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Collaborative Learning Space for Music Community in Yogyakarta, Indonesia: A Design Exploration

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Abstract

The increasing interest of musical arts among youth especially in Yogyakarta leads to a rapid proliferation of community based both formal and informal musical groups. It drives a necessity to provide those groups with spaces to learn and perform. Formal institutions namely universities and schools can only be accessed by formal educated students. In the other hand, many informal music groups also need spaces to learn and perform. Student-centered learning and information technology in education has been a popular trend among universities in Indonesia. Arguably it also generates the development of collaborative learning space and collaborative work spaces in Yogyakarta. It gives a space with proper facilities for students to learn and work along with their companions at any time possible.

This paper will report surveys on the proliferation of those collaborative learning space in general and musical community needs. We try to map the relation between the design typology provided by the existing space and the need and expectation of the community. It is then discussed and elaborated the (new) contextual collaborative learning concept as an approach to design a learning and performing space for musical arts. This paper will indicate a propoposal of a new concept of architectural space and collaborative learning in terms of music education. The spatial layout, building performance and visual preference of the design proposal will be tested to community expectations.

Keywords: co-space, music community, studio work, music education, collaborative learning

1. Introduction

In the context of musical education in Indonesia, the development of musical arts undergoes a rapid growth, especially since 2006, where national statistics shows musical arts became the biggest creative

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economical sector development with 18,06% of growth, far above the average national economic growth (5.24%). This development leads to a proliferation of musical communities, groups, and organizations scattered around the nation, including Yogyakarta. Our survey in this city found that the proliferation of music communities especially youth interest on music is increasing. One of those communities that is highly active is AMARI, Ansambel Musik Anak dan Remaja Indonesia (Indonesian Children and Teenage Music Ensemble). It is a community which focused on orchestral instrument such as strings, piano, and woodwinds, and is active since year 2000. With around 20 members and increasing, Amari rehearse every week in the community's founder small home, thus causes discomfort to its members because of its small and acoustically unpleasing space. Another example is a music group named GMCO (Gadjah Mada Chamber Orchestra). It is a group which also focuses on orchestra but instead of an informal community, it is a formal campus group from Universitas Gadjah Mada, Indonesia. Although it is a formal and licensed group, they also lack of spaces to learn, rehearse, and perform. The number of members in this group can't be facilitated by the relatively small space given by the campus. Thus GMCO often moves to another rehearsing space which needs a large effort causing discomfort to its members.

Despite those proliferation, there are only three formal music education institution in Yogyakarta, namely Sekolah Menengah Musik (Music High School), Institut Seni Indonesia (Indonesian Institute of Art), and Universitas Negeri Yogyakarta (National University Yogyakarta). Those institutions can only be accessed by their regular students, whereas the informal music groups only has a limited access. Furthermore, the educational system (curriculum) lacks of a system that can facilitate their students which has different types of learning methods. Although music courses in Yogyakarta gives informal students their place to learn, it lacks spaces to learn, rehearse together (collaborative-learning) and to perform.

The lack of spaces to rehearse, learn, and perform music and the increase of youth music interest and music communities in Yogyakarta becomes a contradictory fact that becomes the issue to be reported in this paper. What we try to explore is the map of the relation between the design typology provided by the existing space and the need and expectation of the community. With the view that collaborative learning may be the way to accommodate the future learning space, exploring concepts and solutions for the development of musical arts and community in Yogyakarta will be provided.

2. Survey Method

The surveys to map the existing typological space for learning music has been conducted through physical observation to 2 places in Yogyakarta, namely Sekolah Menengah Musik (Music Middle School), and Institut Seni Indonesia (Indonesian Art Institute). The interviews were conducted to get a certain point of view from the user i.e. musicians and music communities from Yogyakarta. The survey was conducted to 60 random music players as a sample in Yogyakarta to strengthen the background and to know their hopes and expectancies of an ideal music learning and rehearsing space.

3. Analysing Co-Learning Space: Expectancy and Space

We reported our survey on the music community in Yogyakarta. From the 60 random music players we interviewed, there are 46 musicians who are involved regularly in a music community, which is at least 75% of the sample. It shows that the majority of music players in Yogyakarta is involved in a certain music community. The frequency of rehearsal in a week obtained from the survey shows that 83.9% of the users tends to practice at least once in a week. It shows that a large number of music players tends to rehearse in a regular basis. The survey also shows that all of the users goes to certain place like music studio, classrooms, and friends houses when rehearsing together, which doesn't have decent acoustics (except music studios) and large spaces to facilitate the users. It also hints that users won't have any objection if

they have to rehearse in a place other that their homes.

The survey includes an open question about the hopes and expectancy of an ideal music learning and rehearsing space. This is an attempt to dig the expectancy of the users and translate them into an architectural language. The results shows a number of statements that aren't architectural issues such as the needs for comprehensive music equipment, computers, internet availability, and more, and will not be considered to be analyzed. Three classification was narrowed from the translatable results, which are architectural programs, room size, and visibility (Table 1).

Table 1. Results of the survey on user's expectancy

Architectural Programs		Room size		Visibility	
Statements	Percentage	Statement	Percentage	Statement	Percentage
Playing space included	8,7%	Large space	64%	Mirror included	60%
Group rehearsing	34,8%	Flexible space	36%	Luminous rooms	20%
Private rehearsing	13%			Communication with other users	20%
Decent circulation	8,7%				
Concert stage included	34,8%				

The amount of users that states the need of a space to rehearse in groups is around 34%, showing the urgency of group rehearsing spaces (co-learning spaces). Decent circulation cannot be excluded, it gives the users comfortability of movement around rehearsing rooms, concert stages, and other functions. For this paper, although the percentage is notable, the need of a playground is excluded considering it can't be included to a generic concept for music education spaces (but can be included in a specific concept for a music education facility). The need of large spaces for the users is notable, but flexible spaces are also important for users. It gives the possibility to have large spaces and also small spaces to rehearse. Both of the statements will be considered to create the concept.

In the context of space, although there aren't many places solely for collaborative learning, formal educated students (outside the musical context) tends to maximize the functions of other typologies namely cafes, libraries, and internet centres and transforms them into impromptu collaborative learning spaces. From the observation, it is indicated that the layout of a coffee shop or library for instance already gives spaces to collaborate, which accommodates students to learn collaboratively with their friends. Thus, small coffee shops and libraries in Yogyakarta has a tendency to be used as an impromptu collaborative learning space for students. The design is simple, a round table with chairs around them, automatically gives a decent visibility and connection between the users, but also maintaining private spaces bounded by individual chairs.

In term of existing space for collaboration in learning music, our survey shows that there are several formal rehearsing spaces that are specifically used for music rehearsals, located inside the formal music institutions around Yogyakarta. Our survey shows that the spatial layout of those rehearsing rooms are uniform, giving uniformity and inflexible to music rehearsal, which contradicts the nature of music itself. Other than that, music communities around Yogyakarta couldn't have any access to these rehearsing spaces.
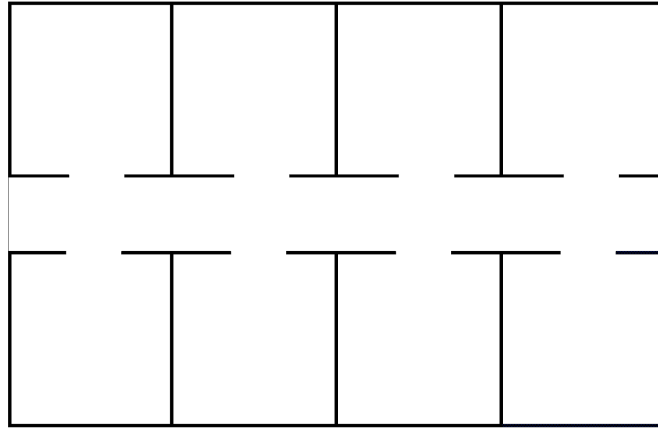
Fig.1. patial Layout of the typical existing rehearsal rooms

The Figure 1 shows the layout of the typical existing rehearsal rooms, where square rooms are placed side by side and also opposite to each other, connected with a corridor between them. The layout shows uniformity of the rehearsal rooms, which emphasize individual rehearsals, rather than group and collaborative rehearsals. The corridor based layout also draws problems where students doesn't have a comfortable circulation, in line with the previous survey where a decent circulation is needed. Students of this formal institution tends to gather around these corridors to discuss and play around or even rehearse together, strengthen the need of collaborative spaces.

4. Exploring Co-Learning Space: Concept for Future Design

Collaborative learning (co-learning, or CL) is based on human needs to interact each other and cooperate for a shared cause. According to Laal and Laal, co-learning can be defined as an educational approach to teaching and learning that involves groups of learners, i.e students, working together to solve a problem, complete a task, or create a product. Co-learning is also an umbrella term for educational approaches involving the collective effort of group work (2012). When participants bring their different abilities, experience, and ideas together, the understanding of other participants is enriched, resulting in an active form of learning as reported by I-Sha, Tiong, & Seng (2008). While co-learning is defined as a method of learning, co-learning spaces are rooms or space which contain and accommodate such activities. Co-learning spaces lately has been a trend among youth, where they are able to learn together on groups, enriching their understanding of a certain matter.

Many believe that collaborative learning fosters positive interdependence since the success of one person is dependent on the success of the group as expressed by Laal (2013). Collaborative learning has widely discussed primarily on its relation with computer capability to provide learning management system (LMS). In recent studies, there is a growing interest in the use of multi-user virtual environments (MUVEs) as collaborative learning environments. In this new environment, it is also shown by Ibáñez that interactions with elements of 3D virtual worlds can enforce collaboration (2013). Indeed, this virtual environment and collaborative learning have transformed formal educational practices.

In learning music, such tendencies has also growing as suggested by McCarthy (2005). Kumpulainen and Rajala also indicate the trend especially on the context collaborative creativity in creating music composition (2016). However, since learning through virtual space is extended across space and time, Kumpulainen & Rajala also warn that it create a blurring boundary of traditional learning in school and out of school. This blurring space-time needs to be negotiated. They argue that the blurring space-time also challenge normative definitions of learning that rely normally we understand as simple and static categorizations of

students and schools (2016). Hence it is interesting to explore how architecture is evolving and should be developed in term of its function and morphology responding to collaborative tendencies of musical communities.
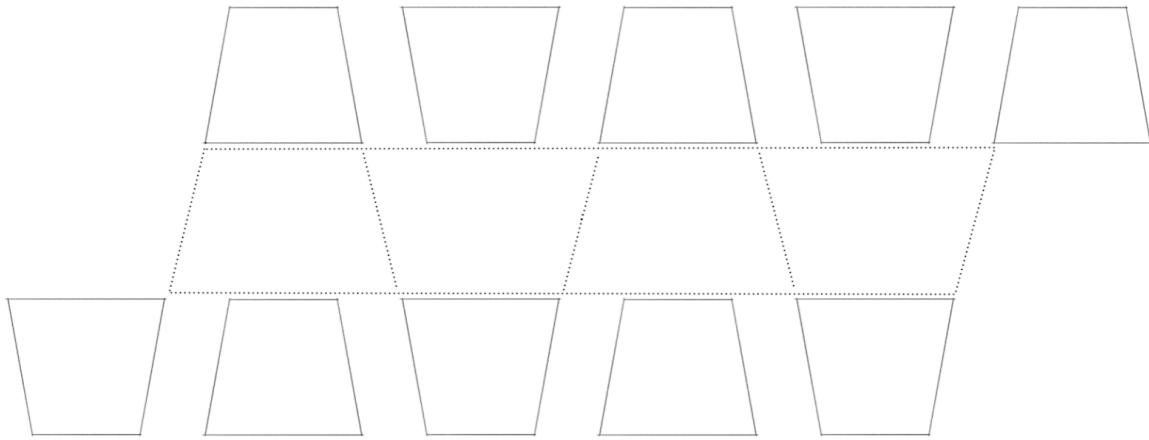

Fig. 2. Room Layout of Musical Collaborative Space

The Figure 2 above shows the concept of musical collaborative space. The music rehearsal rooms are angled with a 6 degree angle, giving the best acoustical performance for music rehearsing where the sound waves are dispersed as well as concentrated. By placing them side by side and giving a circulation space enough for two people with music instruments, users can maximize the space in front of the rooms. The material used for the front face of the rehearsal rooms are double glazed walls, giving a better visibility and connectivity between the rehearsal rooms, as well as maintaining its acoustic performance. The space between the opposing rehearsal rooms is used as the collaboration space, which is flexible in terms of layout. The dotted lines represent a flexible layout, where partitions can be placed along these dotted lines, giving freedom for the users to use a small space or large space, shown in figure 3. Because of the angled partitions, acoustical performance can be maintained. Like the layout of coffee shops mentioned before, this room layout maximizes the connectivity and visibility while still maintaining the privacy of each music rehearsal rooms.
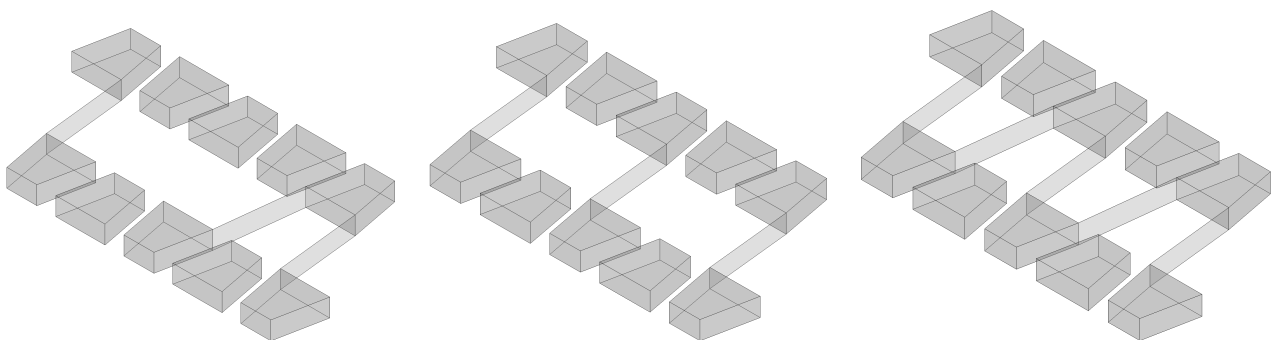

Fig.3. Partition layout for flexible space

4. Conclusion

Our surveys on the musical community in Yogyakarta shows that there are a significant need for collaborative learning space for their collective learning. Since the music communities tends to practice and rehearse on a group and in a regular basis, hence, the existing typical rehearsal space is not adequate

enough to accommodate that need both in term of quantity and quality. The survey shows that a number of music players needs spaces to do group rehearse, individual rehearse, and also a flexible space. There are also needs more communication to other players, thus implementing the collaborative space concept would be potential solution to enhance the learning quality in Yogyakarta context.

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