

A Brief Introduction to Javanese Gamelan

Gamelan types, basic structures, composition

Traditional Javanese music-*karawitan*-includes more than just the gamelan; it also comprises several genres of unaccompanied singing (*tembang*), the traditional vehicle of Javanese poetry.¹ The term "gamelan" refers to more than one kind of ensemble. The ensemble that concerns us, however, is the largest and most versatile, the "complete" (*jangkep*) or "big" (*gedhe*) gamelan of the court tradition, which encompasses the most tonal and timbral variety, the largest repertory, and serves the widest range of functions: it accompanies several genres of dance (*beksa*) and theater (*wayang*), sets a dignified tone at weddings, and creates a festive atmosphere at dance parties (*tayuban*).

A "complete" gamelan ensemble is a set of matched instruments, but also includes male and female singers; its instrumentation is somewhat flexible, but governed by a body of conventions. Each vocal or instrumental part has a more or less strictly defined musical role. These embody three categories: the form-defining ("punctuating") instruments; instruments that bear the melodic skeleton or framework; and the "elaborating" parts.

The form-defining instruments demarcate the time cycles of the *gendhing* (a composition set in a metric cycle of fixed length), which range from 8 to 256 beats long. The large gong (gong ageng), producing the lowest, most resonant sound of the ensemble, plays once per cycle, to mark its end (its most important metric point). Such a cycle is called a *gongan*. *Gongan* are classified into several named categories (*ketawang*, *ladrang*, etc.) by their overall length and manner of subdivision.

The major subunits of a *gongan* are phrases ending with a stroke on the *kenong*, a medium-pitched set of horizontally mounted kettle gongs. *Kenongan* phrases are further subdivided by other instruments (the *kethuk*, *kempul*, and *kempyang*). Where the form-defining instruments are diverse in tone-color and construction, the instruments that bear the melodic skeleton are belong to the *saron* family, and generally carry a single melodic line in different registers (metallophones with the relatively narrow range of an octave or slightly more). The melody is usually called the *balungan* (literally, skeleton); the first generation of Western ethnomusicologists compared it to a *cantus firmus*. The higher-pitched *saron panerus* or *peking* plays simple variations on the *balungan*. A diverse group of singers and instruments comprise the "elaborating" and more rhythmically-active parts. These parts may be varied in accord with certain conventions. They include the kettle gongs (*bonang barung* and *bonang panerus*), the *rebab* bowed lute, the metallophones *gender barung* and *gender panerus*, the *gambang* xylophone, a zither (*clempung* or *siter*), and *suling* bamboo flute. The female solo singer (*pesindhen*) will usually be present, sometimes with a male chorus (*girong*). This larger group associated with the presence of singers and lack of *bonang*, is sometimes called the "soft-sounding" style, as opposed to the "loud" *bonang*-dominated instrumental gamelan. The *kendhang* is a set of drums, large one (*kendhang gendhing*, for slower, calmer pieces) and small (*ciblon*, for intricate rhythms and dances), and *ketipung* (smaller).

The melodic leader of the gamelan is the leading elaborating part: in "soft" playing, the *rebab*, the two-stringed bowed lute, leads; in "loud" playing, where the *rebab* is absent, the *bonang* leads. The *kendhang* leads the tempo.

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Tuning, pitch, mode

A gamelan *gedhe* is a double set of instruments, each set tuned to a different *laras* (tuning system). *Sléndro* is pentatonic (composed of intervals larger than a major second but smaller than a minor third). The other *laras*, *pélog*, includes seven pitches per octave, but traditional compositions use only five of these in any given passage. Each gamelan set may have its own distinctive tuning. Compositions can often be transposed from one tuning system to another, making such transpositions kinesthetically natural to perform.

Pélog Cipher notation		1	2	3	4	5	6	7 (dot above or below indicates octave.
Pitch name		<i>panunggul</i>	<i>gulu</i>	<i>dhadha</i>	<i>pélog</i>	<i>lima</i>	<i>nem</i>	<i>barang</i>
Approx. Western equiv.	D ⁻²⁶	Eb ⁻¹⁰	F ⁻⁴⁵	G ⁻²⁴	G ⁺⁴³	A ⁺⁴³	B ⁺³⁵	
Sléndro Cipher notation	2	3	5	6	1			
Pitch name	<i>gulu</i>	<i>dhadha</i>	<i>lima</i>	<i>nem</i>	<i>barang</i>			
Approx. Western equiv.	D ⁺²⁸	F ⁻³⁵	G ⁺¹⁷	A ⁺⁴⁰	C ⁻¹⁰			

Each of the two tunings systems is home to three *pathet* ("modes"), and a symmetrical arrangement of these six *pathet* governs the overall course of a performance. The melodic parts are expected to display the *pathet* of a piece in ways appropriate to their respective idioms. The *balungan* distinguishes between *pathet* by emphasizing different pitches at important metric junctions, and also by means of characteristic phrases. The elaborating parts likewise have their own conventional means of signaling the *pathet* of a composition.

Ladrang Sri Duhita, laras pélog pathet barang by K.R.T. Wasitodiningrat

The full title of the *gendhing* conveys important information about formal structure (*ladrang*), the particular melody (*Sri Duhita*), tuning system/*laras* (*pélog*) and mode/*pathet* (*barang*). The word "*ladrang*" tells us the pattern of punctuation used: the gong *ageng* plays every 32 beats, marking off the *gongan*; the large horizontal kettle gong (*kenong*) plays every 8 beats, marking off the *kenongan*; a smaller hanging gong (*kempul*) plays at the midpoint in the second, third, and fourth *kenongan*; and the small, single horizontal kettle gong (*kethuk*) plays on the second and sixth beat of each *kenongan*. Each mark different levels of subdivision of the *gongan*, interlocking to form a regular, recursive pattern (t=*kethuk*, n=*kenong*, p=*kempul*, w for *wela*, a "rest," g=*gong*):

t w t n t p t n t p t n t p t n/g

Ladrang Sri Duhita begins, as do nearly all *gendhing*, with a melodic solo introduction (*buka*) joined first by the drum and then the other instruments at the first gong stroke (the *buka* identifies the *gendhing* to knowledgeable listeners). A full analysis of the piece would include tempo levels (*irama*), changes between levels (I, II, III, and IV), and resultant melodic expansion and contraction; various kinds of instrumental variation (simultaneous and sequential); contrastive drumming styles and signals; male and female vocal melodies, vocal solos, and vocal text; and the dynamics of interaction among musicians as the *gendhing* is performed.

Ladrang **Sri Duhita**, laras pélog pathet barang (Wasitodiningrat)

Buka

• 2 2 2 6 7 2 3 6 5 3 2 • 7 5 ⑥

Lancaran

[2 7 2 6 2 7 2 6̂ 7 7 3̇ 2̇ 6 5 2 3̂
 2 3 2 7̇ 5 6 5 3̂ ↗ 2 7 2 3̇ 2 7 5 ⑥]

Angkatan ciblon

↗ 2 2 • • 6 7 2 3̇ 6 5 3 2 • 7 5 ⑥

Ciblon

[2 3 2 7̇ 3 2 7̇ 6̂ 2 3 2 7̇ 3 2 7 6̂
 7 7 • • 6 6 7 2̇ • 3̇ 2̇ 7 6 5 2 3̂
 6 7 3̇ 2̇ 6 3 2 7̇ 5 5 6 5 7 6 5 3̂
 2 2 • • 6 7 2 3̇ 6 5 3 2 • 7 5 ⑥]