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Compositional Practice as Expression of Cultural Hybridity in Lou Harrison's *Double Concerto for Violin, Cello, and Javanese Gamelan*

Matthew Neil Andrews

Abstract

Artists in the twenty-first century face a creative dilemma: styles and traditions from around the world are now available to all, and in the post-colonial era it can become difficult to discern the appropriateness of artistic borrowings. I propose that cultural hybridity, defined as genuine investment in another artistic culture's traditions and respect for its practitioners, can provide an "Ariadne's thread" to guide the interculturally sensitive artist. Lou Harrison's long relationship with the gamelan music (*karawitan*) of Indonesia provides an enlightening example. From his initial exposure to Asian music all through his decades of intensive study and instrument-building, Harrison's development as a composer of multicultural music demonstrates four aspects of cultural hybridity: curiosity, respect, discipline, and devotion. Harrison's compositions for gamelan and Western instruments show the composer at his most hybrid. This analysis of his *Double Concerto for Violin, Cello, and Javanese Gamelan* and the path leading to its creation aims to delineate the ways in which one particular non-Western tradition can be combined with Western instruments and traditions to create a work of intercultural beauty, respectful to both musical traditions and to the artists who practice them.

Keywords: Lou Harrison; American gamelan; cultural hybridity; *Double Concerto for Violin, Cello, and Javanese Gamelan*.

According to dancer and choreographer Mark Morris, “[y]ou either know Lou and have been to his house and are his best friend, or you’ve never heard of him.”¹ My experience, as a composer and gamelan performer discovering Harrison’s music only after the composer’s death in 2003, has revealed a similar truth: every person to whom I mention Harrison has either never heard of him, or adores him fully enough to have complex, almost religiously paradoxical opinions of him. Nowhere is this more evident than in the wide variety of attitudes towards his syntheses of Eastern and Western musical traditions, notably his works for Western classical instruments and Indonesian gamelan.

Harrison earned a portion of his reputation as an East-West composer by studying and working equally with West Coast composers Henry Cowell and John Cage and East Coast composers Virgil Thomson and Charles Ives. However, it is the union of the *global* East and West which really concerns us: Harrison’s music is characterized by its deep roots in both Western European classical music and the musical traditions of Asia.

Harrison himself was cynical about being labeled an East-West composer. His response to those who described him thus was:

[a]ll they are saying is that I live in California and know Asian music. I should say my knowledge is of Korean classic court music and of Chinese late chamber music and of Javanese court and folk music.”²

Harrison was well aware of the living, evolving nature of even the oldest traditions, referring to the Northern Chinese tradition as “still alive as all these traditions are,”

¹ Quoted in Leta E. Miller and Fredric Lieberman., *Composing a World: Lou Harrison, Musical Wayfarer* (Urbana: University of Illinois Press, 2004), ix.

² Richard Kostelanetz and Lou Harrison, "A Conversation, in Eleven-Minus-One Parts, with Lou Harrison about Music/Theater," *The Musical Quarterly* 76, no. 3 (Autumn 1992): 398.

adding that “[t]hey are still growing and getting new pieces...[i]f you're a first-class tradition, you compose too.”³ Of these traditions, Harrison had a special love for the gamelan orchestra of Indonesia:

As far as I'm concerned, the gamelan is probably the most important and the most beautiful of the orchestral traditions on the planet, there being very few: the Sino-Javanese, the northwest Asian⁴ one, and the Southeast Asian one. Of that, the blossom is the central Javanese gamelan, which is sensuously the most beautiful music on the planet and intellectually the most exciting.⁵

Harrison's relationship with “non-Western” music is too subtle to be contained within such simplistic categories as “East/West” or “authentic/spurious.” A better word for Harrison is *hybrid*, a term he picked up from Henry Cowell, who taught him not to “underrate hybrid musics *because that's all there is.*”⁶ I hope to demonstrate that Harrison's hybrid compositions, particularly his *Double Concerto for Violin, Cello, and Javanese Gamelan*, display a high degree of intercultural integrity and provide models for fruitful, cross-cultural, artistic collaboration.

We twenty-first-century composers, performers, listeners, and researchers have access to vast amounts of material from myriad musical traditions, which leads us to a difficult contradiction: how do we engage this material in a way which is respectful and meaningful? Throughout the history of colonialism and globalism, cultures have been strip-mined for resources right along with the land and the people themselves; at times, little has remained but a vague Western misinterpretation of the colonized. Former Lewis

³ Ibid.

⁴ Harrison's wry nickname for Europe.

⁵ Ibid., 400. Note Harrison's appreciation for the gamelan's sensual as well as intellectual qualities, an important point which has sometimes been overlooked.

⁶ Lou Harrison, *Lou Harrison's Music Primer: Various Items About Music to 1970*, (New York: C.F. Peters Corporation, 1971), 45.

& Clark College gamelan director Vincent McDermott summarizes the problem in a memorable phrase: “[g]amelans have been flowing out of Indonesia as fast as her oil.”⁷ Aside from ethical considerations, which need not be argued further here,⁸ there are pragmatic reasons for concerning ourselves with issues of appropriation and hybridity. Reputation is one practical issue, relevant for any artist, but on a deeper level we must recognize that a real understanding of “the other” benefits the act of creation itself. Cross-cultural experiences, as with collaboration in general, can provide complexity, diversity, robustness, and even longevity to a work of art. There are times when artistic borrowings from other cultures, if handled badly or superficially, can become shallow, appropriative, and even tacky. We must take care in navigating the large grey area between the outright appropriation of the external tokens of foreign cultures and a genuinely cross-cultural artistic creativity, a grey area we can observe somewhere between the stock sitar twang that universally signals “The Orient” to Western filmgoers and George Harrison’s informed use of sitar in his solo music and several Beatles songs.⁹

For Lou Harrison, cultural hybridity was a matter of curiosity, respect, discipline, and devotion. His earliest musical experiences show a total embrace of the novel and unfamiliar, as he enthusiastically latched onto whatever caught his interest; many early enthusiasms, such as Korean, Chinese, and Indonesian music, stayed with him for decades following first contact, waiting for the right conditions in which to bloom and

⁷ Vincent McDermott, "Gamelans and New Music," *Musical Quarterly* 72, no. 1 (1986): 16.

⁸ For an in-depth discussion of these matters, see Derek B. Scott, "Orientalism and Musical Style," *Musical Quarterly* 82, no. 2 (1998): 309-35 and Rachel Chacko, "Beyond the Myth of East-West Hybridity: An Analysis of Lou Harrison's Works for Gamelan and Western Instruments," PhD diss., University of Colorado College of Music, 2010 (ProQuest).

⁹ Most prominently in "Love You To" and "Within You, Without You."

ripen. His early exposure to Chinese opera in San Francisco was particularly formative: “By the time I was mature I had experienced a lot more Chinese than Western opera—scads more, by astronomical units.”¹⁰ It was in San Francisco, too, that he first heard gamelan orchestras, first in Cowell’s world music class and on LP recordings brought back from Indonesia by his roommate Dorothy James, later in person at the Dutch East Indies pavilion during the 1939 Golden Gate Exposition.¹¹

Harrison’s first compositions specifically referencing gamelan do little more than imitate the ensemble’s percussive textures and other superficial features. An early example is 1951’s *Suite for Violin, Piano, and Small Orchestra*, which includes, among its six movements, two entitled “First Gamelan” and “Second Gamelan,” which use tack-pianos and celesta to approximate the gamelan’s metallophones.¹² Harrison described the features of this work as:

aural imitations of the generalized sounds of gamelan. These movements don't use gamelan instruments, gamelan melodies, or gamelan procedures, but at least I didn't modulate!¹³

Harrison “simply selected from his limited research those elements he found attractive,” a habit which he described as “musical tourism.”¹⁴ Later works emerged from further study of Indonesian music,¹⁵ gamelan-like structural elements and alternate tuning systems appearing in the *Concerto in Slendro*, written in 1961 on a trip to Tokyo. Once Harrison

¹⁰ Kostelanetz and Harrison, "A Conversation," 406.

¹¹ Miller and Lieberman., *Composing a World*, 20.

¹² Heidi Von Gunden, *The Music of Lou Harrison* (Metuchen, N.J.: Scarecrow Press, 1995), 110.

¹³ Harrison, interview with the authors, March 8, 1994. Quoted in Leta E. Miller and Fredric Lieberman, "Lou Harrison and the American Gamelan," *American Music* 17, no. 2 (Summer 1999): 149.

¹⁴ Harrison, personal communication with the authors, 1998. Quoted in Miller and Fredric Lieberman, "Lou Harrison and the American Gamelan," 151.

¹⁵ Most importantly, the writings of Colin McPhee. See Miller and Lieberman, *Lou Harrison* (Urbana: University of Illinois Press, 2006), 49-50.

was in a position to more thoroughly pursue his interests,¹⁶ he and partner William Colvig built their first gamelan. This set of just-intoned aluminum instruments—initially dubbed “American Gamelan” and later renamed “Old Granddad”—was built for Harrison’s puppet opera *Young Caesar*, commissioned in 1969, and was first used at the opera’s 1971 premiere.¹⁷ Harrison wrote several works for Old Granddad during the 1970s, including 1974’s *Suite for Violin and American Gamelan*.

Up to this point (from 1939 to 1975) Harrison had explored his initial curiosity, invested time in study and self-education on the subject, and had even devoted himself to building gamelan-inspired instruments. However, he still had not formally studied gamelan in any traditional sense. This changed following the 1975 Berkeley World Music Festival, where Harrison first heard the music and gamelan orchestra of Javanese composer and performer K.R.T. Wasitodiningrat, popularly known as Pak Cokro.¹⁸ The Center for World Music in Berkeley not only invited Pak Cokro (who had been teaching at CalArts in Southern California since 1972) to come teach courses at the festival, but they also made arrangements for him to bring his set of gamelan instruments, Kyai Hudan Mas.¹⁹ It was following this encounter that Harrison began his serious study of traditional Indonesian gamelan music, first playing with Pak Cokro and his assistant Jody Diamond and later composing a series of works exploring authentic performance practice and compositional methods. This period culminated in several large scale works for

¹⁶ That is, after he returned to California, settling in Aptos (near Santa Cruz) and taking a teaching position at San Jose State University.

¹⁷ Miller and Lieberman, "Lou Harrison and the American Gamelan," 154-7.

¹⁸ *Ibid.*, 157.

¹⁹ *Ibid.*, 158.

gamelan and Western instruments, including the *Concerto for Piano with Javanese Gamelan* and the *Double Concerto for Violin, Cello, and Javanese Gamelan*.

Harrison seems to have put off writing directly for gamelan for so long—nearly forty years from his first exposure—simply because he didn't think he could, reminding us that “in Colin McPhee's time [c. 1964] there were maybe one or two gamelans in the USA” and stating that “[a]t that time it didn't even vaguely occur to me to compose for it...[because] any gamelan in the USA was used for academic work.”²⁰ It was not until 1975, when “at a concert in Los Angeles, in the green room Pak Cokro said I should please write for gamelan...[y]ou could have knocked me over with a piano because it had never occurred to me that one could do this.”²¹ Harrison scholars Leta Miller and Fredric Lieberman note that Cokro's invitation came “after several months of study.”²²

The *Double Concerto for Violin, Cello, and Javanese Gamelan* was eventually created by combining works composed separately for gamelan during this period. The concerto was commissioned by the Mirecourt Trio in 1981 and premiered at Mills College the following year.²³ It is the first large-scale expression of Harrison's mature gamelan style, marking a turning point in his decades-long pursuit of sensual beauty complemented with intellectual excitement.

The *Double Concerto* is built in three movements: *Ladrang Epikuros*,²⁴ *Stampede*, and *Gending Hephaestus*.²⁵ The central movement, *Stampede*,²⁶ uses only the *kendang*

²⁰ Kostelanetz and Harrison, "A Conversation," 395.

²¹ Ibid.

²² Miller and Lieberman, "Lou Harrison and the American Gamelan," 163.

²³ Bill Alves and Brett Campbell, *Lou Harrison: American Musical Maverick*, Bloomington: Indiana University Press, 2017: 362-3.

²⁴ Named for the Athenian philosopher.

²⁵ Named for the Greek god of blacksmiths, also known as Vulcan.

and *bedug* drums and the *gong ageng* (the largest gong) from the gamelan orchestra, and thus will concern us minimally. The outer movements were originally written for Javanese gamelan alone and the violin and cello parts were not added until the *Double Concerto*'s creation. The first movement is in *laras pelog*, the gamelan's seven-tone hemitonic scale, and the third movement is in *laras slendro*, a fairly typical anhemitonic pentatonic. Neither scale is quite commensurate with Western scales, although Harrison describes *slendro* as "the one you would recognize as a kind of pentatonic,"²⁷ while *pelog* is "minor sounding with small intervals and a complicated tuning system"²⁸ and can be very roughly approximated as a minor scale with a raised fourth scale degree and a second scale degree hovering microtonally somewhere between natural and flat. The *Stampede* movement is built entirely upon the octatonic scale, cadencing frequently on C and treating the synthetic scale (a favorite of Messiaen's) as a sort of compromise between *pelog* and *slendro*:

Pelog (*Ladrang Epikuros*): D-E(b)-F-G#-A-Bb-C

Octatonic (*Stampede*): C-**Db-Eb-E-F#-G-A-Bb-C**

Slendro (*Gending Hephaestus*): Db-Eb-F-Ab-Bb

Harrison also used the *Stampede* movement to give the gamelan a rest and showcase the violin and cello with minimal percussive support. It is in three-quarter time throughout, uses typically Western canons and cross-rhythms, and in general contrasts with the outer movements' use of traditional gamelan music (*karawitan*).

²⁶ From the Medieval "Estampie", a dance form Harrison used often. See Miller and Lieberman., *Composing a World*, 221.

²⁷ Kostelanetz and Harrison, "A Conversation," 401-2.

²⁸ Ibid.

Although some have found fault with Harrison's understanding and use of *karawitan*, the two gamelan movements demonstrate many characteristically Javanese elements. The score and performance notes use several *karawitan* terms, which we will define and discuss in turn.

All *karawitan* music is built on a central structural melody called *balungan*, which is somewhat comparable to a *cantus firmus* or *figured bass*; the *balungan* guides the playing of all the instruments in the orchestra. The instruments of the gamelan orchestra are divided into three main groups: keyed metallophones playing the *balungan* itself; groups of elaborating instruments performing complex fractal figures called *kembangan*;²⁹ and the phrase-marking colotomic instruments.³⁰ The word *gending* in the title *Gending Hephaestus* is simply a general term meaning “piece of music,” but the term *ladrang* in opening movement *Ladrang Epikuros* does designate a very specific traditional formal structure, which gives us some insight into how Harrison approached his gamelan writing.

The *ladrang* structure is primarily defined by the manner in which longer phrases are marked by the colotomic instruments. These instruments, all of which are pitched gongs, include the *gong ageng* (a very large gong which marks the ends of phrases), the *kenong* (a set of smaller pot gongs placed horizontally on racks), the *kempul* (hanging gongs similar to—but much smaller than—the *gong ageng*), the *suwukan* (a

²⁹ For a thorough discussion see Alves, “Kembangan.”

³⁰ The word “colotomy” was coined by Dutch ethnomusicologist and gamelan studies pioneer Jaap Kunst specifically to describe this feature of *karawitan*.

medium-large gong between the *kempul* and the *gong ageng*), and the *kethuk* (a very small pot gong with a sharp, crisp attack, usually played by the *kenong* player).

Normal *karawitan* structure is deeply binary, and at its most basic conceptual level consists of layerings of weak-to-strong dyads. In most *karawitan* formal structures, including *ladrang*, the *balungan* is accented by the *kethuk* (notated “t”) on every other beat; by the *kenong* (“N”) and *kempul* (“P”) every fourth beat; and at the end of each phrase by the *gong ageng* (“G”), which closes all and begins a new cycle. This alternation of weak-to-strong beats at several levels of abstraction is the essence of *karawitan*’s self-similar deep structure.³¹

In the traditional version of *ladrang*, the colotomic structure is normally notated thus: t W t N t P t N t P t N t P t G (Figure 1). The W, placed where the first P would otherwise occur, stands for *wela* and indicates that the first *kempul* stroke is omitted “in deference to the greatness that is the gong.”³² In some compositions, including the *Double Concerto*, the medium *suwukan* gong ends the first half of the phrase, coinciding with the second *kenong* stroke.

With this in mind, we can see that most obvious way in which Harrison’s *ladrang* deviates from traditional norms is that its *balungan* is sixty beats long instead of the usual thirty-two (Figure 2). Whereas a traditional *ladrang* (such as *Wilujeng*) consists of two lines of four four-beat phrases each, *Ladrang Epikuros* has five such lines.

³¹ For a more detailed technical discussion of these matters, see Neil Sorrell, *A Guide to the Gamelan*, Portland, Or.: Amadeus Press, 1990 and R. Anderson Sutton, *Variation in Central Javanese Gamelan Music: Dynamics of a Steady State*. DeKalb: Northern Illinois University Center for Southeast Asian Studies, 1993.

³² Stephen Parris, “Towards a Harmonic Approach to Composing for Central Javanese Gamelan,” D.M.A. diss., Mills College, 2015: 51.

Figure 1: *Wilujeng*, a traditional *ladrang*, with colotomic pattern shown.

Ladrang WILUJENG skandro manyura

Buka - 132 6123 1132 - 12(6)

	t W	t N	t P	t N
Dampak	2123	212 <u>6</u>	33--	6532
	t P	t N	t P	t G
	5653	212 <u>6</u>	2123	212(6)

UK --6- 15i6 356i 6532

66-- 15i6 1132 - 12(6)

Figure 2: *Ladrang Epikuros*, gamelan score showing *balungan* and colotomic pattern.

LADRANG EPIKUROK PELOG, LIMA

Buka: ..16 5312 ..16 5323 123236 (5)

	T W	T N	T P	T N
{	.1.6	.1.5	.136	5323
	T P	T N	T P	T N
	.1.6	.1.5	.134	6532
	T P	T N	T P	T ^N
	.653	23.5	42.3	216 (5)
	T P	T ^N	T P	T ^N
	.216	2152	14.3	2342
	T P	T N	T P	T ^N
	.126	2152	14.1	236 (5) }

Further analysis, however, shows that Harrison's *ladrang* is somewhat more traditional than it may appear. The second line is a variation on the first, which is common enough in a traditional *ladrang*; the third line is an expansion of the second, echoing the 6 5 3 2 phrase and closing with the characteristic cadential gesture 3 2 1 6 5, with a *suwukan* stroke on tone 5 marking the longer period's midway point. The fourth and fifth lines form a well-balanced pair, conforming closely to the colotomic structure of *ladrang*. Taken as a whole, we could interpret the third line as an *ompak*, or bridge, between the first and final pairs of lines; we might thus consider this balance to be similar to the Javanese *merong* and *minggah*, vocal forms which alternate in a similar fashion in many *gending*. Returning to Figure 1, we see just such alternation in the traditional *ladrang Wilujeng*: in normal practice, the *ompak* opens the piece and is played twice, slowing down and transitioning to the *ngelik* (pronounced and abbreviated as *lik*) before beginning its alternations. Harrison did not label the sections thus, however, and there is little else to suggest that he consciously had these specialized forms in mind. Nevertheless, the general structure is balanced in a way which is, perhaps, not so far from *ladrang* after all.³³

When we examine the solo instruments' interaction with the *ladrang* form, we see the continuation of this balance. Considered analytically, there are few points of direct comparison between Harrison's flowing melodic lines and the more complex heterophony which would, in a traditional *ladrang*, be sung by *gerongan* (male chorus) and *sindhen* (female singer) or played on the *rebab* (bowed stringed instrument) and

³³ My experience playing *karawitan* leads me to suspect that Harrison must have at least soaked up the general feel of such structures; one can't help gaining some intuition through regular practice.

suling (bamboo flute). The central comparison is the violin and cello melodies' use of *laras pelog* and their tendency to align with the *balungan* on strong beats (especially the cadential phrase-marking tones), which is certainly enough to make the music sound more Javanese than Debussy's *Pagodes*;³⁴ otherwise the Western instruments play a typically Harrisonesque modal melody in quintal counterpoint.³⁵ The solo instruments enter only after the tempo has slowed from the faster *irama tanggung* to the slower *irama dadi*, which is precisely when the singers in traditional *gending* often enter. Violin and cello play four cycles in all: a first cycle in octaves, two cycles alternating lead lines with supporting countermelodies, and a final cycle which hews very closely to the central *balungan* while adding suggestions of *jhala*, an articulated drone pattern which Harrison borrowed from Hindustani music.³⁶

Such back-and-forth between the solo instruments is typical of a Western *concerto grosso* (specifically the Baroque *ritornello*), but there are certainly many instances of such alternation in *karawitan*, especially between the male and female singers, between shadow-puppet leader *wayang dalang* and accompanying orchestra, or between groups of loud and soft instruments.

The third movement is labeled *gending*, a general term for any piece of *karawitan* music, and does not specify any particular form. A look at the movement's structure

³⁴ It has been proposed that the defining feature of *karawitan* is its tuning system; that is, music using *laras slendro* or *laras pelog* will sound more Javanese than music which uses metallophones and colotomy. See Neil Sorrell, "Issues of Pastiche and Illusions of Authenticity in Gamelan-Inspired Composition," *Indonesia and the Malay World* 35, no. 101 (2007): 34.

³⁵ For a lengthier discussion of Harrison's melodic approach in *karawitan*-Western hybrid music, see Rachel Chacko, "Playing Apart as 'Playing Together': Lou Harrison's *Threnody for Carlos Chávez* for Gamelan and Viola," *American Music* 32, no. 4 (Winter 2014): 423-447.

³⁶ Harrison, *Music Primer*, 39. Harrison calls *jhala* "India's answer to the Alberti bass."

shows why: it is extremely unconventional by *karawitan* standards, although several familiar Harrisonisms are prominent. The movement's three sections each use some triple division of a single *gongan*, recalling the Medieval-inspired "*tempum perfectum cum prolatione perfecta*"³⁷ of Harrison's earlier *Threnody for Carlos Chavez*.

The A section consists of three lines of three four-beat phrases each: two nearly identical lines are answered by a complementary line leading to a cadence on 3 5 1 6 (mi sol do la). The first two periods are subdivided idiosyncratically but logically, the first pair of four-beat phrases forming the antecedent to the third phrase's consequent; the way the *kethuk* and *kempul* strokes are placed in first two phrases suggests that Harrison constructed his triple form by elongating a portion of the traditional Javanese *ladrang*.³⁸

Figure 3: *Gending Hephaestus*, gamelan score showing *balungan* and colotomic pattern.

Mvt. III
Gending HEPHAESTUS, Slendro
 BUKA: ..62 532.. 62532 1235 .3535i ©

[A] 2. 2G^T 51653^P 2356^{T N}
 2. 2G^T 51653^P 2352^{T N}
 5312^T 1235^P 35i6^{T N} (or 6)

[B] .1. G^T .5. 3^P .6. 5^{T N}
 .3. 2^T .1. 6^P .5. 3^{T N}
 .2. 3^T .5. 6^P .3. 2^{T N}
 .1. 2^T .3. 5^P .1. 6^{T N}

in this section use pancer high one i → [C] i 653^N 2353^{P T} 5615^{PT N} (Irama III)
 i 653^N 2312^{P T} 3516^{PT N}

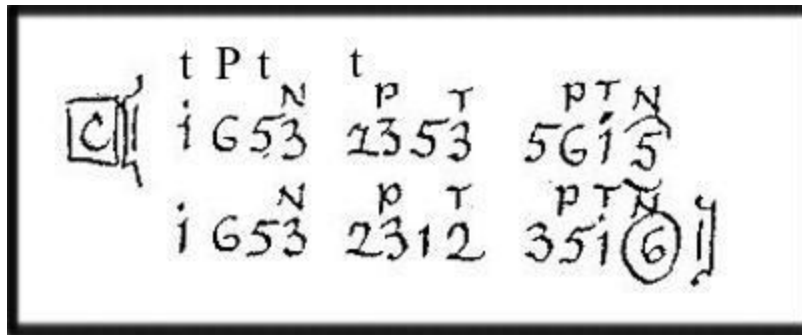
10 March 1981, at Mills

³⁷ Lou Harrison, personal communication, 2001. Quoted in Bill Alves, "Kembangan in the Music of Lou Harrison," *Perspectives of New Music* 39, no. 2 (Summer 2001): 41.

³⁸ This also creates a 2:1 ratio to answer the first movement's 3:2 ratio. Implicate musical order such as this is typical of Harrison's style.

The slower B section continues this pattern by adding a fourth three-phrase period, punctuated by the medium-sized *suwukan* gong, and creating a more dyadically-balanced period. The C section slows down even further for the entrance of the solo instruments, and consists of two lines of three four-beat phrases each. The colotomic pattern changes here, adopting an abstracted variation on the Javanese colotomic structure: if we superimpose the missing colotomic notes onto Harrison’s *balungan*, we see this:

Figure 4: C section of *Gending Hephaestus*, showing a possible connection to traditional structure.



Thus, by leaving some colotomic markers out while elongating others and adding an internal repetition (of the P T on 3 5), Harrison implies a traditional structure while still adhering to his tripartite form.

The most important point of comparison between Harrison’s *ladrang* and *gending* and their Indonesian inspirations is in his attention to—and reliance upon—the supporting and elaborating instruments. The drumming is expected to be done along traditional lines, and the performance notes even indicate which regional drum styles will work best with each section. Both *Epikuros* and *Hephaestus* have *balungan* which can be readily interpreted by the players, and while it is true that some the phrases are unusual in

structure (especially the implied triple meter in *Hephaestus* and the cross-rhythms created by the placement of rests in *Epikuros*), for the most part the elaborating *kembangan* figures can be calculated and performed by moderately experienced players. The performance notes indicate that either the soft *panerusan* (elaborating instruments including *gendér* and *gambang*, both multi-octave keyed percussion instruments) or the louder group (*bonang barung* and *bonang panerus*, paired sets of smaller pot gongs) can be used, and the relatively simple formulas which dictate these instruments' elaborations are adapted easily enough to Harrison's *balungan*. Only one *kembangan* part is explicitly notated: the *bonang obligato* used in *Gending Hephaestus*. Even this is not unheard of in traditional *karawitan*, especially for unconventional *balungan*, and although the part is unusual (and very difficult) it does make use of the *bonang*'s rows of pots in ways that recall traditional *sekarang* (flowering) cadential figures.

The use of *bonang mipil* and *gendér cengkok* figures is especially important. *Mipil* and *cengkok* are types of *kembangan*, and in normal practice they are ostinato patterns prefiguring important cadential tones, which therefore appear in these parts before they appear in the rest of orchestra. In the *Double Concerto* these anticipatory tones often create a degree of friction between the Western instruments and the gamelan. Such anticipations and frictions, however, weave the entire tapestry of sound together. They embody the very essence of the end-weighting³⁹ which is so central to the sound and structure of *karawitan*.

³⁹ "End-weight" refers to the tendency in *karawitan* for greater metric emphasis to appear at the ends of phrases, rather than at the beginnings as in Western music. For more on end-weighting in *karawitan*, see Rachel Chacko, "Beyond the Myth of East-West Hybridity," 2010 and Henry Spiller, "Lou Harrison's Music for Western Instruments and Gamelan: Even More Western than It Sounds," *Asian Music* 40, no. 1 (Winter/Spring 2009): 38.

Some performers, ethnomusicologists, composers, and gamelan specialists, despite being admitted enthusiasts of Harrison's work for gamelan, have nevertheless found fault with his use of gamelan sounds and techniques. Dwight Thomas, an ethnomusicologist who performed the *Double Concerto* with the University of Michigan gamelan, wrote that "[t]raditional Javanese musical elements were...sacrificed," noting that:

Gamelan parts were sometimes awkward...Harrison's tempos demanded a restructuring of traditional Javanese drum patterns and the creation of new ones...[k]jenong and kempul parts were not always in standard Javanese form...[m]ovement endings had to be carefully choreographed in order not to sound like mistakes by Western standards."⁴⁰

Thomas makes special note of the movements' fixed lengths, necessitated by the use of Western instruments but at odds with the open-ended nature of traditional Javanese performance practice; *karawitan*'s cyclical nature normally allows for pieces to be compressed or stretched out in accordance with the ensemble's performance needs and intuitions. In Thomas' view, the *Double Concerto* "violated too much of the normal meaning of gamelan participation," being "especially hard on the communal meaning I gain from the group," and he states unequivocally that "[p]eople did not hear Javanese music."⁴¹

⁴⁰ Dwight W. Thomas, "Lou Harrison's 'Double Concerto for Gamelan, Violin and Cello': Juxtaposition of Individual and Cultural Expectations," *Asian Music* 15, no. 1 (1983): 94. It should be noted that although Thomas speaks critically of the *Double Concerto*, he also writes of his satisfaction with the composition considered separately from its relation to gamelan.

⁴¹ *Ibid.*, 99.

Audrey Wozniak, a violinist who performed the *Double Concerto* at Harvard University with Gamelan Si Betty⁴², expresses a different view of the work's communality. She notes that:

[w]hile the sparse written indications in the music and division of gamelan and stringed instrument parts may appear to engender disconnect overall, in fact, the lack of a composite score mandates that the players actively engage with and listen to one another so as to successfully interlock parts.⁴³

Wozniak describes the *Double Concerto* as being “truly an egalitarian collaborative effort” in which every component is essential to all the others:

without the violin and cello lines, the gamelan melodies become repetitive; without the drumming, linking the gamelan and violin and cello parts and guiding the players becomes a herculean challenge; and without the gamelan, the “solo” lines of the violin and cello become mundane, lacking the context to render them relevant to the listener.⁴⁴

(I personally am uncertain that these pieces couldn't work well in a different context; it might be an instructive to hear the outer movements performed by gamelan alone, perhaps with *suling*, *rebab*, or *gendér* performing an adaptation of the string parts.)

Much of the theoretical criticism of Harrison's works for Western gamelan has centered around this delicate balancing of of Eastern and Western elements, especially in terms of tuning, timbre, and musical structure. Thus, ethnomusicologist Henry Spiller sees obfuscation in Harrison's attitude towards intonation:

Tuning...is one musical arena in which Harrison's gamelan music makes the exotic seem familiar by masking non-Western approaches to music-making with existing Western discourses—a practice which has the potential to mislead its

⁴² Harrison and Colvig's second gamelan and their first to be consciously designed and constructed following Javanese models; see Miller and Lieberman, "Lou Harrison and the American Gamelan," 159.

⁴³ Audrey Wozniak, "Orientalism, Regionalism, Cosmopolitanism: Musical Manifestations of Cultural Hybridity," Honors thesis, Wellesley College, 2014: 21.

⁴⁴ *Ibid.*, 23.

listeners into believing they are engaging with a non-Western musical aesthetic when, in fact, they are not.⁴⁵

Harrison's own feelings about tuning were very strong and quite visceral: "if I ever hear another triad in equal temperament I'll go screaming...The major triad is forbidding, because music is a physical thing."⁴⁶ He described music as "emotional mathematics," asserting that "it is rational intervals that grip you and emotionally stir you."⁴⁷ It seems clear that, if nothing else, Harrison came by his intonational attitude honestly.

Composer and gamelan expert Neil Sorrell is of two minds about Harrison's gamelan work: he describes Harrison's *Double Concerto* as "a beautiful and deservedly successful work"—expressing, with "a Harrisonesque superlative," his opinion that the *Double Concerto*'s first movement "is the finest composition by a Western composer for Gamelan, or otherwise in the style of it"—but nevertheless contends, with Spiller and Thomas, that "its quasi-traditional use of the gamelan masks an element of failure."⁴⁸ Sorrell takes particular issue with Harrison's use of traditional Javanese terms like *ladrang* and *pathet* (Javanese modal system), which he describes outright as "appropriation," arguing that the use of such terms "carries specific expectations and suggests a more genuinely Javanese product than in fact exists."⁴⁹

However, according to composer and Harrison expert Bill Alves, "[s]ince 1984 Harrison has not indicated the *pathet* of his pieces;" Alves goes on to clarify that

[w]hen Harrison was in Indonesia in 1984⁵⁰, his application of a certain *pathet* was questioned by Javanese experts, leading him to conclude that the concept of

⁴⁵ Spiller, "Lou Harrison's Music for Western Instruments and Gamelan," 32.

⁴⁶ Kostelanetz and Harrison, "A Conversation," 403.

⁴⁷ Ibid.

⁴⁸ Sorrell, "Issues of Pastiche," 40.

⁴⁹ Ibid., 41.

⁵⁰ Shortly after the *Double Concerto* was completed.

pathet was too complex and essentially Javanese to be intelligently applied to his own works. Thereafter, he ceased to indicate the pathet of his works.⁵¹

For Alves, an understanding of Harrison's use of *kembangan*—which Alves translates as “blooming”⁵²—is central to understanding his attitude towards gamelan in general:

Kembangan is a powerful tool for creating melodic structure, but the gamelan aesthetic does not represent to Harrison simply a compendium of techniques to be exploited. The way in which *kembangan* ties together metrical, melodic, and tonal levels reflects the close-knit community spirit of the gamelan and gamelan players worldwide, as is acknowledged in the title of Harrison's *Main Bersama-sama* (1978), which means ‘playing together.’ There is really no better motto for Harrison's respect and enthusiasm for gamelan and the harmony it creates and represents.⁵³

Regarding issues of tuning, ethnomusicologist and gamelan expert Marc Perlman scrutinizes the curious overlap between enthusiasts of just intonation and of gamelan music, two systems which are not necessarily commensurate, and locates the origin of this confluence precisely in Harrison's life work. Perlman notes that “[e]ven before Harrison started building gamelan, he was a proponent of extended just intonations” and adds that “even his Java-built set are tuned thus,”⁵⁴ quoting Harrison's statement that “[b]ecause of my pleasure in just intonations, all our gamelan are so tuned, even our imported *gamelan degung*⁵⁵, which we retuned and 'clarified' into rational intervals.”⁵⁶

⁵¹ Alves, "Kembangan," 36. Alves cites Miller and Lieberman, *Composing a World*, 170 and Lou Harrison, "Thoughts about 'Slippery Slendro,'" *Selected Reports in Ethnomusicology* 6 (1985): 111-17.

⁵² Ibid.

⁵³ Alves, "Kembangan," 51-2.

⁵⁴ Marc Perlman, "American Gamelan in the Garden of Eden: Intonation in a Cross-Cultural Encounter," *The Musical Quarterly* 78, no. 3 (Autumn 1994): 512.

⁵⁵ A smaller Sundanese ensemble, which Harrison used in the composition of *Main Bersama-sama*.

⁵⁶ Lou Harrison and William Colvig, "Gamelan Builders' Notes," *Ear*, 8, no. 4 (1983): 26. Quoted in Perlman, "American Gamelan in the Garden of Eden," 512.

Perlman, himself a student of Javanese gamelan music, finds this attitude to be an “odd superposition of musical concerns,” explaining that “[m]usic in Java has nothing to do with just intonation—not in its interval usage, not in its theory, not in its intellectual context” and concluding that “[b]y impressing just intervals into their gamelan, American composers, consciously or not, have infused a Western soul into a Javanese substance.”⁵⁷ Perlman points to the Javanese concept of *embat*, which “refers to any particular intonational realization of a tuning system” in the sense that “[a] gamelan has an *embat*, either its own unique one or else an imitation of the tuning of some other widely known or admired gamelan,” and expands the idea that “[p]eople also have *embat*; indeed, to become a singer or rebab player, one must have one's own *embat*, which one adjusts to fit the tuning of whichever gamelan one happens to be playing with,” concluding that “[t]his adjustment need not be perfect; some musicians even claim that it can never be perfect.”⁵⁸ Perlman thus argues that because intonation in Javanese gamelan is no more ‘pure’ or ‘impure’ than just intonation, equal temperament, Kirnberger No. 2,⁵⁹ or any other Western tuning, “this confluence of interests makes sense only in terms of twentieth-century [i.e., post-modern] Western musical culture;” he argues that “both non-Western musics and non-tempered tunings (as opposed to Western art music played in equal temperament) have come to represent nature,”⁶⁰ suggesting that the association of just intonation with gamelan is yet another form of orientalization and romanticization of the supposedly pure and primitive Other.

⁵⁷ Ibid., 513.

⁵⁸ Ibid., 535.

⁵⁹ A favorite of Harrison's. See Kostelanetz and Harrison, "A Conversation," 392.

⁶⁰ Ibid., 542.

However, Miller and Lieberman remind us that “[w]hile Harrison realized that Indonesian tuning practice (in contrast to that of European cultures) was not governed by concern with the mathematical purity of interval vibration ratios he was nevertheless intrigued by the Indonesian culture’s embrace of intonational variation,” concluding that “a gamelan tuned in just intonation (its intervals conforming to small integer ratios), while not culturally *characteristic*, was nevertheless culturally *possible*.”⁶¹ Miller and Lieberman continue:

Recognizing his own status as a neophyte in the world of gamelan theory and practice, Harrison sought the approval of native teachers for his various pure interval tunings. Pak Cokro immediately identified [two of Harrison’s experimental slendro tunings] as representative of the two major gamelan schools of central Java (Yogyakarta and Surakarta), and pronounced the pelog of Si Betty “good with voices.” Widiyanto, from Surakarta, told Harrison that [the Surakarta tuning] “touched his heart.” The comments of both men reflect a typical Indonesian attitude toward intonation: a gamelan tuning is a personal expression of the particular tuner; vocally inspired, it reflects his highly individualistic intonational character, or *embat*.⁶²

Thus we see that even when taking liberties, Harrison was respectful both to his own maverick spirit and to the spirit of the source tradition. His *embat* was, apparently, fully compatible with that of the musicians and cultures from whom he learned.

Sorrell, too, discusses the tuning issues in the *Double Concerto*, which “must be negotiated throughout [the performance], creating special practical challenges for the two soloists.”⁶³ Such constant negotiation is certainly in line with normal gamelan practice, although it does require string players with exceptional curiosity, flexibility, and devotion. It also necessitates a notational obligation to the Western instruments; in

⁶¹ Miller and Lieberman, "Lou Harrison and the American Gamelan," 159.

⁶² *Ibid.*, 162-3.

⁶³ Sorrell, "Issues of Pastiche," 35.

Harrison's case that meant, among other things, accommodating the fixed nature of Western classical playing by using clear staff notation and fixed repetitions. With respect to Dwight Thomas and his peers at University of Michigan, this compromise seems quite in line with the generally accommodating nature of Javanese musicians.

Regarding this flexibility, Sorrell argues that "the gulf between East and West" is actually a gulf "between subtle variability and doctrinaire standardisation," adding that "it should be viewed as a beautiful chasm" and concluding that "[s]tandardisation is the enemy of gamelan music, be it in the tuning or performance practice."⁶⁴ Rather than being a weakness, this admixture of cultures is the strength of Harrison's work; Sorrell admits that "[i]t is obvious that [Harrison] could not have composed such a work without some degree of bi-musicality."⁶⁵ Sorrell points to Harrison's devotion, reminding us that the composer:

did just about everything one might expect to leave no doubt of his deep commitment to the gamelan: he learnt to play; he visited Indonesia; he consorted with leading Javanese musicians in California; he composed music not only to imitate the gamelan but even for actual gamelan instruments, and even built them himself.⁶⁶

According to Miller and Lieberman, the ensemble nature of gamelan "reinforces [Harrison's] political outlook: his dedication to community, pacifism, and cross-cultural synthesis."⁶⁷ They assert that Harrison's "ultimate objective is to achieve a distinctive musical sound...whether it is fitting for him to use the instruments or compositional

⁶⁴ Ibid., 36.

⁶⁵ Ibid., 42. I consider "bi-musicality" equivalent to "cultural hybridity."

⁶⁶ Ibid., 33.

⁶⁷ Miller and Lieberman, "Lou Harrison and the American Gamelan," 173.

processes of a foreign culture to this end is not an issue, in his view, so long as his borrowings are effected with respect.”⁶⁸

As we can see from this wide array of complex opinions, the matter of Harrison’s cultural hybridity is far from straightforward. It is typical of the man that he did not avoid intercultural conflict, but rather embraced the friction of encounters between disparate cultures:

I have felt for a long time, and still do, that the real problem, the real interest in music is the conflict, the friction, the pulls and responses between what is coming along spontaneously as the material and the intellectual superimposition of the whole form, the shape of the entire movement. It’s the friction between those two that produces interesting music...It’s a balancing act, a juggling act between what bubbles up spontaneously and has continuity of its own and a general form which you know that you want to use. It’s a constant juggle right up to the last joint between the final section and that other that comes out. And that’s an interesting juggling; it makes for what I think is exciting music.⁶⁹

We began this investigation discussing the curiosity, respect, discipline, and devotion required to move beyond cultural appropriation to cultural hybridity. This four-part delineation was inspired by a motto of Harrison’s, one of many which appear throughout his *Music Primer* (Figure 5). In a 1986 interview he explains it thus:

I developed a motto of my own, which is, in order: cherish, conserve, consider, create. It seems to me that that’s a general course of any enthusiasm. First, you find something that you love, and you cherish it. Then, of course, if you love it you want to conserve it, save it. And then, in doing so, you consider it in all of its parts and aspects. And out of that you may be moved to create something.⁷⁰

⁶⁸ Ibid., 173-4.

⁶⁹ Personal interview with the author, Virginia Madison Rathbun, “Lou Harrison and His Music,” M.A. thesis, San Jose State University, 1976: 49, quoted in Rachel Chacko, “Playing Apart as ‘Playing Together’: Lou Harrison’s *Threnody for Carlos Chávez* for Gamelan and Viola,” *American Music* 32, no. 4 (Winter 2014): 430.

⁷⁰ Eric Marin, *Lou Harrison: “cherish, conserve, consider, create.”* Videocassette, FVM Media, 1987.

In our encounters with the plurality of cultures and traditions which are available to us as twenty-first-century artists, may each of us be so moved.

Figure 5. Page from *Lou Harrison's Music Primer*⁷¹

<p>re re re re re re re re re re re re re</p> <p>ITEM <input type="checkbox"/> CHINESE <input type="checkbox"/></p> <p>OPERA IS COMPLETE</p> <p>musical theater, for it includes & offers all that can be done with text & music. Plain speech, unaccompanied. Plain speech accompanied. Rhythmitized unaccompanied. Rhythmitized speech accompanied. Song unaccompanied, etc., up to & including Chorus accompanied. re re re re re re re re re</p> <p>ITEM <input type="checkbox"/> CHERISH,</p> <p>CONSERVE, CONSIDER,</p>	<p>CREATE. re re re re re re re re re</p> <p>ITEM <input type="checkbox"/> TO A COM-</p> <p>POSER THERE ARE REAL-</p> <p>ly four kinds of compositions: 1) Voluntary ~ one composes these because one wants to (or can't help it). 2) Suggested. 3) Requested ~ usually by a fellow artist & often for a specific purpose. 4) Commissioned ~ this piece is "paid-for" (i.e. one is given money to make possible its composition, for it is not legally possible to "sell" a piece) by an agreed upon sum, & often many details of the work itself are agreed upon in advance. Best of all is when someone commissions an already begun Voluntary work! re re re re re re re re re</p>
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⁷¹ Lou Harrison, *Lou Harrison's Music Primer*, 37-8.

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