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Musical coexistence of *gendhing gati mardawa* in the accompaniment of *bedhaya sang amurwabumi* dance

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ABSTRACT

This study discusses the musical coexistence in *Gendhing Gati Mardawa* as an accompaniment to the *Bedhaya Sang Amurwabumi* Dance, by highlighting how the musical construction of Javanese tradition negotiates with the aesthetic context, history, and cultural representation in the contemporary era. This study uses a qualitative method with a case study approach, the research analysis combines three main perspective lenses: postcolonial, hybridity, and musicology. Through a postcolonial perspective, this study examines how traces of power discourse, palace cosmology, and Javanese cultural narratives are rearticulated through the structure of the *gendhing*. The hybridity perspective is used to examine the mixture of traditional musical elements, such as the *balungan* pattern, the accompaniment work, and the relationship of the *gendhing* structure with the aesthetic needs of palace performances, resulting in a musical form that is not entirely traditional but still maintains its cultural legitimacy. Meanwhile, the musicological perspective provides a foundation for reading the relationship between musical structure, ritualistic function, and the embodied experience of gamelan musicians, musicians, and dancers. The results of this study indicate that *Gendhing Gati Mardawa* displays a coexistence between the harmony of *gamelan* instruments and European musical instruments, never in harmony, in the accompaniment to the *Bedhaya Sang Amurwabumi* Dance. This coexistence not only enriches the aesthetic experience but also offers new insights into how the *karawitan* tradition transforms through a dialogue between cultural continuity and contemporary artistic demands. This research contributes to the study of dance accompaniment music, demonstrating that musical hybridity should not be understood as deviation, but rather as an adaptive expression that maintains cultural relevance in the context of court performances.



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1. Introduction

The presence of European musical instruments and Javanese *gamelan* as dance accompaniment can still be found in classical dance performances today. Traditional dance performances that predominantly use traditional musical instruments are then accommodated by forcibly incorporating European musical instruments under the pretext of filling melodic gaps. This practice is commonly found in dance accompaniments by merging local and European music, incorporating a variety of instruments such as wind instruments, bowed strings, and percussion [1]. So far, studies on European musical instruments in dance accompaniment fall into three tendencies. First, the integration of musical instruments is seen as a positive impact that enriches and fosters artistic creativity [2], [3]. Second, this integration is perceived negatively, tending to erode existing arts and traditional musical instruments [4], [5]. Third, the integration is viewed as a neutral descriptive phenomenon, simply illustrating the coexistence

of European and classical instruments [6], [7]. However, these tendencies have yet to explore the broader impacts of musical coexistence on performers. This article aims to gain a deeper understanding of the phenomenon occurring in *Gendhing Gati Mardawa*, the accompaniment for the *Bedhaya Sang Amurwabumi* dance, particularly why European musical instruments are involved alongside Javanese gamelan tuned in pelog. The study also examines the extent to which European ensemble music can coexist in palace dance accompaniment. Although European ensembles and Javanese gamelan are not pitch-precise, they have been performed together over time. This discussion is based on the argument that introducing an external element into a cultural domain and acknowledging it as one's own culture indicates cultural appropriation. In this context, the factors driving this integration remain unknown.

1.1. Musical Coexistence

Coexistence serves as a framework for understanding and describing the mechanisms of living together [8]. Coexistence theory explains how interactions between environments and species influence community composition and diversity, emphasizing spatial and temporal variability [8]. This theoretical approach can be applied to align conflicting variables [9], [10]. At the same time, coexistence advances various subfields, including social sciences and arts [11]. In the context of music, coexistence refers to the state in which various types, styles, or genres of music can live side by side and respect each other within a community [12]. Straw and Schmutz & van Venrooij highlight that music consists of coexisting and interacting practices [13], [14]. Thus, musical coexistence involves orientation, expectations, and conventions from various perspectives.

1.2. Javanese Gamelan

Gamelan refers to an ensemble of instruments, primarily consisting of gongs and metallophones with specific tuning systems. The most commonly used gamelan in Central Java today includes large sets featuring gongs, slab instruments, three drums (*kendhang*), bamboo flutes, zithers, and *gambang* [15]. *Gamelan* tuning follows two scales: *slendro* (five-tone) and *pelog* (seven-tone), distinct from Western tuning systems [16]. Despite this, *gamelan* tones function similarly to octaves in Western music, with high, middle, and low notes [17]. *Gamelan* music is deeply embedded in cultural traditions and is commonly used as accompaniment for traditional Javanese dances [18]. At the same time, *gamelan* has been employed in therapeutic contexts, influencing emotions and even serving as a form of hypnosis therapy [19].

1.3. Palace Dance

Traditional dance has long been an integral part of cultural expression, initially functioning as a medium of connection between humans and ancestral spirits [20]. Traditional dance embodies various aspects of life, including daily activities, religious beliefs, gender relations, and animal imitations [21]. Classical palace dance is deeply intertwined with Javanese cultural values, often accompanied by *gamelan* and, in some cases, Western musical instruments [22].

2. Method

This research employs a cultural music study approach with a more critical perspective. The study does not aim to determine right or wrong. Instead, it examines the musical taste (aesthetic sensibility) of a European music ensemble that is forced to conform to the musical taste of Javanese gamelan, resulting in dissonance due to the tonal effects in Javanese gamelan melodies. Despite the resulting dissonance, it is intriguing that this practice continues to be used as accompaniment for dance movements in *Kapang-Kapang* at the Keraton Yogyakarta. This research is a qualitative study using a case study approach. Through the case study of *Gendhing Gati Mardawa* as accompaniment for the *Kapang-Kapang Bedhaya* dance "*Sang Amurwabumi*", the study aims to provide answers to the research questions posed in the problem formulation.

According to Yin, case study research can be categorized into three types: (1) explanatory case studies, (2) exploratory case studies, and (3) descriptive case studies. First, explanatory case studies are complex and multivariate, typically used in causal studies due to their suitability for pattern-matching analysis. Second, exploratory case studies involve data collection in the field before formulating research questions. This type of study is often considered preliminary research and social research. Although data collection precedes fixed

research questions, the research framework is established beforehand. Third, descriptive case studies present conclusions in a descriptive format linked to theories and findings.

This research adopts the second type of case study approach: exploratory. It will generally analyze the phenomenon of musical interaction between a European music ensemble and Javanese gamelan in the context of specific dance accompaniments at the Keraton Yogyakarta. Specifically, in the case of the *Gendhing Gati Mardawa* composition for the *Bedhaya Sang Amurwabumi* dance, the study will examine the power relations in sound that emerge when the tonal elements of a European music ensemble are forced into the composition of *Gendhing Gati Mardawa*. The data collection process for textual analysis involves several steps.

The compositions of *Gendhing Gati Mardawa* are transcribed, rewriting their notation into Western music notation. This step is crucial to obtain textual data and content related to the compositional characteristics of these pieces in alignment with Javanese *gamelan*. The transcription techniques for each composition into Western notation are further elaborated in Chapter V. The purpose of transcribing *Gendhing* notation into Western music notation is to facilitate reading the gamelan notation for musicians playing European instruments in the performances of *Bedhaya Sang Amurwabumi*.

According to Bandem, the preservation of Nusantara music can be carried out through three types of research: (1) Documentation through audio and visual recordings, accompanied by music transcription for study purposes; (2) Development research, which focuses on maintaining existing music while adapting to changing times, diffusion to other regions for specific purposes, and new creative expressions rooted in tradition; (3) Scientific research, covering the origins and growth of musical styles, socio-economic backgrounds, and (4) aspects of communication and symbolic interaction. Aligned with Bandem's framework, this research follows these steps: (1) Conducting audio-visual recordings for documentation and data collection; (2) Transcribing gamelan notation into Western notation to aid musicians playing European instruments; (3) Performing textual and content analysis, as well as contextual analysis within the framework of cultural music studies.

This study also examines the phenomenon supporting the hypothesis that a power relation in sound has occurred, where the European ensemble's sound is "subjugated" by being adapted to resemble Javanese *gamelan*. This hypothesis is based on the researcher's direct experience in the field as a dancer, musician, conductor, and transcriber of Javanese *gamelan* notation into Western notation. As previously mentioned, transcribing *Gendhing* into Western notation is intended to facilitate reading gamelan notation for musicians (who are not court-appointed musicians) involved in the performances of *Bedhaya Sang Amurwabumi*. The transcription process begins with audio recordings of the *Gendhing* pieces, which are repeatedly listened to before transcription.

The process also considers which *gamelan* instruments will be played alongside the European ensemble. This aspect is crucial because Javanese gamelan tuning systems are not standardized. In this case, the *Bedhaya Sang Amurwabumi* performances are accompanied by the royal heirloom *gamelan* set Kanjeng Kyai Panji, which is tuned to the pelog scale. Therefore, the tuning of the European ensemble must be adjusted to match the laras (tuning system) of Kanjeng Kyai Panji. The musical interaction between the European music ensemble and Javanese *gamelan* for accompanying classical Yogyakarta-style dance first took place at the Keraton Yogyakarta. Therefore, the primary research location is the Keraton Yogyakarta. Additionally, the research was also conducted outside the Keraton, specifically at Sanggar Tari Yayasan Siswa Among Beksa, a dance studio that still regularly holds rehearsals for classical dances such as *Bedhaya* and *Srimpi*, accompanied by Javanese *gamelan* and a European music ensemble.

Data collection was carried out through literature studies at several locations, including the Widya Budaya Library of the Yogyakarta Palace, the Kridha Mardawa Library of the Keraton Yogyakarta, the Sana Budaya Museum Library, the Regional Library and Archives Agency (BPAD) of Yogyakarta Special Region, and the Cultural Values Preservation Center (BPNB) Library in Yogyakarta. Other data in the form of photographs were obtained from the personal collection of the family of a former *abdi dalem* musikan (court musician), while video recordings of the *Bedhaya Sang Amurwabumi* dance performance were sourced from the documentation

division of the organizing committee. Video recordings were also obtained from the documentation of the Honorary Doctorate Award Ceremony for Sri Sultan Hamengku Buwono X by the Indonesian Institute of the Arts (ISI) Yogyakarta in 2011. Photographic documentation was conducted at Gedhong Sedahan (*Kagunan*), Bangsal Mandhalasana in the Keraton Yogyakarta complex, and at the home of R.W. Pradjawaditra, a former abdi dalem musikan in Kampung Musikanan.

To document the uniform costumes worn by palace musicians, photographs were taken at Gedhong Sedahan (*Kagunan*), while historical artifact documentation involved capturing images of Bangsal Mandhalasana, the site of European music activities, located in the inner courtyard of the Keraton Yogyakarta. The first interview was conducted at the Pradjawaditra family residence, where reproductions of photographs depicting the activities of abdi dalem musikan were made, along with an examination of archival diary records left by Pradjawaditra. The second set of interviews involved several sources, including experts in Keraton Yogyakarta arts and culture, *abdi dalem pamucal beksa* (dance instructors), *mataya* (dancers), *pengrawit* (*gamelan* musicians), and *musikan* (European-style musicians) associated with palace artistic activities. Special interviews were also conducted with individuals directly involved in the performances of *Bedhaya Sang Amurwabumi*.

3. Results and Discussion

3.1. Integration of European Musical Instruments into Javanese Gamelan (A Forced Practice)

European musical instruments, including bowed strings (violin, viola, cello, contrabass), wind instruments (trumpet, trombone, saxophone, tuba), and percussion (drums, cymbals), have been integrated into Javanese *gamelan* for *Bedhaya* dance accompaniment. This integration complements and enriches the melodic texture of Javanese *gamelan* but must not surpass the number of traditional *gamelan* instruments. As can be seen in Table 1.

Table 1. Integration of European musical instruments and Javanese *gamelan*

European Musical Instruments			Javanese Gamelan
<i>stringed instruments</i>	<i>wind instruments</i>	<i>percussion</i>	
Violin, Viola, Cello, Contrabass	Trompet, Trombon, Saxophone, Tuba	drum, Cymbal	Saron peking, saron demung, bonang barung, bonang penerus, bonang panembung, kethuk kenong, kempul, gong, kendang, bedhug

3.2. Filling Melodic Gaps to Enrich Dance Accompaniment

With the inclusion of several European musical instruments, the sound of the accompaniment for the *Bedhaya Sang Amurwabumi* dance will be enriched. The *Gendhing Gati*, which is played to accompany the *kapang-kapang* movements of the *Bedhaya*, was initially performed in a *mbalung* manner, meaning a unison between the sound of the *gamelan* and the European musical instruments. However, over time, several types of *gendhing gati* in the Keraton Yogyakarta are no longer performed in this way. The addition of European musical instruments in the performance of *Gendhing Gati* significantly enhances and enriches the character of these instruments when playing the *Gendhing Gati* composition.

Today, the accompaniment of *Gendhing Gati* is played polyphonically and even overlaps when the main melody is countered by the additional melodies played by the European musical instruments. To fill the melodic gaps when the main melody sustains long notes, the empty spaces are filled with fill-in tones played by the trumpet or sometimes the trombone, filling in the empty musical phrases.

This creates a kind of dialogue between the main melody, resembling the *balungan gendhing*, and the secondary melody. This interplay between the two melodies becomes particularly interesting when the European musical instruments are given a smaller portion of the melody compared to the Javanese *gamelan*. Here, the role of the European musical

instruments is to complement the Javanese *gamelan* accompaniment, making the *gamelan* melody sound richer and fuller in timbre. As can be seen in Fig. 1.



Fig. 1.Gendhing Gati Mardawa

3.3. Challenges in Harmonization for Dance Accompaniment

Musicians and dancers report a lack of precision in tuning between Javanese *gamelan* and European instruments. While attempts are made to match pitches, *gamelan* tuning cannot be adjusted instantly, unlike Western musical instruments. Despite these challenges, musicians and dancers acknowledge that the fusion enhances performance aesthetics. As can be seen in Table 2.

Table 2. A blend of musicians and dancers enhances the aesthetic appeal of the performance.

Informant	Position	Testimonial	Coding
Informant 1	Musician	There is a mismatch between the sound of European musical instruments and Javanese <i>gamelan</i> .	misalignment
Informant 2	Musician	Despite the disharmony, they are still played together, albeit somewhat forcefully.	misalignment
Informant 3	Musician	Harmonizing the pitch of <i>gamelan</i> and European musical instruments takes time and cannot be done instantly.	misalignment
Informant 4	Pengrawit	The sound of <i>gamelan</i> is difficult to tune or adjust to match the sound of European musical instruments.	misalignment
Dancer 5	Dancer	If the melodies of Javanese <i>gamelan</i> and European musical instruments are played differently, dancers experience a sense of discomfort.	discomfort

3.4. The Harmony of Javanese *Gamelan* and European Musical Instruments for Javanese Dance Accompaniment

According to sources, the combination of Javanese *gamelan* and European musical instruments for accompanying Javanese dance results in overlapping sounds. This is evidenced by the lack of synchronization between the tuning of *gamelan* and European musical instruments, which never achieve perfect precision despite efforts to do so. This claim is supported by testimonies from musicians, *gamelan* players (*pengrawit*), and dancers, as follows: Several of these testimonies indicate that European musicians who participated in accompanying the *Bedhaya Sang Amurwabumi* dance experienced discomfort due to sound discrepancies, although the combination was still forced. For *gamelan* players, as long as the European musical instruments were not louder than the Javanese *gamelan*, the issue was not significant. For the dancers, if the European musical instruments mimicked the *gamelan* melody in a way that aligned with the traditional *mbalung* style, it could enhance their dancing spirit and create a *ngengreng* (resonant) sound effect that boosted confidence, as expressed by Pujaningrum in her testimony. Joko Suprayitno stated that it is difficult to precisely match Javanese *gamelan* tuning with European musical instruments. Furthermore, he noted that only

pelog-tuned gamelan is somewhat close to Western musical tuning. For Western musicians, custom musical notation was created by transcribing gamelan notation into Western notation.

Sri Kawuryan, a court musician (*abdi dalem pengrawit*), testified that the fusion of gamelan and European musical instruments for accompanying the *Bedhaya Sang Amurwabumi* dance was a necessity. He further explained that, in principle, European musical instruments should support the *gamelan* and must not dominate. When Western instruments play gamelan melodies in the *mbalung* style, they should not overpower the bonang motifs such as *mipil* and *nggembyang*, as the bonang is the primary melodic instrument. If Western instruments introduce their own melodies, they may obscure the main bonang melody. According to Subuh, the sounds of Javanese gamelan and European musical instruments never fully integrate but are still forced to accompany the dance. In an interview, Subuh emphasized that the fusion of gamelan and Western instruments feels artificial but is still enjoyable. On the other hand, when *Gendhing Gati Mardawa* was used to accompany the *Bedhaya Sang Amurwabumi* dance, the tuning discrepancies between Javanese *gamelan* and the European musical ensemble were highly noticeable. However, *Bedhaya* dancers could still appreciate the unique sound sensation when gamelan and Western instruments played together. *Bedhaya Sang Amurwabumi* dancer Nooryastuti shared her perspective, stating that the combination of *gamelan* and European musical instruments enhanced her enthusiasm and confidence while dancing. The following is when the *Bedhaya Sang Amurwabumi* dancers enter the stage accompanied by a combination of Javanese gamelan and European musical instruments. Behind the dancers, musicians are seen playing European musical instruments led by an orchestra conductor. As can be seen in Fig. 2.



Fig. 2. Bedhaya 'Sang Amurwabumi' performed at the ISI Yogyakarta Concert hall. In the framework of the Awarding of Honorary Doctorate Degree in Performing Arts for Sri Sultan Hamengku Buwono X on December 27, 2011.

Fig. 3 shows the *Bedhaya Sang Amurwabumi* dancers perform the "*sembah*" movement, marking the start of the initial movement after entering the stage. Beside the dancers, Javanese musicians can be seen playing *gamelan* instruments to accompany the dance



Fig. 3. The Bedhaya Sang Amurwabumi dancers perform the "*sembah*" movement, marking the start of the initial movement after entering the stage. Beside the dancers, Javanese musicians can be seen playing *gamelan* instruments to accompany the dance.

3.5. Integration of European Musical Instruments in Javanese Gamelan

The integration of European musical instruments into Javanese gamelan was an enforced fusion aimed at accompanying *Bedhaya* dance in the Keraton Yogyakarta. This enforcement combined the distinct sound aesthetics of both musical traditions Javanese *gamelan* and Western instruments. As a result, the blended sound often appeared to overlap. This fusion was initiated by the Dutch under orders from the Sultan of Yogyakarta. In terms of tuning, neither Javanese *gamelan* nor European instruments share the same precise pitch. The integration of these instruments involved a degree of compromise, attempting to align their pitches as closely as possible. Despite their fundamental differences, both types of instruments could still function together in accompanying *Bedhaya Sang Amurwabumi*. Over time, the European musical instruments used for accompanying *Bedhaya Sang Amurwabumi* no longer merely imitated the *balungan* (skeletal melody) of gamelan but developed their distinct melodic structures. This divergence in melodic phrasing enriched the overall sound of *Gendhing Gati Mardawa*.

3.6. Filling Melodic Gaps to Enrich the Sound of Musical Accompaniment

Gendhing Gati Mardawa is one of the compositions used to accompany the *kapang-kapang* movements in *Bedhaya Sang Amurwabumi*. The structure of *Gendhing Gati Mardawa*, when played by Javanese gamelan alongside European musical instruments, allows for its notation to be rearranged. The purpose of rearranging this composition is to introduce a new timbre to the dance accompaniment performed by both the Javanese *gamelan* and the European ensemble. By closely analyzing the melodic phrasing of *Gendhing Gati Mardawa*, it is evident that the piece can be rearranged or performed with an increased number of musical instruments. Initially, the European ensemble only included wind and percussion instruments, but over time, it expanded to incorporate a full range of string instruments. The melody accompanying the *kapang-kapang* movements in *Bedhaya* has evolved. The primary change lies in the melodic approach, which originally adhered to the *mbalung* style but later deviated from it. The arrangement of *Gendhing Gati Mardawa* in *Bedhaya Sang Amurwabumi* has shifted from unison with European musical instruments to a more complex arrangement where Western instruments now provide counter-melodies. These changes align with the evolution of *gendhing* accompaniment in dance, particularly within the *Bedhaya Sang Amurwabumi* genre. The use of triplet motifs in European musical instruments has become a distinctive necessity, despite sometimes clashing with the character of *gendhing gati* or *gendhing mares*. This is because triplet or *triol* melodies are a hallmark of *gendhing mares'* compositions traditionally used for dance accompaniment.

3.7. Risks of Harmonization in Dance Accompaniment

The risks of harmonization in dance accompaniment refer to the effects of blending Javanese gamelan and European musical instruments, which often result in dissonance and imprecise pitch alignment. The overlapping sounds of these two musical traditions frequently create aesthetic conflicts that cannot be entirely avoided. In this case, European musical instruments must adjust their tuning because Javanese *gamelan* cannot be re-tuned quickly. Western instruments, on the other hand, are more flexible in tuning adjustments, making them more adaptable to different musical contexts. According to Joko Suprayitno, harmonization between gamelan and accompanying Western instruments can be achieved through pre-rehearsal tuning. However, even with prior tuning, the results will never be as precise as Western musical tuning. One of the main challenges in harmonizing these two traditions lies in the gamelan itself. The absence of a standardized tuning system in Javanese gamelan consistently poses difficulties in synchronizing with European musical instruments. This issue arises because the pitch of Javanese gamelan does not exactly match Western musical pitches unless modified, as seen in the *campursari* music system. In such cases, the gamelan sound is adjusted to closely approximate European musical instruments, creating an illusion of precision between the two musical traditions.

4. Conclusion

Research on the Coexistence of the *Gati Mardawa Gendhing* in the *Bedhaya Sang Amurwabumi* Dance accompaniment shows that the relationship between the musical structure of the *gendhing*, the dramatic needs of the dance, and the construction of its cultural meaning operates through the mechanism of musical coexistence namely, the encounter and fusion of

traditional elements that maintain references to standard forms while opening up space for performative innovation. The results of the study confirm the initial objective that the *Gati Mardawa* musical form functions not only as dance accompaniment but also as a symbolic device that operates within the aesthetic, historical, and ritual framework of the *Bedhaya* dance. Using a theoretical framework of music culture specifically the concepts of aesthetic sensibility, musical hybridity, and performative interpretation this study confirms that coexistence occurs through three domains: (1) the domain of structure, which maintains the patterns of *balungan*, *laras*, and *gatra*; (2) the domain of function, which adapts musical dynamics to the needs of movement dramaturgy; and (3) the realm of meaning, which reconstructs the symbolic relationship between the *gendhing*, palace values, and the cosmological narratives that live within *Bedhaya Sang Amurwabumi*. Through these findings, this research's academic contribution is evident in two main areas. First, it clarifies how musical coexistence can serve as an analytical model for understanding the relationship between music and dance in Javanese tradition, which has often been separated between musical and choreographic analysis. Second, it enriches the study of cultural music by demonstrating that innovation in the form of *gendhing* is not always in conflict with tradition, but rather forms part of the ongoing process of cultural negotiation within palace arts practices. Thus, this research not only illustrates the existence of *Gendhing Gati Mardawa* as an accompaniment to the *Bedhaya Sang Amurwabumi* dance, but also demonstrates how music can become an arena for dialogue between tradition and creativity, revitalizing the relevance of classical aesthetics in the context of contemporary performance.

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