Debussy's 'Pagodes' and the Javanese ketawang cycle, or Was Debussy the first Java Jive?  
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I

As its title suggests, 'Pagodes' is essentially a descriptive piece. Pagodas (oriental temples) externally exhibit the combined characteristics of relatively small bases with ornamented structures, and are generally found to be built over some sacred relic.\(^1\) The initial stimulus for the piece probably arose from Debussy's fascination with the sound of the Javanese gamelan\(^2\) which he heard at the International Exhibitions in Paris in 1889 and 1900.\(^3\) Indeed, the piece affords an excellent example of the composer's ability to synthesise retrospectively the most salient features of Javanese music. Not only does he evoke an atmosphere strongly redolent of the gamelan through his use of heterophonic textures and predominantly pentatonic themes but, more significantly, through the systematic placement of what one might term 'gong' notes throughout the piece. One may be forgiven for initially wondering whether any significance can be attached to what may, in all probability, amount to nothing more than a colouristic device - a textural placement of certain notes in different registers to suggest the multiplicity of instruments employed in the gamelan. It is, however, the precise placement of the 'gong' notes and their correspondence to the Javanese form, the ketawang cycle, that forms the basic assumption for this article. It is quite possible that Debussy had some knowledge of the instruments, if not Javanese musical structures, prior to hearing them at the Exhibitions of 1889 and 1900, as an entire gamelan had been presented to the Paris Conservatoire in 1887 by the Dutch government.\(^4\)

The Javanese gamelan can vary in size from a few instruments to over seventy-five. Harpole lists the three basic types of metallophones used as follows: 'The saron and gender (metal keyed instruments resembling xylophones); the bonang (instruments that resemble inverted bronze pots with a knob on top, supported upright in a carved wooden frame); and suspended gongs of various sizes.'\(^5\) The instruments are struck with padded mallets to create a clear and resonant sound. There is also a direct link between the size of an instrument and the complexity of its music: the smaller and higher-pitched instruments playing more notes than the larger lower-pitched ones. The gamelan may also include voice: female soloist (pesinhen), mixed chorus (gerong bedayan) or male unison chorus (gerong), as well as stringed instruments, drums and a small assortment of flutes. A complete gamelan would contain two sets of instruments, each tuned to a different scale: the five-note slendro and a seven-note pelog, which are both fundamentally pentatonic structures (the second expanded with additional decorative notes).

It is of some importance to stress here that the pentatonic themes in 'Pagodes' are not derived exclusively from Javanese scale systems and patterns. As Howat points out, pentatonicism is endemic to folk music world wide and may, just as easily, have some other stimulus, such as Chinese or even other Asian idioms.\(^6\) While Debussy's use of pentatonicism does suggest an oriental sound world, it is more than likely that his interest in Javanese music lay deeper than in the mere imitation of its scales.

II

'Pagodes' is a straightforward ternary structure with a short coda appended to the return of the first section. The subdivisions fall in the following bars: Introduction (bars 1–3); A (bars 3–23); B (bars 23–53); A1 (bars 53–80), and Coda (bars 80–98). Uncharacteristically, the A1 section is virtually an exact repeat of the first section, imbuing 'Pagodes' with a simplicity of design that is not usually associated with Debussy's mature piano style. Debussy rarely repeated any section of music without some subtle alteration. Like Bartók, he favoured a continuous reappraisal and, consequently, a reassessment if not actual variation of his musical material. Arguably, 'Pagodes' is one of the first piano pieces to truly reflect this new maturity in piano writing and is not so far removed from the salon pieces he was composing before the 1890s. This apparent formal simplicity, however, disguises a possible
correlation between the formal design in Debussy’s ‘Pagodes’ and the Javanese ketawang temporal cycle. In order to do this it will be necessary to briefly outline the chief characteristics of the Javanese model. Essentially, a Javanese gendhing (composition) is sectional in character, linking together a number of temporal cycles which are subject to further subdivision. The gongan contains all of the material framed between one stroke of the largest gong and the next. One specific temporal form is the ketawang temporal cycle, reproduced in Example 1.

Example 2 draws attention to the correspondence between the ketawang temporal cycle and ‘Pagodes’. The terms signifying gong notes in Example 1, are replaced in Example 2 by the ‘gong’ notes found in ‘Pagodes’. This placement acquires even more significance through the strict alternation of pitches (B–G#–D#) which correspond with the three different gongs represented in Example 1. In Example 1, one gongan of the ketawang temporal cycle is divided into eight sections by a strict alternation of the three different gongs, or time markers. The kenong, divides the cycle in half. The kempul, divides the cycle into four parts. (Its first appearance is marked in parenthesis because it is sometimes omitted in performance. Despite the physical omission, the gong’s function - that of marking time - remains implicit whether or not the gong is actually heard). The final gong, the kethuk, divides the total cycle into eight parts.

In Example 2, one can see that the ketawang temporal cycle does not conflict with the Western ternary form interpretation given earlier. The simple ternary form may be regarded as merely a superficial organizational device. Buried beneath the conventional interpretation and tripartite design lies a more complex structural principle: two interlocking forms are, therefore, juxtaposed yet interdependent. Formally, Debussy’s piano piece is a tightly structured composition whose design incorporates formal concepts from both East and West. The A and B sections complete one gongan of the ketawang temporal cycle. The A1 and Coda, through a roughly proportionate number of bars, provide a symmetrically balanced second half, or second gongan, to the total number of bars in the piece. The balance works out to 52 bars in the first gongan and 45 bars for the second, which makes up the remainder of the piece.

Example 3 (overleaf) lists the number of bars that constitute the sections between one gong note and the next. In ‘Pagodes’, Debussy extends the length of each gong resonance: the gong notes are now four, and in some cases, eight bars rather than one bar apart. The pattern established appears to consist of balanced eight and four bar phrases. The exceptions include the first gong note ‘B’ at the beginning of the A, B, and A1 sections - this constitutes an eight bar unit, giving the whole an overall pattern of 8+4+4+4 for each of the sections A, B and A1. This explanation, however, in itself requires subtle clarification. Just as the Javanese form appears to be a rather rigid system in print yet is open to slight modification in practice to add extra subtlety to the overall cycle, so ‘Pagodes’ similarly offers slight delays of gong notes and, consequentially, expansions of the basic form. For example, bars 31 and 32 comprise a written out ritenuto in this section. It is common for Javanese music to slow

Kenong Kethuk Kempul Kethuk Kenong Kethuk Kempul Kethuk

Example 1: Ketawang temporal cycle.

B G# D# G# B G# D# G#

Example 2: Gong notes in Debussy’s ‘Pagodes’
Ternary Form: A B A1 Coda
Gongs: B G# D# G# B G# D# G# B
Bar numbers: 3 11 15 19 23 33 37 45 53 61 65 69 78 80 98
Number of bars: 8 4 4 4 8+2 4 4 4 8 4 4 4+5
written out (4+4; 4+4) written out ritenuto

Example 3: Formal structure in Debussy’s ‘Pagodes’.

down just before a new section, and here, the parallel occurs with the onset of a new theme in the dominant key. So we find that Debussy prepares for this new theme by marking time with a syncopated ostinato figure that will support the next four bar unit. In this same section, the D# (bar 37) and G# (bar 45) gong notes are each expanded to two four bar units i.e. 4+4. This occurs simply through a repeat of the four bar units initiated in bars 37 and 45. This final repeated unit, beginning in bar 45, offers an example of the subtlety with which Debussy handles his formal structure. Example 4 illustrates how the theme first heard in bar 33, occurs now in bar 46 rather than bar 45, creating a 1+4 sequence. Consequently, the repeated four bar unit is compressed into three bars, overlapping in its final notes with the return of the A1 section in bar 53. Similarly in the A1 section, the final G# (bar 69) is expanded to a double four bar phrase. Other deviations include such concessional devices as another written out ritenuto in bar 77 and a short ‘link’ joining the A1 to the Coda (bars 78–79).

The placement of the gong notes, which may or may not represent prolonged harmonic regions on a deeper level of structure, confirm that these notes assume some type of formal function within the overall design of the piece. Some of these gong notes are more readily perceivable than others and therefore warrant some explanation, if not justification. In bars 1-11, the B gong occurs in the lowest register of the left hand part. Example 5 shows the dyad, B-F#, in bar 1, that

pervades the texture in the first ten bars of the piece. Again, in bars 11–14, the G# gong in the left hand part is easily perceived. Example 6 illustrates the low G# in bar 11 that is sustained as a pedal throughout bars 11–14. It is more difficult to pick the D# gong in bars 15–19, which is represented by an ostinato pedal on an oscillating triplet figure D#–C#–D#. Example 7 illustrates the left hand oscillating triplet figure in bar 15 of the piece. This figure continues in the middle and top registers of bars 19–23, superceded by a descending linear progression in the bass linking the G-sharp gong in bar 19 to the B gong in bar 23. Example 8 shows the bass line descent in the left hand part. The notes are stemmed and beamed to demonstrate their interdependence in the linear progression that connects the G# gong note to the B gong note. Bars 23–31 pose no problems regarding identification of the B gong, which is found in the bass register of the left hand. Bars 31–36 maintain a double pedal with the dyad F#–G#.

Example 9 identifies the G# gong by superimposing a linear voice-leading analysis over the right hand melody in bars 33–36. Here the gong note G# is prolonged through the arpeggiation of a G# minor triad in the right hand, as well as being supported by the F#–G# dyad in the left. The voice-leading analysis of the theme given in Example 9 helps to identify the essential G# focus of bars 33–36, and confirm the left hand G# as the most important note of the accompanying dyad. In bars 37–45, the D# gong occurs in the left hand as a reference note within the theme.
Example 10 reproduces the bass line in bars 37–40 and marks the reference notes (D#) with arrows. In bar 40, a neighbour-note figure, D#–C#–D#, emerges in slow pedal notes (through bars 40–45) in the bass register, below a repeat of the theme illustrated in Example 10. Finally, bars 46–53 restate, in the left hand, the G# gong with the theme originally heard in the right hand in bars 33–36 and represented earlier in Example 9. Now the F#–G# dyad is reinforced by an octave doubling in the right hand. Example 11 illustrates the accompaniment figure that occurs in bars 45–50. The notes of the lower dyad are played together, while the notes of the upper dyad form an ostinato figure. With bar 53 the A section returns and the piece moves through the second and final gongan of the ketawang temporal cycle.

III

Whether or not Debussy knew anything of the specific theory and practice involved in Javanese music, exposure to its exoticism and novelty enabled him to assimilate enough of its basic characteristics to translate its essence into his own creative language. ‘Pagodes’, then, is a spectacular example of Debussy’s ability to assimilate and use in his composition, certain aspects from the music of another culture. If the similarity is purely accidental, then how much more remarkable that a fleeting impression should result in such an accurate evocation of mood, style, texture, design and thematic contour.

As Howat observes however, ‘Java and gamelans may be merely one of several oriental images blended in ‘Pagodes’, as a westerner’s perception of ‘pagodas’ and all they imply.’ Howat cites Debussy’s friend, Paul-Jean Toulet’s return to Paris in 1903 - two months before the composition of ‘Pagodes’ - from a visit to China and Vietnam as possible evidence for this point of view. Nonetheless, this does not deny that imitation is the sincerest form of flattery and, perhaps after all, we can call Debussy the first Java Jive.
R. Schmitz, *The Piano Works of Claude Debussy* (New York: Dover, 1966), pp.81-5. In addition to giving a general description of these temples, Schmitz suggests that the very design of the pagoda roofs is embodied in the arabesques of the music, pp.83-4.

1 The word 'gamelan' simply means 'orchestra' or 'ensemble'. For more information see Ernst Heins, 'Indonesia: Instrumental ensembles', *The New Grove Dictionary of Music and Musicians*, IX, 173-9.

2 A full Javanese gamelan and dancers from Jogjakarta were presented in the Dutch section at the Paris World Exhibition of 1889. Refer to G.W. Hopkins, 'Ravel', *The New Grove*, XV, 610. The second presentation of Javanese music that Debussy heard occurred in the 1900 Paris Exhibition featuring a gamelan from the city of Solo. Solo (Surakarta) is a neighbouring kingdom to Jogjakarta in Java and the home of another important gamelan.


6 See R. Mueller, 'Javanese influence on Debussy's *Fantaisie and Beyond*', *19th-Century Music*, vol.10 no 2 (Fall 1986) for a meticulously researched article whose principle argument suggests that Debussy's *Fantaisie* is directly derived from the Javanese piece *Wani-wani*. While Howat, op.cit., dismisses this contention, the article does however provide fascinating background research and documentation regarding the influence, and possible formal implications, of Javanese music in Debussy's compositions.

7 I was first alerted to this model by reading William P. Malm, *Music Cultures of the Pacific, The Near East and Asia* (Englewood Cliffs, New Jersey: Prentice-Hall, 1967), pp.34-51. However, in preparing this article I am much indebted to Aline Scott-Maxwell, from the Music Department of Monash University, for carefully scrutinizing my work and verifying my conclusions and assumptions.

8 Howat, op.cit.