



Journal of Art, Architecture and Built Environment (JAABE)

Volume No. 3 Issue No. 1 Spring 2020

ISSN: 2617-2690 (Print) 2617-2704 (Online)

Journal DOI: <https://doi.org/10.32350/jaabe>

Issue DOI: <https://doi.org/10.32350/jaabe.31>

Homepage: <https://journals.umt.edu.pk/index.php/JAABE>

Journal QR Code:



Article: **Study of Utilizing Residual Spaces under Flyovers in Lahore, Pakistan**

Hamna Ahmed
Ayesha Mehmood Malik
Saad Mujahid
Rabia Khan

Author(s):

Online Pub:

Spring 2020

Article DOI:

<https://doi.org/10.32350/jaabe.31.05>

Article QR Code:



Hamna Ahmed

To cite this article:

Ahmed, H., Malik, A. M., Mujahid, S., & Khan, R. (2020). Study of utilizing residual spaces under flyovers in Lahore, Pakistan. *Journal of Art, Architecture and Built Environment*, 3(1), 84–98.

[Crossref](#)

Copyright Information

This article is open access and is distributed under the terms of Creative Commons Attribution – Share Alike 4.0 International License

Indexing Agency



For more Please Click Here



A publication of the
School of Architecture and Planning
University of Management and Technology, Lahore, Pakistan.

Study of Utilizing Residual Spaces under Flyovers in Lahore, Pakistan

Hamna Ahmed, Ayesha Mehmood Malik*, Saad Mujahid and Rabia Khan

Department of Architecture, School of Architecture & Planning,
University of Management and Technology, Lahore, Pakistan

Abstract

Residual spaces are the leftover spaces such as the spaces under flyovers. These spaces further act as physical barriers in the city's urban form.. The spaces under flyovers have been neglected, left underused, even in some cases, remain frightening, and unattractive. These spaces provide local communities with various opportunities. In the city of Lahore, there is a lack of public places that enhance social interaction. There are many possibilities of transforming the dead and unused spaces under flyovers into creative venues for various communal activities. This paper attempts to focus on the concept and importance of leftover spaces, while identifying and analyzing the type of social space according to the presented concept of Lefebvre.

Keywords: flyovers, public spaces, representation of space, residual spaces, urban social space

Introduction

There are spaces in cities which are perceived as leftovers and these spaces are also known as residual spaces. They are found in all cities. These spaces comprise the gaps between buildings or dead-end streets, awkward angles and corners, and/or undesired spaces under overheads and flyovers (Campbell, 2013). As these spaces are not maintained, people perceive them as neglected or dead spaces used as an encroachment. In Pakistan, these spaces are mostly used as parking spots and are the result of bad decision making and poor management by designers and planners.

Today, cities' professionals all over the world are realizing that these spaces have the potential to be converted into small scale public spaces, public pockets and/or community gathering and activity spaces in the city, which will be beneficial for both the city and its residents.

Worldwide, many cities are facing the problem of the rapid growth of their population, which is adversely affecting the life of their residents. In Pakistan, urbanization is increasing at an annual rate of 3% which is the fastest rate of increase in South Asia. The United Nations Population Division estimates that by

*Corresponding author: ayesha.malik@umt.edu.pk

2025, Lahore's population will increase from 7 million to 10 million and in Pakistan, half of the population will live in urban areas. This rapid urbanization is disturbing the quality of life in the cities. People are facing issues such as poverty, homelessness, and poor infrastructure due to the increasing population (Domínguez, [2014](#)). There is a lack of public spaces due to inadequate planning of cities in Pakistan. If we aspire for a better city, we have to work with the scale which is the most sensitive part in a city's planning that remains neglected due to the 'top down' approach of planners and designers that later affects the quality of life adversely.

"If you design cities for cars and traffic, you'll have cars and traffic. If you design for people and space, you will have people and space." -FRED KENT (Kent, [2005](#))

The extension of cities is an organic process. Flyovers in cities connect different neighborhoods and communities. The residual space under flyovers is visually accessible but mostly remains underused and is neglected by planners as well as the residents of the cities. These spaces emerge due to inefficient and improper planning processes implemented without understanding the fabric of the city. Many cities initiate to re-think about these ignored spaces (Biesecker, [2015](#)).

The population of cities is increasing as discussed above, due to which the number of vehicles in the cities have also increased. This, in turn, has increased the demand for infrastructure to facilitate vehicular traffic. Consequently, the authorities have decided to construct more roads and highways for the ease of the people, neglecting the pedestrians, public spaces for the people, etc. A rapid increase in the number of flyovers to facilitate the smooth flow of traffic gave birth to the idea of developing something productive under the flyover spaces (Mydin & Utaberta, [2015](#)).

The aerial views of flyovers in Lahore, one of the major cities of Pakistan, explicitly represent the technical advancement of urban and transport planning of the city. With the passage of time, the population of Lahore is increasing at a very fast rate due to the migration of people from rural areas to Lahore, as Lahore has better social and physical infrastructure and provides a better quality of life. The previous government was focused on developing the infrastructure of Lahore and designed the metro bus service, many flyovers to cater the traffic inside the city, and the Ring Road that connects the city all over. However, those designers failed in designing the spaces under flyovers which are misused as encroachment, parking areas, waste dumping areas etc. The authors carefully selected some spaces under

flyover. The purpose of this paper is to convert those ignored spaces into live spaces so they can contribute to the city's development.

Methodology of Analyzing Residual Space

An observational analysis was done to observe the spatial design of the selected residual spaces in Lahore. Both primary and secondary data which included interviews, literature review and the information collected through questionnaires. The purpose of this research is to analyze the residual spaces for social activities / projects in accordance with the philosophy of Henri Lefebvre. The conclusions were drawn as technical design solutions that can be used to redesign these residual spaces, specially the flyovers in Lahore and other cities.

Spaces under Flyovers of Lahore

Jinnah flyover was constructed in 1990 as an alternative to crossing the railway track. It is considered as one of the longest overhead bridges in Lahore. It has a length of 1 kilometer and under this flyover, there is hustle and bustle day and night. There is a roundabout crowded by the day laborers in the morning till noon, including a barber who has set his shop with a chair and a mirror and a cobbler who sits there with many ripped shoes and fixing tools. Gamblers, beggars and drug addicts also sleep under the shade of this flyover. On both sides of the flyover, there are commercial markets and their workers park their bicycles under the flyover, as it provides shade to their bikes without obstructing the road.

Figure 1

Cobbler Mending Shoes under Jinnah Flyover



Figure 2

Parking of the Workers in Shop Vehicles



The Mian Mir Bridge is one of the oldest bridges in Lahore. It was constructed in 1958 and it has a length of 0.67 km. The Mian Mir and the Sherpao Bridge were also constructed over a railway track. Mian Mir Bridge is situated in the area of cantonment which is a high security area. In this area, many shops have been constructed under the bridge, although half of the area is used as a parking area for the offices of the vicinity.

Figure 3

Under Bridge Space of Mia Mir Bridge Used as Parking Area



Figure 4*Shops under Flyover, Fortress Stadium*

The Sherpao Bridge was constructed in 1976 and it has a length of 0.14 km. This space is also a leftover space but due to its design, it has a great potential for place making. Some homeless people are living there with their families and drug addicts sleep on those benches during the night time.

Figure 5*Homeless People Living under Bridge*

The Muslim Town flyover is encroached as a parking lot. The shop owners and workers of Ichra market park their cars under the bridge's shade. At noon, a man arrives with his food stall, from which many passersby and workers buy their lunch. There is a designed landscape under the flyover with sitting spaces but because this

flyover exists between the inner city highway and due to fast vehicles and heavy traffic on the road, there are very few pedestrians there.

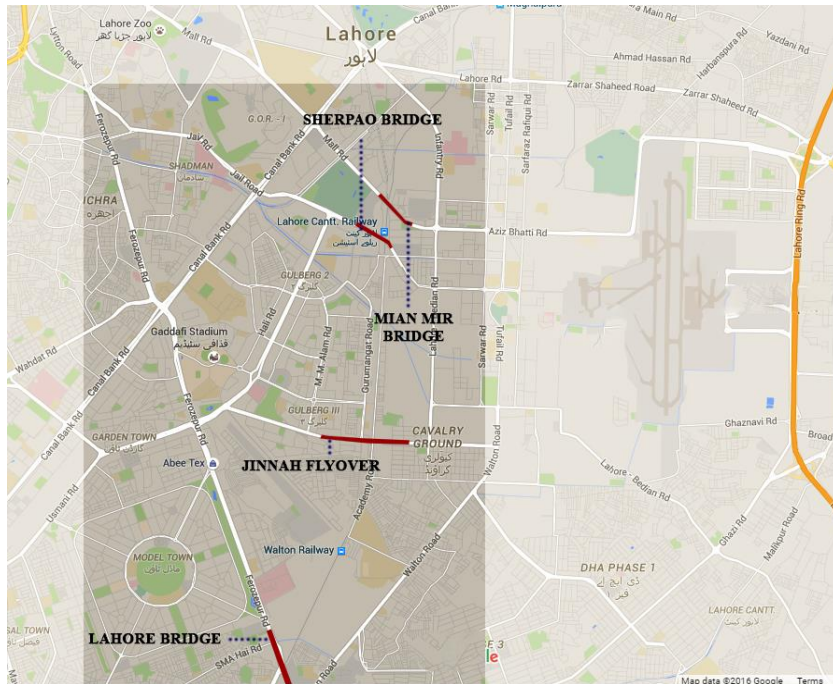
Figure 6

Landscape under Muslim Town Flyover



Figure 7


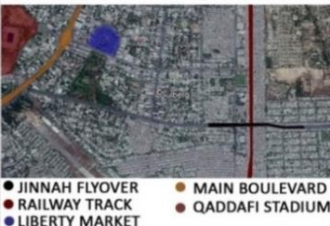






Lahore Map with Marked Bridges



All these flyovers have the potential to be transformed into public spaces. Already, there is a lack of public spaces in Lahore, so the encroached and abandoned under flyover spaces can be utilized wisely. They can be converted into social interaction spaces, spaces of teaching the under privileged children, sleeping shelters for homeless people, open markets for the people who sell things at traffic signals, libraries for the students and shops for free hand books, art galleries, and seating areas with traditional board games.

Figure 8

Flyovers in Lahore

| FLYOVER | TIME OF CONSTRUCTION | CURRENT SITUATION | MAP |
|---------------------|---------------------------|---|--|
| JINNAH FLYOVER | 1990 OVER RAILWAY LINE |  |  ● JINNAH FLYOVER ● MAIN BOULEVARD ● RAILWAY TRACK ● QADDAFI STADIUM ● LIBERTY MARKET |
| SHERPAO BRIDGE | 1976 OVER RAILWAY LINE |  |  ● SHERPAO BRIDGE ● MAIN BOULEVARD ● JAIL ROAD ● RAILWAY TRACK |
| MIAN MIR BRIDGE | 1958 OVER RAILWAY LINE |  |  ● MIAN MIR BRIDGE ● FORTRESS STADIUM ● SHERPAO BRIDGE ● RAILWAY TRACK |
| MUSLIM TOWN FLYOVER | 2012 OVER CANAL |  |  ● MUSLIM TOWN FLYOVER ● CANAL ● METRO BRIDGE ● QADDAFI STADIUM |

Conclusion

Tupule Flyover, Mumbai, India

In 2011, Matunga residents displaced the gamblers and drug addicts under the flyover of Tupule, who congregated under the flyover and found that space to be hidden and neglected by the surrounding societies, creating a perfect environment for them to consume drugs and play cards (gambling). The residents formed a civil group named as 'One Matunga'; firstly, they collected the funds for the redevelopment of under flyover space and round-the-clock private security (Chandana, [2017](#)). Secondly, after getting approval from various government bodies, they transformed that abundant space that was once used by gamblers and drug addicts in to a lush garden, which is now used as a recreational space and a lush pathway for commuters (Hoh, [2016](#)). Apart from this, the plan also included a basketball court and skating paths for children, jogging tracks, amphitheater, sitting spaces for the people and a flower garden.

Figure 9

Tupule Flyover, Mumbai



Source: (Chandana, [2017](#))

Under Flyovers in Cairo, Egypt

The selling of books under bridges is one of the best examples for using the residual spaces. This can be seen under the bridges in Caracas, Venezuela where books are being sold under the Av Furzes Armadas flyover. These stalls are of second hand books. The presence of book stalls attracts the people and the space is frequently visited.

Figure 10*Books Shop under Av Furzes Armadas Flyover**Source:* (Chandana, [2017](#))

Need of Public Space

Generally, when we think about the cities, we think about the people who belong to these cities. A public space serves as a platform to promote social interaction, helps the community to develop its identity, and enrich the quality of life for the surrounding residents. In Lahore, during the Eid holidays, every small green pocket in the city is crowded. People come with their families to celebrate Eid and hawkers sell different things like balloons, cotton candy, different toys etc. These spaces although do not fulfill the idea of a public space yet remain in public use. The reason is that we are lacking in designing public spaces appropriately but our cities are spreading very fast with their highways and flyovers. The population is increasing so fast that during vacations, people search for some recreational space and every bit of green space is used as a public park. However, those spaces are not parks, they are just green pockets. The spaces under flyovers, because of ignorance, are still abundant in number but people don't go there even during holidays. Modern cities such as Lahore suffer from the lack of public spaces. There are still many unused or leftover areas within the cities that have the potential for a better public space. Most of the leftover spaces emerge due to solving the traffic issues.

The conversion of these residual spaces into social spaces will promote social value in the society that takes the form of place-making, promotes a healthy lifestyle and becomes a social capital. There must be planning considerations which include programs for these spaces in relation to the volume of the traffic. As cities

develop, opportunities abound for re-thinking the use of sterile pockets of infrastructural land, such as the areas beneath viaducts, bridges and flyovers and/or spaces in tunnels, as potentially dynamic spaces rather than static ones. These spaces also create affordable sites for incubating and test-bedding new ideas, hence expanding not just our spatial capacity but also the limits of our entrepreneurial imagination.

In many cases where alternative land uses have been considered, the main concern of city governments is safety. The spaces under flyovers are sensitive nodes that are being used as land encroachment. Even in Lahore, people charge taxes for parking cars there, although these spaces are not in the ownership of anybody. Hence, some cities imposed a blanket rule on disallowing the use of land under viaducts, which led to the emergence of many static spaces. The city government can better use these spaces with very little investment. Not only the city government but different people will benefit from them if people from the surroundings areas gather there (Hoh, [2016](#)).

From this research, it can be concluded that spaces under flyovers are considered as leftover spaces that can be utilized for social activities for the public. If these spaces have a proper parking area, food courts and some recreational activity centers, they are said to be appropriately utilized. However, in order to understand the possibilities, one should study the demand, physical characteristics of the given space and community background of its surroundings which is the key point of designing, so that the particular space fulfills the need of the people to ensure the utilization of that area in the best possible way.

Representation of a Space Leading Toward Place Making

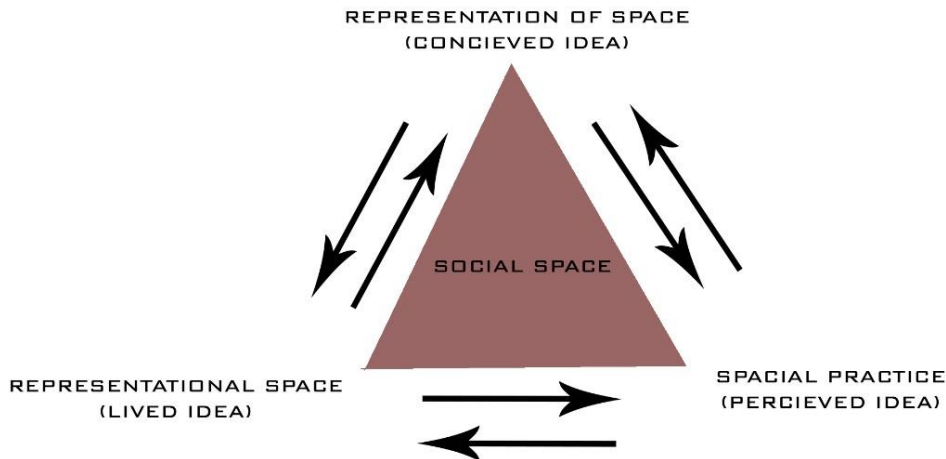
Lefebvre defined urban social space or public space as an urban space filled with built environment which is a product of a plan after it was conceived by planners, architects, and urban designers. The same environment can also be perceived by the users and redefined by their lived experiences (Lefebvre, [1974](#)).

Place making invites planners and communities to come together and reimagine / recreate a public space that fulfills the needs of the users. These residual spaces have a great potential for place making and inviting the communities at a single platform to share their ideas and needs and most of all, it will make the quality of life better (Kushwa & Rathi, [2017](#)). The idea is to analyze the given space, to know the demands of that space, why these kinds of spaces emerge and where they are situated. These are some important questions which help analyzing the given space

and to know what the concept of that space is, how people perceive it and in reality, how people are living inside that bubble.

Figure 11

Illustration of Dialectic Relation in a Social Space



Idea of Utilizing the Space under Flyovers

Through the lens of the Lefebvre theory about social space, we analyzed the space under Lahore Bridge near Kot Lakhpat and Gulab Devi hospital. Lahore is facing a massive growth in the population as well an immense increase in the number of vehicles. Due to this multiplication of people and vehicles, the government and higher authorities planned highways or flyovers for the ease of the people but they neglected the pedestrianization and demand of public spaces in the city. Different activities are going on at these spaces such as children come from the near katchi abadis to play, the vendors sell fruits, vegetables and toys such as balloons and even beggars / wanderers come under the flyover to enjoy the shade and rest. The triad shows that these spaces (conceived, lived and perceived) are interlinked with each other. The design proposed by AR. Rabia Khan (co-author) says that under the flyover, the idea is to provide a flexible space and not a rigid structure to allow people to appropriately utilize the space according to their needs. For this purpose, she gives the example of designing the hexagon pods for homeless people and spaces for the vendors with reference to the perceived and lived spaces. Hence, the residual spaces under flyovers will act as social indicators (shown in Fig. 7). The design includes a playing area for the children, public toilets which are

the need of public spaces in Lahore, hexagon structures that are to be used by homeless people as sleeping pods at night.

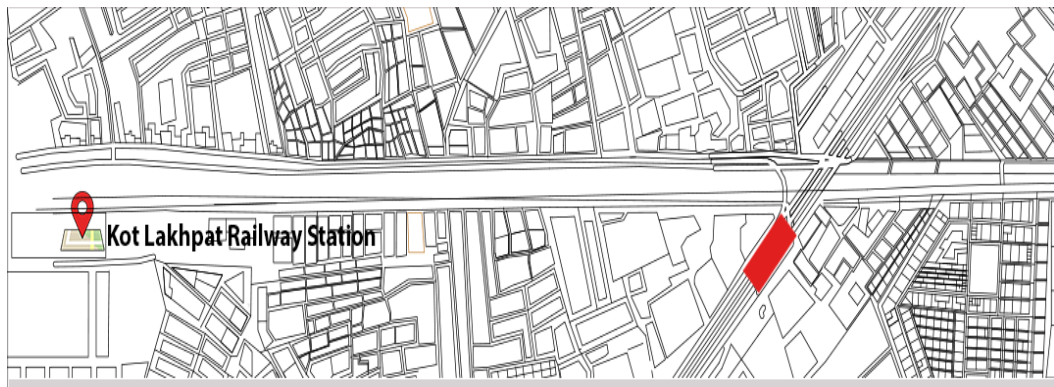
Figure 12

Under Lahore Bridge

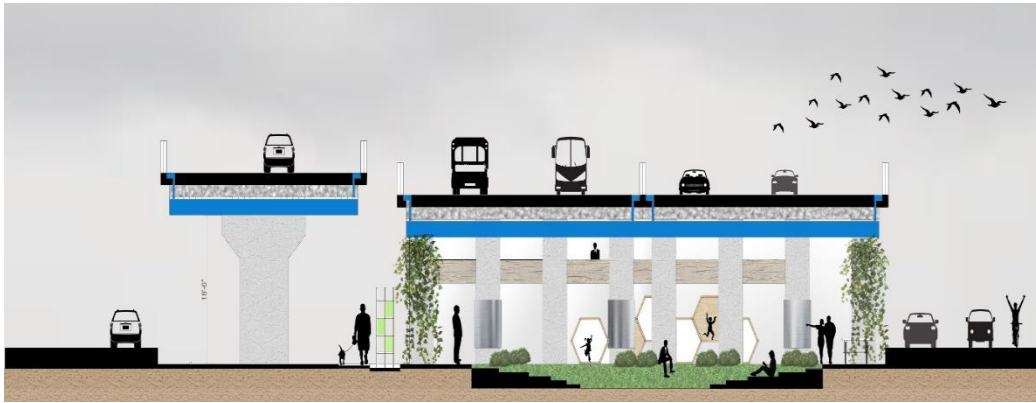


Figure 13

A Site in Lahore



The ideal flyover is used for the purpose of playing, for shelter, for community building, for worship and for celebration (Kushwa & Rathi, 2017). This design has the potential for well-lit public spaces, for food court, seating areas and play areas. It also gives an opportunity to the vendors in dense neighborhoods to attract the public and it also improves the overall pedestrian connectivity.

Figure 14*Section for the Design Proposed under Bridge***Figure 15***Section for the Proposed Design under Bridge*

Designing sleeping pods for homeless people is a great idea as it is the need of our city to cater those people who are unable to find a space for sleeping and end up sleeping either on the road or on the pedestrian paths. These designed pods should be small in size so that people may only use them for sleeping and they should be installed in different parts of the city's public spaces. People using them need not only be drug addicts but they may include day laborers who have come from the villages into the city for work, hawkers, and/or the people looking for a shelter to sleep. To avoid drug addicts, there should be proper lighting and constant surveillance of these pods, so that the people in need can take their proper advantage.

References

Biesecker, C. (2015). *Designing urban underhighway spaces*. The University Of Georgia.

- Campbell, C. C. (2013). *Visualizing residual spaces in new light: A study for creating & designing an urban public space under a downtown San José Freeway*. San José State University.
- Chandana, G. (2017). *Flyover: An urban void*. <https://www.slideshare.net/GeevaChandana/flyover-urban-void-or-fabric-knitting-the-city>
- Domínguez, G. (2014, December 14). Pakistan's urbanization: A challenge of great proportions. *DW: Made for minds*. <https://www.dw.com/en/pakistans-urbanization-a-challenge-of-great-proportions/a-18163731>
- Hoh, D. (2016). *Turning dead spaces*. Centre for Liveable Cities. <https://www.clc.gov.sg/docs/default-source/reports/turning-dead-spaces.pdf>
- Kent, F. (2005). *Streets are people places*. Project of Public Spaces. <https://www.pps.org/article/transportationasplace>
- Kushwa, N., & Rathi, K. (2017). Urban voids - reclaiming urban space. *International Journal of Advanced Research, Idead and Innovation in Technology*, 3(1), 196–203.
- Lefebvre, H. (1974). *The production of space*. Blackwell publisher.
- Mydin, M. A. O., & Utaberta, N. (2015). *Improvise overpasses: Study on utilizing spaces below flyover*. *International Journal of Applied Engineering Research*, 10(17), 37851–37856.