

Web Feature 2.2

Javanese Court Gamelan, “Hudan Mas”

The Javanese *bubaran* (ceremonial composition) “Hudan Mas” (“Golden Rain”)¹ illustrates a very different conception of “scale.” In Western music there are different scales, but the specifics of those scales are generally the same. For example, all of the scales we have examined are made up of pitches that are found within the twelve pitches of the chromatic scale. An oboe player or a violinist will probably have a pretty specific mental image of what A 440 is supposed to “sound like,” and a major scale will be expected to have the same pattern of half and whole steps regardless of on which note it begins. In Javanese music, however, the concept of “scale” is a good deal more fluid.

“Hudan Mas” is a composition for *gamelan*, an ensemble comprised mainly of various pitched gongs and percussion instruments with metal bars that somewhat resemble a Western vibraphone (*gamelan* is an Indonesian word that means “musical ensemble”). Along with the tuned metallic percussion one may also find percussion instruments with wooden keys, plucked and bowed string instruments, flutes, and singers. A drummer who sits in the midst of the ensemble signals changes in sections and tempo and thus functions as a kind of conductor. A *bubaran* is a ceremonial piece for processions and recessions, having something of the same function that Edward Elgar’s march “Pomp and Circumstance” does for its use as a processional or recessional at graduation ceremonies. There are two sections to the composition, each of which are repeated; these sections are then alternated in performance for as long as necessary.

One way of conceiving of a scale is by some selective subset of the twelve chromatic tones within an octave, and indeed we may think of each of the scales that have been presented so far in that way. The *gamelan* music of the Javanese region of Indonesia, however, is constructed from a very interesting alternative. Broadly speaking, there are two tuning systems in Javanese gamelan music: *pelog*, which has seven tones per octave, and *slendro*, which has five tones per octave. Each *gamelan* has two sets of instruments, then, one for each tuning system; most pieces for *gamelan* only use one tuning. Based on this description, you might think that *pelog* corresponds to a major or minor scale or one of the church modes in Western music and that *slendro* corresponds to our pentatonic scale. This is not likely so, however, because there is no fixed “pitch

¹ As of this writing, the iTunes tag for this recording of “Hudan Mas” had a typographical error; it can be located on iTunes under the title “Nudan Mas.”

standard” to either *pelog* or *slendro* that would be universal among the various *gamelans*; every *gamelan* is tuned to its own version of *pelog* and *slendro* scales, so an instrument taken out of an ensemble and placed in another ensemble would likely sound out of tune. (This actually has some parallels with Western orchestral music; in the eighteenth and nineteenth century, different European orchestras had their own “versions” of A, all somewhat sharp or flat of A 440, to which each orchestra would tune. The pitch standard of A 440 was not established until early in the twentieth century.)

“Hudan Mas” uses the *pelog* tuning system, but because each ensemble has its own distinctive set of pitches that make up its own *pelog* system, the notation for the piece uses numbers (so-called cipher notation) rather than notes on a staff; the numbers are similar in conception to scale degrees. The *balungan*, or skeletal melody, of “Hudan Mas” is given in cipher notation in Web Example 2.4; the numbers may be thought of as analogous to scale degrees in the tuning system. Different ensembles’ performances of “Hudan Mas” are likely to sound slightly different from one another, because the actual scales involved will be different; nevertheless, the *contour* of the melody will be the same, and this is how the tune is recognized.

:	6	5	3	2	
	6	5	3	2	
	3	3	2	3	
	6	5	3	2	:
:	7	5	6	7	
	5	6	7	2	
	2	7	6	5	
	6	7	6	5	:

Web Example 2.4. The *balungan* of “Hudan Mas” in cipher notation.

A culture’s theoretical constructs are culturally shaped (including aspects reflecting contact from other cultures), and this in turn contributes to the form and overall affect of its music. It might be said that one cultural value shown in Western classical music is the tendency to organize and classify into hierarchies. At the risk of generalizing, it could be asserted that Western music privileges development in the harmonic domain rather than melodic nuance or rhythmic complexity, elements that are emphasized much more in the music (and music theory) of other cultures. By studying

the music of other cultures, we can learn a little more about our own music (and its underlying values and thought processes) in the process.