

Exploration of Interior Elements in the Harmony of the Music Studio

Tita Cardiah^{1,a}, Santi Salayanti^{1,b}, Ari Alghani^{1,c},

¹Interior Design Study Program, School of Creative Industries, Telkom University, Bandung, Indonesia
^atitacardiah@telkomuniversity.ac.id, ^bsalayanti@telkomuniversity.ac.id, ^calghaniari@gmail.com

Abstract. Music is sound that is arranged in such a way that it contains rhythms, songs, and harmony, especially from the sounds produced from tools that can produce rhythms. To produce a rhythm of the music that is perfectly influenced by musical instruments and elements of interior space. Music studio as a space for expressing music requires supporting elements of space to fulfill harmony and can facilitate user activities while stimulating users in music quality and psychologically to make music so that quality musicians are produced.

Exploring the interior elements of the music studio space to produce good music sounds, influenced by several facts, namely; the shape of space, composition of space, material, decoration of space, and space capacity. The form of interior elements used is organic forms so as not to arise boredom when on the move followed by the use of curved lines to reinforce the dynamic impression. The exploration of the interior elements of the music studio space includes floor elements, wall elements and ceiling elements through dynamic and non-rigid forms so that harmony and harmonization of music are achieved.

Keywords: music studio, interior elements, exploration, harmony

1. INTRODUCTION

In music, harmony is a choir or sound that comes from two or more tones to produce a harmonious rhythm when sounded simultaneous. These tones are tones that have different levels. Some are high and some are low. When the music is sounded in harmony, then the music will sound good and sweet in the ears.

The harmony of musical tones and rhythms can be realized by representative music studio space, both visually and audio through the implementation of harmonious interior elements. The design of a "Harmony" music studio must be supported by the space elements and supporting elements of the space combined to fulfill harmony and can facilitate user activities while stimulating

psychological users to make music so that great musicians are produced. The interior elements of the music studio include all aspects in it such as facilities, the stimulation of the user through choosing colors, shapes, use of furniture, lighting, and airing so that the studio feels comfortable when playing music.

2. METHOD

This study uses several methods of data collection that can support the concepts that will be applied in the interior design of the music studio. Literature studies related to an interior element, acoustics, color psychology, music and instruments as a reference for understanding music. Observe and study the situation on-site to find out the problems that exist, such as

circulation, lighting, airing, and materials used. Benchmarks, Interviews with Lecturers, Staff and Students and Musicians. Comparing with some similar cases as a reference in the planning process

3. RESULT AND DISCUSSION

The music studio is a room for practicing or producing music. Noise control is the main key to a music studio. This control is reviewed from 2 things, namely:

1. Resist the entry of noise from outside
2. Hold out the noise from inside.

To reduce the entry and exit of vibrations from outside the room and from inside the studio, the studio floor should be designed with a raised floor model; the ceiling frame should ideally be installed hanging and not attached to the roof frame; the wall is designed as a double wall with different materials from the cavity between filled with air (Mediastika, 2005: 104).

The acoustic concept in the music studio room is not necessary reflection, because activities carried out in the studio generally require the help of musical equipment. The music studio room consists of 1. Music studio room (musical instrument room), 2. Operator station: sound quality control room results from activities in the studio with loudspeaker equipment and control table (mixer table), 3. The space between a room that functions as a sound lock so that the sound does not enter or leave the studio. (Mediastika, 2005: 110).

Floor Elements

Based on "The Encyclopedia Americana" (1990: 263) the function of the floor is not only a place to stand but also functions as an element of decoration, supporting the burden of furniture placement, other facilities, and as a silencer/sound absorber.

The use of parquet floors in the music studio room is based on the needs of musician activities, circulation, acoustics, and decoration art. the characteristic of parquet is natural, Easy to finish, Soundproof. the advantages of parquet materials

are Supple, durable, and easy maintenance enough Cleaned using wax, but the use of parquet has a weakness that is not anti-insect

Wall element

In terms of physics the building walls have several functions such as the following:

- The load bearer above it, the wall must be able to withstand horizontal, vertical, vertical loads and bending forces due to vertical loads.
- As a cover or room divider, the boundary involves vision so that humans are protected from direct vision, usually related to personal or special interests. (Mangunwijaya, 2009: 339)

As a room, an acoustic wall in the music room is designed with a double wall system using different materials, with a cavity between filled with air placed an acoustic blanket. Wall finishing uses soft materials that can absorb sound such as carpets, soft boards, acoustic panels that are taped to the wall (Mediastika, 2005: 109). the disadvantages of using soft board materials are Not fire resistant and Not waterproof. the use of carpet material on the walls as aesthetics and acoustics, the colors and patterns vary, the atmosphere is warm and supple. Maintenance is quite difficult because it saves dust maintenance by washing, brushing, spraying with hard water or a vacuum cleaner.

Ceiling element

The ceiling is one of the elements forming a space that functions as a barrier to the upper room that reflects the character of space and the types of activities carried out in the room.

The ceiling has a function as a cover of the upper space, according to its characteristics, the ceiling can influence people who carry out activities below it, especially in the presence of high ceilings in the ceiling, materials, colors, and ceiling textures. The ceiling has a function in the form of:

- a. Forming space
- b. Protective human activities with simple forms
- c. Acoustics

- d. Support the atmosphere of the space
- e. The Protective cavity of AC installation, electrical cable, and place for attaching light points.

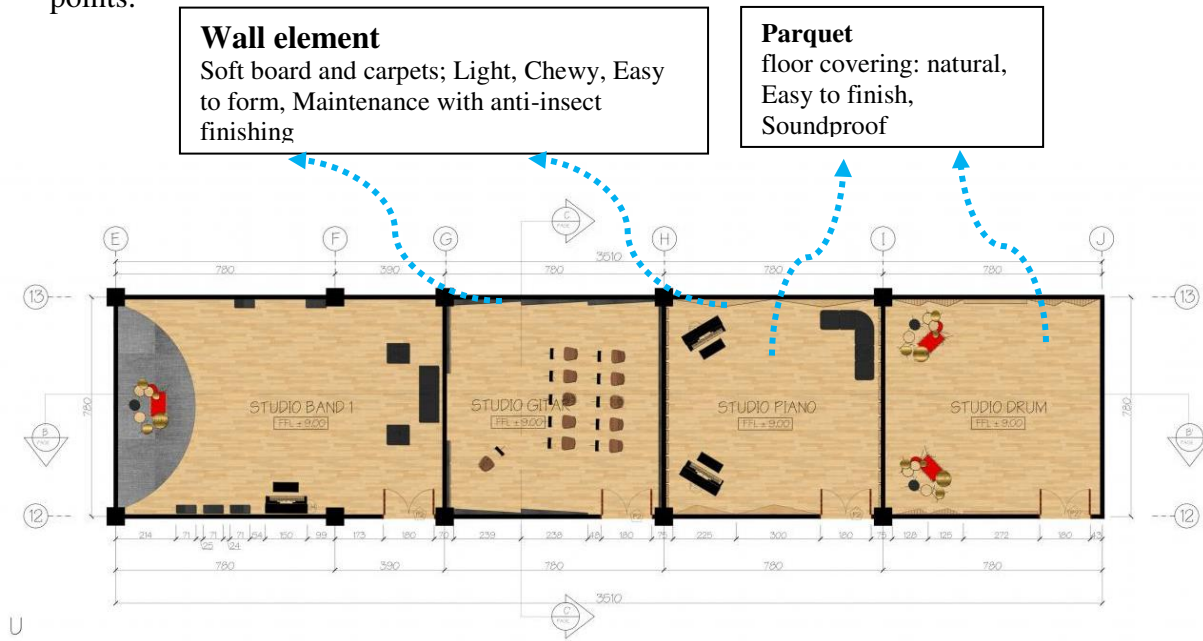


Figure 1. layout music studio
Source: Self Documentation

Settlement of ceiling

In the ceiling section, the ceiling in the music studio space was formed by designing high and dynamic shapes, adjust from the dynamic and rhythmic nature of music



Figure 2. piano studio
Source: Self Documentation

Acoustic Review

In interior design, sound control in interior spaces is very much considered. More specific to

maintain, improve the desired sound and reduce or eliminate sounds that will hinder activity. (D.K. Ching, 2005: 265)

Sound absorbing materials and construction used in room acoustic design can be classified as (Doelle, 1990; 33) :

1. Porous materials: Fiberboards, soft plastering, insulating blankets, mineral wools.
2. Absorbing panel: Wood panel, gypsum, plastic board, glass, and metal plate
3. Cavity resonator: board, wooden block.

Insulation against building noise can be obtained using (Doelle, 1993; 180) :

- a. Floating floors
- b. Solid hanging sky mounted with a spring
- c. Soft floor coating such as carpet, vinyl, cork, rubber
- d. Walls with soft layers such as carpet, vinyl, cork, rubber



Figure 3. gitar studio
Source : Self Documentation

Acoustics or sound systems are elements that support the success of good design. The effect of the sound system can cause psychological and emotional effects in the room so that with a good sound system the room users will feel certain impressions in the room. Space configuration can be horizontal along with the site, diagonally up a slope, or stand tall like a tower. The curved and segmented shapes of the linear organization cover the area of exterior space on the hollow side and direct the spaces facing the center of the area. On the convex side, this shape appears to block and separate the space in front of it against the environment.

4. CONCLUSION

The concept of the form in the design of the Music Studio is to adjust to the character of the music that is dynamic with the differences in the tone of the music. Dynamic properties are adapted into a form that is not symmetrical and has a pattern in the form of curved lines and organic forms so as not to appear stiff. The organic form is an asymmetrical or irregular

formation that is adapted from natural forms found in nature such as stone, wood, mountains. Dynamic forms can influence users to be more creative because there is no boredom created from dynamic forms.

References

- [1] Pell, Cesar. 1936. *Neufert Architects Data Third Edition*. Germany: Black Publishing
- [2] Daniels, Richard. 2015. *Acoustic design of schools: performance standards*. London: Building bulletin 93
- [3] Lord, Peter., dan Duncan Templeton. 2001. *Detail Akustik Edisi Ketiga*. Jakarta: Erlangga
- [4] Banoë, Pono. 2003. *Musik dan Kosmos: Sebuah Pengantar Etnomusikologi*. Jakarta: Kanisius
- [5] Mediastika, Christina E. 2005. *Akustika Bangunan*. Jakarta: Erlangga
- [6] D.K. Ching, Francis. 1994. *Arsitektur Bentuk Ruang*
- [7] Corky Binggeli A.S.I.D. *Building System for Interior Designers*. 2003. New Jersey
- [8] John Wiley & Son, Inc.
- [9] Routledge. 2010. *Theatre Buildings A Design Guide*. 2 Park Square, Milton Park, Abingdon.
- [10] Mediastika, Christina Eviutami. 2006. *Akustika Bangunan: prinsip – prinsip dan penerapannya di Indonesia*. Jakarta : Erlangga
- [10] Doelle, L. L .1993. *Akustik Lingkungan*, erlangga, Jakarta