
Mamoru Fujieda's Plant Language: Hybrid Approaches to Composing for Koto



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Abstract: Composer Mamoru Fujieda (b. 1955) has carved out an intercultural musical world essential to his artistic language. Fujieda's work is informed by the electrical activity emitted from plants and its translation into sound, American minimalism and microtonality, gamelan music and traditional Japanese musical mediums. This paper analyses the Third Collection *Koto-Gamelan Set* (1996) from his magnum opus, *Patterns of Plants* for three *kotos*, to challenge the appropriative gamelan nature of this composition.

Inspired by La Monte Young's *Well Tuned Piano*, Fujieda created a non-equidistant eleven note just intonation scale from seven-limit harmonic relationships that aims to produce an "atmosphere of Indonesian gamelan" (Fujieda, 2009). However, like many American composers of the 1970s, Fujieda appropriates gamelan music as a means of self-expression through tunings at the expense of other facets of Indonesian music. My analysis compares Fujieda's tuning

to La Monte Young's source material, and to median tunings of Indonesian *slendro* and *pelog* scales.

Fujieda uses large end-weighted structural chords that function similarly to gongs heard in gamelan music and resemble the cyclical structures of both gamelan and *gagaku* compositions. Through examining the major structural points of the Third Collection, I posit that Fujieda's Third Collection was composed using the aesthetic model of *jo-ha-kyū* similar to those heard in *gagaku* and *jiuta-sōkyoku* repertoires of Japan. Whether conscious or accidental, Fujieda's choices in the Third Collection of PoP represent a problematic but unique hybridised approach to writing for non-Western instruments that despite issues of cultural borrowing and identity, remains worthy of analysis.

Keywords: just intonation, feedback loop, koto, gamelan, La Monte Young, Well-Tuned Piano, *slendro*, *pelog*, syncretism, synthesis

Japanese composer Mamoru Fujieda (b. 1955) has created and refined his intercultural musical language by drawing on melodic patterns extracted from translating the electrical currents of plants into sound waves. Having composed for a variety of instruments from many cultures over the past thirty years, his ongoing magnum opus *Patterns of Plants* (1995–, hereafter referred to as PoP) represents a provocative approach to writing for Japanese instruments. As musical communities become more globalised and interconnected, the issues regarding appropriation, agency, borrowing, and the feedback loops that they produce challenge artists to create new works for non-Western instruments in new contexts that honour their existing traditions while simultaneously recontextualising them for new artistic environments. Fujieda's Third Collection from PoP, *Koto-Gamelan Set* (1996, hereafter referred to as KGS), presents an intellectually and sonically provocative composition that through use of microtonal tuning systems and subtle rhythmic devices, creates an “atmosphere of Indonesian gamelan” (Fujieda, 2009). This “atmosphere” is an appropriation of Indonesian music and is part of a feedback loop that presents perceived ideas of Indonesianness through the lens of just intonation.¹ This is done in the same spirit as some American West Coast composers in the 1970s through 1990s at the cost of many other aspects of Indonesian music and culture. By Fujieda's own admission during an email conversation, beyond the tuning, KGS bears no direct similarity “in style or method of gamelan directly.” He was first introduced to gamelan music by Lou Harrison in the late 80s, and prior to composing KGS in 1996 had little experience with gamelan music (Fujieda, 2021). However, KGS coincidentally uses structural elements that are common in both Indonesian and Japanese music and are a key element in this comparative analysis.

As described in David Novak's 2013 book *Japanoise*, cultural exchanges of this nature have evolved to the point where the borrowing and trading of musical sounds, ideas, and the merging of cultures and cultural objects has become its own self generating feedback loop (Novak 2013). This exchange of cultures and its objects applies as well to issues of cultural identities and particularly the ways in which aspects of identities and cultures are fragmented to help form identity is particularly salient to this paper (Utz 2021). Through integrating multiple techniques from Japanese, Indonesian, Indian, and American music traditions, Fujieda has synthesised a musical composition that attempts to transform Eastern and Western source materials into a new hybridised world, situated within this US-Southeast Asia feedback loop (appropriation of gamelan). This loop can be traced back to composers such as John Cage (1912–1992)², Lou Harrison (1917–2003), and Harry Partch (1901–1974). In KGS, Fujieda has redeployed this American reimagining

¹ For a detailed discussion on just intonation, please see Gann, 2019.

² Japanese composers such as Toru Takemitsu would say their meetings with Cage allowed them to “recognise the value of my own tradition.” For more on this and Takemitsu's relationship to composing for Japanese instruments, see Burt, 2001.

of gamelan music to explore unique tunings through just intonation and is in dialogue with the Indian-inspired works of La Monte Young (b.1935-). These influential composers explored tuning to express their musical ideals and beliefs, and this exploration often included drawing inspiration from East Asian cultures.³ Fujieda is part of this feedback loop, but on the opposite side of the Pacific Ocean.

I believe KGS fits the criterion for “synthesis” as described in Yayoi Uno Everett’s 2004 “Intercultural Synthesis in Postwar Western Art Music: Historical Contexts, Perspectives and Taxonomy.” Fujieda’s work through incorporating these various fragmentations of techniques and concepts from different cultures “effectively transform[s] the cultural idioms and resources into a hybrid entity” (Everett 2004). However, most curiously, the composition, despite its strong borrowings from different cultures, can, to a musical insider of Japanese and Indonesian music, see vestiges of the source materials, something that is in direct conflict with Everett’s theory of synthesis. It is because of the complex overlapping of all of these unique facets of KGS that this multi-tiered syncretic approach becomes a new kind of hybrid global art music.

Indonesian gamelans were brought to the US as early as the 1950s by scholars like Jaap Kunst at UCLA. They were later appropriated and reconfigured by American composers such as Lou Harrison beginning in the 1960s and 1970s in order to explore their own interests in intonation and instrument building (Miller and Lieberman 1999). Composers such as Barbara Benary (1946–2019) initially tried to create instruments to teach and perform traditional repertoire in the US. Ultimately Benary’s gamelan, later known as Gamelan Son of Lion, became a laboratory for composers to explore new music for these instruments (Arms 2021, Clendinning 2020). Gamelans first appeared at Tokyo University of the Fine Arts in 1974 (Benary and Deguchi 2010). Concurrently, composers like Fujieda who was first introduced to gamelan by Lou Harrison in the 1980s (Fujieda 2021) became deeply interested in gamelan tuning and would use this as a jumping off point to create new works, as Harrison did, rather than fully exploring the intricacies of gamelan music. For Fujieda, the intonational possibilities provided by the slendro and pelog tuning systems in Indonesian music fused with his exploration of the tuning system employed by La Monte Young in his landmark composition *The Well-Tuned Piano* (Fujieda 1998, 2021). However, prior to composing KGS in 1996, Fujieda’s only experiences with gamelan had been with Lou Harrison, and he had not yet studied gamelan intimately (Fujieda 2021).

While it is not the only composition in PoP that explores ideas of gamelan music and is not the only Collection for non-Western instruments, KGS represents one of the most harmonically and rhythmically complex of these compositions with an available commercial

³ In the case of Partch, this included interest in and appropriation of Japanese stories and theatrical traditions of *Noh*, and *kabuki*.

recording.⁴ My comparative analysis compares median tunings of Indonesian *slendro* and *pelog* scales with La Monte Young's *Well-Tuned Piano* (1964-73, 81-present) from which Fujieda drew inspiration. By doing so, I shed light on the complex intonational feedback loop that makes KGS so unique both as a critical entry in Fujieda's PoP and as a provocative means of composing for non-Western instruments. Attention will also be paid to some of the major structural hallmarks of *gagaku* 雅楽 (Japanese court music), *jiuta-sōkyoku* music 地歌・箏曲 (chamber music for *koto*, *shamisen*, and *shakuhachi*), and Indonesian gamelan music. Despite comments from both performers and critics that compare Fujieda's works to baroque keyboard suites (Cahill 2014), my analysis reveals that the four movements of KGS more closely resemble *jo-ha-kyū* 序破急 structures found in *gagaku* and *jiuta-sōkyoku*⁵ music. Whether conscious or accidental, the choices by Fujieda in this composition represent a problematic but unique hybridised approach in writing for non-Western instruments that—despite issues of cultural borrowing and identity—remains worthy of analysis.⁶

BORROWING: Jo-ha-kyū and Tuning

Jo-ha-kyū is a Japanese aesthetic and structural concept that is applied to many performing arts, and has roots in *gagaku*, the traditional court orchestral music of Japan. The sections of a typical *jo-ha-kyū* work are divided into an introduction (*jo* 序) and exposition or developmental section (*ha* 破) and a finale (*kyū* 急; Figure 1). In the *tegotomono* 手事 style of *jiuta-sōkyoku* music for *shamisen*, *koto*, and *shakuhachi*, the *maeuta* 前歌 or opening song of a typical composition would be considered the *jo*, followed by a virtuosic interlude *ha* (Burnett, 1989, Blasdel & Kamisango 2008).⁷ The *atouta* 後歌 or final song of the *tegotomono* serves as the *kyū*.



Figure 1: *Jo-ha-kyū* model of typical *jiuta-sōkyoku* composition. Other *tegotomono* style compositions may feature more extended *tegototo* instrumental interludes with multiple variations, or middle songs. However, the major structural tenets of a *tegotomono* composition can be broken down into this general tripartite structure.

⁴ The 12th, 19th, 25th, and 27th Collections explore different gamelan inspired concepts. The 19th and 27th Collections also exist as transcriptions done by the composer in dialogue with Gamelan Paraguna, a Japanese gamelan degung consort. Fujieda refers to each new piece in PoP as a Collection.

⁵ Classical Japanese art chamber music for combination of voice, *shamisen*, *koto*, and *shakuhachi*.

⁶ This essay would not have been possible without the support of Fujieda, who gave me access to various scores and recordings that are not commercially available.

⁷ For a more in-depth discussion of *jo-ha-kyū* in *tegotomono*, please refer to Burnett 1989 and Blasdel and Kamisango 2008.

In the context of *gagaku* compositions, the influence of *jo-ha-kyū* is more obvious (Figure 2). Traditionally, all *gagaku* compositions begin with an opening tuning piece, either a *netori* 音取 or *chōshi* 調子⁸ that serve to establish the tonal mode of the suite and is part of the *jo* section. Once a modality is established, a suite or composition is performed. The *jo-ha-kyū* structure is most apparent in multi-movement suites like *Goshōraku* 五常樂 or *Sandaien Ichigu* 三臺塩一具, that feature individual movements titled *jo*, *ha*, and *kyū*. *Netori*, *chōshi*, and movements titled *jo* compositions are typically written in free rhythm and performed at a slow tempo. *Ha* sections of a composition feature stricter rhythmic framework and are typically faster in tempo. The concluding *kyū* section is usually the fastest portion of the composition, serving as the finale. However, even within single movement works such as *Etenraku* 越天樂 and *Bairo* 陪臚, skilled performers will gradually accelerate over the course of the composition, creating a different kind of temporal ebb and flow. Some teachers describe this as *jo-ha-kyū* and will sometimes extend this metaphor to the execution of individual sounds. By extension, each sound has its own energy and natural momentum.

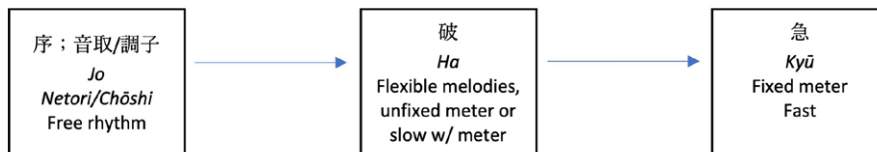


Figure 2: *Jo-ha-kyū* model of *gagaku* compositions (Tanaka and Koto, 2016.)

I posit that KGS has a similar structural design to a typical *gagaku* suite. The opening Pattern⁹ of KGS (*jo*) presents two of the structural hallmarks of the composition: gong chords¹⁰ that punctuate the ends of melodies akin to gamelan music and melodies that are rhythmically offset akin to *jiuta-sōkyoku* text setting. The second and third movements of KGS (*ha*) thoroughly explore the different melodic and rhythmic permutations available to the three *kotos* through rhythmic augmentation and diminution. The second movement in particular incorporates the idea of interlocking *kotekan* melodies found in gamelan music through overlapping plant melodies at different transpositional levels. Only after presenting a series of progressively harmonically complex gong chords saturated with

⁸ There is no direct musical equivalent for *chōshi* in English. It is best described as a series of arhythmic melodic phrases, usually presented in instrumental canons, that establishes a primary musical mode for a suite. For more, see Marrett 2001.

⁹ Fujieda calls each individual movement in a PoP collection a Pattern rather than a movement. Each pattern is labeled alphabetically (Pattern A, B, C, and D).

¹⁰ I will refer to large chords consisting of three notes or larger as gong chords. These harmonic units are not always presented in rhythmic unison, but function similarly to large gongs used in gamelan music.

more pitches in the first three movements (as well as increasingly intricate interlocking rhythms) does Fujieda present a rhythmically straightforward finale. The fourth movement (*kyū*) features a steady and comparatively easy to discern quadruple pulse that uses the simplest gong chords constructed from perfect fifth intervals, thus resolving all previous dissonant gong chords used in the *jo* and *ha* movements of KGS. To better understand the harmonic and melodic progression of the piece and its intersection with *jo-ha-kyū*, it is useful to examine median Indonesian tunings that inspired it.

Slendro and Pelog

Composer and ethnomusicologist Michael Tenzer writes in his 2011 *Balinese Gamelan Music* that it is better to consider the slendro and pelog tunings systems as guidelines for tuning rather than scales with specific intervallic distances. Perlman (1994), Tenzer (2011), Gann (2019), Arms (2021), and other scholars have written extensively on the tunings of gamelans in the US and in Indonesia, and all concur that each ensemble, regardless of geographic location, is tuned to be compatible with instruments within their own given group. Each ensemble has a slightly different tuning and therefore possesses a different *embat* ("character" or individual voice) (Arms, 2021).

According to musicologist Kyle Gann in his 2019 *The Arithmetic of Listening*, slendro and pelog tuning schema and the size of intervals change depending on whether the instruments are Balinese or Javanese. Balinese slendro scales feature intervals ranging in size from 80 cents to 450 cents. Javanese scales conversely are more evenly spaced out across the octave with steps between 231 and 254 cents. In pelog scales, notes are spread out in uneven intervals ranging from 110 cents to 281. Rather than utilising all seven pitches available, most compositions limit themselves to a pentatonic pitch gamut (Gann, 2019). In KGS, Fujieda has derived a lattice of 11 pitches, but limits himself to 7 pitches within each movement to more clearly differentiate the character of different movements.

The American gamelan tradition, as initiated by composers like Lou Harrison, Daniel Schmit (b. 1942), and Barbara Benary, represents a curious and distinctly American application of just intonation to Indonesian gamelan instruments. Ethnomusicologist Marc Perlman describes this as unique to 1970s and 1980s West Coast American musical circles (Perlman, 1994). These composers began building their own gamelans in the 1970s using tuning systems that have no precedent in music from any region in Indonesia. While Fujieda did not study with Lou Harrison while at UCSD, Fujieda has said on numerous public occasions and written that Harrison's approach to multi-cultural composition and just intonation left a profound impact on him.¹¹ Instruments like Harrison's

¹¹ The application of just intonation to gamelan instruments has become its own subject of study, and scholars like Perlman (1994), and Arms (2021) have written about the lack of commonality between just intonation tendencies in American gamelan traditions and tuning methods tendencies and traditions in Indonesia.

“Si Betty” are tuned to the 16th, 19th, 21st, 24th, and 28th harmonics on D for a sléndro mode, and the 12th, 13th, 14th, 17th, 18th, and 19th harmonics on D for pelog (Gann 2019, Arms 2021). This means of tuning gamelan is unique to American gamelan builders, as demonstrated by its dissimilarity to Surjodiningrat, Sudarjana, and Susanto’s 1993 mean measurements of sléndro and pelog tunings (Gann, 2019; Figure 3). While gamelans represent a unique musical world in and of themselves, another interesting musical framework found in the just intonation works of La Monte Young would become central to the creation of KGS.

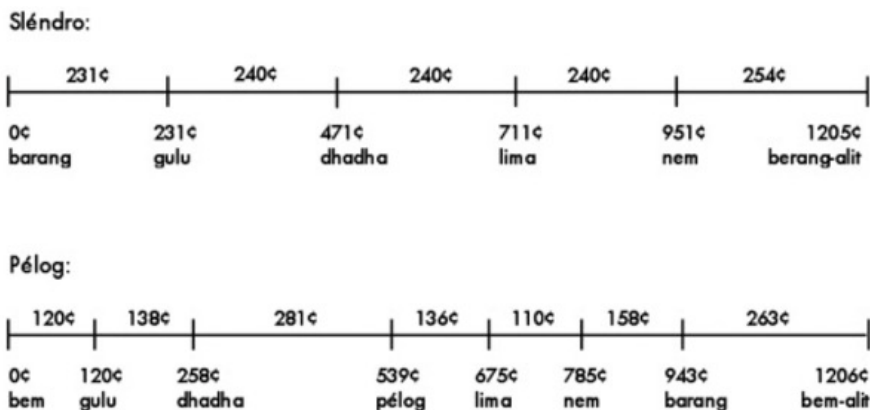


Figure 3: Mean tunings of Javanese gamelans as given by Surjodiningrat, Sudariana, and Susanto (Gann, 2019.)

La Monte Young – Well-Tuned Piano

The composer and performer La Monte Young’s (b. 1935) profound influence on countless composers cannot be expounded upon in this essay. I will instead focus on his influence on Fujieda’s work and in particular on KGS. Young’s ongoing landmark composition, the *Well-Tuned Piano* (WTP), is constructed from a unique pitch gamut that imposes strict rules that he then improvised according to. The composition is informed by his own experiences listening to, performing, and studying traditional Hindustani music with Pandit Pran Nath.¹² WTP’s tuning system is derived from a combination of 3/2 intervals and 7/4 intervals; 5/4 intervals are avoided completely. The pitch gamut used in WTP consists of 12 non-equidistant pitches derived from an E-flat ten octaves below the lowest E-flat on Young’s Bösendorfer piano (Figure. 4, Gann, 1993).¹³

¹² For a detailed analysis of WTP, see Gann 1993.

¹³ In both cases of Young’s and Fujieda’s tonal lattices, the names of pitches mapped onto the five line staff has resulted in an arbitrary mapping of pitch names onto a keyboard. In the case of Young, this was done to

Fujieda's pitch derivation includes one significant deviation. Young's pitch materials are derived only from overtones of a low E-flat, whereas Fujieda's model seems to employ pitches derived from subharmonics, thus allowing Fujieda to partition his total pitch gamut into two distinct modes. Fujieda designates A as the fundamental (1/1) and the lattice yields two non-equidistant seven-note modes that serve as the melodic and harmonic bedrock for KGS (Figure. 5). Four of the pitches in the A and C Patterns are conceptually derived from subharmonics ($8/7$, $12/7$, $9/7$, $27/14$) and six are derived from harmonics ($3/2$, $9/8$, $7/4$, $21/16$, $63/32$, $189/128$). Of the entire pitch gamut used in KGS, there are only three tones in common between melodic patterns: $1/1$, $3/2$, and $9/8$ (Figure 5b). In the same way tetrachords in regional Japanese music are named according to inner intervallic content, such as in the *miyako-bushi* 都節 tetrachord,¹⁴ Fujieda also differentiates his patterns by the notes between large perfect intervals such as the fourth and fifth.

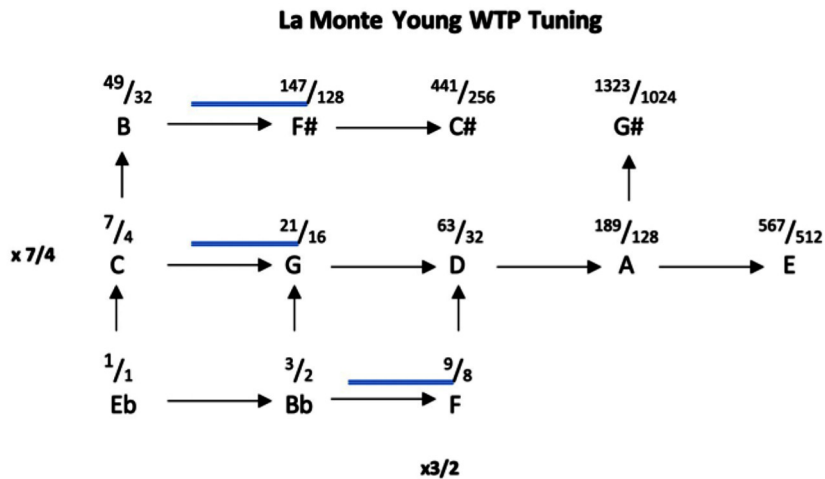


Figure 4: 2D grid showing the ratios and pitches used in La Monte Young's WTP. Pitches shown on the X axis are derived from $3/2$ relationships, while notes on the y axis are derived from $7/4$ relationships (Gann, 1993). The mapping of pitches onto the piano results can result in arbitrary pitch labels e.g., E-flat to C, C to B and so on.

facilitate ease of performance of WTP at a keyboard – in the case of Fujieda, it is less clear why he chose this tablature notation system, and may have been notated as an attempt at notational convenience.

¹⁴ In Fumio Koizumi's theory of Japanese music, most melodic units consist of tetrachords that contain a fundamental note, a perfect fourth above it, and a middle identifying pitch. The *miyako-bushi* tetrachord, with a minor second in-between the perfect fourth, is one of the most commonly heard tetrachords and can be heard in most *jūta-sōkyoku* compositions. For more, see Blasdel and Kamisango, 2008.

Mamoru Fujieda's KGS Tuning

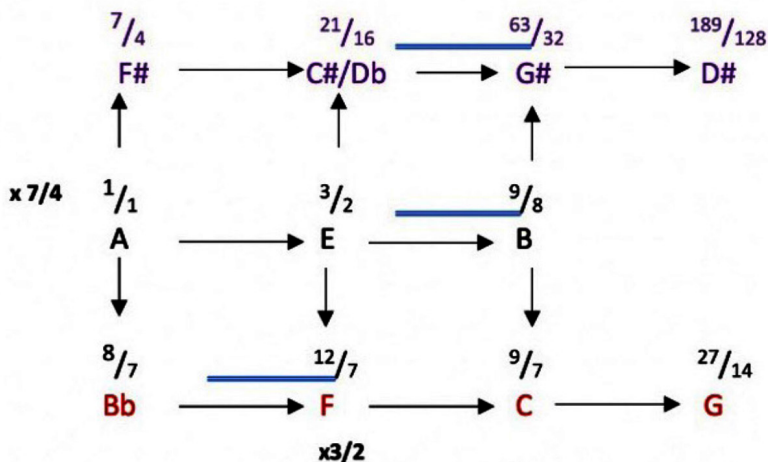


Figure 5: 2D chart of tuning relationships in KGS. Pitches in purple are unique to Patterns A and C. Red pitches are unique to Patterns B and D. Remaining pitches are common tones. Pitches are derived in the same way as in WTP. 1/1 of A is in accordance with the way it is presented in Fujieda's score.

Patterns A & C Mode

Patterns B & D Mode

Figure 5B: Patterns A, B, C, and D gong chords in five-line notation. Pitches have been assigned twelve-tone equal tempered equivalents for ease of performance and reflect the way they are notated in KGS' score. Pitch distances are shown in cents in red.

Use of Gamelan Techniques in KGS

Both traditional *koto* and gamelan music share heterophonic compositional underpinnings. Gamelan music is typically structured around a *balungan* (core melody) that follows a colotomic structure,¹⁵ which repeats a certain given number of times and is delineated by the use of gongs to mark the ends and beginnings of phrases (Tenzer 2011). These gongs are also believed to hold significant spiritual meaning, as the sound calls to mind the Hindu belief of reincarnation. Michael Tenzer writes:

Time in Balinese *gamelan*, like many other musics through the world, has most often been characterised as cyclic or regenerative – notably by the Balinese themselves...the music normally returns repeatedly to the same 'point' like a planet in orbit or the hands on a clock. A cycle is formed in such a way that the last note of a melody is also the first note of its occurrence, as though a circle was being drawn and the final arc closed. That moment of renewal is of primary importance and is signified by a stroke of the large gong. Perhaps...this reflects the importance of reincarnation in Hindu belief. (Tenzer 2011)

Fujieda has talked about his deep interest in cyclicity and mandalas, themes that he has continued to explore in his recent evening-length works. He has further explored this concept of living mandalas through spatial placement of performers on stage and considers his work on PoP to be part of a conversation with the “spirits of the plants” (Fujieda 2009, 2018).

Each Pattern of KGS has a different gong chord that is plucked at the end of phrases similar to the colotomic structure of much gamelan music. Because the *koto* players lack an instrument akin to the gong with its substantial overtone spectrum, Fujieda uses large chords of three or more pitches to give the allusion of the presence of inharmonic pitches. In the gong chord in the A Pattern of KGS, the 13 and 17 string *kotos* feature pitches derived from different overtone series eg. Pattern A's gong chord with the 3/2 “E”, from the 1/1 row, 8/7 “B-flat,” 9/7 “C” and 27/14 “G” from the 8/7 row, and a 21/16 “D-flat” from the 7/4 row. Through these types of chords, Fujieda tried to capture the “growl of a gamelan” (Fujieda 2009, 2021). The growl, or difference tones caused by pitches from different overtones being grouped together become gradually more intense, and reaches a climax of harmonic complexity in the final five bars of Pattern C before rushing to resolve all previous dissonant chords through resounding open fifths in Pattern D.

¹⁵ “A musical foundation or timeline in which regular time periods are delineated by punctuating sounds” (Spiller 2008).

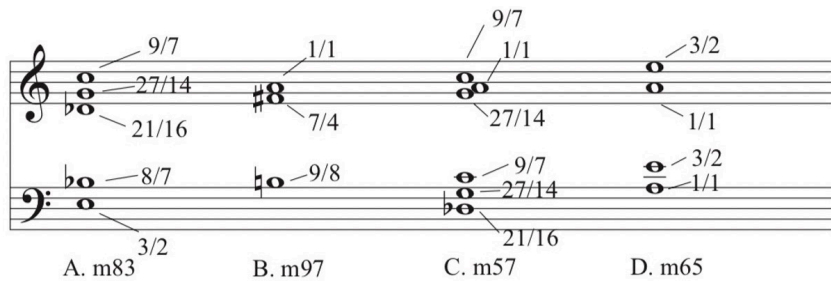


Figure 6: Final gong chords in each Pattern. Pitches are written according to tablature notation established in KGS score. Ratios indicate the assigned note and not intervallic distances between pitches.

Although gamelans often have paired instruments that are tuned to produce beats when played together, Fujieda's means of achieving this effect is very different than it is in Indonesian gamelans. Traditionally, instruments are constructed in pairs, and tuned 7 to 13 cents apart from one another to create beats when playing, which is most notable when unisons and octaves are struck. This shimmering effect caused by the convergence of near unisons and stretched octaves are considered by Indonesians to be more lively and more interesting to hear than perfect octaves and unisons (Tenzer 2011, Gann 2019, Arms 2021). Although Fujieda's *koto* tunings are designed to create similar shimmering beats through the gong chords of KGS, the means in which he produces this effect is more calculated in comparison to the tuning approaches used in Indonesia which are not measured as strictly as in Fujieda's KGS (Gann, 2019). Fujieda's "growls" are both nearly 2 to 3 times too wide, and by comparison to actual gamelan, over calculated and over specified.

The structural gong chords of KGS follow a saw-tooth like trajectory, with the root notes of the gong chords descending during Patterns A and C, and rising in Patterns B and D. This is analogous to Fujieda's approach for conceptually deriving pitches from subharmonic and harmonic series to create ebb and flow between Patterns.

The gong chords (Figure 6) in Fujieda's work function similarly to the colotomic demarcating gongs heard in gamelan music (with some interesting exceptions) and are presented in four different ways: with all notes plucked simultaneously by all three *kotos* (Figure 7), with one *koto* anticipating the gong chord (Figure 8), one *koto* plucking after the primary presentation of the gong chord (Figure 9), or each *koto* plucking a different note in immediate sequential order (Figure 10). In this manner, Fujieda's punctuating chords seem to have accidentally collided with a hallmark of the *jiuta-sōkyoku* repertoire of *shamisen* and *koto*, where the vocalist typically plays rhythmically offset figures similar to fourth-species counterpoint with string melodies that move between unison pitches and dissonant intervals.

pattern A

13-koto
20-koto
17-koto

$\text{♩} = 50$
mp
mp
mp

Figure 7: Type 1 – rhythmic unison sounding of gong chord, mm. 5–6.

13
20
17

97
97
97

Figure 8: Type 2 – rhythmic anticipation in 17 string koto of gong chord, Pattern B m97.

13
20
17

49
49
49

Figure 9: Type 3 – delayed plucking of gong chord in 20 string koto, Pattern B, m50.

The image shows a musical score for three staves, numbered 13, 20, and 17. The music is in a key with three sharps (F#, C#, G#) and a 6/8 time signature. A red box highlights a specific section in measure 21, where the notes enter the staves at different times, creating a staggered effect. The top staff (13) has a quarter note, the middle staff (20) has a quarter note, and the bottom staff (17) has a quarter note, all starting at different points in the measure.

Figure 10: Type 4 – staggered presentation of gong chord, Pattern B, m21.

The gong chords in KGS typically pause the forward momentum and allow the different resonating strings and their pitches to fully interact with one another before players begin a new phrase. This is very different from most traditional forms of gamelan music. In a traditional gamelan work, reaching the final note of a core melody/*balungan* with the ringing out of a gong does not mean that the music pauses. On the contrary, in much Indonesian music, regardless of composition and regional style, a gong that punctuates the final note of a *balungan* maintains forward momentum rather than acting as a moment of cadential tension and release. There are certain exceptions in gong *kebyar* music,¹⁶ in which *suling* flutes might sustain the gong tone for a short time before moving on to the next section of the composition. In KGS, gong chords are typically sustained for up to two full 6/8 measures in the first movement, two to four beats in the second, and one to two and a half beats in the third movement. The fourth movement is the only one that seems to break this pattern of momentary rest and thus seems to have the most in common with the rhythmic profile of traditional gamelan music.

Neither Kimono, nor Batik – Conclusion

The question of appropriation and/or borrowing is not limited to the realm of art music. Of particular importance: who is borrowing and how much knowledge and experience do they have with the culture they are borrowing from? The Canadian composer Daryl Jamieson expounded eloquently upon this very point when asked about his string quartet based on *waka* 和歌 poetry (Japanese 31-syllable traditional poem):

“When dealing with cultural appropriation, it is important to consider the level of understanding the appropriator has over the appropriated culture and tradition, rather than the ethnicity of the person ... Where I am unable to agree with the people who criticise appropriation of cultures is when they insert the concept of ‘ethnicity’ into the debate. They say a Japanese-Canadian

¹⁶ A type of contemporary Indonesian gamelan music featuring percussion, flutes, and string instruments.

can wear a kimono, but a white Canadian should not do that. If they are both born in Canada, they are both culturally Canadian – why do we need to differentiate people by ethnic ancestry in this way?... we should not bind culture and ethnicity together. Anybody who studies another culture and tradition should be able to be part of that tradition. Dividing people by ethnicity is a right-wing ideology.” (Shimizu 2020)

KGS’s resulting compositional world is one that doesn’t exist in any traditional Indonesian or Japanese music. In this situation, KGS and, by extension Fujieda, wear neither a kimono nor an Indonesian Batik-patterned shirt.

In his effort to convey an “atmosphere of gamelan music,” Fujieda created a complex listening environment. However, his compositional choices are not consistent with the stylistic tenets associated with this genre, and any similarity to gamelan music seems to be accidental rather than intentional. During our email correspondence, Fujieda informed me that one of his primary interests when composing KGS was to explore the tonal implications of the seven-limit just intonation mode employed by La Monte Young in his WTP, rather than attempting to directly emulate gamelan music. He said, “[KGS] has nothing to do with the style or method of gamelan directly” (Fujieda 2021). Furthermore prior to his time at UCSD he had limited experience working with gamelan music and was first exposed to the instruments and Indonesian music only after meeting and interacting with Lou Harrison in the 1980s while a student at UCSD (Fujieda 2021.)

Other issues about intonation in Fujieda’s music exist, particularly with regard to his deep interest in transcribing different existing Collections from PoP which represents a striking shift from earlier works in PoP—including KGS—where very specific tunings were chosen for particular instrumental ensembles. In the liner notes to *Marie Nishiyama plays Patterns of Plants* (2018) Fujieda writes: “transcription [and arrangement] is also important. A piece (pattern) is not restricted to a fixed instrument (or instrumentation), so the same melodic pattern transforms itself in various ways through a free transcription of the instruments that can perform the piece” (Fujieda 2018). Because of the unique harmonic materials from seven-limit derived materials, KGS has not been transcribed and retains a unique harmonic identity compared to other collections. Similar to how a gamelan’s tuning changes over time and its own *embat* will gradually emerge, KGS—like an older gamelan—has maintained its singular identity in comparison to other Collections in PoP (Arms, 2021). However, few of the other PoP transcriptions by Fujieda leave the confines of Pythagorean or well-tempered tunings. More recently, instead of exploring the possibilities presented by a single tuning system as in KGS, Fujieda seems more interested in a flexible approach to choosing tonal systems (e.g. Werckmeister III, Pythagorean, and even twelve-tone equal temperament). This shows that Fujieda seems to be more interested in observing the variations that occur when same melody is presented on a different instrument and/or tuning system.

To that end, Fujieda has gone on to transcribe other collections from PoP for the gamelan *degung* ensemble, such as the 19th Collection “The Olive Branch Speaks” (オリーブの枝が話す) and the 27th Collection. During the transcription process, he has altered the music to more closely mimic stylistic traits of gamelan music. He has an ongoing curiosity in borrowing techniques from gamelan music and applying to them to other instrumental ensembles. However, I would argue that KGS's fluid means of adopting gamelan and *jiuta-sōkyoku* techniques produce a more musically compelling world than the recent works for actual gamelan instruments such as the 19th and 27th collections. Fujieda's own interest in transcribing different patterns for different instrumental ensembles is something that does to some extent happen in gamelan settings. For example, the *Degung Klasik* repertoire and certain *gong kebyar* works might be performable on a large variety of instrumental sets across the world, even though each set of instruments will have its own *embat* and thus leave its own signature on a composition. Perhaps through each new transcription, Fujieda allows instrumental ensembles to imbue each transcribed Collection with its own character and feeling through the use of different tuning systems chosen in conversation with performers.

What emerges as a more problematic concern is Fujieda's continued borrowing of gamelan techniques in certain compositions like the 25th Collection that make the gamelan eighth tones of KGS seem innocent by comparison. For example, the 25th Collection (2012) contains movements titled “Gamelan Cherry” and “Gamelan Arabesque.” These movements are composed with melodic patterns extracted from cherry plants and use pentatonic melodies with end-weighted cyclical materials, similar to Indonesian music. However, when performed on a twelve-tone equal tempered instrument such as the piano, much of the charm and intrigue of the composition is lost without the nuance provided by just intonation tunings. This specific type of appropriation resembles an act of musical syncretism as described by Yayoi Uno Everett in her 2004 article “Intercultural Synthesis in Postwar Western Art Music: Historical Contexts, Perspectives and Taxonomy.” In this instance, pentatonic melodies reminiscent of Indonesian music are employed on an equal tempered instrument, “transplant[ing] specific timbral or scalar elements of Asian instruments onto their Western counterparts.” (Everett 2004). What is conveyed in pieces like the 25th Collection instead feels more like an unabashed appropriation of gamelan and less an attempt to create a new work, especially when Fujieda's extensive experiments in other tunings and other hybridised PoP Collections¹⁷ are considered.

As a composer who has written for NWIs in a variety of different styles, I too have often asked myself these questions of where the lines must be drawn. Which lines

¹⁷ Works such as the 4th, 6th, 8th, 9th, and 10th Collections (all works for stringed instruments) make use of just intonation systems more complex than other Collections in Pythagorean tuning and Well-Temperament. For more on the tunings used in Collections 1–18, see Fujieda 2009.

do I want to cross, and how can I step over the line without falling over? Most often the people who decry others as appropriators and cultural thieves are in fact outsiders. Such was the case during a kimono fitting event hosted by the Museum of Fine Art in Boston, wherein public outrage and accusations of cultural appropriation led to the early termination of the event. The plaintiffs were in fact of non-Japanese descent (Shimizu, 2020). Similarly, in the case of this essay, I am a composer, *Kinko-ryu* shakuhachi player, and amateur *koto* player who has participated in gamelan music and appeared as a soloist in contemporary music for gamelan and *shakuhachi*. But I am Japanese American and not of Indonesian descent, and my experiences in gamelan music in the past five years only touch the surface of a type of non-Western music that has already been expounded upon by more qualified individuals. I believe that these opportunities like those presented to us in Fujieda's KGS represent critical moments where if we approach the contemporary composition and the bodies that borrow from other cultures, there is a possibility for us as scholars, performers, and listeners to learn more deeply about other musical cultures. This will further strengthen cross-cultural connections that are becoming increasingly critical in our expanding globalised musical community and enables us to create truly effective musical hybridisation and synthesis wherein truly new and unique works of art are made manifest.

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