Mozart uses a musical device to depict their gradual motion toward emotional synchronization. Don Giovanni begins the duet by singing two phrases; Zerlina responds with two phrases that express her doubts. The two singers continue to pass the melody back and forth, but their "lines" get shorter and shorter until Zerlina gradually gives in. Finally, she consents, and just at that point the Don and Zerlina sing together in precise rhythmic unison ("Andiam, andiam, mio bene"). For good measure, Mozart also picks up the tempo and switches to compound meter. Play the ensemble one more time so that students can assimilate the different aspects of this duet.

Conclusions to Draw about Opera Buffa

In this listening example we see the importance of the ensemble. The drama no longer stops while the soloist sings; characters now interact and the story advances. Mozart used this type of interaction to create dramatic continuity in every musical number of his operas. As a result, he stands out as one of the great dramatists in the history of opera. Mozart's strides toward greater realism and dramatic continuity were carried even further by the composers of Romantic opera (Chapter 18). In this way, the techniques of opera buffa revolutionized opera.

Listening Exercise: Review

Try this listening exercise to review both the four-movement plan and the four instrumental genres covered in Chapters 12–14. Play a guessing game with your class: Have them listen to four excerpts from four works in random order. Each movement of the four-movement plan must be represented, as well as each instrumental genre (symphony, piano sonata, piano concerto, and string quartet). Ask students to determine the genre and the movement number for each excerpt. Encourage them to listen for tempo and character in order to determine the movement number, just as they did in the exercise at the beginning of this chapter. Genre should be even easier—instrumentation is the key here. If students can distinguish among orchestra alone, solo piano, piano with orchestra, and string quartet, they can identify the symphony, piano sonata, piano concerto, and string quartet, respectively. After the strenuous listening exercises in Chapters 13 and 14, this review can restore confidence to students who struggled with Classical forms.

You can expand this exercise to include opera buffa. Add three more excerpts to the four above, from an ensemble, a recitative, and an aria.

Global Perspectives 4: Musical Form: Two Case Studies from Asia

In the final three units of *Listen,* Global Perspectives materials have been clustered at the end of each unit. At first glance, this configuration offers the possibility of reflecting on an entire unit's worth of material from another perspective, and you can certainly use it that way. Or you can take advantage of the enormous flexibility this arrangement offers. When you introduce Vivaldi, Bach, and the eighteenth-century court orchestra tradition in Chapter 10, why not expose your students to the oldest continuous court orchestra tradition in the world: Japanese gagaku? As you explore Classical forms in Chapter 13, why not compare them with the intricate construction of Balinese gamelan music? When you consider the role of ornamentation in Baroque

opera (Chapter 11) or improvised cadenzas in the Classical concerto (Chapter 14), why not contrast these practices with improvisation in a North Indian raga or a South Indian *kriti* (see Further Listening Examples below)? And the list goes on, limited only by your imagination (and the restrictions imposed by your syllabus). There is no wrong approach here; use these examples wherever they make most sense to you.

The two modules presented below follow the same overall format. Each begins with detailed background information on the country and the musical traditions under consideration, and each concludes with practical teaching suggestions for the work itself. Feel free to use the background material for your own study or as part of your classroom presentation. The order of these modules follows the order in the textbook, but don't let that influence your decision about where to present these examples. In the belief that a comparative approach works best, I again encourage you to use these non-Western examples where you believe they offer the most interesting mix of similarities and contrasts. Each module suggests possible comparisons with *Listen* examples from Chapters 9 to 14, but these are suggestions rather than prescriptions. Above all, have fun exploring this music, and let it jog your own creativity.

Sadly, it remains impossible to include the Ravi Shankar/Ali Akbar Khan raga performance found in *Listen,* Fifth Edition. *Do not* let this stop you from using an example from India. Most Americans know little about the music of Islam, Hawai'i, Gambia, Japan, or Bali, but the same cannot be said for music of the Indian subcontinent. The Beatles' much-publicized trip to India and Ravi Shankar's subsequent exposure in the West contributed to growing interest, and today many Americans have at least heard of the *sitar* or of Ravi Shankar. As a result, students are willing to go deeper with Indian music than with other traditions, and you can use that energy to craft powerful learning experiences. I cannot encourage you strongly enough to use either the North Indian raga or the South Indian *kriti* included in Further Listening Examples below.

1. Japan

The tradition of the Japanese court orchestra began a thousand years before Vivaldi or Bach began playing in European court orchestras of the eighteenth century. In fact, gagaku may be the oldest continuously practiced orchestral tradition in existence today. A good place to introduce this music is immediately after you present the concertos of Vivaldi and Bach, where you can compare the role and functions of these orchestras as courtly institutions. You can also study this music alongside the symphony; the more public nature of this orchestral tradition makes for interesting comparisons with gagaku. Of course, whatever similarities there may be, profound differences exist as well. The material below provides background information on the history of gagaku in Japan before it moves to lecture suggestions for *Etenraku.*

History of Gagaku in Japan Japan's history as a nation dates back to the Nara period (710–794 C.E.). Late in the Yamato period (300–710 C.E.), Japanese clan leaders came under the spell of the magnificent Sui (589–618 C.E.) and T'ang (618–907 C.E.) dynasties of China. The obvious way to consolidate power in Japan was to imitate successful Chinese models. A constitution, modeled after Chinese documents, was introduced in 604 by Prince Shotoku, the most powerful clan leader. Buddhism, introduced to Japan in the sixth century C.E., was encouraged as a means of centralizing authority. All in all, a host of Chinese-influenced reforms was instituted, but the establishment of a permanent capital

in Nara in 710 marked the true beginnings of the Japanese nation. Not surprisingly, the new capital itself was modeled after the Chinese capital of Chang'an (Xian).

Just as in politics, Japan's leadership borrowed extensively from China's music, especially the gagaku music associated with Chinese and Korean courts. Chinese courtly music and dance, initially ritual traditions, were themselves an international mixture of influences from as far away as India and Persia. The renowned Chinese court orchestras combined many different types of instruments whose materials were thought to reflect the balance of nature. The importance and depth of Chinese influence on Japan is clearly illustrated in one of the most spectacular imperial celebrations of the Nara period, the 752 dedication of the enormous bronze Buddha at the Todaiji monastery in Nara. All of the Nara dignitaries, many thousands of Buddhist monks, and hundreds of musicians and dancers participated. Music for the festivities consisted primarily of gagaku and Buddhist chant. The gagaku was performed in the Chinese tradition, mostly by foreign musicians. Seventy-five of the instruments used for these festivities have been preserved in excellent condition in the Shosoin, Nara's imperial treasury. The variety of Asian instruments in this collection suggests the breadth of China's sphere of influence, and the artistry of their construction points to the wealth of the T'ang dynasty.

In the Nara period, the music for courtly entertainments and rituals came primarily from the Chinese gagaku tradition. Most musicians employed by the imperial court were of Chinese origin, and all musical activities were overseen by a new governmental department of music, the Gagakuryo. The formation of musicians' guilds, responsible for gagaku and Shinto ritual music, also dates back to this period. But Japan began to turn away from Chinese influence in the early Heian period (794–897 C.E.), which began when the capital was moved to Heian (Kyoto). The Chinese gagaku tradition flourished in Heian, but now it was performed by Japanese musicians, both members of the musicians' guilds and nobles of the court who fell in love with the music. Signs of the tradition's vitality can be seen in the establishment of a permanent imperial gagaku orchestra and the standardization of the gagaku repertory. The repertory was now split into two categories: *togaku,* the T'ang court music that blended Chinese, Indian, and Persian influences; and *komagaku,* derived from Korean and Manchurian court traditions. As direct contact with China diminished, however, the music gradually acquired more Japanese features.

The late Heian period (897–1185 C.E.) saw the decline of the emperor's power and the rise of powerful warrior families, the samurai. Finally, the Genji family seized power in 1185, marking the beginning of the Kamakura shogunate. For the next seven centuries, Japan was a feudal society. The new ruling families had little interest in the courtly lifestyle of the previous Nara and Heian periods, and traditional gagaku was used only for important rituals and ceremonies. The shogunate did provide nominal support for the imperial family, now completely powerless, and this support enabled three guilds to continue their activities over the centuries. In spite of their best efforts, however, the art of gagaku declined, owing to a gradual drop in both the number of pieces in the repertory and the level of expertise of its practitioners. Further, the repertory underwent subtle changes. When the aristocracy guided the tradition in the Heian period, gagaku performers relied on written notation, but when the guilds became keepers of the flame, transmission from one generation to the next appears to have relied more on oral tradition, in some cases altering and obscuring the old T'ang melodies that served as the basis for this repertory.

The Meiji restoration of imperial rule (1868 C.E.) saw the reunification of the traditional music guilds in the new capital of Edo (Tokyo), supervised by

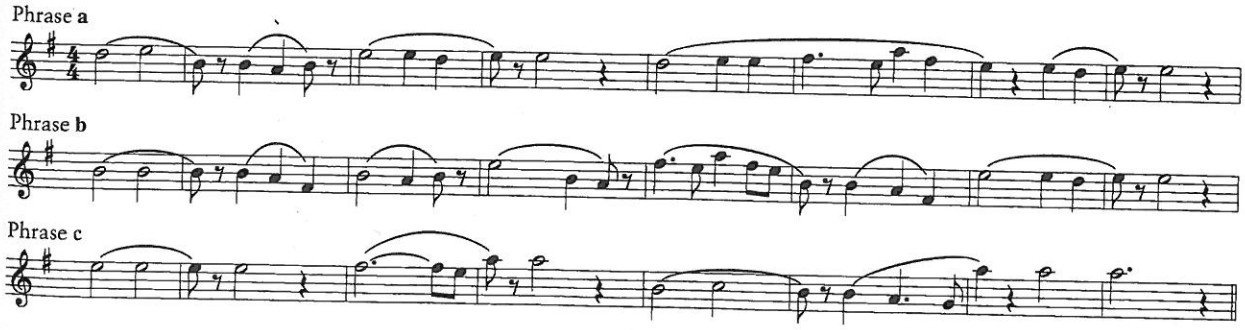
the new Imperial Household Agency. As a result, the imperial gagaku orchestra was reestablished, and gagaku has been well supported in the modern era, even with the onslaught of modern Western styles. Naturally, the Japanese take great pride in being heirs to the oldest continuously maintained orchestral tradition in the world.

Etenraku *Etenraku* comes out of the *togaku* tradition of gagaku, the repertory most directly influenced by T'ang dynasty courtly music from China. Take a look at the background material provided in the textbook, especially the description of instruments in the *togaku* orchestra. The original Chinese melodies can still be found in *togaku* music, though they are buried in the music for *biwa* and *sho*. What now sounds like the main melody is the result of ornamentation and other changes typical of the oral tradition that kept this music alive during Japan's Middle Ages. Still, the modern version represents a long and venerable tradition, and the music retains a unique expressive power.

The experience of listening to this work can prove a real challenge for students. The *Listen* textbook does an excellent job of introducing the instruments of the *togaku* orchestra, whose distinctive sounds can help guide students through this work. Familiarity with two focal points helps enormously in unlocking the secrets of this work: its melodic structure and its rhythmic (colotomic) structure. Anything you can do to help students hear these structures will deepen their listening experience.

Start with melody. The Listen Guide on page 203 of the textbook outlines what appears to be a straightforward melodic structure: **a a b b c c a a b b**. In spite of this clear pattern of repetition, hearing these relationships proves a difficult feat, especially since the piece begins so slowly and freely. In fact, these note durations are so long and irregular that most students will not be able to follow simple motives the first time through, to say nothing of entire phrases. Two strategies can help here. First, since the melody is hard to follow at the beginning, don't start at the beginning! Start instead at 5:25, where the **a** section returns for the first time. Once students grasp the **a** and **b** sections at a quicker tempo, go back to the beginning and lead them through the slow, free version. Second, display the melody for your students so that you can guide them through it.

Melody of *Etenraku*



Though your students may not be able to read music notation, the concepts you introduced in Unit I will allow them to follow along, especially at such a slow tempo. The important thing is to offer some kind of visual representation. Of course, just to be safe, point out each note as the music plays.

If you have time, you can use the notated version to introduce a few features of gagaku scales. When the Japanese imported gagaku, they imported the Chinese music theory that accompanied it. Chinese theory employs diatonic scales

derived from seven adjacent notes in the circle of fifths. The bottom line: Chinese scales look much like Western scales, and any note of the scale can theoretically serve as the first scale step (just as in the European church modes). Of these seven pitches, five serve as primary notes and the other two, less important, serve as exchange notes—variants of other scale degrees. This construction lends gagaku melodies a strong pentatonic flavor. In *Etenraku,* the five primary pitches are D, E, F sharp, A, and B, with C serving an expressive, embellishing function above the pitch B in the **c** phrase. The pitch E serves as the final, appearing prominently throughout the melody as well as at the ends of the **a** and **b** phrases. The Japanese call this scale *hyojo.*[1]

Once students become familiar with the melody, they can begin to hear its phrase repetitions and contrasts more easily, and their new sense of its structure will permit them to notice the effect of the gradual accelerando. Now is also the time to point out the subtle, simultaneous differences between the *ryuteki* and the *hichiriki* versions of the melody—the heterophony referred to in the textbook. Note also the increasing participation of the *gakuso* and *biwa* in the main melody, especially from the **c** sections to the end.

Rhythmic structure provides a second point of entry into this work. The central rhythmic focus is the pattern played by the lowest-sounding drum (*tsuridaiko*), consisting of a weaker stroke (*mebachi*—tender stroke) followed two beats later by the main stroke (*obachi*—venerable stroke). This pattern repeats at regular intervals throughout this piece, every sixteen beats in the first four sections (**a a b b**) and every eight beats from there to the end. As students become aware of this pattern, point out the other patterns in the music that flow from these drum strokes. The single notes and chords played by the *biwa* are coordinated with the main strokes, and the three-note motives played by the *gakuso* consistently come immediately after each main stroke. Even the wind instruments depend on the drum strokes to coordinate their performance of the main melody. You can mark *X*s in the score you display for your students to show the precise, unchanging points where the drum strokes occur in relation to the melody. Finally, the *kakko* fills in the long gap between *obachi* and *mebachi* with accelerando patterns that help suggest the pacing and tempo in between these strokes.

Just as in the court orchestras of the European Baroque, no professional conductor waves a baton to keep everyone together. The strokes of the *tsuridaiko* partially fill the need for coordination, but they do not replace the need for musicians to listen to each other intently and feel the beat together. Of course, the sense of beat found in gagaku does not conform to Western notions of metronomic precision. William Malm describes the Japanese principle of "breath rhythm" as follows: "one . . . finds sections—like the opening of any *gagaku* piece—in which the beat simply cannot be conducted. The melody moves from beat to beat in a rhythm more akin to that of a breath taken in deeply, held for an instant, and then expelled."[2] This points to the other rhythmic processes that shape this piece: the ever-so-gradual acceleration from very slow tempo to moderate tempo and a parallel motion from the very free treatment of the beat described above to a more regular, distinct statement of beats. To make these processes clear, you can count aloud along with the melody near the beginning and again near the end. Students will hear these aspects readily once they have a handle on the melodic structure. More subtle aspects of this work and its musical expression require you to undertake a more profound study of Japanese

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[1]Liner notes for *Gagaku: The Imperial Court Music of Japan.* Lyrichord LYRCD 7126 (CD).

[2]William Malm, *Music Cultures of the Pacific, the Near East, and Asia* (Englewood Cliffs, N.J.: Prentice-Hall, 1967), pp. 139–41.

music and culture, though such study offers many rewards. One such reward is an appreciation for the concept of *ma,* "the space between events,"[3] especially relevant at the beginning of *Etenraku.* The moments of silence—that which is *not* heard—become incredibly significant for the manner in which they frame what we *do* hear.

Concepts such as *ma* point to the marvelous subtleties of Japanese aesthetic awareness. The textbook, describing this music's "aura of quiet, inward-looking Buddhist contemplation," points to the strong Buddhist influence on gagaku. *Etenraku* reflects other aspects of Japanese aesthetics as well in its purity, refined taste, and elegance. Yet underlying the contemplative exterior is a haunting, subdued passion that gives life to the whole. How else could such a music endure for so many centuries?

2. *Indonesia*

The sounds of the gamelan orchestra have intrigued and enchanted Westerners ever since they first wrote of this music in the early 1800s. The gamelan music that inspired Debussy and Ravel at the 1889 Paris Exposition has inspired increasing numbers of Western composers over the past century. This interest has advanced to the point that one can now attend concerts of works written by Western composers for gamelan orchestra.

With its large-scale patterns of sixty-four beats, this music elevates rhythm to a structural level; from that perspective you might consider presenting this work alongside the Classical forms presented in Chapter 13. The frequent use of ostinato layers, on the other hand, suggests fruitful comparisons with the Baroque variation forms discussed in Chapter 10. Either way, the material below will help you with a brief overview of Balinese history and culture, a look at the main types of gamelan orchestra and the instruments they require, and lecture suggestions for the work in the *Listen* recordings: I Lotring's *Bopong.*

Bali Bali is located in the Malay-Indonesian archipelago, a large group of islands that have shared cultural elements over the centuries. Throughout the island chain, one finds frequent examples of ensemble music for bronze idiophones—music constructed of faster- and slower-moving rhythmic layers. Bali's location has also rendered it susceptible to many Asian influences; Indian influence came to the region in about 800 C.E., and Islam spread through much of southeast Asia from 1290 on. When Islam gained a foothold in neighboring Java in about 1400, many Javanese nobles fled to Bali (with their gamelan orchestras). As Islam spread through the islands, Bali stood firm, becoming the strongest remaining bastion of Hinduism in the archipelago. To this day, many Balinese continue to practice their unique blend of Saivite Hinduism (Shiva worship) and local ancestor worship.

Traditionally, music and religion were intertwined to such a degree that religious observance without artistic expression was inconceivable. Thus, training in music and the arts became a natural part of Balinese education, leading foreigners to observe that everyone was "both artist and farmer (or nobleman)."[4] The statistics in the textbook also point to widespread artistic activity—1 gamelan orchestra for every 350 citizens adds up to between 5,000 and 6,000 such ensembles in Bali. This high level of activity also suggests the

[3]William Malm, *Six Hidden Views of Japanese Music* (Berkeley: University of California Press, 1986), p. 43.

[4]David Harnish, "Bali," *Garland Encyclopedia of World Music,* vol. 4: Southeast Asia. (New York: Garland, 1998), p. 729.

reverence tendered toward artistic expression, especially toward music and dance. Playing and dancing were sacred activities, beneficial and even healing for the individual and the community. The gamelan instruments themselves were held to possess sacred properties, and their sounds made those properties tangible. The placement of the gamelan orchestra during rituals and festivities suggests their religious function and their significance. The instruments were positioned somewhere between the site of the most sacred rituals and the areas where people congregated for festivals, thus marking off the boundary between sacred space and secular space. Further, the music itself was constructed to transport the listener into a sacred, cyclic experience of time, apart from the linear flow of human time.

Gamelan orchestras were originally associated with the temples and the princely courts. In the courts they served as symbols of a ruler's spiritual authority. Powerful rulers owned many gamelans; lesser nobles were happy to acquire even one. Gamelan music accompanied virtually all ritual activities associated with temples or courts, whether they related to agriculture, temple festivals, or rites of passage such as birth, marriage, or death. Gamelans could even accompany and sanctify everyday activities of the noble family. Given the varied functions of this music, many gamelan types developed over the centuries, at least twenty-five of them still in common use. Some were so sacred that they could only be used once or twice a year for the holiest of rituals. Others were associated with specific historic courts; playing them invoked the spirit of that time and place. Yet others served recreational functions as accompaniment to theater or dance. The *gamelan Semar pegulingan* that played in palace courtyards afternoons and evenings was named for Semar, the god of love; the full phrase means, roughly, "gamelan of the god of love of the sleeping chambers." At major festivals, many gamelans and musical ensembles might set up and make music throughout the day and night, sometimes performing simultaneously.

Dutch influence in the archipelago increased from the early 1600s on. Dutch trading interests took control of the spice trade by the late 1700s, and Bali finally succumbed to Dutch military forces, becoming a Dutch colony in the first decade of the 1900s. During the colonial period, the revenues that once supported the courts now flowed out of Bali. As the courts declined, so did their ability to support gamelan orchestras. Instruments were often sold or pawned or simply gathered dust. Fortunately, many instruments came into the hands of villagers, who quickly formed clubs to promote the performance of gamelan music. Suddenly this music took on a new vitality in Bali. Dissociated from its courtly functions, gamelan orchestras took on a more populist complexion, drawing players from all social classes. The tradition also saw a new infusion of creativity as composers sprang up in village gamelan clubs. The music they composed kept many elements of traditional Balinese music but added a new, exciting virtuoso element that appealed especially to younger players. This new style, called *kebyar,* has spread and developed since its inception in about 1915. *Bopong,* from the *Listen* recordings, was composed by one of the most popular gamelan composers of the twentieth century, I Lotring.

Balinese Gamelan Ensembles The differences between gamelan types extend beyond the diverse functions they served. Each type is also characterized by its instrumentation and its tuning. Even within a type, instrumentation might vary somewhat from region to region, and the tuning of the instruments varies from ensemble to ensemble. Gamelan orchestras are built as matched sets; instruments constructed for use with one set most often cannot be played in another gamelan—the tuning would not match.

Another aspect of tuning is the scale type associated with each gamelan. Balinese music borrows two scales from Javanese music: the five-tone *sléndro* scale, known in Bali as *saih gendèr wayang*, and the seven-tone *pélog* scale, known as *saih pitu*. *Saih gendèr wayang* employs roughly equal intervals between its pitches, approximating an equipentatonic scale. *Saih pitu* mixes larger and smaller intervals, and—as in Japanese music—five of its pitches are primary, the remaining two auxiliary. A popular variant on *saih pitu* is *selisir*, a five-tone scale that omits the auxiliary pitches of *saih pitu*. Less common is *saih angklung*, an old four-tone variant of the *saih gendèr wayang* scale. One small complicating factor: Some ensembles that traditionally used *saih pitu* have more recently adapted their music to simpler *selisir* tuning.

Tuned gongs and metallophones of various sizes constitute the heart of almost every gamelan. The exact instrumentation varies with the type of gamelan, and many types may incorporate additional drums, flutes, and the occasional string instrument as well. The following list identifies some of the important gamelan types.

Gamelan gong—the largest, most popular, most commonly encountered gamelan type is the gamelan gong. It subdivides into *gong gedé*, formerly associated with the courts, and *gong kebyar*, a recent adaptation favored for gamelan music in the new style. *Gong kebyar* represents a blending of gamelan gong and the *legong* orchestra (*gamelan pelegongan*) described below. The new combination of instruments results in a more brilliant sound, and the preference for instruments that use the more flexible one-handed playing technique permits more virtuosic effects. Both types generally employ the five-tone *selisir* scale.

Gamelan Semar pegulingan—a smaller ensemble with a lighter sound that formerly provided music for royal families. It almost died out, but the conservatories and a few villages continue to perform on this gamelan. Complete orchestras still use *saih pitu* tuning, but one most often encounters smaller ensembles that employ the *selisir* scale.

Gamelan pelegongan—a smaller ensemble similar to the *gamelan Semar pegulingan*, but it replaces the *trompong* (a row of ten kettle-shaped gongs) with a pair of large metallophones (*gendèr*). It accompanied *legong* dancing when princely courts held sway; now it sees other uses as well. The rich polyphony created by this gamelan's rapid figuration has had an enormous influence on Balinese gamelan music in general. The ensemble is tuned to the five-tone *selisir* scale.

Gamelan angklung—another smaller ensemble that now, surprisingly, rarely uses the pitched rattle-like instruments that give the ensemble its name. The music of this ensemble employs the four-tone *saih angklung* scale.

Gamelan gambang—features xylophone-like instruments with bamboo bars. Noted for its short, eight-beat rhythm (5 + 3) and a unique playing style, *gambang* music has influenced *kebyar*-style composers. This music generally uses seven-tone *saih pitu* tuning.

Gamelan selundeng—possibly the oldest Balinese gamelan, it predates Hindu influence. It features metallophones made of iron and a unique musical repertory. Its age and rarity make it especially sacred—so sacred that its storage location is kept secret, and only copies are used for public performance. It is also an endangered species. This music is based on seven-tone *saih pitu* tuning.

Gamelan gambuh—the orchestra associated with courtly *gambuh* theater. It is unusual in its omission of metallophones; instead, it relies on an ensemble of flutes (*suling*), a stringed instrument (*rebab*), and several small gongs and cymbals. This ensemble employs seven-tone *saih pitu* tuning.

Gendèr wayang—a delicate ensemble that accompanies both plays from the Hindu shadow puppet tradition and cremation rituals. The five-tone *saih gendèr wayang* scale derives its name from its association with this repertory.

Gamelan Pelegongan Because of its association with *legong* dancing, music for this ensemble developed a free musical structure that could reflect the frequent changes in mood and tempo required by the dance. Sections in free rhythm might be followed by slow, lyric sections or by the rapid, ostinato-based sections that accompany especially active dancing. A hallmark of *gamelan pelegongan* style, these ostinato-based sections with their fast tempo and rich polyphony have exerted a significant influence on Balinese music in general.

I Lotring, one of the most famous Balinese composers associated with new gamelan styles in the 1920s and 1930s, wrote much of his music for the *legong* orchestra played by the gamelan club in the village of Kuta. Colin McPhee provides much valuable information about the instrumentation of the Kuta *gamelan pelegongan*.[5]

Gangsa jongkok—The word *gangsa* is Balinese for "bronze." These single-octave metallophones consist of five bronze keys on a soundbox that are struck with a single mallet.

- two *gangsa jongkok chenik*—the smaller *gangsa,* pitched from d^3 to b flat^3
- two *gangsa jongkok gedé*—the large gangsa, pitched from d^2 to b flat^2

Single-octave *gendèrs*—These metallophones consist of five suspended keys.

- four *kantilans*—the smallest *gendèr,* pitched from d^3 to b flat^3
- four *penyachahs*—one octave higher than the *jublag,* pitched from d^2 to b flat^2
- four *jublags*—the second largest *gendèr,* pitched from d^1 to b flat^1
- two *jegogans*—the largest *gendèr,* pitched from d to b flat

Thirteen-key *gendèrs*—These metallophones cover a range of two octaves and a fourth. The thirteen keys, suspended over resonator tubes, are played with two mallets, often in octaves.

- two *gendèr barangan* 13—follows the *gendèr gedé*'s lead, pitched from f^1 to b flat^3
- two *gendèr gedé* 13—lower-pitched *gendèr,* pitched from f to b flat^2

Gongs—These bronze idiophones tend to be perpendicularly mounted, with the exception here of the *kelenang*. Arranged from high to low, each one possesses a distinctive sound.

- *kelenang*—a small horizontally mounted gong, pitched at d^2
- *kemong*—a small perpendicularly mounted gong, pitched at g flat^1
- *kajar*—a small gong with a sunken boss, pitched at d^1
- *kempur*—the largest gong in the *legong* ensemble, pitched at F

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[5]Colin McPhee, *Music in Bali* (New Haven: Yale University Press, 1966), p. 153.

Percussion—These include various instruments serving different roles in the ensemble.

- two *kendangs*—membranophones, often played with a drumstick
- *rinchik*—a small cymbal with a light sound, used to accompany dance and theater
- *gentorak*—a rack containing a number of small bells

Flute—The flute is little used in the *gamelan pelegongan* because its pitches are so frequently out of tune with the ensemble.

- *suling gambuh*—the large bamboo flute associated with the *gamelan gambuh*

Note that the metallophones listed above come in pairs. This deliberate pairing allows for a special effect. In the construction process, metallophone pairs are not tuned exactly the same—one will be just a bit out of tune with its mate. This slight mistuning creates an acoustic phenomenon known as "beats"—a vibrato-like effect. The number of beats per second is equal to the difference in frequency between the two pitches. The beats give the sound extra warmth and resonance, qualities that are highly prized.[6] If you listen carefully to the last chord of *Bopong,* you can hear the beating effect.

Each instrument plays a more or less fixed role in the performance of gamelan music. A closer look at the function of the instruments in I Lotring's *gamelan pelegongan* at Kuta can help us understand the layered textures found in Balinese music as a whole. The rhythmic layers prove easy enough to hear: The higher an instrument's pitch, the more rapid its figuration. Textural layers, pointing to distinct elements and their relationships in the sonic weave, require more preparation. The essential layers found in the music of this *legong* ensemble can be described as follows:

Colotomic structure—Not merely timekeeping, this refers to the marking of major structural units and their subdivisions. Western musicians often speak of rhythmic relationships only at the level of the measure or lower; larger rhythmic groupings tend to be referred to as melodic units—phrase, period, section, and so on.[7] Not so in Balinese music, where melodic structures must conform to large-scale, cyclic rhythmic units called *gongan. Bopong*'s largest rhythmic units are 64 beats long; some works are based on 128-beat units. The *gongan,* equivalent to the duration of the nuclear melody (a period), is generally subdivided, first in half, then in quarters, and so on. The gongs mark off these units and their subdivisions. The lowest gong, the *kempur,* sounds only once at the beginning of each *gongan.* Coupled with the *kempur* is the *kemong,* which often plays at the midpoint of each *gongan.* Subdividing the *gongan* even further is the *kajar,* which marks off *palets*—the main units within each period. (In faster passages the *kajar* beats time, aligning itself more with the drums than with the gongs.) The highest-pitched gong, the *kelenang,* usually plays on secondary beats (2, 4, 6, and so on). The higher the pitch, the faster the rhythm.

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[6]Piano tuners use much the same technique in tuning double- and triple-stringed pitches, looking to give each pitch the right amount of "motion."

[7]Many song forms in Western music do rely on large-scale rhythmic units—thirty-two-bar (A A B A) song form, twelve-bar blues, and so on. Nonetheless, Westerners still think of these as melodic or formal constructions, not as rhythmic structure, and we often miss important relationships as a result!

Nuclear melody—The principal melody, the *pokok,* serves as the core of the musical work as a whole. The colotomic structure described above flows from the fixed length of the *pokok,* and the metallophones also derive their roles from prescribed proportional rhythmic relationships to it. Primary responsibility for the *pokok* falls to the four *gendèrs.* The two *gendèr gedé* play a lightly ornamented version of the *pokok* in octaves. The *gendèrs barangan,* playing an octave higher, can double the *pokok* or create a faster-moving paraphrase. Other instruments also derive their roles directly from the nuclear melody. When used, the *suling gambuh* plays a freely ornamented version of the *pokok.* Finally, the *jublags* and *jegogans* play abstracted versions of the *pokok,* picking out and playing only primary notes of the *pokok* (much like playing through a Schenkerian reduction analysis). Generally, the *jublags* play one pitch every two beats, and the *jegogans* one pitch every four beats. (In reference to the colotomic structure, they divide the *pokok* into sixteenths and thirty-seconds, respectively.) Once again, the lower the pitch, the slower the rhythm.

Figuration—The *kotekan*—the rapid, interlocking figuration patterns played by the highest metallophones—is one of the distinguishing features of the *gamelan pelegongan.* Other gamelan ensembles use similar figuration, but the higher pitch of the *legong* orchestra's *gangsas* gives the *kotekan* a lightness and brilliance not matched by the others. Although the *kotekan* sounds like a single melody, in fact it is created by two melodic parts that interlock and overlap in a hocketlike manner. Given the *kotekan*'s fast speed—anywhere from four to eight notes per beat—these patterns require no small degree of virtuosity in their performance, which is all the more remarkable, since these parts are given to the youngest performers, sometimes as young as nine or ten years old. In the *gamelan pelegongan,* the *kotekan* parts are performed by the *gangsas, kantilans,* and *penyachahs.*

Percussion—The actual leadership of the gamelan ensemble falls to the *kendangs.* Although the drum patterns are often intricate, the other performers look to them to set the tempo and guide them through tempo changes. Of course, when the *gamelan pelegongan* accompanies dance, the *kendang* players must coordinate their patterns with the dancers. As was mentioned above, the *kajar* joins in with the *kendang* patterns in faster passages. The *rinchik* provides accentuation, while the *gentorak* provides a continuous jingling background color.

I LOTRING *Bopong*

Originally composed for *gamelan pelegongan, Bopong* has also been adapted for performance by other gamelan orchestras, including the *gamelan Semar pegulingan*—a sign of its popularity. The composer of *Bopong,* I Lotring, was one of the most celebrated Balinese gamelan composers from the 1920s on. According to Colin McPhee, who worked with the composer on numerous occasions, I Lotring was born around 1900,[8] early enough that he could begin his training while the Balinese princely courts still functioned independently. I Lotring studied dance and music at the court of Blahbatu, no longer in existence. Later he relocated to Kuta, a fishing village in south Bali, where he led two ensembles, the *gamelan pelegongan* and the *gendèr wayang.* When these ensembles disbanded, he trained dancers for other villages and wrote occasional works for festivals. While in Bali, McPhee himself also provided I Lotring with work opportunities.

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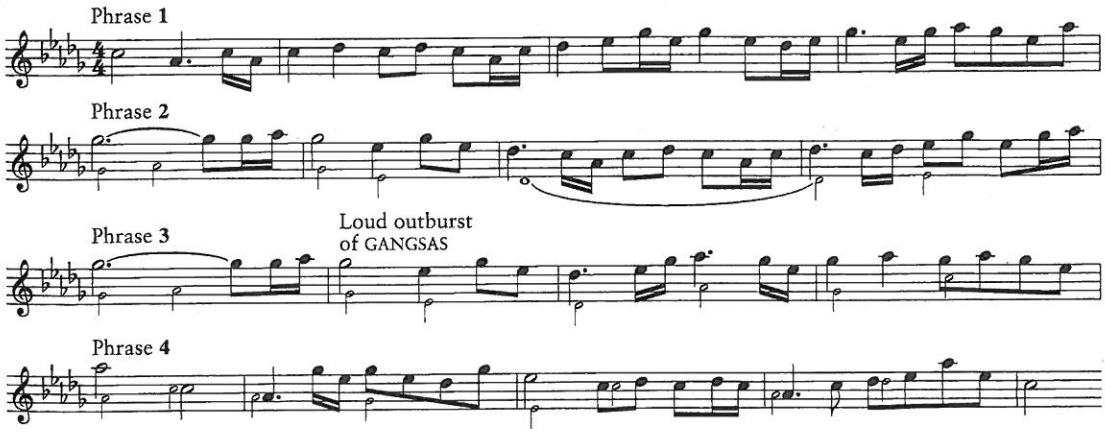
[8]McPhee, *Music in Bali,* p. 308.

Typical of music for the *legong* orchestra, this work consists of several contrasting sections. These sections include an introduction (0:00–0:29) that almost imperceptibly drifts into the second section. Based on cyclic repetition of a sixty-four-beat nuclear melody, the second section (0:29–2:41) is the most traditional portion of this work. The third section (2:41–4:04), full of dramatic *kotekan* flourishes, builds momentum above an eight-beat ostinato that repeats fourteen times. The work's final section (4:04–end)) offers a fast, syncopated, virtuosic unison melody that ends the work with a burst of energy.

When you present this work to your class, start with some background on Balinese history and culture; feel free to use any materials above that interest you. The information on instruments and layers in *gamelan pelegongan* works best when woven into your class discussion of *Bopong,* where students can immediately hear what you're talking about. Once you complete your introduction, proceed directly to the music. As you guide your students through *Bopong,* introduce just one section at a time. Once students can hear the salient features of each section, they can identify the contrasts between them more easily.

Start with the introduction (0:00–0:29). This work begins a bit tentatively; a few *gangsas* play initially, but once the gong stroke sounds (0:04), other instruments such as the *gendèrs* and flute soon find their way in. Point out the fast *gangsa* patterns (at 0:04) in which they play eight notes per beat (the equivalent of thirty-second notes in the textbook's transcription). If you follow carefully, you will also hear that the introduction concludes with Phrase 4 of the nuclear melody. It evolves so naturally from the melodic phrases of the introduction that we hardly notice it at first.

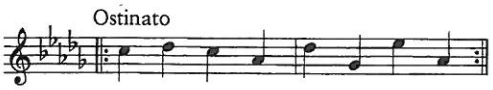
Spend some time with the second section (0:29–2:41). This portion best exemplifies the colotomic, layered structures of gamelan music in general. To make it easier to guide students through this section, display the nuclear melody (*pokok*) so everyone can see it.



Point out the melody's length, sixty-four beats, and note how successive division by two gives us progressively smaller structural units. The entire period divides into thirty-two-beat units, and these units divide into sixteen-beat phrases, and so on. Play this section several times, but focus on a different layer each time. The first time through, ask students to listen for the instruments playing the *pokok* (*gendèrs* and bamboo flute) and point out each note as the music plays. The second time through, ask students to listen for the gongs that mark the colotomic structure—the lowest gong sounds only at the beginning of Phrase 1, secondary gongs at the beginning of the other phrases, and a preparatory

stroke on the downbeat of measure 15. Point out how the gongs articulate the largest divisions of this sixty-four-beat structure, and draw attention to the slight slowing of tempo that occurs at phrase beginnings, especially in Phrases 1 and 3. When these gongs are struck, all activity stops momentarily, as if paying reverence to the sound of the gong. The third time through, ask students to listen for the *kotekan,* the rapid figuration played by the *gangsas* at the top of the texture. It is easy enough to hear them play *subito forte* at measure 10 of each *pokok* repetition, but call attention to the softly played version heard through much of this section. Point out the four-notes-per-beat rhythm (sixteenth notes as per the textbook's transcription), and explain that no one instrument plays the entire *kotekan* pattern. Rather, it is shared between pairs of instruments that play simpler melodies that interlock, hocketlike, to create the impression of a single melody. Finally, for the fourth play-through, ask students to listen for the drums (*kendang*)—the ensemble leaders. Point out the active, shuffle-like rhythmic patterns they play.

Once the students acclimate themselves to the stratified polyphony of section two, move on to the third section (2:41–4:04). This section offers a good example of the dance-related, ostinato-based music so characteristic of *gamelan pelegongan.* No need to play this four times through—once or twice through the fourteen ostinato repetitions provides sufficient opportunity to trace the same four layers successfully. Display this new, shorter *pokok* (the eight-beat ostinato pattern) for your students.



This time, ask students to tell you what was happening in each layer. In the discussion that follows, draw out these points. The *pokok* is only eight beats long this time, and it continues to be played by *gendèrs* and flute. With just eight beats to play with, the colotomic structure is less elaborate. The low gong sounds at the beginning of each pattern, a secondary gong on beat 5, and a preparatory stroke on beat 7. The *kotekan* instruments now pull out the stops with many dramatic contrasts in dynamics (note repetitions 4, 5, 9, 10, and 14) and a fast eight-notes-per-beat rhythm (sixty-fourth notes!). Between the double-time *kotekan* and the short ostinato, this third section sounds much faster than the previous two sections. Finally, the *kendang* players continue to maintain their elaborate, supportive rhythmic patterns. Note the cumulative effect of this ostinato section, both its growing activity and its increasing excitement.

Although the third section maintained the layering and even the colotomic structure (though simplified) of the second section, the fourth section (4:04–end) presents a surprising contrast. Ask students to tell you what is so different here. Of course, there is still a primary melody, but what a melody it is—fast, rhythmically unpredictable, conveying the feel of elaborate syncopations. As expected, the melody is played by *gendèrs* and flute, but the *kotekan* has suddenly disappeared, the *gangsas* now playing along on the primary melody. Students who try to keep the beat in this passage will discover that the colotomic structure has disappeared as well. Our safety net is gone—no longer can we divide by two again and again. The gongs now punctuate the primary melody at erratic intervals; the *kendangs* play in rhythmic unison with the main melody, abandoning their previous sixteenth-note shuffle patterns. These changes create a radical contrast with the earlier sections of *Bopong.* Let students know that this kind of virtuoso, unison writing is characteristic of the modern *kebyar* style that changed gamelan music so dramatically in the twentieth century.

Now play the entire work without pause and ask students to describe the work's overall form. In the discussion that follows, draw out these points. Just as in the Classical symphony, the elements of repetition and contrast figure prominently here. Repetition occurs primarily within each section, and contrast, between sections. The introduction nicely anticipates some of the melodic figures heard later in sections two and three. The second section presents the main argument, the third section paraphrases the argument with greater concision and excitement, and the final section serves as a coda, playing out and releasing the energy that was built up in the previous section. The structure is not identical to any encountered in the Classical symphony, but it uses many of the same elements—repetition, contrast, variation, and coda—to create a satisfying musical form. In addition, *Bopong*'s suitelike structure affords the opportunity to hear several important aspects of gamelan music, ranging from traditional cyclic, ritual constructions (section two) to a modern virtuoso, recreational style (section four).

Additional Teaching Suggestions

Lecture-Demonstration Ideas

1. Show excerpts from *Amadeus*. Many scenes lend themselves to classroom presentation. You can use scenes to demonstrate different Viennese operatic traditions (serious and comic Italian opera or the *Singspiel*), different operatic performance venues (the Imperial Opera on one hand, the lowly *Singspiel* house on the other), differences between German and Italian opera (Mozart's argument with the emperor and his advisers), Mozart's compositional process (the scene where Constanze brings Mozart's scores to Salieri, or Mozart's deathbed dictation to Salieri), or any other topic that strikes you as appropriate. Many of your students have at least heard of the movie, and it raises important musical issues in a format that hits home. *Caution:* Tell the class that Shaffer's story is *not* real. It was based on a hypothetical question: "What if Salieri tried to hasten Mozart's death?"[9] The playwright adapted historical facts and characters to make the *if* plausible. As a result, you cannot use the movie alone to demonstrate Mozart's biography or the personalities of Mozart, Constanze, Leopold, or Salieri. You must do some research, issue a strong disclaimer, and be prepared to tell it the way it really happened. If you want the facts on Mozart's death, consult H. C. Robbins Landon's excellent book *1791: Mozart's Last Year* (New York: Schirmer, 1988). See Video Recordings below for suggested DVD recordings.

2. Introduce students to the controversies that surrounded opera in the eighteenth century. Excerpts from W. Oliver Strunk's *Source Readings in Music History* (New York: W. W. Norton, 1950; rev. ed., 1998) offer fascinating, sometimes entertaining insights. To understand the problems that plagued late Baroque opera seria, select passages from Benedetto Marcello's scathing satire on "modern opera," *Il teatro alla moda* (1720). Heated reactions to the introduction of opera buffa in Paris (1752) stirred one of the most famous controversies,

[9]Rumors that Salieri poisoned Mozart have their own distinguished history, including a play by Pushkin and a mention in Beethoven's conversation books, but other historical documents suggest otherwise.