

**IMPROVISATION AND MUSIC EDUCATION: FROM THE SONIC TO
SOCIAL ATTUNEMENT**

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ABSTRAK

Untuk menciptakan keterjalinan dengan musik, pertama-tama musisi perlu menciptakan hubungan dengan suara batin mereka, dan cara mereka mendekati manifestasi suara dari instrumen mereka (apakah itu melalui penggunaan tangan, suara, atau manifestasi pikiran semata). Karena proses ini bersifat dialektika, kemampuan untuk mengembangkan jenis responsivitas ini terkadang disebut sebagai “penyelarasan” (attunement), yang sama pentingnya dalam bidang musik seperti halnya dalam pertukaran sosial. Oleh karena itu, latihan musik dapat memainkan peran penting dalam mengembangkan bakat tersebut di antara pemain dari berbagai usia.

Makalah ini berfokus pada faktor-faktor yang merangsang atau menghambat ekspresi, melalui lensa musik klasik barat dan musik gamelan Jawa. Akan dikatakan bahwa perubahan kesadaran dalam pengalaman individu, yang diperoleh melalui improvisasi musik dapat menemukan refleksinya pada sinkroni interaktif dalam bingkai sosial dan budaya yang lebih besar.

Kata Kunci: *Alur, gamelan, improvisasi, pendidikan musik*

ABSTRACT

In order to create a relationship to music, artists first need to create a relationship with their inner sound, and the way in which they approach the manifestation of sound from their instrument (whether it'd be through the use of hands, voice, or a plain manifestation of thoughts).

Since this process is dialectic in its nature, the ability to develop this type of responsiveness, sometimes referred to as “attunement”, is as important in the musical sphere as it is in social exchanges. Therefore, musical practice can play an important role in developing such aptitude among people of all ages.

This paper focuses on the factors that stimulate or inhibit expression, through the lens of western classical and Javanese gamelan musical practice. It will be argued that the change of awareness in individual experience, gained through music improvisation can find its reflection on the interactive synchrony in a larger social, and cultural frame.

Keywords: *flow, gamelan, improvisation, music education*

INTRODUCTION

The process of dividing the intellectual from the willing guidance is how the French philosopher Ranciere (1991) perceives *emancipation*. For one cannot be emancipated as long as one's confidence depends on the confirmation of one's intelligence by those s/he is subordinated to. That is to say, the students need to be able to rely on their own intelligence in order to be emancipated. This principle seems to be long forgotten among the members of the society, who may or may not have taken up the positions of educators themselves, further prolonging the hierarchical structure of the educational institutions, and moreover, the society as such.

Music education is no exception in that regard. In this field of creativity, it is an unfortunate fact, that many students of western classical music develop a high dependence on the approval and estimation by their superiors, either through the competitive nature that is instilled in them at the very young age, or through the yearly examinations, that are often perceived as an 'end goal'. Even though these factors can sometimes offer an important stimulation to the teacher and the student, and lead them towards exploring and expanding the abilities of a young musician, they also cause a creative block in students that prevents them from engaging in musical dialogue with others, outside the written score.

After observing the rehearsals of gamelan music in Java, several similarities arose between that which Jacotot calls *universal teaching*, and the way in which

a Javanese guru leads their students. By universal teaching it is considered that we all have a capacity to '... learn something without any means of having it explained to us' (Jacotot, 1823), which, to a certain extent, correlates to the Javanese notion of *golekåná dewe*, which can be translatable to «seeking for oneself». Somewhat paradoxically, what Jacotot intended to introduce to the universities as a defiance towards the old scholastic systems, has been introduced into formal education, accompanied by the significant fees that follow students on their journey towards academic enlightenment. As a result, many students choose to leave formal education in the Arts, and pursue more pragmatic vocations, or maintain artistic practice on the basis of *golekåná dewe* (within one's artistic collective of peers).

In the methodology of Javanese gamelan music teaching, there seems to be a repeating pattern of *golekåná dewe* maintained by those who have the reputation of a master, or a guru. It can be seen in the ways that, for instance, a discussion on different topics is opened only after the individual makes an inquiry into a particular subject, rather than masters bringing the matter up by themselves. Similarly, the music rehearsals have an open-end structure, which allows anyone interested in pursuing a particular technique, free attendance. In this way, an aspirant will have to prove their interest and dedication, which can later lead to further acquisition of knowledge. *Golekåná dewe* often means that longer time is needed for an individual to reach new

information regarding the material s/he is interested in, but according to many Javanese teachers, that doesn't matter in the process of using one's will in the pursuit of knowledge. Furthermore, in theory, this way encourages a student to seek information using multiple sources and to engage in social activities that can help improve both their social skills as well as an understanding of a problem from multiple perspectives.

Based on the data collected during the period of 2020-2021, this paper will present the readers with the information relevant to the study of music in Java, and bring forth the parallels that refer to the state of *flow* among the musicians in Javanese society. Since this is a highly subjective topic, and the global pandemic caused many institutions to close their doors for a prolonged period of time, this article will rely on the materials gathered through limited class observation, empirical evidence, and literature study. Such studies involve Miell and McDonald's research of the impact of the social variables on creativity (2000), or Koutsoupidou and Hargreaves's study of the improvisation on the development of children's creative thinking in music (2009). These studies have proven that a certain level of flexibility is necessary in order to create an environment in which creative interaction can flourish among young and adult minds.

DISCUSSION

Csikszentmihalyi's *flow*

In the book "The psychology of optimal experience" (1990), Csikszentmihalyi

suggests that one of the ways to attain an optimal experience in life is through the experience of *flow*. By flow he refers to the ability to approach daily tasks, and actions as an end in itself, as an autotelic experience. The word *autotelic* derives from the Greek αὐτοτελής (*autotelēs*), formed from αὐτός (*autos*, "self") and τέλος (*telos*, "end" or "goal").

Flow itself can be attained in various activities. As noted, it is a process that can occur in any of the daily activities where one is likely to be invested in the goals they themselves set off to pursue (Csikszentmihalyi, 1990: 120). The music performance and creativity are just some of the matters that can be improved, but also triggered by orienting oneself towards the autotelic, rather than exotelic practice.

Even though consciousness should rather be observed as the continuously evolving matter, Csikszentmihalyi defines it as an *intentionally ordered information*. He suggests that one can approach this ordering of information by a conscious direction of attention, that in turn shapes our very own being. He addresses the following contradiction: "At one point we're saying that the *self* directs attention, at another, that attention determines the self. In fact, both these statements are true: consciousness is not a strictly linear system, but one in which circular causality obtains. Attention shapes the self, and is in turn shaped by it."

Here, we can notice the importance of interaction that seems to be standing at the base of all conscious activities. Whether it is practiced among one's

milieu, or in the approach one has towards the actions at hand, the intention and experience are closely intertwined. In order to build the ability to relate to one's intentions, to clarify them, and express them, one may start by learning this process by non-verbal means.

In the West, the need for interaction is often subsided by the culture-bound request for recognition. Interactional synchrony is often reserved for the infant period, between mother and the child, or between a toddler and peers. Yet, in the creative fields, the focus is often moved to one's ability to distinguish themselves, rather than to build connections according to their talents.

Improvisation

Improvisation is one of the main sources of creativity. It is the practice on which most cultures have built their musical styles and traditions. It is a practice through which all of the composers of classical music have developed their music and attained a rank as the great musicians of their time. Yet, somehow, the current curriculum for music education seldom includes it in the student's practice.

In the west, classical music education has become so entailed in the interpretational skills, that many students leave the years-long musical education with only scatters of classical compositions left in their physical and mental memory, and a tremendous fear of open improvisational sessions involving self-taught musicians on instruments other than their own. The fact that

there is no time in class dedicated to the practice of listening and improvisation, in such a setting as a specialized music school, opens a question towards the goal of music education today.

There seems to be a limit to what is expected of a young music student when it comes to his/ her creative capacities. It is apparent that the way in which music education is constructed influences the ability of young people to sustain great deals of pressure, to preserve poise when exposed to the public scrutiny, and develop the ability to dive into the meaning behind sounds of acclaimed composers, yet, if one is not technically proficient to do so, s/he may be stripped of the 'title' musically able, thus moving into the 'consumer' category.

With focus on technical proficiency on the instrument, and interpretation of the musical score, the teaching technique employed in a western classroom often operates from critical and editorial point of view, leaving little to no room for exploration of other music genres, techniques or styles. Improvisation, on the other hand, if practiced, can help in developing the inner ear, a musical sensibility and responsiveness on one's instrument. Hargreaves sees improvisation as '... the process of generating new ideas in music without any censorship or editing ... it is regarded as a spontaneous instrumental performance ...' (Hargreaves, 1999: 29). How is this censorship employed in the creative sphere inhibiting cultural development? Does the production of artists mainly serve the music industry? How often

do young musicians have a chance to act spontaneously, or to perceive music practice as a spontaneous act during music education?

Apart from being a pivotal element in examining the past and present in a particular culture, music can be a perfect tool to be used when it comes to shaping the nature of interactions, and for building confidence among children and adults. It is shown in many curriculum areas that innate confidence stimulates creative thinking and solution-oriented mind-set (McDonald, Miell, 2000: 36). Building a shared *social reality*, term used by Rogoff (1992), helps in creating a space in which individuals find themselves uninhibited by fear to offer their ideas, and also have sensibility to hear the ideas of others, thus discovering creative solutions to both social and artistic problems.

The musical structure of gamelan

In gamelan performance, the musician acts as an inventor, an improviser, always and everywhere (Benamou, 2010: 137). There is never a single fixed way of performing, and moreover, it's considered 'insufficient' if one plays only the basic melodic form, repeatedly in the same manner. It's expected of a musician to be playful in their exploration of expression, their sensibility, and ability to move within the limited space that is offered in the musical structure. Each musical structure has a set of rules (*aturan*) within which a musician has to work, and find the most creative way to embellish the melodic framework.

Each musical structure can be observed from the aspects that are fixed, or a subject to reinterpretation. In the book *Flow, Gestures and Spaces in Free Jazz*, Guerino Mazzola, explores the ways in which the structures are shaped among free jazz musicians. This principle can be applied to classical, aleatoric, or in this case, gamelan musical structure as well. According to Mazzola, a musical structure can be perceived in two modes, 'closed' and 'open' space (2009: 42).

Closed space within a musical form would be:

- a) *Tonality*, with the cadenzas (in gamelan - *suwuk*) and parts of modulation;
- b) The dichotomy of consonants and dissonances (in gamelan this can refer to the *pathet* modes);
- c) The meter, or a numeric bar scheme, such as a song form, a 4-bar musical phrase, or musical structures found in gamelan (*lancaran*, *ladrang*, *ketawang*).
- d) The conductor's baton, or in the gamelan ensemble a double-headed (sometimes cylindrical) drum, *kendhang*;

An open space would be everything that allows for expansion, whatever it'd be in harmonic functions, time perception and space limits, or choice of instruments. So far, the instruments of the gamelan ensemble have been used in a strict manner by Indonesian composers, at least when it comes to the role they have within a musical piece. The role of each instrument is corresponding to the other one, both structurally and sonically. It is

mostly western composers who attempt to use gamelan instruments solely as individual, independent sources of sound, whereas such attitude towards gamelan in Java is rare, if not, completely absent. Nevertheless, even in the fixed musical structure, musicians are encouraged to add to the overall sound, by responding independently to the framework in which they're in.

In the art of karawitan, we can find examples of such fixed structure in the way the irama is constructed. Irama refers to the tempo and rhythm of the melody (*lagu*). It is a “... relative width of the melodic phrase (*gatra*)” (Martopangrawit, 1975). There are five types of irama, and they can be measured by the number of strokes of saron penerus on the single beat of the balungan.

Irama level	Irama name		
I or 1/1	lancar	Number of saron penerus beats:	1
II or ½	tanggung	Number of saron penerus beats:	2
III or ¼	dados	Number of saron penerus beats:	4
IV or ⅓	wilet	Number of saron penerus beats:	8
V or 1/16	rangkep	Number of saron penerus beats:	16

FIG. 1. Irama name and Irama level

In addition, we can observe how this pattern applies in the real-time if the dots represent the saron penerus beats:

Irama lancar:	6532
Irama tanggung:	.6.5.3.2
Irama dados:	...6...5...3...2
Irama wilet:6.....5.....3.....2
Irama rangkep:6.....5.....3.....2

FIG. 2. Example of the irama structure (source: “*Central Javanese Gamelan handbook*”, Jo Hilder, 1992)

As the tempo becomes slower, the ‘time’ between the notes widens, which invites the elaborating instruments to take a more prominent role. The elaborating instruments such as gender, rebab, bonang and saron penerus have a freedom to embellish the melodic frame in their own interpretation (*garap*).

Nonetheless, performing improvisation in the gamelan ensemble is done exclusively within a ‘closed’ space. In this mode, the musicians need to maintain a constant awareness of each other’s positions and the imminent spaces between themselves that allows for the music to unfold with relief and collaborative presence.

The creativity lies in those ‘in-between’ spaces. To obtain such an understanding of the spaces in music one “... must be capable of being confronted with a no-space or totally empty space situation. It then happens that the space is only reified when it is treated.” (Mazzola, 2009:44)

Here, being in one fixed tonal structure, and having awareness of consonant tones is of great importance, and gamelan in that matter works perfectly. There is a constant flux of freedom and restraint, having instruments that play in a fixed, metric manner that flow with the points of melodic confluence (like balungan instruments), and the fluid, elaborative ones.

Pathet

Another concept that is embedded in the practice of gamelan is the symbolism and structure of a set of “modes”, called

pathet. In order to grasp the meaning of the word, the student may initially learn a formula of each pathet. Structurally, they consist of specific tones within both **slendro** and **pelog** tuning.

name of the key sign for the key in pélog	Pn	Gl	Dd	Pl	Lm	Nm	Br
	1	2	3	4	5	6	7
name of the key sign for the key in sléndro	Br	Gl	Dd	Lm	Nm		
	1	2	3	5	6		

[Pn=panunggal, Gl=gulu, Dd=dhadha, Pl=pélog, Lm=lima, Nm=nem, Br=barang]

FIG 1. Tone names and signs (Ki Sindoesawarno, 1955. *Ilmu Karawitan, Vol, 1*)

We can distinguish three pathet modes within each tuning. In **slendro**, we will use slendro enem, sângå, and manyurå.

pathet enem :

6 - 5 - 3 - 2
enem - lima - dhadha - gulu

pathet sângå:

2 - 1 - 6 - 5
gulu - barang - enem - lima

pathet manyurå:

3 - 2 - 1 - 6
dhadha - gulu - barang - enem

FIG. 2. List of Pathet in the Slendro tuning (Sastrapustaka, B. Y. H. 1984. *Wedha Pradangga Kewedhar*)

In **pelog** tuning there are also three types of pathet:

pathet lima:

5 - 4 - 2 - 1
lima - dhadha - gulu - pannunggal

or 5-3-2-1 (new)

pathet pelog enem (same as in pathet sanga):

2 - 1 - 6 - 5
gulu - pannunggal - enem - lima

pathet pelog barang:

3 - 2 - 7 - 6
dhadha - gulu - barang - enem

FIG 2.1 List of Pathet in the Pelog tuning (Sastrapustaka, B. Y. H. 1984. *Wedha Pradangga Kewedhar*)

Pathet enem is played as an accompaniment, or as a means to transmit the feelings of calm, simple and plain character, whereas pathet sanga resonates with nobility, joy, pain and calm. Gendhing in pathet manyura is perceived as energetic, coquettish and arrogant in character.

The term pathet is an intrinsic part of Javanese philosophy, therefore it doesn't apply solely to musical practice. It can be seen in the attitude, or as a mannerism in which Javanese carry themselves in daily interactions. A highly respected guru, Sastrapustaka, gave the following example as he described the meaning of *pathet* in the Javanese moral teachings:

'... if you wish to achieve your high aspirations, first all your desires must be restrained (dipathet). You must keep your body strong; otherwise its condition will weaken and deteriorate, and, along with it, the condition of your soul. Every day people are certain to have various desires. I will give an example. Desire flows continuously, like water in the river, and it must be dammed up

(be restrained, stopped; dipathet). When the water (desire) has built up, concentrate your thoughts and look for what you really desire. When you are sure you have found it, open the dam and the water (desire) will rush out and carry you quickly to the aspiration you wish to attain.'

Through this lesson, we find out that pathet signifies restraint, and so much more as a part of livelihood than music only. So, how can restraint be applied to the musical scale? It seems likely that, in building a particular atmosphere, or mode, the approach seen here is focused on what is left out, rather than what is included. The particular atmosphere is free of certain elements, rather than being immersed in them. The joyful atmosphere is free of arrogance, and vice versa. It is not the question of what we feel, but what we don't feel that can help us define our current state of mind and soul.

To better understand the origin of such choices made for creating pathet in music, we must look into the art of Wayang Kulit, and the stories that are being accompanied by the gamelan ensemble. The art of Wayang Kulit, or shadow puppet theater tells the stories of Mahabharata, Ramayana, the East-Javanese Prince Panji cycle, as well as various muslim stories. These performances often last throughout the night, starting from 7,30 PM sometimes until 6 AM. It is the central practice that transmits stories and ideas through the versatile dalang (the puppeteer and a story-teller) and pesindhen accompanied by the gamelan orchestra. Dhalang and pesindhen have the power and

responsibility to give social comments, to educate and spread ideas extracted from these stories, as well as to bring the community closer together through commenting on the local events during the comedic segment of the play. At this time of the play, the mythical and earthly come together, and for a moment the local community can find themselves exposed to the 'all-seeing' eye of gods and ancestors. Because the comments are spoken through the characters of local mythical beings among themselves, they somewhat lose the impact that a direct commentary would have, thus creating an elevated atmosphere, by observing an issue from a detached point of view. It also helps that the performers are seated behind the large screen or sheet on which the puppets are reflected upon, so that the personal contact is absent from the mind's-eye.

Through the performance, there are several segments of the play that carry an encrypted message, recognizable to those who listen, and are familiar with Javanese music. According to pak Sastrapustaka, we can distinguish three major segments within the Wayang kulit play.

One, that lasts from the first scene until midnight, would be played in pathet enam. This choice is connected to the nature of the story, and issues that are being raised during this time. (1984:328)

If we look at the pathet **enam** as [6 - 5 - 3 - 2], we will notice that the 'form' or [1] is lacking. The story is still in the phase of implication, an innuendo that speaks to the audience from the outskirts of the whole. If translated literally, it

offers the following suggestion: *'the feeling of love gives life to the way'* ([J] *rasa sangsem nguripi dalan*), or *'the way of life is in loving feelings'* ([J] *dalaning urip nangsemi rasa*).

It indicates that the following story involves love, and passionate feelings, but the viewer is not yet introduced to the core plot.

From this pathet, music slowly moves into the next period, which is performed in pathet **sanga**. This particular segment in Wayang Kulit often discusses the form of love, how it can be obtained and its significance in life. The translation of the pathet sanga [2 - 1 - 6 - 5] can be: [J] *dalane awujud rasa sengsem*, meaning, *'the way has the form of loving feelings'*, or *sengseming rasa dadi wujuding dalan*, *'the loving feelings are the form of a way'*. Here, it's common that strong feelings arise among the wayang characters, some of which related to romantic feelings, but very often it will also represent the turmoil in the spiritual sphere, among casts, or warriors, feelings that may flicker and flare up out of control (1984:329). Here, interestingly enough, the tone dhadha [3], or life is absent.

The last period of wayang kulit (from 3 am - 6 am) slowly re-establishes the balance in the inner and outer universe. We move towards the resolution. Life and all its issues become clearer and clearer. Here the music flows in the pathet **manyura** [3 - 2 - 1 - 6]. [J] *Uriping dalan awujud rasa - 'the life of the way takes the form of senses'*; [J] *Wujuding rasa nguripi dalan - 'the forms of senses give life to the way'*.

In pathet manyura, the tone lima [5] - love, passion is lacking. The passions have to dissolve into the overall feelings, to be integrated into the unity of rasa in order for life to move on its way.

Through the pathet formulation, we can see how the flux of structure and improvisation can be built following the particular character of a song. By describing the meaning behind a particular sound, the group of musicians can gain a platform on which to build a harmonious musical structure. Moreover, if the voice is involved, it is not uncommon to choose a particular set of words to produce that shared reality and process it through a joint attention. Such examples are seen in the group therapy sessions, in which performance is often structured in such a way that the meaning behind the words, when externalized, becomes a source of strength and a collective healing process.

Flow within the musical structure

In gamelan music, the external elements often influence the internal. Many gamelan masters bring out in conversation the notion that young student's characters eventually become close to the symbolic meaning of the instrument they play in the gamelan ensemble. For example, a kendhang player may develop the character of a leader, or the person who plays gong will grow patient in life. The choice of instrument also depends on the inherent character of the child. Now, unless a musician is specialized in one particular instrument like gender or rebab, the

ideal that can be accomplished through gamelan practice is being able to develop all of the characteristics that will make one person 'whole', by engaging with each instrument individually.

Furthermore, in karawitan, there are no two gamelan groups that will play the same melodic pattern (cengkok). It is the responsibility and a calling of a musician to enliven the melody, by contributing their personal style to it, and making it original and authentic for that particular group (Benamou, 2010:137). While there are no official competitions of gamelan ensembles, there are many festivals and ceremonies during which the gamelan groups may 'compete' among themselves. This is done in the exhibitive manner, rather than competing for a prize during the performance. Being in the relaxed state of mind, relieved of the pressure that a competition may impose, is paramount for any artist to be in the state of flow, and to enjoy the process.

One of the main principles in the learning techniques employed in gamelan, is the development of intuition. The intuitive learning is stripped of the exotelic end-point, and is placed in the mode of consciousness that exalts in the abstract, cyclical time perception occurring at the particular moment. The older generation gurus would direct their students to play as if they are meditating in front of a gamelan set (Benemou, 2010:50). Such an intense focus could often lead individuals to an altered state of mind, during which, performers could step out of their 'ego-self', and be immersed in the 'higher-self', through

contemplating on the object of creation (Walton, 2007:32). The group flow is then even more likely to occur.

While this method is scarce in the western society today, it is nonetheless possible to develop this intuitive, holistic perception of music, that doesn't require immediate reference to the visual cue, or the logical explanation of its structure. As both analytical, and intuitive modes are a part of the human experience, it seems like there needs to be an effort of gurus and teachers to bridge that process of learning among the students.

CONCLUSION

There are several factors often reported by those who experience the state of *flow*: high challenge - skill balance; clear goals; immediate feedback; sense of control; intense concentration; merging of action and awareness; loss of self-consciousness; distorted perception of time; a sense that the activity is intrinsically rewarding.

Even though these factors have the defining characteristics of the state of flow, I would like to argue that some of them are also likely to arise as a result of familiarity with the narrative. This argument arises from the experiences of many subjects who reported the state of flow by practicing a repetitive activity, or in the case of classical musicians, the familiarity with the written score during the performance.

This state of 'flow' can be presented and examined from the individual standpoint, yet it cannot be exempt from what is called the *interactional*

synchrony. This term was originally coined and conceptualized by Condon and Ogston (1971), who found that there is a high behavioral attunement between speakers and hearers. Through the analysis of conversations recorded on the video tapes, frame by frame, they saw the two individuals almost as “moving according to the same set of strings”. When brought down to numeric measurement, they discovered that people are able to synchronise in both verbal and non-verbal behaviour in as little as 1/20th of a second (Sawyer, 2003:38).

The dialectical mode in which the musicians operate thus has a great potential to expand the sense of reciprocity and interconnectedness among its practitioners instead of being subject to one’s authority and scrutiny.

The use of non-verbal, and non-visual cues, such as in the aural learning processes, has already seen its application in experiments that examined the effects of group improvisation in reducing stress, growing empathy among people, as well as communication skills among its participants (McDonald, Miell, 2000).

If the young people are taught to develop their perception through relying on other senses, apart from visual cues, or verbal instructions, this could affect their ability to interpret the common narrative from another stand-point, moving the focus towards a liminal space, where an individual is in a constant dialogue with the environment. As learning begins on the level of individual experience, and as the change in the awareness in one

individual can affect another, so the change of values and consciousness in the educational system may affect other cultural values as well (Diamond, 1979:101).

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