earlymoderntexts.com/assets/pdfs/descartes1649.pdf.
[47] Ibid.
[48] Descartes, *The Passions of the Soul*, trans. Haldane and Ross, 374.

occurred in individuals. Therein came their understanding of the Doctrine of Affections and of how music could reasonably affect an individual's mental states. In much the same way as a wild animal could excite the human passion of fear, a musical figure, especially one that was particularly predisposed to a certain affection, could stimulate an individual's temperaments and passions. A piece that was written in a major tonality, was rhythmically moving, and was in a faster tempo might excite an individual's heart, causing it to produce more blood, making them more sanguine and, thus, more joyful.

The effects of these musical figurations caused Renaissance and Enlightenment thinkers to begin to experiment with music and emotion in newer ways. Greek theorists had believed that an imbalance of humors would result in pathogenic disorders. Individuals were "inclined to suffer from certain afflictions," both physical and emotional, "due to an overemphasis of a particular affection."[49] A rightly balanced individual would portray a normative range of emotions—happiness when something good happens, sadness when something bad happens, and so on—as a result of a healthy balance of all four humors. Originally, composers aimed to simply elicit specific emotional reactions. However, these later Enlightenment thinkers hoped to exploit the links between specific musical figurations and the animal spirits in the body in order produce a balance of all four humors. They believed that in this way they would be able to cure psychological and physiological imbalance.

Renowned physician Richard Brockelsby, in his treatise, *Reflections on Ancient and Modern Music with the Application to the Cure of Disease* (1749), defended the idea that music contained curative powers.[50] He believed that the human mind "has a faculty, or disposition" to be either pleased or discontented by certain sounds and systems of sounds. He asserted that the "most violent passions of the mind"—fear, anger, grief, and excessive joy–could be alleviated by music.[51] He advocated that music could alleviate prenatal illness and even help the unborn child. His reason for this was that music's inherent simplicity could aid in healing, and he noted a connection between specific parts of a composition and the mind's response to them.[52]

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[49] Bartel, *Musica Poetica*, 37.
[50] Margaret Ann Rorke, "Music Therapy in the Age of Enlightenment," *Journal of Music Therapy* 38, no. 1 (2001): 67, doi:10.1093/jmt/38.1.66.
[51] Ibid., 69.
[52] Ibid., 72.

Although some music scholars attest that the Doctrine of Affections is not an example of Enlightened thought because of its association with church music and the music of J. S. Bach, the Doctrine of Affections is certainly an example of Enlightened thought due to its scientific foundations, its effects on musical composition in the baroque era, and its effects on the understandings of the human body. Though the idea had been understood for centuries dating back to the Renaissance, the practice was not named or manipulated until the late baroque era, most notably in the works of Mattheson, Rameau, and C. P. E Bach. This kind of thinking coincided with revolutions in music theory that shaped how modern scholars both understand music and compose it. This higher-level study of music and the body would also lead to a precursor of music therapy which is, today, highly useful in the medical and scientific community. The Doctrine of Affections is, therefore, a highly valuable part of our understanding of music theory and its repercussions on music today.

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