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The Not So Silent Planets: The Medieval and Renaissance Concept of *Musica Mundana*

The idea of *musica mundana* does not seem to hold a high place in musicians' or philosophers' imaginations as it once did. This is a topic that is only briefly mentioned in music history classes around the world and is generally viewed as a myth with no relevance to modern musicians. I would like to present the argument that *musica mundana* should be understood as a serious undertaking to explain the order of the universe in the medieval and renaissance periods and has important implications of how we understand the music in the past and present times. To do this we will look at the mindset of the medieval and renaissance periods, the history of *musica mundana*, and its importance to contemporary musicians.

Musica mundana was the way philosophers and musicians understood the role of music. The overarching role of music was not to provide pleasure or amusement, but to explain the order of the universe from the heavenly bodies to our human ones. They connected the order of the universe to the pleasure that music provided. We derive pleasure from music because it reflects what is around us and what is in us. It is sometimes hard for contemporary musicians to understand *musica mundana* as actual music because this music traditionally doesn't make sound. *Musica mundana* is the silent organization of the planets and music, currently understood, is organized human sound. To understand *musica mundana* it is imperative to understand how the original authors of this idea thought of music as a system for organization.

For contemporary readers, it is easy to impress our own view of the world upon medieval ideas and concepts. We look inward to ourselves and our close surroundings to find the answers we seek; earth and people who inhabit it are very large in our current imaginations. In comparison, the medieval man saw the earth as insignificant. Movement earthward from any part of the universe was conceived

as movement downwards and lowly.¹ Therefore, *musica mundana* was a higher form of music than *musica instrumentalis*, or music made by instruments.

C.S. Lewis described the medieval man as “an organizer, a codifier, a man of system.”² He also stated that they were “literate people who had lost most of their books.”³ What he meant was that there were many gaps in collections of the classical writers. This is in contrast to the renaissance period when scholars recovered many ancient sources. The books that were available at the time included ancient Hebrew, Greek, Roman and early Christian works. Since these sources came from many different authors and time periods, there were contradictory ideas found in these works. But instead of declaring one authority right and another wrong, the medieval men tried to find an explanation which harmonized all the authorities.⁴

The thinkers and philosophers of the renaissance shared the desire of finding and implementing a perfect system of organization for the knowledge they had. While still striving for the same goal the renaissance man had added difficulties in his search for a unifying theory of the universe because of the increase amount of conflicting texts.

In Renaissance Europe, on the contrary, many thinkers harbored the ambition of implementing the perfect organization of knowledge, though pragmatic, notably alphabetical, arrangements were also widespread in certain contexts. During the Renaissance the difficulty of ordering knowledge was greatly exacerbated in almost every field by the massive influx of material to be included, stemming from newly discovered worlds and newly recovered ancient texts as well as newly printed texts of all kinds, and by concurrent social and cultural changes associated with the development of printing, a rapid growth in higher education, and shifting patterns of patronage and social mobility.⁵

¹C. S. Lewis and Walter Hooper, *Studies in Medieval and Renaissance Literature* (Cambridge [Eng.]: University Press, 1966), 49

² *Ibid.*, 44.

³ *Ibid.*

⁴ *Ibid.*, 45

⁵ James Hankins, *The Cambridge Companion to Renaissance Philosophy* (Cambridge, UK: Cambridge University Press, 2007), 287

It was this challenging search of finding order that brought forth two major philosophies of the medieval and renaissance periods: scholasticism and humanism. Scholasticism came to fruition during the medieval period and was a dominant philosophy in the European universities. It was a new system to find or make order out of chaos from the abundance of classic texts and authorities. Boethius is considered to be a forerunner of this philosophy, although most date the beginning of scholasticism near the end of the eleventh century.⁶

The ambition of this philosophy was to reorganize the traditional authorities into legal codes and textbooks. “The goal of the new education, as a great modern authority on canon law put it, was to create “harmony from dissonance”: to use the disparate authorities inherited from the past as a normative foundation for systematic sciences of law, theology and medicine. These sciences could then be used to bring order to state and society.”⁷

As the renaissance came about, a new philosophy became popular and a new culture was formed as a consequence. Humanism was the philosophy and it influenced how men saw themselves. Men no longer saw themselves as small objects that had no value worth intense study. The view of men started to turn inwards, away from the heavens. One of humanism’s goals was to improve the quality of human beings. The humanists claimed that the study of good literature would make people better, more virtuous, wiser, and eloquent.⁸

The fundamental assumption of all humanists, as of the Renaissance movement in general, was that the remains of classical antiquity constituted a great reservoir of excellence – literary, intellectual, artistic, and moral – to which debased and decadent modern times could turn in order to repair the damage wrought by the barbaric and corrupt *medium aevum* that had followed the fall of the Roman Empire.⁹

⁶James Hankins, *Renaissance Philosophy*, 33

⁷ *Ibid.*, 32

⁸ *Ibid.*, 33

⁹ *Ibid.*

Within these mindsets, outlooks, and philosophies is situated the idea of what music is and specifically the idea of *musica mundana*. *Musica mundana* (the music of the spheres) is the first part of a three-part dialogue of music. The other parts of the dialogue are *musica humana* (music of the human body) and *musica instrumentalis* (vocal and instrumental music). While understanding of the *musica mundana* changed and matured during the medieval and renaissance periods, the basic understanding of *musica mundana* is that it encompasses the order and harmony of the heavens. It is one attempt to find a unifying theory of everything.

The search for the unifying theory of everything is sometimes wrongly classified as a more modern search. The medieval and renaissance scholars also grappled with unifying theories of the universe. While the scientific method has provided the framework for the modern approach, music provided a similar framework for the scholars in the past. During the medieval period *musica mundana* was seen as the way creation worshiped God. While this harmony could not be heard, it had a large impact on how musicians understood *musica instrumentalis*.¹⁰

The beginning of the tradition of *musica mundana* is found in Plato's works.¹¹ Plato (ca. 423-347 B.C.) believed that the mind conceptualized objects in abstract; that reality exists in a world of abstract ideas and forms.¹² What we learned or understood through our physical senses could not be trusted. Knowledge, according to Plato did not change and separate from our perception of it. We could only come to know truth through pure reason. Music for Plato was a science of mathematical proportions; mathematics being one of the platonic forms. He was also greatly influenced by the Pythagorean philosophy. This philosophy "sought to explain the unity of cosmos by establishing a single principle

¹⁰ David S. Chamberlain, "Philosophy of Music in the Consolatio of Boethius" *Speculum*, Vol. 45, No.1 (Jan. 1970): 81 -82

¹¹ Claude V. Palisca, *Humanism in Italian Renaissance Musical Thought* (New Haven: Yale University Press, 1985): 161.

¹² Joseph Dyer, "The Place of Musica in Medieval Classifications of Knowledge" *The Journal of Musicology*, Vol. 24, No.1 (Winter 2007), 8

that lies at the root of all things and constitutes the original cause of Being.”¹³ Plato held that while the spheres made aural music, human beings could not hear because we have grown too accustomed to it.¹⁴ Later, philosophers did not think that the sphere did not make actual sounds, but rather represented in visual form the aural music.

Aristotle, a student of Plato, rejected the platonic forms and *musica mundana*.¹⁵ *Musica mundana* was not aural music nor was it a form that represented aural music. He believed that knowledge came through observation of the physical world. Abstract ideas, when they did exist, only did so because of their connection to the physical.¹⁶ According to Aristotle music had two components: mathematical proportions and physical sound.

The philosopher who had the most impact on the medieval understanding of music was Boethius (ca. 480-524 AD).¹⁷ The aim of his works “was precisely not to set up an either-or. Although he himself was at [the] bottom a Neo-Platonist, he expressly wanted to preserve both Plato and Aristotle.”¹⁸ He tried to balance the views of music by Plato and Aristotle. While he agreed with Aristotle that the senses are a basis for knowledge, he was wary of putting complete trust in them. In the area of music history he is known for his work *De institutione musica*, a work from a larger set of works on the knowledge of four *quadrivium* areas.¹⁹ From Boethius we received the three classifications of music: *musica mundana*, *musica humana*, and *musica instrumentalis*.

¹³ Günter Berghaus, “Neoplatonic and Pythagorean Notions of World Harmony and Unity and Their Influence on Renaissance Dance Theory.” *The Journal of the Society for Dance Research* Vol. 10, No. 2 (Autumn, 1992), 43-70

¹⁴ Carla Zecher, “Pagan Spirituality and Christian Passion: The Music of the Spheres in Sixteenth-Century French Cosmological Poetry” *French Forum*, Vol. 18, No. 3 (September 1993), 304

¹⁵ Joseph Dyer, “The Place of Musica,” 8

¹⁶ Ibid.

¹⁷ Ibid., 12-13

¹⁸ Josef Pieper, *Scholasticism: Personalities and Problems of Medieval Philosophy*. (New York: Pantheon Books, 1960), 29-30

¹⁹ Carla Bromber, “A Preliminary Study of the Origin of Music in Cinquecento Musical Treatises,” *International Review of the Aesthetics and Sociology of Music*, Vol. 41, No. 2 (December 2012), 163

After Boethius presented this classification of music, *musica mundana* and *musica humana* are not mentioned again in *De institutione musica* and it was thought that he never mentioned these subjects in any of his other works. But when we look at Boethius' last work, *De consolazione philosophiae*, it is infused with ideas about music. In this work *musica mundana* exists in three forms: the motions of the spheres, the binding of the elements, and the variation of the seasons.²⁰ For Boethius music was the only mathematical art that is related to morality as well as truth.²¹ He also thought that musical instruments should be built in a style that imitated the order of the world of *musica mundana* so as to continue the order.

Boethius, in *De consolatione Philosophiae*, reasons that *musica mundana* "serves Philosophy in both ethics and metaphysics: it teaches her [Philosophy] to apply remedies in fit order; it offers man a pattern of love and order by which to guide his own life; it demonstrates the existence and power of God; and it gives sure evidence of the goodness by which God governs the universe."²²

An important text of the medieval period was the commentary from Chalcidius, who translated the Plato's *Timaeus* from Greek into Latin. The *Timaeus*' main focus was material or substance, what it was, how to describe it and how to work in harmony with it. Although the sense of sight is highly regarded in this text as a tool for learning, music was still considered to have the ability to function as the visual arts. It was to make "profound, basic, philosophical concepts available to the senses." This text presents the material world and the human soul as containing musical elements. This is an important example of how philosophy and music were linked in the medieval imagination.

During the Medieval period the earth was still at the center of the universe. Next in line is the moon, Mercury, Venus, the Sun, Mars, Jupiter, Saturn, and then the stars. Because of *musica mundana*,

²⁰ David S. Chamberlain, "Philosophy of Music in the Consolatio of Boethius" *Speculum*, Vol. 45, No.1 (Jan. 1970), 81

²¹ *Ibid.*, 84

²² *Ibid.*, 90

each planet resided in a transparent sphere that revolved around the earth.²³ The earth was seen as the lowest place in the universe. The earth on the cosmic scale was seen as insignificant not only by scholars, but also by moralists and poets.²⁴

C.S. Lewis notes that the medieval man

did not think that the spaces he looked up at were silent, or dark or empty. Far from being silent, they were perpetually filled with sweet, immeasurable sound. The vast hollow spheres, turning each at its proper interval inside its superior, gave out a blended harmony.²⁵

It was during the mediaeval period that *musica mundana* was a physical reality; a reality that gave order to the heavens and by consequence to humans. As the time progressed to the renaissance, the idea of *musica mundana* morphed into two strands of thought, one where it was more of a physical reality and another where it was an abstract concept; it depended on the philosopher. To the contemporary reader the idea of *musica mundana* as a physical reality might sound absurd, but keep in mind the reason behind the idea: to be a system of order.

The works of Giorgio Anselmi (c. 1440-43 AD), a renaissance philosopher and theorist, imagined a more physically concrete *musica mundana*, which he renamed *harmonia celestis*.²⁶ Each sphere surrounding a planet had angels assigned to it. Each of these angels had a specific job.

On the innermost sphere, the earth, Anselmi places the Angels who proclaim to humanity the divine will. In the second or lunar orb are the special messengers, the Archangels; in the third, that of Mercury, are the angels called the Virtues, through who God reveals great miracles and portents; on the fourth, that of Venus, are the Powers (*Potestates*), who restrain the malignant spirits that threaten man and are capable of injuring him. The fifth, the sphere of the sun, holds the Principalities (*Principatus*), who serve God in governing his kingdom. The sixth, of Mars, hosts the Dominations (*Dominationes*), the army of militant angels, defenders of the righteous and opponents of the unjust on earth. The seventh is the order of the Thrones (*Throni*), who have their seat in the orb of Jove, and whose function is to transmit the decrees and laws of

²³ C. S. Lewis and Walter Hooper, *Studies*, 45

²⁴ C. S. Lewis and Walter Hooper, *Studies*, 46

²⁵ *Ibid.*, 52

²⁶ Claude V. Palisca, *Humanism*, 164.

God. The eighth order, the Cherubim, resides in the sphere of Saturn, and because of their proximity to the Supreme Wisdom, interpret it for the masses. The ninth host of angels are in the sphere of Uranus; they, the Seraphim, excel all others in wisdom, authority, and happiness and participate most intensely in the divine flame and love of God.²⁷

This was Anselmi's attempt to Christianize the *musica mundana*, in which God uses the spheres and the angels reside in them to protect and give order to the earth and its inhabitants. But he also thought the spheres had a practical side, that the movement of the heavens gave rise to three types of music: diatonic, chromatic, and enharmonic. Anselmi's importance does not stem directly from his own original approach to *musica mundana*, but on his influence on another renaissance philosopher: Franchino Gaffurius. It should be noted that Gaffurius carefully borrowed from Anselmi.²⁸

Franchino Gaffurius was not the kind of humanist who appreciated only ancient culture and who scorned medieval concepts. He displayed a remarkable catholicity of taste discernment in his studies, and this quality is reflected in the authors he cited in *Practica Musica*.²⁹ Other previous philosophers mentioned Gaffurius was influenced by Plato, Boethius, and Anselmi.

"One important component of ancient cosmology restored by Gaffurius is the role given to the Muses in planetary and earthly harmony."³⁰ The muses take on the role that the angels did under Anselmi's system. The muses were thought to bring harmony to the universe and the souls of men. For the frontispiece of *Practica Musicae* (1496) Gaffurius illustrates how the modes of music correspond to the planets and their muses.³¹ The Phrygian mode corresponded with the planet Mars and the Mixolydian mode corresponded with Saturn.

²⁷ Claude V. Palisca, *Humanism*, 164-165

²⁸ *Ibid.*, 166

²⁹ Clement A. Miler, "Gaffurius's 'Practica Musicae': Origin and Contents." *Musica Disciplina*, Vol. 22, (1968), 110

³⁰ Claude V. Palisca, *Humanism*, 170

³¹ James Haar, "The Frontispiece of Gaffurius's *Practica Musicae* (1496)" *Renaissance Quarterly*, Vol. 27, No. 1 (Spring, 1974), 12

While *musica mundana* was at times thought of as a more abstract concept, Gaffurius believed it was the very basis, along with *musica humana*, of music's power and purpose.³² In his understanding, since there was harmony of the cosmos and a harmony within the human body, we can "derive pleasure from music because it answers to the harmony within."³³ Philosophers found the harmony that links all three types of music together to an important aspect of *musica mundana*. Sometimes we can only understand one of these types by seeing a resemblance in another.

The next place the philosophy of *musica mundana* was to be in the popular imagination, which had the effect of decreasing its influence in the academic world. By the sixteenth century the idea of *musica mundana* was relegated as a tool for poets. French renaissance poets tried to balance between pagan ancient muses and Christian imagery.³⁴ A common subject for this genre was a specific quest that was amorous, scientific, or devotional, with the aim of reaching a mythical or religious destination. The main character, while on this journey, would stop at these celestial spheres where he could forget worldly cares and focus on a heavenly vision.³⁵

This change in direction from a serious philosophical discussion to being a poetic device came about for different reasons. The poets started to use *musica mundana* because it gave them credibility and prestige because of their understanding of the harmony of the universe for "a poet filled with the influx of divine furor could be expected to produce an exemplary song, whose profound power would be a direct function of its imitation of the music of the spheres."³⁶

As the increase use of *musica mundana* as a poetic device increased, its association with other myths increased. Philosophers grew disinterested, whether from this increase association with myths or the dominate philosophies of the day that turned man's attention inwards. *Musica mundana* soon

³² Claude V. Palisca, *Humanism*, 177

³³ Claude V. Palisca, *Humanism*, 177

³⁴ Carla Zecher, "Pagan Spirituality and Christian Passion", 297

³⁵ *Ibid.*, 298

³⁶ *Ibid.*

became relegated to the realm of fiction where it resides today, where it is a pretty bobble to be toyed with momentarily and then consigned to gather dust in the attic of the mind.

Although *musica mundana's* influence ended by the sixteenth century, we still see some influence like Holst's *The Planets, Op. 32* and even in Christian hymns like *This is My Father's World*. Plus, now that we have turned back some of our attention to the heavens and pointed our telescopes to the stars we have found out that planets do actually make noise. Radio waves have been picked up by NASA's satellites that originate from planets and stars. Although there has been no connection made from these radio waves to our human music, maybe in the future they will become a part of the music once again.

Even with these examples of left over influences we are left with a sense that *musica mundana* has nothing left to say for the 21st century musician. I would like to challenge this conviction. I would like to argue that *musica mundana* might very well help explain why we are moved and find pleasure in music. Could it be that the reason we enjoy music is because it reflects the order found in the universe and in ourselves?

Musica mundana was founded as a way to find order out of chaos. The philosophers had to assume there was an inherent order in the three types of music, in the same way scientists have to assume there is a form of logic so as to benefit from the study of the world. We gain comfort and pleasure from this order or logic. We assume the sun will rise in the eastern sky because of our experience of order of the universe, if this order was to disappear we would become frightened.

Western Music, in the modern sense, has its own order and logic. Consonance is restful and dissonance moves us onward. It is because of this order that composers can compose music fit for the occasion, whether it is for a parade, funeral, or a breath taking moment. It is this order and logic that resonates with us. When music loses this order and becomes purely random it loses its power to touch people, as some 20th century composers found out. Music has been referred to as a universal language.

Many musicians would be hard pressed for an answer to the question why this is. Each part of the world has its own distinct musical sounds and genres, but we still enjoy and are touch by each other's music, why? The tradition of *musica mundane* points to an answer – a connecting order.

In conclusion, we are not so different from the ancient, medieval or renaissance man. We still like order, whether it is visual or aural. This order is still found in the heavens, body, and aural music; the three types of music that philosophers have given. We can still learn from the past philosophers and musicians on why our music is important. Music is more than a commodity, entertainment, and plain sound; it is something much larger. The reason why we love the aural music is because it reflects the world around us and we are touched by music because it reminds us of something within ourselves. This should give us a pause for thought and a reason to keep making and listening to music.

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