

E-ISSN: 2620-9810

# Study of Public Open Space Circulation Patterns in Mall Building

Putri Meka Mutya Fhadilla, Satriya Wahyu Firmandhani

Department of Architecture, Faculty of Engineering, Universitas Diponegoro, Semarang, Indonesia

Corresponding e-mail: sfirmandhani@gmail.com

### **Article info:**

Received: 04-06-2022, Revised: 30-12-2022, Accepted: 31-12-2022

Abstract. The lack of open space due to land competition in the area which ultimately causes a lack of gathering activities for the community, so that with the movement of people who originally gathered in open spaces are now starting to move or turn into modern malls. This certainly encourages the development of malls that can be integrated with public open spaces as a gathering place for the community. There are several malls that have been tried to be integrated into malls with the concept of public open space, including The Park Mall Solo, Kelapa Gading Mall in Jakarta and Cihampelas Walk in Bandung. The purpose of this study is to determine the role of circulation patterns that can affect or form open spaces for malls. The method used is a qualitative descriptive method with a case study approach. The analysis was carried out by analyzing and comparing the circulation patterns of the three malls in combining malls with open spaces. The results of this study indicate that the circulation pattern uses covert retail which is arranged in a linear manner, so that visitors can pass through a retail space that has a semi-open circulation form.

Keywords: Circulation, Public Open Space, Mall

### 1. Introduction

According to property observer from Savills PCI, Anton Sitorus (Halim et.al, 2015) in this era, not only housing is a necessity for residents. The population is increasing and denser, welfare is increasing, and the lifestyle is getting higher, as well as adding shopping activities from traditional markets to modern markets. Therefore, this is the reason why malls/shopping centers are needed, especially in big cities. In addition, the lack of public open space as a result of competition, especially in urban areas, eventually leads to reduced gathering activities for them, so that there is a shift in lifestyle from what was originally gathered in public open spaces to now starting to move or change towards a modern development center/mall. (Putra et al, 2011). This has certainly led to the development of malls/development centers that can be integrated with public open spaces as a gathering place to gather for those who share.

Based on the literature by Maitland (1985) and Hernandez (2015) the definition of mall is a container or place that is used as a shopping center or selling-buy goods and services consisting of various kinds of retail units, restaurants and as a place to carry out social activities and recreation. The existence of the mall construction has a positive impact, especially for the economy of the community and surrounding residents and this development is also a solution to overcome fatigue in the midst of busy various activities, especially during this pandemic. In addition, many people experience mental health so they need a place/container for recreation. It is noted that people experiencing depression have increased by 35% or an increase of 2-3 times compared to the 2018 Basic Health Research data (Unair news, 2022). However, from the large number of public development centers / malls, the element of open space provided is still very minimal so that eventually the catchment area is reduced. There are several malls that have been tried to be integrated into shopping centers/malls with the concept of public open space, including The Park Mall Solo, Kelapa Gading Mall in Jakarta and Cihampelas Walk in Bandung. With the concept of public open space, it also refers to the Sustainable

doi: 10.14710/jadu.v5i1.14455

Development Goals in point 11 available by Making Cities and Settlements Inclusive, Safe, Resilient and Sustainable.

Meanwhile, to assess the quality of the existence of public open space to the mall, it can be seen from the circulation pattern that can facilitate movement between visitors from one place to another (Putra et.al, 2011). Analysis of the simulation pattern is important to find out how much influence it has in shaping public open spaces on malls. In addition, the circulation pattern can also affect the zoning and visual aspects. This can also be used as an evaluation material in the future in order to develop a shopping center/mall.

### 2. Methods

This research used a qualitative descriptive method with a comparative case study objective approach by looking for variations from several case studies. To achieve the goal, descriptive qualitative research must be conducted to determine the best open public space circulation pattern in the mall building, which includes: conduct a review of the literature, data was collected from both primary and secondary sources, and then analyzed using parameters, such as the building's completion, the entry, the path's arrangement, the interaction between space and path, and the circulation space's shape. Furthermore, from the results of the analysis, compared to the three case studies so as to obtain the results of the synthesis of the form of integration of public open space with shopping centers in the aspects of circulation.

### 3. Discussion

## 3.1. Public Open Space to The Park Mall Solo



Figure 3.1. Floor Plan of The Park Mall Solo (mall.theparksolo.com, 2014)

The circulation groove is a rope that binding on the spaces of a building both inner and outer spaces and being interconnected (Pynkyawati et.al, 2014). The nature of the public open space of The Park Mall Solo is to use a disguised circulation pattern to get to the final destination and give the impression of flowing. This accessibility is used because of the obstacles, namely public open space and space relations and pathways through space in the form of food and drinks as well as through space in the seating area. This type of circulation can be inferred as oblique (Veramyta, 2012). The floor plan of The Park Mall Solo can be seen on the figure 3.1. The configuration of the visitor movement path is radial because it has the characteristics of developing in all directions, circulation is not too long, requires a large enough footprint, the relationship between space and path is so close. This radial pattern has linear paths that extend or end at the same central point, such as spreading from one point or

converging to one point. The configuration of the flow of visitor movements can also be seen in the movement on weekdays and weekends towards entrance 2 (P2) on the north side of public open spaces. The explanation can be clarified by figure 3.2.

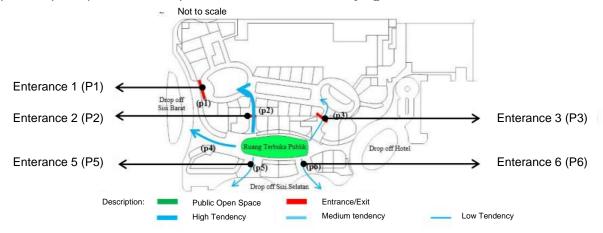


Figure 3.2. Flow of Motion in Public Open Spaces The Park Mall Solo (Analysis Results, 2022)

The relationship between space and paths in the public open space of The Park Mall Solo can be seen on the figure 3.3 as follows:

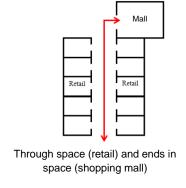


Figure 3.3. The Relationship of Space and Paths in Public Open Space to The Park Mall Solo (Analysis Results, 2022)

The form of circulation space in the public open space of The Park Solo is the form of an open circulation space that is open on both sides of the alley of The Park Mall Solo so that it gives the impression of being open, spacious, and close to nature. The illustration of circulation space of The Park Mall Solo can be seen on figure 3.4.



Figure 3.4. Circulation Space Forms in Public Open Space to The Park Mall Solo (mall.theparksolo.com, 2022)

## 3.2. Public Open Space to Kelapa Gading Mall



Figure 3.5. Floor Plan of Kelapa Gading Mall (malkelapagading.com, 2022)

The nature of the public open space of Kelapa Gading Mall is to use a disguised circulation pattern because of the shape of the circulation space that penetrates public open spaces and passes through spaces in the corridors of the Mall Kelapa Gadingg shopping center. The configuration of the flow of visitor movement in this open space is radial because it is located in the center of the development center so that visitors can move more easily in all directions. the tendency of visitor movement on weekdays and weekends, namely towards the shopping center corridor/gading walk. The illustration of visitor movement can be seen on the figure 3.6.

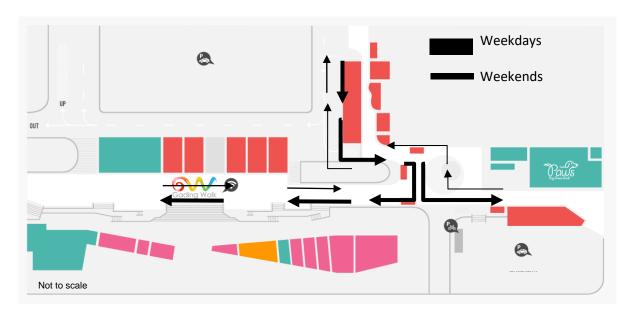


Figure 3.6. Flow of Motion in Public Open Spaces Kelapa Gading Mall (Analysis Results, 2022)

The relationship between space and paths in the public open space of Kelapa Gading Mall can be seen on the figure 3.7.

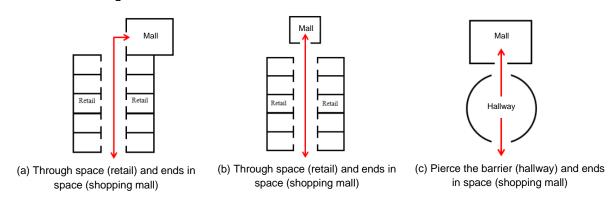


Figure 3.7. Space and Path Relationships in (a) Gading Walk Corridor, (b) La Piazza Corridor and (c) Hallway (Analysis Results, 2022)

The form of circulation in public open space to Kelapa Gading Mall, namely the form of open circulation space on one side of the Gading Walk corridor, the form of a roofless circulation space in the La Piazza corridor, and open space on both sides in the Kelapa Gading Mall corridor so that it gives the impression open, spacious, and close to nature. The illustration of the previous description can be seen on the figure 3.8.



Figure 3.8. Circulation Space Forms in (a) Gading Walk Corridor, (b) La Piazza Corridor and (c) Hallway (Analysis Results, 2022)

# 3.3. Public Open Space to Cihampelas Walk Bandung



Figure 3.9. Floor Plan of Cihampelas Walk Bandung (ciwalk.com, 2019)

The nature of the public open space of Cihampelas Walk Bandung is to use a disguised circulation pattern because due to the existence of hampered achievements, namely the Young Street corridor, Broadway Street corridor, and hallway. The configuration of the Cihampelas Walk motion path is linear. The flow of visitors to Cihampelas Walk on weekdays and weekends tends to go through the Young Street corridor. On weekends the flow of movement to the main entrance is diverted to the Young Street corridor and the Broadway Street corridor because there are usually events in the hallway so that movement is blocked as seen on the figure 3.10.

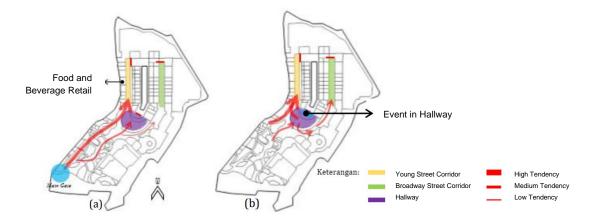


Figure 3.10 Flow of Motion in (a) Weekdays and (b) Weekends (Analysis Results, 2022)

The relationship between space and paths in the public open space of Cihampelas Walk can be seen on the figure 3.11 as follows:

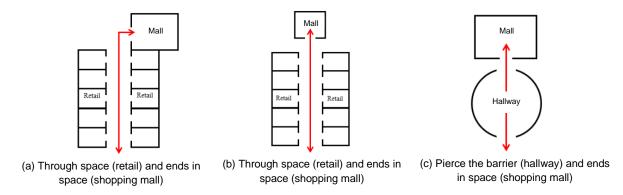


Figure 3.11. Space and Path Relationships in (a) Young Street Corridor, (b) Broadway Street Corridor and (c) Hallway (Analysis Results, 2022)

The form of circulation in the public open space of Cihampelas Walk is a closed circulation form but still uses a transparent roof in the Jalan Muda corridor, closed circulation in the Broadway Street corridor, and open circulation on both sides of the Cihampelas Walk hallway so as to give the impression of being open, spacious, and close to nature. The description can be clarified by figure 3.12.

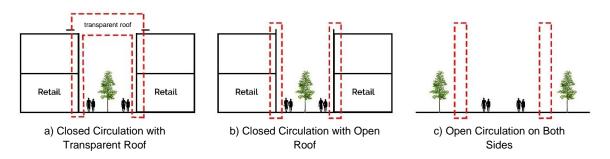


Figure 3.12. Circulation Space Forms in (a) Young Street Corridor, (b) Broadway Street Corridor and (c) Hallway (Analysis Results, 2022)

## 3.4. Results of Public Open Space Analysis of Mall

Based on the previous analysis of three case study, the circulation of public open space of mall can be inferred in the three pattern as illustrate on the figure 3.13

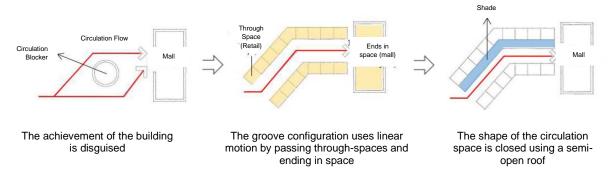


Figure 3.13. Results of Public Open Space Analysis of Mall (Analysis Results, 2022)

### 4. Conclusion

In conducting research on the circulation of public open space in the mall building can be drawn, as below:

- a. The circulation aspect can be used as a zoning connection that makes a transition between the main gate (zone), public open space, and shopping center/mall.
- b. The achievement of the open space building towards the mall is disguised due to the existence of public barriers with the flow of movement of visitors on average passing through public open spaces.
- c. The configuration of the motion flow is linear which is curved with the spaces leading to the center of the open space. using linear because to direct / facilitate the circulation of visitors for activities so that all areas can be explored and the point of crowding is not only centered / focused on one place.
- d. For the relationship of space and paths as well as the form of circulation space that is most appropriate to be applied in this building, namely, the mass of the building that surrounds and leads to the open space which is the center of the mall
- e. A shopping center consists of spaces that are connected by a common room. The shared space/intermediary space is an open space that is used as the center of the mall and connects the spaces around it.
- f. This circulation aspect will also support spatial and visual zoning.

### **Acknowledgments**

The author would like to thank all those who have supported and motivated me to complete this paper. Especially to the management of malls that allowed author to conduct the observation.

#### 5. References

- Halim, T.A., Wizaka, S.T., & Tomasowa, S.T. (2015). Pusat Perbelanjaan Dengan Konsep Ruang Terbuka di Jakarta. Undergraduate thesis, BINUS.
- Hernandez, T. (2015). Komposisi Pada Fasade Bangunan. Accessed March 10, 2022, http://www.arsigraf.com/2015/10/pengertian-definisi-mallmenurut.html
- Maitland. (1985). Shopping Mall: Planning and Design. Langman Group Limited.
- Putra, A. (2016). Integrasi Ruang Terbuka Publik Terhadap Pusat Perbelanjaan (Studi Kasus: Cihampelas Walk Bandung, Surabaya Town Square, dan The Park Solo). Doctoral dissertation, Universitas Brawijaya.
- Pynkyawati, T., Aripin, S., Ilyasa, E., Ningsih, L. Y., & Amri, A. (2014). Kajian Efisiensi Desain Sirkulasi pada Fungsi Bangunan Mall Dan Hotel BTC. *Reka Karsa*, *2*(1).
- Unair news. (2022). Kesehatan Mental Masyarakat Indonesia Saat Pandemi Covid-19 di Media Online. Accessed March 3, 2022, http://news.unair.ac.id/2022/01/03/ kesehatan-mental-masyarakat-indonesia-saat-pandemi-covid-19-di-media-online/.
- Veramyta, Rohana (2012). Landasan Konseptual Perencanaan dan Perancangan Perpustakaan Anak Sebagai Sarana Pendukung Tumbuh Kembang Anak di Kota Yogyakarta. S1 Thesis, UAJY.