

Pitch Relation as a Generative Basis for Tataluan in Sundanese Gamelan and Balinese Gong Kebyar

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ABSTRACT

This study examines the compositional process of *tataluan* for Sundanese *wayang golek* through the interaction of Sundanese gamelan and Balinese Gong Kebyar. The study originated from an artistic research process in which the two gamelan systems were explored through direct listening, experimentation, improvisation, rehearsal, and musical forming. Particular attention was given to the emergence of pitch relations between the two ensembles. The analysis employs Michael Tenzer's approach to musical organization, focusing on pitch, rhythm, periodicity, texture, segmentation, and form. The findings reveal three interconnected processes. First, auditory exploration produced three principal pitch relations—Da–Dang, Na–Ding, and Ti–Dong—which functioned as generative musical anchors rather than absolute pitch equivalences. Second, these pitch relations were elaborated through rhythmic placement, repetition, accentuation, dynamic variation, and differentiated instrumental functions, creating a layered interaction between the two ensembles. Third, the elaborated musical materials were organized into the formal sections of Tatalu, Bendrong, and Wawayangan, producing the larger structure of the *tataluan* composition. These findings indicate that the integration of Sundanese gamelan and Gong Kebyar did not occur through the homogenization of their musical characteristics. Instead, the compositional process developed through a trajectory of relation, elaboration, and formation, in which limited pitch correspondences became the basis for increasingly complex rhythmic, textural, and formal organization. The study therefore positions pitch relation as a generative point of departure in the creation of an intercultural gamelan composition for the pre-performance context of Sundanese *wayang golek*.

Keywords: Pitch Relation; Tataluan; Sundanese Gamelan; Gong Kebyar; Musical Analysis

INTRODUCTION

Tataluan occupies an important place in Sundanese *wayang golek* as the musical opening that prepares the transition into the performance. Its presence is shaped by the broader musical environment of Sundanese karawitan, where *waditra*, tuning, rhythmic organization, and melodic movement contribute to a distinctive sonic character (Soepandi, 1975; Suparli, 2010). The qualities of individual *waditra* also contribute differently to the overall texture of the ensemble (Kubarsah, 1994). In this study, *tataluan* is developed through the encounter between Sundanese gamelan and Balinese Gong Kebyar. The research proposal already positioned this encounter as a compositional

process involving the exploration of sound, pitch, tempo, rhythm, melody, and instrumental possibilities.

The encounter between these two ensembles became particularly significant at the level of pitch. Sundanese *pelog-salendro* operates within its own tuning practices and musical conventions (Warnika, 1982; Suparli, 2010), while Gong Kebyar emerges from a different Balinese orchestral and tuning environment (Herbst, 2014). During the creative process, the two ensembles were first approached through direct listening rather than through an attempt to standardize their tuning systems. This exploration produced three perceived pitch relations: Da–Dang, Na–Ding, and Ti–Dong. These relations became meaningful not because the paired pitches were assumed to be acoustically identical, but because they offered workable points of connection within the sounding conditions of the composition.

Tenzer's approach to gamelan analysis provides a useful way to examine what happened after these pitch relations were identified. His analysis of Balinese gamelan attends to the interaction of melodic organization, rhythmic cycles, repetition, density, and differentiated instrumental layers (Tenzer, 2000). From this perspective, pitch relation can be followed as it moves into larger musical processes. In the present work, the relations Da–Dang, Na–Ding, and Ti–Dong were developed through rhythmic placement, repetition, accentuation, dynamic change, and interaction between instrumental parts. This development also resonates with the compositional stages stated in the proposal, where exploration is followed by improvisation and *forming* as musical materials gradually acquire a more organized structure.

As the material develops, the interaction between the two ensembles becomes increasingly textural. Sundanese gamelan remains connected to the musical environment of *wayang golek*, while Gong Kebyar introduces other possibilities of rhythmic energy, accentuation, dynamic contrast, and instrumental density. The relation between them therefore grows through the organization of difference rather than through the elimination of difference. Tenzer's attention to rhythmic periodicity and instrumental stratification is useful here because it allows the analysis to move beyond individual pitches toward the ways different musical layers become coordinated within a larger process (Tenzer, 2000). The larger compositional form is organized into Tatalu, Bendrong, and Wawayangan, three sections already identified in the research proposal. Their significance lies not only in their names, but in the changing organization of rhythm, repetition, density, accentuation, and instrumental interaction across the work. In this sense, the form of the *tataluan* grows out of smaller musical relationships. Pitch relations provide an initial point of contact; rhythmic, periodic, and textural processes expand those relations; and the accumulated transformations eventually shape the larger sectional form.

Previous sources used in the study provide important foundations for understanding Sundanese karawitan theory (Soepandi, 1975, 1976), *pelog-salendro* practice (Warnika, 1982; Suparli, 2010), Sundanese *waditra* (Kubarsah, 1994), musical creation (Sukerta, 2011), and Gong Kebyar (Herbst, 2014). Tenzer (2000), meanwhile, offers an analytical perspective for examining how musical coherence emerges through relationships among pitch, rhythm, periodicity, texture, and form. The present study brings these concerns together by tracing how pitch relations encountered during the creation of a Sundanese–Balinese *tataluan* develop into larger musical organization. The analysis therefore follows three related processes: pitch relations as the generative basis of the *tataluan*, their rhythmic, periodic, and textural elaboration, and their formal organization into Tatalu, Bendrong, and Wawayangan.

METHOD

This study employed an artistic research approach to create a *tataluan* using Sundanese gamelan and Balinese Gong Kebyar. The creative process followed Sukerta's (2011) stages of idea formulation, exploration, improvisation, forming, rehearsal, and performance, with attention to sound, pitch, rhythm, tempo, melody, and instrumentation. The main data were the resulting composition, rehearsal process, and direct musical experimentation. Particular attention was given to the pitch relations Da–Dang, Na–Ding, and Ti–Dong, which emerged through comparative listening. The composition was then analyzed using Tenzer's framework, focusing on pitch, rhythm, periodicity, texture, segmentation, and form. The analysis traced how initial pitch relations were elaborated through rhythmic and textural processes and subsequently organized into the three main sections: *Tatalu*, *Bendrong*, and *Wawayangan*.

RESULTS AND DISCUSSION

The compositional process developed through three connected levels of musical organization. It began with direct listening between Sundanese gamelan and Balinese Gong Kebyar, from which three recurring pitch relations emerged: Da–Dang, Na–Ding, and Ti–Dong. These relations became the initial compositional anchors, not as claims of absolute pitch equivalence, but as workable points of connection between the two ensembles.

The identified pitch relations were then elaborated through rhythmic placement, repetition, accentuation, dynamic change, and differentiated instrumental interaction. In this stage, pitch was no longer treated as an isolated element, but as material that gained musical function through periodicity and texture. The two ensembles remained distinguishable in their sonic roles, while their interaction created a more continuous musical organization.

This development ultimately led to the larger formal structure of the work. The composition was organized into *Tatalu*, *Bendrong*, and *Wawayangan*, as established in the research design. Read through Tenzer's analytical perspective, the form emerged from the accumulation and transformation of smaller musical relations: pitch correspondences were developed into rhythmic and textural patterns, and these patterns were subsequently differentiated into larger sections.

The overall process can therefore be summarized as:



Figure 1 Pitch Relation to *Tataluan* Process

The finding indicates that the *tataluan* was formed through a gradual movement from relation, to elaboration, to formal organization. Pitch relation provided the initial

connection, while rhythm, periodicity, and texture enabled that connection to develop into the larger compositional form.

Pitch Relations as Generative Musical Anchors

The first finding concerns the emergence of Da–Dang, Na–Ding, and Ti–Dong during the early stage of musical exploration. These relations were not predetermined in the compositional design. They appeared when pitches from Sundanese gamelan and Gong Kebyar were sounded, listened to, and compared directly. What matters here is that the act of listening gradually changed the status of these pitches. At first, they were simply sounds belonging to two different gamelan systems; once certain correspondences were repeatedly perceived and tested, they became usable compositional points of contact.

Tenzer's perspective helps explain why these relations became important beyond the question of tuning. Musical material in gamelan acquires structural significance through its placement within larger melodic, rhythmic, cyclic, and textural relationships (Tenzer, 2000). The three pitch relations in this study therefore functioned less as fixed equivalences than as generative musical anchors. They provided enough correspondence for the two ensembles to begin interacting without requiring their tuning systems to be made identical. The compositional possibility emerged precisely from this limited relation: a small sonic encounter became the point from which a larger musical organization could grow.

Rhythmic, Periodic, and Textural Elaboration

The second finding shows that pitch correspondence alone did not produce the composition. Once the relations Da–Dang, Na–Ding, and Ti–Dong had been established, they were subjected to repetition, rhythmic placement, accentuation, changes in dynamics, and interaction among instrumental parts. Repetition made the relations recognizable, while rhythmic and dynamic variation prevented them from remaining static. As more instruments entered, the initial pitch relations gradually became part of a denser musical field.

This development resonates with Tenzer's attention to periodicity, rhythmic density, and instrumental stratification in gamelan music (Tenzer, 2000). Different musical layers can move with different functions and densities while remaining connected within a larger organization. A similar process appears in the present *tataluan*. Sundanese gamelan and Gong Kebyar were not required to duplicate one another; instead, their contrasting rhythmic, accentual, and timbral possibilities were distributed within the composition. The resulting texture was therefore built from interaction rather than uniformity. What began as pitch correspondence developed into a musical relationship sustained by repetition, contrast, and differentiated instrumental roles.

From Musical Elaboration to Tataluan Form

The third finding appears when these smaller musical relationships begin to acquire formal direction. The composition was eventually organized into Tatalu, Bendrong, and Wawayangan, three sections that had already been anticipated in the research design. Yet the sections became musically meaningful only after the materials generated during exploration and rehearsal were organized into different combinations of rhythm, repetition, accent, dynamics, and instrumental density. In this way, form was not simply imposed on the musical material from the beginning; it developed as the material itself became increasingly differentiated.

Tenzer's analytical perspective allows this process to be understood as a movement from local musical events toward larger structural articulation (Tenzer, 2000). Pitch relations created initial points of connection, rhythmic and periodic processes extended those relations through time, and textural differentiation gave them changing degrees of density and intensity. These transformations eventually provided the musical distinctions through which Tatalu, Bendrong, and Wawayangan could operate as separate but connected sections. The *tataluan* form can therefore be read as the outcome of a gradual compositional trajectory: relation → elaboration → formation. In this trajectory, the discovery of pitch relations does not stand apart from the completed work; it remains audible as the generative condition from which the broader rhythmic, textural, and formal structure developed.

CONCLUSION

This study shows that the *tataluan* developed from three initial pitch relations—Da–Dang, Na–Ding, and Ti–Dong—which were subsequently elaborated through rhythm, periodicity, texture, and formal organization. These processes eventually shaped the sections of Tatalu, Bendrong, and Wawayangan. Through Tenzer's analytical perspective, the compositional trajectory can be understood as pitch relation → elaboration → formation.

Future research may examine these pitch relations through acoustic measurement, detailed transcription, and comparative tuning analysis across different gamelan sets. This would help determine how stable and transferable such relations are beyond the specific ensemble used in this study.

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