

Shelter – A Place to Feel Safe and Secure

Safety, security and the built environment



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1 Urban Shelter Design Development

How Security shaped Urban Structures throughout History

Urban safety and security is a central element in modern urban areas. It is embedded in the very urban fabric of modern cities. From the morning when one exits one's house to the end of the day, we are all constantly going through procedures related to security. For example, when I leave in the morning, I lock the door of my room, leave the corridor where only the students that are also living in that same corridor have access through an electronic badge, and I exit the building through a secure entrance door. When I get to the university before 8am I have to open the entrance door with a card and a personal code given to me by my university. This very same procedure has to be repeated just a few seconds later to get access to my workspace.

The morphological aspects of urban safety and security of modern cities can be traced all the way back to the earlier known cities of ancient times. The issue of security was at the roots of most ancient cities. They were located upon hills and surrounded by walls. This protection became even more prevalent during the middle ages (Mumford, 1938). The purpose of these walls and security measures were to protect its inhabitants from outside invaders and then to prevent the residents from entering places which were reserved for the elite. The very form of the city was controlled and restricted by their walls and the security measures within them.

A classic example of the walled city is the city of Carassonne¹ in southern France, with its dual walls, turrets, and church. The streets within are narrow and the houses small confined by the restriction of the walls. Entry was allowed through guarded gates. The gates could be closed in time of hostilities.



Fig.1: walled city of Carassonne, France

(source:http://upload.wikimedia.org/wikipedia/commons/7/7b/Cit%C3%A9_de_Carcassonne.jpg)

The industrial city no longer needed walls to protect itself from outside forces threatening its population. The state or the empire provided for the protection of all citizens within its boundaries. In the pre-industrial era, the poor and the rich lived in close proximity. The threat came outside the community. After the industrial revolution, the poor were segregated from the rich as the proletariat were perceived to be of danger to the bourgeois and the welfare. The street pattern defined the urban morphology of the industrial city and was designed in a way that violence by the proletariat could be controlled by the state. The roots of these

¹ www.carcassonne.culture.fr

patterns can be found in the redevelopment of Paris by Haussmann in the 1850's. Haussmann restructured Paris by creating boulevards for easy troop movement and by segregation of neighbourhoods by surrounding streets as a security measure. These concepts are reflected in the modern street patterns in all urban settings (Harvey 2006.)



Fig.2: Renovation of Paris by Eugène Haussmann

(source: www.arthistoryarchive.com)

The post-industrial city is one which has similarities with the industrial city, but has changed into one where private space is more separated than before and security measures through technology or through specialized security personnel has increased. This can for example be seen in the increase of gated communities all over the world or the increased use of electronic monitoring.

So the security portion of the human mind has been reflected in the urban fabric in all historic stages of cities. The elements of walls, towers and other security measures such as guards seem to be elements in all stages. In the modern era, these traditional methods of security have been supplemented by electronic surveillance.

The Phenomenon of Gated Communities

As mentioned above, private and fortified communities are by no means new in urban history. Cities from ancient times through the middle ages often featured walls for protection from the outside world. In the last decades the privatization of urban space through walls, fences and gates has become a trend in global urban development. Gated enclaves are appearing both in rich and in poor countries, in the North and South, and in developed and developing nations. In many developing countries, as in the Philippines for instance, gated communities also seem to be used to solve the problem of the rapid urbanization which induces huge areas of informal settlements within the cities. Relocation projects such as the Habitat-St. Hannibal Housing Project² by Habitat for Humanity in Manila, Philippines, are offering these people a new, safer and more secure place to live. In the case of the St Hannibal Project, about 300 families living as squatters along the Pasig River were relocated on a nearby site, still within the informal settlements (*Fig.3*). This has a significant impact on the security aspects of the relocation site. These families are not only offered a new home, they will also obtain a higher standard of living, while the ones living across the street will still be stuck in extreme poverty.



Fig.3 St Hannibal; Gate ; Surrounding area

Such inequalities are leading to one of the reasons for gating certain areas: safety and security. Blakely and Snyder (1997), who provided one of the most thorough investigations of gated communities available, identified three main types of gated community: lifestyle, prestige, and security zone communities.

² awarded as “2008 best practices in improving the Living Environment”
www.unhabitat.org/bestpractices/2008/mainview04.asp?BPID=2123

(Grant&Mittelstaedt, 2004). St Hannibal would be listed under the third type mentioned, a project that reflects a fear of outsiders.

2 Factors Shaping Urban Shelter Design

Before one can discuss the conditions that are relevant and important for Urban Shelter Design, one has to understand first the meaning of the notion “shelter”. Reading through different definitions of the notion, one word was sticking out: protection³. Seeing the task of a shelter in the protection of someone (or something) raises a lot of questions which help to determine the essential factors that shape Urban Shelter. What is it that people need protection from? What are the threats and who is most threatened? If shelter means protection, what is it that makes a place protected, safe and secure?

According to the Global Report on human settlements (2007) the three major threats to urban safety and security are

- urban crime and violence
- insecurity of tenure and forced evictions
- natural and human-made disasters

Poverty is the main victim as it is an important socio-economic determinant of vulnerability to these threats. Poor people are more exposed to crime, forced evictions and natural hazards. They are more vulnerable because they are often located on sites prone to floods, landslides and pollution. Furthermore, they are politically powerless.

Urban Fear and the Perception of Safety

Urban fear has become an indicator of sustainability. The fear reflects how vulnerable a citizen feels, though it doesn't have to be based on real facts, specific studies or numbers. It is most often related to the simple point of perception. It has been found that the more fearful citizens are, the less they are likely to be happy and content in their city⁴. Of course people want to live in a

³ Shelter - a place where people are protected from bad weather or from danger
a place or situation in which you are protected from bad weather or danger
a place to live, considered as a basic human need www.macmillandictionary.com

⁴ World Habitat Day 2007 www.unhabitat.org

safe place. They don't wish to live in an unsafe city or neighbourhood that is pursued by crime and violence.

The structure of urban space plays a significant role in human psychology. For instance, the ownership of space (public, semi-public, private), architectural structures, urban vegetation, street lighting and so on, are some of the factors that affect the good or bad psychological human state and human behaviour (Austin et al, 2002; Blakely&Snyder, 1998). According to Sigmund Freud, human beings are threatened by three different directions: 1. By ourselves, 2. By the others and 3. By our relationship between ourselves and other people (Bakratsa, 2011:9).(Fig 4)



Fig. 4: Directions of threat
(source: elaborated by the author,
based on Bakratsa, 2011.)

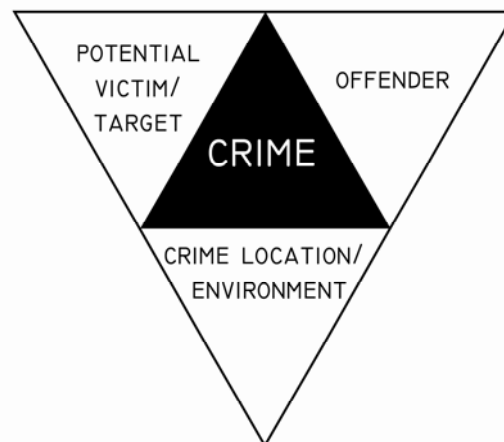


Fig. 5: Basic elements of crime
(source: elaborated by the author,
based on CPTED)

On the other hand, there are three elements of crime that are, at the most basic level, required in order for a criminal event to occur: 1. a ready, willing and able *offender*, 2. a vulnerable, attractive or provocative *target/victim*, and 3. a favourable *environment*.⁵ (Fig 5)

The following comparison of the two previous diagrams should show that there is a relation between the physical environment and the way people feel or interact and that certain environments do affect the people's behaviour in a certain way.

⁵ Crime Prevention through Environmental Design (CPTED) based on research conducted by CSIR Building and Construction Technology

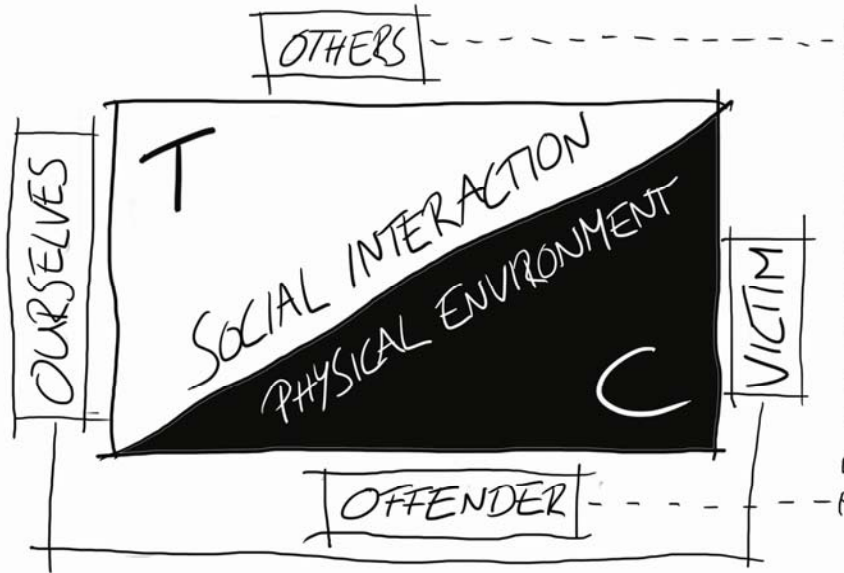


Fig. 6: the physical environment and the social behaviour

(source : elaborated by the author)

So the environment can also play a significant role in influencing perceptions of safety. While certain environments can induce a feeling of safety, others can induce fear, even in areas where levels of crime are not high. In this regard, planning and design measures can be utilized very successfully to enhance feelings of safety in areas where people feel vulnerable.

Besides the urban and neighbourhood conditions there are other factors conditioning the perception of fear and the sense of security within the urban realm like demographic factors or victimization experiences (Austin et al, 2002). Within the demographic factors affecting the perception of fear is sex, age and socioeconomic status. Usually, women seem to experience higher levels of fear than men and on the other hand older people seem to have lower security levels than younger ones.

3 The Role of Architects

Everyone wants a safe(r) place to live, to work and to do everything in between. So how does architecture contribute to safety? And what is its connection with a

person's sense of safety? What role do the architects and their designs play in the contribution to safe and secure cities?

First of all, safety is not an issue that addresses only architects and planners. Sure, urban design defines function and form of the build environment, and it has therefore a large impact on urban safety in various ways, but good urban design can only happen if there exists good governance that values citizenship by consulting and involving all citizens in their decisions and planning. Creating a safe environment is everybody's responsibility. Public safety must be considered a right for all that all members of society have to develop together with their municipalities and governments.⁶

Media also plays a major role in the contribution to the perception of safety. Media has power and can largely affect the image of an area or a city. For instance, during the study trip in Manila, there was this taxi-driver who was very uncomfortable with entering the property of a housing project by the organization Gawad Kalinga, as the project is located within an area called "Baseco", a large area of informal settlements. Its reputation for high crime and violence rate made this area become a "No-Go"-zone for most citizens.



Fig. 7: Gawad Kalinga-Housing Project in Baseco, Metro Manila

⁶ "The Safer Cities Programme" www.unhabitat.org

This example illustrates that, as already mentioned in the previous chapter, safety, and more importantly the perception of safety, is directly linked to the sustainability of an area, a neighbourhood or a city. Sustainable urbanisation can only happen if the inhabitants of a city feel safe to take part in economic, social, and cultural life, if investors perceive the city as secure and the tourists have no reason to fear for their life. The overall development of cities is affected by lack of safety and the perception of feeling unsafe.⁷

The architect is part of the physical and spatial planning tool whose goal should be to design a safe and secure urban environment not only to keep crime, violence and fear from threatening life in society, but also to enable a sustainable development of cities. He carries a responsibility for his designs that affect lifestyles and safety in the built environment. There are a number of mechanisms which define the design of urban spaces, such as road widths, scale and volume of public and semi-public spaces, accessibility of the spaces, adequate lighting, urban furniture and vegetation and so on... This turns the generation of a safe city into a complex process and to achieve the goal, communication and cooperation on all levels (local authorities, inter-organisation, between governments, the civil society, the private sector etc..) is essential.

4 Design of Sustainable Shelter and Neighbourhoods

It's all about Community.

Anna Minton⁸ discusses this exact point in a radio broadcast on *Radio Netherland Worldwide*⁹. She explains that people don't just feel safer because they have locks on their doors; but, that people feel safer in environments that foster and promote "trust between strangers".

This leads to the big question: Does your architecture evoke feelings of safety because it shelters its occupants from the rest of the surrounding area, or does your architecture evoke feelings of safety because it is an environment that is designed to foster trust?

⁷ "Making Cities Safer", UN-Habitat

⁸ Anna Minton is a British journalist and writer of the book "*Ground Control-Fear and Happiness in the 21st Century City*"

⁹ Safety in cities and the architecture of fear www.rnw.nl

In other words, when you design your building (or neighbourhood), is it to be an “island” that shuts out the rest of the crime-ridden surrounding area — driving people to isolate themselves from the rest of the community? Of course, architecture needs to shelter its occupants to some extent; but doing this too much may actually be contributing to the crime problem, and the occupant’s sense of fear. Planning and design measures can be utilised very successfully to enhance the safety in areas where people feel vulnerable. The notion that the physical environment can influence perceptions of safety and that it can either increase or reduce the opportunities for crime is not new. Internationally, it has been studied extensively over a number of decades. For instance, the “Defensible Space” model, primarily developed by Oscar Newman (1972), promotes designs of public and semi-public spaces that are under public surveillance at all times. Housing areas are designed in a way that make the surroundings spaces possible to control and defend. The urban design should make it easier to recognise the neighbours, so that non-welcome guests could be distinguished which establishes a sense of territoriality which helps to prevent crime.



Fig. 8: typical closed streets, Newman (1992)

The “fortified enclaves”, also called “gated communities”, are a specific phenomenon of defensible space. Though this fortress-like protection should not

be the solution to the problem. One should rather aim for a shelter that provides a sense of safety which spreads into the surrounding community, creating social control by the people themselves. An alternative to the gates would be the idea of natural surveillance that can be created through design and planning. The eyes of the people in the community would establish invisible gates instead of being physically kept behind fences or walls.

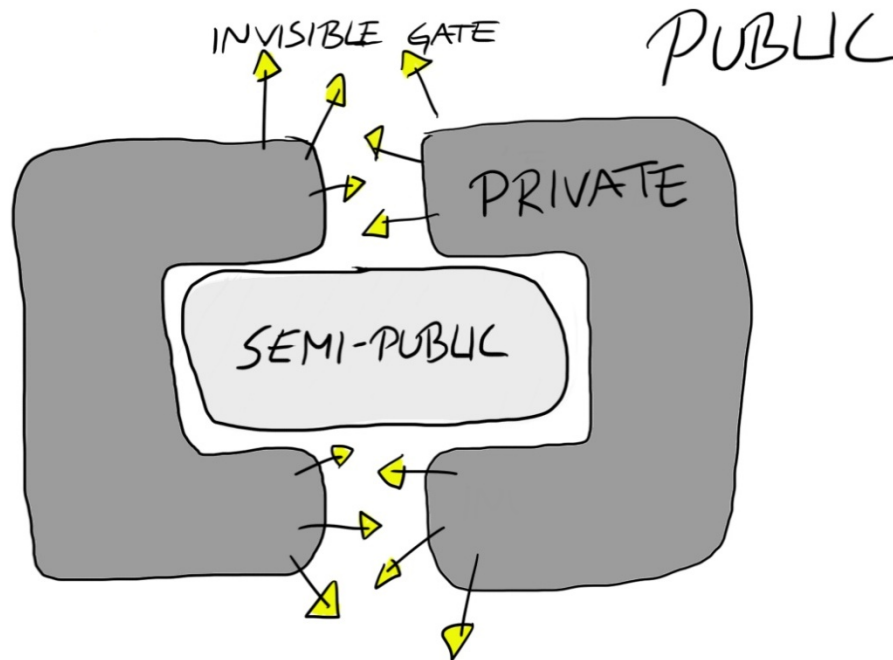


Fig. 9: concept of invisible gates (source : elaborated by the author)

When it comes to design strategies that allow you to design a safe environment, one main rule should be followed: use design principles that enable the creation of a community feeling, because along with a sense of community comes a sense of safety. By simply knowing your neighbours, you gain control of your neighbourhood. Some examples could be the issue of visibility mentioned before, the involvement of the people in the maintenance of the area, or the territoriality factor that defines the ownership of certain spaces and the way people interact.

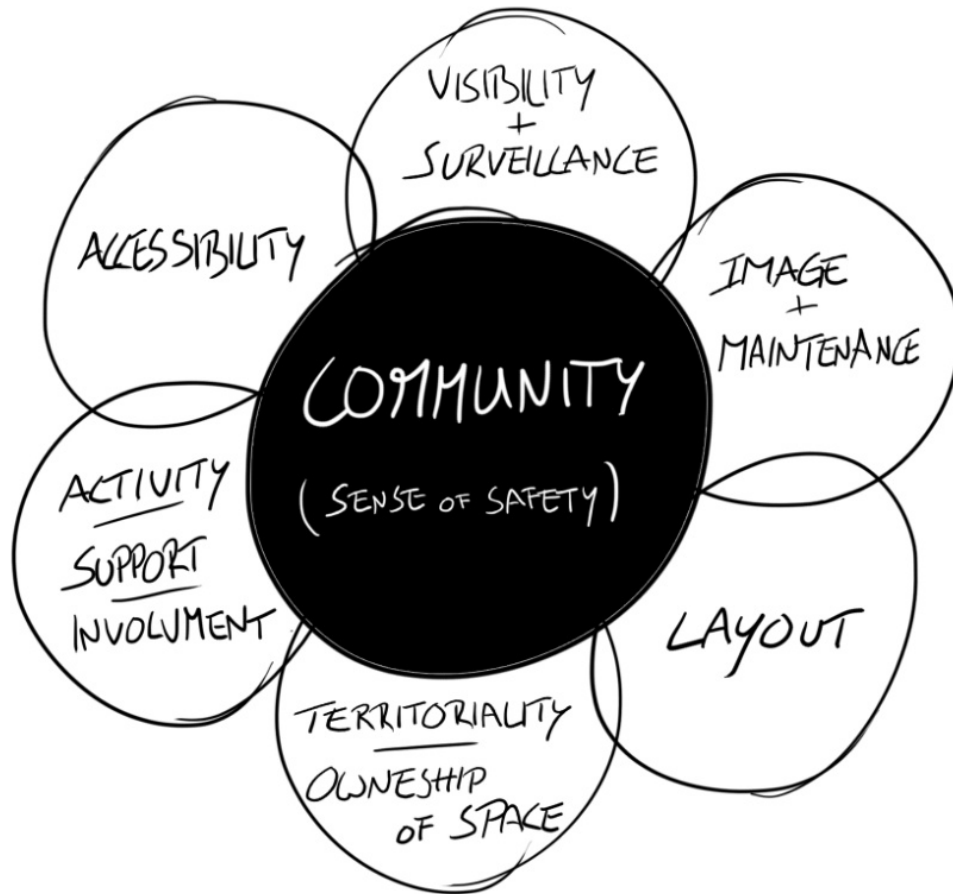


Fig. 10: Design principles (source : elaborated by the author)

Shelter design is about more than the physical spaces – at its core lies community development in the broadest sense.

“The key to the success of any intervention that involves the planning and design of the physical environment lies in the extent to which the people using these environments are involved in the process.” (CPTED)

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