

2 A Brief Introduction to *Karawitan*

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 Even the term “gamelan” refers to more than one kind of ensemble. There are many relatively small ensembles dedicated to particular ceremonial purposes, playing restricted repertoires: the *gamelan Sekatèn*, for example, is heard only once a year, performing outside of the Great Mosque during Garebeg Mulud, the commemoration of the birth and death of the Prophet Muhammad.

The ensemble that concerns us, however, is the largest and most versatile, the “complete” (*jangkep*) or “big” (*gedhé*) gamelan of the court tradition. This is the ensemble that encompasses the most tonal and timbral variety, boasts 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: the types and numbers of instruments and singers can shrink or expand depending on the size of the set and the availability of players. (Indeed, much of the repertory can be performed by as few as seven musicians.) But this flexibility is governed by a body of conventions. Each vocal or instrumental part has a more or less strictly defined musical role. Roughly speaking, we can divide these into three categories: the form-defining (“punctuating”) instruments; instruments that bear the melodic skeleton or framework; and the “elaborating” parts.² No matter how few instruments are available, each of the three categories must be represented: at least one punctuating instrument, one melodic-framework instrument, and a few elaborating parts.

The form-defining instruments demarcate the time cycles of the *gendhing* (a composition set in a metric cycle of fixed length).³ They delineate the boundaries and map the internal contours of each type of time cycle, 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). Hence such a cycle is called a *gong-cycle* (*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 kettlegongs. These *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 homogeneous; for the most part they carry a single melodic line, though in different registers. These instruments, which we may call the *saron* family, are metallophones with the relatively narrow range of an octave (or slightly more). The three members of the family (the *slenthem*, *demung*, and *saron barung*) normally perform the same melody in three different octaves, a melody now usually called the *balungan* (literally, skeleton). Though the *balungan* can be played fairly rapidly, it can also be very sparse, with each tone lasting several seconds; the latter practice may explain why the first generation of Western ethnomusicologists compared it to a *cantus firmus*. There is also an instrument identical in construction but tuned an octave higher than the highest *saron*, which constantly plays simple variations on the *balungan*; known as the *saron panerus* or *peking*, it falls functionally between the melodic-skeleton instruments and the “elaborating” parts.

The rich melodic texture of the gamelan is produced mainly by the diverse group of singers and instruments comprising the “elaborating” parts. These are “elaborate” in that they are more rhythmically active than the *balungan*. They are mostly not concerted parts; that is, these performers do not play or sing in unison with anyone, but need only coordinate with one another in relatively loose ways.⁴ They thus possess a great deal of individual liberty and may vary their parts according to their musical personalities or the mood of the moment, or in reaction to the improvisations of the other players.

We may divide them roughly into two groups. On one hand are the so-called loud-sounding parts, dominated by the racks of kettlegongs, the *bonang barung* and *bonang panerus*. It is possible to perform many *gendhing* with no other elaborating parts than these; this kind of “loud” playing is

accordingly called *bonangan* in Solo. Most of the time, however, there is a larger group of voices and instruments, including the *rebab* bowed lute, the metallophones *gendèr barung* and *gendèr panerus*, the *gambang* xylophone, a zither (*clempung* or *siter*), and *suling* flute. The female solo singer (*pesindhèn*) will usually be present, sometimes with a male chorus (*gérong*) as well. This larger group, associated as it is with the presence of singers, is sometimes distinguished from the *bonang* kettlegong sets by using the term “soft-sounding.” Just as it is possible to play many pieces with only “loud” elaborating instruments, it is also possible to use only “soft” instruments and voices, omitting the *bonangs*.

There is also an instrument that does not really fit into this tripartite schema. The *kendhang* is a set of drums, including a large one (the *kendhang gendhing*), used for the relatively calm *gendhing*, and a smaller one, the *ciblon*, borrowed from dance accompaniment, which plays intricate rhythms to create a lively effect.

GENDHING IN PERFORMANCE: INTERACTION AND LEADERSHIP

Regardless of his or her role in the ensemble, the musician must be familiar with the idioms of the leading parts in order to be able to interpret the clues and signals necessary for ensemble coordination. For while the general course of a composition is predetermined, there are always various alternative possibilities concerning its details. These do not generally need to be specified ahead of time, for they can be communicated as necessary in performance by aural cues from the leading instruments.

The melodic leader of the gamelan is the leading elaborating part: in “soft” playing, the *rebab*, the two-stringed bowed lute, leads; in “loud” *bonangan* playing, where the *rebab* is absent, the *bonang* leads. Complementing the melodic leader is the leader of the tempo, the *kendhang* (drum). The *rebab* or *bonang* indicates to the other musicians what piece they should play next by intoning its introduction;⁵ they can also control the timing of the transitions to certain sections within a piece. At finer levels of musical detail, the *rebab* can direct the other “soft” parts to favor one or another interpretive option with regard to ambiguous passages within some compositions.

The *rebab* and *bonang* lead aurally in another sense, in that they forecast the immediate future to some extent; their parts have a certain short-term predictability built in, and can thus quite literally “lead” or “guide” (*nuntun*) the other parts. Musicians familiar with the idioms of these two parts

can often anticipate the shape of a phrase from its opening tones. For example, by listening to the first two notes of a *bonang* phrase, a *saron* player can deduce his part for the next three or four seconds (Perlman 1994:149–50). For musicians who play the skeletal melody, or the secondary elaborating instruments, this predictability can serve as a safety net in case of memory lapses. But it also allows musicians to perform pieces they have not memorized, at least at a minimally adequate level. This sort of playing—in which the performer constructs his or her part phrase by phrase on a just-in-time basis by listening to one of the leading parts—is what musicians call “floating” (*ngambang*) or “being carried by the current” (*ngèli*: Suhardi 19.vii.97).⁶

PITCHES AND SCALES

The “complete” gamelan embraces not only a great variety of instrumental timbres and melodic idioms, but a diversity of scales as well. A *gamelan gedhé* is a double set of instruments, each set tuned to a different *laras* (tuning system). One of these, *sléndro*, is pentatonic, and in its realization on the fixed-pitch instruments it seems to the Western-trained ear to be composed of intervals larger than a major second but smaller than a minor third. (The singers and flexible-pitch *rebab* occasionally introduce smaller intervals approximating semitones.) The other *laras*, *pélog*, includes seven pitches per octave, but in traditional compositions only five of these appear in any given passage: the other two are exchange tones that substitute temporarily for their neighbors. There is no absolute pitch, or even a standardized intonation, for these two *laras*; each fine gamelan set may have its own distinctive realization of them. The sample tone measurements given in example 3 are therefore only illustrative, not definitive.

The names of the five tones of *sléndro* are also used to denote the tones of *pélog*, though their pitches may be quite different (example 3). This terminological sharing indicates parallels in the use of the two *laras*. Compositions can often be transposed from one tuning system to another (usually from *sléndro* to *pélog*), and a *sléndro* pitch is usually mapped onto the *pélog* pitch that bears its name.

This parallelism is also built into the construction of the fixed-pitch instruments, making such transpositions kinesthetically natural. Some of the elaborating instruments in *pélog* have only five pitches per octave and hence can be played with the same techniques and conventional melodic gestures of their *sléndro* counterparts. Other elaborating parts (the *rebab*, *suling* flute, and singers) use distinctively different gestures in the two tuning systems.

EXAMPLE 3. Tone measurements of the *pélog* and *sléndro slenthem* of the gamelan used at the Sri Wedhari theater auditorium in Solo, expressed in cents deviations from the Western tempered scale (A = 440 Hz). (This particular tuning pattern is unique to this gamelan; other gamelan differ in various tuning details.)

<i>PÉLOG</i>							
Cipher notation	1	2	3	4	5	6	7
Pitch name	<i>panunggul</i>	<i>gulu</i>	<i>dhadha</i>	<i>pélog</i>	<i>lima</i>	<i>nem</i>	<i>barang</i>
Western equiv.	D-26	Eb-10	F-45	G+24	G#+43	A+43	B+35

Western equiv.		D+28	F-35		G+17	A+40	C-10
Pitch name		<i>gulu</i>	<i>dhadha</i>		<i>lima</i>	<i>nem</i>	<i>barang</i>
Cipher notation		2	3		5	6	1
<i>SLÉNDRO</i>							

EXAMPLE 4. Skeletal melody (*saron*) and two versions of the male chorus (*gérong*) part for one phrase of Ladrang Pangkur *irama dadi*. Comparison of versions in *sléndro manyura* and *pélog barang*. Source for *pélog* version: Suroso Daladi (n.d., V:27).

saron

3 5 3 2 6 5 3 2

pélog

. . . . 6 6 . 7 2 . 3 6 7 6 5 7 6 5 3 2

sléndro

. . . . 6 6 . i 2 . 3 2 i 6 i 2 i 6 3 5 3 . 2

(continued)

Compare one phrase of the male vocal (*gérong*) part for a composition that can be played in both *sléndro* and *pélog* (example 4). The melodic contour of the framework melody is identical in both tuning systems, but the voice part takes distinctively different shapes.⁷

The fact that not all of the *pélog* instruments have all seven tones causes occasional tonal clashes. Some instruments lack the tone 4 [*f**], and when that pitch occurs in a composition they must substitute a neighboring tone (either 3 [*e*] or 5 [*g#*]). But *sléndro*, too, has a practice of scalar multiplicity. The *rebab* and *pesindhèn* can play a conventional phrase called *barang miring* ("slanted"; also referred to using a Dutch loanword, *mineer*). This phrase

EXAMPLE 4. (continued) Western staff trans-notation.

The image shows a musical score for four instruments, arranged in four staves. The top two staves are for instruments in the *sléndro* tuning system, and the bottom two are for instruments in the *pélog* tuning system. The top two staves (saron *sléndro* and gérong *sléndro*) are in 4/4 time with a key signature of one flat (B-flat). The bottom two staves (saron *pélog barang* and gérong *pélog barang*) are in 4/4 time with a key signature of one sharp (F-sharp). The saron parts play a simple melody of quarter notes. The gérong parts play a more complex melody with eighth and sixteenth notes, including slurs and ties.

uses *pélog*-like intervals approximating semitones, smaller than any found on the fixed-pitch *sléndro* instruments.

PATHET

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 (example 5). Each *sléndro pathet* together with its *pélog* counterpart (*sisihan*) defines a segment of the performance's time frame, during which only compositions in those two *pathet* may be played (at least in theory). The transition from one time period to another is formally marked and irreversible. Hence the progress of a performance is in a sense delineated by the sequence of *pathet*.

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 (Perlman 2001).

The apparently clear-cut, formal simplicity of the logic of the *pathet* sys-

EXAMPLE 5. The six *pathet* (modes) within the two tuning systems. Each of the three rows corresponds to a time segment of the performance occasion.

	Tuning system	
	<i>Sléndro</i>	<i>Pélog</i>
M		
o	<i>nem</i>	<i>lima</i>
d	<i>sanga</i>	<i>nem</i>
e	<i>manyura</i>	<i>barang</i>

tem belies its actual complexity. As a classification system for *gendhing* it is full of anomalies; its notional symmetry is not reflected in the transposition of compositions or performance practice between tuning systems. Describing the *pathet* system in these pages would require too long a digression; *pathet* has stimulated and frustrated generations of Javanese theorists and has become one of the most heavily researched topics in gamelan scholarship. Making sense of it is a task that must await another occasion.

THE IMPORTANCE OF IDIOMATIC INTEGRITY

The remainder of this chapter will focus closely on the melodic parts. Each part has one or more strongly defined idioms and is responsible for maintaining the integrity of those idioms. While each part also bears a responsibility to the whole (to match or fit together with the other parts), and while the elaborating parts must allow room for variation (through which individual players can express their personal tastes and respond to the exigencies of the performance situation), each part must guard the consistency of its distinctive idiom. Each part should unite with the others (*nunggal*), but only as long as it can do so and still maintain its own life (*urip dhéwé*: Sutton 1979:61, 70; Suyenaga 1984).

I will not try to catalog these idioms exhaustively in what follows, but will briefly illustrate each of the categories introduced above—*balungan*, soft elaboration, and loud elaboration. I will describe the distinctive aural qualities of the parts (their characteristic timbres and means of tone production), but because my main concern is to prepare the discussion of in-

terpart relations in chapter 3, I will concentrate on their powers of melodic and rhythmic expression. Since each part can match with the others only as far as the constraints of its idiom allow—since it can express only those melodic features of a composition compatible with that idiom—I pay particular attention to the constraints of range and rhythmic density that strongly define the “character” (*watak*) of each part.⁸

THE IDIOMS OF THE MELODIC SKELETON

The melodic skeleton has three distinct idioms, characterized by three levels of rhythmic density: *nibani*, *mlaku*, and *rangkep*. Each is roughly twice as dense as its predecessor in the series (example 6).

The middle level, *balungan mlaku* (“walk, travel”), is the most common; *balungan rangkep* (“double”), twice as dense, is the least common. The rhythmically sparsest idiom, *balungan nibani*, is the most rhythmically and melodically regimented. The other idioms have more rhythmic variety, while *balungan nibani* employs notes of a single durational value (represented in staff notation as whole notes). Similarly, where the other idioms can repeat tones, in *balungan nibani* the same pitch can never appear twice in immediate succession (Martopangrawit 11.ii.86). This fact has important consequences for *balungan nibani*’s ability to “guide” the other parts: as we shall see, since it can neither repeat nor sustain pitches, it cannot clearly express the kind of melodic motion known as “hanging.”

THE IDIOMS OF THE ELABORATING PARTS: AN OVERVIEW

The richness of *karawitan*’s melodic texture is found in the elaborating parts. When all nine instruments and both the female solo singer and the male chorus are present, eleven distinct melodic parts entwine around the slow-moving melodic skeleton. The “loud” parts—the *saron panerus*, *bonang barung*, and *bonang panerus*—are relatively homogeneous in sound: they are all metal percussion instruments and are closely associated with the melodic skeleton. The “soft” parts, led by the *rebab*, are both more varied in tone color and have overall more melodic independence from the *balungan*.

The “loud” parts, though similar in timbre, are distinguished by register or subtle qualities of tonal envelope. The *saron panerus*, playing the most rudimentary elaborations, produces its sounds with an unpadded mallet on metal keys; it is also located in the highest octave of the ensemble. The *bonang barung* and *bonang panerus* are sets of small kettlegongs without res-

EXAMPLE 6. Three varieties of melodic skeleton (*balungan*), notated as one-octave *saron* melodies. Source: *balungan nibani*, Gendhing Montro *sléndro manyura*, *inggah*; *balungan mlaku*, Gendhing Kocak *sléndro nem, mérong*; *balungan rangkep*, Ladrang Lipursari *sléndro manyura*.

nibani . 2 . 1 . 2 . 1 . 3 . 2 . 1 . 6

mlaku . 5 5 5 2 2 3 5 . . 5 6 1 2 3 2

rangkep 32653561 32653561 23..3361 22.3.1.2

Western staff trans-notation.

onators; besides the *saron panerus* they have the strongest attack and sharpest decay of all the metallophones.

The "soft" parts have a variety of means of tone production and timbre. There is one bowed string instrument (*rebab*) and one plucked zither (*clem-pung* or *siter*); there is one end-blown bamboo flute (*suling*) and one wooden xylophone (*gambang*); there are male and female singers. The *gendèr barung* and *gendèr panerus*, though bronze metallophones, are set apart from the *bonangs* and *saron panerus*: they are played with padded mallets, and their metal keys have individually tuned bamboo or metal resonators, giving them a rounded, sustained tone.

The elaborating parts are also distinguished by their melodic and rhythmic idioms, but these are best introduced by means of a concrete example. In example 7 I have aligned selected elaborating parts as they might be played

EXAMPLE 7. Selected elaborating parts (*saron panerus*, *bonang barung*, *gendèr barung*, *gambang*, *rebab*, *pesindhèn*) as they might be played for the *balungan* passage 1232 .126 in the *mérong* (first movement) of a *gending* in *sléndro manyura*.

saron 2 1 2 3 2 . 1 2 6

sar. panerus 2 2 1 1 2 2 1 1 2 2 3 3 2 2 3 3 1 1 2 2 1 1 2 2 6 6 5 5 6

bonang . 1 2 1 . . 2 1 . 3 2 3 . . 2 3 . 2 1 .55 5 1 . . 5 1 5 . 6 1 . .

gendèr 6 i 2 i . i 2 i 3 . 2 3 .23 2 i 6 5 6 5 . 5 6 5 i . 6 . i . 6 i 6

barung 2 . . .12 3 1 2 6 1 1 .61 2 321 2 . 6 5 6 1 5 6 .53 . 3 .56 . 6 6

gambang 2 6 1 2 1 6 1 2 3 3 5 2 1 6 3 5 6 6 1 2 3 5 6 6 1 5 3 2 6 1 2 6 1 2 1 2 3 1 2 6 5 3 3 5 6 1 2 3 3 5 2 1 6 3 5 6

rebab 2 . . 21.1. 3 . 3 . . . 2 3 212 2 . 1 2 1 . 2 . . 1 . .62 . 1 . . 6

pesindhèn 3. . 3 333 3 . . 2 2 2 3 .12 . . 1 6 .6.

EXAMPLE 7. (continued) Western staff trans-notation.

The image displays seven staves of Western staff trans-notation for Indonesian instruments. Each staff begins with a treble clef and a 4/4 time signature. The notation includes various musical symbols such as notes, rests, beams, and slurs. The instruments and their corresponding notations are:

- saron**: A single note on the second line of the staff.
- saron panerus**: A series of notes on the second line, connected by a horizontal line.
- bonang barung**: A series of notes on the second line, with a wavy line indicating a tremolo effect.
- gendèr barung**: A series of notes on the second line, with a wavy line indicating a tremolo effect.
- gambang**: A series of notes on the second line, with a wavy line indicating a tremolo effect.
- rebab**: A series of notes on the second line, with a wavy line indicating a tremolo effect.
- pesindhèn**: A series of notes on the second line, with a wavy line indicating a tremolo effect.

(continued)

EXAMPLE 7. (continued)

The image displays a musical score for seven instruments, arranged vertically. Each instrument's part is written on a five-line staff with a treble clef and a 4/4 time signature. The instruments are labeled as follows:

- saron**: Features a simple melody with a few notes.
- saron panerus**: Shows a more complex melody with many notes, some beamed together.
- bonang**: Displays a rhythmic pattern with notes and rests.
- gender**: Shows a complex, multi-measure rhythmic pattern.
- gambang**: Features a complex, multi-measure rhythmic pattern.
- rebab**: Shows a complex, multi-measure rhythmic pattern with some notes marked with a 'V'.
- pesindhèn**: Shows a complex, multi-measure rhythmic pattern with some notes marked with a 'V'.

in a brief passage from a traditional composition.⁹ For clarity of exposition, this example and the subsequent discussion omit some of the secondary elaborating parts (*suling*, *gendèr panerus*, *clempung*, *bonang panerus*).¹⁰

The skeletal melody (*balungan*) of this passage is here represented by the *saron* part, actually played in double parallel octaves by three members of the *saron* family of metallophones. It is slow-moving, notated here in half notes and whole notes.

The elaborating parts are all more rhythmically active than the *balungan*. Some maintain a constant rhythmic density: the *saron panerus* produces a steady stream of eighth-notes, just as the *gambang* rarely breaks its flow of sixteenth-notes. The idiom of the *gendèr barung* has both more rhythmic flexibility and more variety: it can play nearly constant eighth-notes, constant sixteenth-notes, or anything in between. In this example it keeps mostly to eighth-notes but mixes in sixteenth-notes and quarter-notes.

The *rebab* is even more rhythmically supple and is also distinguished by its tendency to play “behind” the beat. (This is hard to represent accurately in notation. The *rebab* part in example 7 has been simplified; in actual performance much more “rubato” would be heard.) But it is the *pesindhèn* who is least regimented by the beats of the meter; she sings almost constantly “out of time” and staggers her phrases to end much later than the other parts. In this example, she ends her phrase about three quarter-notes later than do the other parts.

For our present purposes we do not need to examine in further detail the melodic idiom of each elaborating part.¹¹ But we do need to understand what it means for each part to preserve its own character. We can most easily do so by observing how the parts can (or cannot) express the various types of melodic movement found in Javanese compositions.

THE RANGES OF THE PARTS

One of the most important determinants of a part’s powers of melodic expression is the width of its range. While the parts differ both in their absolute pitch and in their range, only the latter difference has real musical significance for performance practice. Traditional *gendhing* do not exploit the five-octave melodic compass of the ensemble as a whole (example 8) in the way a Western composer might treat the orchestra’s total palette by assigning a theme now to the double basses, now to the piccolo. Rather, through the principle of octave equivalence, all of the parts are considered to share a single conceptual tonal space covering two and one half octaves

EXAMPLE 8. The location of selected *sléndro* instruments within the total melodic compass of the ensemble.

The image displays a musical score for ten *sléndro* instruments, arranged vertically. Each instrument's melodic range is shown on a five-line staff. The instruments and their approximate melodic ranges are:

- bonang barung**: Treble clef, 4/4 time, range from G4 to E5.
- gambang**: Treble clef, 4/4 time, range from G3 to E5.
- gendèr barung**: Treble clef, 4/4 time, range from G3 to E5.
- saron panerus**: Treble clef, 4/4 time, range from G4 to E5.
- saron barung**: Treble clef, 4/4 time, range from G4 to E5.
- demung**: Treble clef, 4/4 time, range from G3 to E5.
- slenthem**: Bass clef, 4/4 time, range from G2 to E4.
- kenong**: Treble clef, 4/4 time, range from G3 to E4.
- kempul**: Bass clef, 4/4 time, range from G2 to E4.
- rebab**: Treble clef, 4/4 time, range from G3 to E5.
- pesindhèn**: Treble clef, 4/4 time, range from G3 to E5.
- gérong**: Bass clef, 4/4 time, range from G2 to E4.

All staves are in 4/4 time and feature a key signature of one flat (B-flat). The melodic lines are composed of eighth and quarter notes, illustrating the specific pitch ranges for each instrument within the ensemble's total melodic compass.

EXAMPLE 9. The conceptual range of gamelan melody. In *pélog*, the low 1 is used only in *pélog lima*.

sléndro

2̣ 3̣ 5̣ 6̣ 1 2 3 5 6 1̣ 2̣ 3̣ 5̣

pélog

(1̣) 2̣ 3̣ 4̣ 5̣ 6̣ 7̣ 1 2 3 4 5 6 7 1̣ 2̣ 3̣ 4̣

Western staff trans-notation.

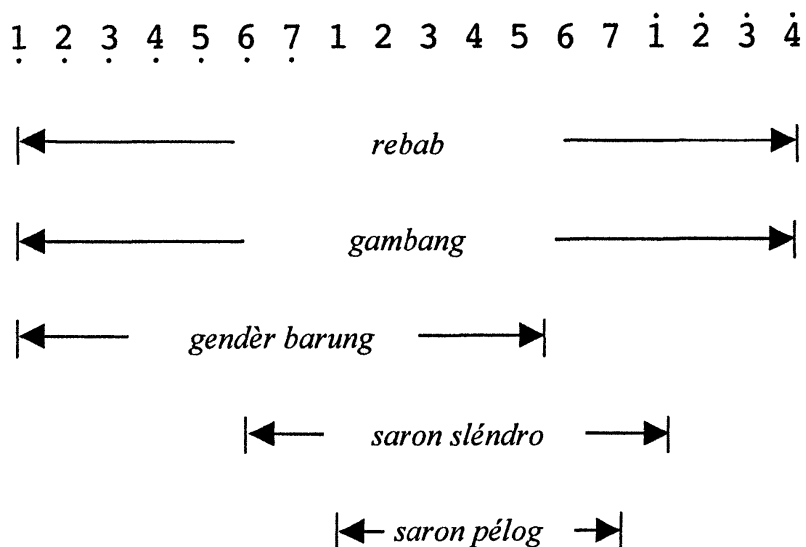
The image shows two musical staves. The top staff is labeled 'sléndro' and contains a melodic line with notes corresponding to the sléndro scale: 2, 3, 5, 6, 1, 2, 3, 5, 6, 1, 2, 3, 5. The bottom staff is labeled 'pélog' and contains a melodic line with notes corresponding to the pélog scale: (1), 2, 3, 4, 5, 6, 7, 1, 2, 3, 4, 5, 6, 7, 1, 2, 3, 4. The notes for the lower octave (1, 2, 3, 4, 5, 6, 7) are marked with an asterisk to indicate they are outside the conceptual range.

(example 9). Different parts realize this conceptual ambitus in different actual octaves. It is this conceptual ambitus that is represented in Javanese cipher notation; in the Western staff examples in this book I locate it arbitrarily from D below middle C to the G above the treble clef. (All mention of specific pitches and registers herein will refer to this conceptual ambitus; thus I will omit further qualifications, referring simply to “low 5 [g]” instead of “5 [g] in the lower octave of the conceptual range.”)

Some of the instruments can encompass this full range, but not all. Example 10 shows the effective ranges of various melodic parts within the conceptual tonal space of *sléndro*.¹² The effective range is not simply the sum of tones available on an instrument, but reflects how they are used. For example, a twenty-key *gambang* can span four octaves. However, since it is played in parallel octaves, and since some of its tones are never used cadentially, its effective range is the same as that of the *rebab*.

The *rebab* and *gambang* clearly have the widest ranges, and the *saron* family the narrowest; the ranges of the other parts fall between these extremes. As a result, there are melodies that can be played on the *rebab* but

EXAMPLE 10. Effective ranges of the widest and narrowest instrumental parts in Solo-style Javanese gamelan music, showing their positions within the conceptual two-and-one-half-octave ambitus of *gendhing* melody.



Western staff trans-notation.

rebab

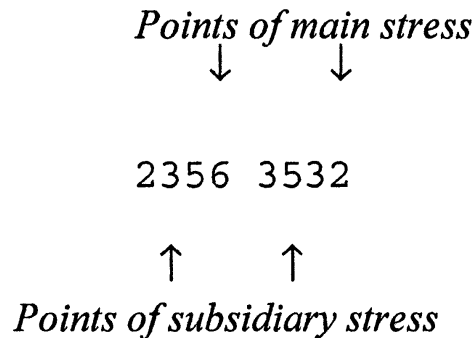
gambang

gendèr barung

saron family

that could not be played on (say) the *saron*, if only because of the differences in the width of their effective ranges. In particular, the fact that the *saron* realizes the *balungan* within its narrow range (cf. chapter 3) has played an important role in the development of Javanese theories of melodic guidance (as we shall see in chapter 5).

EXAMPLE 11. Two *gatra* of a melodic skeleton.



THE METRIC ORGANIZATION OF CADENCES

In the remainder of this chapter we will explore some of the ways in which the melodic parts move through this conceptual ambitus. Javanese musicians distinguish a few large categories of melodic motion, but in order to understand their distinctions we must first become acquainted with the temporal structuring of melodies around cadences.

A cadential point is called *sèlèh* (literally, to place or put down; also used in the sense of emotionally settled, calm, stable). Melodic cadence-points are closely associated with metrically strong beats, and also with a convention of ensemble coordination: in each phrase of a composition, the different instrumental and vocal parts are expected to cadence on the same tone. They do not always reach the cadence tone at the same moment: as we have already seen, the *pesindhèn* usually delays her phrase to arrive on the cadential tone one to four beats late. But conceptually, the cadential point is the moment when the various parts converge on the same pitch.

Cadences normally occur at metrically important moments: at the most important point in the *gong*-cycle (the stroke of the large gong) and the subsidiary stresses marked by the *kenong*, but also at the ends of a small metric unit not audibly marked by any form-defining instrument. This is a unit of four slow beats, known as *gatra*.¹³ Like a Western measure in quadruple meter, the *gatra* has one major point of stress and a point of subsidiary stress halfway through the unit.

In modern Javanese cipher notation a *gatra* is written down separated by spaces from its neighbors (example 11). Since all melodic motion is felt to move toward a goal, *gatra* are written with their most metrically important tones last. Thus the rightmost numeral in each of the groups in example 11 (the 6 and the 2) receive metric stress. Accordingly, in the Western staff ex-

amples in this book I notate these tones on the downbeats of measures. Subsidiary stress falls on the second tone of each group (i.e., the 5 in 3532); these tones appear on the third beats of the Western measures.

Melodies typically place their cadences at these points of metric stress, though the relationship is not invariable; the strongest cadences do not always fall at the strongest metric positions. There are many *gatra* downbeats where the melody does not cadence, just as there are *kenong*-strokes that fall on subsidiary cadences.

Now that we have seen the pitch space through which melodies move tonally and the metric space through which they move temporally, we can introduce the three basic types of melodic motion: moving, hanging, and slipping.

THE THREE TYPES OF MOTION IN THE MELODIC PARTS

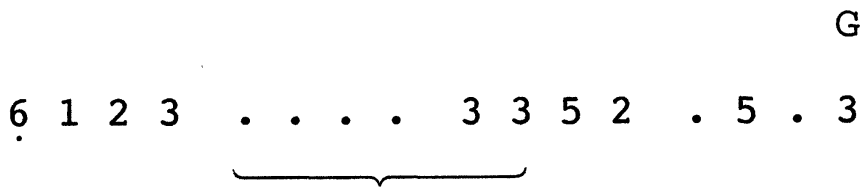
Moving, Hanging, and Slipping in the Balungan

There is no general term in common use for ordinary melodic motion from cadence-point to cadence-point; the category seems to be unmarked. If a Javanese term were needed for it, the most appropriate one would probably be *mlaku* (to walk, move, travel).¹⁴ “Moving” is normally anticipatory motion, moving *toward* a goal yet to come, not away from something that just happened. Since this goal usually falls on a point of metric stress, we may use motion from a weak beat to a strong beat as paradigmatic of “moving.”

In contrast to this type of (unmarked) melodic motion, there are two named types of special motion: “hanging” (*nggantung*, *gantungan*) and “slipping” (*plèsèdan*). Hanging is stasis, the absence of motion; slipping is sudden motion.

Hanging contrasts with “moving” precisely because it lacks the motion from weak beat to strong beat characteristic of moving. Hanging is often represented in the *balungan mlaku* idiom by the sustaining or repetition of a single tone from a weak beat to a strong beat. In example 12, the melody hangs for six beats on 3 [*e+*]. Here, the tone 3 is reached by moving to a strong beat; it is then sustained for four beats and repeated for two beats, at which point moving resumes. (Note that there is no hanging in the final four beats of this phrase, even though two tones are sustained. But the 2 [*d*] and the 5 [*g*] are each struck on strong beats—the 2 at a cadential point, the 5 at a point of mid-*gatra* subsidiary stress—and sustained through weak beats. The effect is not one of stasis, but of change in the overall pace of motion: from steady half-notes, we now move in steady whole-notes.)

EXAMPLE 12. Skeletal melody (*balungan*) for a passage from Gendhing Lendhi *sléndro manyura*. The “hanging” part of the passage is bracketed.



Western staff trans-notation.



Plèsèdan (literally, slipping) is sudden motion. Slipping is implied by the *balungan* when a cadence is immediately followed by hanging on a different tone, as in example 13. Here the melody slips at the end, cadencing on the 2 [*d*] and then slipping to 6 [*a*], where it hangs for four beats.

Slipping is most commonly signaled in *balungan mlaku* by a repeated tone in a weak-beat/strong-beat configuration, as above. (Sometimes the tone is not struck again on the strong beat, but rather the stroke on the weak beat is sustained.) Slipping weakens the previous cadence’s sense of completion. When slipping motion occurs immediately after a *kenong*-stroke, the *kenong*, which normally plays the pitch of the cadential tone, plays instead the pitch of the slipped-to note.

I have deliberately chosen to illustrate hanging and slipping using *balungan mlaku* because the three *balungan* idioms cannot all indicate melodic stasis equally well. *Balungan mlaku* is versatile in this regard, and *balungan rangkep*, too, can represent hanging by sustaining and repeating tones. By contrast, *balungan nibani*, since it can never pause and cannot repeat tones, can never clearly indicate hanging.

Let us now observe how the three kinds of melodic motion are manifested in some of the elaborating parts. As we shall see, the parts are not equally capable of expressing all of the aspects of melodic motion. These differences in capability have important implications for the ways the parts can relate to one another.

EXAMPLE 14. *Saron panerus* part for a sample two-*gatra balungan* passage (*irama dadi*).

balungan

3 5 6 5 3 2 1 2

saron panerus

. 33553355665566553322332211221122

Western staff trans-notation.

pitch, and as long as there are no large leaps, the *saron panerus* will play *aabbaabbccddccdd*.

When musicians talk about the soft elaborating parts, they often use the term *céngkok*. This is a way of referring to the conventionalized aspect of melody. It is a word with varied meanings, but in this context it describes the stable melodic content of a stock phrase, one or two *gatra* long, which can be varied and embellished in indefinitely many ways but which remains recognizable.¹⁶

Musicians sometimes speak of *céngkok* as things, and of the quantity of *céngkok* as a measure of musicianship. An accomplished player can be said to “have many *céngkok*”; a young musician can self-deprecatingly say that his “vocabulary” (*perbendaharaan*) of *céngkok* isn’t very large. The sense of *céngkok* as distinct “riffs” with their own identities is further reinforced by the practice of referring to some of them by name (*dua lolo*, *puthut gelut*, *ayu kuning*, etc.). One of the most easily identifiable is the double-length *céngkok* called *ayu kuning*. This *céngkok* has a distinctive vocal part, and its name is taken from the words that can be sung to it (they describe a woman’s appearance: “beautiful, fair-skinned, and shapely”). Example 15 shows two

EXAMPLE 15. The melodic pattern called *ayu kuning* in the *gérong* (male chorus) idiom. 15a: A basic version in *sléndro pathet manyura*, cadencing on 1 [c-]. Source: Martopangrawit (1975:1, 4-5; 1984:14). 15b: The same, transposed to *pathet sanga*.

15a.

6 . 1̇ . 3̇ . 2̇ . 6 . 3 3 2 2 1

a - yu ku - ning bén - trok maya maya

15b.

5 . 6 . 2̇ . 1̇ . 5 . 2 2 1 1 6̇

Western staff trans-notation.

manyura

a - yu ku - ning bén - trok ma - ya ma - ya

sanga

versions of this gesture at two different transposition levels (in *pathet manyura*, where it is used to cadence on the tone 1 [c-], and—one tone lower—in *pathet sanga*, where it cadences on 6 [a]). The soft elaborating parts such as the *rebab*, *gendèr barung*, and *gambang* have their own versions of *ayu kuning* suited to their respective idioms.

But a *céngkok* need not have a single invariable melodic outline. For example, the very common pattern *puthut gelut* has no conventional vocal line associated with it and takes two or three different shapes in both the *rebab* and *gendèr* parts. And some elaborating phrases are even less distinctive; there are also unnamed phrases used as transitions. These phrases are not thought of as integral wholes, but are referred to generically as “bridges” (*jembatan*) or *rambatan* (literally, a trellis for climbing plants).

GARAP

Before concluding this survey of the melodic parts, I must briefly return to one of the most important dimensions of contrast between the elaborating parts and the *balungan*. This contrast is more than a contrast of melodic idiom: it is also a contrast in kinds of performance practice, kinds of knowledge, and in the roles different musicians play within the ensemble. One word that summarizes many of these dimensions of contrast is *garap*. This term, though meaning literally “work,” is untranslatable. In its broadest sense it refers to performance practice in general, but it is also used to distinguish the elaborating parts from the *balungan*. Mitropradongga, for example, advised me to “know the *balungan* first [*ngerti gendhing dhisik*], then study the *garap*.” *Garap* connotes the individual latitude and autonomy of the performer of an elaborating part; Martopangrawit considered it an art of interpretation, requiring insight and judgment. The performer has some liberty in the choice of *céngkok* to use for any given passage in a *gendhing*, and flexibility in how to realize a *céngkok* on any given occasion. This latitude, which has been called improvisational by ethnomusicologists, distinguishes the elaborating parts from the *balungan*;¹⁷ for while the *balungan* of a *gendhing* can exist in different versions, the musicians entrusted with it are not expected to spontaneously vary it in performance.

CONCLUSION

The melodic parts are expected to match or “unite” within the limits established by their respective idioms. In this chapter we have seen how these idioms provide more or less scope for the parts to traverse pitch space and to display different kinds of melodic motion. Some of the parts—in particular, the *saron*—have quite narrow ranges. Some idioms, such as *balungan nibani* and the *saron panerus*, cannot represent hanging movements. Within these limits the parts must fit together. How they do so is the subject of the next chapter.