

USING MUSIC WELL: REASSESSING PERCEPTION IN AUGUSTINE'S *DE MUSICA*

Augustine's treatise *On Music* (*De musica*) is one of the earliest examples of interdisciplinary engagement between Christian theology and music, but has received relatively little scholarly attention.¹ This is partially explained by the judgment that *De musica*'s treatment of both disciplines, while rigorous, is conventional and uninspired. As Jamie James writes in a popular history of the 'Music of the Spheres', *De musica* 'is not studied much nowadays, even by Augustinian specialists. The common wisdom about the work is that it is tedious and derivative'.² While James is certainly right that much of *De musica*'s dense prose draws on other musical and theological sources, it would be surprising if nothing new had been generated in the process. In this paper, we will attempt to identify unique features in Augustine's account through comparison with both Classical theories of musical perception and his earlier theological works. We will then turn to modern interpretations of *De musica*, using our conclusions to determine whether any unique features may have been consistently overlooked.

Physical and Rational in Grades of Virtue

Before considering *De musica*'s relationship to Classical music theory, we must place it within the context of Augustine's own theological development. While it is possible to approach this task in a number of ways, we will look specifically at his discussion of the grades of virtue in *De quantitate animae*, since this closely parallels the theological ascent, and its ethical conclusions, in *De musica*'s sixth book.³

Augustine inherits his understanding of virtue from Plotinus, who identifies a distinction between those virtues that can be directly

¹ There is, for example, no complete critical translation into English (although there is a translation from *Patrologia Latina* 32 by R. Catesby Taliaferro in *The Fathers of the Church* 4, 169–384 [Washington, DC: Catholic University of America Press, 1947]).

² Jamie James, *The Music of the Spheres* (New York: Copernicus, 1991), 71.

³ An alternate but related approach is to examine *De musica* in relation to Augustine's treatment of the passions. See, e.g., G. Van Riel, 'Mens in mota mota manet. Neoplatonic Tendencies in Augustine's Theory of the Passions', *Augustiniana* 54 (2004), 507–31.

perceived in God – the source of all virtue – and those made necessary for our contemplation of God by our embodied existence. Escaping from evil requires ‘attaining likeness to God’, which involves ‘becoming just and holy, living by wisdom, the entire nature grounded in virtue’.⁴ God is identified with virtue, and yet ‘we are met by the doubt whether even in this Divine-Being all virtues find place – moral balance, for example; or fortitude where there can be no danger since nothing is alien; where there can be nothing alluring whose lack could induce the desire of possession’.⁵ Plotinus’s solution is to divide virtue into two grades: the civic or ethical virtues, which follow from our limited, embodied existence; and the purificatory or cathartic virtues, through which we attain likeness to God. Each level contains the virtues of wisdom, temperance, courage and justice, but directed towards different ends: either our embodied activity, or our rational ascent to virtue’s divine source. Charles Brittain explains the distinction between these two grades of virtue in relation to temperance, which ‘is defined as the ethical virtue constituted by imposing measure and limit on the emotions, and as the cathartic virtue constituted by not sharing in “the body’s” emotions or by turning inside towards intellect’.⁶

The problem, as Brittain’s example demonstrates, is that the two grades of virtue often conflict: while the cathartic virtues involve a disassociation from the physical, the ethical virtues require active engagement with our bodies so as to regulate our emotions. Moreover, although cathartic virtues are superior to their ethical counterparts, they cannot exist independently: mastery of the ethical is required for engagement with the cathartic. This leaves two logical possibilities. Either we sometimes act in accordance with the lower, rather than the higher, grade of virtue (what Brittain calls the ‘single-operation’ option); or we are somehow able to act in both grades simultaneously (the ‘multiple-operation’ thesis).⁷ Choosing the single-operation hypothesis leads to a moral quandary, since if the cathartic virtues are superior to ethical virtues it is unclear why we should ever choose to act in accordance with the latter. Plotinus, in advocating a single-operation view, seems to suggest that for the sage the cathartic virtues may include attention to the virtuous activity of the body, but only

⁴ Plotinus *Enn.* 1.2.1; trans. Stephen MacKenna (London: Penguin Books, 1991).

⁵ *Ibid.*

⁶ Charles Brittain, ‘Attention Deficit in Plotinus and Augustine’, *Proceedings of the Boston Area Colloquium in Ancient Philosophy*, 28: 223–263 (Leiden: Brill, 2003), 224.

⁷ *Ibid.*, 225.

insofar as the body is an independent moral entity and such action does not contribute to the good of the sage as intellect.⁸

From a Christian perspective, such a radical dissociation between the cathartic and ethical is problematic, not the least because 'it faces an obvious textual problem in the case of "charity" (which alone endures "forever" according to Paul in 1 Corinthians 13)'.⁹ As a consequence, ethical virtues cannot simply be stepping stones to higher forms of activity, but must have their own value and continuing relevance. Augustine departs from Plotinus and opts for a multiple-operation approach to virtue, which allows him to affirm our activity within both grades without requiring that we attend to the lower virtues instead of the higher, or else countenance a complete division between the rational and the physical. In circumventing this moral dilemma, however, the multiple-operation thesis raises its own psychological quandary: how is it that we are able to act in both grades simultaneously? In *De quantitate animae*, Augustine identifies seven different levels of activities within the soul: those related to [i] physical sustenance, [ii] non-rational thought (e.g., perception), [iii] reason, [iv-v] purification, and [vi-vii] contemplation.¹⁰ Levels [i-iii] and [iv-vii] correspond to the domains of ethical and cathartic virtue, respectively, with reason functioning as the lynchpin between the two grades. Reason is not a level of cathartic virtue per se, since all humans are capable of rational action as it relates to physical experience. Even so, reason itself is not physical, and forms the basis for the intellectual levels of purification and contemplation.

After identifying the seven activities of the soul, Augustine then considers how these different levels interact. 'It looks like it is possible', he writes, 'that [the soul] should act at all these [levels] simultaneously, but that it seems to itself only to act [at the level at] which it acts with difficulty or at any rate with fear. For it acts in this case more attentively than in the others'.¹¹ Augustine argues that the soul

⁸ 'Once the man is a Proficient, the means of happiness, the way to good, are within, for nothing is good that lies outside him. Anything he desires further than this he seeks as a necessity, and not for himself but for a subordinate, for the body bound to him, to which since it has life he must minister the needs of life, not needs, however, to the true man of this degree' (Plotinus *Enn.* 1.4.4).

⁹ Brittain, 'Attention Deficit in Plotinus and Augustine', 248.

¹⁰ *De quant. an.* §70–81. Levels [iv] and [vi] are activities resulting in the perfected activity of [v] and [vii].

¹¹ Quærimus quippe de animæ potentia, et fieri potest ut hæc omnia simul agat, sed id solum sibi agere uideatur quod agit cum difficultate, aut certe cum timore. Agit enim hoc multo quam cetera attentior. *Ibid.*, 79.

is capable of acting on multiple levels at once, but also maintains it can only attend to one level at a time. The level occupying the soul's attention is the one that causes the most difficulty (fear); or, as in some manuscripts, that which requires the most love.¹² Augustine's multiple-operation theory, then, is of a peculiar kind: while he affirms the ability of our soul to act on multiple levels at once, he also seems to indicate that our consciousness or attention follows something more akin to the single-operation theory, since it can only focus on a single level at a time. By layering conscious single-operation on top of unconscious multiple-operation, Augustine is able to preserve the connection between body and mind, with conscious actions in the body forming a basis for the unconscious activity of the soul's higher levels.

What it does not resolve, however, is the moral problem with the single-operation theory: why would we ever choose to attend to the lower levels of virtue? In *De quantitate animae*, Augustine suggests that in the activity of the lower, ethical virtues we must 'understand that God is acting through us': that, like in Plotinus, actions in the lower grades of virtue are prescribed by the higher levels (in this case, by God), but not for the sake of the person's own ethical virtue.¹³ Thus, we do not ever have to choose to act within the lower grades because the higher levels dictate actions that affect others in ethical terms without building up our own ethical virtue. This solution, while theoretically possible, does not seem to describe our actual experience. When we act ethically, we are not semi-conscious conduits of divine will, but instead turn our attention away from cathartic contemplation of God towards matters of ethical virtue; we are, in fact, distracted from the higher levels by the lower. As a consequence, Augustine abandons this idea in later discussions of virtue, suggesting that although undistracted contemplation will be a feature of our spiritual, resurrection bodies, it does not characterise our current, imperfect state.¹⁴

Even if the perfect multiple-operation of virtue is impossible in our pre-Resurrection bodies, it nevertheless exists as an ideal model for the relationship between contemplation and ethical action: a standard to which we should aspire, despite the fact that its consistent achievement is, in practice, beyond our current ability. When interacting with the physical world, then, we should strive to be guided by that which is revealed to us by God through contemplation, rather than attending

¹² Brittain, 'Attention Deficit in Plotinus and Augustine', 253–6.

¹³ *De quant. an.*, 79.

¹⁴ See, e.g. *Retract.* 1.11.2; Brittain, 'Attention Deficit in Plotinus and Augustine', 260–3.

directly to the physical stimulus. In this way, we can ensure that we act in accordance with the divine will, without seeking to build up ourselves. The physical world thus becomes beneficial to our spiritual development by allowing us the opportunity to serve God through the service of others.

Music in Classical Thought

It is precisely this dynamic between contemplation, the physical world, and spiritual development that we find in Augustine's treatment of music in *De musica*. Music is a particularly interesting case of the relationship between physical and spiritual virtue because it is itself a form of rationality. Tradition credits Pythagoras with the discovery that strings with lengths related according to a particular set of whole number ratios produce harmonic intervals.¹⁵ If one string is twice as long as another, for example, the two will sound an octave apart, while strings in a relation of three to two will sound a perfect fifth, and four to three produces a perfect fourth. Not only do whole number ratios with a first term one greater than the second (i.e., 2:1, 3:2, 4:3, etc.) create musically pleasing intervals, but the complexity of such ratios is inversely correlated with their musical consonance. So, for example, an octave (2:1) is perceived as more consonant than a perfect fifth (3:2), which is in turn more pleasing than a perfect fourth (4:3). It is difficult to underestimate the importance of this discovery in the history of Western thought: for the first time, an observable, sensible property of the natural world could be precisely predicted using numbers.¹⁶ While we no longer give credence to many of the Pythagoreans' numerological beliefs, the idea that the universe is fundamentally mathematical continues to guide scientific thought.

Music's ability to provide a sensible connection between the structure of nature and rational thought ensured its importance, on a theoretical level, within Classical and Medieval education. Although reason is not necessarily subject to perception in either Pythagorean or Platonic thought – sensory information being insufficient to disprove rational conclusions – music is significant precisely because our sensory judgments of harmony and beauty seem to correlate exactly with

¹⁵ See, for example, the account of this discovery in Nicomachus of Gerasa's *Manual of Harmony* (5.27–28).

¹⁶ D. P. Walker notes that the mathematical study of astronomy predates the discovery of musical ratios, but rightly emphasises the importance of music in establishing the numeracy of the earthly as well as celestial spheres. *Studies in Musical Science in the Late Renaissance* (Leiden: E. J. Brill, 1978), 7.

reasoned expectations. As a consequence, the relationship between music and reason remains even if we were to privilege our sensory reflections over rational conclusions. Ptolemy does precisely this in his *Harmonics*, demonstrating that if we apply the ratios of 2:1, 3:2, and 4:3 to lengths of string at constant tension, we do, in fact, hear musically pleasing intervals.¹⁷ In music, the distinction between sense and reason is blurred: music is literally rational – i.e., composed of ratios – and thus sensibly demonstrates the very structures of reason. Taking this conclusion a step further, music allows direct interaction, on a human scale, with the forces that move the universe. The natural world is enchanted – filled with song – and this music of the world can be discerned through rational reflection: ‘Music [in Classical thought] was not simply an object in a magical world, but the rational agent of enchantment itself’.¹⁸

Because music is itself rational it is capable of affecting the soul directly, not simply through physical means. Aristides Quintilianus describes this process, writing that ‘the soul is a certain harmonia and harmonia exists through numbers. Of course, since harmonia in music is composed through the same proportions, when the similar proportions are moved the similar passions are also moved at the same time’.¹⁹ Aristides portrays the soul as a musical instrument, which resonates with the harmonic structure of musical sound. Because of its inherent rationality, music not only acts on the passions, but also influences the soul on a rational level:

For while all education induces either through passion, such as education from the nomoi, or through persuasion, such as that in associations, music prevails by both means, enslaving the hearer by word and melos, and, by varied changes both of sound and forms, drawing him on by the connection of the things expressed.²⁰

Music acts on our passions, but it also acts through rational ‘persuasion’, which is more akin to coercion than reasoned argument, since it is by this means that music ‘prevails’, ‘enslaving the hearer’. There is thus a decidedly deterministic element in Aristides’s account

¹⁷ For a discussion of Ptolemy’s scientific investigation of music, see Andrew Barker, *Scientific Method in Ptolemy’s Harmonics* (Cambridge: Cambridge University Press, 2000).

¹⁸ Daniel K. L. Chua, ‘Vincenzo Galilei, modernity and the division of nature’, in *Music Theory and Natural Order from the Renaissance to the Early Twentieth Century*, ed. Suzannah Clark and Alexander Rehding, 17–29 (Cambridge: Cambridge University Press, 2001), 22.

¹⁹ Aristid. Quint. *Peri mousikēs*, 2.17, 86; trans. Thomas J. Mathiesen (New Haven: Yale University Press, 1993).

²⁰ *Ibid.*, 2.6, 59.

of musical perception: music's rational character allows it not simply to distract our rationality, but to actually 'prevail' over it.

This coercive quality is not generally seen to be problematic in Classical accounts of music, where it is often employed as a method healing and described in medical terms. Boethius – the chief Medieval authority on music – transmits the legend of 'Terpander and Arion of Methymna [who] saved the citizens of Lesbos and Ionia from very serious illness through the assistance of song',²¹ and recounts how even in routine tasks, music could be of assistance: 'Upon awakening, [the Pythagoreans] purged their stupor and confusion of sleep with certain other modes, for they knew that the whole structure of our soul and body has been joined by means of musical coalescence'.²² Plato, however, worries about the improper use of music's power over the soul. He allows only two modes in his perfect republic – one for war and inspiration (Dorian) and the other to be used in times of peace (Phrygian) – and warns against the dangers of melodic innovation: 'For any musical innovation is full of danger to the whole State, and ought to be prohibited'.²³ Regardless of whether we ought to embrace music's beneficial potential or remain wary of its coercive power, there is agreement that music is particularly capable of prevailing over the soul's activity.

The idea that music is able to actively shape our thought, on a rational as well as physical level, remains a defining feature of musical theory throughout the Middle Ages and into the Renaissance. Boethius comments that, 'When rhythms and modes reach an intellect through the ears, they doubtless affect and reshape that mind according to their particular character'; clearly echoing the relationship between musical ratios and the activity of the soul expressed by Aristides.²⁴ As late as the sixteenth century, John Calvin worries about music's coercive potential: 'It is true that every evil word (as Saint Paul says) perverts good morals, but when the melody is with it it pierces the heart that much more strongly and enters into it'.²⁵ The belief that music holds a natural power over its listeners remains current into the Renaissance, finding expression in Marsilio Ficino's magic-filled Platonic Theology, and in more traditional works of music theory like the *Musica practica* of Bartolomé Ramos, which argues for musical reforms on the basis that 'without a doubt, music

²¹ Boethius *De inst. mus.*, 1.1.185.

²² *Ibid.*, 1.1.186.

²³ *Pl. Resp.*, 424; trans. Benjamin Jowett.

²⁴ Boethius *De inst. mus.*, 1.1.180.

²⁵ Charles Garside, Jr., 'The Origins of Calvin's Theology of Music,' *Transactions of the American Philosophical Society* 69, no. 4 (1979): 33.

has immense effect upon and mighty power over the human soul, whether to calm or rouse it. If in our time music does not work so many miracles, it is to be attributed not to the art, whose perfection exceeds that of Nature, but to those who use the art badly'.²⁶

In both Classical and Medieval accounts, then, we find an emphasis on the ability of music's rational character to directly influence both thoughts and actions. The language used is often explicitly coercive: music 'enslaves', 'prevails', 'pierces', 'reshapes'. This view of music presents Augustine with a difficult theological problem. Music's apparent power to determine thought and prevent virtuous action remains incompatible not only with the sovereignty of the soul over the body, but also with our ability to respond freely to God's grace – remaining focused on contemplation and not succumbing to musical distraction. At the same time, however, because musical harmonies 'are a creation of divine providence, as they are beautiful in their own kind', they cannot be dismissed as insidious temptations: as things simply to be avoided.²⁷ The challenge for Augustine, then, is to determine how we can avoid any misplaced love for musical harmonies, 'Not by throwing them away as a burden, nor by embracing them as something well anchored, but by using them well'.²⁸

Process of Musical Perception

Augustine's theological concerns about music are most obvious in *De musica's* sixth book, where the theoretical concepts of metre and verse discussed in the previous five books are used as the basis for a reflective ascent to divine knowledge.²⁹ Augustine chooses to discuss musical harmonies and proportions through an analysis of rhythm,

²⁶ Quoted in Edward E. Lowinsky, 'Music of the Renaissance as Viewed by Renaissance Musicians' in *Music in the Culture of the Renaissance and Other Essays*, ed. Bonnie J. Blackburn (Chicago: University of Chicago Press, 1989), 97.

²⁷ quicumque de nostra quoque poenali mortalitate numeri facti sunt, non eos abdicemus a fabricatione diuinae prouidentiae, cum sint in genere suo pulchri. *De mus.* 6.14.46; trans. Martin Jacobsson, *Aurelius Augustinus De musica liber VI: A Critical Edition with a Translation and an Introduction* (Stockholm: Almqvist & Wiskell, 2002).

²⁸ Neque amplectendo quasi fundatos sed bene utendo carebimus. *Ibid.*

²⁹ There has been some debate over both the period of composition and the relationship of the first five books to the sixth. Martin Jacobsson argues that there is some evidence to date book six towards the end of the 387–409 window of composition (x–xxvii), and a letter from Augustine to Memorius, Bishop of Capua, suggests that Augustine felt this final book to be superior to, and to some extent separable from, the others (*Ep.* 101).

which he deems more accessible than pitch: 'Since the pervasive influence of rhythm is more easily studied in speech, and an analysis of it leads by gradually mounting steps to the highest secrets of truth... I wrote six books on rhythm'.³⁰ At the beginning of book six, he takes pains to emphasise that intellectual analysis is not necessary for those with faith, whom he urges 'not to descend to these things';³¹ a point he reiterates in his final conclusion to the work: 'These things have been written for much weaker persons than those who, following the authority of the two testaments, venerate and worship the one supreme God... for they are purified not through the brilliance of human arguments but through the most powerful and burning fire of love'.³²

Having decided, however, to take the difficult path of reason, Augustine launches into the dialogue of his ascent from music to contemplation of God. First, we must understand how we listen to and understand the music we hear. Thus, the master asks,

When we pronounce the verse *Deus creator omnium*, where do you think that these four iambs, of which it consists, and the twelve time-units are; that is to say, should we say that these rhythms are merely in the sound which is heard, or also in the hearer's sense, which belongs to the ears, or also in the activity of the pronouncing person, or, since the verse is well well known, also in our memory?³³

Augustine initially identifies four different components of music making, all of which the student agrees must contain 'rhythms' or, literally, 'numbers' (*numeros*): the actual sound, its creation, our perception, and our memory. The first two are relatively straightforward: ratios are present in the actual sound as it is transmitted to our hearing,

³⁰ Verum quia in omnibus rerum motibus, quid numeri ualeant, facilius consideratur in uocibus ea que consideratio quibusdam quasi gradatis itineribus nititur ad superna intima ueritatis ... conscripsi de solo rhythmo sex libros. *Ep.* 101; translated by Wilfrid Parsons in *The Fathers of the Church* 18 (Washington, DC: Catholic University of America Press, 1953), 146.

³¹ Ne ad ista descendant et. *De mus.* 6.1.1.

³² Sermonem autem hunc nostrum mandatum litteris si qui legunt, sciant multo infirmioribus haec esse scripta, quam sunt illi qui unius summi Dei consubstantialtem et incommutabilem trinitatem, ex quo omnia, per quem omnia, in quo omnia duorum testamentorum auctoritatem secuti uenerantur et colunt eam credendo, sperando et diligendo. ... Hi enim non scintillantibus humanis ratiocinationibus, sed ualidissimo et flagrantissimo charitatis igne purgantur. *Ibid.* 6.17.59.

³³ Cum istum uersum pronuntiamus, Deus creator omnium, istos quatuor iambs quibus constat, et tempora duodecim ubinam esse arbitreris, id est, in sono tantum qui auditur, an etiam in sensu audientis qui ad aures pertinet, an in actu etiam pronuntiantis, an quia notus uersus est, in memoria quoque nostra hos numeros esse fatendum est? *Ibid.* 6.2.2.

and in the musician's performance. Proportions are also present throughout the process of musical perception, which Augustine will proceed to elaborate in the subsequent discussion. Memory is included because of the temporal nature of musical ratios. We must remember the proportions of past sounds in order to perceive complete rhythmic patterns; we can only know the rhythmic position of an individual syllable through our memory of the syllables that have already been heard.

Probing these relationships, the master and student then seek to determine which numbers can exist independently. Those in sounds can exist without someone to hear them, and we can also create rhythms (e.g., our pulse and breathing) that do not require perception or memory. The numbers present in memory, on the other hand, can exist without the others – we can remember a song without having to hear it – but 'they would not be committed to memory unless heard or thought about, and therefore, although they remain when the other cease to exist, they are imprinted by the others as by forerunners'.³⁴ What about the numbers by which we perceive? At first glance, hearing would seem to be dependent on having something to hear; but this becomes less obvious with additional reflection, for in hearing we measure the consonance or dissonance of the sounds, and 'this power of approving and disapproving is not created in my ears when I hear a sound'.³⁵ Augustine responds by distinguishing two sets of numbers within the process of perception, one that reacts to the sounds we hear, and another that judges whether these sounds are pleasing. Instead of a single set of 'perceptual numbers', the process of musical perception involves two independent sets of proportions: those present in our hearing, and those by which we judge the ratios we hear. These latter, 'judicial numbers' are superior to the former because they 'could not judge the others unless [they] were superior to them', and it is from these numbers that Augustine will continue his ascent.³⁶

At the moment, however, there is a problem: by splitting perception into two different parts, one describing the body's sense of hearing and the other referring to the soul's capacity to judge, we seem to have made the soul subject to the body; something that is, according to Augustine, 'completely absurd' (*perabsurdum*, *De mus.* 6.5.8). Logically, therefore, it must be the case that 'when we hear, the

³⁴ Sed tamen nisi auditi, uel cogitati, non mandarentur memoriae: et ideo quanquam illis desinentibus maneat, iisdem tamen praecedentibus imprimuntur. *Ibid.* 6.3.4.

³⁵ Non enim tunc fit in auribus meis, cum sonum audio, haec uis adprobandi et improbandi. *Ibid.* 6.2.3.

³⁶ Non enim de illis posset, nisi excelleret, iudicare. *Ibid.* 6.4.6.

rhythms are not created in the soul by the rhythms we know exist in the sounds'.³⁷ It is important to note that this contradicts Aristides's statement that 'the soul is moved naturally by music'; that it 'prevails' over and 'enslaves' the listener. On the contrary, Augustine insists that the soul is not subject to the body or anything that is perceived through it, even the rational harmonies of music. This leads his speculations, however, into uncharted territory; a fact confirmed by the hesitancy with which he resolves to 'try, to the extent that God will deign to help me, to guess and expound what is concealed here'.³⁸ His subsequent solution is worth quoting at length:

I think that the soul produces something out of the body and acts in it as in something that is subject to its dominion by God's will, and that it does this sometimes with ease, sometimes with difficulty, depending on how much the corporeal nature yields to it, depending on its merits. Therefore, whatever corporeal things are brought into our body or brought to it from the outside, these things produce something not in the soul but in the body itself, something that either opposes or agrees with the activity of the soul. And therefore, when the soul resists what is opposing it and only with difficulty pushes the matter that is subject to it into the paths of its activity... it is said to have sensation, and this is what we call pain or labour. However, when that which is introduced or is contiguous to it does agree with it... it is perceived with pleasure.³⁹

Unpacking this logic, we find that instead of being acted on by the body, the soul acts in the body while the body receives rhythms through hearing. To the extent that these two movements agree, we feel pleasure; insofar as they disagree, we feel pain. The soul, as the

³⁷ Non ergo, cum audimus, fiunt in anima numeri ab his, quos in sonis cognoscimus. *Ibid.* 6.4.6.

³⁸ Conabor quidem, quantum Deus adiuuare dignabitur, quidnam ibi lateat coniec-tare atque disserere. *Ibid.* 6.5.8.

³⁹ nec ab isto quidquam illam pati arbitror, sed facere de illo et in illo tanquam subiecto diuinitus dominationi suae: aliquando tamen cum facilitate, aliquando cum difficultate operari, quanto pro eius meritis magis minusue illi cedit natura corporea. Corporalia ergo quaecumque huic corpori ingeruntur aut obiciuntur extrinsecus, non in anima, sed in ipso corpore aliquid faciunt, quod operi eius aut aduersetur, aut congruat. Ideoque cum renititur aduersanti, et materiam sibi subiectam in operis sui uias difficulter impingit, fit attentior ex difficultate in actionem; quae difficultas propter attentionem, cum eam non latet, sentire dicitur, et hoc uocatur dolor aut labor. Cum autem congruit quod infertur, aut adiacet, facile totum id uel ex eo quantum opus est, in sui operis itinera traducit. Et ista eius actio qua suum corpus conuenienti extrinsecus corpori adiungit, quoniam propter quiddam aduentitium attentius agitur, non latet; sed propter conuenientiam, cum uoluptate sentitur. *Ibid.* 6.5.9.

seat of rationality, moves the body according to what it expects or desires, which is proper proportion and pure ratio. If we think in terms of intervals, the soul expects to hear a fifth with a ratio of 3:2; if the pitches are out of tune with each other, our senses are in conflict with our expectations, and we experience pain. The senses report, the soul predicts, and the result is feeling. Brian Brennan highlights the dependence of this view on Varro's theory of the emotions, in which the soul seeks the harmonious balance of its parts: 'When something material happens in the body there is a consciousness of disturbance in the balance. When music strikes the ear it sets up just such a bodily disturbance'.⁴⁰ Yet while Augustine is clearly drawing on such ideas, his application of them to music remains novel. This is indicated not only by the hesitancy with which he proffers his solution, but also by a perceptible difference in character between this approach and Classical accounts of music's coercive power. Instead of allowing the rationality of musical forms to influence the movement of the soul directly, Augustine argues that the sensory numbers travel into the body and are compared with the responding numbers – the expectations for the music that we have independently reached. Musical perception is thus a process in which our reason moves towards, but is never controlled by, the information provided by our senses. The mind judges the sensory numbers rather than being overcome by them.

This judgment Augustine divides into two stages. The first is the comparison between sensory and responding numbers that causes either pleasure or pain, feelings he ascribes to 'sensual' numbers. Because this judgment is automatic and temporal, such numbers cannot represent the highest form. Moreover, their judgment remains potentially subjective, for it depends on the expectations generated by our soul. If we are familiar with the sounds and styles of serialism, we are not surprised (and therefore pained) by atonal music. Music lacks any inherent power to colour our reactions. Yet perhaps the music of Pierre Boulez should cause us pain! This type of normative judgment is beyond the scope of the subjective, temporal sensual numbers, and so Augustine posits another level by which we judge our immediate emotional reactions. These 'judicial' numbers not only make timeless, objective judgments of beauty, but also help us to identify mistakes at other levels of perceptual process. We are able to recognise when an instrument plays a wrong note because it jarringly disagrees with our

⁴⁰ Brian Brennan, 'Augustine's *De musica*', *Vigiliae Christianae* 42, 267–81 (1988), 273–4.

expectations for the performance. Viewed from another perspective, we are able to recognise the true form of the composition, and the beauty present in it, despite the imperfection of the performance. Augustine, who defines musical beauty as 'a kind of equality and equally measured intervals',⁴¹ recognises the ability of flawed performances to nevertheless point towards the perfection they lack: 'Equality charms the soul with the rhythms of temporal spaces, whether any two short syllables that it has heard are really equal'.⁴² Moreover, despite the fallen nature of the corporeal world, 'To the extent that they [rhythms] imitate equality, we cannot deny that they are beautiful in their own kind and order'.⁴³

Musical Understanding and Grades of Virtue

To say that our sensory judgments are sometimes wrong we must have knowledge of a transcendent Truth; as Augustine writes,

The mind would certainly not look anywhere for the equality that we found in the sensible rhythms, not certain and permanent but yet shadowy and transient, unless this equality were known from somewhere.... So from where should we believe that the soul is given what is eternal and unchangeable, if not from the one, eternal and unchangeable God?⁴⁴

It is contemplation of God's perfection that allows us to accurately judge the music we hear; knowledge of objective truth comes from divine illumination. Right musical understanding is thus inextricably linked to virtuous action, and specifically, to the state of contemplation. As we have seen, such a state is difficult to maintain: in listening to music, we can become distracted from the 'contemplation of things eternal... by anxious desire for sensual pleasure'.⁴⁵ Our

⁴¹ Num aliud praeter parilitatem quamdam et aequaliter dimensa intervalla? *De mus.* 6.10.26.

⁴² Cum eam in spatiorum temporalium numeri aequalitas mulceat, utrum duae syllabae breues quascumque audierit uere sint aequales. *Ibid.* 6.10.28.

⁴³ In quantum imitantur, pulchra esse in genere suo et in ordine suo negare non possumus. *Ibid.* 6.10.28

⁴⁴ Aequalitatem illam, quam in sensibilibus numeris non reperiabamus certam et manentem sed tamen adumbratam et praetereuntem agnoscebamus, nusquam profecto adpeteret animus, nisi alicubi nota esset... Vnde ergo credendum est animae tribui quod aeternum est et incommutabile nisi ab uno aeterno et incommutabili Deo? *Ibid.* 6.12.34, 36.

⁴⁵ Amor igitur agendi aduersus succedentes passiones corporis sui, auertit animam a contemplatione aeternorum, sensibilis uoluptatis cura eius auocans intentionem: hoc autem agit occursoribus numeris. *Ibid.* 6.13.39.

inability to remain fixated on the true beauty of God is ultimately caused by pride, 'Through which vice the soul chose to imitate God rather than to serve him'.⁴⁶ We do not want to acknowledge that we are subject to higher numbers and powers, so we busy ourselves with judging those things beneath us. The practical effect of ignoring God is that the highest numbers we can exercise when perceiving music and ratio are the sensual numbers, reducing music to mere feeling. By severing the connection with ultimate truth, however, we are actually left incapable of exercising correct judgment at any level, and 'the just consequence is that those who through their pride wished to surpass the others are not able to rule even over their own parts and bodies'.⁴⁷

Our understanding of *De musica* comes alive when its account of musical perception is viewed alongside an analysis of the grades of virtue; and, in particular, the multiple-operation theory developed in *De quantitate animae*. By fixing our attention on God through contemplation we are able to judge music correctly, acting within the lower levels of virtue – reason and perception – to neutralise any imbalance caused by music's imperfection. In contemplation, God provides the understanding necessary to participate in lower levels of activity without allowing them to overcome us, or causing our pride in judgment to distract our attention from the divine. This is, of course, an ideal account. As Augustine acknowledges, pride does distract from contemplation by encouraging us to view judgments of musical beauty as autonomous. In so doing, however, we are not only pulled down the hierarchy of virtuous action, but in fact lose all ability to judge. The soul actively resists being influenced by the physical through the production of its own expectations, which can then be compared with the motions of the body. Yet how can we generate such expectations on our own? Without divine illumination to guide our judgments there is no way to ensure even a modicum of correlation between the activities of the soul and those of the body. The interaction between body and soul is thus left to degenerate into cacophony: we are 'not able to rule even over their own parts and bodies'.

If pride is the cause of our alienation from God, even in our appreciation of music, then the antidote to this separation is 'that we should love our God and Lord with all our heart and with all our soul and with all our mind and love our neighbour as ourselves'. In practical

⁴⁶ Quo uitio Deum imitari quam Deo seruire maluit anima. *Ibid.* 6.13.40.

⁴⁷ Iure autem secutum est, ut quae superbia caeteris excellere cupierunt, nec suis partibus atque corporibus sine difficultate et doloribus imperent. *Ibid.* 6.13.41.

terms, this means we must 'direct all these movements [of the soul] and rhythms of our human activity to this end'.⁴⁸ When we use rhythms for our own ends, determined by pride, we become enslaved to them, for we lack the capacity to judge objectively. It is through love of God and neighbour, then, that we may actually gain control over our perceptions and emotions, and no longer be subject to them. This process of reorientation, 'Whereby the soul with the help of its God and Lord draws itself away from the love of an inferior beauty by fighting down and killing its own habit', in turn promotes in us the virtues of temperance, fortitude, and justice.⁴⁹ Just as we can allow music and number to pull our gaze away from God, we can also use the music present throughout the world to aide our spiritual ascent.

It is at this point that the multiple operation of different grades of virtue becomes particularly interesting, because it not only explains how we can act ethically while remaining focused on the divine, but also indicates how such ethical action can be used to enhance cathartic contemplation; in Christian terms, how the love of neighbour contributes to the love of God without simply being a step along a virtuous ascent. Right judgments of music – made possible by divine illumination through contemplation – are able to neutralise distracting musical imperfections, removing music's potentially negative effects. Yet we are not left entirely unaffected by music: the activity of the soul, producing expectations of harmony and comparing these with the numbers of our hearing, does not return us to the status quo ante. Instead, it generates an emotional reaction in the sensual numbers: pain, to the extent that the music deviates from our expectations, and pleasure in the harmony of sound and expectation. Any pain, however, is quickly converted into pleasure as we contemplate how the music ought to be. Music, rightly judged through the multiple operation of virtues, not only directs us towards contemplation, but uses emotion to reinforce the integration of the ethical and cathartic. It is in this sense, then, that activity within the physical world can be used to strengthen our relationship with God rather than simply distracting from contemplation of the divine. We are not called to denounce

⁴⁸ Ad hunc igitur finem si omnes illos humanae actionis motus, numeros que referamus, sine dubitatione mundabimur. *Ibid.* 6.14.43.

⁴⁹ Sed haec actio qua sese anima, opitulante Deo et Domino suo, ab amore inferioris pulchritudinis extrahit, debellans atque interficiens aduersus se militantem consuetudinem suam, ea uictoria triumphatura in semetipsa de potestatibus aeris huius, quibus inuidentibus et praepedire cupientibus, euolat ad suam stabilitatem et firmitatem deum; nonne tibi uidetur ea esse uirtus quae temperantia dicitur? *Ibid.* 6.15.50. These are precisely those central virtues identified by Plotinus (*Enn.* 1.2.1).

musical harmonies, or their capacity to imitate true beauty. Rather, we must 'use them well', responding to the music in a way that maintains our attention on the contemplation of God, and thus allows musical harmonies to strengthen the integration of the different grades of virtue rather than distracting from that which is higher.

A Unique Account of Musical Perception

For theologians, *De musica* provides an illuminating application of Augustine's theory of virtue to a particular type of physical distraction; moreover, one that – as a form of rationality – has the potential to be particularly insidious. Yet its importance chiefly lies in the novel use of a multiple-operation approach to the understanding of musical perception. Although Augustine is, at times, wary of the power of music to distract (for example, his famous discussion of music in *Confessiones* 10.33), the coercive, deterministic language of Aristides and, later, Boethius, is noticeably absent from *De musica*.⁵⁰ Instead, the emphasis is placed on our ability to act in accordance with cathartic virtues despite music's potential to distract. This freedom of right action is preserved by Augustine's hesitantly offered account of musical perception, which describes the soul as acting within the body alongside the numbers of our hearing; producing an emotional response through the interaction between body and soul.

That is not to say that such a positive outcome is assured, or even likely. It is for this reason that Augustine 'vacillate[s] between the peril of pleasure and the value the [musical] experience': music retains the tantalising potential to move him 'more than the thing which is sung'.⁵¹ Just as it is easy to be distracted from contemplation of God by our ethical activities, the sensual beauty of music can draw

⁵⁰ This is noticed by composer Paul Hindemith, who cannot identify what differentiates *De musica* from other Classical sources but nevertheless senses a divergence between these, 'In which the power of music, its ethos, is brought into action upon our mind,' and the Augustinian approach, where 'our mind absorbs music and transforms it into moral strength' (Hindemith, *A Composer's World* [Mainz: Schott Musik International, 1952], 11).

⁵¹ ita fluctuo inter periculum uoluptatis et experimentum salubritatis magisque adducor non quidem inretractabilem sententiam proferens cantandi consuetudinem approbare in ecclesia, ut per oblectamenta aurium infirmior animus in affectum pietatis adsurgat. Tamen cum mihi accidit, ut me amplius cantus quam res quae canitur, moueat, poenaliter me peccare confiteor et tunc mallem non audire cantantem. *Conf.* 10.33.50.

our attention away from the source of all beauty and equality. What is again different, however, is that Augustine maintains the possibility that music might have a positive influence, and preserves the element of human choice in determining how it will be used. Music may be distracting, but we can choose to focus on its theological significance rather than remaining transfixed by its sensual charms.

Interestingly, the significance of *De musica* has largely gone unnoticed, both in terms of its relevance for discussions of virtue and its divergence from other Classical texts on music. In most cases, this can be attributed to a misreading of the critical passage on musical perception (6.5.9).⁵² Instead of noting the interaction between judgment – which remains autonomous – and the numbers of hearing, both Medieval and contemporary commentators have read Augustine's account in traditional terms as describing the progressive refinement of sensory information. In his *Journey of the Mind to God*, for example, Bonaventure gives a concise summary of the ascent in *De musica*'s sixth book, but describes the process of perception in a completely linear manner, ignoring the predictive nature of the reacting numbers: '[Augustine] declares that there are numbers in bodies and specifically in sounds and voices, and these he calls "sounding numbers." Secondly, there are numbers which are drawn from these and which are received into the sense faculty, and these he calls "reacting numbers."' ⁵³ Bonaventure overlooks the opposition Augustine establishes between our perceptions and our expectations, reading *De musica* as simply reflecting the Classical tradition rather than subtly but significantly altering it.

Modern commentator Bruce Bubacz, on the other hand, does recognise that Augustine's logic 'rules out... a simple look-and-see model of perception – a simple empiricism', but then proceeds to explain perception once again as a matter of refinement, in which sensory data alters our mental expectations.⁵⁴ Drawing on *De Trinitate*, he explains that perception involves the mind 'imposing a structure on the manifold of experience, testing that structure, and modifying it'.⁵⁵ The mind must 'consider the random elements of experience,

⁵² Although not all: Brennan correctly analyses Augustine's account, but fails to link it to his discussions of virtue (Brennan, 'Augustine's *De musica*', 273–4).

⁵³ Bonaventure *It. ment. Deum*, 2.10; trans. Philotheus Boehner (Indianapolis, IN: Hackett Publishing, 1993); emphasis added.

⁵⁴ Bruce Bubacz, *St. Augustine's Theory of Knowledge* (New York: Edwin Mellen, 1981), 111.

⁵⁵ *Ibid.*, 117.

structure them, and construct a picture of the physical world'.⁵⁶ If we look at the passage of *De Trinitate* that Bubacz quotes, however, we find the same account of perception as *De musica*:

The images of corporeal things... which we draw in through the bodily sense... whether it contradicts the reality or by chance agrees with it, are approved or disapproved within ourselves by rules that are wholly different, which remain unchangeably above our mind when we rightly approve or disapprove of anything.⁵⁷

The mind does not 'structure' the sensory information, successively refining the image and discriminating its features, but judges it. Only though such an autonomous form of judgment, which in imposing structure on our perceptions is not in any way responsible to them, can Augustine preserve the multiple operation of contemplation and perception.

Bubacz's attempt to have reason refine, rather than judge, sensory data may reflect a modern tendency to view perception in cognitive terms. Similarly, Steven Guthrie specifically identifies a parallel between Augustine's theory of musical perception and cognitive psychology: in both models there is 'sense announcing and reason discovering'.⁵⁸ In a cognitive model of perception, information travels exclusively up a series of hierarchical levels, so that notes are distinguished from each other before being stitched together into melody, polyphony, and piece. Higher-level judgments of style, rhythm, key, meter, etc, can only be made once the raw sensory data has been processed to a sufficient level; we cannot identify a melody without first processing each note for pitch, duration, and timbre. This is the modern equivalent, then, of Bonaventure's interpretation, with sensory information moving directly up an analytical hierarchy. While a cognitive model might thus be appropriate for the Medieval tradition, it does not describe the process of judgment in *De musica*.

What these examples of modern interpretation show is that Augustine's technical prose and the strength of the Classical tradition of music theory have together led many to overlook the subtle but significant change he makes to the process of musical perception.

⁵⁶ *Ibid.*

⁵⁷ Vnde etiam phantasias rerum corporalium per corporis sensum haustas... aliis omnino regulis supra mentem nostram incommutabiliter manentibus, uel approbare apud nosmetipsos, uel improbare conuincimur, cum recte aliquid approbamus aut improbamus. *De Trin.*, 9.6.10; quoted by Bubacz, *Ibid.*, 116.

⁵⁸ Steven Guthrie, *Carmen universitatis: a theological study of music and measure* (Ph.D. diss., University of St. Andrews, 2000), 239.

Although music is inherently rational, and thus a special case, it does not gain through this rationality a coercive power over our actions. Instead, the theory of perception Augustine developed in earlier works like *De quantitate animae* continues to apply.⁵⁹ While theologically *De musica* echoes earlier ideas, in so doing it deviates from Classical theories of musical perception and their emphasis on the determining effects of musical proportions. Thus, although *De musica* does not offer a unique account of perception per se, it does present an innovative theory of musical perception.

By following a 'multiple-operation' understanding of virtue – in which attention on the higher levels of virtue allows us to interact with the physical world without becoming distracted by it – Augustine is able to formulate a much more sophisticated understanding of music's positive role within the process of spiritual formation than is found in other Classical and Medieval authors: one that emphasises our judgment of musical harmonies instead of their coercive powers of distraction. In this way, Augustine preserves the possibility that, instead of prescribing human actions, music might always be 'used well': as a means of directing our thoughts towards the divine source of truth and beauty.⁶⁰ His innovative treatment of music thus has interesting implications for theological understandings of music, while belying the claim that *De musica* is simply derivative and unworthy of scholarly attention.

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⁵⁹ Brittain notes that *De musica* follows *De quantitate animae*, but does not identify this as a departure from tradition.

⁶⁰ *De mus.* 6.14.46.