THE STUDY OF MUSIC AT THE UNIVERSITY OF OXFORD IN THE TWELFTH AND THIRTEENTH CENTURIES

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Higher education in Europe during early part of the middle ages consisted wholly of what was then known about the so-called "seven liberal arts" (grammar, rhetoric, logic, arithmetic, astronomy, geometry, and music) largely through the writings of Martianus Capella, Boethius, Cassiodorus, and Isidore of Seville.[1] The little that was known about these arts and the small number of texts from which they were taught helped to produce an educational status quo that remained rather fixed until the rediscovery of the writings of classical thinkers like Aristotle in the early twelfth century. With this new knowledge came both a renewed interest in learning and new material to teach, which eventually prompted the development of new educational institutions like universities.[2]

The fervor for this new knowledge appears to have initially dulled interest in the quadrivial arts (arithmetic, astronomy, geometry, and music), at least in Paris, for by 1255 the statutes regulating the curriculum at the university make no mention of texts concerning subjects like arithmetic or music.[3] This has lead scholars like Joseph Dyer to conclude that, "In thirteenth-century Paris . . . music has no place in either of the public forums of the University—the magisterial lecture or the formal academic dispute,"[4] despite the important musical developments that were taking place in Paris outside the university (especially at Notre Dame cathedral). The notable similarity between the University of Paris and Oxford[5] suggests that this neglect of the quadrivium might have been true at Oxford as well, and, indeed, the curriculum described in the

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[1] See David L. Wagner, "The Seven Liberal Arts and Classical Scholarship," in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 1–25.

[2] See Charles Homer Haskins, *The Renaissance of the Twelfth Century* (Cambridge: Harvard University Press, 1927).

[3] Lynn Thorndike, *University Records and Life in the Middle ages* (New York: W.W. Norton, 1975), 64.

[4] Joseph Dyer, "Speculative 'Musica' and the Medieval University of Paris," *Music and Letters* 90, no. 2 (2009): 204.

[5] Charles Homer Haskins, *The Rise of Universities* (Ithaca: Cornell University Press, 1965), 19–20; Haskins, *The Renaissance of the Twelfth Century*, 20 & 386.

Oxford statutes of 1268 is nearly the same as that of Paris in 1255.[6] Yet by 1431 Oxford's statutes require that all scholars wishing to proceed to a master of arts degree spend at least one year studying Boethius's *De institutione musica*—something not required at Paris even by 1255.[7] This suggests either a sudden return of quadrivial arts to the curriculum in the fifteenth century, or, more likely, that these subjects had continued to play an important role in the curriculum all along.

Even after Oxford had begun granting degrees in music in the late fifteenth century, a certain Richard Ede—who requested a BMus in 1506/7 for extensive study of music done outside the university—was still required to hear lectures on Boethius's *De institutione musica*.[8] Indeed, Caldwell notes the continued importance of *De institutione musica* at Oxford well into the nineteenth century.[9] That the quadrivial music of Boethius would continue in Oxford's statutes for so long perhaps indicates that it was not totally driven out by the curricular reforms of the twelfth and thirteenth. Indeed, Fletcher suggests that Oxford's 1268 statutes only represent *minimum* requirements and notes that provisions were made for students who had studied texts not included in the statute.[10] Thus, it is my contention that music, along with other quadrivial arts, continued to play an important (though largely unofficial) role in the faculty of the arts at

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[6] J.M. Fletcher, "The Faculty of Arts," in *The History of the University of Oxford*, ed. J.I. Catto and Ralph Evans, vol. 1, *The Early Oxford Schools* (Oxford: Clarendon Press, 1984), 376.

[7] See Jacques Verger, "Patterns," in *A History of the University in Europe*, ed. Hilde de Ridder-Symoens, vol. 1, *Universities in the Middle Ages* (Cambridge: Cambridge University Press, 1992), 52–3; Gordon Leff, "The *Trivium* and the Three Philosophies," in *A History of the University in Europe*, ed. Hilde de Ridder-Symoens, vol. 1, *Universities in the Middle Ages* (Cambridge: Cambridge University Press, 1992), 323–4; A.B. Cobban, *The Medieval Universities: Their Development and Organization* (London: Methuen and Co., 1975), 107; John Caldwell, "Music in the Faculty of Arts," in *The History of the University of Oxford*, ed. James McConica, vol. 3, *The Collegiate University* (Oxford, Clarendon Press, 1986), 201.

[8] Caldwell, "Music in the Faculty of Arts," 206–7.

[9] Caldwell, "Music in the Faculty of Arts," 201.

[10] Fletcher, "The Faculty of Arts," 376; see also Leff, "The *Trivium* and the Three Philosophies," 324.

the University of Oxford even during the curricular sea change that took place in the thirteenth century.

To understand the role that music played within the curriculum of the early university requires an understanding of what the study of music looked like as a quadrivial discipline. According to Boethius:

> There are three classes concerned with the musical art. One class has to do with instruments, another invents songs, a third judges the work of instruments and the song. But that class which is dedicated to instruments and consumes there its entire efforts, as for example the players of the cithara and those who show their skill on the organ and other musical instruments, are separated from the intellect of musical science, since they are servants, as has been said, nor do they bear anything of reason, being destitute of speculation. The second class having to do with music is that of the poets, which is borne to song not so much by speculation and reason as by a certain natural instinct. Thus this class is also separated from music. The third is that which assumes the skill of judging, so that it weights rhythms and melodies and the whole of song. And seeing that the whole is founded in reason and speculation, *this class is rightly reckoned as musical*, and that man as a musician who possesses the faculty of judging, according to speculation or reason, appropriate and suitable to music, of modes and rhythms and of the classes of melodies and their mixtures. . . .[11]

For Boethius, then, it is the "theorist" interested in divisions of the monochord, the ratios that produce musical intervals, the classification of consonance and dissonance, and the definition of the modes that is the true musician, not the organist or master of the cithara. Cassiodorus likewise echoes this sentiment when he defines music as, " . . . the discipline which treats of numbers in their relation to those things which are found in sounds."[12] It is thus with this "speculative" aspect of music that the writings of Boethius, Cassiodorus, and many other medieval writers were mainly concerned.

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[11] From Oliver Strunk, *Source Readings in Music History* (New York: W.W. Norton, 1950), 80, quoted in Karp, "Music" in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1983), 176–7, emphasis mine.

[12] From Strunk, *Source Readings in Music History*, quoted in Karp, "Music," 174.

Music's mathematical relationships were important to Boethius and the medieval worldview in general because of the belief that these same types of relationships also governed the interaction of heavenly, spiritual, and physical bodies.[13] Studying music thus provided insight into the innerworkings of the universe, but more importantly helped to prepare for the study of scripture, which, according to Weisheipl, was the ultimate goal of the liberal arts in medieval education.[14] This educational philosophy is made particularly evident in the requirement at nearly all universities in the thirteenth century that students complete arts study before passing to the "higher" and more sought after faculties of theology, law, and medicine.[15] In most cases, then, the study of music and other quadrivial arts was really only a means to an end. Thus, while it is certainly true that treatises discussing the "practical" aspects of music like chant classification, improvisation of polyphony, and musical notation were written during the middle ages (like those of Guido d'Arezzo), these treatises were not particularly useful for the student of the liberal arts because music was really only of secondary importance.

This view of the liberal arts as a prerequisite for Biblical study appears to have changed in various ways over the course of the thirteenth century as scholars across Europe attempted to integrate the newly-discovered Aristotelian philosophy into the old system of liberal-arts education. In Paris this new knowledge largely replaced the quadrivium rather than being integrated into it. This is likely due to the fact that the university and governing statutes that grew from the community of scholars that gathered around Peter Abelard in Paris during the twelfth century had tended to share his interest in philosophy, logic, and speculative theology to the

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[13] See Karp, "Music," 175; Plato, *Timaeus*.

[14] James A. Weisheipl, "The Structure of the Arts Faculty in the Medieval University," *British Journal of Educational Studies* 19, no. 3 (1971): 263.

[15] Weisheipl, "The Structure of the Arts Faculty in the Medieval University," 263–5.

virtual exclusion of the quadrivial arts.[16] Even initial bans on the reading of Aristotelian texts in Paris during the early thirteenth century seem to have only strengthened interest in them, and Leff indicates that these texts were being studied during the bans anyway.[17] With limited time in which to cover all of the material that university students needed to hear before they could earn their degrees, the quadrivial arts that had already fallen under neglect quite naturally fell by the wayside. The 1255 Paris statutes, then, were describing the current curricular practice of the time rather than prescribing any sort of curricular reform.

> This does not appear to have been the case at Oxford however. Fletcher notes that:
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> > Despite this listing of prescribed texts [in the 1268 statutes], however, it is evident that the university did not wish to impose an inflexible programme on students. Later in the same statute the masters chosen to examine candidates for determination [a public dispute in which students were examined toward the end of their undergraduate studies] were given permission to consider the case of students who had heard the prescribed texts less than the statutory number of times, or who had omitted to hear any particular book. If students could show that they had heard other texts which in the opinion of the examiners compensated for those omitted, then they would not be debarred from proceeding to determination. It is clear that the texts prescribed in 1268 give only an inadequate guide to the texts read by regent masters at Oxford.[18]

To go to the trouble of requiring certain texts only to allow students to determine without having read them hints at an ulterior motive behind the writing of the 1268 statutes, which can only be understood if we consider the status that Paris held in the eyes of other European universities. During the middle ages, the University of Paris was the most important and imitated university in northern Europe.[19] Not only was Paris the first university in this region and thus the model from which the universities of England and the German-speaking lands grew, but its masters also held a certain prestige at other European universities such that, "A master who had taught and been

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[16] Haskins, *The Rise of Universities*, 14; Dyer, "Speculative 'Musica' and the Medieval University of Paris," 201.

[17] Leff, "The *Trivium* and the Three Philosophies," 320.

[18] Fletcher, "The Faculty of Arts," 376; also see this reference for a list of prescribed texts in the 1268 statutes.

[19] See Haskins, *The Rise of Universities*, 19–20.

admitted to the magisterial guild in one of those places [Paris for theology and arts, Bologna for law, and Salerno for medicine] was certain of obtaining immediate recognition and permission to teach in all other inferior studia [universities], while these *studia* themselves would not receive masters from other schools without fresh examination."[20] The universality with which a Paris mastership was recognized at other universities helped to spread Paris's model of arts education across Europe as masters moved from Paris to other institutions.[21] But Paris's status likely also pressured many universities to imitate its curriculum as closely as possible so as to remain relevant in the world of European education. Given the proximity of Oxford's 1268 statutes to those of Paris in 1255 and the provisions made for students and masters wishing to study texts outside the "official" curriculum, one cannot help but wonder if this pressure didn't play a role in the adoption of this new curriculum at Oxford. I do not wish to suggest that academic pressure from Paris's reputation was the only reason for the writing of Oxford's 1268 statutes or that the arts curriculum at Oxford and Paris was irreconcilably different before this time. Rather, I argue that the context within which these statutes were adopted, and the provisions made within them hint at the presence of an academic subculture within the faculty of the arts at Oxford that was somewhat different from what we find at Paris. Indeed, it has become clear in recent years that a very important scientific revolution was taking place at Oxford during the thirteenth century that was virtually undocumented in any official university statutes.

As at Paris with Abelard, the tone for liberal-arts study at Oxford was set early on by the work of a few important men working in and around the university: Robert Grosseteste and his student Roger Bacon. Whereas Abelard's interests tended to be more in line with the new

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[20] Hastings Rashdall, *The Universities of Europe in the Middle Ages*, ed. F.M. Powicke and A.B. Emden, vol. 1, *Salerno, Bologna, Paris* (London, Oxford University Press, 1951), 7–8.

[21] Cobban, *The Medieval Universities*, 108.

speculative philosophical trends of the day that often neglected the quadrivium, Grosseteste and Bacon embraced a much more traditional liberal-arts philosophy in which quadrivial arts were viewed as a sort of preparation for theological study.[22] But beyond the pragmatic value of the quadrivial arts, Grosseteste and Bacon also seem to have been interested in these arts as ends in and of themselves. For Grosseteste, his interest in the liberal arts, paired with his own translations of Aristotle and several Arabian scholars:

> was the groundwork for the evolution of two procedural principles of enduring value for the study of science in the middle ages; namely, the application of mathematics to the natural sciences as a means of description and explanation, and the stress upon observation and experiment as the essential method of testing a given scientific hypothesis. These principles transformed the study of scientific data from a fairly random exercise to an integrated mathematic inquiry into the physical phenomena based upon the tripartite cycle of observation, hypothesis and experimental verification.[23]

Clearly, then, interest in mathematics in particular went far deeper at Oxford than anything we have seen at Paris and already attests to a significant difference in the role of the quadrivium at Oxford and Paris.[24] This scientific tradition at Oxford continued with Roger Bacon who, "went further than Grosseteste, and almost all of his contemporaries, in giving mathematics primacy over logic as the condition of all knowledge as well as theological understanding."[25]

The strength of this scientific tradition at Oxford also has significant implications for the study of music at Oxford during this time. Namely, that despite the enormous impact of this tradition on the history of science and academic inquiry in general, it went largely undocumented

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[22] Leff, "The *Trivium* and the Three Philosophies," 322–3; F.L. Harrison, "Music at Oxford Before 1500," in *The History of the University of Oxford*, ed. J.I. Catto and Ralph Evans, vol. 2, *Late Medieval Oxford* (Oxford: Clarendon Press, 1992), 348–52; Dyer, "Speculative 'Musica' and the Medieval University of Paris," 201.

[23] Cobban, *The Medieval Universities*, 108.

[24] Dyer, "Speculative 'Musica' and the Medieval University of Paris," 201.

[25] Leff, "The *Trivium* and the Three Philosophies," 322.

in any of Oxford's official statutes.[26] This reinforces, once again, the idea that the 1268 statutes were a prescriptive list of minimum curricular requirements with some significant caveats rather than a descriptive list of everything being studied at Oxford. Furthermore, this also indicates that study of the quadrivial arts often went far beyond these required minimums. Therefore, the fact that music does not appear in any official university documents until 1431 does not necessarily indicate that it was not being studied before this time. But even more importantly, Leff argues that this "distinctive approach" to mathematics and science appears to have carried over into the study of *all* of the other quadrivial arts as well.[27] Indeed, Grosseteste and Bacon spend a considerable amount of time discussing music in their own writings.[28]

Grosseteste's writings on music in *De artibus liberalibus* are very reminiscent of Boethius's *De musica* in that musical inquiry is understood largely as the study of proportion and the ways in which these proportions govern the interaction of all sorts of phenomena, including the movement of heavenly bodies and the interaction of the human body and soul. Because musical relationships were like those of the body and soul, Grosseteste even believed that music could be used medicinally to heal infirmities resulting from an improper relationship between the body and soul.[29] Grosseteste's views on music thus fall well within the boundaries of "traditional" quadrivial music.

Bacon's writings, on he other hand, are far more Aristotelian in content, particularly in his discussion of the "visible music" of gesture and dance. In *Opus maius* Bacon discusses music mainly as it relates to the study and public reading of the Bible. According to Harrison, Bacon

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[26] Leff, "The *Trivium* and the Three Philosophies," 324.

[27] Leff, "The *Trivium* and the Three Philosophies," 323.

[28] See Harrison, "Music at Oxford Before 1500," 348–52.

[29] Harrison, "Music at Oxford Before 1500," 348.

believed musical study was important because, "theologians need a knowledge of musical maters in order to understand the musical terms, metres and genres that occur in the Bible and to achieve good public presentation of the Bible, since while grammarians point out the factual elements involved, such as stress and punctuation, musical considerations such as those discussed by Augustine . . . lie behind these elements."[30] Bacon then turns to the classification of music's elements in his *Opus tertium* and it is here that he progresses furthest from the views expounded by Grosseteste. Rather than Boethius's three broad musical categories (*mundana, humana,* and *instrumentalis*), Bacon divides music into its visible and audible facets, each of which is further divided in two—movement and formations for visible and voice and instruments for audible. In fact, Bacon seems somewhat skeptical of Boethius in general and instead draws most of his material from the likes of Euclid, Ptolemy, Gaudentius, Censorinus, Abinus, Augustine, Martianus, Cassiodorus, and al-Fārābī.[31]

The writings of Grosseteste and Bacon were not the only ones to be found at Oxford during the thirteenth century however. Harrison notes the presence of several manuscripts at Oxford containing the writings of Guido, Cassiodorus, Isidore, Franco of Cologne, Philippe de Vitry, Jehen des Murs, and even a copy of Boethius's *De musica*.[32] That there were apparently very few copies of *De musica* available at Oxford during the thirteenth century would perhaps indicate that it was not actively being studied.[33] But we must be mindful of the difficulty with which books were obtained during this time. As Fletcher points out, "The student's duty to attend lectures regularly was an essential requirement of the university at a time when books

[30] Harrison, "Music at Oxford Before 1500," 349.

[31] Harrison, "Music at Oxford Before 1500," 349–52.

[32] Harrison, "Music at Oxford Before 1500," 353.

[33] Caldwell, "Music in the Faculty of Arts," 203.

were often not easily available and, when obtainable, sold at too high a price for any but the wealthiest of students. Institutional libraries grew only slowly, and even then were open usually only to those members of the institution who were graduates."[34] Thus, it is certainly possible that lectures were given on Boethius's *De musica* even if there do not appear to have been many copies of it available at the time.

Though Boethius and the "speculative" tradition of music theory in general would continue to occupy an important place in musical study for centuries to come, beginning sometime in the late fourteenth or early fifteenth century, musical study at Oxford began a gradual move away from this tradition toward the study of actual music. This trend, which reflected a similar movement that had been taking place in the field of musical study in general since about the tenth century,[35] eventually culminated in the granting of degrees in music at Oxford beginning in 1479 with Robert Wydow.[36] It is not clear exactly what was required to earn these BMus degrees during the first years they were offered, but by 1506 with Richard Erde—though he alone appears to have been required to hear lectures on Boethius—these degrees were being awarded largely on the basis of *practical musical ability* demonstrated through some sort of compositional exercise.[37] In fact, many of Oxford's music degrees awarded during the latter middle ages appear to have been given to people who had never actually studied at the university.[38] While the BMus degree seems to indicate a shift toward practical musical study

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[34] Fletcher, "The Faculty of Arts," 374–5.

[35] See Calvin M. Bower, "The Transmission of Ancient Music Theory into the Middle Ages," in *The Cambridge History of Western Music Theory*, ed. Thomas Christensen (Cambridge: Cambridge University Press, 2002), 158–64.

[36] Caldwell, "Music in the Faculty of Arts, "206; for a complete list of music degrees at Oxford, see Harrison, "Music at Oxford Before 1500," 369–71.

[37] Caldwell, "Music in the Faculty of Arts," 206–7.

[38] See Harrison, "Music at Oxford Before 1500," 369–71.

within the field of music, the 1431 statutes requiring all MA students to hear lectures on Boethius demonstrates that the tradition of speculative musical study continued to play a role at Oxford in the general arts course.[39]

Nan Carpenter argues that this "twofold approach" to music evidenced at Oxford (and also Cambridge) was particularly important to the culture of medieval England and also helped to set it apart from other European universities.[40] Indeed, it is quite clear by the fifteenth century that Oxford's approach to music is much different than that found at its neighbor in Paris, but the often scant availability of official university documents regulating the curriculum at Oxford makes it appear as if this transformation happened over night. As I have argued in this essay, however, there is evidence to suggest that the study of music as a quadrivial discipline never went out of style at Oxford as it did in Paris, but instead continued to be studied "unofficially" for a considerable amount of time until there arose some specific need to officially require it in the statutes. The diverging paths taken by Oxford and Paris were paved early on in their institutional histories by the influence of a handful of prominent scholars who, by their dynamic reputations and wide-reaching influence set the tone of the universities for centuries afterward. Regardless of the reasons for its continued prominence, however, the fact that music and other quadrivial arts continued to be studied at the University of Oxford during the curricular reforms of the twelfth and thirteenth centuries was a hugely significant event in the history of European education and one that has helped to shape musical and scientific inquiry as we know it today.

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[39] Caldwell, "Music in the Faculty of Arts," 201.

[40] Nan Cooke Carpenter, *Music in the Medieval and Renaissance Universities* (New York: Da Capo Press, 1972), 89.

Bibliography

Barbera, André ed. *Music Theory and its Sources: Antiquity and the Middle Ages.* Notre Dame: University of Notre Dame Press, 1990.

Beaujouan, Guy. "The Transformation of the Quadrivium." In *Renaissance and Renewal in the Twelfth Century*, 463–87.

Bower, Clavin M. "The Transmission of Ancient Music Theory into the Middle Ages." In *The Cambridge History of Western Music Theory*. Edited by Thomas Christensen, 136–67. Cambridge: Cambridge University Press, 2002).

Caldwell, John. *The Oxford History of English Music*. Vol. 1, *From the Beginnings to c. 1715.* Oxford: Clarendon Press, 1991.

_____. "Music in the Faculty of Arts." In *The Collegiate University*, edited by James McConica, 201–12. Vol. 3 of *The History of the University of Oxford*. Oxford, Clarendon Press, 1986.

Carpenter, Nan Cooke. *Music in the Medieval and Renaissance Universities*. New York: Da Capo Press, 1972.

Cobban, A.B. *English University Life in the Middle Ages.* Columbus: Ohio State University Press, 1999.

_____. *The Medieval Universities: Their Development and Organization*. London: Methuen and Co., 1975.

Dales, Richard C. *The Intellectual Life of Western Europe in the Middle Ages*. Leiden: E.J. Brill, 1992.

Daly, Lowrie J. *The Medieval University, 1200–1400*. New York: Sheed and Ward, 1961.

Dyer, Joseph. "Speculative 'Musica' and the Medieval University in Paris." *Music and Letters* 90, no. 2 (2009): 177–204.

Fletcher, J.M. "The Faculty of Arts." In *The Early Oxford Schools*, edited by J.I. Catto and Ralph Evans, 369–99. Vol. 1 of *The History of the University of Oxford*. Oxford: Clarendon Press, 1984.

Harisson, F.L. "Music at Oxford Before 1500." In *Late Medieval Oxford*, edited by J.I. Catto and Ralph Evans, 347–71. Vol. 2 of *The History of the University of Oxford*. Oxford, Clarendon Press, 1992.

Haskins, Charles Homer. *The Renaissance of the Twelfth Century*. Cambridge: Harvard University Press, 1927.

_____. *The Rise of Universities*. Ithaca: Cornell University Press, 1965.

Hoenen, Maarten, Josef Schneider, and Georg Wieland, eds. *Philosophy and Learning: Universities in the Middle Ages*. Leiden: E.J. Brill, 1995.

Karp, Theodore C. "Music." In *The Seven Liberal Arts in the Middle Ages.* Edited by David L. Wagner. 169–95. Bloomington: Indiana University Press, 1983.

Leff, Gordon. "The *Trivium* and the Three Philosophies." In *Universities in the Middle Ages*, edited by Hilde de Ridder-Symoens, 307–36. Vol. 1 in *A History of the University in Europe*. Cambridge: Cambridge University Press, 1992.

Masi, Michael, ed. *Boethius and the Liberal Arts: A Collection of Essays.* Berne: Peter Lang, 1981.

Paetow, Louis John. *The Arts Course at Medieval Universities with Special Reference to Grammar and Rhetoric*. Urbana-Champaign: University Press, 1910.

Pedersen, Olaf. *The First Universities: Studium Generale and the Origins of University Education in Europe.* Cambridge: Cambridge University Press, 1997.

Rashdall, Hastings. *The Universities of Europe in the Middle Ages.* Edited by F M Powicke, and A B Emden. London: Oxford University Press, 1951.

Strunk, Oliver. *Source Readings in Music History*. New York: W.W. Norton, 1950.

Thorndike, Lynn. *University Records and Life in the Middle Ages*. New York: W.W. Norton, 1975.

van Deusen, Nancy, ed. *The Intellectual Climate of the Early University*. Kalamazoo, medieval Institute Publications, 1997.

Verger, Jacques. "Patterns." In *Universities in the Middle Ages*, edited by Hilde de Ridder-Symoens, 35–74. Vol. 1 in *A History of the University in Europe*. Cambridge: Cambridge University Press, 1992.

Wagner, David L. *The Seven Liberal Arts in the Middle Ages.* Bloomington: Indiana University Press, 1983.

Weisheipl, J. A. "Curriculum of the Faculty of Arts at Oxford in the Early Fourteenth Century." *Mediaeval Studies* 26 (1964): 143–85.

Weiss, Susan Forscher, Russel E. Murray, Jr., and Cynthia J. Cyrus, eds. *Music Education in the Middle Ages and the Renaissance.* Bloomington: Indiana University Press, 2010.

Williams, C.F. Abdy. *A Short Historical Account of the Degrees in Music at Oxford and Cambridge: With a Chronological List of Graduates in that Faculty from the Year 1463.* London: Novello, Ewer, and Company, 1893.