

## The Influence of Society 5.0 on the Social Interaction Space of Unimal Architecture Students: A Study on the Personal Space of Architecture

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### Abstract

Looking for informal spaces off campus to meet learning needs that involve mental and intellectual aspects. The existence of this informal space is not only a temporary waiting area but also a space that facilitates social interaction connected to academic activities. This study examines the space for social interaction in the campus environment and adaptation to the era of Society 5.0. This research involves architecture students as research subjects, considering their activities and needs that involve mental and intellectual aspects. In this context, the personal space proposed by Robert Sommer and the concept of third place proposed by Oldenburg become the theoretical basis for analyzing the space of student social interaction. These two ideas will collaborate to reveal the influence of Era 5.0 on students' social interactions in fulfilling their mental and intellectual qualities in learning outside the classroom. The era of Society 5.0 demands the expansion of campus interaction space and the integration of technology to accommodate students' mental and intellectual growth. In conclusion, social interaction spaces on campus are essential in shaping relationships between individuals, facilitating collaboration, and creating a positive social climate. Students are looking for informal spaces off campus to meet learning needs that involve mental and intellectual aspects. Adaptation of the interaction space order in campus architecture and technology integration is essential in facing the era of Society 5.0. A structured and supportive social interaction space can help maintain students' mental and intellectual balance.

**Keywords:** *Personal Space*<sup>1</sup>, *Third Place*<sup>2</sup>, *Informal Spaces*<sup>3</sup>, *Social Interaction*<sup>4</sup>, *Social Interaction Space*<sup>5</sup>.

### 1. Introduction

Social interaction space is an important aspect of the campus environment that shapes relationships between individuals, facilitates collaboration, and creates a positive social climate (Tamariska & Ekomadyo, 2017). However, social interaction spaces are wider than public spaces such as classrooms, halls, or libraries. Personal space factors also have a significant role in shaping social interaction patterns. Personal space refers to physical and psychological areas individuals consider their personal property. This includes physical distance between individuals, privacy preferences, and different comforts (Hall, 1966). In the context of architecture students, personal space can be an important factor influencing how they interact with fellow students, faculty, or other campus staff members.

Architecture students have a different social reality from students from other disciplines. Their activities often involve creative processes, exploration of ideas, and interaction with physical elements and concepts of space involving mental and intellectual aspects (Saraswaty & Nasution, 2016). In carrying out these activities, architecture students are involved in design, drawing, and presentation activities. The study space for architecture students must facilitate these activities well.

Based on the quality of architectural learning has unwittingly brought students to enter the era of Society 5.0 in fulfilling mental and intellectual strength. Their knowledge is not only

required from learning instruments on campus. However, they must also be able to keep up with the current architectural knowledge. So outside of the learning space on campus, it can be seen that there is a student character involved with the atmosphere of the 5.0 era (Teknowijoyo, 2022). For this condition, thought is needed so that the physical existence of campus buildings can provide a balance of acceleration, development, and virtual student learning as facilities that can accommodate their mental and intellectual growth.

Based on practical observations of the existence of corridor rooms, reception rooms, and transition spaces available in physical campus buildings are seen only as mere intermediary spaces without any idea or idea of the existence of adaptable spaces for student social interaction (Aulia et al., 2020). As an evaluation material, a study is needed in research activities to reveal the character of student social interaction space in order to be able to survive academic activities in the campus environment without having the desire to look for other places outside the campus.

## 2. Materials and methods

The idea used is personal space proposed by Robert Sommer about the human orientation that is responsive to the existence of space around it. In contrast, Oldenburg's idea of third place (Informal Space) is used to answer the physical existence of space to its conditions both dimensionally and specific settings as a forum for student social interaction. These two ideas will collaborate to reveal the influence of Era 5.0 for students' social interactions in fulfilling their mental and intellectual qualities in learning outside the classroom.

### 2.1 Communal Space of Social Interaction

Communal campus social interaction spaces refer to places in a college or university where students gather and engage in various social activities, share ideas, and form strong social relationships. Within a campus rich with interaction opportunities, "communal" refers to concepts related to community life and collective nature (Purwanto, 2012).

The similarity of social orientation is a factor that influences social interaction in communal spaces. It refers to aligning values, interests, goals, and views between interacting individuals. Individuals with similar social orientations are more likely to share interests, have similar perspectives, and support each other in achieving their goals. The similarity of social orientations creates a strong foundation for interacting in communal spaces, as they share common understandings, interests, and visions that facilitate effective communication and collaboration.

On the other hand, mentality and intellectual orientation outside of study hours emphasize the interest and dedication of individuals in continuing to learn, develop themselves, and expand their knowledge outside the formal educational environment. In this context, they seek new knowledge through reading, discussion, and participation in activities. The aim is to enhance critical, analytical, and creative skills and broaden understanding of different aspects of life. Overall, communal spaces of campus social interaction and mentality and intellectual orientation outside of study hours complement each other, creating an environment that supports students' social and intellectual development on and off campus.

### 2.2 Interpretation of Personal Space in Social Interaction

Scalatic-based visual dimension is a concept that refers to a person's ability to process visual information with different levels of clarity, detail, and complexity. High visual scales can affect attitudes related to a person's mental and intellectual.

A person with a high visual scale tends to have a more analytical, creative, and holistic thinking attitude. They can notice small details, understand complex patterns and relationships,

and imagine objects or solutions. Good visual sensitivity can also affect meticulous attitude and precision in understanding information. However, it is essential to remember that visual scales are only one aspect of the various factors that affect a person's mental and intellectual attitude. Verbal skills, logic, verbal creativity, experience, and education also play a role in shaping overall attitudes.

1. Heroic Scalatic:

- **Vast Personal Space:** Individuals with heroic scalic preferences tend to require a more comprehensive personal space, with more significant physical distance between themselves and others.
- **Mental Aspect:** Heroic can relate to mental attitudes that tend to be independent and introverted. This individual may prefer to work independently, have the personal time and space to think deeply, and consider solutions or ideas more thoroughly. Heroic can give them room for reflection, introspection, and the development of deeper thinking.

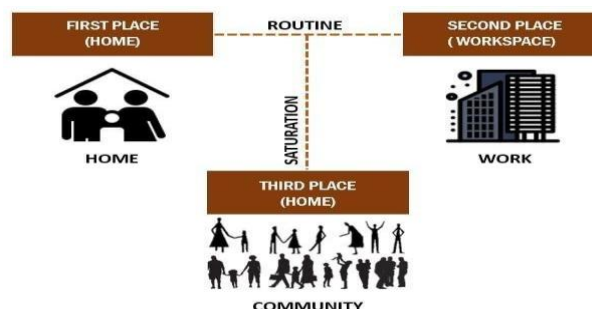
2. Intimate Scalal:

- **Close Personal Space:** Intimate scalation describes an individual's preference for a closer personal space, with less physical distance between themselves and others.
- **Intellectual Aspect:** Intimate scalacism relates to intellectual attitudes that tend to be extroverted and collaborative. Individuals with intimate creative preferences may be more open to social interaction, value physical contact, and prefer to interact intensively with others. In an intellectual context, they may show a more adaptive attitude towards working in groups, sharing ideas, and discussing actively. Both heroic scalative and intimate scalic influence individuals' mental and intellectual attitudes but in different aspects. Heroic escalates has more to do with independent, introverted, and deep-thinking mental attitudes. In contrast, intimate relatives have more to do with intellectual attitudes that are extroverted, collaborative, and adaptive in social contexts.

2.3 *Existence of Informal Space*

The escalating-based visual dimension is a concept that refers to a person's ability to process visual information with varying levels of clarity, detail, and complexity. High visual scales can affect attitudes related to a person's mental and intellectual. In his book entitled "The Great Good Place," Ray Oldenburg introduced the concept of Third Places as an essential element in social life and public welfare. Third Place refers to environments outside the home (first Place) and workplace (second Place), where people gather informally to interact, spend free time, and form social relationships.

*Third Place* is a place that provides a sense of community, bonding, and community. Oldenburg describes Third Place as the "social heart" of society, where individuals feel comfortable, accepted, and connected to others. Third Place provides a relaxed, welcoming, and inclusive environment where individuals can interact without pressure or rigid goals. It becomes a source of social solid connections, fosters the exchange of ideas, and builds mutually supportive bonds between individuals.



**Figure 2.3.1**  
Diagram Third Place



First Place for students refers to their residence which serves as a place of privacy to develop themselves, relax, and recover energy after activities outside. Second Place refers to campus environments and study spaces such as libraries, study centers, or cafes. Second Place is often a place of informal meeting and collaboration between students, facilitating sharing knowledge and experience. Third Place for students can be a coffee shop around campus, a city park, or public spaces outside the campus environment. At Third Place, they can share stories, discuss topics unrelated to their studies, and feel connected to other students who share their interests. This place is also a source of inspiration and relaxation for students (Suyudhi & Hadiwono, 2020).

#### 2.4 Research methods

The research method used to reveal the dynamics of space production motivated by human needs and orientation in society 5.0 is descriptive qualitatively (Anselm et al., 1987). Qualitative methods can bring closer research answers based on honesty and validity to space needs based on the orientation possessed by the object

research. The object of research will communicate its existence clearly through observation with a specific time and form of space that he can consume to meet the orientation and needs of his activities. Descriptive is a way of research to display visuals of the composition of the research mindset. From this method, a mapping of the situation of the activity of the object of research will be displayed against the background of its orientation and needs based on a specific collection of its proximity to previously established ideas and ideas of knowledge (Prof. et al., M.T., I.A.I., 2015).

While the selection of research samples uses random sampling, which emphasizes the symptoms of experience based on human orientation and needs on activities outside the work and living productive community, the third place or informal space is a place that accommodates the dominance of human behavior dynamically being the target of the validity of this object of study. The third place in question is the Architecture Campus of Malikussaleh University, located on Jalan Samudera, Lancang Garam, Lhokseumawe, Aceh, from the time of learning to completion. The time of the study is a time when people are productive in socializing with relatives in fulfilling personal and group orientations outside the space where they live.

### 3. Results and discussion

Before revealing the influence of Society 5.0 in the interaction of social space of Unimal architecture students in the context of personal architectural space, a study of analysis is needed first and collaboration of ideas to find answers in evaluating the existence of informal spaces that can adapt student activities.

#### 3.1 Student Interaction Room Orientation

Spaces outside the classroom, often called "huddle rooms," are virtual environments for students to develop social interaction, collaboration, and engagement on campus. The space aims to create an environment facilitating informal meetings, casual discussions, and student social activities. A critical aspect of huddle space is flexibility. This space must have adjustments and adaptations for different types of interactions.

The term *gathering room* is designed to provide a comfortable environment and encourage students to interact informally. Its function is more than just empty spaces or hallways between campus buildings. Meeting rooms are often placed in strategic locations on campus, such as corridor rooms, reception rooms, and student transition rooms, so they are easily accessible to students.

The gathering room gives students an inviting place to spend time outside the classroom. This creates an atmosphere that supports collaboration, exchange of ideas, and personal growth. This space also serves as an inclusive place where students from various backgrounds can interact with each other, exchange experiences, and enrich their knowledge through diverse dialogues and conversations.



**Figure 3.1.1**

Floor Plan 1 (a); Floor Plan 2 (b); Floor Plan 3 (c)

### 3.2 Personal Space in Social Interaction

Various situations influence a student's decision to stay on campus or go off campus based on his mental and intellectual state. Every student has different preferences and needs, and several factors can influence their choices.



**Figure 3.2.1**

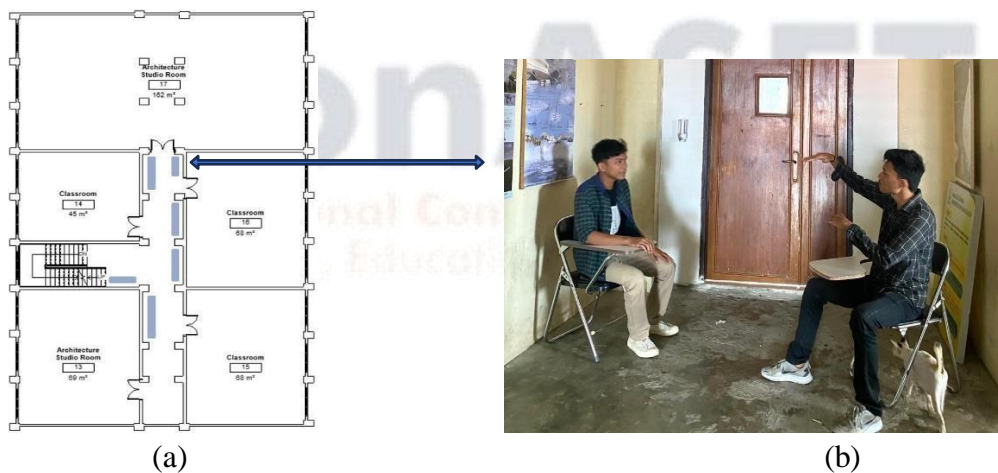
Floor Plan 1 (a); Interact (b)

Figure 3.2.1 represents students staying on campus to ensure easy access to academic facilities and study centers. By settling on campus, they can immediately get information about upcoming assignments, interact with fellow students, exchange ideas, and discuss relevant academic topics.



**Figure 3.2.2**  
Floor Plan 2 (a); Access Information (b)

In addition to benefiting from accessibility and better information, students who live on campus also have the opportunity to interact with fellow students with similar learning interests. This creates an environment that facilitates fruitful discussion and collaboration. In informal information spaces, they can broaden their horizons, share experiences, and build valuable networks for the future.



**Figure 3.2.3**  
Floor Plan 3 (a); Discussion Activity (b)

A structured and supportive campus environment is vital in maintaining students' mental and intellectual balance. On campus, facilities and services are specifically designed to support students' needs. With academic facilities within easy reach, they can optimize their study time and feel more connected to academic activities. Thus, staying on campus benefits students in holistically developing themselves and achieving a healthy mental and intellectual balance.





(a)

(b)

**Figure 3.2.4**

Do Assignments Together (a); Sharing Session (b)

However, some students go off campus to meet their mental and intellectual needs, as shown in Figure 3.2.2. Some possible reasons behind this choice include seeking a quieter atmosphere or expanding social networks outside the campus environment, or attending special training or activities that are not available on campus. They may also seek informal off-campus spaces, such as community centers or co-working spaces, that provide opportunities to interact with individuals from diverse backgrounds and broaden their horizons.

Some students' choices may change as their mental and intellectual needs change throughout their study. They may start by living on campus to build a solid academic foundation but then go off-campus to explore unique interests and talents that require a different environment. Conversely, some initially choose to go off campus but then decide to stay on campus after realizing the importance of the structure and support in the campus environment.

### 3.3 The Role of Society 5.0 in Student Interaction Space

*Society* is an entity consisting of individuals living together in an interrelated environment. In this society, there is a tendency to pursue individual interests and the need to interact and get along with others (Kamal et al., 2020). As part of society, students show individual nature by having desires, interests, and goals. However, they also recognize the importance of social interaction and relationships.

The campus interaction space is where students can meet their friends, share stories, and have fun while staying in an academic environment. Spaces like corridors, reception rooms, and transition rooms on campus allow students to vent their need to play and socialize. Activities within campus interaction spaces allow them to build critical social connections, develop communication skills, and broaden their horizons.

Although campus interaction spaces provide opportunities for play and socializing, it is essential to recognize that campus informal spaces cannot fully meet each individual's academic and play needs. Therefore, adaptation in campus design becomes essential. The era of Society 5.0 has presented new challenges in student learning, where there is a slowdown in the space of interaction that should be dynamic (Rahayu, 2021). In facing this era, it is necessary to expand campus interaction space and technology integration so students can learn holistically and engage in learning experiences relevant to the times.

Thus, campus interaction space plays a vital role in unifying student interaction. Through these interactions, students can strengthen social relationships, develop communication skills, and complement their academic experience with activities outside the

classroom. Well-designed campus interaction spaces can create an environment that supports students' holistic growth and development.

### *3.4 Adaptation of the Interaction Space Order in Architecture*

Architecture involves the art and science of designing and constructing physical structures, such as buildings and environments, considering aesthetic, functional, and technical aspects. Architecture creates a comfortable and functional environment for humans.

In an constantly changing era, knowledge must also change to keep up with the times. The rapid development of technology and science requires students to continue updating their knowledge to stay caught up. If they adapt, they can avoid falling behind and struggling to face future challenges. In addition, student interaction outside of study hours is also essential to meet the needs of informal space on campus and improve their mental and intellectual qualities. Outside of study hours, students engage in various activities, such as group discussions, participation in student organizations, social activities, the arts, or the exploration of personal interests and talents. Students can expand social networks, develop communication skills, increase social sensitivity, and gain valuable experience through interactions outside of study hours. Group discussions and informal meetings allow students to exchange ideas, discuss academic topics, and deepen their understanding.

## **4. Conclusion**

The era of Society 5.0 has changed the landscape of learning and student interaction by expanding the scale of learning beyond the capacity of social interaction spaces on campus. As a result, students have sought informal spaces outside the campus as an alternative to meet learning needs that involve mental and intellectual aspects. However, it is essential to remember that these informal spaces serve as temporary waiting areas and facilitate social interaction that remains connected to academic activities.

The rapid development of technology and knowledge in the era of Society 5.0 has affected how students learn and interact. Social interaction spaces available on campus have limitations in accommodating the development of learning needs. As a result, students have sought informal spaces off campus, such as co-working spaces or learning communities, to gain additional experience and knowledge relevant to their field of study.

However, this informal space is more than just a temporary waiting area. They are also places where students can stay connected to their academic activities and engage in functional social interactions. These informal spaces can be meeting rooms in cafes, public libraries, online discussion rooms, co-working places, or various off-campus organizations relevant to the student's field of study. Students can deepen their understanding, develop social skills, and form relationships that support their intellectual development and mental wellbeing through interactions in these informal spaces.

## **References**

- Aiello, J. R., & Baum, A. (2016). Workplace Environments: Contributions to the Health and Functioning of Adults in the Workplace. In *The Oxford Handbook of Environmental and Conservation Psychology*. Oxford University Press, 283–301.
- Anselm L. Strauss. (1987). *Qualitative Analysis for Social Scientists*. Cambridge University Press.
- Aulia, S. A. S., Yudana, G., & Aliyah, I. (2020). Kajian Karakteristik Koridor Jalan Slamet Riyadi Sebagai Ruang Interaksi Sosial Kota Surakarta Berdasarkan Teori Good City Form. *Desa-Kota*, 2(1), 14. <https://doi.org/10.20961/desa-kota.v2i1.32648.14-30>



- Hakim, R., & Utomo, H. (2003). *Komponen perancangan Arsitektur Lansekap: Prinsip unsur dan aplikasi desain*. Penerbit Bumi Aksara.
- Hall, M. R. (1966). Edward T. Hall : Proxemic Theory , 1966 By Nina Brown. 4–7. Hayduk, L. A. (2001). Personal space: Where we now stand. *Psychological Bulletin*, 127(4), 458–477.
- J.J. Gibson. (1979). *The Ecological Approach to Visual Perception*. Houghton Mifflin. Kamal, I., Firmansyah, E. A., Rafiah, K. K., Rahmawan, A. F., & Rejito, C. (2020). *Pembelajaran di Era 4.0*. November, 265–276.
- Kosslyn, S. M., G.Ganis, & Thompson, W. L. (2001). Mental imagery: Some basic questions. In M. S. Gazzaniga (Ed.), *The cognitive neurosciences*. MIT Press.
- Larice, Michael and Macdonald, Elizabeth. 2007. *The Urban Design Reader*, second edition, Routledge, NY
- Margawati, M. (2014). *MEMAHAMI PERSEPSI VISUAL : SUMBANGAN* Pendahuluan Peristilahan. V(01), 47–63.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, 84(3), 231–259.
- Oldenburg, R. (1989). *The Great Good Place: Cafes, Coffee Shops, Bookstores, Bars, Hair Salons, and Other Hangouts at the Heart of a Community*.
- Prof. Dr. M. Syaom Barliana, M.Pd., M.T., I.A.I., D. C. (2015). *Arsitektur, Urbanitas, dan Pendidikan Budaya Berkota*. Deepublish.
- Purwanto, E. (2012). Pola Seting Ruang Komunal Mahasiswa Arsitektur Fakultas Teknik Universitas Diponegoro. In *Seminar Nasional SERAP 2 -Arsitektur UGM* (pp. 341–360).
- Rahayu, K. N. S. (2021). Sinergi pendidikan menyongsong masa depan indonesia di era society 5.0. *Edukasi: Jurnal Pendidikan Dasar*, 2(1), 87–100.
- Saraswaty, R., & Nasution, A. M. (2016). Kajian Mental Image Mahasiswa Arsitektur Terhadap Arsitektur Dengan Metode Pendekatan Semiotik. *Educational Building*, 2(2), 14–20. <https://doi.org/10.24114/eb.v2i2.4394>
- Suyudhi, H., & Hadiwono, A. (2020). Rumah Seni Ruang Terapi. *Jurnal Sains, Teknologi, Urban, Perancangan, Arsitektur (Stupa)*, 2(2), 2079. <https://doi.org/10.24912/stupa.v2i2.8592>
- Tamariska, S. R., & Ekomadyo, A. S. (2017). ‘Place-Making’ Ruang Interaksi Sosial Kampung Kota’. *Jurnal Koridor*, 8(2), 172–183. <https://doi.org/10.32734/koridor.v8i2.1345>
- Teknowijoyo, F. (2022). Relevansi Industri 4.0 dan Society 5.0 Terhadap Pendidikan Di Indonesia. *Educatio*, 16(2), 173–184. <https://doi.org/10.29408/edc.v16i2.4492>