

Street and Human Activity

Ar. Tulsi N Patel
M.Arch(City Design)
Dept. of Architecture Assistantship
Gov. Polytechnic for Girls, SURAT, INDIA

Ar. Parul Shastri
M.Arch(City Design)
Faculty of Architecture
S.C.E.T, SURAT, INDIA

Abstract

This Topic discusses the concept of Street, Street in an urban physical context and the form and uses of street. The identity of place and human activities, urban image and culture are also reviewed. An overview of the environment behaviour studies is presented to provide the theoretical framework for conducting this study. Informal street activities as a part of urban culture are discussed to define and understand the street features.

As an important element of urban form, street functions as social space, commercial space, cultural space, as well as channels of movement and symbolic representation of local tradition and culture. Since street spaces comprise not only physical element but also the people who are moving, using, acting, and dancing within and around them, informal street activities emerge as an integral part of street life.

1. Introduction

The aim of this study is to demonstrate the significant role of informal street activities (street culture) as an integral part of urban culture and image and to provide guidelines to conserve these significant attributes in enhancing the richness and the complexity of Street as the main commercial-historic-cultural corridor in the historic city. The study focuses on the contextual relationship and interaction

between people and the built environment, to emphasise this significant ambience and the role of informal street activities in the current urban design approach. The study intend to prove that informal street activities have a significant role on enhancing diversity in the use of street, activating public life and increasing attractiveness. Despite these positive attributes, these informal activities are seen to be one major obstacle in the process of managing urban spaces by the local authorities because of the inherent issues of conflicting occupation of public urban spaces that result in the hindering of pedestrian and vehicular movements, decreasing sidewalks space and more often, general cleanliness of the urban environment. Urban design solutions are formulated to exploit all possibilities to conserve the informal street activities as significant attributes in enhancing the richness and the complexity of the street and at the same time try to resolve the problems that arose in managing the conflicts and issues pertaining to these activities and the spaces they occupied.

2. Street

‘Think of a city and what comes to mind? It is the streets. If a city’s streets look interesting the city looks interesting; if they look dull, the city looks dull.’
(Jacobs, 1961)

According to the Merriam-Webster Dictionary, street is a public thoroughfare especially in a city, town, or village including all area within the right of way (as sidewalks and tree belts). Furthermore, street is distinguished as being wider than an alley or lane but narrower than an avenue or boulevard. Rapoport (1987) defines streets as linear spaces lined by buildings, found in settlements and used for circulation and sometimes for other activities. While providing the difference between a road and street, Moughtin (1992) describes street as an enclosed, three dimensional space between two lines of adjacent buildings. According to Rykwert (1986), street is a delimited surface and part of an urban texture characterized by an extended area lined with buildings on either side.

Bernard Rudofsky says “the street is not an area but a volume. It cannot exist in a vacuum; it is inseparable from its environment. In other words, it is no better than the company ground. Its viability depends as much on the right kind of architecture as on the right kind of humanity”.

“In a very broad sense, street form can be defined as any built or non- built form which is used for physical communication, i.e. which accommodates all kinds of traffic. It can be a linear space bounded by building facades, or it can be in the form of canal in water as well as in the form of freeways in air. Thus street form can be recognized as a form created by human beings.

The literal meaning of “street form” is the street space bounded by facades on both sides. So there are few definitions or descriptions of word ‘Street’. In this study, deriving understanding of various concept of street, it is intended to assign a word, “street form”. This new definition of “street form” interprets it as the total environment of a street generated by its inhabitant’s needs and activities. As social aspect, according to this definition, street form will reflect the life style of a community during a particular period. The components of street form can be identified as street space, house facades, etc which can identify the physical aspects.

3. Street in an Urban Physical Context

Street has become a subject of intellectual discourse as early as Vitruvius (mentioned in his famous book *The Ten Books on Architecture*), Palladio and Alberti. They were concerned with the classification of streets’ characteristics in the paradigmatic environments of renaissance.

In the context of urban physical form, street is believed to be one of the earliest elements of city pattern. Some scholars even believe that certain streets were older than the human settlements they served (Rykwert, 1986). Street connects one place to another, and provides a network of routes.

Streets play a significant role in determining urban form more than any other elements of urban form. As Jacobs (1993) states through the forms they have created, streets contain some characteristics that distinguish a city form from others. They help determining the period when the city was built, its geographical characteristics, the underlying functions, design or political philosophies, technological demands and the local culture. Additionally, street or in other terms “path”, according to Lynch (1960), is the first most significant element which forms the image of a city. Amongst the nodes, landmarks, edges and districts, paths are the most noticeable and memorable features in a city. Other channels of movement, including alleys, motorways, railways, canals and the like are also included in this category. A path is the only element amongst them which allows individuals to view the other four elements as well.

4. Evolution of Street form and its transformation

The basic idea of the street was conceived functionally by a group of people, as a link of communication, because of a strong desire to communicate with the other group of people living away from them. This communication was essential because of many reasons like, security, social habits, distribution of surplus product, etc. in the process of time; this link grew and developed certain form and character due to certain contextual forces like climate, topography, habits and needs of people, etc.

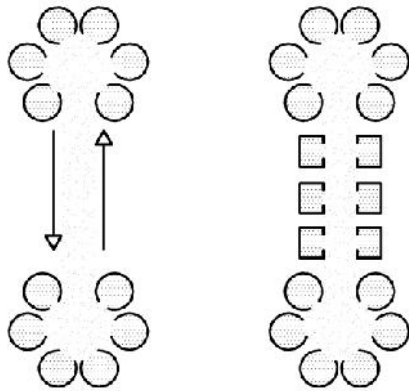


Fig 1 - Evolution of a street

Street form varies at different places and at different time due to change in human and natural forces. It is also directly dependent upon the function it serves. The scale of street is determined by its functions and users.

It is also observed that sometimes the meaning of Modern Street has been changed from older street. The emphasis is shifted from a man to mobile. This street is not in the form of narrow, meandering alley way, It is transformed into the form of broad avenue, freeway or express way to accommodate automobiles. This change is the result of rapidly advancing technology which encourages human being to build such super human structures. Thus, this kind of street is evolved out of a need of mass-communication at a faster rate and ease of laying infra structures.

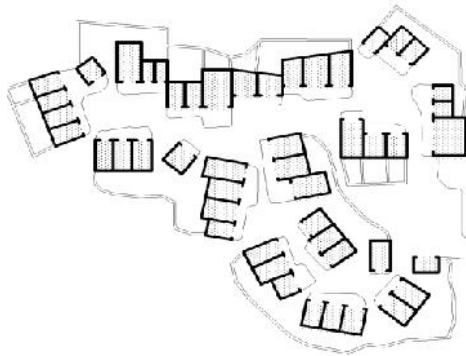


Fig 2 -Absence of Street in randomly organized settlement

In the case of older street, the concept to quite an extends centred around man and his environment. All psychological aspects of

human beings like sense of enclosure, privacy, security, intimacy were considered and expressed in its form.

Being one of the elements of urban space, form of street is established spatially by elements which structure the street configuration. Trancik (1986) classifies urban space (street and square) in two primary types: “hard” space and “soft” space. The hard space is the one which is principally bounded by architectural walls and the soft space includes the spaces dominated by the natural environment.

Furthermore, Trancik (1986) states that

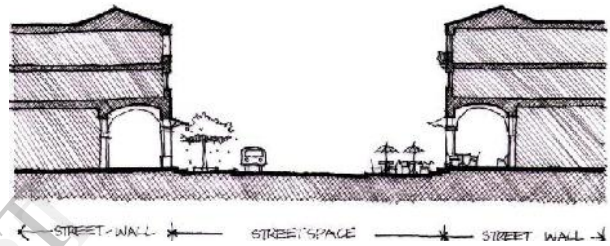


Fig 3-Section of street showing the arrangement of street space and street wall

inflected (curved) and uninflected (straight). In uninflected street space, the entire street space is perceived at a glance and displays a monumental physical form. Meanwhile, the inflected street space gradually unfolds due to its curvature, the facades are varied within a certain consistency of style, creating a richness and controlled diversity that seems to be absent in the straight street space and it is much more in keeping with human figure rather than monumental physical form.



Fig 4 -Types of streetscape: inflected and uninflected showing different appearance and visual perception on streetscape

Source: Looking at London , Kutcher , 1978

Form of streetscape as perceived by pedestrian and motorist, according to Rapoport (1987) shows that pedestrian (walker) perceives more detailed features of street space rather than the person involved in high-speed activities (motorist), as shown in the following figure.

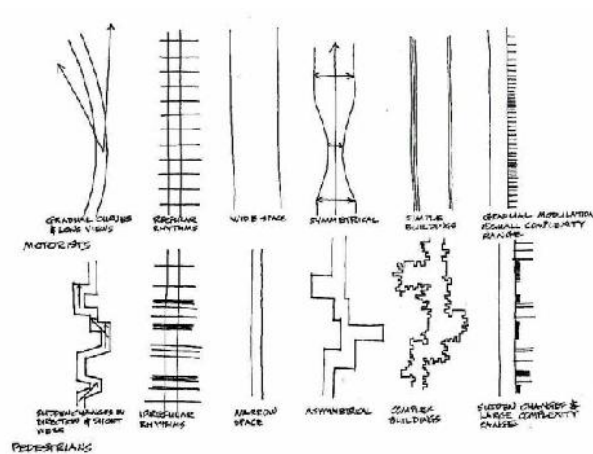


Fig 5 - Perceptual characteristic of streetscape according to motorists and pedestrians
Source: Rapoport, 1987

5. The Uses of Streets

According to Ellis (1986), street can be divided spatially as street walls and street space. Street space refers to the volumetric entity created by the street wall. It appears as a bounded configuration and acts as exterior room of the city. Meanwhile, street wall is an enclosure of street space, which can be formed as a series of buildings or landscapes.

5.1. Streets as Channel of Movement

As a channel of movement, street connects one place to another. The street provides a link between buildings, both within the street and in the city at large. As a link, it

facilitates the movement of people, as pedestrians or within vehicles, and the movement of goods. In correlation to this function, Eichner and Tobey (1987) have identified various activities regarding the use of street as a channel of movement (Tab 1)

FUNCTIONAL USES

Vehicular Circulation

- Through movement
- Picking up/dropping off passengers
- Curb side parking
- Access to parking
- Buses
- On-street service
- Off-street service
- Emergency vehicle

Pedestrian Circulation

- Through movement
- Waiting for, boarding and alighting from vehicles (buses, auto, cars)
- Entering and leaving subways
- Crossing street
- Entering and leaving building

Public movement involves walking, riding horses, camel and other animals, using animal's pull cart, cycling, and driving the more modern and sophisticated vehicles such as cars and motorcycles. The evolving of various means of transportation drives the street to provide space for them. As a result, the nature of street space transforms.

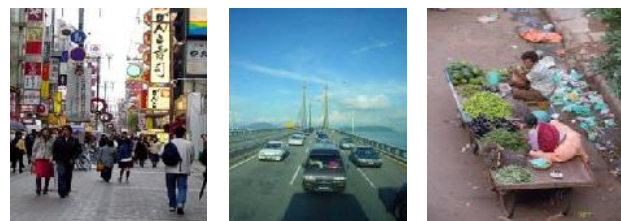


Fig 6 - Streets as Channels of Movement; (a) pedestrian movement (Osaka, 2002) (b) vehicle movement (Penang, 2005), (c) various movement of goods and people (Surat, 2011)
Source: Author photographs

Many streets have become inundated with motorized vehicles to such an extent that the pedestrian and public life have almost been squeezed out. Furthermore, in many streets in North America walking and public life has been completely phased out from the nature of street activities. Whereas streets, such as in Barcelona, Copenhagen, Curitiba (Brazil) and Melbourne (Australia), have striven to regain a reasonable balance between traffic, market, and meeting places (Gehl, 2002)

5.2. Streets as Social Space

Streets also act as an arena for social interaction. People use street as a media to interact with each other. It is in street space, where people can see and are to be seen. Eichner and Tobey (1987) have identified several social uses of street which are shown.

SOCIAL/AMENITY USES OF STREET

- Strolling and window shopping
- Resting
- People-watching
- Vendors
- Telephones
- Newspapers
- Art works and banners
- Eating
- Waiting
- Orientation/information
- Street performers
- fountains

5.3. Streets as Commercial Space

Some streets function as a place for exchange of goods or a place to do business (Rykwert, 1986 and Jacobs, 1993). People use streets as a place to offer goods and a place for display as much as they were 'allowed'. Pedestrians see, compare, discuss with their companions, bargain and decide whether to buy an item or not.

In Asian cities, streets, besides being a public space, have traditionally served as a place to do commerce. While people use the street as a place for trading, numerous other forms of economic-based informal street activities, such as of street vendors and street musicians, occupy most part of the street space.



Fig 7 –Ruwala tekra; Bhagal; Surat

5.4. Streets as Political Space

Street is a place where personal and political life flows together. It is a meeting ground for the development and exchange of ideas and hopes or a stage for demonstration and mass expression (Jacobs, 1993). Streets are generally used as routes for political rallies and marches towards power or political representations, such as governmental offices, parliament buildings and city monuments.

In many cases, including imperial axis to Tiananmen Square in Beijing and the corridor in between the White House and the Capitol in Washington, streets function as a place to hold national parades and Independence Day ceremonies, or in the contrary, sometimes it is where people gather to protest against the formal authority.

5.5. Streets as Cultural Space

According to Rapoport (1987), the use of streets by pedestrians is primarily culturally based. India is a fine example of the effects of culture on the streets use. There, the streets provide a setting for what seems to be a bewildering variety of activities and correspondingly diverse sounds, smells and sights.

The streets are full of a great variety of people in all sorts of costumes, not only walking and riding but standing, sitting, squatting and lying down; sleeping, cooking, eating, getting their hair cut or getting shaved; doing laundry, fixing bicycles or tires, manufacturing things, sewing, playing, chanting, arguing, bargaining and - even praying.



Fig 8 - Various ways of using the streets in Surat, India; a mixture of animals, people, bicycles, rickshaws, trucks, and buses moves continuously at the same space and time

Streets of Asian cities have specialties and significance in the context of urban public life. Asian streets have culturally and traditionally served the city as a public space, a place where people come together to do commerce, to eat and to socialize. Similarly, Poerbo (2004) states that the urban realm of many Asian cities are not attributed to great parks, squares, or even boulevards, as that in many European cities. On the contrary, the urban life takes place on streets and along its corridors. This narrow tunnel in front of buildings and corridor become suitable spaces to move and to interact to each other.

In addition, Kurokawa (1992) states that street according to the Eastern concept is one form of intermediary zone, which is in contrast to the Western concept of street. In contrast to plaza, the street has no easily demarcated boundaries. The street, in dialogue with the buildings that face it on the both sides, is an unlimited zone that unfolds in time as it progresses. The face of the street changes with time throughout the day, following the pace of human activity.

The streets of Asia serve sometimes as a transportation space; at other times it is an extension of private living space. It exists as a space of plural nature and plural meaning. It is an intermediary zone where the private interior space of the individual dwelling meets public exterior space. This symbiosis of interior and exterior of an Eastern street represents a typically Eastern attitude towards space (Kurokawa, 1992).

While observing some of the Asian cities including Kuala Lumpur and Malacca, Malaysia, Limin (2001) states the Asian cities as a collective phenomenon which may share commonalities. The investigations show some characteristics of Asian cities as follows:

- Streets may be perceived as multi-layered entities instead of clearly zoned areas of use and types.
- The texture of the Asian street tends to be fine and consists of a conglomeration of elements such as canopies, tiled shop frontages, the rhythm of five-foot way arcades, architectural elements, etc. This may

form a rich albeit fragmented text in an urban reading.

- Changes in scale of the buildings may not affect the perception of the street so much as the elements which actually define the street, like awnings, signage and the five-foot way.

- The environment may be an assault on all the senses rather than merely visual or sequential as in the tradition of the townscape movement.

- The flow of spaces along the street may be described sometimes as meandering through, especially where the street is complex and multilayered. Transitions through the public and private realm also take many forms and gradations and are not across a clear threshold.

- The passage of time is especially notable in a rapidly modernizing urban environment through the visible marks of change. Cyclical change may be invisible but defines activities and use of space. The temporally defined use of space seems to be a feature of some of the streets.

- The meaning of spaces and the urban order may not be immediately discernable but may be understood as cultural fields, with meanings generated through use.

6. Identity of Place and Human Activities

Architecture and urban design ‘frame’ space, both literally and discursively. In the lateral sense, everyday life ‘takes place’ within the clusters of rooms, buildings, streets and cities that we inhabit (Dovey, 1999). We live, act and orient ourselves in a world that is richly and profoundly differentiated into places, yet at the same time we seem to have a meagre understanding of the constitution of places and the ways in which we experience them (Relphs, 1972)

The word “place”, according to Norberg-Schulz (1980) is totally made up of concrete things having material substance, shape, texture and colour. Together, these

things determine the “environmental character”, which is the essence of place. In general, a place is given as such a character or “atmosphere”. A place is, therefore, a qualitative, “total” phenomenon, which we cannot reduce to any of its properties, such as spatial relationships, without losing its concrete nature out of sight.

The total phenomenon which composes a place, according to Norberg-Schulz (1980), implies a relationship of physical and non physical aspects in inducing a character of place. In parallel, Canter (1977) states that a place is the result of relationships between activities, conceptions, and physical attributes. It follows that we have not fully identified the place until we know activities are what behavior is associated with, or what is anticipated. Physical attributes are what the physical parameters of that setting are and conceptions are the descriptions, or conception, which people hold of that behavior in that physical environment.

The attribute of identity that has been variously termed as the ‘spirit of place’, ‘sense of place’ or ‘genius of place’ (genius loci) – all terms which refer to the character of that place. Obviously, the spirit of place involves topography and appearance, economic functions and social activities, and particular significance deriving from the past events and present situations – but it differs from the simple summation of these. The spirit of place can persist in spite of the profound changes in the basic components of identity.

Since remote times man has recognized that different places have a different character. In the context of urban conservation, Garnham (1985) states Genius Loci or the spirit of place, is a concept that relates to town preservation and revitalization. This notion is based upon the belief that each town has its own individual special uniqueness, character, identity and spirit, which is different from all other places. The spirit gives value and meaning to a town’s inhabitants and without this spirit their quality of life would be diminished.

Furthermore, in parallel to Relphs (1972) and Canter (1977), Garnham (1985) in his manual for maintaining the spirit of place

points out three major components of the identity of a place, as shown below.

1. Physical Features and Appearance

They involve the actual physical structure of a place and the reality of its buildings, landscape, climate and aesthetic quality.

2. Observable Activities and Functions

This is about how people interact with the place they live in, how their cultural institutions have affected it, and how the buildings and landscapes are being used.

3. Meanings or Symbols

They refer to a more complex aspect, primarily the result of human intentions and experiences. Much of a place's character will be derived from people reactions to its physical and functional aspects.

7. Informal Street activities in the Urban Context

The discourse on the human activities in urban context has been broadly developed in the urban design subject, which basically focuses on the public realm. Urban design is mainly concentrated on the design of urban spaces, which according to Krier (1979) and Moughtin (1992), comprises streets and squares.

It is important to note the difference between the job of an architect, which is single client-based work and the urban designer, which is plural client-based work. Major clients of an urban designer are people or public in general. The big task of an urban designer is to understand and express, in built form, people's values, aspirations and power or ability to achieve them.

The dichotomy between the formal and informal street activities is mainly concerned with the legal aspect, economic aspect, characteristics of the activities and specific locations as Bromley (1979), Rapoport (1987), Gehl (1987) and Korff (2000) have indicated. Concerning the character and economic aspect of human activities, Korff (2000) states that the formal sector refers to the modern sector, to which the big enterprises, banks, and shopping centres belong, while the informal sector refers to

hawkers, peddlers, petty commodity producers, whores and scavengers.

The characteristics of informal and formal sector based on ILO report in 1972 (Bromley, 1979) presented as follows:

Informal activities are a way of doing things, characterized by:	The characteristic of formal sector activities are the obverse of these, namely;
Ease of entry; Reliance on indigenous resources; Family ownership of enterprises; Small scale of operation; Labour-intensive and adapted technology; Skills acquired outside the formal school system; and Unregulated and competitive markets.	Difficult entry; Frequent reliance on overseas resources; Corporate ownership; Large scale of operation; Capital-intensive and often imported technology; Formally acquired skills, often expatriate, and Protected markets (through tariffs, quotas and trade licenses).

Formal and Informal sector is due to the legal aspect. Most of government in the world officially recognizes the formal sector but not informal one and assists in terms of allocation of favorable locations, loans, subsidies, tariff protection and management training to the formal sector.

The state of an urban space, particularly the street as a centre of human activities is one of the most recognized matter which comes into the attention for an urban designer. Street activities, which represent people's values, aspirations, and the urban culture, are often discussed as "formal" and "informal" activities.

In brief, formal activities can be regarded as activities within the buildings of both sides of the street, comprising big scale trading,

legal and formal in nature and taking place in the private spaces of the city. On the contrary, informal street activities, or in other terms “life between buildings” (Gehl, 1987), “informal sector” (Bromley, 1979; Pena, 1999; Korff, 2000), “street activities” (Rapoport, 1987), and “street culture” (Idid, 2004), comprise of all the activities taking place in the street space, informal and public in nature, performed communally and culturally acknowledged as people’s values and aspirations (street culture).

The scope of the informal street activities is not only limited to the economic-based informal street activities or street trading. Social activities including all communal activities in street space or space between buildings are also considered as informal street activities. The scope of economic, cultural and social-based informal activities is provided as following:

7.1.Economic-based Informal Street Activities

The economic-based informal street activities (also called “the underground economy”, and “the shadow economy”) refer to the small business, controlled by the owner, taking place in a small space outside a building, like the business of a street vendors, hawker, street artist (singer, painter, street comedian, street entertainer, etc).

Street trading, in many cities of the world, is a common phenomenon. While walking along the streets, especially in Asia, there are street painters, stalls selling food, local art, merchandise and clothes, etc. They occupy part of sidewalks, corridors, and other public spaces along the street for trading. They are situated side by side with the “formal’ activities in modern buildings, such as high-rise towers, department store and shopping complexes. These formal and informal street activities complement each other in the name of street life.

7.2.Social-based Informal Street Activities

Gehl (1987) defines social activities as all activities that depend on the presence of others in public spaces. Social activities include children at play, greetings and conversations, communal activities of various kinds and finally – as the most widespread social activity – passive contacts, that is, simply seeing and hearing other people.

Human participation in street life is eternally required, both in active or passive forms. It is here in the streets where people can celebrate different kinds of expressions. Since street is a political space, political celebrations, as well as demonstrations can take place. Jacobs (1993), in his criteria for Great Streets stated participation in the life of a street involves the ability of people who occupy buildings (including houses and stores) to add something to the street, individually or collectively, to be part of it. That contribution can take the form of signs, flowers, awnings, colour, or in altering the buildings themselves. Responsibility, including maintenance, comes with participation.

Conclusion

Streets are an important element of urban form, spatially and socially. Spatially, the street wall appears as a bounded configuration and acts as an exterior of the city. Socially, the street space acts as container of human activities in the city. Ratio of the street, which is a comparison between widths of street space and the height of the street wall, determines the performance of a street. The difference of movement in the street determines the form of streetscape as perceived by pedestrians as slow movement and to motorists as fast movement.

The streets of Asia, in contrast to the Western concept of street, serve sometimes as a transportation space; at other times, it is an extension of private living space. It exists as a space of plural nature and plural meaning. It is an intermediary zone where the private interior

space of the individual dwelling meets public exterior space.

As a 'container' of human activities, street space, especially sidewalks offer flexible types of activities, which can be cultural-based, social-based and economic based or a combination of all.

In the urban context, street activities can be categorized into formal and informal street activities. In brief, formal street activities can be regarded as activities within the buildings of both sides of the street, comprising of big scale trading, legal and formal in nature and taking place in private spaces of the city. On the contrary, informal street activities refer to the whole activities which take place in the street space, informal and public in nature and performed communally and culturally acknowledged as people values and aspirations.

The informal sector not only provides employment to those who are directly involved with the field but, the smaller scale industries that are indirectly involved, which increases the total employment provided because them to a considerable amount.

References

- [1] Caldwell, Lynton Keith, 1970, *Environment: A challenge for modern society*. The Natural History Press, Garden City, NY.
- [2] Diamond, Jared, 1999, *Guns, Germs, and Steel: The Fates of Human Societies*. W. W. Norton & Company, New York.
- [3] ^ "Street vendors find shortcomings in Bill". The Hindu. November 5, 2012.
- [4] Adishakti, Laretna T. (1988). Safeguarding and Conserving Taman Sari Yogyakarta, Indonesia, Master Project, Department of Architecture, The University of Wisconsin – Milwaukee
- [5] Yadav, C.S ed. (1987). *Perceptual and Cognitive Image of the City*, Concept Publishing Company, New Delhi, India
- [6] Bromley, Ray (editor) (1979). *The Urban Informal Sector: Critical Perspective on Employment and Housing Policies*, Pergamon Press Ltd., England
- [7] Eichner and Tobey (1987). In Moudon, A.V (ed). *Public Streets for Public Use*, Van Nostrand Reinhold Company Inc., New York
- [8] Ellis W.C. (1986) *The Spatial Structure of Streets*. In Stanford Anderson ed. *On Streets*, Cambridge, Massachusetts and London.
- [9] Garnham, Launce Harry (1985). *Maintaining the Spirit of Place*, PDA Publishers Corporation, Arizona, USA
- [10] Gehl, Jan (1987). *Life Between Buildings-Using Public Space*, Van Nostrand Reinhold, New York

[11] Gehl, Jan (1996). *Public Spaces – Public Life*, Copenhagen 1996, The Danish Architectural Press and The Royal Danish Academy of Fine Arts School of Architecture Publishers, Denmark

[12] Gehl, Jan (2002). *Public Spaces and Public Life City of Adelaide 2002*, Gehl Architects Aps, Copenhagen, Denmark

Illustration

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Fig 2 –Absence of Street in randomly organized settlement

Fig 3-Section of street showing the arrangement of street space and street wall

Fig 4 -Types of streetscape: inflected and uninflected showing different appearance and visual perception on streetscape

Fig 5 - Perceptual characteristic of streetscape according to motorists and pedestrians

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Fig 8 –Various ways of using the streets in Surat, India; a mixture of animals, people, bicycles, rickshaws, trucks, and buses moves continuously at the same space & time