Slendro Culture, Balungan Concept, and Inner Melody of Jawatimuran Karawitan

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Abstract

This study aims to reveal the development and distribution of the slendro tuning and analyze the concept of *balungan gending* and the inner melody of gending in Jawatimuran karawitan. It became essential to do as an effort to build a scientific milestone in Jawatimuran karawitan. This study uses the participant method, which is an effort to involve the researcher in the study he is studying thoroughly. In-depth observations and active interviews were carried out so that the data obtained from the participant method could continue to be contextualized with reality. The researcher tries to place the resource person as a speaking subject, not a passive object. As a result, apart from Malang, almost all Jawatimuran karawitan cultures use slendro gamelan with a unique side and distinctive character. The concept of balungan gending and the inner melody result in the gendings in Jawatimuran karawitan having complex musicality dynamics, in contrast to other musical styles, Surakarta and Yogyakarta, for example.

Keywords: *balungan gending*, inner melody, Jawatimuran karawitan, music notation, organology, slendro

Introduction

Jawatimuran karawitan in terms of concepts and theories so far has not been fully discussed. The discussion regarding the world of karawitan is more centered in Surakarta and Yogyakarta (Setiawan, et al., 2017). Therefore, efforts to develop the scientific side of Javanese musical instruments continue to be encouraged. One of the main reasons is the absence of a "patron" or "cosmic world" such as the palace in Surakarta and Yogyakarta. As a result, the musical culture in East Java developed communally (Sugiarto 2013). Therefore, various musical styles emerged, such as Surabayan, Malangan, Mojokertoan, Porongan, Pandalungan, etc., not concentrating on one particular style point (Setiawan, 2021a). Not all areas in East Java refer to the Jawatimuran karawitan (Munardi 1983:4–6). This is due to the strong influence of the palace culture in Central Java, Surakarta to be exact, with the areas of East Java being part of the legitimacy of its power. Regarding this, Anderson Sutton wrote:

> in the "central Javanese" [Jawa pusat], region of the province one finds a continium in musical style from very nearly Solonese, around Madiun. Recording of Solonese pieces from town such as Trenggalek, Tulungagung, Blitar, [Kediri, Ngawi].. scholars and performers from Central Java with extensive experience in the province of East Java, also consider the Surabaya-Mojokerto-Malang triangle as a distinctive region, whose people share the dialect of Javanese language identified "east Javanese" (*Jawa cara wetanan* or *Jawatimuran*) along with their own musical style. (1991: 121-122).

Sutton tries to identify that the East Java style consists of three main areas: Surabaya, Mojokerto, and Jombang. But in practice, the East Javanese style is broader, covering the areas of Gresik, Jombang, Malang, Mojokerto, Surabaya, Sidoarjo, and Lamongan (in the terminology of the

local community known as *Gerbangkertasusila*) as well as Lumajang, Probolinggo, Pasuruan, Jember (commonly called *Pandalungan*). Other regions, such as Banyuwangi (Osing culture), have a different and very distinctive musical style, with different techniques and instruments (Rahayu, 2010). Uniquely, almost all of these areas use the slendro-tuned gamelan as their musical expression (Supriyono, 2006).

Slendro is a pentatonic tone system without a semitone. The concept is that the distance between the tones (intervals) that are formed is relatively the same (Mistortoify, Haryono, Ganap, & L. Simatupang, 2014). In its implementation, the slendro tone system grows and develops in various types and characters in every cultural area, every sub-culture to communities and individuals. Apart from Malang, almost all regions in East Java that adhere to the concept of Karawitan Jawatimuran (East Javanese) use slendro gamelan. Sukesi Rahayu (2017) explains that the music in East Java (Surabaya, Gresik, Jombang, Lamongan, Sidoarjo, Mojokerto, even Madura) focuses more on the slendro tuning and is classified into four pathets namely *sepuluh*, *wolu*, *sanga* and *serang*. The existence of this slendro gamelan becomes interesting to study further related to the early traces of its emergence and development (Hastanto, 2016).

Jawatimuran karawitan as a musical culture has a unique concept and character, which tends to be different from the musical style in other areas (Nugraha et al., 2009). As in the notion of *balungan* (gending) and the inner melody, Jawatimuran karawitan has a distinctive conceptualization. Therefore, it is essential to present the Jawatimuran karawitan in other karawitan arenas in the archipelago (Setiawan, 2013). Scientific studies on Jawatimuran karawitan continue to be encouraged to build the ideal foundation of musical science. Of course, it should start immediately. However, this does not mean there is no acculturation between Jawatimuran and Surakarta karawitans.

The traces of gamelan-culture-interaction between East Java and Central Java (and even Yogyakarta) have continued for a long time. Regarding this, Sumarsam wrote:

> In his policy of expansionism, Sultan Agung confronted the mighty state of Surabaya, a powerful and rich state because of its intensive trading (with Gresik as its harbor). It took Sultan Agung five years (1620-1625) to defeat Surabaya. Like any other assault, the treasures and royal princesses became the booty of war. Realizing the importance of Surabaya, however, Sultan Agung brought the king's son, Pangeran Pekik, to Mataram, married him to his sister, and reinstalled him as ruler of Surabaya. This marriage diplomacy made Surabaya a close ally of Mataram for a long time to come. Continuing his wish to rule all of Java, Sultan Agung, in collaboration with Sunan Pekik, destroyed Giri in 1636. (2014:337)

Sumarsam explained that Sultan Agung faced Surabaya (East Java), a strong country, because of its intensive trade (with Gresik as its port). At least it took Sultan Agung five years to conquer Surabaya. Realizing the importance of Surabaya, Sultan Agung brought Prince Pekik (son of the king of Surabaya he defeated) and married him to his sister. After marriage, Prince Pekik was returned to Surabaya, and thus Surabaya directly became an "extension" or ally of Mataram (Central Java). Marriage diplomacy is not only a matter of politics and power but also about cultural issues, where art (in which gamelan is involved) becomes a bridge between the two. After becoming an ally of Mataram, Surabaya in the 17th century was at its peak after previously successfully controlling Gresik (Giri) in 1636.

Sumarsam, through his thesis, views that in the context of the conquest, there was a cross-cultural crossing. Because of that, many gendings had the same name, even though they developed locally and had different tastes, adapting to their character and environment. Furthermore, East Java, especially Gresik, according to de Groot (1852), was originally the center of gamelan making in Java. Gresik is an area that has quite advanced arts, including wayang, dance, dance drama, and gamelan. In their analysis, Groot and Sumarsam emphasize that at first, the arts developed quite rapidly in the coastal areas (ports) of East Java because of the contacts that occurred between the natives and immigrants, missionaries and traders.

BIJLAGE III.
(*Zie blz. 415, reg. 14.*)

NAAMLIJST van de Gamelan-spelen.

NAAM van het soort GAMELAN.	NAAM van de MUZIEKSTUKKEN.	GEBRUIK.
1. Senèn.	Gala gandjoer. Watang Pati.	Aan huis van den regent des Maandags of bij het toernooitjen.
2. Kòdòk Ngòrèk.	Als boven.	Bij den regent op feestdagen of groote gelegenheden.
3. Tjara Bali.	Reijongan. Kembang gadoeng. Tabah pisan. Saloekat. Djang kenie. Prang babat.	Als men op de Maduresche manier laat dansen, op groote feesten of maaltijden enz.
4. Bonang Rentong.	Oedan Pedjaten. Kidang milar. Ajam sapannak. Oentjoor oentjoor. Ngembat watang. Lidoeng. Lawoeng. Tropongan. Kebo giro. Seban. Krangéjjan. Bahoengan. Mendjangan Tjingok.	dit wordt door boepati's of andere grooten gebruikt.
5. Saléndro.	Obor. Pindo gawe. Menjan séto. Bowo rogo. Oedan mas. Galendih. Wongso goenan. Puwie. Gantal wedar. Ajakajakan. Katjak. Goentoor. Mara Séba. Bakat. Banten. Bang kang wétan. Kebajong. Titi Pati. Tatoer. Djang weroe. Ramang. Soemrang. Hing Hing. Pakat sari. Tjandra. Gajak setro. Teloetoer. Sekaléron. Menjah. Kembang gajam. Bondan. Gondjing. Bentoeran.	voor de wajang.

Figure 1. Gendings in Gresik (East Java) 17-18 centuries, taken from Groot (1852). These gending names are also commonly found in Surakarta (even Yogyakarta). This proves the existence of a cross between gamelan cultures.

It must be admitted that the scientific foundations of Jawatimuran karawitan are not as solid as those of other musical cultures (Surakarta and Yogyakarta). This is partly due to art schools (and colleges) for the first time in Surakarta (Sumarsam, 1995). Meanwhile, in East Java, Surabaya in particular only recently took similar steps (Sutton, 2001). And even then, almost all of the teachers were brought in from KOKAR (*Konservatori Karawitan* [karawitan conservatory]) Surakarta, so the material taught mainly focused on Surakarta-style karawitan (Soenarto, personal communication, October 24, 2017). The case had significant implications for formulating the scientific concept of Jawatimuran karawitan, which is no longer genuine. The study of *pathet*, for example, is still widely viewed from a scientific point of view in Surakarta karawitan, so that the original *pathet* names of East Java are replaced with pathet names in Surakarta (Setiawan, 2021b).

Likewise, many researchers are trapped in being unobjective by interpreting *balungan gending* and the inner melody. Therefore, this study attempts to investigate Jawatimuran karawitan by looking at the most elementary musical problem, namely the tuning system (*laras*) and the inner melody of

Jawatimuran karawitan from the insider's point of view. It is hoped that new discourses, concepts, and theories regarding the musicality of Jawatimuran karawitan can emerge as a stepping stone to be developed and elaborated more comprehensively in the form of further research afterward. The culture of slendro, balungan gending, and the depth of musical theme are musical events that do not stop at the problem of sounds. But involve the conceptualization of how Jawatimuran karawitan grows and becomes a musical culture that is believed to exist by the community that owns it.

Methodology

This study uses the participant observation method, which is an effort to involve the researcher in the study he is studying thoroughly (Kawulich, 2005). Researchers are actively engaged in various Jawatimuran karawitan performances together with resource persons within a certain period to achieve valid data. The "researcher body" is thus a source of data that deserves to be explored (Thomas, 2019). But from the beginning, full awareness has been raised regarding the limits of when to act as a researcher and when to be part of a musical community. This is important, considering that the researcher is part of the music community he is researching. Thus, the awareness to take that position from the beginning must be realized so that the data obtained are not biased. The participant observation is quite helpful in analyzing and understanding musical phenomena (Mohajan, 2018), such as; what musicians think when they are faced with musical notation, how they know the problem of balungan gending. Active participation also has consequences in uncovering issues that have been difficult for the original musicians (native) to explain, such as the difficulties that arise when describing the depth of gamelan melodies. This research is also based on "practice-led research", in which the practice and involvement of researchers are directly used to create an evidence base for something that is demonstrated or found (Mäkelä, 2007).

In-depth observations and active interviews were carried out so that the data obtained from the participant observation could continue to be contextualized with reality (Ciesielska et al., 2018). The researcher tries to place the resource person as a speaking subject, not a passive object (Baker, 2006). This approach makes it possible to reveal discoveries that have not yet emerged. In such a context, this research seeks to present a "voice from within" (Oyebode, 2017). Researchers become a bridge by knitting emic data (native) to correlate with the ethics side (Rosa & Orey, 2012). Thus, this research is like experimental space, trying to present data as objectively as possible with measurable scientific considerations. The research results are always returned to the community that owns the music culture, not only as a form of scientific contribution but also to get criticism and suggestions. The data obtained and analyzed, then compiled into research results, are shown to the owner of the music culture. This is done so that the research results are valid from the "researcher's point of view" and get similar confirmation from the people who own the music culture. This continues to be done so that research results can be accounted for and convey what is appropriate to be voiced.

Results and Discussions

Slendro Culture

Tasman Rono Admojo and Diyat Sriredjo recorded Jawatimuran gendings in the early 1980s, the results of which were published in a book entitled *Notasi Gending Mojokerto-Suroboyo* in 1981. In the book, 156 gendings from various levels were collected. Of the 156 gendings, all of them are slendro-tuned. Soenarto also did the same thing through his book entitled *Teknik tabuhan karawitan Jawa Timur Surabaya-Mojokerto* (2011), collecting 44, all of which were also in slendro tunes. Recently, Adiyanto through his book *Balungan gending Jawatimuran* (2016) recorded as many as 142 gendings. Of the 142 gendings, only seven are in the pelog tune, and the rest are in the slendro tune. The pelogs tune are *Bango Mati Pathet Nem, Endol-Endol Pathet Barang, Pacol Gowang Pathet Barang, Slukat Pathet Barang, Srundeng Deken Pathet Barang, Sweep Jagat Pathet Nem, Sumyar Pathet Barang*. Kunst (1973), in the decade of 1920, recorded East Javanese music, mostly slendro-tuned, and described the

distribution of gamelan in East Java, including Surabaya, Mojokerto, Jombang, Lumajang, and Malang. The results can be seen in the following figure.

Table 1

Distribution of slendro gamelan in five areas of East Java. Source extracted from Kunts (1973: 564-566)

Region	Slendro	Pelog	Addition of gamelan from 1920 to 1973
Surabaya	101	16	70 slendro
Mojokerto	106	8	40 slendro, 8 pelog
Jombang	189	51	98 pelog "miring"
Lumajang	131	42	
Malang	106	232	54 slendro, 56 pelog
Total	**633**	**349**	

In addition to the Malang area, the slendro gamelan seems to dominate the four regions, namely Surabaya, Mojokerto, Jombang, and Lumajang. Even today, in the Klakah Lumajang sub-district and some areas in Probolinggo-Pasuruan, local people regard the pelog gamelan as "*gamelan rusak* [broken gamelan]" (Hartono, personal communication, September 12, 2017). In other words, the presence of the pelog gamelan has not been entirely accepted, especially by the Pandalungan community (Jember, Lumajang, Probolinggo, and surrounding areas). In some cases, in Sidoarjo, a young, well-known East Java puppeteer named Ki Yohan Susilo. Uniquely, Ki Yohan cannot perform the *sulukan* or vocals of the puppeteer in the pelog tune. During the performance, all night long, the puppeteer only performed the slendro-tuned gamelan. During an interview with Yohan Susilo (personal communication, May 17, 2018), he explained that when he was studying (*nyantrik*) with his teachers, namely Ki Surwedi, Ki Bambang Sugiyo, Ki Supeno, and Ki Suleman, Yohan had never received a vocal in the pelog tune. Inheriting the views obtained from his teachers, he considers that puppetry and musical instruments from East Java (except Malang) are slendro tunes, not pelog.

Yohan had difficulty when he had to bring the vocals in the pelog tune. The pelog tuning vocals (*sulukan*) in the Jawatimuran puppetry is allegedly due to the influence of the Surakarta-style puppetry culture. Ki Surwedi (personal communication, September 16, 2017) explained that the existence of pelog vocals in Jawatimuran puppetry began to develop in the early 1990s because some puppeteers considered performing *sulukan* in pelog tunes was a challenge in itself. Meanwhile, Wartini and Tina (personal communication, February 4, 2018), as *waranggana* (dancers and vocalists in tayub performances) who are pretty well known in Lumajang and surrounding areas, stated that at first, they had difficulties when they had to sing in pelog tunes. Almost all of the *kèjhungan* patterns and traditional gendings in the tayuban are slendro-tuned, so the tunings are very familiar to their ears. The rest, they are required to sing in the pelog tuning when there are *campursarian* (Javanese pop songs).

Especially for Tina, a *waranggana* who was raised in a strict Madurese culture, her contact with the slendro-tuned gamelan is so deep that it still feels when she performs vocals outside of that tone strange. Mistortoify (2015:234) emphasizes that Madurese culture has long practiced the slendro tuning and does not like the pelog tune, so that the pelog tuned gamelan is not found, except in new gamelan groups that are contemporary. Therefore, the view that suggests that the pelog tuning in some Pandalungan communities is considered a damaged or wrong tuning seems to find a justification. Next, in Mojokerto and Jombang there are famous ludruk namely Karya Budaya and Budi Wijaya. Eko Edy Susanto (personal communication, May 21, 2018) as the leader of Ludruk Karya Budaya, explained that ludruk groups in Mojokerto, Jombang, even Surabaya and Lumajang still use the slendro gamelan in their performances. In Ludruk Karya Budaya under his leadership, the slendro gamelan used in the beginning was not as complete as it is now. To find bronze gamelan (because the average gamelan is iron), Eko has to rent it far away in Kedamean District, Mojokerto Regency. Even then, there is only one demung, two saron, peking (saron penerus), bonang barung, bonang penerus, slentho (slenthem), gender penerus, kenong, kempul with the tone *ma* (5), and gong *ageng*.

Compared to gamelan made of bronze, gamelan slendro of iron has a sound frequency that is relatively loud, shrill, and "crispy" compared to gamelan bronze which is gandhem or soft (Prasetya,

2012). Iron gamelan then became the prima donna (idol), although another reason was the relatively lower price to manufacture than bronze gamelan. Almost every ludruk group uses it, and this happened before the 2000s. The iron gamelan used is also considered more flexible and easy to carry anywhere because of its relatively lightweight. In the late 1990s and early 2000s, the iron gamelan was seen as not having prestige for the ludruk group. Bronze gamelan is seen as more "dignified" to raise the name and reputation of ludruk. Bronze gamelan is seen as more elegant, beautiful, shiny when compared to iron gamelan. By having a bronze gamelan, the related ludruk is seen as more special or honorable. This was triggered and initiated by using a bronze gamelan called Kiai Macan Putih by the Ludruk group of RRI Surabaya in that decade (Setiawan, 2020).

Until now, the distribution of slendro gamelan made of bronze has occurred massively in almost all ludruk and shadow puppet groups in East Java. Sutton (1991:127–129) states four characteristics of slendro gamelan in East Java musical instruments. First, there is the Jekdongan drum (which in Sutton's terminology is called *kendang gambyak*). Second, there is the ponggang instrument, also known as the penembung. The shape is smaller than kenong but bigger than bonang. Third, a slentho instrument is a slenthem with a mound above the rectangular key (*pencu*). They are arranged in a device (*rancakan*) that is assembled like compiling a gender instrument (the simple analogy is gender keys with *pencu*, but the shape is more oversized). Fourth, there are balungan instruments such as the saron and demung with a resonator like a gambang (xylophone) instrument, with a design like a gravestone.
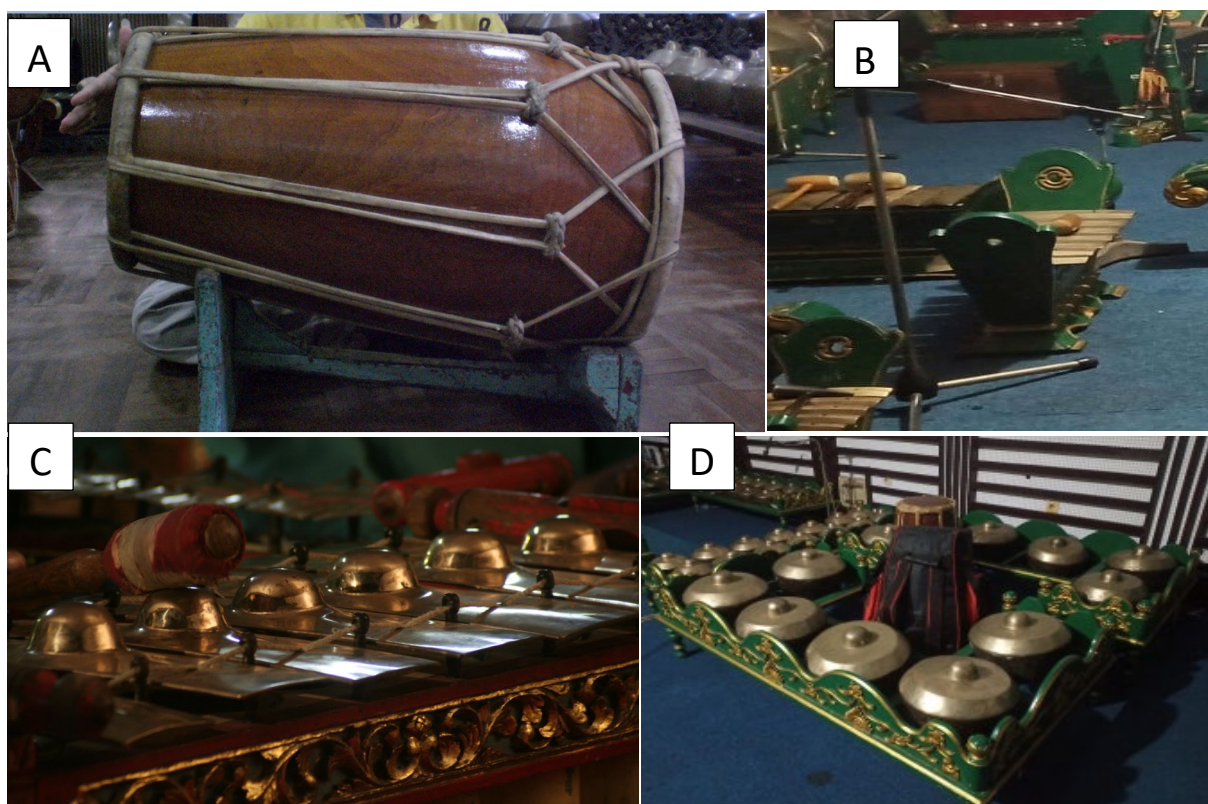

Figure 2. Characteristics of Jawatimuran karawitan instruments. Description in the image above: A. Kendang Jekdong (drum), B. Saron with a wooden body shaped like a traditional Javanese gravestone, C. Slentho, D. Penembung. Photo by Aris Setiawan (2008), and Kukuh Setyo Budi (2022).

Meanwhile, Kartamihardja (1978:32) added that at first, the slendro gamelan in East Java consisted of only one kempul with the tone of *nem* (6) or *ma* (5) and one gong *suwukan* with the tone of *ro* (2) and a gong *ageng* or gong *gedhe*. Currently, the slendro gamelan is proliferating, marked by the increasing number of existing instruments. Kempul does not consist of only one tone, but almost all tones— including *garap* instruments such as gender barung, rebab, siter, and gambang. Musicologically, the placement of the tones on the ricikan key (ricikan is a term for a particular instrument in gamelan) is

also different from the slendro gamelan in Surakarta and Yogyakarta styles. In the ricikan saron and slenthem, for example, it can be seen in the figure below.

Jawatimuran style is composed of tones :	1 2 3 5 6 i 2̇
Surakarta style is composed of tones :	6̣ 1 2 3 5 6 i
Yogyakartastyle is composed of tones :	1 2 3 5 6 i

Figure 3. the arrangement of the tones on the saron dan demung keys of the three styles

In the figure above, the tones are arranged in the slendro saron instrument in three gamelan cultures. It is necessary to distinguish between tone pitches and scales in this context. Tone pitch is the tones used in slendro gamelan (for example, do not use a tone of 4 because it is a tone in the pelog tune), while the scale is a sequence of tones from the lowest to the highest (one octave). Therefore, the tones are arranged coherently in the scale, using a lower point for low tones and an upper point for high tones. One octave can be interpreted as one interval.

The existence tone of 2 is interesting to review, considering that in the construction of Jawatimuran musical culture, the high tones of its presence is quite essential. For example, in the shadow puppets tradition, almost all *kembangan* (patterns) of saron instrument orchestration always reach the high tones, such as in *Gending Krucilan, Alap-alapan, Gemblak*, and *Ayak*. The use of high tones also characterizes the Jawatimuran musical style (Supriyono, 2006). Today, gamelan slendro is intertwined with Surakarta culture. In other words, many slendro-tuned gamelan instruments in East Java are imported from Central Java and are tuned and arranged like the slendro gamelan in Central Java, especially Surakarta (Sutton, 1991). Therefore, it is currently quite difficult to trace the traces of slendro gamelan in East Java which are relatively "original" with the arrangement and point of view described above. Surwedi (personal communication, September 16, 2017) and Kartolo (personal communication, August 2, 2017) explained that basically, the slendro gamelan in Jawatimuran karawitan has a lower tuning size than Surakarta or Yogyakarta (see frequency table below). In Jawatimuran karawitan, although it uses many high tones in its vocals, it is still in the low range when applied to the slendro gamelan in Surakarta. In a sense, the tone of 2 in Jawatimuran karawitan, for example, is almost the same as the tone of 1 in Surakarta, or slightly higher.

This becomes a particular problem when a Jawatimuran puppeteer performs using a slendro gamelan tuning from Surakarta. The high tones will feel much more heightened. On the other hand, low tones will feel much lower. This case, for example, was experienced by Ki Surwedi when he had to perform shadow puppets with Surakarta-style gamelan. He found it difficult to reach the high-pitched areas. In this context, Sri Hastanto's book entitled *Kehidupan Laras Slendro di Nusantara* (2016) is essential to present. In his book, Sri Hastanto explains the range or interval in slendro tones in the archipelago (*nusantara*), which varies, especially in Java. As a comparison of what Sri Hastantao wrote, this study then tries to measure the ambitus (high and low tones) or the interval of the slendro gamelan (in hertz or Hz) on the saron instrument in Lumajang in the Tayub Panji Laras groups, Tayub Endah Laras groups, and the Ludruk community of RRI Surabaya and Karya Budaya Mojokerto. The results can be described in the following table.

Table 2

The frequency of slendro tones in Lumajang, Probolinggo, Surabaya, and Mojokerto

Slendro gamelan in the tayub group of Panji Laras in Lumajang						
Tones	1	2	3	5	6	i
Frequency (Hz)	260	300	342	389	449	521
Slendro gamelan in the tayub group of Endah in Probolinggo						
Tones	1	2	3	5	6	i
Frequency (Hz)	259	301	354	391	452	533
Slendro gamelan in the ludruk community of RRI Surabaya						
Tones	1	2	3	5	6	i
Frequency (Hz)	262	306	358	401	461	542
Slendro gamelan in the ludruk community of Karya Budaya Mojokerto						
Tones	1	2	3	5	6	i
Frequency (Hz)	258	299	340	381	446	519

Compare the frequencies of several slendro gamelans in Surakarta and its surroundings in the table below

Table 3

Frequency of slendro gamelan in Surakarta and its surroundings. Taken from Hastanto's book (2016:40–42)

Slendro gamelan by the puppeteer Ki Manteb Soedharsono						
Tones	1	2	3	5	6	i
Frequency (Hz)	274	316	363	418	481	551
Slendro gamelan at the ISI Surakarta hall (Pendopo)						
Tones	1	2	3	5	6	i
Frequency (Hz)	272	314	361	416	479	550
Slendro Gamelan in Klaten						
Tones	1	2	3	5	6	i
Frequency (Hz)	272	315	361	410	474	539
Selendro Gamelan in Sukoharjo						
Tones	1	2	3	5	6	i
Frequency (Hz)	273	315	362	417	480	550

By looking at the figure above, it can be emphasized that the slendro gamelan in the East Jawatimuran karawitan culture has a lower frequency than that in Surakarta and its surroundings. Therefore, the Jawatimuran karawitan has its unique slendro gamelan, which is different from the slendro gamelan culture in other areas, especially in Central Java.

Balungan Concept and Inner Melody Theme of Jawatimuran Karawitan

Sumarsam, in his book *Hayatan Gamelan, Kedalaman Lagu, Teori dan Perspektif* (2002), reviews the possibilities for determining the inner melody. The main question that arises is, where is the depth of the gamelan melody themes? What instruments can be used as a reference in this regard? From the outset, many Western theorists suspected that Javanese gamelan melodies were contained in the saron melody. Kunts (1973:167,274) and Hood (1954:17) view that the instrument assigned to carry the depth of the central theme is a reasonably significant gamelan element. Before the word balungan gending was coined, Western scholars used the terms nuclear theme, cantus firmus, principal melody, fixed melody (Sumarsam, 2002: 12). Of course, the view that places the melodies of saron, demung, and slenthem (commonly called the *balungan* instrument) as the main melodic theme of gamelan is met with opposition and criticism from indigenous scholars. How is it possible that a saron, which has only a limited range of tones, can cover all the abstractions of the melody of the gending (Sumarsam, 1975).

To answer this question, first, the origin of the word balungan will be explained so that the correlation or connection with gending (so-called "balungan gending") can be interpreted clearly (Perlman, 2004). Sumarsam (2003:207–220) describes the history of when the term *balungan* appeared in the gamelan world. The search carried out by Sumarsam in this context is essential to see and read the traces of karawitan scholarship to penetrate the Jawatimuran sub-style. In addition, to open up other possibilities, the same symptoms in interpreting the balungan gending, the main theme, and the contours of the gamelan melody also occur in Jawatimuran karawitan gamelans. Or are there other dimensions and interpretations, which explain that Jawatimuran karawitan tends to have differences and distinctive characters?

Serat Centhini, Serat Sastramiruda, and *Gulang Yarya*, which were written in the 19th century, cover many gamelan and gending, but the term "*balungan*" is not found. According to Sumarsam (2003: 211), the term *balungan* first appeared in the book *Layang Anyumurake Pratikele Bab Sinau Nabuh Serta Panggawene Gamelan* (1913) by Djakoeb and Wignyaroemeksa. The term balungan gending is used without profound meaning, only mentioned once in the first chapter. In the book, what is meant by balungan gending is the abstraction of the melody played by the slenthem instrument. In other words, balungan gending refers to the range of tones owned by the slenthem instrument. Furthermore, Seolardi, through his book entitled *Serat Pradongga* (1918), explained balungan gending as the main element of gending, which was realized in the form of notation.

The term balungan gending then often appears in books about gamelan. As Hardosoekarto wrote entitled *Titi Asri* (1925), Wirawiyaga with his books entitled *Serat Lagu Jawi* (1935) and *Serat Mardu Swara* (1939). Until the 1930s, the discussion of *balungan* (gending) became increasingly important to translate the depth of the melody into a series of written numbers that could be read and interpreted further. Can balungan gending be written? When referring to the information above, writing about balungan gending is seen as urgent, which Dewantara (1936:47) calls an effort to learn to play the gamelan. As a result, there are simplifications of the musical complexity of the gamelan into a series of simple songs by the saron, demung, and slenthem instruments. Because of its role and function, the unity of the instrument is referred to as the "balungan instrument."

According to Supanggah (1990), although he did not mention in detail how important balungan gending is to be written, it must be admitted that the discussion of balungan gending has sparked other intellectual discourse issues in the gamelan world, one of which is related to notation. The history of notation in the world of karawitan in Surakarta and Yogyakarta has been explained quite well by Sumarsam (2003) and Rusdiyantoro (2019). Gamelan notation is an attempt to document gamelan gendings. Gamelan notation also encountered quite a long polemic, especially on the question of which instrument pattern is appropriate to be notated? Is gamelan notation able to cover all aspects of the musical in gamelan? As explained above, notation is extracted from the instrument playing that is considered closest to the balungan gending, namely saron or balungan.

Rahayu Supanggah (2009:31) suspects that balungan gending is a new phenomenon, or at least emerged after the existence of ricikan balungan. Supanggah's explanation is quite reasonable considering that the discussion about balungan gending reached its peak when the art education institution was established so that issues related to discourse and karawitan science were tried to be raised, including the phenomenon of balungan gending. However, it must be admitted that such a discussion made things even more complicated (in other words, it was confusing)—) understanding of a gending. Balungan gending, vaguely though not fixed or precise, are musical notations, whether on

blackboards, paper, or traded notation books. The balungan gending notation is created after the gending exists. This means that balungan gending is more effort to find a formulation to read the musical essence of a gending. Then were born notes or notations, which are not intended as standardization of a gending, like today.

Initially, the interpretation of the musical notations had sharp differences between one musician and another. This is due to their ability to transform gending into a series of signs and specific codes. Moreover, every musician has an imaginary power that is different in building a musical perception of a piece (gending). A musician who has mastered the rebab instrument will undoubtedly be other from a musician who masters gender instruments. As a result, the casting of balungan gending in the form of a sign or notation becomes different. The notation can only be interpreted, read, and understood by the musician who created it. The same thing also happens to other musicians. When art education institutions were established, methods were needed to make learning gamelan easier and more practical. What is known as the transcription of balungan gending, which is often very personal and in the pocket of the musicians, is then mass-produced with the same contents.

At least there is a different work pattern between balungan gending, a musical abstraction from musicians in the form of fixed codes that are very personal with the balungan gending notation currently circulating. The first way of working, the music first exists (fixed), but because a musician's memory is very limited, unsystematic notes are made that only he can understand. These notes are often tucked away in a pocket or purse, usually written on cigarette packs, small pieces of paper, and the like. The second way of working is reversed; although the gending has existed and is present, for today's musicians, the gending is not fully real in their imagination. The gending becomes present and accurate when they read the notation. The activity of reading notation is not just reading numbers, but at the same time, "*klenéngan gamelan*" or a complete gamelan concert is playing in their imaginations or minds. If the first method of working balungan gending is made when the gending already exists, while the second way of working is reversed, so that the gending exists, it must read the notation.

The second way of working becomes urgent to be reviewed because it directly correlates with the concept of balungan gending in Jawatimuran karawitan. The notation of gamelan raises efforts in understanding the reading so that the gending can be interpreted equally between one musician and another. In Surakarta karawitan, the notation is made based on the form, classification, and structure of the gending (for example, *lancaran, ketawang, ladrang, ketuk loro kerep*, and so on) by accenting the kempul, kenong, ketuk, and gong signs. As a result, a Surakarta-style musician can immediately interpret the gending well by only reading specific notations. Moreover, patterns of a rebab, gender, kendang, and so on are also standardized, or formulas are made. Therefore, a Surakarta Style gending notation can immediately 'become an orchestra' in the imaginary power of a musician or composer. This then gives rise to uniformity of interpretation between one musician and another. If they play outside the existing notation, then it is considered wrong. This way of working is more like Western music's concept (notation), which emphasizes strict accuracy and precision.

Art education institutions in East Java such as STKWS (Sekolah Tinggi Kesenian Wilwatikta Surabaya [Surabaya Wilwatikta College of Arts]) and SMKI (Sekolah Menengah Kesenian Indonesia [Indonesian Arts High School]) Must be recognized as agents who "legalize" the abovementioned standards. This issue is not fully understood in the construction of musical culture in East Java or Jawatimuran karawitan. The recording of karawitan notations was done, but the distribution was not as massive as the Surakarta and Yogyakarta musical styles. The recording of Jawatimuran gendings refers to the workings in Surakarta, namely trying to give signs, make classifications, shapes, and structures of gendings. Soenarto (2011), Mudiyanto (1981), Tasman Ronoatmojo, A. (1981), Suwarmin (1984), and Adiyanto (2016) are some of the researchers who carried out this method of work. However, efforts to make musical abstractions in the form of notation did not work as well as in Surakarta karawitan. As explained earlier, a musician in Surakarta can immediately interpret the notation of gending as "the whole gending" in their imagination which is then translated into real gending or *klenéngan*. But this is not the case in Jawatimuran karawitan. *Gending Morosebo Slendro Sepuluh*, for example, is a gending successfully notated by Tasman in 1981, but today not many musicians can play it, even by reading the available notation.

```
Bk. 2.2  6123  .6.5  .3.(2)

  A. 3235  653͡2  6123  653(2)
     3235  653͡2  6123  212(6)
     i̇2i̇6  2̇i65͡  2353  212(6)
     i̇2i̇6  2̇i65  2353  653(2)

  B. 3.32  3.35  6.65  3.3͡2  6.61  2.23  6.65  3.3(2)
     3.32  3.35  6.65  3.3͡2  6.61  2.23  2̇.2̇i  2̇.2(6)
     i.i2̇  i.i6  2̇.2̇i  6.65͡  2.23  5.53  2̇.2̇i  2̇.2(6)
     i.i2̇  i.i6  2̇.2̇i  6.65͡  2.23  5.53  6.65  3.3(2)
```

Figure 4. Gending Morosebo Slendro Sepuluh. Teken from Tasman's book (1981)

Many musicians have difficulty when faced with the existing notations. Even though the music classifications have been made in sufficient detail and clarity, musicians have not been able to make it into a "complete gending" in their minds and imaginations. Even just muttering (*rengeng-rengeng*) is often difficult. This means that the gendings of Jawatimuran carry a unique character and taste from one another even though they have similarities in structure and form. *Gending Cokronegoro, Ijo-ijo,* and *Walang Kekek* are examples. Have the same shape and size but are different in presentation.

```
A.
Bk.: 6365  6621  321(6)
[:i632͡  653͡2  326̆5  212(6):]

B.
Bk.: .123  .5.6  .5.(2)
[:616͡1  535̆6  2123  653(2):]

C.
Bk.  .  .  .  (5)
[:323̆5  323͡6  323̆6  323(5):]
```

Figure 5. Three gendings have the same structure but differ in their presentation. A. *Gending Cokronegoro Slendro Sanga,* B. *Gending Ijo-ijo Slendro Sanga,* C. *Gending Walang Kekek Slendro Wolu*

The three gendings above can be classified in the same form, but uniquely, each musician processes them differently. *Gending Walang Kekek,* for example, is performed at a relatively faster tempo with a tighter and louder drum pattern. In this context, the differences in musical analysis between the three gendings cannot be explained due to the limited space and the word count. The interpretation made in playing garap instruments is based on the main tones used, especially on heavy beats (*seleh abot*

[Javanese], in karawitan, it is called *ulian*). For example, if a song has the main tone or sentence: .1.6 .3.2 .6.5 .3.2, the heavy tones are the second tone of each *gatra* or phrase. More details can be described as follows:

Table 4.

Heavy beats on the song sentence of the Cokronegoro gending

Song sentence	1	6	3	2	6	5	3	2
Light beat (*padhang*)	1		3		6		3	
Heavy beat (*ulian*)		**6**		**2**		**5**		**2**

Garap instruments (such as the rebab and gender) can improvise to a certain level, as long as the improvisation leads to heavy tones. One musician may improvise differently than another but lead to the same ending tones. Thus, in this context, the notation above is used as a means of reminder or to provoke the imagination of musicians in doing improvisational work. The ideal measure for musicians to play Jawatimuran gendings among many variations is to be able to present the character and taste of the gending being played. It will be difficult for musicians who have never played related gending, while he only has notation. Armed with only notation, he does not know how slow or fast the tempo must be, at what rhythm the gending is performed, and the mechanics of musical building between the tones (musical interaction and communication on the garap instrument, for example).

Returning to the issue of balungan gending, both Sumarsam (2002) and Rahayu Supanggah (1990, 2009), Sri Hastanto (1985) reject the view that the saron melody cannot be considered as balungan gending because of the limited tone area compared to for example gender instruments, bonang, rebab, and gambang. Therefore, the circulating gamelan notations can not necessarily be considered or referred to as balungan gending. On the one hand, the view is true that saron has tone limitations, so the writing of notation refers to the area of ambitus of existing tones. This simple example was once expressed by Becker (1980:83), if there is a melody contour with the tone 1 2 1 6 when played by saron, it will be 1216. As in the example above, the melody contour with a tone that the saron instrument can not accommodate causes simplification. However, there has been no further research on whether the simplification by saron of the gending melody affects the musical quality of the gending as a whole or not.

On the other hand, although it has limitations in reaching all gamelan tones, the saron melody can be read implicitly in a definite or fixed interpretation and meaning. In other words, although high and low notes cannot be entirely written in saron tones (high tones, such as 2 3 5 6 but musicians who have high virtuosity can interpret them better. Far away, and will play *garap* instruments with tones beyond the range of the saron instrument, although the saron tones is still used as a reference. The notation of the saron melody does not merely guide the playing of the saron instrument but becomes a form of new numbers waiting to be interpreted. For rebab, gender, gambang and bonang players, for example, by just looking at the saron tones, in their imagination, they will process it into a much more complex one, adjusting the *garap* on the instrument they want to play.

Based on this view, the statements of Sumarsam, Rahayu Supanggah, and Sri Hastanto in this context can be refuted. The saron melody is the ideal medium in writing balungan gending. Alternatively, it can be said that the saron melody is balungan gending, and the notations that base their writing on saron notes (or balungan instruments) can therefore also be called balungan gending. Because of this, Adiyanto even specifically uses the title *Balungan Gending Jawatimuran* (2016) for his book, which contains notations of Jawatimuran karawitan based on the tones of saron or balungan instrument.

The most recent research concerning balungan gending was written by Khafiizh Hastuti through his article entitled "Identification of the note pattern from balungan gending lancaran using Apriori algorithm" (2015: 287-292). In her writing, Khafiizah uses the word balungan gending, which

is nothing but the notation of saron. Uniquely, balungan gending tries to relate algorithm problems regarding the dictum of time and space precision. What is quite interesting is that, based on the balungan gending, a musical musician within the limits of his imagination can imagine the complete klenéngan process and space and time. Furthermore, more comprehensive research can question whether "imaginary klenéngan" is directly proportional to the "real klenéngan." Moreover, the statement of the saron melody representing the balungan gending in this context can be justified.

The same thing also happens in the Jawatimuran karawitan tradition. The writing of the saron melody is seen as balungan gending. However, the way of interpreting it is different from that of karawitan in Surakarta. The notation (again) cannot be used as a reference in processing, *garap*, elaborating Jawatimuran gendings. In Jawatimuran karawitan, gending notation is often left as numbers that are too difficult to interpret further. There are several main reasons why notation cannot be used as the primary reference in playing Jawatimuran gending. First, the Jawatimuran karawitan culture is the latest in recognizing the notation system compared to the two major styles, Surakarta and Yogyakarta. Second, no method can accurately summarize the sounds in Jawatimuran musical into notation; so far, the recording or notation still refers to similar steps in Surakarta and Yogyakarta. In fact, every musical culture, including gamelan, has a different unique character and side, so it cannot be forced to be the same. Third, Jawatimuran gendings (as previously mentioned) developed orally, thus allowing the same gending to have different musical compositions between regions, groups, and musicians. As a result, one gending notation can be read or played by musician A but not by musician B. Fourth, because one gending can produce many different characters and musical compositions, the ideal step is not only to notate it but also to the involvement of the musicians' experience directly playing these gendings. It is the same as tasting the taste of food; although one person can read the word "salty," it will be difficult to explain if he has never tasted it. Therefore, the effort to document Jawatimuran gendings, especially for now, apart from the availability of notation, is to take advantage of the development of audio-visual technology.

Conclusion

The slendro gamelan in karawitan Jawatimuran was not as complete as it is today. Many arts communities, such as ludruk and wayang, use iron slendro gamelan instead of bronze. Iron gamelan is considered to be louder, apart from being cheaper. Several references show that kendang, ponggang, slenthem, saron, kempul, and gong are the main instruments often used as supporting music for dance performances, ludruk, and wayang. Gradually the slendro gamelan instruments became more complete, both in terms of the tones and the number of instruments. The iron gamelan, which was initially an idol, was replaced with a bronze gamelan. The use of bronze gamelan is considered more capable of enhancing the show's image (call it ludruk and wayang) because its shiny shape feels more elegant and expensive. The development of the times and intercultural influences have caused many slendro gamelans to be imported from Surakarta today. As a result, the slendro gamelan with distinctive East Javanese characters is increasingly marginalized. The main characteristic of the East Javanese slendro gamelan is the high notes that can still be tolerated by the vocals of a dalang or tayub singer. In contrast, the ambitus of the slendro gamelan in Surakarta tends to be higher or shrill. The simple analogy is tone 2 in Jawatimuran slendro gamelan, similar to or the same as tone 1 in Surakarta slendro gamelan.

The recording or transcription of balungan gending into more massive notation is carried out in Jawatimuran karawitan. This refers to a similar activity in Surakarta, where gending documentation is manifested in numbers (notations). However, the gending notation in Jawatimuran karawitan instruments does not play a significant role in building the melodic theme of the gending. A Jawatimuran musician, for example, will find it challenging to play Jawatimuran gending, even though the notation is already available. This can happen as long as the musician has never previously played and heard the related gending. Such a case is different from the theme of the gending melodic in Surakarta. A musician can instantly imagine a musical concert in his mind by simply reading the notation. This shows that the notation, balungan gending, has not played a comprehensive role in Jawatimuran karawitan. The sensitivity and depth of the melodic theme are built from the experience of the musicians, not the reasoning in interpreting the gending from the notation he reads.

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