J A R R A D P O W E L L

GENDHING ERHU

FOR CHINESE ERHU
AND AMERICAN GAMELAN

Gendhing Erhu

by Jarrad Powell

Gendhing Erhu was written specifically for Seattle's Gamelan Pacifica and Warren Chang, a virtuoso player of the *erhu* [Chinese bowed spike fiddle].

The scale mixes pitches from both slendro and pelog, and the pitch called T4 (Tritone 4) is added to form a 10/7 tritone relationship with S1 (Slendro 1). The tuning of Gamelan Pacifica was designed as a matrix of 12 pitches in just intonation. Although not all the pitches are on the instruments at any one time, all of the instruments are modular, so the keys can be rearranged in various ways. Slendro and pelog can be derived from the twelve available pitches, as can other tunings of the composer's choice. The instruments are "extended range," that is, instruments that are usually just over one octave in an Indonesian gamelan have additional pitches at each end of the traditional range. For this piece, the range of most instruments in Gamelan Pacifica is from low 5 to high 3, eg. S5 6 P7 S1 S2 3 T4 S5 6 P7 S1 S2 3. Pitches 3 and 6 are *tumbuk*, the same pitch in both slendro and pelog.

The tuning required for this piece may not be available on other gamelan. One should refer to the ratios below in trying to determine if another gamelan has a tuning that will work for this piece. The tritone (T4) used in Gamelan Pacifica might be approximated by pelog 4, if it is approximately midway between slendro 3 and 5, or by pelog 3, if it is midway between slendro 3 and 5.

This is the scale used by Gamelan Pacifica for *Gending Erhu:*

S1	S2	3	T4	S5	6	P7
1/1	8/7	9/7	10/7	3/2	12/7	27/14

If S5 = Ab, the approximate Western equivalent would be: Ab Bb C Db Eb F G.

The erhu is tuned to S1 and S5. This produces a transposed part in the score. The erhu player follows the scheme below:

written:	1	2	3	4	5	6	7
played:	S5	6	P7	S1	S2	3	T4

Instrumentation

The suggested instrumentation for the gamelan is: gong, kempul, kenong, slenthem, demung, saron, peking, bonang barung and kendang. Only one peking is needed, but there may be more than one saron and demung player. Bonang panerus is unnecessary. Gender may be used in the pathetan.

Cipher notation is used throughout the score for both the gamelan and erhu. It should be noted, however, that the ciphers for the erhu do not have the same pitch values as the ciphers for the gamelan. The erhu utilizes a "moveable *do*" system, where pitch 1 is regarded to be the *do*, or tonic, of a major key. For this piece, *do* is placed at the gamelan pitch S5. The result is that pitch 1 in the erhu part sounds the same as pitch 5 in the gamelan (they are the same frequency). All other pitches in the erhu part are transposed accordingly. In the erhu notation a zero (0) indicates a rest, while a dash (–) represents a sustaining of the previous note.

Some western musical terms are used in the score. Metronome markings are intended as a guide and may be varied slightly. Some dynamics have been indicated as a guide, but they no not represent the complete range of dynamics for the piece. A recording of the performance can be a useful reference for dynamics and for the kendang part. (A tape is available from the Archives of the American Gamelan Institute.)

Kempul 3 should be the lowest kempul tone. If this is not the case then a small *gong suwukan* might be substituted. When slab-type gongs are used, *gong kemodong* (two slabs played simultaneously to create a "beating" tone) should be employed if possible. There is no kendang notation given.

Performance Instructions

Section A. Repeating section taken at a quick lancaran-like tempo. Only the demung should play for the first two repetitions of A. (The low 6 and low 7 should be allowed to ring, while the other notes are damped.) On the third repetition, add the peking, sarons, and kenong. Gong and slenthem join on the fifth repetition. On the sixth repetition the kendang enters. In this way, section A presents a gradual build-up of sound. When going to the second ending of A there should be a slight ritard in the third *gatra* (unit of four beats) so that a new tempo is reached by the start of the second ending. For the second ending all instruments play in unison. The kendang should stop on the first beat of the second ending of A.

Transition to B. Played by one saron and one peking. The peking doubles the written notes, with the

doubled note following the written note. The colotomic instruments play as indicated. No kendang.

Section B. With the exception of the bonang and kendang, the whole gamelan plays. The erhu begins in this section. The peking plays in unison with the other saron and should not double the written note. The gamelan should play softly; the erhu shoud be clearly heard. At the 34th gatra of A the erhu rests and the gamelan has a solo. This solo should be played very strongly. At the 40th gatra the erhu once again plays and the bonang barung begins to play. (The bonang barung part should be clearly heard as a counterpoint to the erhu.) The gamelan maintains a somewhat loud volume and the peking should begin to double each note, once again following rather than anticipating the written note. The kendang also joins in at this point and, in fact, should anticipate the downbeat of the 40th gatra with a "td B" gesture. Where there is a rest the peking should not play and should not double the note immediately preceeding the rest. The first time through the first ending is played, leading directly to the *transition to C*. The second time the second ending at letter D is played.

Transition to C. Top line played by the bonang barung; bottom line played by the slenthem. No kendang.

Section C. Full gamelan and erhu. Softly. Peking in unison, no doubling. No bonang. At the end of this section repeat directly to the sign at the beginning of the ninth gatra of A. No kendang.

Section D. This is actually the second ending of section A. Bonang continues to play and the peking continues to double as in A. The gamelan should continue playing strongly in D. The kendang should also continue to play.

Section E. Gamelan only. Lancaran-like tempo and treatment. On the second repeat of E, bonang plays gembyang using the *dhong* tones (the second and fourth note of each gatra). The peking begins at the third repetition of E. Then it plays double-time, so that it is really playing twice through E for every one repetition by the rest of the gamelan. The end of E is indicated by a ritard at the end of the third gatra. The tempo of section F should be set by the end of E so that the two gatra preceeding the transition to F are played at a steady tempo. The kendang plays throughout E and can control the ritard for this transition but should stop playing on the final beat of E, leaving the gamelan playing alone in the final two gatras leading to the gong. These two gatras should be played in unison with no elaboration at all. Following the gong 6 there is a grand pause. The kendang does not play again for the remainder of the piece.

Transition to F. Played by one demung, beginning after pause.

Section F. The erhu plays the top line and the gamelan plays the bottom line. Play strongly. No peking. Bonang plays in unison with other instruments. The gamelan should follow the erhu player for the crescendo and the ritard at the end. At the end of F the erhu should first sound its final note, followed immediately by the gong. The rest of the gamelan echoes the gong in the traditional Javanese manner. (All other gongs in the piece are sounded in unison and in tempo with the gamelan.)

Pathetan. Played freely by the erhu. A sparse accompaniment should be provided by one demung player or by a gender. (The part is improvised, in response to the erhu part.) The gong is played alone immediately following the pathetan. ◗

Gendhing Erhu

Jarrad Powell

Buka Bonang 63326 537263 27336

A. balungan pulse (bp) = 92

sarons (peking, saron, demung)	632653	·32653	732653	·32653 (1-8)	653 (9)
slenthem	6 32 (ff)	653	7 32	653	653

transition to B (bp = 76-80)

6 326 (p) 53 6 3 2653 6 326 53 6 3 2653

B.

erhu	0 0 0213	6 - -117	3 - -554	3703031	-1735 62	2 - -117
gamelan	6 326 (mf)	534 7	3265	3471	2653	4713

21-1673	3456 -	173-175	-1067 31776	6 - - -	0636 0636 7 -
6534	7123 ·	5 · 52	3 · 54	3 · 71	3542

-7344261	-3755146	3762-262	7 - - -	3 - 03435432	322 - -
4 · 13	5 · 26	71 · 3	426 ·	7 · 35	4267

4 - - -345	2515 7223 34	456 - -	173-175	01-673 1776	6 - - -
1 · · 5	4267	13 · ·	5 · 52	3 · 54	3 · 71

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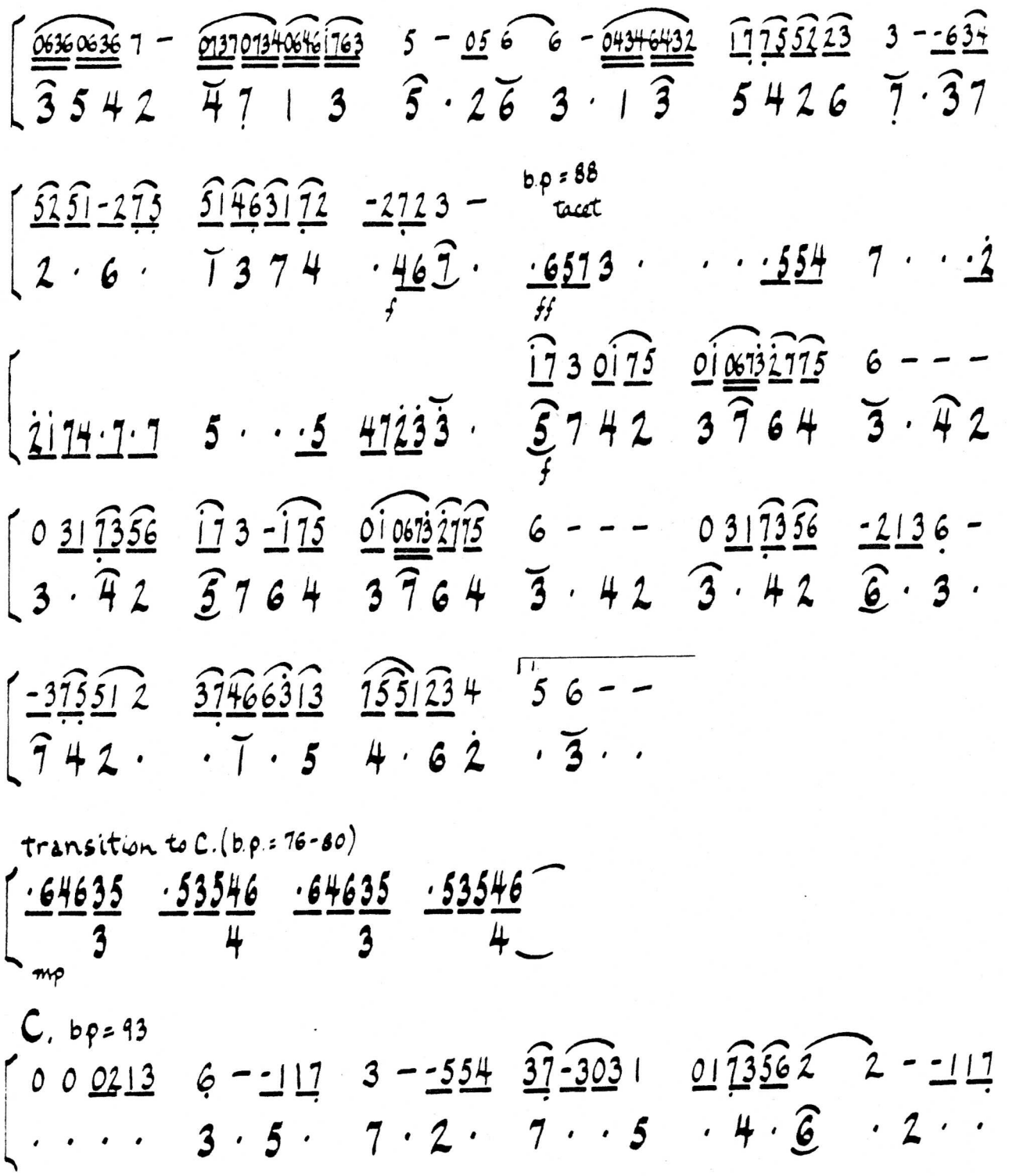
b.p = 88
tacet
transition to C. (b.p. = 76-80)
mp
C. bp = 93

repeat from the sign 𝄋

D. b.p. = 93

E. b.p. = 106

gamelan only

repeat 5 times (at least)

b.p. = 84-88

g.p. transition to F (b.p. = 83)

l.v.

F.

erhu / gamelan

265451 254214 265451 254214 265451 254214 265451

63 · · · 2 · · · 2 · · 1 · · 1 · · 6 · · 2

254214 265451 254214 265451 254214 2

· · 5 6 · 5 6 · 1 · 2 · 5 621651 6 L.V.

poco cresc. molto rit. ff

patetan (freely)

22 4 5 6 - - i i - i 76 5 - - 6i 4 - 65645 2 - - 61

2 · 5 5 43 2 21 6 - 6 - 2 2 1 6 - - 32

gong only 6 L.V.

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Seattle
Fall 1983

Duration app. 10'40"

bonangan for section B

574242 37376464 23234242 23234242 57576464 37376464
5 7 4 2 3 7 6 4 3 · 4 2 3 · 4 2 5 7 6 4 3 7 6 4

23234242 23234242 6i6i3636 74742626 3i3i3535 424 2 2 · 2 2 ·
3 · 4 2 3 · 4 2 6 · 3 · 7 4 2 · · 1 · 5 4 · 6 2

1. 2323 · · · · ‖ 2. 232321i2i 75756262 35351717 56564545 6262i5i5
· 3 · · · 3 · 1 7 5 6 2 · 5 1 7 5 6 · 5 4 2 1 5

36365454 i7i75656 232321i2i 75756262 35351717 56567575
6 · 5 4 1 7 5 6 2 3 · 1 7 5 6 2 · 5 1 7 5 6 · 5

6262i5i5 63635454 i7i75656 i2i2 · 345 on to section D (gendyang)
4 2 1 5 6 · 5 4 1 7 5 6 · 2 345