Volume 6, Issue 1, 2023 p51-61

Lekesan: Interdisciplinary Journal of Asia Pacific Arts

Journal homepage http://jurnal.isi-dps.ac.id/index.php/lekesan

The Concept of Harmony and Modulation in Kwanji Sempidi's Gambang

I Nyoman Mariyana

Karawitan Department, Faculty of Performing Arts, Indonesian Institute of the Arts Denpasar

nyomanmariyana@gmail.com

Gamelan Gambang is a Balinese musical ensemble that has a unique and distinctive characteristic of its musicality. Gamelan Gambang belongs to gamelan saih pitu (seven notes), where in one octave the tone consists of seven principal notes. Each of the instruments in the Gambang Kwanji Sempidi gamelan has a different concept of tone harmonization and tone modulation. The method used in this study uses a type of qualitative descriptive research method through data collection using observation, interview, discography, and documentation methods. While measuring the frequency of the tone using the Curltone application tool. Through this method, in the Gambang Kwanji Sempidi gamelan, harmony appears in the arrangement of the Gambang tones on each Gambang instrument. Harmony is related to the interval or pitch distance. The pitch distance between dAng (A) and dang (a) is called ngembat or octave, the distance between dAng (A) and dEng (e) is called ngepat or ngempyung (kwint), while the distance between dAng (A) and dOng (o) tones called nelu or quart. If they are hit together in one tone simultaneously, four forms of tone harmonization patterns occur (nelu, ngepat, and ngembat). The harmony playing pattern on the xylophone is supported by the gambang beater (*panggul*) which has been set in such a way. The xylophone *panggul* has a different distance between the right and left pairs of mallets. The left pair spans four notes, while the right pair spans five notes. The Gambang Kwanji modulation system, namely the transition from one basic tone to another, is called Sengkeran. In the game, there is a change of one note in the order of the notes used. This sengkeran is found in the Gambang Labdha and Manukaba songs.

Keyword : Harmony, Modulation, Xylophone Kwanji Sempidi

Received February 19, 2023; Accepted April 12, 2023; Published May 6, 2023
https://doi.org/10.31091/lekesan.v6i1.2433

Introduction

Music is factually an art whose essence is closely related to the five senses of hearing and the experience of time. On the basis of these two aspects which can be distinguished but cannot be separated from true musical experience, it seems necessary that in a complete aesthetic it is also well explained about the "order of sound" and "order of time" contained in each piece of music. Music is the expression of ideas through sound, the basic elements of which are melody, rhythm and harmony with supporting elements in the form of ideas, characteristics and color of sound. However, in its presentation it is often combined with other elements, such as language, motion, and color (M. Suharto, 1992:87).

Gamelan Gambang is a Balinese musical ensemble that has a unique and distinctive characteristic of its musicology. Music cultural activities have a very close relationship with the traditions and culture of the community where the music is created. The goal is to satisfy a series of a number of human instinctual needs related to life (Koentjaraningrat in Yudarta, 2021:177). Gamelan Gambang belongs to gamelan saih pitu (seven notes), where in one octave the tone consists of seven principal notes. Gamelan Gambang is a Balinese gamelan in the form of blades and made of bamboo which is thought to have existed in the 11th century AD. (Soekmono, 1973:55 in I Wayan Sinti, 2011:4). Another opinion was found, that the gambang gamelan is found in the reliefs of the Penataran Temple in East Java (abab XV) and the term xylophone is mentioned in the Malat story from the late Majapahit kingdom (Dibia, 1999:100). Gamelan Gambang located in Kwanji Village, Sempidi Subdistrict, Badung Regency, each type of gambang instrument has a different concept of harmonizing tones in "sound arrangement" and "time arrangement".

The pattern of laying out the tones in the Kwanji Sempidi gambang, taking into account the concept of harmonization with good sound quality, is produced when two notes are struck together. Each Gambang instrument has a tone arrangement that refers to the concept of tone harmonization by considering the aesthetic aspects of sound. In this article, we will explain more about the concept of harmonizing tones possessed by the Gambang Kwanji Sempidi gamelan.

Materials and Methods

In this article, we will describe the concept of harmonization in the Gambang Kwanji Sempidi gamelan tone. The method used in this paper uses descriptive qualitative research and interviews. The type of data in qualitative research is true and real data or information that shows the condition or nature of something. Qualitative data can also be interpreted as data in the form of words obtained through interviews, document analysis, discussions, and observations (Redana, 2006: 250). Not much different according to Sugiyono (1992: 2), this type of qualitative research is also research that produces data or information that can describe the realization and related events in people's lives. Researchers in this study collected qualitative data sourced from informants and field data.

The observation method in this study was carried out by making direct observations related to the technical system owned by the Gambang Kwanji gamelan. Through the participatory observation method where the researcher is directly involved with the object, looking for the concept of harmonization in the tone of each Gambang Kwanji Sempidi instrument.

Interview Methods

Using this method, researchers dig up all information through interviews with Kwanji gambang elders or elders including Jro Mangku I Made Ganda, I Wayan Laja, I Made Wetri, I Wayan Sudira, regarding the appropriateness of the information data obtained. An interview was also conducted with one of the foreign students who was researching xylophone in Bali

named Jhonatan Adam. According to him, the Gambang Kwanji gamelan has a different harmonic tone from other Gambang gamelan in Bali.

Discography

Recordings in the form of DVDs, audio visuals, are used as reinforcement for the data obtained. This recording is the result of xylophone performances recorded at the 2009 PKB event conducted by the Gambang sekaa themselves.

Documentation

With this documentation method, the researcher explores information related to the range of notes that exist in each xylophone instrument. Documentation through photographs is used to determine the shape of the Gambang tone arrangement so that it can be seen the differences in the shape and tone arrangement and the concept of harmony in each Gambang instrument.

Discussion

Wholeness in diversity that supports the aesthetics of works of art is supported by three main factors, namely: 1). Symmetry, 2). Rhythm, 3). Alignment/Harmony, (Djelantik, 199:43). Harmony is harmony caused by the interaction of sounds that go together (chords) such as kempyung notes and octaves that are struck together to produce sounds that are interesting and beautiful to hear. Usually the alignment criteria depend on the system used and the concept of the music being made. By harmony, it is meant that there is harmony between the parts or components that are arranged to become a unified part, none of which contradict each other, all fit and are integrated. There is nothing contradictory in terms of shape, size, spacing, rhythm, and tone of voice.

Harmony is harmony caused by the interaction of sounds that go together (chords) such as kempyung notes and octaves that are struck together to produce sounds that are interesting and beautiful to hear. Harmony strengthens wholeness because it gives a sense of calm, comfort, does not interfere with our five senses. The arrest occurs with physical processes in our five senses, the ear catches air vibrations, the eye catches electro-magnetic waves. Harmonic notes have a certain vibrational frequency called octaves, ters, quints. Harmony is presented to strengthen the impression of symmetry in music and symmetries have properties that strengthen the wholeness of a piece of music.

In the Gambang gamelan, harmony appears in the arrangement of the Gambang notes on each Gambang instrument. Each xylophone instrument has a different tone arrangement. The same notes in each xylophone instrument, when hit together in a melody, can create beautiful harmony. As previously mentioned, harmony is related to the interval or distance of notes. The pitch distance between dAng (A) and dang (a) is called ngembat or octave, the distance between dAng (A) and dEng (e) is called ngepat or ngempyung (kwint), while the distance between dAng (A) and dOng (o) tones called nelu or quart. If they are hit together in one tone simultaneously, four forms of tone harmonization patterns occur (nelu, ngepat, and ngembat). The harmony playing pattern on the xylophone is supported by the gambang beater (*panggul*) which has been set in such a way. The xylophone *panggul* has a different distance between the right and left pairs of mallets. The left pair spans three notes, while the right spans four notes. Analysis of the harmony of the tone on Gambang Kwanji Sempidi can be seen from the tone system it has. Tone is one of the important elements in music. Each xylophone instrument has a different tone arrangement. The high and low notes are arranged in such a way as the tone placement pattern in each octave. The pattern of placement of notes on each instrument gives a characteristic to the Gambang Kwanji Sempidi gamelan. The tone arrangement refers to the location of the tone arrangement on the Gangsa Gambang instrument. Besides the gangsa instrument, the barunga is also equipped with four xylophone stump, namely Pengenter, Pemero, Penyelat and Pemetit, each consisting of fourteen blades

made of bamboo (Bamboo Petung). In each Gambang, the tune is sung, with the following tonal arrangements:

a) Gambang Pengenter: o I O o I O A e u a A e u a

b) Gambang Pemero : O A e O A e u a o I u a o I

c) Gambang Penyelat : u a o u a o I O A e I O A e

d) Gambang Pemetit : o I O o I O A e u a A e u a

If you pay close attention, every gambang instrument immediately has a gumbang-ngisep system, namely the seven (lower) basic notes of each gambang instrument are pengmbang, while the seven higher notes are suckers. Another question that arises is why the tones of each Gambang instrument are arranged in such a way or why do the tones appear irregular from lower to higher tones, like the tones of Balinese gamelan in general? The answer is because it is guided by the tone of the Gangsanya (interview, I Wayan Sudira).

Analysis of the Tone Arrangement of the Gangsa Xylophone Instrument

The Gambang Gamelan in the Kwanji Traditional Village consists of two Gangsa stump, namely Penyorog and Pengumbang whose material is made of bronze (Balinese: *krawang*) each consisting of seven blades/tones in the order of the notes as follows:

Figure 1. Gangsa Xylophone Instrument
(Source: I Nyoman Mariyana, 2019)

Susunan nada : 7 1 2 3 4 5 6

Notasi Latin : o I O A e u a

Dibaca : *dong ding dong dang deng dung dang*

By observing the irregular arrangement of Gangsa tones, namely the high tone is placed first, then followed by the next tone from the lowest to the higher tone. The Gangsa Gambang pelawah is made in a way that is somewhat similar to a dulang (Balinese), namely the resonators at both ends of the pelawah are higher than the others. This may be seen from an aesthetic aspect. If the lowest note is placed at the top, it will require a deep resonator to resonate the tone above it. If that is done, the pelawah (resonator) will penetrate downwards. Therefore, the two highest notes, namely note number six (a) and tone number 7 (o), are each placed at the end of the pelawah so that they can resonate with the notes above them.

The Gangsa Gambang tone arrangement is o I O A e u a (seven notes), while each gambang instrument consists of fourteen blades (two octave notes). According to the author, the tone arrangement of the gambang instrument is guided by the tone arrangement of the gangsa instrument (I Wayan Sinti, 2011: 88).

Analysis of the Tone Arrangement of the *Gambang Pengenter* Instrument

The tone arrangement of Gambang Pengenter starts with the note o I O, then it is rewritten as o I O, that is, the second tone arrangement is the octave of the previous tone

arrangement. The next gangsa tone arrangement is A e u a, then it is rewritten as A e u a, so that the complete tone arrangement for the gambang penenter is as follows:

Gambang Pengenter : o I O o I O A e u a A e u a.

Figure 2. The pattern of the input xylophone tones
(Source: I Nyoman Mariyana, 2019)

Table 1. Interferer Tone Harmonies.

No Nada	Jarak Nada	Harmonisasi Nada Gambang	Frekuensi	Pasangan Nada
1.	*Dong'-Dong*	B	247,56 Hz	1 dan 4 B dan B
2.	*Dang Gede-Dang*	C	264,16 Hz	2 dan 5 C dan C
3.	*Deng'-Deng*	D	295, 90 Hz	3 dan 6 D dan D
7.	*Dung-Dung'*	E	328, 13 Hz	7 dan 11 E dan D
8.	*Dang Cenik-Dang*	F#_F	182, 13 Hz	8 dan 12 F# dan F
9.	*Dong Kekok-Dong*	G	103,52 Hz	9 dan 13 G dan G
10.	*Ding-Ding*	A	112,79 Hz	10 dan 14 A dan A

(Source: I Nyoman Mariyana, 2019)

The gambang penter consists of fourteen tone blades arranged differently from large to small, in contrast to the gangsa instrument blades in the Gong Kebyar gamelan. Tone number 1 (starting from the player's left) paired with tone number 4 forms a tone harmony with the octave tone system, namely the high dong tone combines with the big dong tone so that harmonization occurs between B and B to become B at a vibrational frequency of 247.56 Hz. Tone number 2 paired with tone number 5 forms a tonal harmony with an octave tone system, namely the dang big tone combines with the dang tone so that harmonization occurs between C and C to become C at a vibrational frequency of 264.16 Hz. Tone number 3 paired with tone number 6 forms a harmonic tone D with an octave tone system, namely a high tone combines with a deng tone so that harmonization occurs between D and D to become D at a vibrational frequency of 295.90 Hz. Tone number 7 paired with tone number 11 forms a harmonic tone E with an octave tone system, namely the tone of dung combines with high dung so that harmonization occurs between E and D to a vibrational frequency of 328.13 Hz. Tone number 8 paired with tone number 12 forms a tonal harmony with an octave tone system, namely the dang cenik tone combines with the dang tone so that harmonization occurs between F# and F to become F#-F at a vibrational frequency of 182.13 Hz. Tone number 9 is paired with tone number 13, forming a tonal harmony with the tone octave system, namely the dong kekok tone blends with the dong tone so that harmonization occurs between G and G to become G, at a vibrational frequency of 103.52 Hz. Tone number 10 is paired with tone number 14, forming a tonal harmony with the tone octave system, namely the ding tone combines with the ding tone so that harmonization occurs between A and A to become A, at a vibrational frequency of 112.79 Hz.

Analysis of the Tone Arrangement of the Pemero Xylophone Instrument

Gambang Pemero tones, starting with O A e, are rewritten as O A e. The next gangsa tone arrangement is u a o I, rewritten u a o I, so that the complete Gambang Pemero tone arrangement becomes:

Gambang Pemero : O A e O A e u a o I u a o I.

Figure 3. Pattern of Pemero's Xylophone Tones
(source: I Nyoman Mariyana, 2019)

Table 2. Pemero Tone Harmonies.

No Nada	Jarak Nada	Harmonisasi Nada Gambang	Frekuensi	Pasangan Nada
1.	*Dong'-Dong*	D	148, 93 Hz	1 dan 4 D dan D
2.	*Dang Gede-Dang*	D#-E	158, 69 Hz	2 dan 5 E dan D
3.	*Deng'-Deng*	F	175, 29 Hz	3 dan 6 F dan F
7.	*Dung-Dung'*	G	193, 85 Hz	7 dan 11 G dan G
8.	*Dang Cenik-Dang*	A	218, 26 Hz	8 dan 12 A dan A
9.	*Dong Kekok-Dong*	C	127, 44 Hz	9 dan 13 D# dan B-C
10.	*Ding-Ding*	C	264, 16 Hz	10 dan 14 C dan C

(Source: I Nyoman Mariyana, 2019)

The Pemero xylophone consists of fourteen notes arranged in different sizes from large to small. Tone number 1 (starting from the player's left) paired with tone number 4 forms a tonal harmony with the octave tone system, namely the high dong tone combines with the big dong tone so that harmonization occurs between D and D to become D at a vibrational frequency of 148.93 Hz. Tone number 2 paired with tone number 5 forms a tonal harmony with an octave tone system, namely the dang big tone combines with the dang tone so that harmonization occurs between E and D to become D#-E at a vibrational frequency of 158.69 Hz. Tone number 3 paired with tone number 6 forms a harmonic note F with an octave tone system, that is, a high tone combines with a deng tone so that harmonization occurs between F and F to become F at a vibrational frequency of 175.29 Hz. Tone number 7 paired with tone number 11 forms a tonal harmony with an octave tone system, namely the tone of dung combines with high dung so that harmonization occurs between G and G to become G at a vibrational frequency of 193.85 Hz. Tone number 8 paired with tone number 12 forms a tonal harmony with the tone octave system, namely the dang cenik tone combines with the dang tone so that harmonization occurs between A and A to become A at a vibrational frequency of 218.26 Hz. Tone number 9 is paired with tone number 13, forming a tonal harmony with the tone quart system, namely the dong cluck tone blends with the dong tone so that harmonization occurs between D# and B-C to become C, at a vibrational frequency of 127.44 Hz. Tone number 10 is paired with tone number 14, forming a tonal harmony with the tone octave system, namely the ding tone combines with the ding tone so that harmonization occurs between C and C to become C, at a vibrational frequency of 264.16 Hz.

Analysis of the Tone Arrangement of the Penyelat Gambang Instrument

The tone arrangement of the Penyelat gambang starts with the tone u a o, rewriting it as u a o and continuing with writing the next gangsa tone, I O A e, and rewriting it as I O A e, so that the full tone arrangement for the Silat gambang gambang is as follows:

Gambang Penyelat : u a o u a o I O A e I O A e.

Figure 4. Layout pattern of the insulating gambang tones
(Source : I Nyoman Mariyana, 2019)

Table 3. Harmonies of the Intercessor Tone.

No Nada	Jarak Nada	Harmonisasi Nada Gambang	Frekuensi	Pasangan Nada
1.	*Dung-Dung'*	G	395, 51 Hz	1 dan 4 G dan G#
2.	*Dang Cenik-Dang*	G#	409, 18 Hz	2 dan 5 G# dan A-A#
3.	*Dong Kekok-Dong*	C	261, 23 Hz	3 dan 6 A# dan C
7.	*Ding-Ding*	C	260, 25 Hz	7 dan 11 C dan C#
8.	*Dong-Dong*	D#-E	320, 80 Hz	8 dan 12 D#_E dan D
9.	*Dang_Dang*	D#	155, 27 Hz	9 dan 13 F_F# dan D#
10.	*Deng_Deng*	F	176, 76 Hz	10 dan 14 C dan F

(Source: I Nyoman Mariyana, 2019)

Gambang Penyelat consists of fourteen chords arranged in different sizes from large to small. Tone number 1 (starting from the player's left) is paired with tone number 4 to form a tone harmony with the tone octave system, namely the dung tone combines with the high dung tone so that harmonization occurs between G and G# to become G at a vibrational frequency of 395.51 Hz. Tone number 2 paired with tone number 5 forms a harmonic tone with a quint system, namely the dong cenik tone combines with the dang tone so that G# and A-A# are harmonized to become G# at a vibrational frequency of 409.18 Hz. Tone number 3 paired with tone number 6 forms a tonal harmony with the Kwart system, namely the dong cluck tone blends with the dong tone so that harmonization occurs between A# and C to become C at a vibrational frequency of 261.23 Hz. Tone number 7 paired with tone number 11 forms a tonal harmony with an octave tone system, namely the ding tone combines with the high dung so that harmonization occurs between C and C# to become C at a vibrational frequency of 260.25 Hz. Tone number 8 paired with tone number 12 forms a tone harmony with the tone octave system, namely the tone dong combines with the tone dong so that harmonization occurs between D#-E and D to become D#-E at a vibrational frequency of 320.80 Hz. Tone number 9 is paired with tone number 13, forming a tonal harmony with a tone quart system, namely dang tones combine with dang tones so that harmonization occurs between F/F# and D# to become D# , at a vibrational frequency of 155.27 Hz. Tone number 10 is paired with tone number 14, forming a tonal harmony with a quinttone system, namely the deng tone blends with the deng tone so that there is harmonization between C and F to become F, at a vibrational frequency of 176.76 Hz.

Analysis of the Tone Arrangement of the Pemetit Gambang Instrument

The last one is the arrangement of Pemetit xylophone nanda. The tone arrangement for Pemetit's xylophone is the same as for Pengenter's xylophone, except that the notes are one octave higher. The arrangement of Pemetit's xylophone tones is as follows:

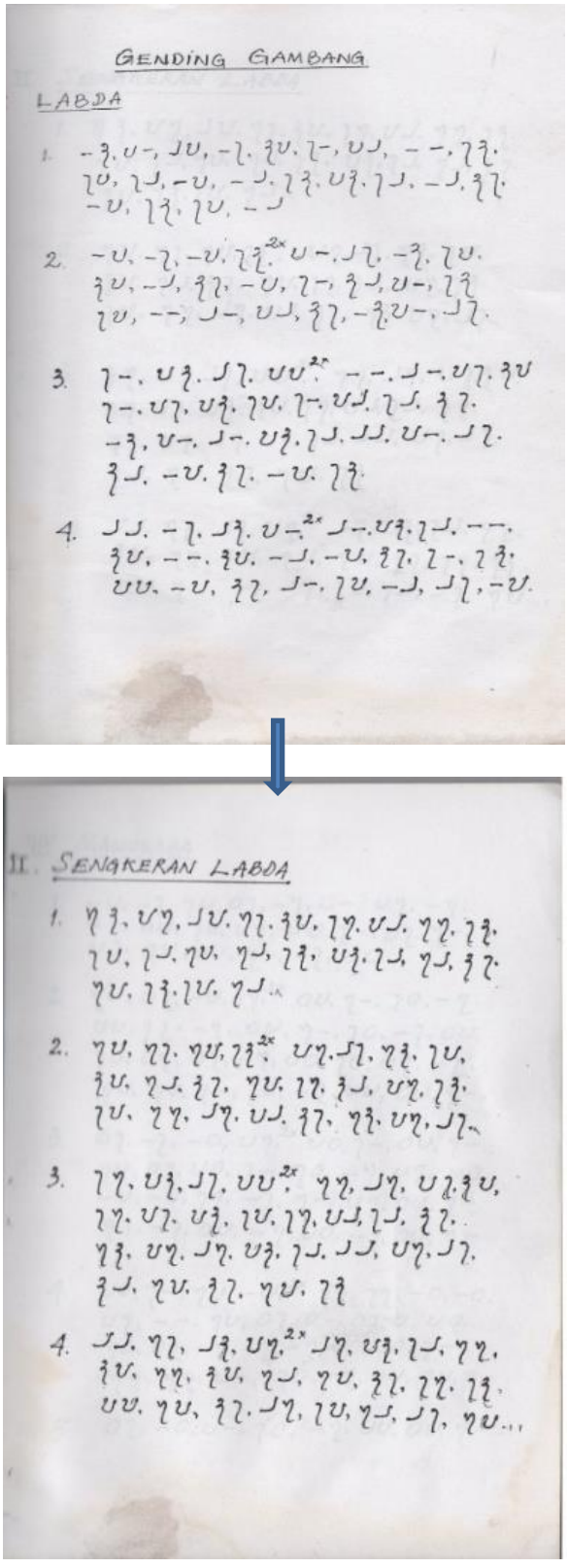
Gambang Pemetit : o I O o I O A e u a A e u a

Figure 5. Pattern of the Picker's Xylophone Tones

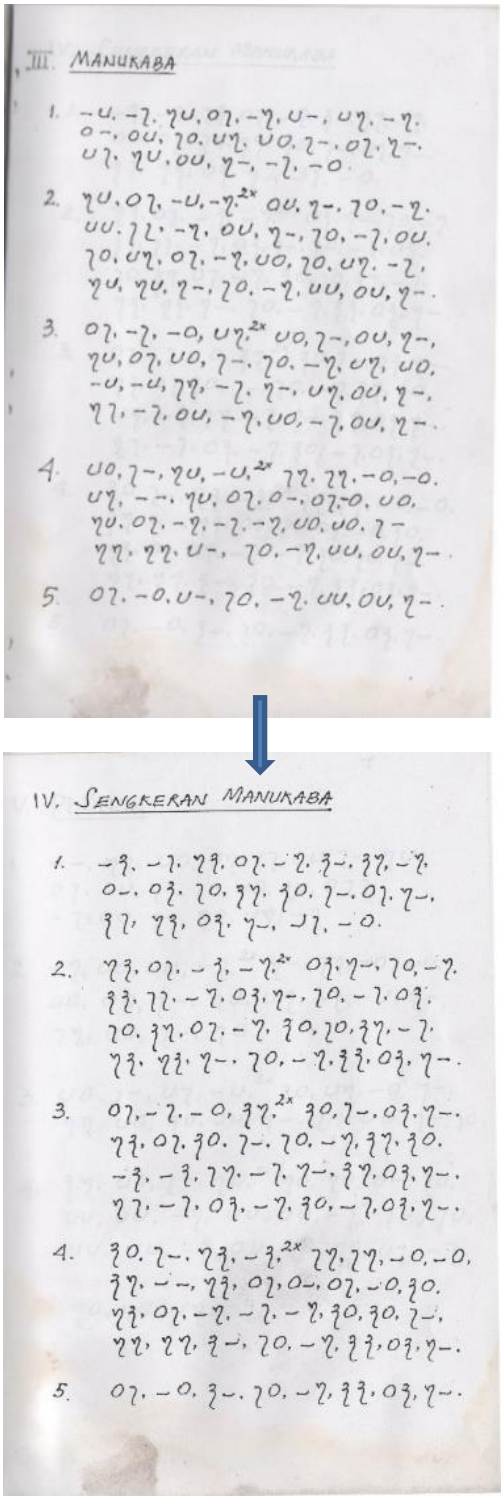
(Source : I Nyoman Mariyana, 2019)

The picker's xylophone has the same tone arrangement as the pincer's xylophone. Tone number 1 (starting from the player's left) paired with tone number 4 forms a tonal harmony with the octave tone system, namely the high dong tone combines with the big dong tone so that harmonization occurs between B and B to become B at a vibrational frequency of 245.61 Hz. Tone number 2 paired with tone number 5 forms a tonal harmony with an octave tone system, namely the dang big tone combines with the dang tone so that harmonization occurs between C and C to become C at a vibrational frequency of 262.21 Hz. Tone number 3 paired with tone number 6 forms a tonal harmony with an octave tone system, where high tones combine with deng tones so that harmonization occurs between D and D to become D at a vibrational frequency of 293.46 Hz. Tone number 7 paired with tone number 11 forms a tonal harmony with a tone quart system, that is, dung tones combine with high dung so that harmonization occurs between D# and E to become D#-E at a vibrational frequency of 321.78 Hz. Tone number 8 paired with tone number 12 forms a tonal harmony with a tone quart system, namely the dang cenik tone combines with the dang tone so that harmonization occurs between F# and F to become F#-F at a vibrational frequency of 320.31 Hz. Tone number 9 is paired with tone number 13, forming a ethe dong kekok tone blends with the dong tone so that harmonization occurs between G and G to become G, at a vibrational frequency of 196.27 Hz. Tone number 10 is paired with tone number 14, forming a tonal harmony with the tone octave system, namely the ding tone combines with the ding tone so that harmonization occurs between A and A to become A, at a vibrational frequency of 109.62 Hz.

Related to the modulation system that exists in Gambang Kwanji Sempidi, modulation occurs due to the transition from one key to another by releasing the first key absolutely. In Gambang Kwanji, the transition from one key to another is called Sengkeran. In his playing, there is a change of one note in the order of the notes used to give a clear audible color or modulation. This sengkeran is found in the Labdha and Manukaba xylophone songs. More details, as can be seen in the notation of the Sengkeran Labdha and Manukaba pieces below.



In the presentation of Labdha's rendition to Sengkeran Labdha on Gambang Kwanji above, it can be seen that the composition of the melody has changed. These changes can be seen clearly especially after being heard. Based on the notation above, from Labdha's recitation to Sengkeran Labdha there is only one tone change, namely the dang tone (--) is replaced by the deng tone (e).



III. MANUKABA

IV. SENGKERAN MANUKABA

Modulation in Manukaba's gending to Sengkeran Manukaba in Gambang Kwanji Sempidi occurs due to the substitution of one note, that is, the tone dung (É) is replaced by the tone dang cenik (;) as shown in the notation above. When heard, the difference will be clearly seen between the Manukaba and Sengkeran Manukaba songs.

Conclusion

Gamelan Gambang as a product of cultural arts which is a type of classical gamelan in Bali needs to be preserved and developed. The Gambang Gamelan in the Kwanji Traditional

Village is a hereditary heritage whose existence is recognized and nurtured by the Kwanji Traditional Village. Gamelan Gambang is a type of classical Balinese gamelan that uses a seven-tone Pelog tuning which is musically strengthened by the presence of the concept of harmonization in each Gambang tone arrangement.

The composition of the gambang instrument tones that seem irregular. However, after analyzing more deeply in relation to the tonal arrangements, it seems that the former creator of the gambang was an artist who had foresight, genius, as well as proficient in tuning/tuning besides understanding aesthetics, philosophy, logic, and ethics in creating Balinese gamelan. The term modulation is used in the transition of the basic tone system used in the Gambang Kwanji Sempidi musical pattern.

REFERENCES

Arikunto, S. 2002. *Prosedur Penelitian*. Jakarta: Rineka Cipta.

Bandem, I Made. 1988. *Prakempa Sebuah Lontar Gamelan Bali*. Sekolah Tinggi seni Indonesia Denpasar.

Bandem, I Made. 1991. *Ubit-ubitan; Teknik Permainan Gamelan Bali*. ASTI. Denpasar

Dibia, I Wayan. 1999. *Selayang Pandang Seni Pertunjukan Bali*. Yogyakarta; Masyarakat Seni Pertunjukan Indonesia

Dibia, I Wayan. Pengantar Karawitan Bali.

Djelantik, A.A.M. 1999. *Estetika Sebuah Pengantar*. Bandung: Masyarakat Seni Pertunjukan Indonesia

Iskandar. 2009. *Metodelogi Penelitian Kualitatif*. Jakarta : Gedung Persada.

Moleong.Lexy. J. 1993. *Metodelogi Pendidikan Kualitatif*. Bandung: PT Remaja Roisda Karya.

Nawawi, Hadari. 2000.*Metode Penelitian Bidang Sosial*. Yogyakarta:Gajah Mada Universiti Pres.

Sinti, I Wayan. 2009. *Gambang; Gamelan Bali Yang Unik*. Bali Post

Sinti, I Wayan. 2011. *Gambang Cikal bakal Karawitan Bali*. Denpasar. TSPBOOKS

Sugiyono.1992. *Metode Penelitian Kualitatif*. Bandung : Alfabeta

Suparli, BA. 1983. *Tinjauan Seni*. Proyek Pengadaan Buku Pendidikan Menengah Kejuruan. Direktorat Pendidikan Menengah Kejuruan. Depatemen Pendidikan dan Kebudayaan

Tilman Seebass: Schlüssel zur revidierten Karte, S. 73 von Seebass: "Eine Forschungsreise nach Bali...", *Mitteilungen der Deutschen Gesellschaft für Musik des Orients* (1974/75), 6982, nachgeführt 1980

Warna, I Wayan. 1990. *Kamus Bali-Indonesia*. Dinas Pendidikan Dasar Provinsi Bali

Yudarta, I. G. ., & Haryanto, T. . (2021). Eksistensi Kesenian Rebana Gending Desa Langko Dalam Masa Pandemik Covid-19 Di Lombok. *Mudra Jurnal Seni Budaya*, *36*(2), 170–178. https://doi.org/10.31091/mudra.v36i2.1460