LIVING IN A BOARDING HOUSE: PRIVACY MECHANISM IN ARCHITECTURE STUDENT'S PRIVATE STUDY ROOM

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ABSTRACT

Boarding house as a type of temporary residence functions to ensure the continuity of daily domestic activities, as well as a comfortable place to study for students as its occupants. The multimodal method employed in architectural studio learning requires using more than one strategy in the learning process, such as through design simulations or making study models. As a result, compared to the unimodal approach, there are spatial consequences for learning privacy that affect individual and group learning processes. This research explores the privacy mechanism in boarding rooms as private workspaces for architecture students. Phenomenological qualitative methods are applied, with data collection techniques ranging from observation, interviews, and sketches to document readings. The research findings show that architecture students optimize space by modifying spatial attributes such as layout, wall openings, material and furniture. This ensures that learning takes place in the maximum privacy possible, enabling a practical function of multimodal learning activities.

Keywords: boarding house, study activities, architecture student, privacy

INTRODUCTION

Many students go to other cities to achieve success through better and higher-quality education. These students then live in rented houses shared with other students. Living with non-family members requires a high level of behavioural adjustment. Not only arranging private spaces for daily domestic life activities but also learning activities that are by the demands of learning methods of each study program. Several things make it difficult for architecture students to carry out their assignments in boarding houses, especially in boarding rooms, such as limited room size, unsupportive working atmosphere, visual disturbances or noise nuisance. This research explores the privacy mechanism in boarding rooms as controlled private spaces for architecture students. Having a certain degree of privacy is essential in co-living, such as in boarding school, as it can provide a supportive environment and improve the quality of education for students.

THEORY / RESEARCH METHODS

A boarding house is a temporary residence where each unit is rented separately, and tenants are required to pay the rental fees within the agreed period and price (Rachmawati, 2017). Some boarding houses provide supporting rooms like shared standard rooms (Setiadi, 2019). A house is more than just an ownership; it is something very personal, providing privacy and allowing residents to get to know their neighbourhood (King, 2004). Within an architectural framework, the house saves people from outside interference and provides privacy in a three-dimensional space. Even though these boundaries can be violated, the house is limited by its definition of home (Shidfar, 2013). Students choose their boarding house carefully because it will become their second home (Rahmawati, 2017). From the students' point of view, a boarding house is a place to live while they are at an educational location (Nurdini, 2009; Harel, 2019). A place to study and do assignments far away from home (Suryanti, 2010).

Students' learning loads and activities vary based on each study program and require different supporting facilities. For architecture students, it is to support their studio-based learning activities. Design studio courses are the leading and most dominant course with the highest credit hours per week compared to other courses (Ibrahim & Utaberta, 2012). In this subject, students learn to think and act like Architects. Design studios also teach critical thinking and environment creation, where students are taught to question everything to create better designs (the American Institute of Architect Student (AIAS) in Studio Culture Task Force (2000) To determine the research theoretical framework, a literature review has been carried out on the learning style of architecture students and privacy in the boarding houses.

Architecture student's learning style.

Every student has their lifestyle, and each one will be different. However, it must be understood that some differences, commonly called variations, appear as simply expressions of different constants (Rapoport, 2005). Some particular behaviours of architecture students when carrying out the learning process include the habit of working at night and the tendency to be alone and experience directly. Nighttime activities are very vulnerable to triggering conflict, especially when doing assignments in a group in a shared room. It is the sound of their conversation and the creaking of their mini wood saws when making models in the still of the night. Architecture students tend to spend most of their time with their peers when they are exploring ideas. This makes the "outside world" less critical, and they do not seem to care about their surroundings. There is a specific behaviour that is due to design thinking. Students are trained to think iteratively when solving complex problems in the design process. This way of thinking can get architecture students into problems (especially if they have a "messy" tendency), such as leaving scattered paper, putting things out of place, not rearranging furniture that has been moved, or even flipping it so this is considered annoying.

The design studio is the design learning process that binds every student throughout the semester. The characteristic of the design studio, put forward by Lueth (2003), is a unique learning environment. A physical environment that allows the continuation of the design learning process. Therefore, it must be ensured that design learning activities do not have to stop at the studio when class ends. Students should be able to do the assignment anywhere and anytime should the study environment support it. It is even possible to do the learning process in their home. This will, of course, influence their daily activities and privacy.

Privacy in the Boarding House

Privacy is a selective control of access to oneself or a group (Altman, 1975). Regardless of privacy preferences, behaviours, and values, people can have a variety of expectations for privacy, which can be low or high (Edney & Buda, 1976). DeMarco and Lister (1987) state that it takes about 15 minutes to reach a state of concentration, equivalent to the time needed for destruction. Therefore, people's preferences, expectations, values, and behaviour differ over time, as each person seeks the various levels of privacy she or he needs and chooses (Sundstrom et al., 1980). Kupritz (2003) and Hutchison (2015) have expanded on Altman's ideas by distinguishing between speech privacy (can carry on a conversation without being

distinguishing between speech privacy (can carry on a conversation without being heard) and visual privacy (from unwanted surveillance). Altman sees privacy as a central concept in space management or design. The goal of the design is to provide as much privacy as expected. In a house, various levels of privacy are needed for the residences, such as public, semi-public, semi-private, and private spaces. The physical architectural environment plays a significant role in facilitating this privacy.

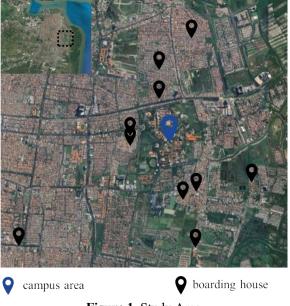
Marshall (1966) classified privacy into six types: solitude, seclusion, intimacy, anonymity, reserve, and not neighbouring. Solitude is the desire to be free to do anything and be free from the attention of others because certain elements limit it. Meanwhile, seclusion is the desire to get away from the sight of and distractions from neighbours and traffic noise. Intimacy is the desire to be close to family or certain people but away from others. Anonymity is a desire not to be recognized or not noticed by others, even in a public place. The reserve is one's desire to be invisible to others by adding a barrier around it, while not neighbouring is the desire not to associate with people around him. Holahan (1982) further said that solitude, seclusion, and intimacy are groups that do not want physical disturbances. Meanwhile, anonymity, reserve, and not neighbouring groups wish to maintain the confidentiality of information about themselves, manifested in their behaviour (Holahan in Sarwono, 1992).

Methods

This study posits a naturalistic or social constructivism paradigm (Creswell, 2013) with the characteristic of using observation and data collection in natural situations with no manipulation. Qualitative methods are applied because this study aims to

determine how architecture students settle down in their boarding houses. The data needed is in the form of narratives, text, images, and other audiovisual materials that can represent their residency experiences. The sample in this study were town architecture students who had lived in boarding houses for at least six months. This is because, within 3-6 months, temporary residents have gone through a period of clinical disturbances caused by homesickness (American Psychiatric Association, 2013) Initial survey was conducted to obtain a representative sample. Of the 82 questionnaires obtained, a grouping process was carried out according to the boarding house's category and management. Then, ten people were selected to become research participants (based on Dukes' recommendation in Creswell (2013).

Ten boarding houses with different characteristics located near the university were chosen as research units (figure 1) to represent architecture students' boarding houses in general.





Data was collected through observation, semi-structured interviews, and documents (Creswell, 2013). Observations were conducted to observe how participants control their privacy by room setting, and semi-structured interviews were carried out for additional information to obtain a deeper and more detailed understanding of the reason (Niezabitowska, 2018). lastly, sketching and photo documentation for capturing the setting. An interactive model is used for the data analysis process. According to Miles and Huberman (1994), three streams of activities co-occur in qualitative data analysis: data reduction, data display, and conclusion drawing/verifications.

RESULTS AND DISCUSSION

Boarding Rooms as Private Workspaces

In the design process, students carry out their tasks in two main activities: brainstorming and design execution. All participants stated that when brainstorming, dominated by drafting concept designs, students preferred to do it in the studio since there were many peer friends with whom they could discuss, had the same understanding, and had the same assignment. However, at the design implementation stage, which is dominated by sketching or drawing activities with the help of software, students tend to choose to do it independently and calmly.

"When I am looking for design ideas, I like being with friends in the studio, but I prefer being alone in my boarding house when drawing design plans, 3D drawings, or rendering" - K, 2023

Studio learning is iterative, meaning the design process will be carried out continuously for one semester. With this long duration, students said that the use of the boarding house for studio assignments was in the final session of the design process, during detailed drawing and finishing.

"... if I look at my fellow students or myself, at the beginning of the semester, we will be in the studio until right in the analysis stage because we can discuss things there, etc. If we expand the studio to the boarding house, for example, it is usually right towards the end of the semester, when we draw the final fittings, detailing and finishing" – F, 2023

When the design execution session was held, students sometimes chose another place, such as a boarding house (figure 2), to do the assignment when the studio was unavailable. Because a studio is a shared space, the boarding house review in this section will also look at the affordance of the shared space in the boarding house as a studio. Discussing the function of the shared rooms as studios, it is necessary to discuss the existence of shared rooms in a boarding house for their respective functions. This discussion shows that only a few shared spaces are equivalent to a studio based on their affordance. Table 1 shows the type and functions of shared space facilities at the architecture student boarding house.

Table 1. Shared Room at The Architecture Student Boarding House					
Participant	Parking	Terrace	Multifunction room	Drying room	Kitchen
L	V	V	-	V	V
R	V	V	V	V	V
G	V	V	-	V	V
А	V	V	V	V	V
Κ	V	V	V	V	V
Н	V	V	V	V	V
Ν	V	V	V	V	V
В	V	V	V	V	V
М	V	V	V	V	V
F	V	V	V	V	V

Source: Observation Note: V= Used, -= not used

From the analysis results, five main rooms are classified as shared rooms, namely the parking area, terrace, drying room, and kitchen. Of the five shared spaces found, they are not possible to use as a replacement for the studio since they are inadequate both functionally and need supporting furniture. Meanwhile, terrace and multifunction rooms are often used for social interaction and discussion. However, since only some residents are architecture students, there is no learning interaction or discussion regarding the assignment.



Figure 2. Furniture Layout in Studio (a), Living room in N's boarding house (b), and K's (c) Source: field survey, 2023

Therefore, from the observations, it is known that there are two main reasons why this space needs to have the affordance of the studio: first, the furniture layout does not support it, and second, there is no community in the boarding house. As seen in Figure 1, there is a significant difference between the furniture in the studio and the furniture in the boarding house's multifunction room. In a boarding house, on average, each multifunction room only has a table and a few chairs intended for receiving guests. Even though the multifunction room in a boarding house does not have the affordance of a studio, this room has another role. For architecture students, who incidentally are isolated, shared space can act as a means of interacting and building relationships.

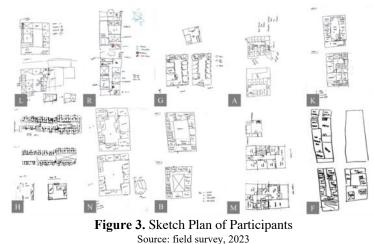
"In this room with a sofa, usually when I come home from college, I sit there for a while and chat with my friends" -L, 2023

In many cases, multifunction rooms are sometimes used by architecture students and students from other study programs to work on assignments together even though they are not having architectural discussions. This space can enable architecture students to have a life outside of conditions that tend to isolate themselves.

"The place that allows the interaction for most residents is on the 2nd floor, called the free space. The room is empty, a free space, ... yes, because it is a room not only for studying, cooking, and other activities. So, sometimes we eat together in there ... just like that" - R, 2023

Apart from that, the shared room can also function as a recreation for its residents.

"I need it, if I want to refresh, there is no place to do it" – B, 2023 The reason is, that most residents only use their boarding room as the main room because it is considered very private.



As seen in Figure 3, all participants thought the room was the only private

As seen in Figure 3, all participants thought the room was the only private room in the boarding house that could be used optimally. Therefore, the following discussion focuses on how residents use boarding rooms and their ability to provide privacy.

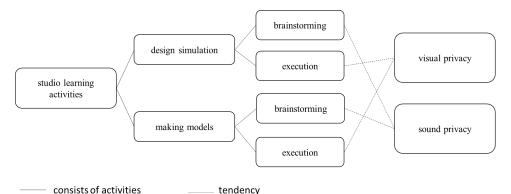


Figure 4. Relations Between Studio Learning Activities and Aspects of Privacy Needs Source: Research document

Students in architectural education programs have a specific learning approach called a multimodal learning approach, which exhibits a balanced propensity for the visual, auditory, read/writing, and kinaesthetic. As has been learned, studio learning activities (figure 4) are focused on simulation design and model making. When carrying out their design processes, namely brainstorming and design execution, a different atmosphere will be required. Brainstorming sessions require visual isolation, while voice privacy is required in the execution drawing. The

following session will look at how architecture students control privacy in their boarding houses.

Visual Privacy in Boarding Rooms

The landlord or boarding room manager permits Different degrees of student intervention in the room. For example, some allow for rearranging furniture, but some do not. When possible, the room is instantly transformed into a private studio where students feel comfortable working all day (Figure 5).

"When I first saw my room, it was so cramped... so I kept rotating that furniture. Study table, cupboard, tilt the chair, and crash into the cupboard... then it ended up like this... study table is in front of the window" -L, 2023

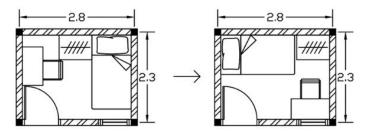


Figure 5. Position of Furniture in the Room Before and After Rearranging by L Source: Research document

The boarding room is central for its residents. For architecture students, this space becomes a private "studio". However, as renters, students must comply with the rules in the boarding house. For example, some did not allow moving the furniture.

"I cannot move the furniture, I cannot put posters on the walls either" -N, 2023

Architecture student study activities involve the VARK (Visual, Aural, Read/write, and Kinaesthetic) learning style, so the process involves much material as a tool. Most of the work will be done using a computer, but there are still other jobs, such as drawing sketches, making models, reading books, etc. In this case, the study table becomes essential. However, in several boarding houses, landlords do not provide study desks as boarding room facilities, so students find completing assignments challenging. For example, B suggested that to make his boarding house more comfortable, a study table should be added as the default facility in the boarding room.

"Add a study table" – B, 2023

R felt the same thing. Because there was no study table, R and his boarding house friends took the initiative to use TV boxes to make a study table together. However, because it was not ergonomic, he brought his study table home.

Space may be uncomfortable; it is not cramped, but there is no table. So we use the cardboard box for the TV to use on a table with my friend, but because it is shallow, even though we are clean, it is still below, so it is uncomfortable. Finally, I went there, bringing from home a table with a folding table like that for the lesehan (doing activities by sitting on the floor)" – R, 2023

If there is a table in the boarding room, the next problem is the position of the study table. Architecture students as residents have two tendencies in placing their desks. The first group is those whose study desks face the window, and the second group chooses to place their desks facing the wall. A consideration by the first group is that because doing tasks on a laptop takes a long time, it is essential to look outside occasionally for eye health.

"I used to go to the optics to check my glasses; he said if it has been an hour on duty, as much as possible, look around as far as you can, see how far away you are with the green ones. But it is not green either, hehe, but at least the distance" -L, 2023

However, conditions outside the window also had impacts on participants. For example, for L, the position of his bedroom window is directly opposite the window of the next-door neighbour's room (figure 6). Thus, he felt that his visual privacy was disturbed when he opened the window, primarily when he directly viewed the opposite room's occupants. Therefore, the view from the window is also critical to pay attention to, especially at the beginning of designing a boarding house. The view should not face directly to other rooms. A good view is obtained if the window has visual access to the garden in the boarding house or does not directly face the neighbour's window.

"It was not comfortable because I opened the window; the room was across from my boarding house, and the window was facing me. So, if I open the window, the one over there is studying, or on the phone, it does not feel good. Yes, the curtains are closed" -L, 2023

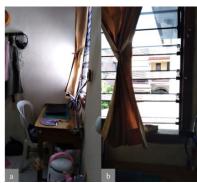


Figure 6. Position of Study Table of L (a) with a view of the front neighbour's room (b) Source: Research document

The discussion shows several ways to arrange the furniture, particularly the study table, based on privacy preferences. Not all architecture students arrange their study tables near the window. Some even deliberately put their study table facing the wall. There are various reasons for this; for example, good light should come from the left, and there is a contrast between indoor and outdoor light. Apart from light, the

limited view from the room is also why the study table does not face the window directly.

"The light makes my laptop glare" -K, 2023 "Actually, due to limitations in managing the layout, because there is a TV, it is awful if there is a bed here; that is why I still put the study table here." -M, 2023

The issue with visual disturbance did not occur in the second group, who prefers the position of the study table to face the wall. This selection is based on learning activities using a laptop because facing a window results in visual glare. In addition, participant M thinks that the view around the boarding house may be insignificant because the boarding house, in general, is two storeys with a narrow view. He suggests the view would be better from the heights in his apartment. Therefore, a table facing the window was not urgent for him.

"In my opinion, it is lacking even though it is on the 2nd floor, the surroundings are still visible. Maybe if it is in an apartment on the top floor, it is nice, the view of the area" -M, 2023

For some people, the choice of working facing a window is pleasant, but for others, it is not. The designer should not see this as a binary opposition but as a gap in between. If one wants to be near a window because of the view and one does not want it because of the glare, the answer might be to put it near the window, but the window is dark and covered with a cloth so that when you want a view, you can open it, but when you are working, you avoid glare. From the above review, visual nuisance in the boarding house occurs due to visual access from the window facing the neighbour's room. When occupants have their rooms far from the reach of other people, this visual privacy becomes less of a problem.

Sound Privacy in Boarding Rooms

Disturbance to sound privacy inside boarding houses can be divided into two causes: noise originating from materials and other occupants (Figure 7). The first case will be discussed through the partition wall material in N's room and zinc material in K's boarding house. To illustrate the disturbance of sound privacy due to other occupants, the experiences of L and G will be highlighted.

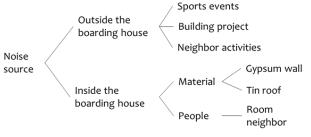


Figure 7. Source of Noice in The Boarding House Source: Research document

The wall partition material in N's boarding house was gypsum (figure 8). Apart from making annoying noises, in terms of safety, the wall is considered psychologically unsafe.

"It sometimes likes to be nudged by people, so it is noisy. If, for example, I am inside, it can also be heard from the outside. (Because this is a partition so sometimes) I am afraid it will break" -N, 2023



Figure 8. Gypsum Wall in N's Room Source: Research document

Apart from partition walls, zinc material (figure 9) also has the potential to cause interference. For example, K was disturbed in activities such as online lectures because of the sound of rain hitting the roof.

"The disturbance was not because of people but because of the rain. So, this roof material is zinc. It was here, in front, so the stairway ledge. So when it rains, I always use a headset. The most annoying time was when I was in college via Zoom, so I used a headset. I bought a new headset that can cut the noise" -K, 2023



Figure 9. Zinc Material on The Front Roof of K's Room Source: Research document

Materials do sometimes have the potential to cause unwanted noises. However, the more disturbing sound is coming from other residents (figure 10). For

example, L felt uncomfortable because his noisy neighbours were disturbing him whenever he was doing his assignment.

"It is uncomfortable that there are several rows from the front of my room that are noisy when they are playing games" -L, 2023

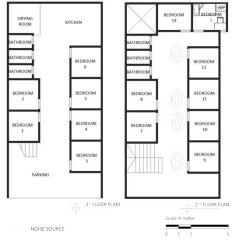


Figure 10. Noise Nuisance in L's Boarding Room Source: Research document

If L feels uncomfortable with his boarding house neighbours playing games, H feels uncomfortable because his boarding house neighbours talk loudly until midnight (figure 11).

"I was once disturbed by the rooms around this (pointing to the neighbouring room of the boarding house). Because they happen to be in the same major, in the same class and are friends, sometimes I want to gather in one room and tell stories and laugh together, even though it is the middle of the night. Very annoying. Even though I have to focus on brainstorming design concepts or when reading articles" – H, 2023



Figure 11. Noise Nuisance in H's Boarding Room Source: Research document

Architecture students need to feel entirely focused on executing design concepts. The primary disturbance in the boarding house is the sound disturbance caused by the neighbours. However, because every occupant has the same rights due to limited ownership and most do not know each other, the participants inevitably accept this condition.

"Sometimes there are those who like to play loud songs; there are those who like to bring guests. Yes, it is not very pleasant, but I cannot do anything about it, so it is okay because he is boarding there, so he also has rights. I also have rights, but I am scared, haha; well, I do not dare to say" -N, 2023

Apart from the annoying neighbours mentioned by many participants, some types of noise still can be tolerated. As experienced by G:

"For example, if there is a problem with noisy neighbours in my boarding house, especially in my alley, my alley is not too noisy, it is not too noisy, plus my neighbours are too." -G, 2023

Sound disturbance in this study is interpreted as a disturbance of sound privacy, namely noise nuisance. Architecture students need a calm situation in carrying out their assignments, and not necessarily silence, because they still need selected voices that help increase productivity for some people. The selected sound in question can be music turned on according to their favourite playlist or even the sound of rain.

"Calm does not have to be very quiet. If the sound of rain is like that, it is okay to relax." -K, 2023

"It is noisy, but there is a headset, so I crank up my music" –L, 2023

Apart from visuals, another issue in boarding houses is noise disturbance. Unwanted noises can be particularly distracting for architecture students who need to focus. Therefore, the room as a private space should be designed to give the occupants as much privacy as possible. This can be accomplished, for example, by providing soundproofing materials or by orienting all bedroom windows outward to limit noise in the room.

CONCLUSIONS

The research findings show the privacy mechanism architecture students use to use a boarding house as an alternative to expanding multimodal learning in the studio. This was done chiefly by choosing and rearranging the space setting as optimally as possible so that they could fulfil the studio atmosphere. The ease of rearranging boarding room settings is highly desired, while the use of shared rooms is only done when more spacious space is needed, such as when making models.

Apart from the condition of the room's interior settings, architecture students can fulfil a desire to be alone (in solitude) and concentrate on their learning activities. However, the condition of boarding houses, inhabited by a wide variety of student learning models, has the potential to cause disturbance, both by humans and building materials.

Therefore, designers should consider designing a boarding house that provides the opportunity for personal privacy for each resident by providing the possibility of adding attributes or non-fixed architectural elements in the boarding room.

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