

Urban Design V/S Crime

Honey Jalali

*Assistant Professor, B.Arch, Masters in Urban Planning (SPA Delhi)
Amity University Haryana, honeyjalali@gmail.com*

Akshat Gupta

B. Arch Student, Amity University Haryana

Abstract

Crime is a social evil and it impacts how people look up at the governing system, managers of cities and perhaps influences how we look at each other. This paper tries to put forward some observations made while walking through the hot spots of Delhi, highlighting their strength and weakness. Further it discusses perspectives of various theorists on how Urban Design and thoughtful neighbourhood planning can prevent or decrease number of incidents occurring in our cities.

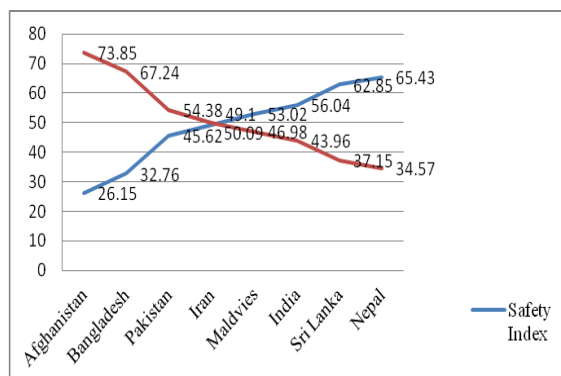
Keywords- *Cities, Crime, Public Places, Urban Design*

1. Introduction

1.1 What is Crime?

An action which constitutes an offence and is punishable by law is considered as a crime. Every crime violates the law but not every violation of the law is considered as crime. Crime is not limited to developing countries but it also has it spread in developed nations. In southern Asia India ranks sixth in terms of crime and safety index (Numbeo 2017). In crime it is super ceded by Afghanistan, Pakistan, Bangladesh, Iran, Maldives followed by Sri Lanka and Nepal.

Figure 1. Crime Index¹ & Safety Index of Southern Asian Countries (2017)



Source: Registrar General of India, Census 2011

Crimes of different types get reported in both urban and rural areas. India is primarily a rural country as only 31.16 per cent of its population lives in urban areas (as per 2011 census) while majority of the population (68.84%) lives in rural areas. Of the total urban population (377.1 lakh) nearly one-third of the population lives in the metropolitan cities (one million plus population). The notable urban crimes under Indian Penal Code (IPC) and Local Acts Special Laws (L&SL) include Murder, Rape, Dacoity, Robbery, Burglary, etc.

In urban areas crime is different from that in semi-urban and rural areas. Most of the crimes happening in rural areas are not recorded due to lack of basic services. Today, after almost 7 decades of independence, the existing policy dynamics has taken a toll on rural India. The villages take a backseat in almost every aspect of socio-economic analysis. We have created an economy of rich cities and poor villages, surging urban areas and decaying rural areas.

Figure2. Incidence & Rate of Total Cognizable Crimes in Metropolitan Cities in 2013

SL No.	City	Population (In Lakhs)	Sex Ratio	Total Cognizable Crimes	Literacy
1.	Mumbai	183.94	863	6367	89.78
2.	Delhi	163.49	868	5749	86.32
3.	Kolkata	140.35	935	1972	87.54
4.	Chennai	86.53	985	131931	90.23
5.	Bangalore	85.20	922	3473	88.69
6.	Hyderabad	76.74	954	1736	82.9
7.	Ahmadabad	63.61	899	122679	88.16
8.	Pune	50.57	904	8834	89.56
9.	Surat	45.91	753	33241	87.83
10.	Kanpur	29.20	857	123602	82.28

Source: Registrar General of India, Census 2011

The above table shows the total no of cognizable crimes such as rape, murder and theft ranges from 1500 to 14000, these are recorded in the year 2013

for the top 10 populated metropolitan cities in India. Chennai is reported the highest no of crimes despite its 90% literacy rate. This is followed by Kanpur, Ahmadabad, Surat, Pune, Mumbai and Delhi.

1.2 Can a space enliven Criminology?

Space is the raw material an architect uses to design Places. 'Space' to a layman is everything beyond Earth. To an architect, 'Space' is anything that hosts 'Design'. Here, 'Design' stands for material that defines the limit of the space. When Design is introduced to a space, the space gets a character of its own. When this character becomes so strongly reinforced in the minds of people, the space transcends into a 'Place'.

The following questions incur after pondering on the terms 'crime, space and place':-

- Where does most recorded crime occur?
- Where do offenders and victims live and spend time?
- Is it possible to prevent crime by changing people's surroundings?
- What does it mean to think 'spatially'?

These are the possible questions that come in the mind of urban designers and architects while dealing with the urban issues. The different spaces that one may spend time in or pass through on a typical day is home, street, college, work place, shop, library, bar, sports centre, cinema, friend's home etc. People use different means at different times of day while travelling to or from these places such as bike, on foot, car, bus, train. Each space has its own internal rules of conduct – breaching these rules can create potential for deviance. But urban design can only deal with crimes in urban areas such as streets, parks, community spaces, etc.

Man needs for survival makes him move from one place to another to conduct his social life without social space, social life cannot be conducted. Spaces are not simply the 'backdrop' for our social interactions but they empowers to shape social life.(Author, Eamonn Carrabine, Author, Pam Cox, Author, Maggy Lee, Author, Ken Plummer, & Author, Nigel South (2008). This is a chapter.

Book title: Criminology: A sociological introduction (pp. 137-153)

2. Urban Design v/s Crime

Cities have always served three vital functions – meeting place, marketplace and connection place. Firstly, the city provides opportunities for social exchange of information of all kinds. Secondly it facilitates commercial exchange of goods and services. Finally, public spaces enable access to and connections between all the functions of the city. It is widely recognized that crime is a threat for healthy city and the fear of crime is significant barrier to physical activities in cities. But the perception of safety can be altered by the environment. For example, lack of street lighting or presence of graffiti can lead to greater fear of crime and consequently lower participation in physical movement. People who have access to a safe place appear to be more likely to participate in social activities and therefore maintain good city life.

It is believed that urban design is the art of creating and shaping cities and towns. It involves the arrangement and design of buildings, public spaces, transport systems, services, and amenities. This is the process of giving form, shape, and character to groups of buildings, to whole neighbourhoods, and the city. There are 5 elements of urban design as defined by Kevin Lynch (Image of the City,1960) are: District, Node, Landmark, Edge, Path. Among these edges and path or streets can be those elements where urban crime can be prevented when carefully planned.

Author Jane Jacobs, in *The Life and Death of Great American Cities*, says, "Streets in cities serve many purposes besides carrying vehicles, and city sidewalks – the pedestrian parts of the streets – serve many purposes besides carrying pedestrians." Jacobs main assertion about sidewalks is that they are the one thing that makes a city safe or unsafe.

In other words cities can be considered as a dangerous jungle where people do not feel safe on the sidewalks. So what is it about sidewalks that make a neighbourhood safe or unsafe? Basically circulation is the main purpose of sidewalks. They are intended and designed as an efficient way to get people around on foot. Jacobs proposes that neighbourhoods with active sidewalk life are

typically the safe neighbourhoods, and those with nearly deserted sidewalks are the ones that are unsafe.

There are three qualities of sidewalks that will equip it to make safety an asset:

- Clear distinction between what is private space and what is public space.
- Enabling natural surveillance - People living or working in an area must get the opportunity for natural surveillance which would provide them a sense of ownership. This can be done by building the stores and houses facing the street.
- Sidewalks inviting more footfalls. This will add to the effective number of eyes on the street as people liking watching people.

Despite of all these notions we cannot make people use a sidewalk they do not wish to use. In order to give people reason to use the sidewalks and streets, there must be a considerable enough number of public places and stores sprinkled throughout a neighbourhood that would warrant people getting out of their homes and walking on the sidewalks. Therefore, designing a place where people want to or need to walk on the streets or to run a business is the responsibility of the architects, urban designers & planners so that people feel safe.

3. Observation Cases

3.1 Introduction

All cities face crime which is a social and environmental problem but crime can be prevented in many cases with help of physical planning like enabling socially active neighborhoods via design of various public participation tools etc . Below some cases are discussed on the basis of observation survey done on 22nd and 23rd of September 2016. Apart from highlighting few of the cases in Delhi an initiative taken in Bangalore is shared which helps in understanding the use of left over urban spaces in best possible way.

3.2 Hauz Khas Village, New Delhi

One such public space is Hauz Khas Village which is located in South Delhi in Zone – F. It is situated in a public area but it still lacks in providing a safe environment. A clear layout of the place shows that all the roads inside the village are narrow and dingy with no proper lighting or surveillance. In the

present scenario, there are isolated areas and enclaves being created in the inner parts of the village which are potential spots for crime like robbery, murder, etc, due to the layout of infrastructures. Focus on built environment, promoting methods of natural surveillance, combining psychological, behavioural can help on altering the physical environment to reduce criminal opportunities.

Figure 3. Potential Crime Spot in Haus Khas



Source: Author

It was also observed that that littering of garbage, mismanagement of waste water will lead to excessive breeding of vermin and agents of disease such as rats, flies and mosquitoes. This environmental crime can be prevented.

On enquiring a vendor elaborated that at night the footfall is more as compared in the morning and there has been no social crimes in the past few years. During the day height of the buildings surrounding the complex restricts the sun light and at night some of the areas in the village get too isolated due to lack of lighting and can be used as potential crime spots so therefore proper CCTV surveillance is must in that area.

3.3 Middle Circle & Subways, Connaught Place, New Delhi

Connaught place is one of the oldest markets of the capital and is also considered the heart of Delhi, India. It has several eating-houses. The state emporia buildings are also located in this area so are the head offices of major banks, airlines and other such things of importance to the tourist. The complex, popularly referred to as CP, is an important meeting point for all sections of people.

Despite of being the popular choice of people it lacks in providing a safe environment in its middle circle.

An observation study was conducted on 22.09.16 at 6pm to identify any potential crime spot in CP. The middle circle roads are being used for parking and lacks maintenance of the street lights. This makes the place dingy and a potential crime spot. There is a designated place for garbage disposal but not maintained at all leading to excessive breeding of vermin and agents of disease such as rats, flies and mosquitoes which is an environmental crime. On inquiring an on duty police man shared his views on status of the middle circle that apart from the improper garbage disposal in the area the service roads connected to the middle circle are being used by people to play cards and drink in public place.

Figure 4. Potential Crime Spot, Middle Circle, CP



Source: Author

We then walked into the subways which are not very active or vibrant places. At night they become crime spot for chain snatching, etc. Due to lack of maintenance of lights in most of the subways, they remain under-utilised after sunset and the place get scary, with addicts behind almost every corner.

3.4 Nithari Village, Noida

Nithari is an urban village in the western part of the state of Uttar Pradesh, India, bordering on New Delhi. Nithari crime case was one of the few cases that shook the nation. The crime could have been prevented if the neighbourhood was well planned in terms of natural surveillance. The reason behind picking this area was that the crime committed happened in the morning despite the fact that the

area is a residential sector with a lot of local shops and wave city center, Delhi public school and Dr Bhimrao Ambedkar Multispeciality Hospital in its vicinity.

Figure 6 Crime Spot, 2006 (House D-5)



Source: Author

The crime area (House) was found to be without proper barricades even after crime happened in 2006. The street lights in the area were still not placed at the right spots and the ones which were installed were not maintained properly. The place on the whole lacked liveliness which is must for a residential area. The locality had no sidewalks and the cars were parked in the non parking zone. The sewer lines were leaking leading to excessive breeding of vermin and agents of disease such as rats, flies and mosquitoes which is an environmental crime.

One can consider it as a case of poor site planning as there were many inactive dead ends. The main contributing factor is the lack of clearly defined spaces of ownership which disables natural surveillance.

Like any other residential areas Nithari village needs to be an active gated community, with carefully designed and maintained footpaths and street lights. The above mentioned measures if taken care of will improve the state of urban crime seen in residential areas.

3.5 Bangalore, MG Road

To ensure smooth transportation every city in India has introduced flyovers which where ever designed are bound to leave spaces beneath them. Over the years, these spaces have become home for the homeless and destitute such as rickshaw pullers,

ice-cream vendors, beggars, drug dealers and hawkers which perhaps was not the intention.

Figure 7: Student Proposed Designer Urban Space



Source: The Times of India Bangalore, Jan 2014

Contrary to the above mentioned situation Anand Rao Circle flyover in Bangalore has set an example. The project was designed by nine students pursuing masters in architecture, New York Columbia University. They aimed to redesign public spaces, turning them into bright urban spots and meaningful, sustainable infrastructure. Comfortably they used recyclable wood; plastic bottles compacted to bales, bamboo and metal scrap. The project is inspired by 'Folly for a Flyover' — an amphitheatre made of recycled material under a motorway in London.

This space earlier was a dumping yard and it now has a mini-park with play zone for children and acts like a pleasing circulation area for public in general. Clearly there is immense potential to improve open spaces along major transportation corridors in every city.

3. Perspectives

Successful urban planning considers character, of "home" and "sense of place", local identity, respect for natural, artistic and historic heritage, an understanding of the "urban grain" or "townscape", pedestrian and other modes of traffic, utilities and natural hazards, such as flood zones. In recent years, practitioners have also been expected to maximize the accessibility of an area to people with

different abilities, practicing the notion of "inclusive design", to anticipate criminal behaviour and consequently to "design-out crime" and to consider "traffic calming" or "pedestrianisation" as ways of making urban life more pleasant.

City planning is now trying to control criminality with structure designed from theories such as socio architecture or environmental determinism. These theories say that an urban environment can influence individuals' obedience to social rules. The theories often say that psychological pressure develops in more densely developed, unadorned areas. This stress causes some crimes and some use of illegal drug and the antidote is usually more individual space and better more beautiful design in place with functionalism.

Oscar Newman's defensible space theory cites the modernist housing project of the 1960s as an example of environmental determinism, where large blocks of flats are surrounded by shared and disassociated public areas, which are hard for residents to identify with. As those on lower incomes cannot hire others to maintain public space such as security guards or ground keepers, and because no individual feels personally responsible, there was a general deterioration of public space leading to a sense of alienation and social disorder.

Jane Jacobs is another notable environmental determinist and associated with "eyes on the street" concept. She says by improving 'natural surveillance' of shared land and facilities of nearby residents and by literally increasing the number of people who can see it, and increasing the familiarity of residents, as a collective, residents can more easily detect undesirable or criminal behaviour.

Broken windows theory, an academic theory proposed by James Q. Wilson and George Kelling in 1982 used broken windows as a metaphor for disorder within neighbourhoods. Their theory links disorder and incivility within a community to subsequent occurrences of serious crime.

Another theory named "broken-window" argues that small indicators of neglect, such as broken windows and unkempt lawns, promote a feeling that an area is in a state of decay. Anticipating decay, people likewise fail to maintain their own properties. The theory suggests that abandonment

causes crime, rather than crime causing abandonment.

Also some planning methods might help an elite group to control ordinary citizens. For example, Haussmann's renovation of Paris created a system of wide boulevards which prevented the construction of barricades in the streets and eased the movement of military troops. In Rome (Italy), the Fascists in the 1930s created ex novo many new suburbs in order to concentrate criminals and poorer classes away from the elegant town. Robert Moses developments in New York were intended to limit the effectiveness of public transit; bridges over parkways were built too low to accommodate buses, in order to restrict access to the beach by racial minorities and the poor.

Other social theories point out that in Britain and most countries since the 18th century, the transformation of societies from rural agriculture to industry caused a difficult adaptation to urban living. These theories emphasize that many planning policies ignore personal tensions, forcing individuals to live in a condition of perpetual extraneity to their cities. Many people therefore lack the comfort of feeling "at home" when at home. Often these theorists seek a reconsideration of commonly used "standards" that rationalize the outcomes of a free (relatively unregulated) market.

4. Conclusion

The crime situation in Indian cities is not very hidden as compared to rural India. Many incidents have been reported on increasing crime rate. This crime we talk about aloud is social only but clearly crime has two aspects to it namely environmental and social. Infact many reasons of crime relates to social, economical and environmental situation of an individual or group.

We cannot see crime as a subjective and isolated matter. Our leaders and planners need to understand that a factor in our crisis is this: We don't see ourselves as part of a greater community with commonly held aspirations. (Alfredo Triff, 2009)

However, the question still arises as to whether the occurring of crime can actually be prevented with urban design or do other factors play a significant role for the crimes happening in a urban city? Urban Design can impact only the physical and

contribute to the psychological environment of people enabling healthy living conditions. This can be further be elaborated by understanding the active and passive public spaces for all age groups.

As discussed a bunch of theorists have put forward their belief that crime can be prevented through environmental design. By this they do not mean climatic environment but people's social, physical and psychological outdoor environment which provides a sense of security and develops social responsibility. This can be explained on a scale as small as of a neighbourhood .For instance if the sector police takes pro active charge of any disorder in the area and less serious crime in neighbourhoods that have not yet been overtaken by serious crime, they can help reduce fear and resident withdrawal. This would build trust and would encourage or rather promote higher levels of informal social control of residents over of their neighbourhood and prevent serious crime from infiltrating.

Also due to fast pace urbanization, industries and transport systems have grown rather out of proportion and are primarily responsible for many social, environmental issues like people living in areas lacking basic infrastructure for work leading to formation of slums and squatter settlements, contributing to unhealthy conditions. There are many such related issues mushrooming in our cities.

There as many aspects to city life itself .To be precise cities are mirror image of its people! There should be meaningful stress on the need for activity to promote surveillance between "private" and "public" spaces irrespective of the landuse. The safety of these spaces cannot be enforced by the police but by the voluntary control of people becoming "active participants".

The cases we observed clearly suggest the significance of well designed, lit and maintained continuous pathways, subways, dead ends or intersections and other public places.

Architects and Planners can contribute through careful inclusive site planning, environmental planning and inclusive urban design. It also means not harming the environment in terms of pollution, wastage of water and arbitrary garbage disposal. The planning and design should offer features that convey ownership and afford easy and frequent

surveillance as there is a capacity of the physical design to impart a sense of security. Also urban design can only contribute to prevent social or environmental crime outside the walls of our homes!

References

2011, C. (n.d.). *Census 2011*. Retrieved from <http://www.census2011.co.in/urbanagglomeration.php>

Armitage, R. (2014, September 08). *ARUP*. Retrieved from <http://thoughts.arup.com/post/details/377/how-can-good-urban-design-reduce-crime>

Bureau, N. C. (2013). Retrieved from <http://ncrb.nic.in/StatPublications/CII/CII2013/Statistics-2013.pdf>

Butzner, J. (2006, JUNE 3). *INDEPENDENT*. Retrieved from INDEPENDENT: <http://www.independent.co.uk/news/obituaries/jane-jacobs-480896.html>

Carrabine, E. a. (2008). *Criminology A Sociological Introduction 2nd edition*. Retrieved from <http://cw.routledge.com/textbooks/9780415464512/downloads/sample.pdf>

Chand, S. (n.d.). Retrieved from Your Article Library: <http://www.yourarticlelibrary.com/urbanisation/11-major-problems-of-urbanisation-in-india/19880/>

Design, U. (n.d.). *Urban Design*. Retrieved from <http://www.urbandesign.org/home.html>

Dreier, P. (2006). *NHI*. Retrieved from NHI: <http://www.nhi.org/online/issues/146/janejacobslegacy.html>

Eaker, C. (2008, October). Retrieved from [https://placemaking.wordpress.com/2008/10/18/the-use-of-sidewalks-safety/\(2008\)](https://placemaking.wordpress.com/2008/10/18/the-use-of-sidewalks-safety/(2008)). In P. C. Eamonn Carrabine, *Criminology*.

EUKN. (n.d.). *European Urban Knowledge Network*. Retrieved from <http://www.eukn.eu/eukn-research/eu-presidencies/danish-presidency/urban-design/urban-design-how-important-is-it-for-cities/>

Gordan, J. (2013, January). *Prezi*. Retrieved from <https://prezi.com/dt20pdrsglrr/crime-prevention-through-urban-design/?webgl=0>

McKee, A. J. (2013, June). *Encyclopedia Britannica*. Retrieved from <https://www.britannica.com/topic/broken-windows-theory>

Mukunthan, A. (2015, December). *Factly*. Retrieved from <https://factly.in/rural-india-behind-urban-india-in-progress-indicators/>

Raghavan, R. (1999, July). *Frontline*. Retrieved from <http://www.frontline.in/static/html/fl1615/16150780.htm>

sunyit.edu. (n.d.). Retrieved from http://people.sunyit.edu/~lepres/thesis/principles/71_pdfsam_POD.pdf

Triff, A. (2009, September Tuesday). *miami bourbaki*. Retrieved from <http://mbourbaki.blogspot.in/2009/09/can-urban-design-fight-crime.html>

University, G. M. (n.d.). Retrieved from <http://cebcp.org/evidence-based-policing/what-works-in-policing/research-evidence-review/broken-windows-policing/>

Zahm, D. (2007, AUGUST). *US DEPARTMENT OF JUSTICE*. Retrieved from POPCENETER: <http://www.popcenter.org/tools/pdfs/cpted.pdf>