Music in Ancient Greece and Rome

Ancient Greece. The ancient Greeks left ample evidence of their love for the arts, and music in particular. Visit the Greek wing of an art museum today, and you will see decorative vases adorned with images of musicians as well as athletes and gods. This iconography furnishes interesting information about Greek music: from the shape of instruments and how they played them (see Figures 1-1 and 1-2) to hints of vocal technique (closely examine Figure 1-3). Music was an essential component of public rituals, such as religious celebrations, public entertainment, and athletic contests—a practice unwittingly resurrected for the opening ceremonies of the modern Olympic Games. Music also played a prominent role in the theater with the all-male chorus providing musical commentary regarding the drama. Only two fragments of this music for theater have survived through the centuries, one of which consists of six lines from Euripides' play Orestes (see Stasimon Chorus in Anthology 1). Music was also an essential part of the entertainment in private gatherings, such as the symposium. The skolion, a brief song with lyre accompaniment, was a popular feature of these social occasions (Skolion As long as you live, Anthology 2). In a spirit of egalitarianism, everybody participated in these performances—that is, if they wanted to be invited to another one.

Ancient Greek music, whether solo or choral, a cappella or accompanied, was monophonic in texture (listen carefully to Anthology 2). While there were a number of percussion, wind, and string instruments, the most significant are the aulos, lyre, and its larger relative, the kithara. Greek mythology associated many instruments with specific deities: kithara with Apollo, aulos with Athena and the satyr Marsyas, whereas the faun-god Pan invented the syrinx (pan-pipes).

It is unfortunate that while we know a great deal about the role of music in ancient Greek society, very little actual music survived. Depending on who is counting (scholars number fragments differently), somewhere between forty and fifty notated compositions are all that remain of this culture’s vibrant musical life. (Imagine how little we would know of the last five hundred years of Western art music if limited to a random selection of fifty fragmentary compositions.) Yet, the music of ancient Greece exerted a powerful influence on Western music. There are two reasons for this. First, their theorists wrote voluminously, examining the concepts of consonance, dissonance, intervals, and scales. Stories credited the mathematician Pythagoras—whose famous theorem $a^2 + b^2 = c^2$ is still memorized by high school geometry students—with discovering the mathematical ratios of musical intervals. Those intervals form the basis of traditional harmony studied in music theory classes today. Further, the Greeks felt these mathematical ratios reflected proportions that were prevalent throughout the cosmos, and by understanding the science of acoustics, they could learn more about the world around them. Musicians in Western Europe also found the writings concerning modes and tetrachords of great interest.

Second, Greek philosophers wrote passionately about the value of music in training the mind and shaping public morality. Plato, for example, extolled the virtues of rigorous state control over music and musicians. The most radical modern-day advocates of censorship appear as waffling moderates when compared to Plato’s ideal state.

Philosophers felt so strongly about music because they observed its unique power to move the emotions. Their descriptions of this potent emotional force, as well as
considerations regarding the relationship between text and music, have influenced Western musicians over the centuries.

**Rome.** The culture of ancient Rome is most remarkable for its contributions to architecture, literature, and the administration of government. In most respects, Romans were adapters rather than innovators; their mythological literature, for example, derived largely from Greek stories. So it was in music. Roman writers developed their ideas about music theory from Greek texts, and their instruments, with the exception of the trumpet (called the *tuba*), were also Hellenic in origin.

Three Roman authors, however, indelibly shaped Western musical thought. St. Augustine (354–430 C.E.), perhaps most famous for his *Confessions*, wrote a six-volume text entitled *De Musica* that 900 years later influenced the development of rhythmic notation. Martianus Capella (flourished c435) included music among the seven liberal arts, ensuring its study throughout the Middle Ages. Finally, after the fall of the Roman Empire in 476, Boethius wrote the text that served as the foundation of music study for more than a millennium, *De institutione musica* (*Fundamentals of Music*). This seminal text reiterated three basic Greek ideas concerning music: the mathematical basis for the ratios of harmony, that these harmonic relationships resonated throughout the universe, and that the study of music was a separate discipline from its performance.

**Chant**

**Origins.** Chant, known variously as Gregorian chant, plainchant, or plainsong, is monophonic music sung by a choir and soloists. For centuries it was the music sung during the worship services of the Christian church. Scholars can only make assumptions about the origins of this vast body of music because for 900 years, the church transmitted chant from one generation to the next through oral tradition rather than written notation. It seems reasonable that the music of the Jewish temple and synagogue services shaped the songs of the early Church, but writings describing early worship services mention that members created and sang new songs. Within a couple of centuries the church began passing their songs of worship from one generation to the next. Today, we often associate the sound of this music with meditation and relaxation of the mind. To the early Church, however, it was a powerful expression of religious devotion; St. Augustine described being moved to tears by the beauty and spiritual intensity of chant.

**Various traditions.** As the Church spread throughout the Mediterranean world, beginning around 300 CE, various Roman provinces developed their own musical traditions. Coptic chant was prevalent in northeastern Africa, and it is still in use by the Coptic Church in Egypt, Sudan, and Eritrea. Byzantine chant flourished in the northeastern regions of the Roman Empire, centering in Constantinople, and became the foundation of chant for the Eastern Orthodox Church. The north Italian city of Milan was the center of Ambrosian chant, a delectable-sounding name to identify a tradition that traces back to St. Ambrose (ca 340–397). Although most Ambrosian chant appeared after his death, he wrote a number of well-known hymns, one of which may be *Aeterna Christi munera*, which Palestrina used as the basis for his Mass of the same name (see Anthology 68). Much revised, this tradition continues in Milan today. Mozarabic chant was indigenous to Spain and continued until the eleventh century, when it was suppressed. The tradition centered in Rome, known as Roman, beginning in the ninth century merged with Gallican, the chant of the Frankish kingdom, and became what we now call Gregorian chant.
Charlemagne. This merging of chant traditions occurred during the first four generations of the Carolingian dynasty (751–877). Seeking to unify a diverse realm that combined different regions, ethnic groups, and languages, they gradually imposed a single tradition of worship on the church in the regions under their political control. While the process began under Pepin the Short, his famous son, Charlemagne, took the important step of requesting books of chant from Rome. He and his advisers began replacing the traditional Gallican chant with what they thought to be chant dating back to Pope Gregory the Great (r590–604). By the 850s, the legend of Gregorian authorship was firmly enshrined, and before the second millennium commenced, it was firmly believed that the Holy Spirit, in the form of a dove, had dictated the chants to Gregory, giving Gregorian chant the imprimatur of divine inspiration as well as the misleading name “Gregorian chant.”

Notation. The ninth century was a watershed period in the history of chant, and not just because it was the period when the Carolingian government began to insist upon a uniformity of practice. It was also the period when chant moved from oral transmission to notation, and the theory of church modes emerged. The symbols that seem so obvious today only developed after a slow, centuries-long process of evolution. At first, notation served as a memory aid, indicating a general melodic shape but not precise intervals or pitches. It was not until the eleventh century that neumes began to indicate exact pitch by means of a staff, an invention credited to Guido of Arezzo (c991–c1033). While the notation is relatively primitive, lacking basic information about rhythmic duration or articulation, Guido was proud of his accomplishment. Now choirmasters could teach boys a chant in a matter of minutes rather than the days it had previously taken to drill it into their skulls through rote memorization.

Hildegard. The myth of Pope Gregory aside, it is rare that we know who composed chant; most were created by clergy who labored in unrecorded anonymity (thereby avoiding the sin of pride) in monasteries or cathedrals, institutions that possessed the means of recording and transmitting this body of literature. One remarkable exception to this pattern is exemplified in the life and work of Hildegard of Bingen (1098–1179). Hildegard composed chant as a means of relating her visions of spiritual images, and the nuns of her convent sang them during their observation of the Mass and canonical hours (liturgical offices). While her compositions were neither widely circulated nor entered into the liturgy of the church, she provides a singular example of the type of individual who composed what we call Gregorian chant. They were devout clergy who believed that the humble use of their musical gift was more important than personal recognition.

Elaborations of Chant: Tropes, Sequences, and Organum

Three distinct types of chant elaborations appeared during the ninth century, the same period that saw the development of notation. Two were monophonic and one polyphonic, but all three were means of enhancing musical expression and religious devotion.

Tropes. Tropes were additions to chant, either textual, musical, or a combination of the two. Musicians could add text to enhance the devotional content of melismatic passages that already existed, as in Kyrie Omnipotens genitor (compare Anthology 11 with the trope-less version of the same chant in Anthology 6). Adding melismatic passages without text to preexisting chant was rare. By far, the most common type of trope consisted of combining text and music to the “Introit,” as in Hodie
cantandus est nobis (Anthology 10). Tropes were particularly popular in monastic institutions, and the most famous composer was a monk from St. Gall, Tuotilo (c850–915). By the twelfth century, when compositional activity became more common in urban cathedrals, the practice of troping died out.

**Sequences.** Sequences are much like tropes, in that they add text and music to chant. They consistently appeared, not at the beginning of a chant but at its conclusion, especially in the “Alleluia" chants of the Mass. (The term sequence literally means “something that follows.”) A characteristic of the genre is double verse structure, wherein two phrases of text are sung to the same melody (see Dies irae, Anthology 12). The spread of the sequence was an indirect result of Viking depredations along the northern coast of France. A monk from the monastery of Jumièges, located just inland from where the mouth of the Seine flows into the English Channel, fled to St. Gall in Switzerland (see Map 3-1), bringing along a book containing a few sequences. There they came to the notice of Notker Balbulus, the author of the first biography of Charlemagne, who was intrigued and wrote his own book of sequences, the Liber hymnorum (completed in 884). Known throughout the Holy Roman Empire, his sequences served as a model for subsequent writers.

**Organum.** Organum began as an improvisational means of elaborating monophonic chant by incorporating passages of polyphony. But which passages should be given this treatment? To have the entire monastic community improvising simultaneously would be impracticable, to say the least. Many chants, however, have solo passages, either a verse or an incipit (the portion at the beginning of the chant that precedes the asterisk in modern chant books). Musically astute cantors could improvise polyphony during these solo portions, leaving the choir to do what they did best, sing in unison. Therefore organum does not exist as an independent composition but as a polyphonic elaboration of the solo sections within a given chant.

Cantors throughout Europe needed to know how to correctly perform this type of music, and a few theorists, such as Abbot Hoger, Guido of Arezzo, and John of St. Gall wrote practical “how-to” books explaining the proper procedures. Today these treatises might be entitled Organum for Dummies, but in the ninth century Abbot Hoger settled on a less provocative title, Musica enchiriadis (Music Handbook). This important treatise provides the earliest description of parallel organum, polyphony in which the new voice (vox organalis) exactly duplicated the original chant (vox principalis) at the interval of a fourth, fifth, or octave below the original. The text also addresses the issue of oblique organum, a style in which the vox organalis holds a single pitch as a drone, thereby of avoiding tritones or enabling a phrase to cadence on a unison. More than a century later Guido’s treatise, Micrologus (c1030), emphasizes the importance of the occursus by allowing major seconds and thirds, voice crossing, and contrary motion to make the smoothest possible cadence. The last important treatise, De Musica (c1100) by John of St. Gall, encourages contrary motion and voice crossing throughout the organal passages and switches the placement of voices so the vox principalis now lies beneath the newly composed vox organalis.

The earliest form of notated organum dates from the period of Guido and is part of a collection today known as the Winchester Troper. This English manuscript predates the development of the staff, so the notation aided the memory of the singers rather than providing a precise indication of the music. A century later, Aquitanian polyphony, centered in southern France, reflected the theories espoused by John of St. Gall. In this style, the vox principalis now occurs below the vox organalis, contrary motion is common, and most important, the chant tones now occur more slowly.
beneath a flowing upper voice, creating sustained-tone organum (see *Viderunt Hemanuel*, Anthology 18).

Notre Dame organum emerged during the final decades of the twelfth century, exemplified by the compositions of Leoninus and Perotinus. Collected in the grandly titled *Magnus liber organi* (or *Great Book of Organum*), one extant copy (c1240) is slightly narrower and half an inch longer than a common index card. Although the volume could easily fit into the palm of the hand, its influence was immense, and the music of Notre Dame was transmitted widely throughout Europe, becoming the first international style of polyphony.

The two-voice organa of Leoninus are sectionalized works that incorporate two divergent styles within a composition: *organum purum* and discant. *Organum purum* corresponds to the florid style of Aquitanian polyphony, and consists of melismatic phrases sung over a *vox principalis* that sustains each note of the original chant. Contrasting sections, in which both voices move in clearly discernible rhythmic patterns, are known as discant; the term for a section in discant style is clausula. In the organa of Leoninus (e.g., *Viderunt omnes*, Anthology 20), a clausula is inserted at various points within the overall *organum purum* style. The various versions of the *Magnus liber* include different clausula settings, known as substitute clausula, that are based on the same notes of the chant but with a different metrical pattern and unique *vox organalis*. Such substitutions could give each performance of *Viderunt omnes* a unique character, which is one reason why various modern recordings of the same organum can sound different.

An important innovation developed by the Notre Dame School was that of rhythmic notation. Theorists described six basic patterns called “rhythmic modes” that were based on the meter of Latin poetry (as described in *De Musica* by St. Augustine). The mode remained consistent throughout the clausula, but durations could be subdivided. Unlike modern notation, where various aspects of the note precisely indicate how long it should be held, duration in the rhythmic modes was determined by the order in which notes were grouped together into ligatures. Composers used this type of notation for more than a century (c1150 to 1280), until it was replaced by mensural notation.

The second great composer of the Notre Dame School was Perotinus, who enhanced his organa by adding a third, and sometimes fourth, voice (see *Viderunt omnes*, Anthology 21). For these extra voices to coordinate with each other, all the upper voices (duplum, triplum, and quadruplum) were sung in modal rhythm over a sustained tenor. Now metrical organization was not just a section with a larger work, as in the organa of Leoninus, but was an essential characteristic of the entire composition. Another trait of Perotinus’s compositions is the use of interlocking phrases, meaning that different voices alternate and repeat short phrases. Further, these phrases move from harmonic dissonance to consonance. The level of vocal interplay and musical structure in his music mark Perotinus as the first modern composer.

**Conductus**

Conductus emerged in southern France during the late twelfth century but quickly adopted by the composers of the Notre Dame School. It was an important genre for about a century until superseded by the motet. While composers created conductus concurrently with organum (there is a three-voice work credited to Perotinus), and it shared the same musical structure of modal rhythm and discant style, this genre is unique from organum in two important respects. First, the tenor line is a newly composed
melody and not based on a section of chant. One late *Ars antiqua* composer, Franco of Cologne, instructed the readers of his treatise, *Ars cantus mensurabilis* (c1260), to write the tenor line first, taking great care to make it melodious and then successively add each additional voice. Second, the text of conductus is a nonliturgical Latin poem, usually of a religious or serious tone, that often railed against corruption or, in the case of *Dic, Christi veritas* (Anthology 23), political opponents. One important exception to this style is, of course, the farcical *Orientis partibus* (Anthology 22). Like hymns, the text is often strophic and set in a regular poetic meter.

**Motet**

**Origins.** The motet is one of the most flexible genres in the history of music. Important examples exist by *Ars nova* composers; it was one of the most significant genres of Renaissance music; later composers, such as Bach and Brahms, contributed important works; modern composers still turn to this genre. Needless to say, a narrow definition of the term cannot adequately define a genre with an eight-hundred-year history, so the best course is to examine how composers treated the motet at various points in time.

The derivation of the word motet provides insight into the intentions of the earliest composers from the Notre Dame School: it comes from the French mot, which means “word.” It precisely describes the early genre: a discant clausula with words added to the notes of the upper voice(s). In a sense, the motet could have served much the same function as tropes, in which text was added to long melismatic passages, partly to gloss the text, partly to aid musical memory. Each of the voice parts above the tenor had its own text, first in Latin, but bilingual combinations of Latin and French soon became common. In these early motets, composers often expanded the two-part texture of a discant clausula to three or even four voices. Indeed, by comparing the various textual and musical additions, it is often possible to trace the evolution of a motet from its early use in organum. The two-part clausula in Anthology 24a is from the *Magnus liber organi*, while the motet *O quam sancta/ Et gaudebit* (Anthology 24b) adds text to the duplum. (The fact that this two-part motet comes from Spain attests to the wide circulation of compositions from the Notre Dame School.) In *El mois d’avril/O quam sancta/ Et gaudebit* (Anthology 24c), another layer of music with its own text, this one in French, has been added providing multiple layers of meaning.

As the thirteenth century progressed, and composers began writing motets of increasing complexity, the notational limitations of the rhythmic modes became more and more pronounced. Mensural notation, described by Franco of Cologne in his treatise *Ars cantus mensurabilis* (*Art of Measured Song*, c1280), emerged as a way to provide each note with its own durational symbol. As a result, composers gave greater rhythmic differentiation to each line. The tenor still moved more slowly than the upper voices, but the fastest-moving top voice was more suited to a voluble French text. Composers gradually moved away from the clausula discant model, writing more unique works. Soon any portion of chant served as a tenor line, not just a melisma; in fact, even the jingle of a street vendor could furnish the basis for a delightful composition (see Anthology 25). No longer was the motet relegated to enhancing the devotional thoughts of its listeners; now it was entertainment.

**Isorhythmic motet.** With the fourteenth century came a new compositional style, the isorhythmic motet. This innovation combined a subtle musical structure of great architectural complexity while allowing malleable phrases perfectly suited to the
rhythmic flexibility of the French text. The foundation of isorhythm is the tenor line. This line consists of two components: one melodic and the other rhythmic. Ordinarily composers of isorhythmic motets based the sequence of pitches in the tenor line on a segment of chant. This melodic pattern—called the color—could be stated once, but generally it was repeated. As a general rule, the rhythmic pattern, referred to as the talea, did not correspond exactly to the length of the color. It usually required several repetitions of the talea before completing a statement of the color. For example, the tenor line in Philippe de Vitry’s (1291–1360) motet Garrit gallus/In nova fert/Neuma (Anthology 28) consists of two statements of the color and six of the talea (expressed as 2C=6T). In contrast to this mathematical organization, the two upper voices freely express the text, their phrases creating individual cadences with the tenor. Vitry’s contemporary, Guillaume de Machaut (1300–1377), also used isorhythm; it is the organizing principle in four movements of his Messe de Nostre Dame (Mass of Our Lady, see Anthology 34).

Isorhythm continued as the dominant form of motet composition for over a century, and the early Renaissance composer Guillaume Dufay used this form in his motet Nuper rosarum flores (see Anthology 39), in which the rhythmic proportions of the isorhythm mirrored the architectural dimensions of the performance space, the cathedral of Florence. Eventually, composers extended the principles of talea and color to other voices as well. When a composer infuses all the voices of a composition with an isorhythmic character (often the nontenor voices may have a talea pattern but omit the color), it is said to be “pan-isorhythmic.”

Early Medieval Secular Music

The composition and performance of music was not confined to the sacred precincts of the church. Medieval men and women listened to and sang songs—especially love songs—and took delight in dancing. As one might expect, these activities were not limited to aristocratic castles or the residences of an educated and urbane clergy; all levels of society enjoyed music, and in many venues, indeed, some much closer to hell than heaven. In Canterbury Tales, the English author Geoffrey Chaucer (c1340–1400) describes a scene wherein music is one attraction luring customers to a brothel.

If secular music was prevalent in medieval society, then why does this repertoire not form a more significant component in our study? The answer lies in the manner in which it passed from one musician to the next: by oral transmission, not by means of written notation, which would require the laborious and expensive process of making a manuscript. When a newer musical style replaced an older one, the previous tradition died out; there was no need to remember what no one wanted to hear anymore. Granted, tastes did not change as rapidly as today, so songs could remain on the “Top Forty” list for decades. Some of the most popular were transcribed into volumes called chansonniers, usually long after the death of the composer. For example, the song Can vei la lauzeta (c1165) appears in a source compiled c1250, indicating that it still retained popularity nearly a century after it was created. Because chansonniers were generally compiled long after the composer’s death, they represent a performing tradition rather than a faithful reproduction of the original song.

Our knowledge of secular music begins during the twelfth and thirteenth centuries in the region of southern France, the same area that developed Aquitanian organum. There, composers known as troubadours, who were as much poets as musicians,
wrote poetry in langue d’oc, the vernacular language of the region. While the language may have been that of the common folk, their songs were not. They created their poems and music for aristocratic consumption; indeed, a number were themselves members of the nobility. Unlike later periods, it was socially acceptable for the aristocracy to be active composers. One of the earliest troubadours was Duke William IX, the grandfather of Eleanor of Aquitaine; another was Countess Beatriz of Dia. Of course, they did not travel the countryside, harp in hand, singing for their supper, nor is it likely that a trobairitz (the term for a female troubadour) would have ever performed in a public setting. In the main, troubadours were valued entertainers and therefore supported by aristocratic patrons. The most famous troubadour was Bernart de Ventadom (c1135–c1195), who though he came from a poor family, served Eleanor of Aquitaine, one of the most astute and politically powerful women in the history of Western civilization.

Troubadour songs, called cansos, share four traits with chant: nonrhythmic notation (if they are notated at all, and most are not), a monophonic line, predominantly move by step, and often have a strongly modal character. There are, however, three important differences: the text is not in Latin, but the vernacular langue d’oc, a repetitive phrase structure (e.g., ABABCDB), and a consistent use of strophic form. All these traits are exemplified in A chantar m’er (only one verse is provided in Anthology 15) and Can vei la lauzeta (Anthology 16).

Shortly after the emergence of the troubadours, a similar movement arose in northern France, not the least because of the influence of Eleanor of Aquitaine, who traveled throughout the Angevin kingdom after her marriage to Henry II of England. The musicians of northern France were called trouvères, and their musical style is not dissimilar from their southern counterparts, but the poems are written in langue d’oïl, the northern dialect of Old French. The descendants of Queen Eleanor were leading figures in the trouvère tradition. Her son Richard the Lionheart was an astute musician and composed at least one surviving work, Ja nus hons pris ne dira (Anthology 17). (Eleanor’s youngest child, John, may have been too irritated by the legendary Robin Hood, being forced to sign the Magna Carta, and loosing his French territories to have had much interest in composing music.) Marie of Champagne, daughter of Eleanor and her first husband, King Louis VII of France, was a patron of the most famous poets of the period. Finally, the familial tendency reemerged in her grandson, Thibaut, king of Navarre (d. 1253), whose prolific work scholars consider among the most important of the period.

Just as the sacred music of the Notre Dame School spread throughout Europe, so also did the contemporaneous secular style of the troubadours and trouvères. Musicians in Italy, Germany, and Spain all imitated the French and developed their own secular tradition. In Germany a poet-musician of monophonic secular music was known as a Minnesinger and later as a Meistersinger. A form commonly associated with this repertoire—but by no means limited to German music—is AAB, often referred to as “bar form.” (Ja nus hons pris, Anthology 17, is a non-German example.) The troubadour tradition also flourished in the kingdom of Castile, a region located in the north-central section of the Iberian Peninsula. Patronized by King Alfonso the Wise, who may have been a composer himself, these poet-musicians wrote songs known as cantigas. Like the French canso, these are often songs of love and heroism, but unlike their Gallic antecedent, many cantigas praise the Virgin Mary and retell stories of her miracles. Approximately four hundred of these songs were collected into a work known as the Cantigas de Santa Maria, one example being Rosa das rosas (see More Music).
Late Medieval Secular Music

Machaut and the formes fixes. As the thirteenth century drew to a close, the music of the troubadours and trouvères coalesced into a handful of poetic and musical forms. As a result of Guillaume de Machaut’s compositions, three of these forms came to dominate the secular vocal music of France for the next two hundred years. These genres are known collectively as the formes fixes (fixed forms). Machaut’s works, however, differ from the Ars antiqua style in two important respects. Unlike the monophonic songs of the troubadours and trouvères, many of Machaut’s works are polyphonic. Further, his manner of writing secular polyphony is dramatically different from earlier composers. Franco of Cologne, describing the method of the Ars antiqua, elucidated the proper way to create a freely composed work such as the non-chant-based conductus: develop a melodious tenor line and then successively add voices to it. In contrast, Machaut emphasized the top voice, or cantus, as the primary melody rather than the tenor. Scholars use the term “ballade style” to refer to this new treble-dominated texture. In this style the slower-moving tenor and contratenor provide harmonic support and can be performed either by singers or instrumentalists.

The three formes fixes of French secular music were the ballade, the rondeau, and the virelai. Of the three, the ballade generally was the most serious in tone, often a song of courtly love. It utilized the form AAB and often included an additional refrain that remained constant throughout each strophe of text, which means it is significantly different from what is sometimes known as “bar form.” Machaut’s three-voice ballade, *Je puis trop bien* (Anthology 32) illustrates the medieval ideal of unrequited courtly love and the new “ballade style.” Machaut enhances this new style in the cantus by writing melismas solely for their melodic beauty rather than for the purpose of emphasizing important words of the text.

The remaining two forms have their roots in the popular dance music of the thirteenth century. The rondeau consisted of eight lines of text set that are distributed between two musical phrases. Because the rondeau repeated the first two lines of text at particular points in the poem, the complete form is rendered as ABaAabAB (with uppercase letters indicating a repetition of text as well as music). While this might appear as a simple musical structure, Machaut composed an example that was a particular tour de force. In *Ma fin est mon commencement*, the tenor line is a retrograde of the cantus and the contratenor, which is only half as long as the other parts, also moves in retrograde after first singing its part from beginning to end. The virelai is also limited to two phrases of music, with the first phrase repeated as a refrain (AbbaA). While the musical form is regular, the exact number of poetic lines varies. Machaut, who is famous for his polyphonic compositions, wrote most of his virelais as monophonic works (see *Douce dame jolie*, Anthology 33). Of the three formes fixes, the virelai was the least common.

Ars subtilior. As the fourteenth century drew to a close, and the Middle Ages gradually gave way to the Renaissance, the musical style developed into what musicologists call the Ars subtilior. This refined and intricate style emphasizes a rhythmic complexity that was unsurpassed until the twentieth century. One prominent composer from this period, Philippus de Caserta, wrote a book entitled *Tractatus figurarum* (Treatise of Note-Shapes) that not only delineates an amazingly complex series of symbols to indicate precise and unusual durations but also provides the earliest discussion of syncopation. Caserta’s ballade *Par le bons Gedeons* (Anthology 36) offers an example of this highly syncopated style. Yet rhythmic complexity was not the only manner in which composers demonstrated a refinement of technique. Even
the manuscript could be a work of artistic complexity. One famous example is Baude Cordier’s canon, *Tout par compas sunt composés* (Anthology 35, see also Figure 13-3), which is notated in a circle. In the space of two hundred years, rhythmic notation had evolved from six basic rhythmic modes to an insupportable complexity, and one that soon relaxed into the simpler, more natural rhythms of the Renaissance.