Ancient music instrument in east java: study about continuity and change in the 10-15 century

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Abstract. This research is included in art history, especially music art in East Java. The oldest evidence of musical instruments in this area is evidenced through the Jalatunda site, Trawas. On one of the relief panels found apsara (nymphs) plays vina (stringed instrument). This site was from the 10th century. Since then the relief of musical instruments more and more carved. This is apparent in some temples in East Java after the 11th century. Not only in terms of the number of instruments, but the type of musical instruments is also displayed more diverse. The inflatable instrument (xylophone), the percussion instrument (membraphone), or idiophone show diversity over time. The development is an interesting phenomenon in the life of music art. Problems in this research, whether within the period of 5 centuries (10-15 AD century) there is a change in how to play instrument. This research uses ethnographic analogy method. In the archaeological discipline, this method is used to reconstruct past lives through activities that can be found in temple reliefs in East Java.

1. Introduction

In the daily life of ancient Javanese society, in the 10th century, music cannot be separated from daily life. Various types of instruments are produced for various entertainment purposes, event or religious markers. It is seen clearly in the reliefs at Temple Penataran, East Java. Relief of this musical is very interesting. In addition to the music history information, also provides more information about the context of musical activities, as well as the function of the instrument itself. This paper aims to identify some music instrument which found in 10 centuries until 15 centuries.

Penataran Temple is located in Nglegok village, Talun sub-district, Blitar. Approximately 200 Km south direction from Surabaya, the capital of East Java province. According to the inscription of 1197, this Penataran temple is called Palah, founded by King srangga. This temple is a complex area of 180 x 60 M. Inside the temple, there are several buildings that were established in different time, in the beginning of XII century AD until the 15th century AD[1]. The Mother Temple in the inner courtyard is the oldest building built by King Srangga, the third king in the era of the Isyana dynasty of the Kediri kingdom. The Mother Temple stands on 2 terraces, and one worn-out cottage. The roof is in the form of
a meru, towering number of 9 or 11. The main temple has a Ramayana relief on the first terrace of the
temple, and kresnayana in second terrace[2].

The next building is Temple Angka tahun, it is called the temple Angka tahun because it is carved
on it's doorstep, a year of 1291 Caka or 1329 AD. This is the reign of King Hayamwuruk, the fourth
king of the Rajasa dynasty, from the kingdom of Majapahit. The kings of Majapahit kingdom are then
add many elements of other temples, such as statues of the doorman in the yard of the temple and the
holy pool or patirtaan[3].

Pendopo terrace, which is in the middle courtyard, in 1375 AD. This terrace is very important,
because at the base or pendopo basement, decorated with reliefs containing folklores, such as Sritanjung.
This relief tells of the sacrifice of Sri tanjung to prove loyalty to his beloved, Sidapaksa. The Relief of
the Setyawan tells a couple's longing for love to meet in spite of the obstacles. Relief Bubuksah and
Gagang aking. These reliefs tell the struggle of two best friends who among them earlier on reaching
moksa, by fasting or not fasting. Relief pennant, tells the struggle of a knight to unite the country and
his kidnapped lover. Some unidentified relief scenes. Some scenes of the story, show daily life at that
time. People make music, people pray, people make love, or the environment of flora-fauna is depicted
in this 29-meter gallery.

As a temple of the Kingdom for 3 dynasties, this place used to be visited by people from all over
Java. According to the Palah inscription of 1291 AD, this temple was established to worship Sang Hyang
Acalapati, another name for mentioning Raja gunung or Shiva itself. Inside the main temple, in the form
of Meru, ther is the god of Siwa stay[4]. Therefore, it is estimated that the Siva priests are as the leaders
of the ceremony in this temple. In addition to the priests, the ceremonial attendants or holy people live
in this place. According to the ancient book of the 15th century "Sang Bhujangga Manik", this temple
Palah is very crowded of people visit, not only as pilgrims but also as a place to study religion. According
to Santiko, a senior archaeologist, Penataran temple is one of the mandala kadewaguruan or religious
center during the Majapahit period[5]. Teachers and students assemble in there[6]. After nearly 2.5
centuries the temple was crowd visited. At the end of the 15th century, along with the fall of Majapahit
reign, this place was quiet, there was no longer any evidence of activity. This place seems to be
abandoned by the pilgrims and its inhabitants. And of course, nobody took care of it anymore.

In 1815, Hoersfield, a Dutch employee, found this temple in a state of disrepair. Perhaps because of
the eruption of mount Kelud, compound the severe condition of this temple.New attention given during
1916 -1926, Perquin, van Coolwijk and De Haan assisted by local residents rearranged the stones of the
temple and managed to reveal the relief stories and the temple decoration of temple Penataran[7]. That
was the last restoration, as we now see. Lucky we are that the restoration managed to organize the entire
temple reliefs intact, so that the musical instruments used at that time can be known clearly.

2. Methods
Identifying how to use the music instrument which available in Penataran relief can be done through
analogy ethnographic method. This method need more example how musical instrument still use in
current day. Fortunately, we have a lot of data that provide information about ancient music instrument
and ethnographic music instrument. Both are well compared, so that we are able to make interpretation.
3.1. Many kind of Ancient Instruments

Based on observations by archaeologists and ethnomusicologists, there are several identifiable musical instruments: tambur, bende, kenong, ceng-ceng and gambang[8]. Tambur is a type of musical instrument membraphone that produces sound from the vibration surface of the skin. How to use it is by using a bat. The harder the hitting the louder the sounds are. This musical instrument of tambur is described on the ramayana reliefs that are beaten by the Ravana troops to encourage the troops. In larger sizes, Tambur is now still used for recital, such as tajidor. It is rarely used in the room. In the series of Ramayana relief, there is also kenong. Kenong is a type of idiophone musical instrument. This tool is made of metal, shaped like a bowl that has a protruding tip point shaped as half-ball. In the Ramayana relief, kenong is used to dispel the Hanuman above the tree[9]. Hanuman is a messenger of Rama to meet the Rama lover, Shinta who was kidnapped by Ravana. After successfully meet Shinta, he smashed burning couple building on the way home. Rahwana troops tried to bring Hanuman down from the tree by using kenong pounding. Most likely, kenong's sound also used to summon troops to come towards Hanuman. Currently now day kenong is still used to tell the dead, by hitting with a certain rhythm while walking around the village or hutment. Kenong in gamelan orchestra use in groups to keep the rhythm and enrich the sound of gamelan percussion.

3.2. The Changes of Playing Kenong

The kenong instrument is somewhat unique in the music scene of reyong music group. It is said to be unique because the kenong instrument is beaten from two sides, and able to resonate because it is mounted on both end of hollow wood. This type of kenong in Java is hard to find anymore. In Bali this tool had been used, but now is no longer found[10]. In some art performances, the use of 2 kenongs are still exist but play differently. In the performing arts of Reong and Banyuwangi, it is done by putting 2 kenongs on wooden container then strapped on the neck. In this way, kemong is hit by walking, not cross-legged as in the relief.

On this relief, music performances is accompanied by dancers. So this relief is a part of performing art which is most likely done on the street and witnessed by 2 nobles, not in the palace. The theme of this relief story has yet to be identified, because the previous series of reliefs told the story of animals or fables with cockatoos as the main characters. After that the relief continued with the story of Sri Tanjung, which is the story of romantic Java drama is very popular at that time.

At the performance, there is also other instrument called ceng-ceng or cymbal. The ceng-ceng is metal-shaped, stacked disks. The player raises the top plate and is banged down so it produces sound. The ceng-ceng is always played together with other musical instruments. The use of ceng-ceng makes the acoustic effect in music performance merrier. In Java, this tool is not too dominant, while in Balinese gamelan, ceng-ceng is more often used.

In the reliefs of battle scenes are also displayed gong instruments. The shape is similar with kenong but larger. Gong in this relief depicted as shouldered by 2 ape troops. The bearer behind them is holding a bat tool, while the other troops walk together toward the battlefield. Gong has a large echo effect, wide sound, similar to bass, so it can be heard from distance. In the gong relief, it is functioned to excite the troops of the apes on the Rama's side. In the context of gamelans orchestra, gong instruments are rarely hit, just as an opening or closing of musical phrases. Due to the large gong echoes, the current effect is often used to open important events.

Another musical instrument is Gambang. This tool is in the form of a crate or a rectangular box. At the top of it, there is a slab instruments made of wood. The elongated rectangular shape is lined up in the tone, produced by each plate's. This tone plate is made of wood, the result of sound comes from the clash of knobs and tone plates that are in sync with the chest space underneath. The sound result is very
sot. Number of plates of xylophone on relief are 16 pieces, which include this type of tool are, slentem
and Selonding but less tone plate. In the reliefs, the gambang is played by two opposite pairs. There was
a maid listening as well. Gambang seemed to be played indoors on the terrace floor with 2 tables filled
with food and offerings. The gambang seemed to have an extraordinary feeling of love, so in the next
scenes depicted the two couples end the performance, gambang placed carelessly in the front porch.
Both united in lap and the young man held his lover.

3.3. The Changes of Gambang Instrument
The current gambang instruments are still used, either in orchestra gamelan, or singly. How to beat the
gambang on the relief done with 2 short sticks in one gob, so it is like the letter "V". This way in Java is
rarely used, while in Bali still use this technique. Now, in general, the drummer of Java gambang uses
a bat on the right and left hand. Single gambang's performance is often played to accompany Javanese
songs, which produce a serene atmosphere.

Another Instrument played singly is called Genta. Genta is one of the ceremonial tools held by the
priests. In the temple Penataran, the Genta was not drawn in relief, but became the attribute of the
goddess who were standing at the four corners of the dragon temple. Because of the existence of Genta,
it is estimated that dragon temple is used to store ceremonial equipment[11]. The priests will sound the
ceremonial Genta at certain times, together with prayers and spells in a ceremony.

Musical instruments in the temple Penataran is not yet representative of the overall Javanese musical
instruments, but through the relief, it can be known continuity of several types of musical instruments
from the 12th century until now. Nearly 10 centuries, which is only slightly changed. As an example of
a change is in how to play Kenong that was originally crossed, now played by walking. This indicates
that at that time the gamelan orchestra was known in the simplest form.

In addition to the data of the temple Penataran, it is no longer found older visual data that showed
how a gamelan orchestra played. The word "gamelan" or "magamel" can be found in older inscriptions.
Since the 18th century along with the establishment of the palace of Islam in Java, a complete picture of
the gamelan orchestra can be known in its formation, both types of tools and how to play.

3.4. Social Context
The social context of music in the temple Penataran is in the environment of ordinary people, it does not
impress the palace. Seen from the Tekes hat, which is worn by two people when watching dance with
kenong orchestra, it comes from the noble class. But they are not in the palace setting. The players can
be distinguished through the cloth-shaped cap covering most of their hair. The noble headbands play
gambang, and the noble aristocracy can also be distinguished through the worn headband. This scene is
set in an ordinary house. Relief of temple Penataran showed us how great the role of the musicians,
nobles and ordinary people in maintaining musical life for 2.5 centuries. In subsequent periods, this
group of artists seemed to survive through folk art, in various areas of East Java, such as Reyog in
ponorogo, Jaranan in Malang, Kuntulan in Madiun, Bantengan in Mojokerto and so on. In the context
of religion, this musical instrument is played not only for consolation alone or used to convey social
message, but also for sacred purposes that is to accompany the course of the ceremony itself.

In the principle, the theme selection of the story on the temple relief was chosen by clerical guidance
and chosen from the text first. In each procession of the ceremony, the pilgrims are invited to understand
the moral teachings through visualized texts. Some stories in poetry can be sung with the accompaniment
of gamelan.
4. Conclusion
Based on identifying music instrument in ancient relief, we find that after the oldest instrument Vina found in Jalatunda sites (10 Century), many kind music instrument appeared among sites in East Java. Penataran Temple is the place where the ancient music evidences were found in large numbers and it was representative music instrument in Java during 12 centuries until 15 centuries. Those instruments are still use this recent day although different to use instrument as music traditional perform.

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