

Music, Passion and Virtue in Two Quodlibetal Questions of the Philosopher Pierre d’Auvergne

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§ Le due *quaestiones* a cui il filosofo-teologo Pierre d’Auvergne ha risposto durante il suo ultimo Quodlibetal (1301) presso l’Università di Parigi sono tra i esempi rari di interesse nella musica che si trovano nella letteratura accademica delle *quaestiones disputatae*. Le risposte di Pierre alle domande non si limitano alla discussione filosofica, ma si estendono a considerazioni fisiologiche. Il suo obiettivo è non solo di dimostrare che la musica può suscitare le passioni e promuovere la virtù, ma anche di spiegare come succede. Spiegherà cioè come l’apprensione di uno stimolo come musica dai sensi si trasforma per la circolazione del sangue, il calore, spirito, et le «qualità prime» in una passione che coinvolge il corpo intero. La musica possiede anche il potere di promuovere la pratica delle virtù attraverso la corrispondenza tra proporzione musicale e proporzioni comparabili nel corpo umano. A tale scopo la musica vocale è preferibile alla musica strumentale. Boezio è citata ma le prove di Pierre non dipendono sulle proporzioni della *musica instrumentalis* e *musica humana*, ma su principi della scienza naturale

§ The two *quaestiones* to which the philosopher-theologian Pierre d’Auvergne responded during his last Quodlibetal (1301) at the University of Paris are among the rare examples of interest in music in the literature of academic *quaestiones disputatae*. Pierre’s answers to the questions are not restricted to philosophical argument but extend to physiological considerations. His goal is to prove not only that music can arouse passion and promote virtue but to explain how it does so. He will explain how apprehension of a stimulus (music) by the senses is transformed by the circulation of blood, warmth, spirit, and ‘first qualities’ into a passion that involves the entire body. Music also possesses the power to encourage the practice of virtue through a correspondence between musical proportion and comparable proportions in the human body. For this purpose vocal music is preferable to instrumental music. Boethius is cited but Pierre’s proofs do not depend on the proportions of *musica instrumentalis* and *musica humana*, but on principles of natural science.

THE asking of questions was an exercise central to the educational discipline of the medieval university, not only in the faculties of theology and arts, but also eventually in those of law and, to a lesser extent, medicine.¹ The main purpose of such intellectual exercises was not to settle a dubious matter once and for all, but rather to explore various aspects of a topic as confined by the parameters of the question. The *quaestio* originated in the master's school-room, where his commentary on an authoritative text might touch on divergent interpretations of certain problematical passages of a prescribed text. Once detached from the lecture room and transformed into a public academic exercise, a *quaestio disputata*, as it came to be called, could be thoroughly explored according to a strictly regulated format.

The question to be treated at a public session was announced beforehand. Conventionally expressed as a *dubium*, it was introduced by the word *utrum* (whether) that ideally permitted a positive or negative response. The bachelors of the master who presided at the session 'responded' to the question by presenting arguments supportive of a positive or a negative response. Members of the audience could pose objections or cite authorities in favor of a *quod sic* or *quod non* conclusion (WEIJERS 1996, pp. 62-91). At a second session a few days later, the master presented his own determination of the question, possibly restructuring arguments introduced at the first session. He might at a still later date publish his definitive determination. Since participants in the oral session could interject comments, it cannot be established with absolute certainty which of the arguments in a published determination are to be attributed to the bachelors, which came from others present (masters, visiting scholars, or clergy), or which from the master himself.

A Quodlibetal disputation followed the same procedural rules as an ordinary public disputation, but during a Quodlibetal anyone in the audience could without warning pose a question about any subject (*de quolibet a quolibet*).² Only the most intrepid masters submitted themselves and their bachelors to a formidable challenge of this nature. When the master presented his determinations of the questions discussed in a Quodlibetal, he was expected to impose some kind of organization (if possible) on the dozen or more disparate questions that had been asked. The two questions about music on which I propose to comment have a few such interconnections, but since the other questions that were part of the Quodlibetal at which the questions were asked have not been published, it cannot be ascertained whether arguments present in other questions were incorporated in either of these two.

¹ On the *quaestio* in general see BAZÁN 1982, pp. 31-49; WEIJERS 1995; WIPPEL 1985a; WEIJERS 2009; WEIJERS 2010, pp. 21-31; WEIJERS 2013, pp. 119-76.

² Palémon Glorieux traced its origin to the *studia* of the mendicant orders, ca. 1230, GLORIEUX 1968, pp. 128-134; WIPPEL 1985b; HAMESSE 2006, pp. 30-38.

Pierre d’Auvergne

Pierre d’Auvergne [Petrus de Alvernia] taught as a master in the faculty of arts at the University of Paris for about ten years before beginning the study of theology under Henry of Ghent and Godfrey of Fontaines *ca.* 1286. He was probably the Petrus de Alvernia installed by the papal legate Simon de Brion as rector of the University of Paris in 1275.³ Licensed a doctor of theology in 1296 and named a canon of Notre-Dame by Boniface VIII in the same year, he assumed one of the chairs of theology reserved for the cathedral canons in the University. He taught theology from this time until early 1302, when he was named bishop of Clermont in his native Auvergne, dying in that office on September 25, 1304.⁴

A prolific commentator on Aristotle’s works on logic and natural science, Pierre was entrusted with the task of completing Thomas Aquinas’s unfinished commentaries on Aristotle’s *De caelo et mundo* and *Politics*, beginning his contribution to the latter with book 3.⁵ (He also wrote a commentary on the *Politics* in question-and-answer format, the earliest surviving commentary on that text.) Ptolemy of Lucca (Tolomeo Fidoni, *ca.* 1236-1327), who may have known Pierre personally, characterized him as a *fidelissimus discipulus* of St. Thomas, a phrase that does not necessarily mean that he was actually his student, though Pierre could have heard some of Thomas’s lectures and public disputes during the Angelic Doctor’s first (1252-59) or second (1269-72) regency at Paris and may have known him.⁶ We can reasonably assume that Pierre’s views generally reflect those of Thomas.

Music and Its Effects

The questions concerning music that are the subject of the present essay were part of the sixth and final Quodlibetal that Pierre supervised as a member of the faculty of theology. This took place during Advent 1301, a few months before his appointment to the see of Clermont. The two questions address the following topics: (1) whether music can arouse the passions and (2) whether music can influence moral behavior.⁷ The questioner(s) might have been

³ For an extensive bibliography see *Peter of Auvergne* 2015, pp. 478-515. This is currently updated at <www.paleography.unifr.ch/petrus_de_alvernia> with an annotated list of works.

⁴ LAJARD 1869, pp. 93-114 (with a note on the troubadour of the same name, pp. 114-118); HOCEDEZ 1933; SEGARRA 1933; FLÜELER 2011; COURTENAY 2015.

⁵ PIERRE D’AUVERGNE 1980; since this and all of the works of Thomas in the edition of Roberto Busa may be accessed via the Corpus Thomisticum <www.corpusthomicum.org>, I will not cite page numbers of print editions. For an evaluation of the influence of Pierre’s commentary see LANZA 1994.

⁶ BLYTHE 2009b; BLYTHE 2009a.

⁷ The two questions on music, described in the manuscripts as *pertinentes ad accidentia in speciali*, have been edited on the basis of six manuscript sources in HENTSCHEL (2000). I would like to express my thanks to Prof. Hentschel for providing me with a copy of this article and edition, which prompted the present endeavor. His edition is also available online in the Thesaurus Musicarum Latinarum database (*siglum* PETQUO). See also RIETHMÜLLER (1990), pp. 197-201. SCHABEL 2006 includes a list of the questions from all six of Pierre’s Quodlibetals together with their manuscript sources.

aware that Pierre had already discussed both themes in his commentary on book 8 of the *Politics*, where he had affirmed that «certain harmonies stimulate passions» (*harmoniae quaedam sunt factivae passionum*).⁸ Many passages from the *Politics* commentary reappear in the responses to the questions about music. Given the fact that the 1301 Quodlibetal was disputed within the faculty of theology, both responses consider moral ramifications — more prominently in the response to the second question than in that to the first.⁹ Interpreting Pierre's responses (especially that to the first question) presents a challenge, due not only to the range of disciplines involved (from musical proportion to human anatomy and physiology), but also to the compressed nature of the arguments typical of a Quodlibetal determination.¹⁰

While the larger organization of the responses is clear enough, the rapidity with which determinations for all the questions treated in a Quodlibetal disputation had to be prepared may explain why certain parts of the discussion are not entirely transparent — reason enough to justify the present detailed commentary on these two rare examples of philosophical *quaestiones circa musicam*. They should be regarded as part of the scholastic philosophical tradition rather than as philosophical excursions into the domain of music theory.

The fact that questions about music were asked at an academic Quodlibetal does not by any means establish the presence of music in the curriculum of the University of Paris or any special interest in that subject by whoever posed the questions.¹¹ During the late twelfth and thirteenth centuries mathematical disciplines had become a less attractive object of study in the wake of the introduction of the full range of Aristotelian treatises on logic, philosophy, psychology, ethics, political theory, and natural science, none of which depended on mathematical modes of demonstration. That a few curious, university-trained scholars took an intellectual interest in music can hardly be surprising, any more than the fact that a few music theory treatises manifest evidence of habits of mind developed by their authors during years devoted to the study of Aristotelian texts.

⁸ *In Politicorum continuatio*, lib. 8, lect. 3, no. 6.

⁹ Both the commentary and the questions served as important sources for the *Tractatus de tonis* (ca. 1300) of the music theorist Guy de Saint-Denis; ed. VAN DE KLUNDERT 1988, vol. I, pp. 152-201. At the time this edition was published, Pierre's two musical *quaestiones* had not been edited; thus many of the views attributed to Guy de Saint-Denis are actually those of Pierre. This in no way diminishes the value of van de Klundert's edition or analysis of the treatise, to which the present writer is indebted. An English translation by Constant J. Mews *et al.* has been announced.

¹⁰ On Pierre's interest in natural philosophy see SCHABEL 2006, p. 96. Three of Pierre's theological *quodlibeta* have been edited by CANNIZZO 1964-65.

¹¹ DYER 2009. RILLON 2013 does not disprove my contention that the study of music played no part in the university curriculum. There is a very good reason why «les traces de la musique dans l'enseignement universitaire à partir de 1215 sont déjà maigres» (p. 375).

Quaestio 16. Music and the Passions

That music can arouse emotions was surely as common an experience in the Middle Ages as it is today, but few music theorists of the time bothered to address the matter. Those who did so generally based their explanations, at least in part, on the traditional mathematical-proportional framework inherited from Boethius.¹² According to this model, human response to musical sounds corresponds to proportions in audible sounds (*musica quae in quibusdam constituta est instrumentis*) and comparable proportions in the human body (*musica humana*). In the words of Boethius, «when we hear what is properly and harmoniously united in sound in conjunction with what is harmoniously coupled and joined together within us and are attracted to it, then we recognize that we ourselves are put together in its likeness».¹³ The author of *Musica Enchiridis* (ca. 900) recognized that music had «so great an affinity and union with our souls», but he conceded that this *similitudo* was exceedingly difficult to explain in words.¹⁴ The learned Engelbert of Admont (abbot of his monastery from 1297 to 1327) affirmed that listening to music «pleases and assuages sense exteriorly and spirit and affections interiorly» (*delectet et demulceat exterius sensum et interius animum et affectum*), but he too could offer no explanation of how this might be so.¹⁵ Pierre d’Auvergne attempted to provide such an explanation.

The following outline of the response to the first question demonstrates how it conforms to the protocols of the academic *quaestio*. Roman numerals have been assigned to each of the main divisions and Arabic numerals to subdivisions of the response. The numbers in parenthesis at the ends of lines refer to the critical edition of the questions published by Frank Hentschel.¹⁶ (His text and a parallel English translation may be found in the Appendix to the present article).¹⁷

***Utrum harmoniae musicales sint excitativae passionum,
puta raptus vel aliarum huiusmodi***

I. Objections that argue for a negative conclusion (1-2)

1. Objects of other senses (sight, smell) do not arouse passion, therefore neither can music
2. Raptus is internal, but music moves spirit externally

¹² RECKOW 1991. I am indebted to Reckow for references in the present paragraph.

¹³ *Cum enim eo, quod in nobis est iunctum convenienterque coaptatum, illud excipimus, quod in sonis apte convenienterque coniunctum est, eoque delectamur, nos quoque ipsos eadem similitudine compactos esse cognoscimus*; BOETHIUS 1867, p. 180; BOWER 1989, p. 2; MEYER 2004, pp. 22-23.

¹⁴ *Quomodo vero tantam cum animis nostris musica commutationem et societatem habeat, etsi scimus quadam nos similitudine cum illa compactos, edicere ad liquidum non valemus* (*Musica et Scolica Enchiridis* 1981, p. 58).

¹⁵ ENGELBERT OF ADMONT 1998, p. 286 (4.3).

¹⁶ HENTSCHEL 2000; the numbers are not included in the TML:PETQUO file.

¹⁷ My thanks to Prof. Constant J. Mews for comments on the translation.

- II. Opinions that point to an affirmative conclusion (3)
 - 1. Aristotle: *Politics* 8
 - 2. Boethius: *De institutione musica* 1
- III. Brief exposition of the affirmative conclusion (4-8)
 - 1. Different harmonies and modes evoke different passions
 - 2. An enraged youth calmed by music in the 'spondaic' mode
- IV. Definition of key terms of the question: *harmonia* and *passio* (9-10)
- V. Analysis of important terms
 - 1. Harmony and consonance (11-26)
 - 2. Definition of *passio* (27-37)
- VI. Reasons in favor of an affirmative conclusion (38)
 - 1. Assimilation of the proportions of the stimulus by the subject (39-44)
 - 2. Operation of the *anima appetitiva* and pleasure (45-51)
- VII. Refutation of objections
 - 1. Ad primum: other senses *can* arouse passion (52-62)
 - 2. Ad secundum: interior raptus is caused by external stimuli (63-70)

The statement of the question (*Utrum ...*) is followed by objections to an affirmative conclusion (I), countered by authorities that support an affirmative conclusion (II), a position thereupon briefly sketched (III). The definition of key terms (IV-V) is followed by arguments in favor of the affirmative conclusion (VI) and concluded by the refutation of objections (VII).

I. Objections that propose a negative conclusion (1-2)

The first objection (1) alleges that, just as audible things are a harmony of sounds, so too does a comparable *harmonia* exist in the objects of other senses. Since the objects of these senses (e. g., vision and smell) do *not* excite passions, so it is claimed, neither can music excite them. The second objection (2) introduces a physiological argument, claiming that, since music causes 'spirit' to move to exterior parts of the body (*causa motus spiritus ad exteriora*), it cannot be the cause of raptus, defined as the movement of spirit to interior parts of the body (*ad interiora*).¹⁸ While acknowledging that *harmoniae musicales* can create a certain 'warmth' that suffuses outer parts of the body, the objection maintains that they cannot generate raptus, by definition an internal state. (The title of the question implied that raptus was the equivalent of passion.)

 EXCURSUS. Aristotle defined *raptus* as a state of excitement often associated with religious ecstasy: «some persons fall into a religious frenzy, whom we see restored as a result of the sacred melodies, when they have used the melodies that excite the soul to

¹⁸ For brief remarks on appearances of *raptus* in the question see GALLO 1999.

mystic frenzy, as though they had found healing and purgation».¹⁹ Aristotle cited the «songs of [the singer] Olympus [that] beyond question make souls enthusiastic» (ποιεῖ τὰς ψυχὰς ἐνθουσιαστικάς): «raptus (ἐνθουσιασμός) is an emotion of the character of the soul» (τοῦ περὶ τὴν ψυχὴν ἡθους πάθος).²⁰ In his *Politics* commentary Pierre paraphrased this definition of raptus as «the movement of something beyond its natural or voluntary inclination [caused] by an external principle»,²¹ and again as «an operation of the intellective part of the soul according to which it is brought by some external [force] to something not natural to itself or [to something] natural through a turning away (*aversionem*) and immobility of the senses».²² Raptus is, therefore, an exceptionally intense reaction to a stimulus.

Sensation and Passion

Explaining the connection between sensation and passion (or raptus) is not an easy matter. As Peter King observed, «the difference between sensations and physiological states is patent, whereas their connection is not», and again «the relation of sensation to the body on one hand and to the mind (soul) on the other hand [is clear, but] how could the lower affect the higher?» (KING 2007, pp. 187 and 189) How does music as sounding phenomenon translate into bodily sensations and the consequent arousal of passion? It cannot be attributed solely to sensation,²³ because sensation merely brings a potentiality — the capacity of the ear to hear — into actuality. As such, it does not create a fundamental change.²⁴

As an incorporeal substance, moreover, the soul can be said to ‘suffer’ a passion only *per accidens* through its union with the body. Near the beginning of *De anima* Aristotle affirmed the principle that, «there seems to be no case in which the soul can be acted upon or act (πάσχειν οὐδὲ ποιεῖν) without

¹⁹ *Politics* 8.7 (1342a 8; vol. II, pp. 2128-2129; hereafter BARNES, without citing the name of the original translators).

²⁰ *Politics* 8.5 (1340a 8-13; BARNES, vol. II, p. 2126). In the *Politics* commentary Pierre misunderstood the ‘songs of Olympus’ as melodies sung by pagan priests of Zeus on Mount Olympus, a point of curiosity rather than significance. On the effect of music independent of text see FORD 2008, pp. 320-325 and *Politics* 8.5 (1340a 40-42; BARNES, vol. II, p. 2126).

²¹ *Raptus est motus alicuius praeter inclinationem eius naturalem vel voluntariam a principio extrinseco; In Politicorum continuatio* lib. 8, lec. 2, no. 16. Cf. Thomas Aquinas on the effects of passion: «the subject is drawn out of the ordinary» (*in omni affectiva passionis patiens aliquanter trahitur extra suam communem ... dispositionem*); *Summa contra gentiles* 1.89.4.

²² *Operatio partis animae intellectualis secundum quam ab aliquo extrinseco fertur in aliquid non naturale sibi, aut naturale, per aversionem et immobilitationem sensuum; In Politicorum continuatio*, lib. 8, lect. 2, no. 17.

²³ Cf. *De somno* 1 (454a 9-11; BARNES, vol. I, p. 721): «sense perception, as actuality, is a movement of the soul through the body» (ἡ δὲ λεγομένη αἴσθησις ὡς ἐνέργεια κίνησις διὰ τοῦ σώματος τῆς ψυχῆς), a phrase virtually replicated in *De sensu* 1 (436b 6-7; BARNES, vol. I, p. 693): ἡ δ’ αἴσθησις ὅτι διὰ σώματος γίνεταί τῇ ψυχῇ («sensation is generated in the soul through the medium of the body»).

²⁴ *De anima* 3.2 (426a 2-26). HAMLIN 1959; SLAKEY 1961; LLOYD 1968, pp. 181-201; EVERSON 1997.

involving the body: e.g., anger, courage, appetite, and sensation generally».²⁵ He repeated the same principle a few lines later: «all the affections [passions] of the soul involve a body» (τὰ τῆς ψυχῆς πάθη πάντα εἶναι μετὰ σώματος); and again, «the affections of soul ... are inseparable from the natural matter of animals».²⁶ Thomas Aquinas insisted on this essential link, maintaining that «an act of the sense appetite is always accompanied by some change of the body (*transmutatio corporis*) and especially around the heart, which is the principle of movement in an animal».²⁷ The important role of the heart in the arousal of raptus and passion will be discussed below.

II. Opinions that point to an affirmative conclusion (3)

As the *sed contra*, two *auctoritates* are brought forward in support of a positive conclusion. Both Aristotle in book 8 of the *Politics* and Boethius in the proemium of *De institutione musica* had defended the view that music does indeed excite the passions, affecting both emotion and behavior. Merely referred to without elaboration here, their views will be taken up in later sections of the response.

III. Brief exposition of the affirmative conclusion (4-8)

Pierre proceeds to set forth the position he will defend: «it is obvious that harmonies and musical modes do stir passions, and different [modes arouse] different [passions]», whether of pleasure or of sadness (4-5). He introduces Boethius's observation about the different kinds of music that would be attractive to a 'lustful spirit' (*animus*) versus those that would please a 'coarse mind' (*asperior mens*),²⁸ a correspondence based on the principle that musical proportions correspond to similar proportions in the human body — a common Boethian *topos*. Music is not limited to this effect, however, for it can also modify behavior: wrath can be incited or calmed by music, an effect attributable not solely to mathematical proportion but to characteristics inherent in the various modes (presumably rhythms as well). As an illustration, Pierre recounts from Boethius's *Musica* the familiar example of a drunken youth whose rage Pythagoras placated by having the prevailing mode (phrygian) changed to a slower and graver 'spondaic' one (8).²⁹ The anecdote

²⁵ *De anima* 1.1 (403a 5-7; BARNES, vol. I, p. 642). MILLER 1999, pp. 318-20; SHIELDS 1988.

²⁶ *De anima* 1.1 (403b 17; BARNES, vol. I, p. 643).

²⁷ *Proximum motivum corporis in nobis est appetitus sensitivus; unde semper actum appetitus sensitivi concomitatur aliqua transmutatio corporis; et maxime circa cor, quod primum principium motus in animali; Summa theologiae*, I^a 20.1 ad 1. For an English translation of the *Summa Theologiae* (hereafter ST) see THOMAS AQUINAS 1947-1948.

²⁸ *Lascivus quippe animus vel ipse lascivioribus delectatur modis vel saepe eosdem audiens emollitur ac frangitur. Rursus asperior mens vel incitatoribus gaudet vel incitatoribus asperatur*; BOETHIUS 1867, p. 180; BOWER, p. 2; MEYER, pp. 22-23. For a similar view see *Politics* 8.5-21-23 (1340a 19 – b 6; BARNES, vol. II, p. 2126).

²⁹ *De institutione musica*, proem., BOETHIUS 1867, pp. 184-185; BOWER, p. 5; ed. MEYER, pp. 26-29. In a related passage Boethius says that *nihil est enim tam proprium humanitatis, quam remitti dulcibus modis, adstringi contrariis* («nothing is more characteristic of human nature

does not, however, attribute the result to a correspondence of mathematical ratios between music and proportions of *musica humana*, but to the *ethos* of the respective musical idioms.

IV. Statement of key terms of the question: *harmonia* and *passio* (9-10)

As an introduction to the analysis of the question Pierre proposes to define its two principal terms: (1) harmony or musical consonance and (2) passion.

V.1. Definition of harmony and consonance (11-26)

This comparatively long section, devoted to the definition of *harmonia seu consonantia musica* (terms that appear to be synonymous in Pierre's vocabulary), quotes liberally from the proemium of *De institutione musica*,³⁰ of which only a few non-technical concepts from books 1 and 2 were familiar to thirteenth-century masters and students. Pierre states the general principle that music considers 'number in sounds' (*numerus in sonis*), a frequently encountered phrase that links abstract number with the world of physical phenomena (sound), but there is no discussion of mathematical proportion.³¹ Pierre's emphasis will revolve around sounding music: *harmonia seu consonantia musica non est sine sono* («harmony or musical consonance does not exist without sound»). He defines sound as «a continuous striking extending to [the organ of] hearing» (15), a paraphrase of Aristotle's *De anima*: «what has the power of producing sound is what has the power of setting in movement a single mass of air which is continuous up to the organ of hearing. The organ of hearing is physically united with air» (ἀκοή δὲ συμφωνῆς ἀέρι), and thereby with the sound-producing object itself.³²

There is a problem in this section of Pierre's response due to the fact that the referent of *in quibus* that begins sentence 21 (*in quibus autem pluralitas differentiam facit necesse est in quadam numerositate consistere*), a quote from Boethius's *Musica*, is unclear. Perhaps in haste, Pierre overlooked the preceding phrase: *ex pluribus enim motibus acumen quam gravitas constat* («for a high pitch consists of more vibrations than a low one»). When «motibus» is supplied (as has been done in the Appendix), it becomes clear that *in quibus* refers to movements of a vibrating body. Consequently, the sentence should properly read: «in which [motions] multitude makes a difference; it necessarily consists in a certain numerical quantity», a reference

than to be soothed by pleasant modes or disturbed by their opposites»); BOETHIUS 1867, p. 179; BOWER, p. 2; MEYER, pp. 20-21.

³⁰ The borrowed text, italicized in Hentschel's edition, could hardly have been recited *in extenso* from memory at the first session.

³¹ Pierre may have picked it up this phrase from a florilegium. For *numerus relatus ad sonos* see LAFLEUR-CARRIER 1994-95, p. 388; and LAFLEUR 1988, p. 360 (lines 21-23). The list of citations could be considerably extended.

³² *De anima* 2.8 (420a 3-4; BARNES, vol. I, p. 668). Such 'striking' could involve, e.g., a drum or a plucked string instrument; MAMBELLA 2001. For a summary of the presumed physiology see OSER-GROTE 2004, pp. 266-269.

to the obvious fact that greater rapidity of vibration produces a higher pitch.³³ Everything about string tension in this passage could just as well be discovered by superficial observation.³⁴ But this discussion does not seem very relevant to the determination of the question.

Music and *scientiae mediae*

In his commentary on *De caelo* Pierre considered *musica* to be mathematical from two different perspectives: *pure* ('without qualification') and *secundum quid* ('to a certain extent', 'in a qualified sense'). The study of proportion *simpliciter*, the subject of Boethius's *De institutione musica*, does not necessarily extend to sounding music. Like other disciplines of the Quadrivium it concerned «permanent entities in ontological independence of the material or physical world» (SCHUELLER 1988, p. 264), and not susceptible to the vagaries of sense perception. The ear can hear sounds, for example, but what might be broadly called their 'interpretation' rests with faculties of the soul. This distinction depends in part on the concept of *scientiae mediae*, sciences that «consider mathematical principles by applying them to natural conclusions, which, «while they are mathematical sciences to a certain extent, [they are] just the same natural».³⁵ Pierre used the example of a line that can be considered both in the abstract and as a visual line drawn on a surface. The same applies to music, «which considers number related to sound» (*numerum relatum ad sonum*).

V.2. Definition of *passio* (27-37)

Pierre now turns to the definition of another, far more complex concept: *passio*, a term that he acknowledges was understood *multipliciter*.³⁶ He (or one of his bachelors) proposed definitions of *passio* by two ecclesiastical authors: John Damascene (ca. 650-ca. 750) and Eustratios of Nicaea (fl. ca. 1000). Damascene's *De fide orthodoxa* (Ἐκθεσις τῆς ὀρθοδόξου πίστεως), the source of the first definition, was a text known in the West through the Latin translation of Burgundio of Pisa, though that is not the version quoted by

³³ Cf. *De institutione musica* 1.3, BOETHIUS 1867, p. 190; BOWER, p. 12; MEYER, pp. 36-38.

³⁴ *Sed in his vocibus quae nulla inaequalitate discordant nulla omnino consonantia est; De institutione musica* 1.3, BOETHIUS 1867, p. 191; BOWER, p. 12; MEYER, p. 38.

³⁵ *Praeter autem istas scientias mathematicas pure sunt aliae secundum quid mathematicae, quae considerant principia mathematica applicando ad conclusiones naturales, quae, etsi sint scientiae mathematicae secundum quid, tamen sunt naturales (proemium 205-208)*; GALLE 2003, p. 15. For the principles underlying the *scientiae mediae*, a term not employed by Pierre, see GAGNÉ 1969; HIRTNER 1998, pp. 33-37; DYER 2007, pp. 66-69. By translating the technical term *secundum quid* as if it were *secundum quosdam* («according to some») Catherine Jeffreys came to the mistaken conclusion that Pierre considered music a natural science rather than a mathematical discipline *secundum quid* «in a certain respect»; JEFFREYS 2011, pp. 164-165. For a detailed analysis of Peter's view see GALLE 2003, pp. 126*-136*.

³⁶ Bernard Lonergan noted that Thomas differentiated among nine related meanings in his *Sentences* commentary; LONERGAN 1947; KING 1998, pp. 102-110.

Pierre in the question.³⁷ Eustratios' definition of πάθος appears in his commentary on Aristotle's *Nicomachean Ethics* (MERCKEN 1973, p. 212).

A comparison of the definitions as quoted by Pierre (1a, 2a) with the original Greek texts (1b, 2b) reveals two inconsistencies (underlined in the Latin text), only the first of which is of significance.

✠ Definition of *passio*: (1) John Damascene and (2) Eustratios of Nicaea

(1a) *passio ... est motus partis animae sensibilis in imaginatione boni vel mali*
(1b) Πάθος ἐστὶ κίνησις τῆς ὀρετικῆς δυνάμεως αἰσθητῆ ἐπὶ φαντασία ἀγαθοῦ ἢ κακοῦ
(2a) *passio animae est motus partis appetitivae sub phantasia boni vel mali*
(2b) Τὸ μὲν οὖν πάθος ἐστὶ κίνησις τῆς ὀρετικῆς δυνάμεως αἰσθητῆ ἐπὶ φαντασία ἀγαθοῦ ἢ κακοῦ

The Latin text has John Damascene (1a) defining passion as «the movement of the *sensitive* (viz. apprehensive) part of the soul in the imagination of good or evil». Eustratios (2a) appears to have defined it differently as «a movement of the *appetitive* part of the soul according to the imagination of good or evil», a definition that attributes passion not to the apprehensive but to the appetitive faculty of the soul. Comparison of the Greek texts (lines 1b and 2b) reveals, however, that both passages agree in attributing passion to the *appetitive* faculty of the soul (κίνησις τῆς ὀρετικῆς δυνάμεως). While Pierre seems to take no note of the discrepancy between the two definitions here, in the *Politics* commentary he had defined *passio animae* as *motus partis animae appetitivae sub phantasia boni vel mali* (but without attribution either to Damascene or to Eustratios).³⁸

Damascene's definition also appears as the *sed contra* of I^a II^{ae} q 22 art. 3 of the *Summa theologiae*, an article in which Thomas Aquinas weighed the question as to whether *passio* can be attributed both to the sensitive and to the rational appetite, opting for the former alternative. He had cited Damascene earlier in a similar context (*Quaestiones disputatae de veritate* 26.3.*sed contra*), where his determination of the question *Utrum passio sit tantum in appetitiva sensitiva* is accompanied by the refutation of no fewer than 18 objections. Thomas's conclusion was the «passion should be more properly attributed to the appetitive potency rather than to the apprehensive».³⁹ This will be Pierre's view in the present question, but the

³⁷ JOHN DAMASCENE 1955, p. 132; JOHN DAMASCENE 1966, pp. 81 and 132-42. Frank Hentschel identified the source of the text, cited by Pierre only as *secundo libro 22 capitulo*, as *De fide orthodoxa* 36. For the Greek text see JOHN DAMASCENE 1969 and 1973, vol. II, p. 88. The passage in question (as much of *De fide orthodoxa*) derives from *De natura hominis* by Nemesios of Emesa (fl. ca. 400). In this case Nemesios is paraphrased rather than quoted directly; NEMESIOS OF EMESA 2011 (cols. 673-674). For an English translation with commentary see NEMESIOS OF EMESA 2008, p. 130.

³⁸ In *Politicorum continuatio*, lib.8, lect. 3, no. 6. The identity of the two sources was pointed out in VAN DE KLUNDERT 1998, vol. I, p. 155, n. 183.

³⁹ *Passio autem magis proprie appetitivae potentiae competit quam apprehensivae*; *Quaestiones de veritate* 26.3.comment.; JORDAN 1986, pp. 77 and 87-90. Cf. *Ratio passionis magis invenitur in parte appetitiva quam in parte apprehensiva*; ST I^a II^{ae} 22.2.comment. On the teaching of

response will not be couched exclusively (or even mainly) within the framework of the terms presented in the definitions. Instead, Pierre will devise an argument rooted in medieval understandings of human physiology, virtually all of which have proven to be erroneous by the advance of scientific knowledge.

The definitions introduce a number of important terms: movement, the soul and its operations (sensitive/apprehensive and appetitive), phantasia, and moral judgment, the latter involving the estimative power of the soul. Additional concepts will be introduced later by an impromptu objection (29) to the Damascene-Eustratios definitions that interrupts the orderly course of the determination. Since understanding of these concepts is crucial to the interpretation of Pierre's arguments, I will attempt to clarify their use, postponing the discussion of movement until after consideration of the aforementioned objection.

Faculties of the Soul, Passion, and Phantasia

Aristotle wrote an entire treatise, *De anima*, on the soul (ψυχή), «the cause and origin of life».40 In book 3 of *De anima* he enumerated three differentiated faculties/operations (δυνάμεις) of soul: «plants possess the nutritive faculty (τὸ θρεπτικόν) only; other things along with this have sensation (τὸ αἰσθητικόν); and, if sensation, then also appetency (τὸ ὀρετικόν), where under appetency we include desire, anger and wrath».41 The appetitive power of the soul in the order of precedence depends necessarily on the apprehensive power. In the words of Thomas, «the operation of the apprehensive power is completed in the fact that the things apprehended are in the person who apprehends, while the operation of the appetitive power is completed in the fact that the person who desires is inclined towards the appetible thing».42

Unlike modern understanding of passion as an extreme, barely controllable, albeit temporary, state of excitement, ancient and medieval understanding of the term (Greek πάθος; Latin *passio*) embraced a wider variety of phenomena, all of which shared the commonality of change in a subject brought about by the action of a stimulus, usually a present external

Albert and Thomas, who did not agree on this matter, see KNUUTTILLA 2002. Cf. «the appetitive power of the soul can be defined as the ability to tend towards objects of awareness»; KENNY 1993, p. 60.

40 BOLTON 1978; CHARLTON 1980; FREDE 1992.

41 *De anima* 2.3 (414a 33-b 3; BARNES, vol. I, pp. 659-660). A few lines previously, Aristotle had included locomotion and «the power of thinking» (διανοητικόν) among the powers of the soul; cf. 3.9 (432a 22 - 433b 7; BARNES vol. I, p. 689).

42 *Actus enim apprehensivae virtutis non ita proprie dicitur motus, sicut actio appetitus, nam operatio virtutis apprehensivae perficitur in hoc, quod res apprehensae sunt in apprehendente; operatio autem virtutis appetitivae perficitur in hoc, quod appetens inclinatur in rem appetibilem. Et ideo operatio apprehensivae virtutis assimilatur quieti, operatio autem virtutis appetitivae magis assimilatur motui; ST I^a 81.1.comment (cf. I^a 80.1). «That appetite originates movement is clear»; *De anima* 3.10 (431a 31-b 1; BARNES, vol. I, p. 689).*

one, but alternatively something evoked by memory or imagination (*phantasia* in terms of the definitions above).⁴³ The English language has no single equivalent that covers the full range of implications embodied in the philosophical concept of *πάθος*, variously translated as affection, passion, or emotion. I will favor 'passion', but 'emotion' would serve quite as well.

Aristotle regarded passion as a temporary condition that ceases sooner or later upon removal of the stimulus: «those [conditions] which arise from some source that is readily healed we shall call by the name of affections (*πάθη*)».⁴⁴ It typically manifests itself through somatic change. In *De anima* Aristotle made the distinction that anger (a favorite demonstration model) would be defined by a dialectician as «desire for retaliation or the like, but by a physicist as a ferment of the blood or heat which is about the heart».⁴⁵ According to Simo Knuuttila, «the estimative power ... causes cardiac and spiritual effects in a manner which serves the actualization of the emotional suggestion».⁴⁶ In another context he paraphrased Avicenna (*De medicinis cordialibus*, 190.48-9), who had observed that «the emotions of the soul ... are also called emotions of the spirit, since they are accompanied by cardiac and spiritual changes».⁴⁷

As characterized by Thomas, «acts of the sensitive appetite, therefore, inasmuch as they involve somatic change, are called passions».⁴⁸ He thus described the succession of events: «the sensations of the soul are not caused by changes in the heart, but just the reverse. This is why in the passions of the soul, such as anger, there is a formal part that pertains to feeling, which in this

⁴³ FLOYD 1998, p. 162, who takes issue with ROBERTS 1988 and 1992. Dissenting from Floyd's dichotomy that «Thomistic *passio* lacks a cognitive component» is CATES 2009, pp. 74-75, n. 1. For a discussion of medieval concepts of the emotions see KNUUTTILA 2004, pp. 212-255; also KING 2012.

⁴⁴ Aristotle made the distinction that «those [characteristics] that are present right from birth as a result of certain affections are called qualities; ... any aberrations that are not natural but result from some other circumstances, and are hard to get rid of or even completely unchangeable ... are qualities, ... but those which result from things that quickly subside are called affections, e.g., if a man in distress is rather bad-tempered»; *Categories* 8 (9b 34 - 10a 10; BARNES, vol. I, pp. 15-16). Cf. Avicenna: *passio non autem est nisi cum aliquid removetur et aliquid advenit*; in *Liber de anima seu sextus de naturalibus*, AVICENNA 1972, p. 137 (lines 77-78). An exhaustive examination of the concept of *passio* in Aristotle is KREWET 2011; see also the excellent survey in LEIGHTON 1982.

⁴⁵ *De anima* 1.1 (403a 30 - 403b 2; BARNES, vol. I, p. 643). Cf. Thomas Aquinas: *Sed in passionibus animae, quod est ex parte animae, formale est; quod autem est ex parte corporis, materiale: haec enim est formalis definitio irae: ira est appetitus in vindictam; haec vero materialis: ira est accensio sanguinis circa cor. Ergo in huiusmodi passionibus principaliter est quod est ex parte animae quam quod est ex parte corporis; Quaestiones disputatae de veritate* 26.2 arg. 6. The most thorough analysis of Thomas's 'treatise on the passions' (ST I^a-II^{ae} 22-48) is MINER 2009.

⁴⁶ KNUUTTILA 2002, referencing Avicenna, *De anima*, 4.4 (62.88-96, 64.2033).

⁴⁷ KNUUTTILA 2004, pp. 177-254.

⁴⁸ *Sic igitur actus appetitus sensitivi, in quantum habet transmutationem corporalem annexam, passiones dicuntur ... actus appetitus sensitivi passiones sunt*; ST I^a 20.1 ad 1. Cf. *Sed ad actum appetitus sensitivi per se ordinatur huiusmodi transmutatio, unde in definitione motuum appetitivae partis, materialiter ponitur aliqua naturalis transmutatio organi; sicut dicitur quod ira est accensio sanguinis circa cor. Unde patet quod ratio passionis magis invenitur in actu sensitivae virtutis appetitivae, quam in actu sensitivae virtutis apprehensivae, licet utraque sit actus organi corporalis*; ST I^a II^{ae} 22.2 ad 3.

example [anger] would be the desire for vengeance. The material part pertains to the heart's motion, which would be the blood enkindled around the heart». ⁴⁹ The relationship is thus one of formal to material causation: in anger «the formal element is that which comes from the will, namely, the desire for vengeance; but the material element is what explains the movement of the heart, namely, the excitement of blood about the heart». In this account Thomas drew on the Aristotelian principle of the four causes (formal, material, efficient, and final). The formal cause of a passion (e.g., wrath) resides in the soul; the material cause is corporeal: the heating of blood around the heart. ⁵⁰ This concept is the matrix within which Pierre will shape his response to the question.

It falls to the estimative faculty of the soul to judge the object of desire as good or evil, for which (as both definitions state) an intervening φαντασία is involved. Phantasia, one step removed from simple perception, occupies an intermediary role «different from either perceiving or discursive thinking (φαντασία γὰρ ἕτερον καὶ αἰσθήσεως καὶ διανοίας), though it is not found without sensation, or judgment without it». ⁵¹ Aristotle made the very broad generalization that «images (φαντάσματα) serve as if they were contents of perception (αἰσθήματα); ... [hence] the soul never thinks without an image (φαντασία)». ⁵² The 'image' is by no means always a visual one, and in the case of *harmoniae musicales* it is not immediately apparent what might constitute such an 'image'. Depending on the circumstances, both intellect and phantasia, like antecedent sense perception, cooperate in the arousal of passion: «when imagination (φαντασία) initiates movement, it necessarily involves appetite». ⁵³

Unlike the apprehensive faculty, which cannot err with respect to its proper object (a healthy eye will always see a red object as red), the estimative faculty, drawing conclusions from phantasia, can fall into error. As Malcolm

⁴⁹ *Non enim affectiones animae causantur ab alterationibus cordis, sed potius causant eas; unde in passionibus animae, utputa in ira, formale est, quod est ex parte affectionis, scilicet quod sit appetitus vindictae; materiale autem quod pertinet ad alterationem cordis, utpote quod sit accensio sanguinis circa cor (De motu cordis 25).* For an edition of the text see LARKIN 1960.

⁵⁰ *Sed in passionibus animae, quod est ex parte animae, formale est; quod autem est ex parte corporis, materiale: haec enim est formalis definitio irae: ira est appetitus in vindictam; haec vero materialis: ira est accensio sanguinis circa cor. Ergo in huiusmodi passionibus principaliter est quod est ex parte animae quam quod est ex parte corporis; Quaestiones disputatae de veritate 26.2 arg. 6.*

⁵¹ *De anima* 3.3 (427b 14-15; BARNES, vol. I, p. 680); FREDE 1992; CASTON 2009.

⁵² *De anima* 3.7 (431a 14-17; BARNES, vol. I, p. 685). See also POLANSKY 2007, pp. 485-493, and the comments about phantasia (*Vorstellung*) in KREWET 2011, pp. 55-59, 323-339, 363-372, 510-512. Cf. *De memoria et reminiscencia* 1: «it is not possible to think without an image (φαντασία)» (450a 1); trans. BLOCH 2007a, pp. 26-29. David Bloch also edited sixteen questions by Pierre on *De memoria*, the fifth and ninth of which concern phantasia; BLOCH 2007b, pp. 71-76 and 85-89. An indispensable guide is COLEMAN 1992, pp. 15-38 (Aristotle) and 422-460 (Thomas Aquinas).

⁵³ *De anima* 3.10 (433a 20-1; BARNES, vol. I, p. 688). Cf. Thomas Aquinas: *Intellectus enim et phantasia factiva passionum afferunt, ut concupiscentiae, irae et huiusmodi, ex quibus cor calescit et infrigidatur* («For the mind and imagination can cause a feeling of lust or anger or other passions, on account of which the heart is heated or cooled»); *De motu cordis* 28; trans. Froelich; see also LARKIN 1960, p. 30.

Schofield observed, «Aristotle hardly gives the impression that *phantasia* provides a particularly secure basis for behaviour».54 Such a notion would not have been lost on a doctor of theology like Pierre d’Auvergne, who links passion, consequent to the operation of the appetitive part of the soul, with moral behavior (35).

An Objection: Passion is not Movement (29)

After having introduced John Damascene and Eustratios as *auctoritates*, it would have been natural for Pierre (or one of his bachelors) to employ their definitions of *passio* as part of the determination of the question – in this case an affirmative response. But a Quodlibetal is not the carefully scripted world of the *Summa theologiae* or the literary *quaestio disputata*. At this point in the public session someone apparently interrupted (*dicitur*), challenging the proposed definitions and pointedly denying that passion could be considered movement. Rather, it is only the fulfillment of a potency, which is *not* movement.

Dicitur autem [passio] esse motus non, qui est actus imperfecti, ut in potentia ad ulteriorem perfectionem, quia huiusmodi motus non est in parte animae appetitiva vel sensitiva, sicut probatum est septimo Physicae, sed secundum quod est actus perfecti vel perfectio de potentia ad actum, quae est mutatio indivisibilis. Mutationes autem indivisibiles sunt fines motuum.

It is said that [passion] is not movement, which is act of the imperfect, as in potency to further perfection, because movement of this kind is not in the appetitive or sensitive part of the soul, as demonstrated in [book] 7 of the *Physics*, according to which [passion] is act of the perfect or perfection of potency to act, which is indivisible change. Indivisible changes are, however, the ends of movements.

The objection asserts that passion cannot be considered movement, which is act of the imperfect, the transition from potency to a further (but not necessarily final) perfection, for such movement cannot be predicated of either the apprehensive (sensitive) or the appetitive faculties of the soul.

Citing the authority of Aristotle in Book 7 of the *Physics* – intended to trump that of the ecclesiastical writers – the *opponens* contends that passion must instead be considered perfect act, the state of perfection of potency to act, *not* movement towards that perfection. Most probably, he had in mind *Physics* 7.3, where Aristotle denied that states of the soul could be considered alterations.55 On this point he was unequivocal: «it is an impossibility that

54 Schofield acknowledges that «Aristotle’s notion of *phantasia* [is] tricky to understand and dangerous to translate»; SCHOFIELD 2011, p. 125.

55 *Physics* 7.3 (246a 10-b 20; BARNES, vol. I, p. 412-413).

movement should be attributed to [the soul]». ⁵⁶ The impromptu objection concludes by asserting that passion is ‘indivisible change’, not movement taking place in time. Thus, according to the objection, both John Damascene and Eustratios err in considering passion to involve movement. Unlike qualitative change (an acorn becoming a tree), the actualization of a potentiality adds nothing strictly new but instead brings to fulfillment something already present: «the transition from having capacity to perceive to perceiving in actuality is not a change, and the perceiving is not strictly motion at all but activity». ⁵⁷ When the sense faculty (e.g., the ear) actually hears, «it is not acted upon or altered» (οὐ γὰρ πάσχει οὐδ’ ἀλλοιοῦται) but brought from potency to act — the actualization of potentiality. It has not been ‘changed’, nor has there been movement.

Movement, Perfect and Imperfect Act

Movement according to Greek philosophy was «an ontological rather than physical concept, [inasmuch as] knowledge, will, [and] desire are conceived as movement» ⁵⁸ or, in the words of Aristotle in the *Physics*, «movement (κίνησις) is thought to be a sort of actuality (ἐνέργεια), but incomplete (ἀτελής), the reason for this view being that the potential whose actuality it is, is incomplete». ⁵⁹ Later in the same treatise Aristotle made the distinction that «motion is actuality of the incomplete, but actuality simply is other, it is actuality of that which has been completed». ⁶⁰ The objection contended that passion must be identified with this «actuality of which has been completed». It rejected the identification of passion as ‘act of the incomplete’, maintaining that, while it is proper to call passions acts, they are acts of the perfect, thus entirely excluding movement, which is act of the imperfect. As Thomas lucidly summarized the distinction: «movement is act, but imperfect act, the mean between potency and act». ⁶¹

⁵⁶ *De anima* 1.3 (405b 34-5; BARNES, vol. I, p. 647).

⁵⁷ POLANSKY 2007, p. 482; LISKE 1991.

⁵⁸ KAULBACH 1971; MEYER 1971; KOSMAN 1969.

⁵⁹ *Physics* 3.2 (201b 31-33; BARNES, vol. I, p. 344). In the context of a treatment of sense perception Aristotle said much the same: ἡ γὰρ κίνησις τοῦ ἀτελοῦς ἐνέργεια; *De anima* 3.7 (431a 6; BARNES, vol. I, p. 685).

⁶⁰ διὸ ἄλλο εἶδος τοῦτο κινήσεως ἡ γὰρ κίνησις τοῦ ἀτελοῦς ἐνέργεια. ἡ δ’ ἀπλῶς ἐνέργεια ἑτέρα, ἡ τοῦ τετελεσμένου; *Physics* 7.3 (245b 2 - 248a 1; BARNES, vol. I, p. 412-414); Aristotle’s use of the perfect participle (τετελεσμένου) implies such completion. *Physics* 3.1 (201a 10-13; BARNES, vol. I, p. 343). Cf. *Metaphysics* 9.6: «that in which the end is present is act» (1048b 18-24; BARNES, vol. II, p. 1656). For an understanding of *actus perfecti* and *actus imperfecti* I am indebted to LONERGAN 2007.

⁶¹ *Motus est actus, sed est actus imperfectus, medius inter potentiam et actum, In libro Physicorum*, lib. 3, lec. 3, no. 6; THOMAS AQUINAS 1963, p. 141 (no. 296). And further, [motus] in rerum natura nihil aliud est quam actus imperfectus, qui est inchoatio quaedam actus perfecti in eo quod movetur; ... Unde motus dicitur actus; consequens vero comparatur ad ipsum sicut perfectum ad imperfectum vel actus ad potentiam, propter quod dicitur actus existentis in potentia; *In libro Physicorum*, lib. 3, lect. 5, no. 17; THOMAS AQUINAS 1963, p. 152 (no. 324). Movement as imperfect act is also treated by Thomas in his *Sententia De anima*, lib. 3, lect. 12, no. 1-5.

✠ EXCURSUS. In order to clarify the distinction between perfect and imperfect act and the principle of potency to act Aristotle used the homely example of the heating of water. For the sake of its greater clarity it will be more advantageous to follow Thomas Aquinas's analysis of this passage in his commentary on the *Physics*. At room temperature water is merely in potency. While it is being heated, «it is reduced to imperfect act; ... that same imperfect act of warmth present in what is being warmed is movement, not, to be sure, according to what is in act only, but according to what, being in act, has an ordering to further act».⁶² When the desired temperature has been reached, that is perfect act. Should still warmer water be desired, the temperature reached becomes in turn a potency with regard to a further heating. A distinction is thus made between two acts: (1) perfect act [heated water] and (2) imperfect act [heating the water], which is movement. Alternatively, Thomas says, «movement is that imperfect act of heat existing in the heatable».⁶³

Primary Qualities and Passion

Seeming to ignore the objection and the issues pertaining to movement, passion, and the faculties of the soul that it presented, Pierre passes with a swift (and perhaps dismissive?) *et ideo* to offer his own view that musical proportions arouse passions specifically by altering 'primary qualities' in the human body, aligning their proportions with harmonic proportions in the music, stating explicitly that «a passion of the soul in the order of nature follows an alteration in primary qualities, active and passive».⁶⁴ This echoes the *Politics* commentary, where Pierre had maintained that passions follow upon a «certain disposition of primary qualities».⁶⁵ Primary qualities were regarded by both the Hippocratic and the Aristotelian traditions as constituent elements of the body: «wet and dry, hot and cold form the material of all composite bodies, and all other differences are secondary to these».⁶⁶ In the present case they bridge the gap between the reception of sound by the sense organ and the arousal of passion: a physiological explanation of how music

⁶² *Antequam aliquid moveatur est in potentia ad duos actus, scilicet ad actum perfectum, qui est terminus motus, et ad actum imperfectum, qui est motus; sicut aqua antequam incipiat calefieri est in potentia ad calefieri et ad calidum esse cum autem calefit, reducitur in actum imperfectum, qui est motus; nondum autem in actum perfectum, qui est terminus motus, In libro Physicorum, lib. 3, lec. 2, no. 5 (concerning 201a - b 5); for an English translation see THOMAS AQUINAS 1963, pp. 137-138 (no. 287).*

⁶³ *Actus imperfectus caloris in calefactibili existens est motus, In libro Physicorum, lib. 3, lec. 1, no. 3; THOMAS AQUINAS 1963, p. 136 (no. 285).*

⁶⁴ *Passio animae ordine naturae sequitur alterationem in qualitatibus primis activis et passivis (31).*

⁶⁵ *Huiusmodi passiones ipsius aliquam dispositionem qualitatum primarum sequuntur; In Politicorum continuatio, lib. 8, lect. 3, no. 6.*

⁶⁶ Aristotle, *De partibus animalium* 2.1 (646a 18-19; BARNES, vol. I, p. 1005); cf. *De gener. et corr.* 2.2 (329b 24-33; BARNES, vol. I, p. 539). The secondary qualities include density, heaviness, lightness, etc.; JACQUART 1984. On the wide dissemination of the Hippocratic corpus in the Latin West see KIBRE 1945.

arouses passions and a departure from the Pythagorean-Boethian model that supposed a correspondence between the harmonic proportions of sounding music (*musica instrumentalis*) and those of the human body (*musica humana*).⁶⁷

Primary qualities are antecedent to the better known humours: «the fundamental mixture in the body is never a mixture of humours, but of the primary qualities».⁶⁸ Pierre would certainly have known about them through readily available medical manuals, especially the *Ysagoge*, a Latin translation of the *Introduction to Medicine* of Hunain ibn Ishaq (d. 873 AD), an author known in the West as Johanniticus. The *Ysagoge*, an introduction to Galen's *Ars parva*, translated by Constantine the African (d. after 1086), a monk of Monte Cassino,⁶⁹ occupied first place in the *Articella*, a collection of basic medical texts widely disseminated in manuscripts and early prints.⁷⁰ The *Ysagoge* listed eight *commixiones* (κρᾶσις; mixing, blending) of primary qualities, of which four, *calidum et frigidum* and *humidum et siccum*, figure in Pierre's definition.⁷¹ The qualities admit of gradations; they are (in Pierre's words) «mixed from extremes according to a certain numerable proportion; that is, the warmth of a living being is not simply warmth, but a diminution of cold, and its wetness is not pure wetness but mixed with dry according to a certain proportion».⁷² A musical stimulus that embodies a given proportion will lead to a rebalancing of primary qualities in a similar proportion, leading in turn to a passion.

Having affirmed that primary qualities define passions *materialiter* (33), Pierre introduces a new consideration, one related to the familiar quartet of wrath, fear, pleasure, and sadness, here associated with warmth (or its absence), blood, and spirit(s): «wrath is a warming of blood or spirit around the heart, fear a reduction of the same, pleasure a diffusion of spirit and warmth, sadness a contraction of the same».⁷³ Accumulation of blood around the heart, which both Aristotle and Galen regarded as the source of the body's

⁶⁷ Pierre probably had little immediate contact with the specialized medical literature, to which no reference is made in the more than one thousand opinions cited in his *Quodlibets*.

⁶⁸ OTTOSON 1982, p. 88, and further DÜRING 1966, pp. 370-385.

⁶⁹ MAURACH 1978 and the criticisms by FISCHER 1983 and WEISSER 1986; see also NEWTON 1994, pp. 16-25 and 43-44.

⁷⁰ On the contents see KRISTELLER 1976, pp. 65-76.

⁷¹ *Isagoge* 4; MAURACH 1978, p. 152. The four pairs of *compositae* are *calidum et humidum*, *calidum et siccum*, *frigidum et humidum*, *frigidum et siccum*, treated as the four humours in the next section of the *Ysagoge*, 'De compositionibus'. Later medieval terminology replaced *commixtio* with *complexio*; JACQUART 1988, pp. 412-419.

⁷² Pierre considers primary qualities in isolation on a scale of intensity, but he makes no reference to their combination (*complexio*), nor does he allude to the pairings of primary qualities that constituted the four humours (blood, yellow bile, black bile, phlegm). On these see ARIKHA 2007.

⁷³ *Unde dicimus, quod ira est accensus sanguinis vel spiritus circa cor, timor autem remissio eorundem, delectatio vero diffusio spirituum et caloris, tristitia vero contractio eorundem* (34). Cf. *In Politicorum continuatio: sicut audaciam abundantia caliditatis circa cor; timor autem infrigidationem quamdam; ira autem accensionem sanguinis vel spiritus* (lib. 8, lect. 3, no. 6).

warmth, did not seem unreasonable, given that the pumping action of the heart was not understood at the time.

Spirit (πνεῦμα), a term of central importance to the response, was introduced in the second objection. The term refers to infinitesimal particles or a subtle vapor believed to be transported through the body's veins, arteries, and nerves.⁷⁴ Spirit was thus not 'spiritual' in the sense of being immaterial.⁷⁵ Ancient and medieval physiology distinguished three kinds of spirits: (1) natural, originating in the liver (source also of blood, it was believed) and carried throughout the body by the veins, (2) vital, originating in the heart and carried along with a small amount of blood by the arteries, and (3) psychic (also 'animal' from *anima*), thought to originate in the ventricles at the base of the brain by refinement of vital spirit, and then transmitted through the (supposedly hollow) nerves. Natural spirit (not of importance in the present context) was responsible for the body's nourishment and growth, vital spirit for the operation of the organs of the body, and psychic spirit, the most delicate of the three, for sensation, intellect, volition, and motor functions.⁷⁶ Pierre's association of blood with spirit is entirely reasonable from the perspective of ancient and medieval theories of anatomy and physiology. Blood and spirit were believed to share the same channels (arteries and veins) that extended throughout the body.

Somewhat unexpectedly, Pierre declares that passions are «acts ... of the appetitive part of the soul which, in its act follows in the order of nature the perception of good conceived as agreeable or disagreeable» (35), thus calling them *acts*, despite the fact that Damascene and Eustratios (with whom Pierre presumably agreed) called them specifically *movement*. This seems to regard passions as acts of the appetitive faculty which, the estimative faculty having intervened, occasion somatic change and thence passion. Does he mean to imply that they are acts of the imperfect?⁷⁷ This seems like a logical explanation, but Pierre does not address this point directly.

⁷⁴ A nuanced survey is TEMKIN 1951, pp. 180-189. For recent interpretations of Galen's teaching see ROCCA 2008 and DEBREU 2008.

⁷⁵ *Spiritus corporeus invisibilis est, et parum habet materia*; ST I^a 36.1 ad 1. For this reference I am indebted to CHENU 1957, p. 224, n. 54. See also BONO 1948, pp. 123-125; LINDBERG 1992, pp. 120-131; and SIRAISSI 1990, pp. 107-109. Since *spiritus* is a fourth-declension noun, it is not always possible from the context to determine whether the singular or the plural is intended. A familiar instance of the use of 'spirit' (natural and vital) occurs in the Gospel of Matthew, where Jesus' death is described by the expression *emisit spiritum* (Matt. 27:50). Cf. the English expression «to give up the ghost». A similar sense is present in the phrase «for even as the body without (the) spirit is dead; so also faith without works is dead» (James 2:26). The Greek text of James (χωρίς πνεύματος) lacks the definite article supplied in most English translations; the article is present in the Greek text of Matthew.

⁷⁶ BURNETT 1994, pp. 103-104; Appendix 1 of the article is an edition of the *Pantegni* text (*Theorica*, IV.19) on the spirits based on the two manuscript traditions.

⁷⁷ *Passiones etiam <sunt> huiusmodi actus, qui sunt partis animae appetitivae, quae in actu suo sequitur ordine naturae apprehensionem boni sub ratione convenientis vel disconvenientis* (35). The text may be corrupt at this point; Hentschel had to supply '*sunt*' to retrieve some meaning from the passage.

VI. Reasons in favor of an affirmative conclusion (38)

This short passage summarizes the preceding and prepares Pierre's commentary in favor of an affirmative determination. Two proofs will be adduced to demonstrate that «consonances or musical harmonies cause or arouse passions» (*causant vel excitant passiones*). These derive from (1) changes in primary qualities engendered by *consonantiae vel musicae harmoniae* which precede the soul's operation, and (2) from the operation of the soul itself.

VI.1. Assimilation of the proportions of the stimulus by the subject (39-44)

Pierre posits the general principle that a stimulus assimilates to itself the passive subject (*assimilat sibi passum*): «in the beginning a subject is dissimilar, in the end similar, and at the midpoint composed of similar and dissimilar, according to the Commentator [Averroës] on the second [book] of *De anima*» (39-40).⁷⁸ The explanation is now resumed with an explanation (initiated at no. 31) of the mechanism by which *harmoniae seu consonantiae musicae* act on 'primary qualities of spirits', these asserted to be «the prime organ (*organum primum*) of hearing [sic] and generally of all the powers of sensation and movement».⁷⁹ This is somewhat puzzling, for Aristotle and the Hippocratic tradition generally considered the heart (not spirits) the *organum primum*. For Aristotle it was the central organ of sensation and even thought: «all sanguineous animals have the supreme organ of the sense-faculties in the heart, for it is here that we must look for the common sensorium belonging to all the sense-organs» (τὸ πάντων τῶν αἰσθητηρίων κοινὸν αἰσθητήριον) and he concludes that «if the life is always located in this part, evidently the principle of sensation must be situated there too».⁸⁰ (The importance of the brain was not universally recognized outside those medical circles that embraced Galen's view of the brain's sensory, cogitative, and estimative capacities.) Pierre reiterates the argument from proportion that passions follow upon and are determined by the variable proportions of primary qualities, 'mixed' (*commixtas*) according to the proportions of a musical stimulus that modifies spirits approximately (*vel propinqua*) according to the same proportion (43).

Pierre follows this conclusion with an allusion to practical music, presenting an argument *ex experientia* for which general assent could reasonably be expected. The second and eighth ecclesiastical tones are said to

⁷⁸ *De anima* 2.5 (418a 3-6; BARNES, vol. I, p. 665). Thomas had defined a sensory power (e.g., hearing) to be «a passive power that is susceptible to being affected by an exterior sensible thing» (*Est autem sensus quaedam potentia passiva, quae nata est immutari ab exteriori sensibili*; ST I^a 78.3.comment.); THOMAS AQUINAS 2010, p. 71.

⁷⁹ *Primas qualitates spirituum, qui sunt organum primum auditus et universaliter omnium virtutum sensitivarum et motivarum* (41).

⁸⁰ *De senectute et iuventute* 1.3 (469a 10-12, 16-17; BARNES, vol. I, p. 747); cf. *Parts of Animals* 2.10: «it is the region of the heart that constitutes the sensory center, ... the heart, from which all sensation proceeds» (656a 29 and 656b 24; BARNES, vol. I, pp. 1022-1023); see also JORI 2005. Aristotle's was the dissenting view among ancient anatomists; see EVERSON 1995, pp. 187-189.

stimulate feelings of compassion or mercy, and for this reason the tract and other chants of the Office of the Dead (*cantus mortuorum*) favor these tones. Pierre could have had in mind the gradual *Requiem aeternam* (tone 2), the tract *Absolve domine* (tone 8), the offertory *Domine Jesu Christe* (tone 2), very likely the responsory *Libera me* (often classified as tone 1, but rarely exceeding the *A-a* ambitus of tone 2), and the Matins responsories of the *Officium defunctorum* in tones 2 and 8.⁸¹ Such attributions follow a long tradition, ancient and medieval, that assigned moral or ethical effects to specific modes or tones.⁸² (Cf. the reference to Pythagoras above.) Pierre treated these attributions in greater detail in his commentary on the *Politics*: «naturally they say that the phrygian tone engenders raptus; the mixolydian, however, mourning and compassion; the dorian, moral behavior».⁸³ From a strictly musical point of view, the argument is not entirely persuasive, since all tracts without exception are in either the second or eighth tones, a situation that has nothing to do with Pierre's conclusion about them.⁸⁴ Nor do all tracts have penitential texts; from the oldest compositional layer one could cite *Jubilate deo*, *Qui habitat in adiutorio*, *Qui regis Israel*, and *Laudate dominum*.⁸⁵ It is only to be expected, moreover, that chants for the Office of the Dead would communicate a profound sense of grief, reinforced at each rehearing, but this effect must be attributed both to text *and* to context, not just to the standardized melodies of the tracts or to certain tones. The effect depended as much on the text of the chant as on the mournful occasions on which it was sung.

VI.2. Operation of the appetitive soul and pleasure (45-51)

The second argument in favor of an affirmative determination that *harmoniae musicales* arouse passion asserts that all appetitive operations of the soul are, according to a natural inclination, directed toward pleasure. Pierre cites the familiar passage from book 2 of Aristotle's *Rhetoric*, where it is observed that «it is pleasant to think that one will obtain what one aims at»,⁸⁶ and from book 7 of the *Nicomachean Ethics* he paraphrased Aristotle's classic definition

⁸¹ *Liber Usualis* 1956, pp. 1785-1799. In some uses, Dominican among them, the tract *Sicut cervus* (tone 8) was sung at Requiem Masses.

⁸² The diverse effects assigned to Greek modes by Plato and Aristotle also involved traditions of playing and singing characteristic of these modes; see *Politics* 8.7 (1342a 28 - 1342b 18; BARNES, vol. II, pp. 2128-2129). For a convenient overview of medieval theorists' opinions see the fold-out table «Characteristika der *toni*» in VAN DE KLUNDERT 1998, vol. I, pp. 202-203.

⁸³ *Naturaliter phrygiam* [tone 3] *dicunt raptus factivam, lydiam mixtam* [tone 8] *autem disponentem ad planctum et compassionem; doricam autem* [tone 1] *ad mores; In Politicam continuatio* 8, lib. 8, n. 4.

⁸⁴ For analyses of the melodies see APEL 1958, pp. 312-330; specialized studies of the eighth-mode tracts are KAINZBAUER 1991, pp. 1-132, and HORNBY 2002.

⁸⁵ HESBERT 1935, nos. 29, 40, 7, 43, etc.

⁸⁶ *Rhetoric* 2.2 (1378b 3-4; BARNES, vol. II, p. 2195). Guy de Saint-Denis cited this statement from Pierre's commentary on the *Politics*, *secundum intentionem philosophi secundo et septimo Ethicorum* (1.4.87), but by omitting the word '*Rhetoricae*' after '*secundo*' he made it appear as if both references were to the *Politics*; see VAN DE KLUNDERT 1998, vol. I, p. 174.

of pleasure as «the natural operation of unimpeded habit» (46).⁸⁷ The appetitive faculty of the soul conforms to a passion in a «harmony similar to it», a response attributed to the fact that the appetitive faculty, already predisposed to a given passion *secundum inclinationem eius naturalem*, is further modified by the musical stimulus and first qualities — the reiteration of an earlier argument.

Aristotle is again invoked to the effect that a given passion weakens its contrary — a familiar principle.⁸⁸ This is explained by the action of certain kinds of music, to which Aristotle referred in book 8 of the *Politics*,⁸⁹ where ‘purgative melodies’ were approved, provided they were tailored to the social class for which they were intended — the free and well educated versus the common crowd of artisans, day laborers and servants — based on the principle that «people receive pleasure from what is proper to them».⁹⁰ With these comments Pierre declares the question resolved (50), but implied in the resolution is the assumption that no one would be inclined to listen to ugly music.

VII.1 *Ad primum: the effect of things perceptible to the senses (52-62)*

The response concludes with the usual refutations of objections which, while extensive given the overall length of the response, can be briefly summarized. Pierre recognized that proportions exist in the objects of sense perception other than music, but he avers that other senses (especially sight) *can* in fact lead to the arousal of passion (53-54), a point that seems reasonable enough *ex experientia*. He notes that Aristotle had maintained that both sight and hearing are faculties of the soul responsible for cognition and hence the transmission of knowledge (*magis nos cognoscere faciunt*), albeit to different degrees.⁹¹ According to the Philosopher, things heard have a greater power to move than things seen, and the sense of hearing is thus more powerful and diverse in its effects than sight. In this case Pierre transfers Aristotle’s reflections on verbal discourse to musical sound, thereby ignoring the considerable divide that separates the two. Passions are aroused in correspondence to proportions in audible stimuli, which «manifestly arouse passions having a correspondence to them» (*et ideo magis et manifestius excitant passiones similitudinem earum habentia* [62]). He does not deny that objects of sight — a landscape, a painting or an attractive member of the

⁸⁷ «It is wrong to say that pleasure is a perceived coming-to-be. What we should rather say is that it is an activity of one’s natural state that is unimpeded rather than perceived»; ARISTOTLE 2000, p. 138 (1153a 12-16).

⁸⁸ *Nicomachean Ethics* 10.5; ARISTOTLE 2000, p. 191 (1175b 2-23).

⁸⁹ *Politics* 8.7 (1341b 33 - 1342a 2; BARNES, vol. II, p. 2128). Aristotle promised to discuss the purgative (κάθαρσις) aspect of music in the *Poetics*, but that was never done.

⁹⁰ *Politics* 8.5 (1340a 40-1340b 7; BARNES, vol. II, p. 2126); also edited in BARKER 1984-89, vol. I, pp. 175-176 and 180-181.

⁹¹ *De sensu et sensato* (437a 4-16; BARNES, vol. 1, p. 694): «it is hearing that contributes the most to the growth of intelligence».

opposite sex — can arouse passions in the beholder, yet he is unwilling to grant any more than that visible things can produce more than a «subtle and almost spiritual alteration» (*visibilia enim movent una alteratione solum tenui et quasi spirituali* [61]).

VII.2. Ad secundum: *raptus* caused by external stimuli (63-70)

The refutation of the second objection, which claimed that «whatever is the cause of movement of spirit to external [parts of the body] does not cause *raptus*» (63), is not an outright rejection of the argument. Nor is the assumption that musical consonances move spirit only towards the body's extremities universally true: passion and *raptus* are not mutually exclusive. In the commentary on the *Politics* Pierre had linked *raptus*, caused by «the withdrawal of warmth and spirit to interior parts [of the body]»,⁹² with the phrygian mode, which he (correctly from the medieval point of view) equated with the third ecclesiastical tone (ambitus: E-e), said to «retract spirits from the exterior to the interior, which disposes to *raptus*».⁹³ Musical harmonies can just as well move spirit(s) to internal parts of the body, altering them and causing in certain cases *raptus*, but from there blood and spirit flow to the extremities, thereby generating passion, a conventional view of medieval physiology.

Quaestio 17. Music, Morality and Virtues

The final question posed during Pierre's 1301 Quodlibetal asked whether or not *harmoniae musicae* are capable of influencing (*valeant*) moral behavior or virtues. Pierre will naturally defend an affirmative response, albeit admitting that badly proportioned music can have a deleterious moral effect. The response to this question, about half the length of the previous, is also simpler and more straightforward in its line of argumentation. By referencing passages in the preceding response, moreover, Pierre fulfills the expectation that the master will forge relationships among responses to the questions asked at the oral session. Since most of the technical and philosophical terms present in this response have been encountered before, an extended explication will not be necessary. As in the previous question, Pierre draws a parallel between musical proportion and comparable proportions in the human body, but in this case without reference to primary qualities or spirit(s). In the following outline of the question arabic numerals in

⁹² *Raptus qui est immobilitas sensuum et partium exteriorum propter revocationem caloris et spiritus ad interiora; In Politicorum continuatio* lib. 8, lec. 3, no. 6. In other contexts such a withdrawal might be interpreted as a manifestation of fear; cf. ST I^a II^{ae} 44.1.

⁹³ *Aliae autem [melodiae] sunt quae raptos faciunt, sicut ea quae dicitur phrygia, quae est melodia tertii toni, quae propter fortem percussione[m] in vocibus fortissime revocat spiritus ab exterioribus ad interiora, quod disponit ad raptum; In Politicorum continuatio* lib. 8, lec. 2, no. 24. Pierre's reference to *percussio* may possibly apply to the stress on the pitch *c* in a number of mode-three chants like the introits *Repleatur*, *Benedicite dominum*, *Deus cum egredereris*, and *Intret oratio*; for the music see *Graduale Romanum* 1957, pp. 302, 607, 300, and 106.

parenthesis again refer to the edition of the question published by Frank Hentschel (HENTSCHEL 2000). For an English translation see the Appendix.

Quaestio 17.

Utrum harmoniae musicae ad mores valeant seu virtutes

- I. Objection that proposes a negative conclusion (2)
- II. Opinions (Boethius and Aristotle) that point to an affirmative conclusion (3)
- III. Arguments for an affirmative conclusion
 - 1. Music affects the passions based on similar proportional relationships between music and the sensible part of the soul (4-9)
 - 2. Some musical proportions are similar to virtues inasmuch as their proportions represent a mean between extremes (10-14)
 - 3. Moderate consonances strike a resonance in the soul
 - a) Pleasure is taken in *harmoniae* and *consonantiae* suited to a person's nature (15-22)
 - b) Aristotle and Boethius on the 'moral' effects of music (23-25)
- IV. The three genera of music: *mundana*, *humana*, *instrumentalis* (26a)
- V. Whether vocal or instrumental music is more conducive to virtue (26b-37)
 - 1. Superiority of vocal music
 - 2. Well-proportioned vs. poorly proportioned consonance
- VI. Refutation of objections (38-40)

I. Objection that proposes a negative conclusion (2)

The single *quod non* argument claims that neither vocal nor instrumental music contributes to the cultivation of virtue. It attributes to Aristotle the view that vocal music makes a person vulgar, benefitting neither soul nor body. Vocal music makes people vulgar, and instrumental music is even less to be esteemed, so it is argued, for it represents no more than a distraction from the quest for knowledge. Aristotle's view is actually more nuanced than this, for he considered that «any occupation, art, or science which makes the body or soul or mind of the freeman less fit for the practice or exercise of virtue is vulgar (*βάναισον*), wherefore we call those arts vulgar which tend to deform the body». ⁹⁴ This general principle applies not just to music but to all the arts and occupations, both with respect to their practical cultivation and their role in education and leisure. Music was inevitably 'vulgar' according to Aristotle if pursued as a career, for professional musicians are generally forced to please

⁹⁴ *Politics* 8.2 (1337b 9-14; BARNES, vol. II, p. 2122 [alt.]).

the tastes of the lowest stratum of society.⁹⁵ The time required to achieve mastery could, moreover, be better spent on more dignified intellectual pursuits.

II. Authorities that support an affirmative conclusion (3)

As in the previous question, two authorities are introduced to support an affirmative conclusion: both Aristotle and Boethius affirmed that music *can* influence human behavior, a point explored at some length in the previous question (VI.11-25) based on passages from book 8 of Aristotle's *Politics* and the prooemium of Boethius's *De institutione musica*.

III. Arguments for an affirmative conclusion (4-25)

Three interlocking arguments are presented to support an affirmative determination. These take up about half of the response, and each concludes with an identical refrain: that musical harmonies «influence moral behavior and dispose to virtue» (*valent et disponunt ad virtutes*) – a rare rhetorical flourish in an otherwise dryly expository text. The first argument *quod sic* argues that certain kinds of consonances stimulate the passions, as already demonstrated in the response to the previous question. Just as consonant sounds that are «drawn to a mean» and well-proportioned produce moderate passions, so in like fashion do they dispose the recipient of the stimulus to virtuous behavior (*valent et disponunt ad virtutes*), because virtue, as Aristotle held, is to be found in the mean, not in the extremes. Indeed, in the *Politics* commentary Pierre had already made the point that «virtues occupy a certain middle way (*ratio*) between extremes, and similarly [do] other moral things».⁹⁶ Consonances that are *magis ad medium reductae* possess the capability of disposing to virtue, but Pierre offers no specific examples of proportions that might achieve this goal. He merely reiterates what had already been asserted in the previous question, that well-proportioned harmonies stimulate passions in similar proportion, and »the more consonant [harmonies] ... dispose to moderate passions» (7).⁹⁷ The more proportions are drawn to a mean the more they dispose to virtue.

The second argument *quod sic* continues in the same vein, claiming that, wherever there are proportional «similitudes of virtues» (*virtutum similitudines*) these similitudes dispose to virtue in accord with the principle

⁹⁵ *Politics* 8.7 (1341b 9-19; BARNES, vol. II, p. 2128); see also BARKER 1984-89, vol. I, pp. 172-173. Also *Politics* 8.6 (1341a 6-26; BARNES, vol. II, p. 2127), where Aristotle also makes the criticism that playing the aulos impedes speech.

⁹⁶ *Virtutes etiam in quadam media ratione extremorum consistunt, similiter et omnia alia moralia. Et hoc etiam manifestum est ad sensum; quia audientes aliquas melodias aut rhythmos, transmutantur secundum animam, aliquando quidem ad iram, aliquando ad mansuetudinem, aliquando ad timorem: quod non est nisi propter aliquam similitudinem istorum ad illa; In Politicorum continuatio, lib. 8, lect. 2, no. 20.*

⁹⁷ *Similiter passiones animae consistunt in quadam determinata proportione agentis ad passum; In Politicorum continuatio, lib. 8, lect. 2, no. 20.*

that «like in its action disposes to like» (*simile enim agendo disponit ad sibi simile*). Such similitudes are present in certain musical harmonies. Just as moral virtue is a *habitus* that embodies a proportion between extremes and is guided by right reason (*virtus ... in medietate consistens, determinata recta ratione*), so too do the proportions of harmonies corresponding to virtues contribute to strengthening them.

The much longer third argument *quod sic* (15-25, nearly one-fourth of the response) reiterates the principle that «hearing consists in a certain mean» (*auditus in quadam media ratione consistit*), as affirmed by Aristotle in book 2 of *De anima*, which considers sense perception as involving proportion.⁹⁸ The «well-disposed soul» (*anima bene disposita*), if it recognizes a ‘mean’ in the sounds, enjoys them precisely because of its predisposition to that proportion (17). From book 10 of the *Nicomachean Ethics* Pierre cites the familiar principle that the soul’s taking pleasure in one of its operations strengthens that operation and diminishes whatever is opposed to it (18), a point made in the response to the previous question and also in the *Politics* commentary.⁹⁹ According to the dictates of reason and nature, the soul is naturally attracted to harmonies most akin to itself (*simile enim confortat sibi simile*; 19, cf. no. 11). Reiteration of the same *harmoniae* can, furthermore, contribute to the strengthening of virtue (20),¹⁰⁰ a view consistent with Plato’s and Aristotle’s opinions about the need to expose young people consistently to specific kinds of music (and to restrict access to others), so that they might be properly educated, culturally, morally, and psychologically — a point emphasized in the previous question. Pierre reiterates the principle that well-proportioned harmonies or consonances dispose to virtue, while ill-proportioned ones have quite the opposite effect, an argument supported with Boethius’s paraphrase of Plato’s view that «music of the highest moral character, modestly composed, [is] a great guardian of the republic» (*magnam rei publicae custodem*).¹⁰¹ Music must be simple and masculine, not effeminate, wild, or inconsistent (*varia*).

In concluding the arguments *quod sic* Pierre notes that the Philosopher (and Greek antiquity in general) preferred the dorian mode as especially supportive of virtue (25). For some reason Pierre here identifies this mode with the fourth ecclesiastical tone (A-a) rather than the first — the usual medieval pairing of Greek terminology with the 1-8 numbering of the modes —

⁹⁸ «If consonance is a proportion, then hearing must also be a kind of proportion. ... in general, a mixture, a consonance, is more pleasant than either high or low pitch, ... sense is a proportion, and objects in excess dissolve or destroy it»; *De anima* 3.2 (426a 27 - 426b 7; BARNES, vol. I, pp. 677-678); also HAMLIN 1959, pp. 49-50; BARKER, vol. II, p. 80; HENTSCHEL 1999 pp. 64-68.

⁹⁹ *Et quia corruptio unius est per generationem alterius; ideo est corruptio unius passionis vel per generationem contrariae, sicut irae corruptio per generationem mansuetudinis; In Politicorum continuatio*, lib. 8, lect. 3, no. 4; cf. *Nicomachean Ethics* 10.5 (1175a 30 - 1175b 2-23; BARNES, vol. II, p. 1858). Aristotle gave the example of an aficionado of the aulos who averts from following a conversation as soon as he hears music being played on this instrument.

¹⁰⁰ Cf. *In Politicorum continuatio*, lib. 8, lect. 2, nos. 35-38.

¹⁰¹ The wording of *De institutione musica* 1.1 differs slightly; BOETHIUS 1967, p. 181; BOWER, p. 4; MEYER, p. 24. Cf. Plato, *Republic* 399-400; PLATO 1975², pp. 138-141.

as best exemplifying what the ancients praised.¹⁰² This contrasts with the parallel passage in Pierre's discussion of modes in his *Politics* commentary, where he correctly identified the hypophrygian mode as equivalent in ambitus to the fourth ecclesiastical tone – the medieval understanding of the relationship.¹⁰³ Pierre does not repeat here the specific assignments of 'ethical' values to various modes/tones found in the *Politics* commentary, where he says that «they call the phrygian by its very nature conducive to raptus, the mixolydian (*lydiam mixtam*) to mourning and compassion, the dorian to moral virtue».¹⁰⁴ In an aside, he notes the frequency with which chants in the first tone (D-d) are encountered in the Gregorian repertoire.

V. Whether vocal or instrumental music is more conducive to virtue (26b-37)

Pierre prefaces his determination of the question with a brief summary of the threefold Boethian division of music into *mundana*, *humana*, and *instrumentalis* (26a), in which he distinguished between music made *in naturalibus* (by the voice) and *ab arte* (by musical instruments).¹⁰⁵ Whoever proposed the question at the oral session intervened at this point, inquiring about the relative merits of vocal vs. instrumental music in the promotion of virtue (26b). Questions about their relationship and relative merits were treated by Aristotle in the *Politics* (and hence in Pierre's commentary on this work). Naturally, Pierre will affirm Aristotle's view about the superiority of vocal music over instrumental, even if the consonances happen to be identical (e.g., an instrumental rendering of a vocal work). As proof, Pierre relies on the pseudo-Aristotelian *Problemata* (his only reference to these in the *Quodlibets*), asserting that «ordered movement is naturally more akin to us than disordered, and is therefore more in accordance with nature», a fact that can be confirmed by observing the delight that even newborns take in the sound of music (29).¹⁰⁶ Quoting the anonymous author of the *Problemata*, Pierre compares orderly movement in music with the health benefits of

¹⁰² In the *Politics* Aristotle gave pride of place to the dorian, since «everyone agrees that it is the steadiest and has, more than any other [harmonia], a courageous character; ... it is clear that dorian melodies are more suitable for the education of younger people»; *Politics* 8.7 (1342b 12 and 16; BARNES, vol. II, p. 2129). In the Greater Perfect System of Greek music theory the dorian *harmonia* corresponded to the *e-E* octave (descending).

¹⁰³ *Melodia autem dorica rationem medii habet respectu aliarum; non enim ita excellenter acuta est sicut illa quae dicitur lydia mixta, quae est septimi toni; nec etiam ita depressa in gravitate, sicut hypodorica vel hypophrygia, quae est secundi vel quarti toni; In Politicorum continuatio*, lib. 8, lect. 3, no. 12. This comparison of the ranges of the octave species illustrates that the dorian occupies a middle place. For an explanation see ATKINSON 2009, pp. 171-201.

¹⁰⁴ For the Latin text see n. 83 above.

¹⁰⁵ The distinction is derived from Isidore of Seville, *De musica* 19; ISIDORE OF SEVILLE 1911. Isidore distinguished a third category: *rythmica, quae pulsu digitorum numeros recipit*; SCHUELLER 1988, pp. 257-282.

¹⁰⁶ Aristotle, *Problemata* 19.38 (920b 30-36; BARNES, vol. II, p. 1436); ARISTOTLE 1953-57², pp. 400-403; ARISTOTLE 1957, pp. 62-63. The borrowed text is italicized in the Appendix.

exercising or eating and drinking in moderation, the general rule being that «every proportioned thing is more pleasurable than a disproportioned one».

Vocal music, created by natural instruments, must of necessity be more pleasurable than instrumental music, created by artificial instruments, since the former is more *secundum naturam*. Consequently, «a vocal harmony is more pleasurable than an instrumental one of the same proportion, all other things being equal». If it is true that «pleasure influences and disposes to virtue», then vocal music will accomplish that goal to a higher degree than instrumental music. Nevertheless, a musical consonance *bene ordinata et proportionata secundum naturam* will be pleasurable under any circumstances. Pierre concludes (unsurprisingly) that «a well-proportioned musical *harmonia* influences morality positively (*valet ad mores*), but a poorly proportioned one has the contrary effect» (37).

VI. Refutation of objections (38-40)

Turning to the refutation of objections — in this case very brief ones — Pierre rejects as erroneous the superficial generalization that music per se makes people vulgar. Music that is *bene commensurata* cannot be so judged, though a melody with an unbalanced rise and fall (*intentionem vel remissionem*) that renders it *incommensurata* can admittedly have this effect. Rejecting the second objection, Pierre maintains that Aristotle's evaluation of instrumental music as something that «hinders the acquisition of knowledge» cannot be taken as universally valid, granted that this might (again) be true of music that is *incommensurata* (39).

In his response to the second question Pierre hardly goes beyond Plato (*The Republic*) and Aristotle (*Politics*) in affirming the importance of music for the cultivation of moral behavior. He gives no practical examples — and perhaps felt no need to in this context. The arguments in favor of a positive response (III) are based on correspondence of proportion and the principle that virtue resides not in extremes but in a mean: «well-proportioned harmonies or musical consonances influence and dispose to virtues [and] disproportionate ones dispose to the contrary» (22). Boethius and Aristotle prized the (Greek) dorian mode precisely for this salutary effect.

Conclusion

In his response to the first of the two *quaestiones circa musicam* asked at the 1301 Quodlibetal Pierre d'Auvergne endeavored to explain the chain of events that begins with sounding music and ends with the arousal of a passion and concomitant somatic changes. He argued that the proportions of audible sound altered the proportions of primary qualities, thus setting up a chain of physiological events that aroused a passion related to the proportion. Such an explanation combined elements of Pythagorean-Boethian music theory, principles of Aristotelian philosophy, physiology and psychology, as well as ancient and medieval medical doctrines. The response to the second question

follows a simpler and one might say more traditional path, not proceeding beyond a 'proportional' argument. Just as well-ordered music consists in «a certain mean ratio» (*quadam media ratione*), so does virtue and, although vocal music is to be preferred over instrumental, a well-proportioned harmony is the decisive factor. In both responses it is assumed that a given piece of music will arouse a single passion or encourage a single virtue – a reasonable assumption in light of the fact that contrast within a single pieces or a movement of a larger work did not emerge as an important stylistic-formal principle in musical composition until the second third of the eighteenth century.

Appendix

Petrus de Alvernia: Quodlibet VI, qq. 16 and 17

Consequenter ponuntur quaestiones pertinentes ad accidentia in particulari; et fuerunt duae circa idem: prima fuit utrum harmoniae musicales sint excitativae passionum, puta raptus vel aliarum huiusmodi; secunda fuit utrum faciant ad mores.

Subsequently, questions were posed pertaining to accident in particular, and two were about the same [topic]. The first was whether musical harmonies arouse the passions – for instance, rapture, or other similar things. The second was whether they had an effect on moral behavior.

Quaestio 16.

Utrum harmoniae musicales sint excitativae passionum, puta raptus vel aliarum huiusmodi

I. Objections that propose a negative conclusion (1-2)

1. Ad primam argumentum fuit quod non, quoniam sicut audibilia consistunt in quadam harmonia sonorum ita sensibilia aliorum sensuum, puta visibilia et odorabilia,

sed harmonia in aliis sensibilibus passiones non excitat sicut in visibilibus et odorabilibus, igitur nec in audibilibus.

2. Praeterea specialius illud quod est causa motus spiritus ad exteriora non est causa raptus, quia raptus fit per motum eorum ad interiora;

sed harmonia musica est causa motus spiritus ad exteriora, quia movendo calefacit et calor diffundit spiritus ad exteriora, ergo et caetera.

Concerning the first [question] the *quod non* argument was [that], just as audible things consist in a certain harmony of sounds, the same is true with respect to things perceptible to the other senses as, for example, things that are visible and odorous;

but since harmony in other objects of sense perception (as in the case of things that are visible and odorous) does not excite the passions, neither does [this happen] in the case of audible things.

In addition, whatever is especially the cause of movement of spirit to exterior parts [of the body] is not the cause of rapture, because rapture comes about through their movement to interior parts.

Musical harmony, however, is the cause of movement of spirit to exterior parts, because by moving it warms, and warmth diffuses spirits to exterior parts; therefore, etc.

II. Authorities that support an affirmative conclusion (3)

3. In contrarium est Philosophus octavo *Politicae* et Boethius in prooemio primi *Musicae*. Contrary [to this view] are the Philosopher in the eighth [book] of the *Politics* and Boethius in the preface of the first [book] of *Musica*.

III. Brief exposition of the affirmative conclusion (4-8)

4. Ad istam quaestionem dicendum est quod manifestum est harmonias et modos musicos excitare passiones, et diversos diversas. Regarding this question it is to be said that that [it is] manifest [that] harmonies and musical modes do stir the passions, and different [modes] different [passions]. Some stimulate pleasure, others sadness.
5. Aliquae enim excitant ad delectationem, aliquae vero ad tristitiam. Indeed, a lustful mind delights in lustful modes, and in hearing them is frequently enervated and overcome.
6. *Lascivus quippe animus lascivioribus delectatur modis vel saepe eosdem audiens emollitur aut frangitur.* Then again, the coarser mind enjoys agitated [modes] and is made coarser by the same, as Boethius says in the preface of *Musica*.
7. *Rursus asperior mens vel incitatoribus gaudet vel incitatoribus asperatur, sicut dicit Boethius in prooemio Musicae.* Some [harmonies] incite to wrath, others diminish it according to what the same Boethius recounted in the aforesaid first book: that Pythagoras, by changing the phrygian mode to the spondaic, which is slower and more solemn, restored to a peaceful state of mind a youth who, provoked to wrath by the sound of the phrygian mode and wishing to burn down the house of a prostitute, could not be deterred by the pleas of friends. But the cause of this is not in equal measure in the soul.
8. Aliquae vero ad iracundiam excitant, aliquae vero remittunt ipsam, secundum quod idem Boethius recitat eodem primo, quod Pythagoras iuvenem *sub phrygii modi sono incitatum* ad iram et volentem comburere impudicae mulieris domum, nolentem *desistere monitionibus amicorum, ad statum mentis pacatissimae* revocasse per mutationem modi phrygii in spondeum qui tardior et gravior est; sed huius causa non aequae in anima est.

IV. Statement of the key terms of the question: *harmonia* and *passio* (9-10)

9. Et ideo ad huius declarationem accipiendum est primo, quid est harmonia seu consonantia musica et in quibus consistit, deinde autem, quid est passio et circa quae. In taking up the demonstration of this there must be considered, first of all, what harmony or musical consonance is and in what things it consists; thereafter, what passion is and what things it concerns.

10. Et ex his poterit apparere aliter qualiter ratio praedictorum. From these the reason for the foregoing can be made evident to a certain extent.

V.1. Definition of harmony and consonance (11-26)

11. De primo dicendum est quod harmonia seu consonantia musica non est sine sono. Concerning the first [term] it is to be said that harmony or musical consonance does not exist without sound.

12. Musica enim per se considerat numerum in sonis. Music in itself considers number in sounds.

13. Sonus autem sine percussione et pulsu esse non potest. Sound cannot be produced without striking and beating.

14. Hic autem motus quidam sunt locales. Here, however, certain motions are limited.

15. Unde, si omnia quiescerent, sonus omnino non esset; propter quod sonus materialiter definitur: quod est percussio continua usque ad auditum. Whence, if everything comes to rest, there is no more sound at all; for this reason sound is defined materially as a continuous striking extending to [the organ of] hearing.

16. Motuum autem alii sunt tardiores, alii vero velociores, eorundem etiam quidam sunt rariores, quidam spissiores. Some motions are slow, others are more rapid; some are wide, others narrow.

17. Rarior vero aut tardior si fuerit motus, sonum efficit gravem, si autem celer fuerit aut spissus, acutum. If the motion is wider or slower, a sound of low pitch is produced; if [the motion] is rapid or narrow, [the sound is] high-pitched.

18. Propter quod, si eadem corda intendatur amplius, acutiorem sonum reddit, si vero remittatur, graviorem. On account of which, if the same string is stretched more, it produces a high pitch; if loosened, a lower pitch.

19. Quanto enim tensior fuerit, velociorem pulsum reddit celeriusque revertitur et frequentius aerem percussit, quanto vero laxior, tardiores reddit pulsus et propter inbecillitatem percussio non diutius oscillat. To the extent that [the string] is stretched more tightly, the beating becomes more rapid, and more swiftly rebounds and more frequently strikes the air; to the extent that [the string] is loosened, it produces a slower pulse, and due to the weakness of the pulsations it does not resonate long.

20. Quoniam igitur voces acutae a spissioribus et velocioribus causantur motibus, graves vero a tardioribus et raris, manifestum est, <eas> quadam additione motuum ex gravitate in acumen intendi, subtractione vero eorundem laxari ex acumine in gravitatem. Because high pitches are produced by narrow and rapid movements and low pitches by slower and wider ones, it is evident that an increase in motion raises [the pitch] from low to high; in reduction of the same, they descend from high to low.

- 21.** *In quibus [motibus] autem pluralitas differentiam facit necesse est in quadam numerositate consistere.* In which [motions] multitude makes a difference; it necessarily consists in a certain numerical quantity.
- 22.** *Omnis vero paucitas ad pluralitatem sic se habet ut numerus ad numerum comparatus.* Every small quantity is related to a larger as number compared to number.
- 23.** *Eorum vero quae secundum numerum conferuntur, quaedam sunt aequalia, quaedam autem inaequalia, et ideo sonorum quidam aequales, quidam autem inaequales.* Of things compared according to number, some are equal, some unequal, and thus some sounds are equal, others unequal.
- 24.** *Et in his, qui simpliciter sunt aequales, non est proprie consonantia vel harmonia musica proprie, sed aliquid perfectius et sicut mensura omnium consonantiarum vel harmoniarum musicalium.* And in those things that are simply equal, there is not properly a consonance or musical harmony, but something more perfect and like the measure of all consonances or musical harmonies.
- 25.** *Et propter hoc harmonia vel consonantia musica est diversorum sonorum inter se secundum acutum et grave in unum redacta concordia.* On account of this, harmony or musical consonance is a concord of dissimilar sounds, according to high and low, brought together into a unity.
- 26.** *Et in hoc apparet primum.* And thus is the first [term] clear.

V.2. Definition of *passio* (27-37)

- 27.** *De secundo vero dicendum est, quod secundum Johannem Damascenum secundo libro vicesimo secundo capitulo [quod] passio, quamvis dicatur multipliciter, prout tamen hic sumitur, est motus partis animae sensibilis in imaginatione boni vel mali.* Concerning the second [term] it can be said that, according to John Damascene in book 2, chapter 22 [of *De fide orthodoxa*], passion (although it has many meanings), insofar as it is here understood, is the movement of the sensible part of the soul in the imagination of good or evil.
- 28.** *Et secundum Eustratium super secundum Ethicae passio animae est motus partis appetitivae sub phantasia boni vel mali* And according to Eustratius [in his commentary] on book 2 of the *Ethics*, a passion of the soul is a movement of the appetitive part [of the soul] under the phantasia of good or evil.
- 29.** *Dicitur autem [passio] esse motus non, qui est actus imperfecti, ut in potentia ad ulteriorem perfectionem, quia huiusmodi motus non est in parte* It is said, however, that [passion] is not movement, which is act of the imperfect, as in potency to further perfection, because movement of

animae appetitiva vel sensitiva; sicut probatum est septimo *Physicae*, sed secundum quod est actus perfecti vel perfectio de potentia ad actum, quae est mutatio indivisibilis.

30. Mutationes autem indivisibiles sunt fines motuum.

31. Et ideo passio animae ordine naturae sequitur alterationem in qualitatibus primis activis et passivis, secundum quas primo alterantur, quaecumque alterantur secundum Philosophum, ubi prius.

32. Istae autem qualitates non sunt simplices in animali sed permixtae ex extremis secundum aliquam proportionem numerabilem, puta calidum animalis non est simpliciter calidum sed remissum per frigidum, sic nec humidum eius est humidum purum, sed permixtum cum sicco secundum aliquam proportionem.

33. Similiter se habet et in aliis, propter quod definiuntur huiusmodi passiones materialiter per huiusmodi qualitates.

34. Unde dicimus, quod ira est accensus sanguinis vel spiritus circa cor, timor autem remissio eorundem, delectatio vero diffusio spirituum et caloris, tristitia vero contractio eorundem.

35. Passiones etiam <sunt> huiusmodi actus qui sunt partis animae appetitivae, quae in actu suo sequitur ordine naturae apprehensionem boni sub ratione convenientis vel disconvenientis.

36. Et ideo ponitur in definitione praedicta: “sub phantasia boni vel mali.”

this kind is not in the appetitive or sensitive part of the soul, as demonstrated in [book] 7 of the *Physics*; but according to which [passion] is act of the perfect or the perfection of potency to act, which is indivisible change.

Indivisible changes are, however, the ends of movements.

And therefore a passion of the soul in the order of nature follows an alteration in primary qualities, active and passive, according to which they are first altered (whichever are altered) according to the Philosopher, as above.

These [primary] qualities are not, however, simple in a living being, but mixed from extremes according to a certain numerable proportion; that is, the warmth of an animal is not simply warmth but a diminution of cold; thus its wetness is not pure wetness but mixed with dry according to a certain proportion.

Likewise in other things, for which reason passions of this type are defined materially through these same qualities.

Whence we say that wrath is a warming of blood or spirit around the heart, fear a reduction of the same; pleasure a diffusion of spirits and warmth, sadness indeed a contraction of the same.

Passions [are] indeed acts of this type, which are of the appetitive part of the soul, which in its act follows in the order of nature the perception of good under the aspect of appropriate or inappropriate.

And therefore it is stated in the previous definition: “under the phantasia of good or evil” [cf. 27-28].

37. Ex his apparet, secundum quid scilicet est passio animae et circa quid. From these things it is clear to some extent what passion of the soul is and what it concerns.

VI. Reasons in favor of an affirmative conclusion (38)

38. Ex dictis potest apparere duplex ratio, propter quam consonantiae vel musicae harmoniae causant vel excitant passiones, quarum prima sumitur ex parte motus in qualitatibus sensibilibus praecedentis ordine naturae operationem animae per se, secunda vero ex parte ipsius operationis eiusdem per se. From what has been said there emerges a twofold reason why consonances or musical harmonies cause or arouse passions, of which the first derives from movement in sensible qualities in the order of nature antecedent to the operation of the soul in itself; the second derives from the operation of the same [soul] in itself.

VI.1. Assimilation of the proportions of the stimulus by the subject (39-44)

39. Prima vero est quia omne quod agit per aliquam formam primo in agendo assimilatur sibi passum. The first [reason] is because everything that acts through a certain form in acting first assimilates to itself the subject.

40. Passum enim in principio contrarium est, in fine simile; in medio autem compositum est ex simili et contrario secundum Commentatorem super secundum *De anima*. For at the beginning the subject is dissimilar, in the end similar; at the midpoint, however, [it is] composed of similar and dissimilar according to the Commentator on the second [book] of *De anima*.

41. Harmoniae autem seu consonantiae musicae ratione soni harmonici agunt et per motum localem, ut dictum est prius, et per alterationem secundum primas qualitates spirituum, qui sunt organum primum auditus et universaliter omnium virtutum sensitivarum et motivarum. Harmonies or musical consonances by reason of harmonic sound act through limited movement, as was said above [cf. 14], and through alteration according to primary qualities of spirits, which [spirits] are the prime organ of hearing and generally of all powers of sensation and of movement.

42. Igitur assimilant eos sibi alteratos ipsos secundum qualitates primas harmonicas harmonia sibi simili. [The harmonies] therefore assimilate them [spirits] to themselves, altered according to primary harmonic qualities in a harmony similar to themselves.

43. Cum igitur passiones sequantur per se dispositiones aliquas primarum qualitatum commixtas secundum aliquam proportionem numeralem, ut probatum est prius; si aliqua harmonia musica sit in eadem proportione vel propinqua et agat in spiritus secundum quod huiusmodi, eos assimilabit sibi,

44. et per consequens causabit vel excitabit passionem existentem in simili proportione secundum quod nos videmus ad sensum, quod harmoniae secundi et octavi toni excitant ad compassionem vel misericordiam; unde tractus et cantus mortuorum in ecclesia ut in pluribus sunt illorum tonorum ad excitandum fideles ad compassionem.

Since, therefore, the passions in themselves follow certain dispositions of primary qualities mixed according to a certain numerable proportion, as already demonstrated, if a certain musical harmony were in the same or an approximate proportion and acted on spirits to that extent, [that harmony] will assimilate them to itself;

and it will consequently cause or arouse a passion existing in a similar proportion according to what we see from experience, that harmonies of the second and eighth tones stimulate compassion or mercy, whence the tract and chants of the dead in the Church are generally of those tones in order to arouse the faithful to compassion.

VI.2. Operation of the Appetitive Soul and pleasure (45-51)

45. Secunda, quae sumitur ex parte operationis appetitivae per se, est: quoniam omnis operatio partis animae appetitivae, quae fit secundum inclinationem naturalem, delectabilis est secundum intentionem Philosophi secundo *Rhetoricae*.

46. Septimo etiam *Ethicae* dicit quod delectatio est operatio connaturalis habitus non impedita.

47. Sed operatio ipsius quae fit ab harmonia simili ei in qua consistit passio aliqua eius, puta ira vel timor, fit secundum inclinationem eius naturalem, ut in tali passione consistit vel bene dispositus est ad eam, igitur sibi est delectabilis.

48. Sed delectatio secundum aliquam operationem adauget operationem

The second [reason why harmonies arouse passions], which is derived from the appetitive faculty in itself, is because every operation of the appetitive part of the soul which follows a natural inclination is pleasurable according to the Philosopher in the second [book] of *Rhetoric*.

In the seventh [book] of *Ethics* he says that pleasure is a connatural operation of unimpeded habit.

But the operation of this same [appetitive faculty], which is caused by a harmony similar to it, in which [harmony] there exists a certain passion like wrath or fear, acts in accord with its natural inclination, inasmuch as it consists in such a passion or is well disposed towards it. It is, therefore, pleasurable in itself.

But pleasure according to a certain operation increases that operation and

illam et corrumpit contrariam, sicut dicit Philosophus decimo *Ethicae*, igitur harmonia musica factiva huiusmodi delectationis inducit et auget passionem quae in simili proportione consistit et corrumpit contrariam ab ipsa purgando, propter quod dicit Philosophus octavo *Politicae* quasdam esse purgativas.

49. Quae enim generativa est unius, corruptiva est contrariae.

50. Et sic apparet solutio ad quaestionem.

51. Et concedatur ratio, quae est ad partem concessam.

weakens the contrary, as the Philosopher says in the tenth [book] of *Ethics*. Therefore, a musical harmony generative of this kind of pleasure stimulates and heightens a passion that consists in a similar proportion and weakens the contrary by purging it. For which reason, the Philosopher says in the eighth [book] of *Politics* that certain [harmonies] are purgative.

Whatever is generative of one thing diminishes the contrary.

And thus the solution to the question is clear.

And the argument which is conceded to the other side, is granted.

VII.1. Ad primum: the effect of things perceptible to the senses (52-62)

52. Ad eas quae sunt in oppositum.

53. Ad primam dicendum est: cum dicitur quod sicut sonus consistit in aliqua harmonia, ita sensibilia aliorum sensuum, concedatur, non tamen aequaliter vel similiter in audibilibus et aliis.

54. Et cum assumitur quod harmoniae in aliis sensibilibus non excitant passiones, dico, quod immo, magis tamen in visibilibus et audibilibus, quae magis nos cognoscere faciunt, quia passiones supponunt cognitionem.

55. Talia autem sunt visibilia et audibilia, quia visus et auditus, quorum sunt activa, magis nos faciunt cognoscere secundum Philosophum libro *De sensu*.

56. Adhuc autem magis in audibilibus in actu, tum quia magis faciunt nos scire, quamvis per

Regarding those [views] in opposition. Regarding the first [objection]: when it is said that, just as sound consists in a certain harmony, so do sensible objects of other senses — let it be conceded — but not in equal measure, however, or in like fashion in audible things and other things.

And when it is assumed that ‘harmonies’ in other things perceptible to the senses do not arouse the passions, I say that, to the contrary, [it happens] to a greater degree in visible or audible things, which cause us to learn to a greater degree, because passions presuppose cognition.

Of such a kind, however, are visible and audible things, because sight and hearing (which are active) assist us more in gaining knowledge according to the Philosopher in the book *De sensu*.

Yet, however, more actively in audible things, because such things make us more to know, even though *per*

- accidens secundum eundem, ubi prius. *accidens* according to the same [Philosopher], as above.
57. Sermo enim bene audibilis existens causa est disciplinae, sed secundum accidens; A discourse audibly and clearly pronounced is the cause of instruction, but only *per accidens*,
58. ex nominibus enim constat. [for] it consists of words;
59. Nominum unumquodque symbolum est. each of the words is a symbol.
60. Tum quia audibilia fortius movent et pluribus modis. Because, moreover, things heard move more strongly and in several ways.
61. Visibilia enim movent una alteratione solum tenui et quasi spirituali, audibilia autem magis movent materiali alteratione et etiam secundum localem motum medii et organi, sicut dictum est prius. Visible things move only by a subtle and almost spiritual alteration. Things that are heard, on the other hand, move more by material alteration and according to a limited movement of the medium and [sense] organ, as was said above.
62. Et ideo magis et manifestius excitant passiones similitudinem earum habentia. And therefore [things heard] more and more obviously arouse passions having a correspondence to them.

VII.2. Ad secundum: interior raptus caused by external stimuli (63-70)

63. Ad secundum: cum dicitur quod illud quod est causa motus spiritus ad exteriora non causat raptum, quia raptus fit per motum eorum ad interiora et caetera supponatur. With regard to the second [objection]: when it is said that whatever is the cause of movement of spirit to exterior parts does not cause rapture, because rapture occurs through their movement to internal parts, etc., that is assumed.
64. Et cum assumitur quod consonantiae musicae movent spiritus ad exteriora, dicendum quod non est verum universaliter. And when it is assumed that musical consonances move spirits to exterior parts, it must be said that this is not true in every case.
65. Primo enim movent eos ad interiora et alterant. [Consonances] first move them [spirits] to interior parts and alter [them].
66. Ibi enim maxime movent alterando ubi causatur passio, quia causa in actu et causatum in actu sunt simul. There they move especially by making alterations where passion is caused, because the cause in act and what is caused in act are concurrent.
67. Quia igitur organum partis animae appetitivae et sensitivi primi sunt interiorius, secundum Philosophum maxime alterant interiorius circa idem sensitivum primum. Because, therefore, the instrument of the appetitive part of the soul and of the first sensitive are internal, according to the Philosopher, they especially alter internally around the same first sensitive.

68. Et hoc apparet in raptu, qui causatur ex apprehensione partis animae intentione interiori delectationis circa illud. And this is clear in raptus, which is caused by a perception of part of the soul with the interior intent of [taking] pleasure in it.

69. Quia enim intenditur [*recte* intenduntur?] in ipso apprehensio et delectatio, confluunt spiritus et calor ab exterioribus ad interiora, ubi magis laborat natura. Because both perception and pleasure are intensified in the same [stimulus?], spirit and warmth flow together from exterior parts to interior parts, where nature especially works.

Hoc enim est ex sagacitate naturae mittere spiritus ad locum in quo magis indiget. For it belongs to the wisdom of nature to send spirit to the place where it is most needed.

Quaestio 17.

Utrum harmoniae musicae ad mores valeant seu virtutes

1. Ultima quaestio fuit, utrum harmoniae musicae ad mores valeant seu virtutes. The last question was whether musical harmonies influence morality or virtues.

I. Objection that proposes a negative response (2)

2. Et argumentum fuit quod non, quia omnis harmonia musica vel est vocalis vel instrumentalis, sed nec haec nec illa valet ad mores: vocalis non, quia secundum Philosophum octavo Politicae facit banausos, id est male se habentes secundum corpus ad animam, And there was an argument *quod non*: because every musical harmony is either vocal or instrumental, neither the latter nor the former influences morality. Not vocal music, because according to the Philosopher in [book] 8 of the *Politics*, it makes [people] vulgar, that is, in a bad condition with respect to [the relationship of] the body to the soul.

nec etiam instrumentalis, quia retrahit a scientia, quae requiritur ad mores secundum eundem, ubi prius, ergo et caetera. Nor surely instrumental music, which hinders [acquisition of] knowledge, which according to the same [Philosopher], as above, is required for morality, therefore, etc.

II. Authorities that support an affirmative response (3)

3. In oppositum est Boethius in primo Musicae in prooemio et Philosophus octavo praedicto. In opposition is Boethius in the first [book] of *Musica* and the Philosopher in the aforementioned eighth [book].

II.1. Music affects the passions based on similar proportional relationships between the music and the sensible part of the soul

4. Ad istam quaestionem dicendum est consequenter primo quod quaedam consonantiae musicae valent et disponunt ad mores seu virtutes.

5. Cuius ratio primo apparet ex dictis, quoniam si aliquis agit vel disponit ad aliquid, ipsum magis factum agit et disponit ad magis tale, quoniam si simpliciter ad simpliciter et magis ad magis et maxime ad maxime.

6. Sed soni consonantes secundum aliquas harmonias agunt ad passiones et excitant eas, sicut apparet ex praecedenti quaestione, ergo magis consonantes et ad medium reducti agunt et disponunt ad passiones moderatas et ad medium reductas magis.

7. Sed passiones ad medium reductae disponunt ad virtutes, quoniam sunt materia earum.

8. Virtutes enim per se sunt moderativae earum.

9. Igitur consonantiae quaedam musicae, quae scilicet magis ad medium reductae sunt, valent et disponunt ad virtutes.

Consequently, concerning this question it must be said first of all that certain musical consonances influence and dispose to morality or virtues.

First of all, the reason for this is clear from what has been said, because if anything acts or disposes to something, the more it is done it acts and disposes a greater degree to such, because if simply to simply, and more to more, and most to most.

But sounds consonant according to certain harmonies act on the passions and arouse them, as is evident from the preceding question. [Sounds that are], therefore, more consonant and drawn to a mean act and dispose to moderate passions drawn more to a mean.

But passions drawn to a mean dispose to virtues, because [the passions] are the matter of them.

For virtues in themselves are moderative of them.

Therefore, certain musical consonances which, that is to say, are drawn more to a mean, influence and dispose to virtues.

III.2. Some musical proportions are similar to virtues inasmuch as their proportions represent a mean between extremes (10-14)

10. Secundo hoc idem apparet, quoniam illa in quibus sunt virtutum similitudines, valent et disponunt ad eas.

11. Simile enim agendo disponit ad sibi simile.

12. Sed in quibusdam harmoniis musicis sunt virtutum similitudines.

13. Virtus enim moralis est habitus in medietate consistens determinata recta ratione, quemadmodum sapiens determinaret.

Secondly, the same is clear, because those things in which there are likenesses of virtues influence and dispose to them,

for like by its action disposes to like.

But in certain musical harmonies there are likenesses of virtues.

Moral virtue is in fact a habitus consisting in a mean determined by right reason, just as a wise person would determine.

14. Harmoniae autem musicae in media quadam ratione sonorum consistunt, sicut declaratum fuit in praecedenti quaestione. Igitur harmoniae musicae quaedam valent et disponunt ad virtutes.

Musical harmonies consist in a certain mean reckoning of sounds, as was explained in the previous question. Certain musical harmonies, therefore, influence and dispose to virtues.

III.3. Musical consonances resonate in the soul (15-25)

15. Tertio hoc idem apparet, quoniam auditus in quadam media ratione consistit, sicut apparet secundo De anima.

Thirdly, this appears [to be] the same, because hearing consists in a certain mean ratio, as is clear in the second [book of] *De anima*.

16. Si igitur movetur ab harmonico sono sibi proportionali est delectatio secundum ipsum.

If, therefore, [hearing] is moved by a harmonic sound proportional to itself, there is pleasure according to the same [sound].

17. Cum igitur anima bene disposita per intellectum in auditu secundum actum iudicat mediam rationem sonorum sibi convenientem, delectatur.

When the soul, therefore, well disposed by the intellect for hearing according to [its] act, judges a mean ratio of sounds suitable to itself, it takes pleasure.

18. Delectatio vero in operatione intendit operationem et remittit contrariam, sicut apparet ex decimo Ethicae; operatio autem intensa delectationem quam consequitur propter quod intendit sibi similem.

Pleasure in an operation intensifies [that] operation and diminishes the contrary, as is evident from the tenth [book of] *Ethics*; an intense operation achieves pleasure on account of the fact that it intensifies what is similar to itself.

19. Simile enim confortat sibi simile.

Like reinforces [what is] like to itself.

20. Quia ergo opus virtutis consistentis in eadem vel simili proportione illi assimilatur, intenditur, et ipsa intensa delectatio intenditur, et ipsa iterato [*recte* iterata?], intensa intenditur virtutis illius operatio.

Because, therefore, the work of a virtue consisting in the same or a similar proportion is assimilated to that [proportion], it is intensified, and the same intense pleasure is intensified, and the same [being] repeated, the intense operation of that virtue is intensified.

21. Per intentionem vero frequentem ipsius operationis augetur virtus illa.

Indeed, through repeated intensification of the same operation that virtue is increased.

22. Igitur harmoniae vel consonantiae musicae bene proportionatae valent et disponunt ad virtutes, impropportionatae autem ad contraria.

Therefore, well-proportioned harmonies or musical consonances influence and dispose to virtues; disproportionate ones [dispose] to the contrary.

23. Et propter hoc dicit Boethius

And on this account Boethius says in

prooemio Musicae, *idcirco magnam rei publicae esse custodiam Plato arbitratur musicam moratam optime prudenterque coniunctam, ita ut sit modesta et simplex et mascula non effeminata nec fera nec varia.*

24. Et Philosophus dicit octavo Politicae, quod talis reddit innocuam regionem.

25. Talis autem secundum ipsum est illa maxime quae dicitur doria quae est harmonia quarti toni, deinde autem illa quae primi, quae in frequentiori usu habentur in cantibus ecclesiae.

the proemium of *Musica* that Plato considered music of the highest moral character [and] modestly composed to be an excellent guardian of the republic; accordingly, it should be temperate and simple and masculine, not effeminate, nor violent, nor fickle.

And the Philosopher says in the eighth [book of] the *Politics* that such [music] renders a land safe and sound.

Such is especially the case (in his opinion) of that [harmony] called Dorian, which is the harmony of the fourth tone, [and] next the [harmony] of the first [tone], which is used very frequently in the chants of the Church.

IV. The three genera of music: *mundana, humana, instrumentalis* (26a)

26a. Sed cum sit musica triplex: scilicet mundana, humana et instrumentalis, instrumentalis quidem quae consistit in instrumentis quibusdam quorum quaedam sunt naturalia, quaedam ab arte.

Illam vero, quae consistit in naturalibus vocalis est, quia vox naturalibus instrumentis formatur, alia vero instrumentalis retinens sibi nomen commune.

But since *musica* is threefold: cosmic, human, and instrumental; which instrumental consists of certain instruments of which some are natural, some [devised] by art.

That which consists of natural [things] is vocal, because the voice is formed of natural instruments, the other instrumental [music] retaining a name common to both.

V. Whether vocal or instrumental music is more conducive to virtue (26b-37)

26b. Adiungebat ille, qui proposuit quaestionem, quae istarum plus valet ad mores: vocalis an instrumentalis.

27. Et dicendum est quod, si sint eiusdem harmoniae bene moratae differentes in hoc, quod ista vocalis et illa instrumentalis, reliquis existentibus paribus, vocalis plus valet ad mores seu virtutes.

The person who proposed the question added [an inquiry about] which of these influences morality more: vocal or instrumental [music].

And it is to be said that, if they are of the same well-made harmony, [but] differing inasmuch as one is vocal and the other instrumental (all else being equal) the vocal is of greater influence on morality or virtues.

28. Cuius ratio potest haberi libro *De problematibus*, particula 20, quaestione 37.

29. Motus enim qui sunt secundum naturam sunt delectabiles, cuius signum est, quod pueri confestim nati gaudent ipsos audientes, quia magis ordinati sunt et magis ordinate nos movent.

30. Prius enim est motus ordinatus secundum naturam inordinato, quare magis secundum naturam.

31. Signum autem est, quoniam laborantes et bibentes et comedentes ordinate salvamus et augemus naturam et virtutem, inordinate autem corrumpimus et stupefacimus ipsam.

32. Aegritudines enim ordinationis corporis non secundum naturam motus sunt.

33. Consonantia autem est complexio contrariorum proportionem habentium ad invicem; proportio autem est ordinatio et delectabilis secundum naturam, et proportionatum omne improportionato omni delectabilius est.

34. Ex quibus accipitur quod consonantia bene ordinata et proportionata secundum naturam est delectabilis.

35. Quae ergo magis est secundum naturam, magis est delectabilis natura, sed consonantia vocalis magis est secundum naturam instrumentali, quoniam ista naturalibus instrumentis causatur, illa vero non, igitur magis est delectabilis harmonia vocalis instrumentali existente in eadem proportionem aliis existentibus paribus.

36. Quare si propter delectationem valet ad virtutem et disponit, mani-

The explanation for this can be found in the book *De problematibus*, part 20 [recte 19], question 37.

Movements that are according to nature are pleasurable, an indication of which is that newborn children enjoy listening to them, because [such movements] are more ordered and move us in a more ordered way.

For according to nature an orderly movement is superior to one without order, because [it is] more in accord with nature.

A sign of this is that, [by] working, drinking, and eating in a well-ordered way we preserve and enhance nature and strength; [if] in a disordered way, we corrupt and dull it.

For illnesses of the orderly disposition of the body are movements not in accord with nature.

Consonance, however, is the combination of opposites having a proportional relationship to each other; proportion, moreover, is an orderly disposition and [is] pleasurable according to nature, and every proportioned thing is more pleasurable than a disproportioned one.

According to which it is agreed that a consonance well-ordered and proportioned according to nature is pleasurable.

Whatever, therefore, is more according to nature is more pleasurable in nature, but vocal consonance is more in accord with nature than is instrumental, because the former is produced by natural instruments; the latter [is] not. Vocal harmony is, therefore, more pleasurable than instrumental of the same proportion, all other things being equal.

For which reason if [something] on account of pleasure influences and

festum est quod magis valet et disponit ad ipsam.

disposes to virtue, it is obvious that this influences more and disposes to the same.

37. Sic igitur apparet, quod harmonia musica bene proportionata valet ad mores et per oppositum impropor-tionata ad contrarium.

Thus it is clear that a well-pro-portioned musical harmony influ-ences morality and inversely a poorly proportioned one [acts] to the contrary.

VI. Refutation of objections (38-40)

38. Et quod arguitur quod non vocalis, quia facit banausos et male se habere ad animam, dicendum quod non est verum de ea, quae bene commensurata est, de ea autem quae incommensurata est propter inten-tionem vel remissionem, veritatem habet, quod non valet ad eos sed magis ad oppositum.

And when it is argued that vocal [harmony does] not [influence moral behavior], because it makes people vulgar and is ill-suited to the soul, it is to be said that this is not true of that [harmony] which is well proportioned, but of that which is badly proportioned on account of ascent or descent; this does not influence them, but rather the opposite.

39. Quod autem arguitur quod non instrumentalis, quia retrahit a scientia secundum Philosophum, non est verum de omni, sed de ea quae incommensurata est, de qua conces-sum est quod non facit ad mores, sicut prius.

What is argued that instrumental music [does] not [promote virtue], because, according to the Philo-sopher, it holds [one] back from knowledge, is not true of all [instrumental music], but only of what is ill-proportioned, concerning which [it is] conceded that it does not promote morality, as [stated] above.

40. Ratio in oppositum procedit sua via.

The opposing argument proceeds its own way.

Explicit ultimum quodlibet a magistro Petro de Alvernia disputatum anno domini millesimo tricentesimo primo.

[This concludes the final quodlibet disputed by Master Pierre d’Auvergne in the year of the Lord one thousand three hundred one].

* * *

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Passages from sources quoted verbatim by Pierre (or suggested by one of the participants in the quodlibetal session) are indicated by italics.

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