Chapter 7: Interlocking Rhythms and Interlocking Worlds in Balinese Gamelan Music
Paired Tuning of Female and Male Instruments

One of the most striking features of the sound of a gamelan gong kebyar is its shimmering quality, which is created, in part, by the unique paired tuning of sets of Balinese gamelan instruments.

• Read the “Insights and Perspectives” box on page 94.
• Define gangsa.
  
  Melodic metallophone instruments. Different sizes and octaves. They are paired and in each pair one is identified as female and the other as male.

• Briefly describe the tuning of female and male instruments. They are tuned to the same sequence of pitches, but the female is slightly lower in pitch and the male is slightly higher in pitch.

• Listen to Musical Illustration #21 as an example. You first hear a 5 note scale played on the female metallophone, then the same scale on the male counterpart.
• Define ombak and how it is created. The acoustical beating effect when the male and female notes are played together.

• Watch this YouTube video of ombak and then describe the effect.

Out of tune, shimmering, wave of sound

• Explain the symbolic levels of meaning for this system of tuning. Breathes life into the sound of the gamelan. Without it, a gamelan is *mati* (literally, dead). A union of male and female creates biological life; for gamelan, it creates symbolic life. Another symbolic meaning is related to Hindu-Balinese notions of gender: femaleness – associated with earth maleness – associated with sky
The Gamelan Beleganjur: An Introduction

Gamelan Musical Tour: refer to page 96-97 in your textbook
This guided tour introduces and explains:

• The instruments of the ensemble.
• The basic gong cycle.
• The relationship between the music’s core melody and the elaboration of that core melody in other instrumental parts.
• The standard rhythms and interlocking patterns employed.
• The stratified structure of the music, in which higher-pitched instruments play at faster rates than lower-pitched one.
Balinese Gamelan Music in Context

• Identify locations where gamelans and closely related ensembles may be found.
  Bali, Java, several other Indonesian islands. Related ensembles are found in other parts of Southeast Asia including Malaysia and Cambodia.

• Explain how Indonesia’s national slogan, Unity in Diversity (Bhinnéka Tunggal Ika, pronounced Bee-nay-kah Toon-gahl EE-kah), serves as a framework for preservation, development, and nationalization of the nation’s diverse cultures. Certain traditions receive abundant government support as a musical emblem of Balinese-Indonesian cultural nationalism.
Give examples of the diversity of Indonesia’s population, i.e., ethnic groups, languages, geography, religion, etc.

1. The diversity of Indonesia is extraordinary. There are over 300 ethnic groups (each with its own distinct culture) and more than 300 spoken languages; the official language of Indonesia is Bahasa Indonesia.

2. Indonesia consists of more than 13,000 islands, about 6,000 of which are inhabited.

3. Indonesia is world’s largest Islamic nation (geographically and by population). Other represented religions include Hinduism, Buddhism and indigenous belief systems. Bali has majority Hindu population (only such province in Indonesia; and the only world society beyond the Indian subcontinent where the pop. Is majority Hindu).

4. Indonesia was a former Dutch colony, becoming an independent nation in 1945, with full sovereignty achieved in 1949.
Explain the unique syncretisms found in Balinese Hinduism. It blends elements of Hinduism and Buddhism with earlier layers of indigenous Balinese spiritual belief and practice.

What role did the arrival of Hindu-Javanese culture play in the history of gamelan? Gamelan music is performed at virtually all religious ceremonies and has been a central element since Hinduism and Buddhism were brought to Bali from Java in the 13th century.

How does the Hindu-Balinese conception of the universe relate to music of the gamelan? This concept of the universe is divided into three realms: the Upper World (domain of gods and venerated ancestors, who reside in the heavens above Mount Agung), the Middle World (earthly realm of the Balinese people) and the Lower World (realm of evil spirits and malevolent creatures). Gamelan beleganjur music is performed during cremation procession functions as part of the battle between the human and the evil spirit forces that occupy the Lower World.
What is wayang kulit?
shadow puppetry

Give a brief overview of the music, religion, and culture of the Bali Aga.

Bali Aga (“Original Balinese”) have not absorbed Hindu or Buddhist layers of influence. They observe the original indigenous Balinese spiritual practice and use iron-keyed gamelan instruments.
Shared Characteristics Between Javanese & Balinese Gamelans

- Related types of instruments (bronze gongs, bronze metallophones, drums, end-blown bamboo flutes)
- Basis in cyclic musical forms
- Related tuning systems, scales, modes
- Multipart textures: higher-pitched instruments play at faster rhythmic rates than lower-pitched instruments
- Melodic organization in which a slow-moving core melody is embellished by faster-moving melodies played on other instruments
- Close association with various forms of dance, dance-drama, and other arts
- Common historical foundation in Hindu religious cultures, reflected symbolically in the music.
Differences Between Javanese & Balinese Gamelans

**Ketawang: Puspawarna**

<table>
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<tr>
<th>Javanese court gamelan</th>
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<tbody>
<tr>
<td>• Majestic</td>
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<tr>
<td>• Expansive</td>
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<tr>
<td>• Ethereal</td>
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<tr>
<td>• Stately tempo</td>
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<tr>
<td>• Multiple layers, but each is discernible; not overly complicated.</td>
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<tr>
<td>• Melodic ideas are relatively simple, straightforward</td>
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<td>• Singing – both call &amp; response and heterophonic sections</td>
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**Jaya Semara**

<table>
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<tr>
<th>Balinese gamelan gong kebyar</th>
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<tbody>
<tr>
<td>• Rapid-fire</td>
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<tr>
<td>• Frenetic</td>
</tr>
<tr>
<td>• Shimmering</td>
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<tr>
<td>• Intricate</td>
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<tr>
<td>• Complex melodies</td>
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<td>• Kebyar means “to flare up like a match”; also translates as “lightning”</td>
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<td>• No singing, but there is call &amp; response – between groups of instruments, as well as heterophonic texture</td>
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</table>
Describe some of the differences in the more than two dozen distinct types of gamelan found in Bali. Some are similar to gamelan gong kebyar, using bronze gongs and metallophones. Others rely on different materials, such as iron, hardwood and bamboo. One uses no instruments, only voices. The different types are distinguished less by musical criteria and more by the designated role they play within their local society, such as their associations with particular rituals, ceremonies, dances, dance-dramas, shadow puppet plays (wayang kulit) and competitive events.
Kilitan Telu Interlocking Rhythms

• How do the kilitan telu and other related forms of interlocking patterns symbolize communal interdependence in Balinese society?

Traditionally, in most every realm of life, Balinese people give high priority to working together collectively in pursuit of community-directed goals and values.

• Explain the relationship of the three rhythms and how this relates to Balinese cultural vision.

Each rhythm is essentially identical to the other two (except for where it starts relative to the kempli’s beat). No one of the three rhythms is considered complete by itself; it needs the other two. The whole of the kilitan telu is greater than the sum of its individual parts.
Balinese Kecak and the Kilitan Telu

• What are the musical roots of Kecak? Describe this earlier ritual. Ancient trance ritual (Sanghyang Dedari) in which a small group of men use a vocal chant to induce a chant in female spirit mediums. These mediums work to summon ancestral spirits to aid the village in times of need.

• List several of the onomatopoeic syllables substituted for the different gamelan instruments.
  “sirr” for the large gong, “pur” for the kempur, “cak”

• What does the Kecak dance-drama reenact? An episode from the Ramayana, the great Hindu epic. Most popular plot is the abduction of the beautiful Princess Sita by the evil King Rawana. Sita is eventually rescued by her beloved Prince Rama.
• Discuss the origins of the present-day Kecak. Invented through a collaboration between Balinese musicians and dancers and an expatriate German painter, Walter Spies, in connection with a 1932 German film, “The Isle of Demons”. It then developed into a Ramayana dance-drama for tourist performances.

• Listen to the brief excerpt from a Kecak performance. 

• **Kecak YouTube clip** (start at 0:50)

• To get a sense of how to perform the interlocking rhythms heard in Kecak, perform the kilitan telu rhythms charted below (and on p. 98).
The Gamelan Beleganjur in Battles of Good versus Evil: Beleganjur Music during a Balinese Cremation Procession

• What is the first essential step that frees the soul of the deceased?
The act of cremation

• Briefly discuss the need for a procession as part of these rites?
Carries the remains from the family compound to the Temple of the Dead (dedicated to Siwa).

• What type of Balinese social institution is responsible for the planning and productions of cremations and other mortuary rituals?
Banjar
• Briefly describe the cremation procession, explaining what happens at various points along the way and the cultural significance of particular ritual activities. The beleganjur group assembles and lines up right behind the cremation tower, where it stays throughout the procession. Men and women, gathered near the tower, sing sacred verses (kidung). Other types of processional gamelan may also perform along the route.

• What specific functions does beleganjur music serve in the context of the procession?
These separate music events generate a cacophony that helps generate a state of *ramé* (crowdedness), which is a hallmark of virtually every Balinese ritual or social occasion. The more kinds of music there are – the more crowded – the better.
• What is symbolized by the multiple tiers of the cremation tower? They represent the 3 worlds of the Balinese cosmos; the body of the deceased is placed near the top to symbolize the hope of ascension to the Upper World.

• Explain the rationale for spinning the cremation tower at crossroads. It is believed that demonic forces of the Lower World congregate are most concentrated at crossroads. Spinning serves to confuse the bhutas and leyaks.

• How does the style of beleganjur music change when the procession enters a crossroads and what is this style of playing called? Rhythmic patterns of the drums and cymbals change. Eighth note patterns of kilitan telu replace the more intricate sixteenth note patterns. This more driving rhythm is called malpal.
• Describe the nature of the music played as the actual cremation takes place.

Quieter, more meditative

• How does the music serve as a ladder for the ascent of the liberated spirit?

Song of farewell that accompanies the atma, or soul, as it finally begins the journey of its ascent to the Upper World.
Beleganjur Music Performed during a Balinese Cremation Procession

0:00—0:35  Sound of crowd assembling, singing of kidung (sacred verses)
0:36      Lead drummer entry; cueing beleganjur ensemble, signaling commencement of procession
0:41      Full ensemble enters over gilak gong cycle; tower is lifted onto shoulders and the procession begins; unison rhythm in cymbals
0:53—0:55  Brief passage of kilitan telu interlocking rhythms
0:56—1:05  Gong cycle only (drums/cymbals are silent), followed by interlocking drumming and return of cymbals
1:06—1:38  Kilitan telu interlocking cymbals
1:39—1:49  Jagal: intricate drum duet
1:50—end   Cymbals re-enter, more kilitan telu

Malpal example

YouTube clips
Worldly Battlegrounds of Beleganjur Music

• What roles did beleganjur music play in warfare?
  Armies marched into battle to the accompaniment of the beleganjur; music served to inspire warriors to great bravery and to strike terror amongst the enemy.

• How does the role of “music as warrior” relate to the contemporary role of beleganjur in cremation rituals?
  Battles the malevolent spirits of the Lower World during the cremation procession.

• Identify contexts in which the image of the Balinese warrior has been kept alive?
  Baris warrior’s dance, dance-dramas, wayang kulit, modern beleganjur contest (lomba beleganjur)

• When and where was the first modern beleganjur competition held? How has this practice spread since that first contest?
  Denpasar, 1986
  There are now similar contests held all over the island, ranging from small regional competitions to island-wide championships.

• What innovations have emerged since the 1990s that have challenged the traditional men’s role in beleganjur?
  Women’s and children’s beleganjur groups
Kreasi beleganjur: The contest music style

• What was the sole purpose of traditional beleganjur music?
  Functional: to support the ritual it accompanies

• In which ways does kreasi beleganjur music differ in style and performance techniques from traditional beleganjur music?
  Flashy, inventive, fast, complex; full of musical contrasts & surprises and enhanced by elaborate pageantry, colorful costumes and choreography.

• Which elements of traditional beleganjur music are retained in the new contest style?
  Gilak gong cycle, cyclic core melody, kilitan telu cymbal patterns, interlocking drum rhythms, melodic elaboration patterns of the reyong

• Describe the format of the lomba beleganjur.
  Numerous beleganjur groups representing different banjars, districts or regions of Bali compete against each other in a formal environment.
• What is the “job” of kreasi beleganjur music? How does this compare to the music’s function in traditional cremation rituals?
Impress and entertain the adjudicators and audience. The goal if the performers is to win contest rather than battles against evil spirit adversaries.

• What are the three parts of a kreasi beleganjur competition piece?
1. Opening section: fast tempo, lots of rhythmic variation featuring different instruments
2. Middle section: slower tempo, reyong playing is more lyrical and melodic
3. Third section: return to tempo and rhythmic energy of section 1, but with different variations

• Kreasi beleganjur music places high value on:
1. Compositional originality
2. Ensemble virtuosity (group, not individual)
3. Emphasis on showmanship – both in playing and in movement (gerak)
4. Varied textures, in which different sections of the ensemble (drums, cymbals, reyong) are featured
A prize-winning kreasi beleganjur performance must adhere to the following key elements of traditional beleganjur music:

1. Only traditional beleganjur ensemble instruments may be used, and the basic musical roles and playing styles of the instruments should be maintained.

2. Signature musical elements of traditional beleganjur (ex.: gilak gong cycle, standard core melody, conventional interlocking patterns) should be retained.

3. A dignified and “heroic” (*kepahlawanan*) musical character should be present in the performance.
Gerak: The Choreographic Element in Kreasi Beleganjur

• Who performs gerak in a performance?
The musicians themselves

• What archetypal Balinese historical figure is frequently depicted in gerak?
Traditional Balinese warrior and his kepahlawan, or “heroic” character

• How is this character depicted in movement?
Classic poses of battle and martial arts maneuvers

• From which other domains may choreography be drawn?
Spinning the cremation tower at a crossroads, humorous satire (caricaturing nightclub dancers)
Wira Ghorava Cakti ’95, I Ketut Suandita

• Briefly discuss Suandita’s career in kreasi beleganjur composition and performance.
  Grew up playing beleganjur, kebyar and other styles of gamelan
• What notable achievement had he achieved by the age of 23? Was the composer of the winning composition in Bali’s most prestigious beleganjur contest for three consecutive years (1990, 1991, 1992). What is even more impressive is that he directed three different groups (from three different villages) to those championships and was the lead drummer for two of them.
• What appears to be the secret of Suandita’s success as a beleganjur composer? His ability to adhere closely to the foundational style and character of beleganjur musical tradition while simultaneously extending that tradition into innovative and musically compelling territory.
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<tr>
<th>Time</th>
<th>Description</th>
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<tr>
<td>0:00—0:06</td>
<td>Interlocking drumming, syncopated cymbal rhythms; gilak gong cycle provides foundation</td>
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<tr>
<td>0:07—0:18</td>
<td>Distinctive Suandita-style cymbal interlocking, with different patterns performed by each of the 8 cymbal players</td>
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<tr>
<td>0:19—0:27</td>
<td>Unaccompanied reyong feature</td>
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<td>0:28—1:14</td>
<td>Gong cycle returns; talents of full ensemble on display</td>
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<td></td>
<td>Good example of 8-part cymbal interlocking (from 0:38)</td>
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<td>1:15—1:28</td>
<td>Transition to slower tempo section; contrasting musical character</td>
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<td>1:29—2:11</td>
<td>Slow section begins</td>
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<td></td>
<td>Unpredictable changes in tempo, texture &amp; rhythm intentionally used to blur distinction between “slow” and “fast” parts of piece as music progresses</td>
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<td>2:12—end</td>
<td>Drums and cymbals play at double the tempo of the other instruments, creating an effects of 2 levels of tempo occurring at once.</td>
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Crossing International Borders

- Identify non-Indonesian composers influenced by Javanese and Balinese gamelans.
  
  Claude Debussy, John Cage, Lou Harrison, Colin McPhee, Benjamin Britten, Philip Glass, Steve Reich, Michael Tenzer, Wayne Vitale, Evan Ziporyn, Barbara Benary

- How have selected pop stars used gamelan music in their work? Digital samples of gamelan on some of their recordings

- Identify ways in which Western and other international musics have influenced Indonesian composers. They have created music that combines Indonesian and non-Indonesian musical elements in novel ways
• Briefly discuss musik kontemporer, the avant-garde genre of Indonesian music. (The book doesn’t provide much). Avant-garde music is often considered experimental art music. Traditional notions of melody, harmony and rhythm are frequently put aside and, in their place, radically different approaches are tried. In recent years, Indonesian music has had more influence on Western avant-garde music than the other way around. Nonetheless, Western notions of rhythm and melody have found a place in the Indonesian avant-garde community. Jazz, in particular, has been a significant influence.

• Identify locations of gamelan performance groups active outside of Indonesia. Which style of gamelan is performed by most of these groups? At which universities in the United States are gamelan programs located?
United States, Canada, United Kingdom, Italy, Japan
Javanese gamelan traditions are the most common choice.
UCLA, University of British Columbia, Bowling Green, FSU
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<th>Part</th>
<th>Time Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>Part I</td>
<td>0:00—0:13</td>
<td>Single reyong pot playing truncated, kilitan telu-derived rhythmic pattern. Other 3 reyong pots enter, building a dissonant chord.</td>
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<td>0:14—0:53</td>
<td>Gong agong enters. Gangsa metallophones enter one by one, eventually generating an ostinato rhythm</td>
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<td>0:54—1:25</td>
<td>Synthesizer melody unfolds over steady, slow-moving core melody. Sequence of low gong strokes (with electric bass) combines elements of Balinese gong cycle and the bass line of a Western-style chord progression.</td>
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<tr>
<td>Part II</td>
<td>1:26—1:41</td>
<td>All instruments drop out except for single reyong pot. Synthesized drums enter (1:30). Electric bass enters, establishing funk groove (1:33). Scratch turntable sneaks in and builds with a crescendo (1:39-1:41)</td>
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<td></td>
<td>1:42—3:37</td>
<td>Improvised scratch turntable solo. 2nd, 3rd, 4th reyong pots re-enter (2:29). Gangsas come back in (2:41), gradually splitting apart</td>
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<td></td>
<td>3:38—end</td>
<td>Return of synthesizer tune over gamelan core melody, low gongs, bass, all other instruments; dense, multi-layer texture</td>
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More Contemporary Gamelan Examples

**Contemporary Gamelan example 1** – this work shows the influence of Western classical music

**Contemporary Gamelan example 2** – this song shows some Western pop influences