

# **Music and Mood Regulation: A Historical Enquiry into Individual Differences and Musical Prescriptions through the Ages**

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## **Abstract**

*In modern times, the use of music in the fields of health and mental health is becoming mainstream. Its application is of interest in both the treatment of mood disorders such as depression and in healthcare settings such as cancer wards or palliative care. However, this powerful effect is by no means a new concept, with music being used for mood regulation purposes since at least the time of the ancient Greeks. In fact, it was only during the 18<sup>th</sup> century with the dichotomy between the arts and sciences that occurred, that music became regarded as of less interest to health scientists. This paper investigates historical literature on the use of music in mood regulation from ancient times until today, drawing on a narrative synthesis of historical reports in order to demonstrate the various mechanisms and types of music that were believed to be involved in its power to influence moods. It is argued that while individual music therapists in clinical practice continually consider individual differences and the potential for music to have a negative impact on mood, these issues are rarely considered in empirical studies on music and mood.*

**Key words:** Mood regulation, individual differences, music therapy, harmony of spheres, doctrine of ethos, humours

Today, most music lovers would instinctively agree that music has a power to alter our moods, at times helping us relax or to enjoy a strangely pleasant state of melancholy, at other times driving us to exhilarating heights of joy. Indeed mood regulation is recognised as a core aim of current music therapeutic practice (Barrera, Rykov, & Doyle, 2002; Cassileth, Vickers, Lucanne, & Magill, 2003; Magee & Davidson, 2002; McKinney, Antonie, Kumar, Tims, & McCabe, 1997). Over the past 15 years in the Western cultures of the USA, Europe and Australasia, music for mood regulation has also become much more common in a broad range of health and mental health contexts (Mitchell & MacDonald, 2012; Pothoulaki, MacDonald, & Flowers, 2012).

The use of music to influence emotional states is not a recent concept. Historical sources reveal that the relationship between music, mood, affect and mood-regulation are concepts that were understood many centuries ago. In fact it wasn't until the scientific revolution of the 17<sup>th</sup> and 18<sup>th</sup> centuries - when science became focused on the idea of 'empirical' evidence and statistics and the worlds of science and the arts became separated - that the usefulness of music to alter mental states was forgotten or ignored and a disassociation between music and mental life occurred (Wigram, Pedersen, & Bonde, 2002). The fact that music has been associated with mood regulation for so long attests to its power to influence human emotions.

As researchers within a centre investigating the history of emotions, the current authors aim to investigate how historical understandings of emotion can inform contemporary perspectives. The purpose of this paper is to explore concepts of human mood regulation and whether these have remained constant or have changed over time in different historical contexts. This paper will therefore begin by clarifying its key terms. It will then outline some of the key beliefs and practices to have appeared throughout history, especially about the ways music could be used to influence moods. It will be demonstrated that the popularity of music as a treatment for mood disorders has waxed and waned, despite there having been firm advocates of its power to alter moods from ancient times until today. We will also argue that scholars in preceding centuries have demonstrated an awareness of the potential for music to have a *negative* influence on moods that contemporary research and practice benefit from observing.

## **Key Terms**

*Emotional responses* to music may be immediate, even instinctive (Juslin & Västfjall, 2008). While difficult to distinguish from emotion, *mood* is often understood as being more diffuse and global than emotions as well as more enduring (Isen, 1984; Morris & Reilly, 1987; Swinyard, 1983). Berrios (1985) described mood as providing a “sort of background feeling tone” (p. 747). Moods can be affected by immediate emotional responses (Pieters & van Raaij, 1988).

*Mood disorders* are psychiatric conditions characterized by abnormalities of emotional state and impaired capacity to successfully regulate one’s own mood. They may be characterized by severe or prolonged mood states that disrupt daily functioning (*Dorland’s Medical Dictionary*, 2007).

The definitions given above are contemporary understandings. However, meanings of terms and words change over time (Aitchison, 2001), and the historical sources examined in this paper did not always use the specific terms we have defined. However, narrative context enabled us to determine when passages within the literature were relevant to mood regulation. For example, much interest in the use of music in some centuries was related to the treatment of *melancholia*. ‘Melancholia’, a term coined by Hippocrates referred to a condition where a person suffered fear or distress for an ongoing period (Lewis, 1934). Today, the condition would likely be recognized as depression or anxiety, although it has taken on different meanings over history. Hippocrates also introduced the term *mania* (or ‘frenzy’), and although this term has also been used in various ways in history, it too was a mood disorder for which music was often recommended as treatment. Therefore, in this paper we will consider examples of music being used to create specific emotional states, to alter moods and to treat mood disorders, as all being relevant to the concept of mood regulation.

## **Methodology**

Our approach in this paper differs from a contemporary systematic review in that its purpose was to consider historical beliefs and theories rather than to synthesise results of clinical studies and interventions. The process used resembled the techniques of narrative synthesis, drawing on principles of historical comparative analysis. Narrative synthesis is a

described as an approach to the synthesis of evidence that relies primarily on the use of words and text to ‘tell the story’ of the literature that has been reviewed (Popay et al., 2006). It is therefore a method applicable to a wide range of questions not just those relating to the effectiveness of particular interventions.

Historical comparative analysis is a method used in social science research which is defined as having “a concern with causal analysis, an emphasis on processes over time, and the use of systematic contextualized comparison” (Mahoney & Rueschemeyer, 2003, p. 6). Although the purpose of our study does not completely fit this description, it was decided to draw upon some of the methodological principles of this tradition, given the historical nature of our investigation.

## **Procedures Used**

**Identifying the literature for analysis.** The first step in our investigation was to undertake a comprehensive search of online databases such as Informit, Ingenta Connect, and JSTOR for any mention however brief, of the use of music throughout history to regulate mood, to manipulate emotions, or to treat mood disorders. Any beliefs, theories, anecdotes, texts, or historical figures that were mentioned were noted and then an effort was made to trace the information back to its original source by conducting further searches of online databases. Any information relating to music and mood regulation prior to the twentieth century was considered relevant.

Although the focus was on European sources, information relating to other cultural empires was also noted for comparative and contextual purposes. Given that the beliefs of the ancient Greeks formed the foundation of many of the concepts to be found in later eras of European history, this was the starting point for our search (Cook, 1981).

While primary sources were of principal interest, secondary sources were also reviewed in line with the methods of historical comparative analysis. This was done because of their potential to help situate the primary texts within their historical context and to determine how the beliefs/theories found within the primary sources had shaped the views of future theorists (Mahoney & Rueschemeyer, 2003). In addition, where the primary texts of some key figures were not accessible, secondary sources were used as evidence of their content. Texts which merely contained

repeats of earlier beliefs without any further development of ideas were omitted from further consideration.

Quality of the literature to be used was assessed in several ways. In the case of primary sources, evidence of the historicity of the texts was gleaned from historians who have studied the texts in detail. It was not considered necessary to ascertain the veracity of anecdotes contained in those texts, as such anecdotes provide evidence as to the beliefs and theories held at the time, whether the events described actually occurred or not. In the case of secondary sources, quality was assessed according to the scholarship displayed in their writings as well as the frequency with which they were cited by other scholars.

A total of 28 primary sources were identified as containing relevant information (see Table 1). The majority were medical or philosophical texts or treatises on music theory, either discussing the theories regarding music's power or recommending music as treatment for emotional conditions. The works cited in this paper represent only a sample of the texts analysed.

**Organising the Data.** The second step in the process was to organize the information collected chronologically and to group it according to historical periods. A preliminary synthesis of key theories and beliefs in each period as to music and mood regulation was then formulated.

**Data Analysis.** Data from both primary and secondary sources were coded according to the key theories and ideas that had been identified within each time period (see Table 2). Thematic analysis was then undertaken in order to search for patterns of thinking and recurrent concepts within these key theories (Arai, Britten, Roberts, Petticrew, & Sowden, 2007). A final synthesis of findings was then developed involving both an understanding of how music and mood regulation were viewed in the key time periods investigated and a comparison of that with contemporary perspectives.

**Table 1**  
*Primary sources explored in this analysis*

Author	Text	Date of Writing or Publication (if known)	Type of Work
Plato	<i>Republic</i>	360 BCE	Philosophical

	<i>Poetics</i>		
Iamblichus	<i>De Vita Pythagorica</i>		Historical/Philosophical
Galen	<i>On Temperament; De Pulsibus</i>		Medical
Celsus	<i>De Medicina</i>	b. 47 BC	Medical
Cicero	<i>De Re Publica</i>	51 BC	Political
Boethius	<i>De Institutione Musica</i>	6 <sup>th</sup> Century AD	Music/Medical
Cassiodorus	<i>Variae Epistolae</i>	537 AD	Correspondence
Martianus	<i>De nuptiis Philologiae et Mercurii</i>	5 <sup>th</sup> Century AD	Philosophical
Capella			
Hildegard of Bingen	<i>Physica; Causae et curae</i>	1150 AD	Medical
Peter of Abano	<i>Conciliator Differentiarum quae inter Philosophons et Medicos Versantur</i>	13 <sup>th</sup> Century; published 1472	Medical
Johannes Tinctoris	<i>Complexus effectuum musices</i>	ca. 1474-75	Music Theory
Gentile da Foligno	<i>Primus Avicenna Canon cum argurissima Gentilis exposition</i>	1477	Medical
Jacopo da Forli	<i>Expositio et queastiones in primum Canonem Avicennae,</i>	1480	Medical
William of Auvergne	<i>De Universo</i>	1230s	Philosophical
Bartholomeus Anglicus	<i>De Proprietatibus Rerum</i>	1240	Compendium
Ramos de Pareja	<i>Musica Practica</i>	1482	Music Theory
Marsilio Ficino	<i>De Vita Libri Tres; De vita coelitus comparanda</i>	1489	Philosophical
Robert Burton	<i>Anatomy of Melancholy</i>	1621	Medical/Psychological
Athanasius Kircher	<i>Musurgia Universalis</i>	1650	Music Theory
Richard Browne	<i>Medicina Musica, or a Mechanical Essay on the Effects of Singing, Musick and Dancing</i>	1729	Medical
Richard Brocklesby	<i>Reflections on Ancient and Modern Music with the Application to the Cure of Disease</i>	1749	Medical
Florence Nightingale	<i>Notes on Nursing: What It Is, and What It Is Not</i>	1859	Medical/Nursing
William Pargeter	<i>Observations on Maniacal Disorders</i>	1792	Psychological

## Summary of the Findings According to Time Period

### Ancient Cultures

In Western culture, belief in the power of music to affect mood and emotions can be traced to the ancient Greek philosophers. Pythagoras and his followers (see Figure 1) believed that the planets vibrated in the same frequencies and with the same ratios as the harmonics of notes (Aristotle, *On the Heavens*, Book II, Part 9)<sup>5</sup>. This correlation between astronomical and musical proportions led to a philosophy known as ‘harmony of the spheres’, a belief that the heavenly bodies in motion produced a series of tones, a kind of scale (David, 1951). Pythagoras also believed that different musical modes<sup>6</sup> or scales could influence mood in particular ways. He is said to have developed certain melodies to be used in cases of despondency and others to counteract anger (Iamblichus, 1999).

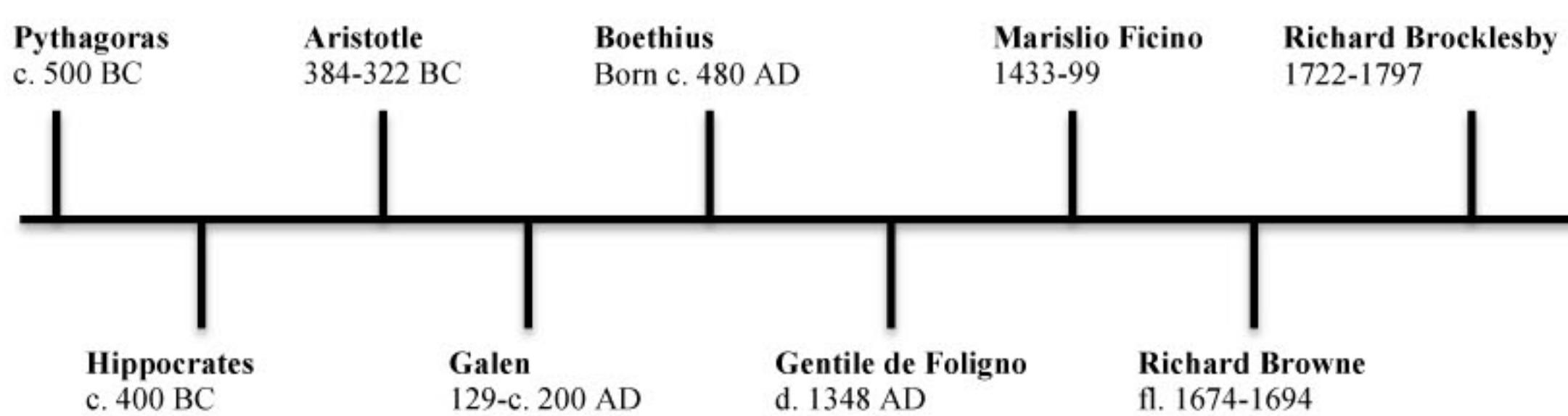


Figure 5  
Timeline of key figures in history of music and mood regulation

Another dominant theory of the period was the ‘ethos’ doctrine (Rorke, 2001; Wigram et al., 2002). This was the belief that *harmonias* (one-line melody) and modes each had a special ‘ethos’ or character and particular properties which would influence mood in certain ways (David, 1951). In a passage in his *Republic* (Book III), Plato relates a dialogue between his brother Glaucon and Socrates in which Socrates encouraged the use of particular musical modes to inspire men to bravery, while calling other modes ‘relaxed’, encouraging drunkenness, softness and indolence.

Aristotle (384-322 BC) also referred to the doctrine of ethos. He described the way a person’s ‘very soul’ could be altered by listening to

<sup>5</sup> No known texts by Pythagoras survive. His teachings are known through the works of his followers.

music and also the fact that *harmonias* differed greatly from each other, thus affecting the listener differently. Rhythms, he said, have the same effect: “some fix the disposition, others occasion a change in it; some act more violently, others more liberally”. (*Politics*, Book VIII, Chapter V). Interestingly, Aristotle also commented on the effect of individual differences on the cathartic value of music. He argued that people differ both in the extent to which they experience emotions that will need purging, and the extent to which music will move them emotionally, allowing them to vent their negative emotions. He wrote:

For feelings such as pity and fear, or again, enthusiasm, exist very strongly in some souls, and have more or less influence over all. Some persons fall into a religious frenzy, whom we see as a result of the sacred melodies – when they have used the melodies that excite the soul to mystic frenzy – restored as though they had found healing and purgation. Those who are influenced by pity or fear, and every emotional nature, must have a like experience, and others in so far as each is susceptible to such emotions, and all are in a manner purged and their souls lightened and delighted. The purgative melodies likewise give an innocent pleasure to mankind (Book VIII, Section VII).

Another medical theory of the time was the ‘Doctrine of the Humours’, which was in circulation around the time of Hippocrates (c.400 BC). According to that theory, mental health reflected the balance or imbalance of four bodily fluids or ‘humours’: blood, phlegm, yellow bile and black bile. Music was considered to be capable of restoring the balance between the humours (Wigram et al., 2002). Again the effects were attributed to the modes and their connection to the planets (Godwin, 1993).

Galen (or Galenus), the second century Greek philosopher proposed the categorization of personalities according to humoural imbalances as either phlegmatic, choleric, sanguine or melancholy (*On Temperaments*). Galen also wrote about music being inherent in the pulse (*De Pulsibus*). These two ideas were to further influence theories about music in mood regulation in the following centuries.

Thus, although theories differed, a commonality amongst ancient scholars at the dawn of Western civilisation was the belief that particular music could influence moods in specific directions. Mode and rhythm appear to be the most commonly cited features of the music with the power

psychological insights that are of relevance to music therapy today, such as the importance of considering the temperament of the patient and the usefulness of music in enabling catharsis.

### **Medieval/ Middle Ages/Dark Ages**

This was an era when Christianity and the liturgy were spreading, thus influencing the development of both music and the theory surrounding it. The ancient Greek ideas about ‘the music of the spheres’ were applied to newer Christian thinking and were influenced by Egyptian and Arabic philosophy, becoming known as neo-platonism (Gouk, 2004). However, there was less interest in the Greek and Roman concept of music as of therapeutic value in the early years of the Dark Ages. The primary interest of the scholars of the time was the mathematics relating to pitch (Bower, 2002). Nevertheless, its use as a mood regulator is still in evidence amongst some physicians.

Two of the most important medieval writers on the subject of music and its influence on mood, were Boethius (born c. 480 AD) and the Roman statesman and writer Cassiodorus (480-573). They were largely responsible for the transmission of the theories of Pythagoras, Plato and Aristotle. The treatise by Boethius *De institutione musica* was an important university text especially in medicine, which in some Italian universities was part of the ‘faculty of arts and medicine’ (Cosman, 1978). In it Boethius related how Pythagoras calmed a young man who had become upset by the sound of the Phrygian mode. Though the young man had good reason to be upset as his ‘harlot’ was found in the house of another man, the tale focuses on the state of ‘frenzy’ that he experienced as a result of listening to a flautist playing in the Phrygian mode. The tale recounted that the man only began to respond to reason when the mode of the music was changed to the slow and rhythmic Spondaic mode (Book I, Part 1).

Boethius, drawing on the earlier philosophies of the harmonies of the spheres, divided music into several categories. *Musica mundana* was the heavenly music of the motion of the spheres. Its reflection was found in *musica humana*, the rhythms and cycles of the human body. At the bottom of the hierarchy was *musica instrumentis* which was the music made by humans with the instruments of their creation. Thus humanity could vibrate in harmony with the celestial bodies if their bodies were balanced and ‘in tune’.

Cassiodorus gave an evocative description of the value of music to influence moods in a letter to Boethius (first published c. 538) in which he requested assistance in finding a harp player for Clovis, King of the Franks. In the letter he referred to the music of the spheres and talked about how music can change the heart. He wrote: “Harmful melancholy he turns to pleasure; he weakens swelling rage; he makes bloodthirsty cruelty kindly, arouses sleepy sloth from its torpor, restores to the sleepless their wholesome rest, recalls lust-corrupted chastity to its moral resolve, and heals boredom of spirit which is always the enemy of good thoughts” (Cassiodorus, 1886, p. 24).

In the fifth century Martianus Capella reported the cure of the mentally ill by music (Paul, 1958). His work *De nuptiis Philologiae et Mercurii* (On the Marriage of Philology and Mercury) was influential for almost all of the medieval period (LeMoine, 1972), and was important in ensuring the survival of the Pythagorean ideas about the harmony of the spheres through into the Renaissance (Bower, 2002).

In the eighth and ninth centuries during the course of his conquests, Emperor Charlemagne acquired manuscripts including those of Martinaus Capella and Boethius (Bower, 2002). These began to be copied and dispersed throughout the Empire, resulting in a revival in interest in Pythagorean ideas amongst monastic scholars. With the founding of universities following this, there was a returning interest in the teachings of Galen amongst medical practitioners. Physicians were encouraged to have a liberal education in the arts including music in order to enhance their understanding of the human rhythms and pulse (Bower, 2002).

Hildegard of Bingen (c.1098–1179) for example, wrote two medical treatises. In these texts Hildegard did not specifically mention music as a treatment. However, melancholia is described as having come into existence when man was first banished from Eden and severed from the heavenly choirs with which he had until then, sung in harmony. She claims that music came into being through the prophets, which enabled humans to once again sing with joy. For Hildegard, therefore, melancholy was a spiritual illness, and music, a psychic force capable of countering it (Callahan, 2000).

Medieval physicians who wrote about the influence of music on the pulse include Peter of Abano (1257 – 1315). He claimed that music was of great importance to both general health and mental health and that

application of rhythmic modes,<sup>7</sup> recommending particular modes to increase a sluggish pulse or adjust a rapid or erratic one (Callahan, 2000). According to Gentile da Foligno (d. 1348), an Italian professor and doctor, both musical consonance and musical mathematical proportions were to be found within the pulse. He argued that high and low pitches corresponded to strength or weakness in the pulse, while the speed of the pulse corresponded to the measuring of time in music (*Primus Avicenna Canon cum argutissima Gentilis exposition*, cited in Siraisi, 1975).

Other medieval writers directly discussed the influence of music on depression or melancholy. William of Auvergne, a French priest who served as Bishop of Paris from 1228 to 1249, dedicated a chapter to music in his treatise. While William disagrees with Plato's explanation of music's healing powers, he does agree with him as to its therapeutic value describing its usefulness in treating insanity, melancholia and other mental disturbances (Paul, 1958). Similarly, Franciscan monk Bartholomeus Anglicus (ca. 1203-1272) describes a condition similar to depression, suggesting that music would be of assistance in treating it (Paul, 1958). He was likely largely influenced by Aristotle (Se Boyar, 1920).

While some medieval practitioners used music for treating melancholic moods, others were concerned with counteracting mania or excessive energy and joy. Gentile da Foligno, for example, recommended musical potions against "infatuation by joy" (Cosman, 1978, p. 3). An interesting occurrence during this time was the curious phenomenon of 'dancing mania', or tarantism, which swept Europe following the plague in 1374. Large groups of people, sometimes thousands, would dance uncontrollably in the streets until they collapsed from exhaustion. Music was found to be one of the best ways of controlling it, and authorities in many towns ordered soft, slow soothing music to be played in the streets and market places until the strange contagion was arrested (Cook, 1981).

Thus for some centuries in the medieval period, while the focus of some was on the mathematics of music, for physicians, the power of music to influence mood and health continued to be significant. We see the continual evolution of ancient Greek ideas including the music of the spheres, music to balance specific humoral temperaments and to regulate

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<sup>7</sup> Rhythmic modes were a medieval concept in which the relative duration of notes were determined by their position with a rhythmic series or mode (Roesner, 2006). There

the pulse. The choice of both the correct melodic mode and rhythmic mode to create the desired balance was considered important. Once again, therefore, physicians recognised the importance of tailoring the musical prescription to the individual.

Table 2

### *Mechanisms by which music was believed to influence moods*

Time Period	Source	Believed Mechanism
Ancient	Pythagoras	Harmony of spheres
	Socrates & Plato	Ethos doctrine
	Hippocrates & Pythagoras	Balance of humours achieved by power of modes
	Aristotle	Catharsis; purgative effect
	Galen	Regulating the pulse
	Various physicians	Balancing the humoural temperament.
Medieval	Neo-platonists	Cosmic harmony
	Neo-platonists; Boethius	Sympathetic vibrations between <i>musica mundana</i> and <i>musica humana</i>
	Hildegard of Bingen	Music as a psychic force to counter the effects of Edenic sin
	Gentile de Foligno and Jacopo da Forli	Rhythmic modes to harmonise pulse to one's nature
	Ramis de Pareja; Marsilio Ficino	Planetary influence of modes in balancing humours
Classical	Richard Burton	Catharsis
	Richard Browne	Increasing the flow of 'animal spirits' and affecting bodily vibrations.
	Brocklesby	Balancing the passions

Renaissance

Renaissance scholars continuing in the tradition of their medieval counterparts, especially in Italy, also demonstrated the influence of the ancient Greeks. A direct line can be traced from the works of Boethius to some of the major writers on music of this period such as Marsilio Ficino. Within this period a further synthesis was gradually achieved between the various threads of theory seen in previous centuries, fusing Pythagorean cosmology with Galenic medicine and monastic writings on church modes (Callahan, 2000).

This synthesis is evident in the works of Ramos de Pareja. In his

influence of the modes on the humours also drawing upon Islamic neoplatonist writings attributing the power of the modes to particular planets with which they corresponded (Ramos de Pareja, 1993). He also gave specific musical prescriptions for altering certain mood states caused by humoural imbalances.

Another interesting figure in the history of music and mood regulation is the Italian priest, theologian, astrologer and physician, Marsilio Ficino (1433-99). His work *De vita libri tres* (*Three Books on Life*) (1489) suggested how music might be used to deliberately manipulate the emotions, seeking to unite Platonism with Christianity (Leach, 2006). Ficino does not prescribe the use of specific modes, but does give detailed descriptions of the musical characteristics of each planet (Callahan, 2000). He also offers a complex set of techniques for creating songs to attract beneficial planetary emanations (Gouk, 2004). Ficino believed that by causing the air to vibrate, sound could connect directly with the ear and thus convey those vibrations to the soul and spirit (Gouk, 2004). Therefore carefully selected music was the most effective means to obtain bodily and spiritual balance and harmony (Wigram et al., 2002). In summary he said: “From tones chosen by the rule of stars, and then combined in accordance with the stars’ mutual correspondences, a sort of common form can be made, and in this a certain celestial virtue will arise” (cited in Wells, 1985, p. 515). Ficino’s astrological model lasted until the end of the eighteenth century when it was superseded by neurological and mechanical theories (Wigram et al., 2002).

Thus in the Renaissance we see a continuation in the merging of ancient Greek astrological theories pertaining to music, with Galenic theories about humoural temperaments and further theories of composition and aesthetics.

### **Baroque, Classicism and the Enlightenment**

The 18<sup>th</sup> century saw important changes in the approach of theorists towards the usefulness of music in mood regulation and the treatment of melancholy. This period saw a great deal more focus upon experimentation and observation. It also saw a revival of the ideas of antiquity regarding the representation of specific emotions using particular tonalities, rhythms or motifs in the form of the ‘doctrine of affections’ (or ‘doctrine of the passions’). With this increased focus among composers on the power of

the realm of art rather than being a science equal to mathematics and medicine. This viewpoint was strengthened by the increasing influence of Descartes' theory of the duality of mind and body (Heller, 1987). Much of the belief of previous centuries was categorised as superstition (Gouk, 2004). Thus as interest in music and emotion was growing amongst composers, it was becoming of less interest in the world of science.

However, this change motivated some physicians and music theorists to begin more systematic empirical studies of the effects of music on mood, which became the basis of modern music therapy. The 'doctrine of the passions' provided a basis for medical theorists to begin to investigate music's effects on the 'passions' in more detail.

Much writing in this period about the use of music to treat melancholia was based on the work of Ficino (Gouk, 2004). Dr. Robert Burton was one of the first medical practitioners of the period to be come interested in the effect of music upon melancholy, although in his writings, melancholy was a broad concept covering more than just depression (Brady & Haapala, 2003). His book *Anatomy of Melancholy* (1621) was written from his own experiences with the condition (Cook, 1981). In it he recommended music as a "sovereign remedy against despair and melancholy" (Burton, 1857, p. 335). Burton demonstrated an understanding of the varying influences music could have depending on the individual. He argues that in some cases music can "make such melancholy persons mad" citing Plato's warning that music be carefully used "lest one fire increase another" (p. 336). On the other hand, referring to Aristotle's doctrine of catharsis, Burton argues:

Many men are melancholy by hearing music, but it is a pleasing melancholy that is causeth, and therefore to such as are discontent, in woe, fear, sorrow or dejected, it is a most present remedy: it expels cares, alters their grieved minds and easeth in an instant (p. 336).

Richard Browne also wrote for readers with tendencies towards melancholy. Music was recommended as a cure for the spleen (a condition similar to melancholy), vapors, melancholy and madness. It was particularly designed to appeal to women who were considered most vulnerable to melancholy. Browne also discussed the causes of 'spleen', arguing that it was caused by malfunctions in the secretion of the 'animal spirits'. Music could be used to treat this because it invigorated and increased flow of the spirits in the body. Based on Newtonian principles, he

ear to the auditory nerve thus affecting the very vibrations of the body (Kennaway, 2010).

Another medical practitioner Richard Brocklesby (2010), discussed at length how music could affect the mind. The most violent passions, he argued, can be allayed by music. He particularly recommended music for use with disorders arising from excessive passions such as anger, over-enthusiasm in religion or love, and panic or fear. Both Browne and Brocklesby noted that the same music could have differing effects on different people and that the wrong choice of music could actually worsen symptoms in some conditions (Gouk, 2004).

One of the most famous accounts of the use of music for mood regulation in this period is the story of the male soprano Farinelli who was engaged to perform as treatment for the depression of Philip V, King of Spain (Kamen, 2001; Rorke, 2001). Princess Izabella Czartoryska of Poland similarly claimed to have been cured of melancholia by the power of music. After Benjamin Franklin invented his glass harmonica in 1761 he played it for the princess who later wrote in a letter that this was the beginning of her recovery (Gallo & Finger, 2000). Franz Anton Mesmer, who believed that ‘animal magnetism’ was an actual fluid which could be strengthened by sound, also used the glass harmonica in his treatment sessions (Gallo & Finger, 2000). Music was also reputedly used to treat the depression of George II of England and King Ludwig of Bavaria (Cook, 1981).

Eighteenth century Englishman, William Pargeter (1792) systematically studied the effect of music on mania and argued that compositions needed to be carefully selected to correspond with the particular sufferings of the patient. He is quoted as saying: “a considerable knowledge in music will be requisite to select those compositions and instruments and that arrangement of the instrumental parts as may exactly correspond with the *pathos animi*... this must be regulated by the feelings of the patient” (cited in Mitchell & Zanker, p. 737).

During the 1800s the use of music in the treatment of people in asylums was increasingly popular (Blumer, 1892; Rorke, 2001). For example, in 1890, Dr. W. T. Weimner had piano music played to 1400 mentally ill women and found that slow music was able to soothe even the most disturbed patients (Cook & Walter, 2005). Florence Nightingale (2010) also spoke about the benefits of music in improving the state of

mind of the sick, describing certain types of music that could be beneficial and others that could actually damage the sick.

### **The Thread Throughout History**

As can be seen from the review above, music and its power to treat psychological conditions such as melancholy or depression have had inconsistent popularity amongst scientific thinkers throughout the centuries. However, despite some philosophical dissenters, the majority of musicians and music lovers throughout the ages appear to have never wavered in the conviction that music could move emotions and alter moods. Whole traditions, such as blues music in jazz, have evolved in order to exorcise melancholy (Brettingham-Smith, 1993).

Viewpoints as to the mechanisms involved in music's power to shape moods, have differed over the centuries (see Table 2). Beliefs ranged from music's power to exert planetary energies, to its capacity to balance bodily fluids and regulate the pulse. Some theories, such as Aristotle's discussion of catharsis were amazingly astute given the beliefs common in the period and have been borne out by current research (Garrido & Schubert, 2011, 2013). However, from the ancient Greeks such as Pythagoras and Plato, to Italian Renaissance writers such as Ramos de Pareja and Marsilio Ficino, the common thread has been the link between music and its mood-altering qualities. Many of the theorists mentioned in this article, were also composers, and their writings inevitably affected their compositions. Thus the very course of music has been shaped by this underlying belief. Interestingly, at the very point in music history where composers became most interested in the ways music can mimic and evoke emotion, science became less interested. Ultimately, this stimulated a more systematic empirical approach by some physicians into music's influence over mental and emotional states.

In recent decades, ancient ideas regarding the connection of mind and body have once again become part of mainstream thinking (Wigram & Saperston, 1995). Music and mood regulation have again become connected in the scientific domain, with a number of systematic studies being conducted to look at the power of music to influence the mind and emotions in day-to-day life. However, although music was a recommended treatment for melancholia and other mood disorders in the historical periods reviewed in this paper, there is a notable lack of systematic study of

the effectiveness of music therapy for treating depression in contemporary literature (Maratos, Gold, Wang and Crawford, (2008).

Theorists have not always agreed on the type of music that would have the most desirable effect upon mood either. At times modes were believed to be of crucial influence, while at other times rhythm and vibration were the core concepts. However, it is informative to trace the understanding of the great thinkers that music was not just of general therapeutic value to all people. Rather, from Aristotle to Pargeter, it was understood that music could have differing effects upon individuals depending on both their temperament and the emotional state requiring treatment. This was the very basis of music's application to the doctrine of the humours, although not always recognized by researchers today. Interestingly, there is some connection between Galen's model of humoural temperament and the modern extraversion-neuroticism typology of personality (Eysenck, 1964; Stelmack & Stalikas, 1991), and yet personality is seldom considered in contemporary research when evaluating the effectiveness or otherwise of various uses of music for mood regulation.

In discussing music as therapy, Kemper and Danhauer (2005) agreed that music may have different effects depending on listener characteristics such as age, culture, medical conditions, musical aptitude and experience. Montello and Coons (1999) similarly recommended choosing one form of music therapy over another based on personality types as well as clinical diagnosis. However, with some notable exceptions (Erkkila et al., 2011; Lacourse, Claes, & Villeneuve, 2001; Miranda & Gaudrea, 2011; Authors, 2011, 2012), there appears to be a tendency on the part of researchers to focus on the positive aspects of musical engagement with minimal research considering the detrimental effect that some kinds of music may have upon mood in some individuals. For example, research on the effects of rap music has yielded conflicting results with some authors reporting positive effects on mood from engagement in rap music (Baker & Homan, 2007; Authors, 2011, 2012) and others reporting negative associations (Doak, 2003). The reasons for such conflicting results could arguably be attributed to the differing personalities and mood states of the participants. However, researchers rarely consider the influence of such factors, unlike their counterparts from centuries past. This paper has attempted to demonstrate that theories on music and mood regulation can continue to be informed by

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## **A response to Garrido & Davidson's article, including a tribute to Denise Grocke** (AJMT 2013 Vol 24)

**By Helen Odell-Miller** Professor of Music Therapy at Anglia Ruskin University and an Honorary clinical research specialist at Cambridge and Peterborough Mental Health Foundation Trust UK.

This article is extremely wide ranging, laying out research on music and mood regulation through a systematic literature review and narrative research perspective, crossing boundaries of music and medicine, music and health, music therapy, religious practice, musicology, psychology, and education. Positively stating that in modern times the use of music in the fields of health and mental health is becoming mainstream, the article might lead us to question why ‘becoming mainstream’ has taken so long! The article also provides very important historical information to music therapists about the serious practice of music in health in ancient times, surprisingly mirroring parallel debates in current practice about music and health, science, therapy, the arts and spirituality.

Research by a wealth of philosophers, scientists, medical practitioners, musicians and other practitioners who used music for mood regulation and who developed complex systems for this, is reported. The summary of musical studies related to health ranges from Pythagoras (c.500BC) to Richard Browne (fl. 1674-1694) and makes encouraging reading on the one hand, but on the other, leads us to ask questions about why modern day music therapy research is described as rather ‘minimal’, particularly regarding discussion about the detrimental effect that some kinds of music may have on individuals. For example mode and rhythm appear to be the most commonly cited features of the music with the power