UNIT - I

Urban Communities & Behaviour – SAR1303

Environmental Psychology

Environmental Psychology is the study of transactions between individuals and their physical settings. In these transactions, individuals change their environments, and their behaviour and experiences are changed by their environments. It is the study of the relationships between behaviours and experiences of a person and their built environment.

It includes theory, research, and practice aimed at making the built environment more humane and improving human relations with the natural environment.

Environmental psychologists work at three levels of analysis:

- Fundamental psychological processes like perception of the environment, spatial cognition, and personality as they filter and structure human experience and behaviour,
- The management of social space: personal space, territoriality, crowding, and privacy, and the physical setting aspects of complex everyday behaviours, such as working, learning, living in a residence and community, the study of social relationships and the study of culture, and
- Human interactions with nature and the role of psychology in climate change.

Maslow's Hierarchy

A psychological theory developed by Abraham Maslow in 1943. Needs at the lower level of the pyramid must be met to some extent before higher needs begin to manifest themselves. Maslow's theory is important to understand when relating personal needs to the built environment.
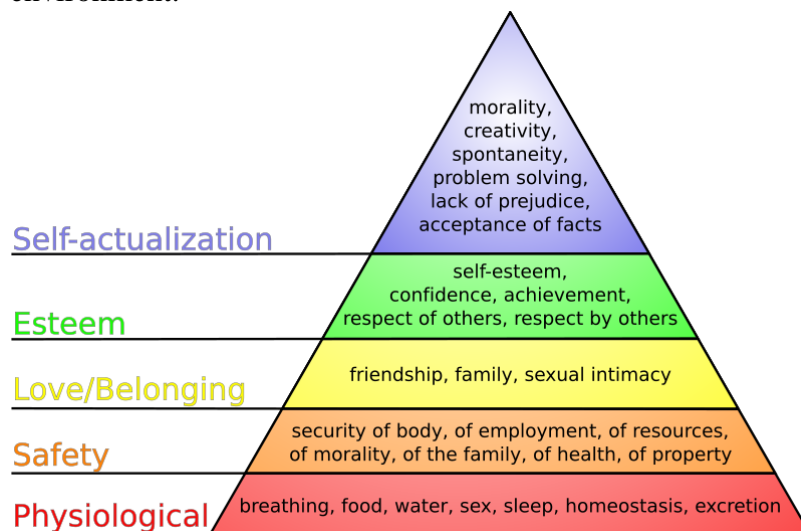
Built environments affect our thinking, our emotions, our behaviour, and our mental and physical health. Buildings have a direct effect on our emotions. They can be depressing or uplifting, soothing or surprising, welcoming or forgiving. We spend 80–90% of our lives indoors.

Interior Elements affecting behaviour:

Forms, Light, Colors, Furniture, Sounds, etc.

Psychological aspects in an Interior Space:

- Geometry (2D) and form (3D)
- Style (time period/aesthetic) and context (cue to the space use) of interior furnishings

- Materiality and texture
- Height and enclosure of the space.

Form and Geometry
Linear geometry- Lower pleasure/arousal (Designers exception)
Curvature- More pleasure/arousal
Curvature of objects or built environment activates the anterior cingulate cortex, directly linked to the salience and reward properties of visual stimuli

Furnishing Style and Context
Perception of pleasant interiors activates the visuospatial processing regions in the fronto-parietal network, showing involvement of motor and cognitive processes during the evaluation of spaces.

Materiality and Texture
Wooden textures reduce autonomic nervous system (ANS)- heart rate and sweat response, showing less signs of stress and tension.

Height and enclosure
High ceilings and curvilinear spaces are judged as more beautiful, activating structures involved in visuospatial exploration.
Reduced visual and locomotive permeability (enclosed, low ceilings) elicits an emotional reaction to make an exit decision.

Example of a hospital room designed for the well-being of a patient.

Indoor Environmental Quality (IEQ)

Indoor environmental quality (IEQ) refers to the quality of a building's environment in relation to the health and wellbeing of those who occupy space within it.

Some of the elements of IEQ are:

Thermal comfort, Lighting, Humidity, Airborne contaminants, Acoustics, Airflow Ventilation.

THEORIES OF HUMAN BEHAVIOUR

In contrast to most other scientific fields that are based on theories and scientific models, the study of environmental psychology lacks a unifying theory that can be applied to all types of environments consistently. The term 'environment' alone is so vast, and the techniques that are used to study it so varied, that it is considered to be resistant to any theoretical unification. In spite of this, behavioural theorists and psychologists have speculated on various environment-behaviour models. A review of the literature suggests that these can be summarised as five main theoretical perspectives. These are as follows:

1. arousal theory,

2. stimulus load theory,

3. behaviour constraint theory,

4. adaptation level theory,

5. environment stress theory, and

6. perception or cognition theory

The Arousal Theory

Arousal theories relate to how psychologically aroused people are as a result of environmental stimulation. Arousal is a heightening of brain activity by the arousal center of the brain, known as the reticular formation. It is characterised on a scale which features sleep at one end, and excitement at the other end.

Theories of arousal have generally been concerned with the relationship between a person's state of arousal and their behaviour or performance. This relationship is referred to as the Yerkes-Dodson Law and is usually depicted as a curvilinear relationship as in the Figure below. According to this Law performance is at its best when arousal levels are at a moderate level. Performance progressively worsens as the arousal levels either fall below, or rise above the optimum level.

Yerkes Dodson Law – arousal above the optimal leads to decrements in performance.
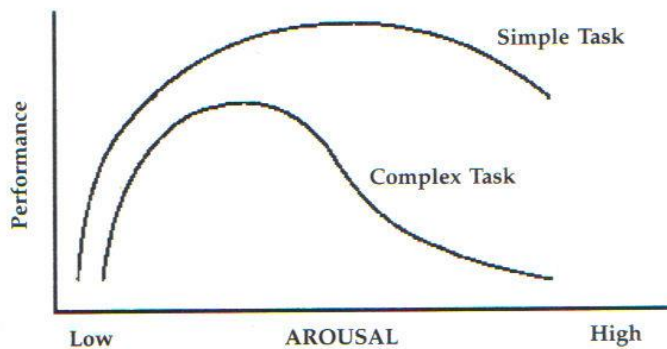
The relationship between arousal levels and behaviour and performance has been shown in various studies. In a study of personal space (the comfortable distance between people) in the men's lavatory, it was found that where personal space invasions occurred, close interpersonal distances caused delays in urinating. This study suggested that arousal associated with personal space invasions produced physiological changes in heart rate, respiration rate, blood pressure and adrenaline secretion.

The Stimulus Load Theory

The Stimulus Load Theory conceptualises the environment as a source of sensory information (referred to as stimulus or stimuli), that provides people with psychological stimulation. These stimuli can range from simple ambient features such as light, sound or temperature, to complex physical features such as buildings, streets, land forms and the presence of other people.

The Stimulus Load Theory is based on the notion that people have a limited capacity to process environmental stimuli. When faced with an excessive amount of stimuli, or 'stimulus overload', people have a propensity to ignore some features and give more attention to those that are perceived as more important to the task at hand.

In a physical environment, a similar situation may occur when a person is in a crowded situation, in an unfamiliar city with towering buildings and lost. Attempts at trying to find the way may be hindered by an overabundance of stimuli such as signs, street patterns, people, cars and buildings. In situations where the more important stimuli are ignored, in this case finding the way, rather than concentrating on getting through the crowd, a person's performance is rendered suboptimal. The behavioural after-effects may include errors in judgement, decreased tolerance and frustration, and ignoring others who may need assistance.

In contrast to environments with stimulus overload, monotonous environments that are stimulus-deprived lead to boredom and behavioural deficiencies. This suggests that under-stimulation can be just as detrimental as overstimulation. Figure below illustrates types of environmental stimulation.

Examples of environmental stimuli in the streets of Hong Kong in the form of buildings, streets, buses, signs, colours, signs, images and other people.

The Behaviour Constraint Theory

The focus of behaviour constraint theories is on the real or perceived restrictions that are imposed on people by the environment, and the perceived degree of control that people have, or want to have, on an environment. These theories posit that the environment is capable of preventing, interfering with, or limiting the behaviours of individuals.

Where people perceive that they have lost some degree of control over their environment, their first experience is of discomfort, which is then followed by an attempt to reassert their control. This reaction is described by Veitch and Arkkelin as psychological reactance. It can occur in different situations. For example, to avoid crowding, people may erect physical or social barriers to shut others out. In dark and deserted streets people may alter their movement patterns or avoid such places altogether. When attempts to regain control of the environment are unsuccessful, learned helplessness can. This is where people begin to believe that what they do has no effect on the environment and that whatever happens is out of their control. This can result in a sense of despair and feelings of alienation about the environment. In contrast, when people perceive that they have some control over their environment, it has been found that environmental problems such as littering and graffiti are reduced.

The Adaptation Level Theory

The adaptation level theory maintains that excessive environmental stimulation, or too little environmental stimulation, can have a detrimental effect on people's emotions and behaviours. This suggests that a moderate level of environmental stimulation is the most desirable.

Adaptation level theorists assert that the relationship between people and their behavioural response to the environment is comprised of two processes – adaptation and adjustment. People either adapt by changing their responses to the environment, or adjust by changing the environment where they are. Either way, the process results in bringing the person back into equilibrium with his or her environment.

To illustrate this concept, an example of adaptation to an extremely noisy street may include physiological responses such as tinnitus ('ringing ears'), constriction of blood vessels, neuromuscular tension (nerve and muscle tension), or vibrations in the ears. An adjustment to the environment may include wearing earplugs or building soundproof walls or windows as a barrier to the noise.

The Environment Stress Theory

The theory of Environmental Stress focuses on the role of physiology, emotion and cognition within the person-environment relationship. Environmental features are believed to impinge on human senses, causing a stress response where those features exceed an optimal level. Pollution, extreme temperatures, traffic, noise and crowding are typical environmental stressors.

Environmental Stress theorists believe that once environmental features are recognised as threatening, part of the behavioural response is automatic and begins with an alarm reaction. This reaction causes the affected person to experience alterations to their various physiological and psychological processes. What follows is a resistance to the stress and attempts to alleviate the stress by drawing on coping strategies. If there is prolonged exposure to stress, coping strategies diminish and a state of exhaustion sets in. This can lead to mental disorders, lowered resistance to stress or diminished interaction with others.

The theory also emphasises the role of 'cognitive appraisal' in a person's psychological or emotional stress response. The term 'cognitive appraisal' refers to how a person assesses the seriousness of the situation. Further, it suggests that behavioural responses to stress vary from person-to-person due to individual perception. This may be an indication of why some people are better able to deal with stress than others.

The Perception or Cognition Theory

Cognition theory focuses on people's perception or cognition, rather than the behaviour that they overtly display. Unlike the previous theories, Cognition theory is not grounded in science. It concentrates how people perceive the environment according to their learned experience, cultural differences and personality traits.

Gifford explains that cognition is how "we acquire, store, organize, and recall information about locations, distances and arrangements in buildings, streets and the great outdoors" highlight another aspect of the cognition process to do with assigning meaning to the environment.

Seeing comes before words…it is seeing which establishes our place in the surrounding world; we explain that world with words… The relation between what we see and what we know is never settled (Berger 1973:1).

Although this quote expresses the concept of perception literally, it can also be considered figuratively. This is because although sight is indeed a primary indicator in terms of perceiving and cognising the visual aspects of city form, visually impaired people are still capable of having a perception of an environment, by drawing on senses other than sight. Accordingly, in addition to perception and sight, the relationship between a person and their environment can also be affected by touch, hearing and smell which are facilitated by the physical and ambient features of the environment.

Urban Area:

- High population density
- Diverse population
- Greater infrastructure and built environment
- Non-Agricultural occupations
- Cosmopolitan
- Around 3% of the Earth's land surface are urban areas.
- Eg: Delhi, India. Mumbai, India. Shanghai, China. Sao Paulo, Brazil. Cairo, Egypt. Tokyo, Japan. New York, USA. Karachi, Pakistan. Istanbul, Turkey. London, United Kingdom. Mexico City, Mexico. Dhaka, Bangladesh

Environment

The environment refers to one's surroundings. It is used to refer to a specific part of one's surroundings, as in social environment, physical environment, natural or built environment.

Community

- Group of people living in a contiguous geographic area,
- Having common centres of interests and activities,
- Functioning together in the chief concerns of life.

You can classify every type of community by the purpose that brings them together.

1. Interest. Communities of people who share the same interest or passion.
2. Action. Communities of people trying to bring about change.
3. Place. Communities of people brought together by geographic boundaries.
4. Practice. Communities of people in the same profession or undertake the same activities.
5. Circumstance. Communities of people brought together by external events/situations.

A community may be big or small. A big community, such as a nation, contains within it a number of small communities and groups with more close, numerous common qualities. Small communities like village or neighbourhood are the examples of the primitive world. Both the types of communities, big or small, are essential to the full development of life.

Man cannot live in isolation. He cannot live alone. He keeps contact with his fellow beings for his survival. It is not possible for him to keep contact with all the people or to belong as a member of all the groups existing in the world. He establishes contact with a few people who live in close proximity or presence to him in a particular area or locality. It is quite natural for people living in a particular locality for a longer period of time to develop a sort of likeness or similarity among themselves. They develop common ideas, common customs, common feelings, common traditions etc.

They also develop a sense of belonging together or a sense of we-feeling. This kind of common social living in a specific locality gives rise to the community. The examples of community include a village, a tribe, a city or town. For example in a village community, all the villagers lend each other hand in the event of need in agriculture and in other occupations. They take part in all important occasions which occur in a neighbour's home. They are present when marriages, deaths, births take place in any family. They celebrate the festivals

together, worship common deities and jointly face all calamities. In this way the sense of belongingness in generated among the villagers which creates village community.

Meaning of Community:
The word community has been derived from two words of Latin namely 'com' and munis. In English 'com' means together and 'munis' means to serve. Thus, community means to serve together. It means, the community is an organisation of human beings framed for the purpose of serving together. Community is a people living within a geographical area in common inter-dependence. It exists within the society. It is bound by the territorial units. It is a specific group while society is abstract. "Community living is natural to man.
He is born in it and grows in the community ways. It is his small world. Men, we have seen began with group life. Over the time, they occupied a habitat and while in permanent occupation of it; they developed likeness, common habits, folkways and mores, interdependence and acquired a name.

They developed amongst themselves a sense of togetherness and an attachment to their habitat. A community thus has a habitat, strong community sense, and a manner of acting in an agreed and organized manner. There are various definitions of community.

- Osborne and Neumeyer write, "Community is a group of people living in a contiguous geographic area, having common centres of interests and activities, and functioning together in the chief concerns of life."
- According to Kingsley Davis, "Community is the smallest territorial group that can embrace all aspects of social life."
- As Sutherland points out, "It is a local area over which people are using the same language, conforming to same mores, feeling more or less the same sentiments and acting upon the same attitudes."
- Maclver defines community as "an area of social living, marked by some degree of social coherence.
- For Bogardus it is a social groups with some degree of "we feeling" and "living in a given area.
- Mannheim describes community as "any circle of people who live together and belong together in such a way that they do not share this or that particular interest only but a whole set of interest.

Basic Elements of Community:
According to Maclver and Page, there are two main bases or essential elements on the basis of which community is formed.

(i) Locality:
Locality implies a particular or territorial area unless a group of people live in a particular locality; they cannot establish relations and generate the we-feeling among themselves. Living together facilities people to develop social contacts, give protection, safety and security. Locality continues to be a basic factor of community life. Maclver says, though due to the extending facilities of communication in the modern world the territorial bond has been broken, yet "the basic character of locality as a social classifier has never been transcended.

(ii) Community Sentiment:

Community can be formed on the basis of community sentiment. It is extremely essential. It implies 'a feeling of belonging together." It is a 'we-feeling' among the members of a community. People living in a community lead a common life, speak the same language, conform to the same mores, feel almost the same sentiment and therefore, they develop a feeling of unity among themselves.

In other words, it can be said that community feeling has the four important aspects such as we-feeling, interdependence, participation and community control. The community sentiments are developed by we-feeling. The members of community develop we-feeling by their mutual interdependence. They contribute to the progress of the community by participating in its activities. Community controls the behaviour of its members. The obedience to community rules brings uniformity among the members.

Other Elements of Community:

Some other elements of community are as follows:

(i) Group of people:

Fundamentally, a community consists of a group of people. A solitary individual cannot form a community when a group of people share the basic conditions a common life, they form community.

(ii) Naturality:

A community is not deliberately or purposively created. It is a spontaneous or natural growth. An individual is born in a community. It is my virtue of community that he develops.

(iii) Permanence:

A community is generally not temporary or short-lived like a crowd or a revolutionary mob. It is a permanent organisation or durable social group. This durability is evident from the age-old communities existing in modern times. A community continues as long as members are there.

(iv) Likeness:

In a community there is a likeness or similarity in language, custom, mores, traditions etc. among the members. So A. W. Green has rightly said, "A community is a cluster of people living within narrow territorial radius who share a common way of life."

(v) A Particular Name:

Every community is always known with a particular name, their immediate bases of origin give such community a particular name. For example based on the linguistic condition people living in Orissa are called Oriyas; living in Kashmiri culture are called Kashmiris.

(vi) Spontaneity:

Every community grows itself spontaneously. A community is not deliberately or purposively created. A kind of natural force acts behind the origin and development of communities. Various factors like customs, conventions, and religious beliefs bind the individuals together.

(vii) Common Life:
Some sociologists like Elwood says that the life of the people in a community is near about the same. There is no epochal difference between the way of life of the individuals. Their eating pattern, dressing style, language etc. are found to be similar. Due to their inhabitation on a particular geographical area, they develop a kind of emotional and cultural uniformity. Community is never formed with a particular aim. But they are the outcome of social uniformity among the individuals.

(viii) Common Interests:
In community, all the members have common and collective interests. People live in community and work together to fulfill these interests. Thus, Newmeyer says, community is a group of people living in a delimited geographic area, having common interests and activities and functioning together in their concern of life.

Behaviour
- Actions and mannerisms of an individual or system
- Under particular conditions
- In conjunction with themselves and their environment (including other individuals or systems)

SOCIETY

Society refers to a system of social relationships, a group of people with a common territory, interaction, and culture. Society is built upon interactions with varied people.

Community

All the people who live in a particular area, when talked about as a group. Community is the collection of people with similar interests, essentially residing in one geographic place.

Community vs Society

SOCIETY

- Society is a web social relationships. But community consists of a group of individuals. It is a specific group.

- Society is abstract. Community is concrete. A definite geographical area is not necessary for society. But a definite geographical area is essential for a community. It is bound by the territorial units.

- There can be more than one community in a society. Most societies consist of more than one community, varying in size, physical appearance, organization and specialized functions. But there cannot be more than one society in a community.

- Society is an intangible artefact. But community is a natural entity.

- In the society, the group is merely means to an end. But in the community, the group has a life of its own, superior to that of its temporary members. The group is an end in itself.

COMMUNITY

- Community sentiment or a sense of unity is not essential in a society. But community sentiment is indispensable for a community.

- In a society the common objectives are extensive and coordinated. But in a community, the common objectives are comparatively less extensive and coordinated.

- In a society, the common interests and common objectives are not necessary. But in a community, a common agreement of interests and objectives necessary.

- In the society, members have doctrine, public opinion, contractual solidarity and individual will. But in the community, members have faith, customs, natural solidarity and a common will.

Distinction between Community and Society:

The constituent elements and behaviour patterns of both community and society are dis¬tinctive. We may describe the distinction between community and society as follows:

1. Society is a web social relationships. But community consists of a group of individuals. It is a specific group.
2. Society is abstract. Community is concrete.
3. A definite geographical area is not necessary for society. But a definite geographical area is essential for a community. It is bound by the territorial units.

4. There can be more than one community in a society. Most societies consist of more than one community, varying in size, physical appearance, organization and specialized functions. But there cannot be more than one society in a community.
5. Society is an intangible artifact. But community is a natural entity.
6. In the society, the group is merely means to an end. But in the community, the group has a life of its own, superior to that of its temporary members. The group is an end in itself.
7. Community sentiment or a sense of unity is not essential in a society. But community sentiment is indispensable for a community.
8. In a society the common objectives are extensive and coordinated. But in a community, the common objectives are comparatively less extensive and coordi¬nated.
9. In a society, the common interests and common objectives are not necessary. But in a community, a common agreement of interests and objectives necessary.
10.   In the society, members have doctrine, public opinion, contractual solidarity and individual will. But in the community, members have faith, customs, natural solidarity and a common will.

UNIT - II

Urban Communities & Behaviour – SAR1303

Population

- For most of human history population growth has been restricted because of disease and famine,
- A few thousand years to grow from 8 to 16 million
- Around 1000 years- 16 to 32 million growth
- 1960-99 40 years- 3 to 6 billion
- World population may never double again.
- Stabilization / drop in fertility rates.
- UN- Population is growing at 11.4% adding 76 million people per year
- 7.5 billion in 2020 to 9.7 billion in 2050
- Many scientists think Earth has a maximum carrying capacity of 9-10 billion
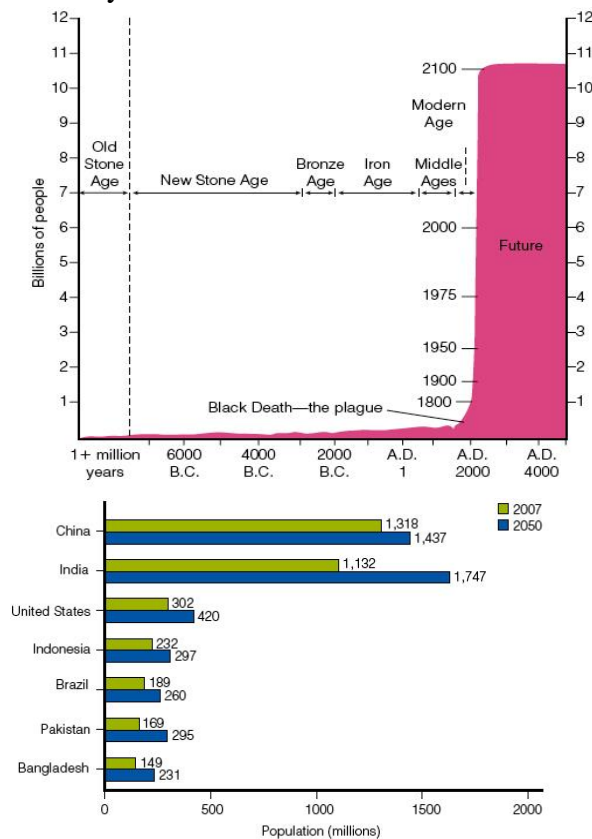
Population density

- The number of people per unit of land area.
- In 18 countries, the population density is more 1,000 people per square mile.
- The population density of India is 869 people per square mile, compared with 80 people per square mile in the United States.

Urban world population

- 750 million-   1950
- 4.5 billion (56%)-   2020
- More than 75%-   2050 (predicted)

Urbanization

- Transformation leading to higher proportion of total population of an area to live in cities and towns
- Urban population - Persons living in cities or towns of 2,500 or more residents.
- Urbanized area - One or more places and the adjacent densely populated surrounding area that together have a minimum population of 50,000.

Urbanization in India

- 11.4% -   1901
- 28.5% -   2001
- 31.2% -   2011
- 35+% -   2020

Why?

- Industrial revolution
- Migration from Partition
- Economic development & opportunities
- Growth of employment
- Infrastructure facilities.
- Land fragmentation from infrastructure development
- Agriculture not profitable

Consequences of Urbanization

- Rapid urbanization –> Explosive growth
- Explosive growth -> Overcrowding, Inadequate Housing, Unemployment, Decrease in Standard of Living, Environmental Damage
- Persistence of traditional activities provide a sense of employment
- These labour intensive activities provide minimum income

Urban Problems

- Poverty
- Unemployment
- Crime
- Overcrowding
- Child Labour
- Slums

- Water/ Power shortage

- Traffic

- Pollution

- Social Evils

Public Space

A social space that is generally open and accessible to everyone. Place to Connect, Meet, Eat, Exercise, Rest, Relax, Offer Prayer, Protest, Demonstrate, Feel Safe. Includes urban open spaces and public and government buildings open to the public as well.

Types:
Outdoor, Indoor
Natural, Manmade
Formal, Informal
Active, Passive
Organized, Unorganized

All public space users have the right to:
- roam freely
- rest and relax unmolested
- associate with others
- use public space without the imposition of petty local controls unless carefully justified e.g. on drinking, smoking, safe cycling, skating, and dog walking,
- collect for registered charities
- take photographs
- trade (if granted a public licence)
- demonstrate peacefully and campaign politically
- busk or otherwise perform (in non residential locations).

Public space users have a responsibility to:
- respect the rights of others to conduct their business unhindered and unmolested
- respect public and private property
- act in a civil and safe manner at all times
- avoid littering
- keep the peace.

Owners and managers of public space have a responsibility to:
- respect and protect the rights of all users, including to privacy
- treat all users in an equitable and inclusive manner
- keep spaces safe within the context of the actions of any reasonable person
- keep spaces clean and well maintained
- keep spaces open and unrestricted at all times (or otherwise in line with regulatory stipulations).

Urban Open spaces

- Give form and shape to the city
- Provide space needed for recreation

- Create chances for interaction between people
- Preserve natural beauty
- Provide a place for economic activity

Some examples of urban open spaces are:

Waterways, Parks, Playgrounds/ Fields, Green Areas, Bazaars/ Markets, Beaches, Plazas, Squares, Pathways- Streets, Pavement, etc.

Positive Spaces:

Space Type	Distinguishing Characteristics
Natural / Semi natural urban space	Natural and semi-natural features within urban areas, typically under state ownership.
Civic space	The traditional forms of urban space, open and available to all and catering for a wide variety of functions.
Public open space	Managed open space, typically green and available and open to all, even if temporally controlled.

Negative Spaces:

Space Type	Distinguishing Characteristics
Movement space	Space dominated by movement needs, largely for motorized transportation.
Service space	Space dominated by modern servicing requirements needs.
Leftover space	Space left over after development, often designed without function.
Undefined space	Undeveloped space, either abandoned or awaiting redevelopment.

Ambiguous Spaces:

Space Type	Distinguishing Characteristics
Interchange space	Transport stops and interchanges, whether internal or external.
Public 'private' space	Seemingly public external space, in fact privately owned and to greater or lesser degrees controlled.
Private 'public' space	Publicly owned, but functionally and

	user determined spaces.
Internalized 'public' space	Formally public and external uses, internalized and, often, privatized.
Retail space	Privately owned but publicly accessible exchange spaces.

Private Spaces:

Space Type	Distinguishing Characteristics
Private open space	Physically private open space.
External private space	Physically private spaces, grounds and gardens.
Internal private space	Private or business space.

Aspects of Successful Public Spaces:

1. Distinctiveness,

2. Accessibility,

3. Safety,

4. Comfort,

5. Provision of passive and active engagement,

6. Enjoyable

STREETSCAPE

Streets represent the largest area of public space in all cities. Market areas and commercial streets, streets with schools and colleges as well as other important destinations such as transit stations attract a lot of pedestrian traffic.

Streets are the lifeblood of our communities and the foundation of our urban economies. They make up more than 80 percent of all public space in cities and have the potential to foster business activity, serve as a front yard for residents, and provide a safe place for people to get around, whether on foot, bicycle, car, or transit. The vitality of urban life demands a design approach sensitive to the multi-faceted role streets play in our cities.

Streets are public spaces

Streets are more often the most vital yet underutilized public spaces in cities. In addition to providing space for travel, they play a vital role in public life of cities and communities and should be designed as public spaces as well as channels for movement.

Great streets are great for Business

Cities have realized that streets are an economic asset as much as functional element. Well-designed streets generate higher revenues for businesses and higher values for home owners.

Streets can be changed

Transportation engineers can work flexibly within the building envelope of a street. This includes moving curbs, changing alignments, day lighting corners and redirecting traffic wherever necessary.

Streets are an ecosystem

Streets should be designed as ecosystem where man-made systems Interface with natural system. From pervious pavements and bioswales that manage storm-water run-off to street. Trees that provide shade and are critical. To the health of cities, ecology has the . Potential to act as a driver for long Term, sustainable design

Phases of Transformation

Existing- Existing conditions demonstrate how traditional design elements such as wide travel lanes and undifferentiated street space have had an adverse impact on how people experience the streetscape.

Interim Redesign- Striping and low cost materials can realize the benefits of a fun reconstruction in the short term while allowing a city to test and adjust a proposed redesign.

Placemaking

Placemaking is a people-centered approach to the planning, design, and management of public spaces. It involves looking at, listening to, and asking questions of the people who live, work, and play in a particular community to discover their needs and aspirations. This information is then used to create a common vision for that place. Small-scale, simple improvements result from this vision that can immediately bring benefits to public spaces and the people who use them.
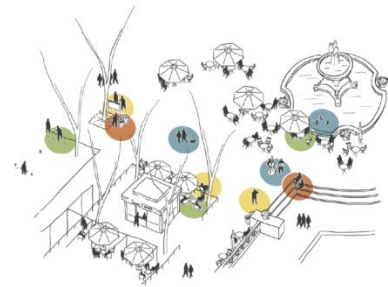
POWER OF 10+

HOW CITIES TRANSFORM THROUGH PLACEMAKING
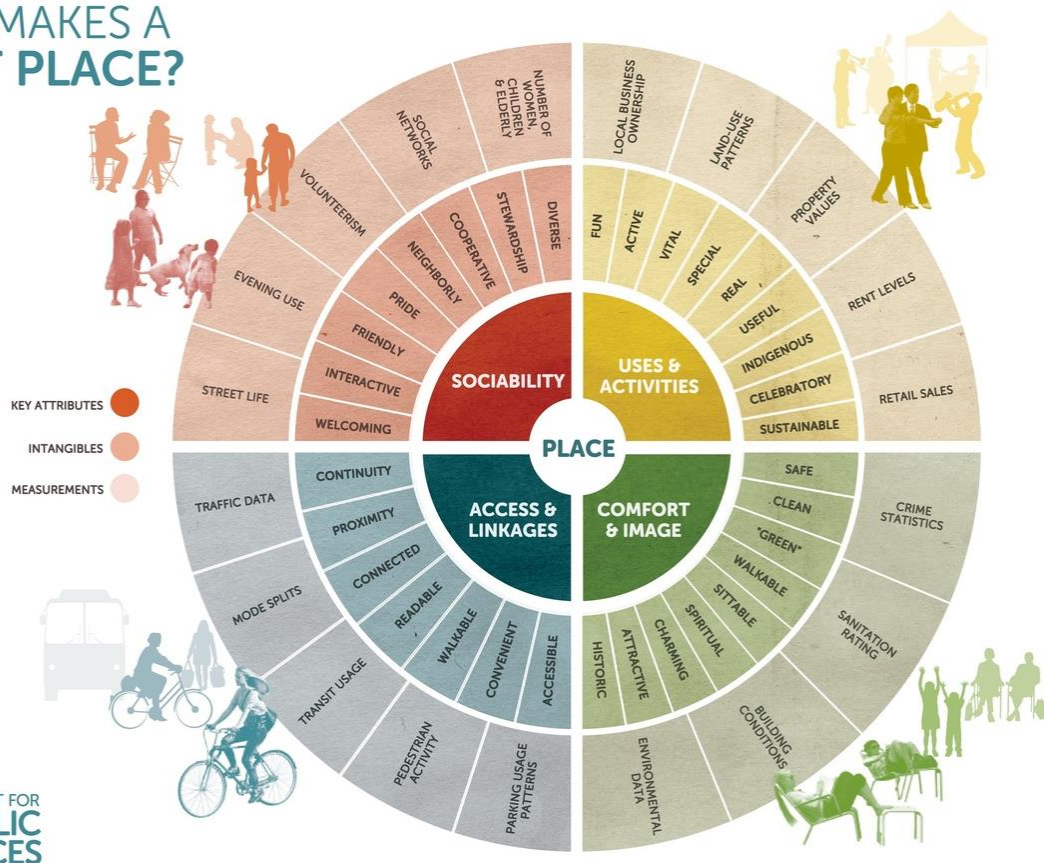

City/Region
10+ MAJOR DESTINATIONS

Destination
10+ PLACES IN EACH

Place
10+ THINGS TO DO,
LAYERED TO CREATE SYNERGY

PROJECT FOR
PUBLIC
SPACES

WHAT MAKES A GREAT PLACE?

KEY ATTRIBUTES
INTANGIBLES
MEASUREMENTS

PROJECT FOR
PUBLIC
SPACES

Five design qualities are critical to a good walking environment:

These characteristics were defined qualitatively and then related to the physical features of the street environment:

1. **Imageability-** The quality of a place that makes it distinct, recognizable, and memorable. A place has high imageability when specific physical elements and their arrangement capture attention, evoke feelings and create a lasting impression.

2. **Enclosure-** Refers to the degree to which streets and other public spaces are visually defined by buildings, walls, trees and other vertical elements.

3. **Human scale-** Refers to a size, texture, and articulation of physical elements that match the size and proportions of humans and equally important, correspond to the speed at which humans walk.

4. **Transparency-** Refers to the degree to which people can see or perceive objects and activity—especially human activity—beyond the edge of a street.

5. **Complexity-** Refers to the visual richness of a place. The complexity of a place depends on the variety of the physical environment.
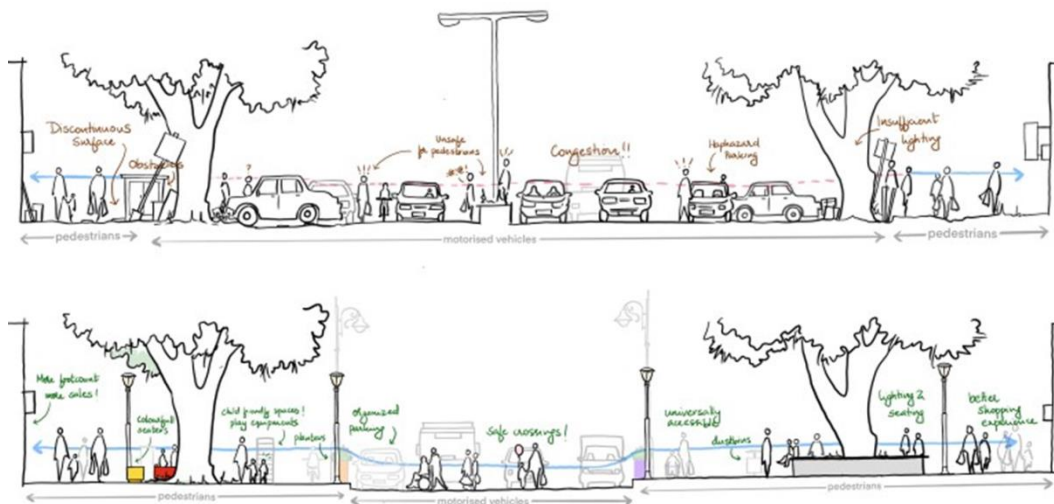
AFFORDANCES

Affordance is what the environment offers the individual.

Affordances are to be taken advantage of in design.

"The perceived or actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used… A chair affords ('is for') support and therefore affords sitting. A chair can also be carried. Glass is for seeing through, and for breaking."

"Affordances provide strong clues to the operations of things. Plates are for pushing. Knobs are for turning. Slots are for inserting things into. Balls are for throwing or bouncing. When affordances are taken advantage of, the user knows what to do just by looking: no picture, label, or instruction needed."

Aspects of physical development of a place:

Layout - urban structure	The framework of routes and spaces that connect locally and more widely, and the way developments, routes and open spaces relate to one other. The layout provides the basic plan on which all other aspects of the form and uses of a development depend.
Layout - urban grain	The pattern of the arrangement of street blocks, plots and their buildings in a settlement. The degree to which an area's pattern of blocks and plot subdivisions is respectively small and frequent (fine grain), or large and infrequent (coarse grain).
Landscape	The character and appearance of land, including its shape, form, ecology, natural features, colours and elements, and the way these components combine. This includes all open space, including its planting, boundaries and treatment.
Density and mix	The amount of development on a given piece of land and the range of uses. Density influences the intensity of development, and in combination with the mix of uses can affect a place's vitality and viability. The density of a development can be expressed in a number of ways. This could be in terms of plot ratio (particularly for commercial developments), number of dwellings, or the number of habitable rooms (for residential developments).
Scale and Height	Scale is the size of a building in relation to its surroundings, or the size of parts of a building or its details, particularly in relation to the size of a person. Height determines the impact of development on views, vistas and skylines). Height can be expressed in terms of the number of floors; height of parapet or ridge; overall height; any of these in combination; a ratio of building height to street or space width; height relative to particular landmarks or background buildings; or strategic views.
Scale and Massing	The combined effect of the arrangement, volume and shape of a building or group of buildings in relation to other buildings and spaces).Massing is the three-dimensional expression of the amount of development on a given piece of land.
Appearance-details	The craftsmanship, building techniques, decoration, styles and lighting of a building or structure. This includes all building elements such as openings and bays; entrances and colonnades; balconies and roofscape; and the

	rhythm of the facade.
Appearance - materials	**The texture, colour, pattern and durability of materials, and how they are used. The richness of a building lies in its use of materials which contribute to the attractiveness of its appearance and the character of an area.**

Urban Design Ideologies and the Evolving Nature of Public Spaces

There have been significant movements and ideologies that have influenced the shape of the built environment and the form of public spaces since the late nineteenth century. The movements suggest, at the very least, that the practice of urban planning and architecture is constantly motivated by the desire to enhance urban areas and improve quality of life in response to changing circumstances.

The City Improvement and City Beautiful Movements

The City Improvement and City Beautiful movements of the 1900s emerged from debates amongst built environment professionals who argued that Australian cities were ugly, uninteresting, lacked civic pride and did not offer any pleasurable vistas, public squares or open spaces (Hamnett and Freestone 2000). Although the movement recognised that "beauty had to be more than skin deep" (Hamnett and Freestone 2000:31), it appreciated that the beautification of public spaces had positive impacts on tourism, the attraction of capital and property values.

Beautification schemes of this period were expressed in the form of elaborate arches, ornamentation along public streets and emphasis on gateways, landmark features, parks, gardens, fountains and public art (Hamnett and Freestone 2000). The movement emphasised that public spaces should be formed by order, harmony, formality and symmetry (Hamnett and Freestone 2000).

The Garden City Movement

The Garden City movement of the 1910s was founded by the urban planner Ebenezer Howard, who designed a template for how cities and suburbs should be designed. The key principles of the movement were based on limiting the size of the population in each neighbourhood, the creation of radial avenues, the provision of a central public space in the centre of the city surrounded by impressive public buildings, and the provision of a 'green belt' to define the boundaries of the neighbourhood and contain development (Hall and Ward 1998).

Howard's designs influenced the establishment of suburbs in the United Kingdom (UK) and Australia (Hall and Ward 1998) and many of the principles can be seen in the design of Australia's capital city, Canberra, and in Daceyville in Sydney (Hamnett and Freestone 2000). The features advocated by this movement emphasised the form that public spaces should take and where they should be located in relation to the private spaces of neighbourhoods. In order to signify their importance, the public spaces inspired by this movement were located at the centre of neighbourhoods.

The Myth of Architect as God Period

Architectural ideologies of the twentieth century have also influenced the shape of the built environment. Modernist architects of this time, perceived themselves as designers, not just of buildings, but of utopian societies (Short 1989). These architects replaced the dominant notion of 'god as architect' with the myth of 'architect as God' (Short 1989).

In 1927, Le Corbusier, who was one of the most influential architects inspired the notion that architecture is an art, and that the architect as an artist should be free from the demands of the population (Short 1989). Le Corbusier also believed that a "building was a machine for living in" (quoted in Short 1989:42). He aimed to reflect this in the built environment, through his visions of monotonous and repetitive, concrete residential and office towers with roof gardens, set in vast open spaces (see Figure 6 below). This ideology of the time saw a shift away from client preferences to architectural fashion.

The projects that were built at this time became symbolic of the mechanisation of architecture. The move away from a 'humanistic' environment at a 'human scale' produced an alienated built environment that detracted from the attractiveness and desirability of the surrounding public spaces (Short 1989).

The utopia envisioned by Le Corbusier and his followers may have been a popular architectural trend at the time, however it failed to acknowledge the preferences of not only the inhabitants of the buildings but also the impact of those buildings on the public realm and the public users. Little interest was paid to the needs of pedestrians or to how users would interact in that environment (Baldwin 1999). Subsequently, many of these projects failed, were abandoned and eventually demolished because of the social problems that they created (Short 1989).

Le Corbusier's vision for Paris: city of three million inhabitants.
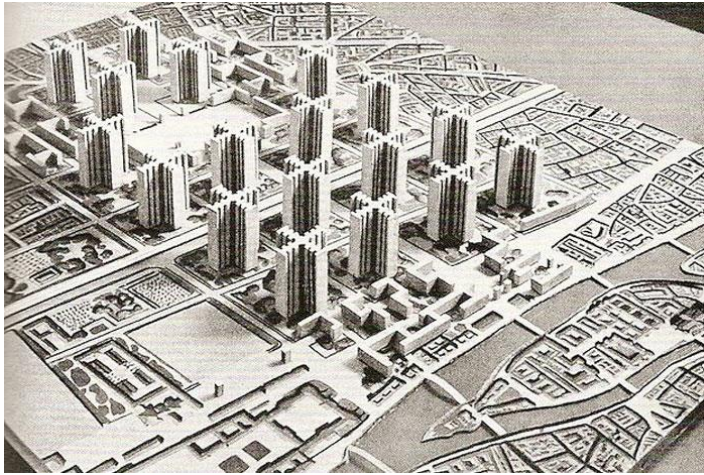
The New Urbanism Movement

In more recent times, the emergence of the American New Urbanism movement has not only influenced the field of planning, but also the fields of urban design and architecture (Gleeson 2006). Essentially, it is a design-based approach that focuses on promoting development that is compact and contained, provides a diversity of housing options, provides central public spaces and reduces reliance on private cars by locating all essential services within a five-minute walking distance (Southworth 2003; Talen 2003).

Although the main objective of the movement is to rebuild cities in the shape of traditional towns, in the United States of America (USA) it has been criticised for producing designer style communities that attempt to conjure social interaction. The influence of New Urbanism in Sydney can be seen at places such as Cape Cabarita which is depicted below.

A view of Cape Cabarita depicting highly-maintained central public and recreational spaces surrounded by residential developments (Cape Cabarita 2007).

The New Urbanism movement is of particular interest to this study because its advocate's emphasise the significance of urban design in affecting the way that people interact with the built environment. For instance, it somewhat naively assumes that neighbourly looking and

narrow streets, and well-designed public spaces foster social interaction between people, and somehow entice people to communicate with their neighbours (Southworth 2003).

However, this assumption is naïve in its reminiscence of traditional neighbourhoods, because modern neighbourhoods and cities are radically different in comparison to 50 years ago (Southworth 2003). Their changing nature is attributed to new methods of transportation, technologies, communications and changes in social structures.

While the principles advocated by the movement convey an appreciation for public spaces, the agenda to revert pretentiously to the urban design of the past can be problematic. The reliance on urban design to accomplish such things as encourage people to be more social, by literally reducing the distance between them, particularly in a residential neighbourhood, is unlikely to work. There needs to be an acknowledgement of the changing nature of society, and an understanding of how people behave and respond to the environment, before measures such as narrow streets are applied to public spaces.

Urban Structure and Morphology

Morphological studies often deal with development of forms and pattern of the present city or other urban areas through time, in short with evolution. In fact, an urban settlement is apparently a physical entity and the morphology it acquires is a result of a long process of growth. In a more restricted sense, the terms of morphology refers to the internal structure of various land uses in urban areas. The functional structure, functions and forms, constitute principal and intimately related aspects of urban morphology. In a specific period of time, the structure of a town passes through various developmental stages and is the consequence of the processes it undergoes. In general, the morphology of a town is quite different from that of a biological organism, to the extent of its individuality with the function. But, the process of formation of a town and the development of an organic form are almost alike and pass through three stages: (i) Histogenesis, (ii) Patternogenesis, and (iii) Morphogenesis.

In the process of town formation 'histogenesis' refers to the origin of historical nucleus of the town, and it forms some definite means of intercommunication between individual human agglomerations. During this stage, the nucleus development of a town takes place. Settlement starts concentrating around a religious site, fort, lake, etc. centripetal force is active in this process. The pattern formation or 'patternogensis' may be regarded to be the phase of development of various nuclei of human settlements and their interactions within, ultimately providing a pattern of skeleton to the town. More precisely, the development of roads and structures can be put into this heading. Thus, the sectoral development of town takes place and centrifugal force, to some extent, is active. The state of 'morphogenesis' can be perceived in the morphological character, to be closely associated with the functional character of present day city.

Urban morphology

Urban morphology is the study of the physical form of a city, which consists of street patterns, building sizes and shapes, architecture, population density and patterns of residential, commercial, industrial and other uses, among other things. Special attention is given to how the physical form of a city changes over time and to how different cities

compare with each other. Another significant part of this subfield deals with the study of the social forms which are expressed in the physical layout of a city and conversely, how physical form produces or reproduces various social forms. This approach challenges the common perception of unplanned environments as chaotic or vaguely organic through understanding the structures and processes embedded in urbanization.

In American geography, urban morphology as a particular field of study owes its origins to Lewis Mumford, James Vance and Sam Bass Warner. Peter Hall of the UK is also a central figure in the field of urban morphology. In Europe the word morphology has been used in various times by Dickinson, Smailes, etc. Dickinson (1950) wed and interpreted in terms of its origin, growth and defined it thus, "morphology is concerned with plan and build of habitat". Morphology of towns thus reflects its functions and idea of planning and building at each phase of its development. Ratzel has remarked that, "like functions beget like forms", and in identical frame of references "the nature of both depends on the cultural realm in which they develop".

Morphology studies often deal with development of forms and pattern of the present city or other urban areas through time, in short with evolution (Murphy, 1966). The influences which the city exerts on the social and economic structure of the area help in the economic structure of the area and in the formation of land use patterns. The different functional characters are found to be concentrated at different places. The priority is for the economic and social utility of the particular function (Singh, 1964). According to Dickinson (1956) the uses which can pay the highest rent at a particular place occupies the land once the site is occupied, it is the human or cultural factors which give the essential form, shape and sustenance to the town on a particular site according to the needs of the age (Smailes, 1966).

J.E. Brush (1962) has discussed the morphology of Indian cities with respect to existing layout of streets, the arrangement and characteristics of buildings and associated patterns of land use. Discussing about the above views, R.L. Singh (1961) pointed out that the same should be pursued not only with a view to identify new categories and pattern or developing new classification but also for the light they throw on historical sequence and functional relationship. According to Singh (1970), the term 'morphology' includes the various internal forms and structural patterns and characteristics of a spatial unit. In brief, urban morphology is the distribution of different functions in a city.

According to Dickinson (1956), it is concerned with the plan and builds of the habitat, viewed and interpreted in terms of its origin, growth and function. It is a description of their nature, their relative disposition and their social interdependence that constitutes a geographical analysis of an urban area (Smailes, 1970). There are three basic models in urban morphology:

1. Burgess Concentric Model (1929),

2. Hoyts Sector Model (1939),

3. The Multi Nuclei Theory (Ullmann & Harris, 1945)

Burgess's concentric ring model:
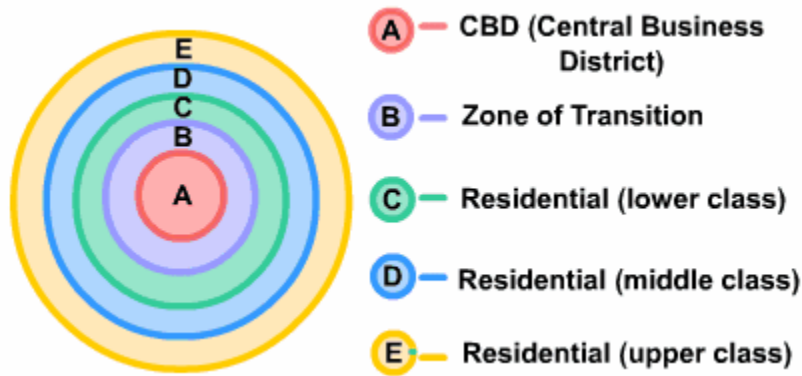
Burgess based his model on the city of Chicago

At its core is the **CBD**, or **Central Business District.** This is the area with the highest land price, which could only be afforded by businesses.

Around this is the zone of transition, which is where industry located. In many cities in the UK, such as Birmingham, this zone can be quite easily identified. However in most cases the industry has moved out, leaving the zone empty and in need of renewal.

Beyond the zone of transition are the rings of residential housing. As people became more wealthy they could afford to live further out of town, in bigger houses, with larger gardens.

The houses closest to the centre originally would have housed the workers for the inner city industries. Many British cities still have many of these terraced houses remaining.

As people moved away from the CBD, the houses closest to the centre would be taken by newly arrived immigrants to the city, either from elsewhere in the country or abroad.

Hoyt's sector model:
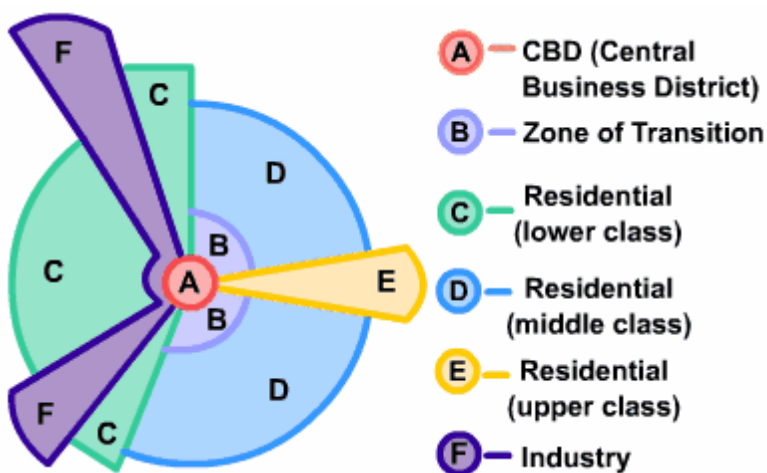
The sector model has a similar idea of a CBD to Burgess. This is still the area with the highest land price.

Hoyt then used transport routes to determine where his other sectors would be located. He still had a zone of transition around the CBD, but he also had industry fanning out from the centre along major transport routes. He assumed that "Like would attract like", which is why he decided that land-uses would concentrate to form sectors, rather being in rings, like Burgess thought.

The lowest class housing would be closest to the industry, and probably be located where the prevailing winds would blow the pollution towards them (and away from the higher class housing).

The high class housing also is in a sector of its own, running all the way from the CBD, where many of the residents would work, to the outer suburbs.

Harris & Ullman's multiple nuclei model:
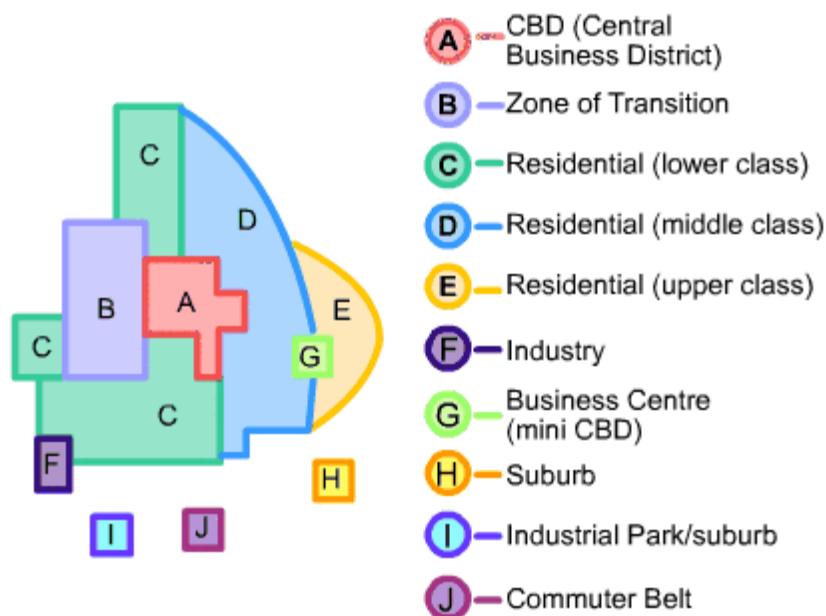
This model was aimed at being more specific than the other two, however it also has become more complicated.

Harris and Ullman still have a central CBD, but they also have other smaller centres performing specific functions that Hoyt and Burgess decided would have been found in and around the CBD. Thus Harris & Ullman also havea business centre, and industrial parks.

Large cities do display some of these characteristics. **London** has different areas of its centre that have different functions: the City, Westminster, Oxford Street and the West End all have differing specific functions.

London has also grown to engulf other towns and villages, which have become smaller CBD's within the whole of Greater London. These CBD's act as growth poles, meaning that the city does not just grow from one central point, but from many spread around its area.

Indian Context

No Indian town purely follows these urban morphological models. The most salient feature of urban morphology of Indian towns includes at least four types of cities. Though a lot of variations in the city structure are observed - ranging from fully planned and modern westernized cities to more or less indigenous cities, but a varying blend of the orient with the occident and with the distinctive Indianness is a common feature. The Indian culture still has an upper hand in most of the cities. The four types of Indian cities are:

i. Indigenous cities with one dominant node: These cities, following in general the Bleicher-Clark Model of urban density gradient, are in majority numerically.

ii. Anglicized port cities: (Mumbai, Kolkata and Chennai). These have lower densities in the city centre, as contrasted with the indigenous cities.

iii. Two-node cities: this group includes cities like Hyderabad – Secunderabad and Bangalore.

iv. Planned cities: Cities like Chandigarh, Jamshedpur and Bhubaneswar are include in this category, where the population density is lower throughout and the density crest is not necessarily in the centre.

UNIT - III

Urban Communities & Behaviour – SAR1303

HOUSING

The main challenges as far as urbanization is concerned in India are the facts that there is an urban housing shortage of 18.78 million. According to the 2011 census, only 70.6% of urban population is covered by individual water connections compared with China (91%), South Africa (86%) and Brazil (80%).

What is Housing?

Housing could be defined as a process that involves social, cultural and economic backgrounds of the inhabitants of the city, that varies between different scales, that requires a production process over time involving financing mechanisms, thus tying up different stakeholders, investors, public sector and the community as a whole.

Housing shortage –break up

Estimated Urban Housing Unit Shortage as on 1.4.2007:

Total:24.71 million

EWS:21.78 million

LIG:2.89 million

MIG/HIG : 0.04 million

More than 99% shortage is for EWS/LIG segments–Technical Committee setup by Ministry of Housing & Urban Poverty Alleviation

Housing Need & Demand

Housing 'demand' is a market driven concept and relates to the type and number of houses that households will choose to occupy based on preference and ability to pay. Housing 'need' is an indicator of existing deficit: the number of households that do not have access to accommodation that meets certain normative standards. This measure mainly refers to the level of need for more or improved social housing. The term 'housing requirement' is sometimes used to combine these two measures to generate an overall picture of the housing market.

TYPES OF HOUSES

Bungalows

In smaller cities and semi-urban locations where land supply is still available, houses are being built on individual plots. The house owner enjoys complete privacy, builds the supporting amenities and infrastructure as per his taste and fervour. Such dwelling has its pros and cons. While the owner enjoys complete freedom, he is not insulated from external risks that may pose a threat to the property.


Housing Complexes/ Societies

Restricted supply of land has led to vertical developments taking place in cities. Today, developers are offering a wide range of options with multiple amenities that suit the requirement of modern home buyers.

Integrated Communities

Developers are also developing integrated township projects which are nothing but self-sustained urban hubs or communities. Equipped with social and other amenities such as club houses, schools, hospitals shopping complexes, these townships offer residents a wholesome living experience. These townships being built far away from the city-centre are also attracting buyers who are not in a position to buy their dream houses within the city limit.
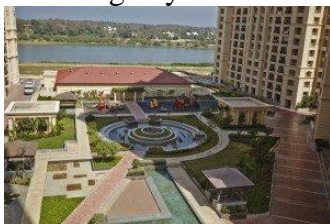
Farmhouses/second homes

Farmhouses and vacations houses are located away from urban crowd have also become a common feature to attract hi-end buyers. In the last decade or so a large chunk of this kind of supply has become part of organised supply of housing, even as these are sporadic in nature. In case of such developments, home owners are responsible for creating all required infrastructure on their own and hence often exposed to related risks.

Apartment

An apartment is an American term for a home where you live (British English: flat) in a separate home within a large building where others also have their own home. This style of building is often called an apartment block. Apartment blocks are normally owned by a single company or developer and each apartment is rented by the person living there.

Condominium

A condominium is a style of an apartment which is individually owned by the person living there, although you can rent from the condo owner. Each condo owner is allowed to buy and sell their own condo and own a small percentage rights to the land and common areas, like the gym or tennis court. This is different from an apartment where the entire building is owned by one person or company.

Cottage

Cottages are small old-fashioned houses often found in the countryside. England style cottages are world famous for their signature look. They are often made of stone or brick with a straw or thatched roof.

Dormitory

Dormitories are similar to apartments and common on college and university campuses. Here they are used by students who want to live close to school. Dormitories are large buildings with many individual rooms called dorm rooms. People often share rooms with other people and share bathroom and kitchens with many other dorm rooms.

Duplex

A duplex is a kind of house where two homes are built under one roof. It is similar to a semi-detached house because duplexes are attached to another person's house on one side but not on both sides. Some duplexes used to be one house but were split into two homes.

Farmhouse

Farm houses are one story low built houses. They are traditionally built far away from the city, on large areas of land used for farming or raising animals.

Houseboat

A houseboat is a type of floating building where people live. As the name suggests, they're part house, part boat. There are different kinds of houseboats. Some look like a boat that has room to sleep, whereas others are square shaped and simply look like floating houses.

Hut

A hut is a very simple one story house, often built with cheap materials or natural materials like mud. These kinds of homes have been used for thousands of years by our ancestors. They're still seen today in poor places and regions which have not changed their ways in many generations.

Log Cabin

These buildings are small structures found in the forests or woods. They're made almost completely out of wood or large logs. A "log" is a round piece of wood cut right from a tree. People also use logs to keep their home warm in a fireplace.

Manor
A big country house with a lot of land. They are an old style house, normally owned by wealthy families. Manors have very large and beautiful gardens.

Mansion
A large and impressive house. Similar to a manor. However, manors are generally old and in the country. In contrast, mansions can be anywhere. Mansions can be old, or new. Most famous actors and singers live in mansions.

Motel
A hotel located close to a major road and mostly used by travellers who wish to rest while making long road trips. Motel comes from the words motor and hotel. On average motels are not as nice as most hotels and offer only basic services.

Palace
A palace is the home of a country's king or queen. Buckingham Palace is the very famous home of the Queen of England. Palaces are generally very large and have many people working there to take care of the royal family.

Semi- Detached House

Semi means half or partly. Detached means that it is not touching anything else. A semi-detached house is a house that is touching another building on one of its sides but not on another.

Shack

A shack is a small building often put together loosely with left-over or cheap materials. A shack is similar to a hut or cabin. What makes a shack different is that it is often made with modern materials like wood and metal and generally not well built.

Skyscraper

A skyscraper is a very tall new style building. You will see many skyscrapers in nearly every city around the world. They are made of glass and metal. Skyscrapers are used as office buildings or apartments.

Tent

A temporary shelter made from fabric. Most people use tents when they go camping and need to quickly set up a place to sleep that will protect them from the rain, wind and small animals overnight.

Urban Slums

- A compact settlement of at least 20 households with a collection of poorly built tenements, mostly of temporary nature, crowded together usually with inadequate sanitary and drinking water facilities in unhygienic conditions.
- 25% of the Indian urban population living in slums.
- Breeding centres of disease and crime.
- Slum clearance being carried out
- Control of rural-urban migration required.

Causes

- Poverty
- Migration
- Rapid population rise
- Absence of proper housing facilities
- High rental rates
- Lack of cheap transport
- Neglect of houseowners
- Unplanned growth of the city
- Negligence of municipality

Effects

- Individual disorganization
- Family disorganization
- Health and sanitation
- Social disorganization
- Moral degeneration

Environmental Perception

Perception is the process for gathering information about the world (source of affective responses).

We gather information from the simple stimuli that the environment has to offer:

- Brightness
- Color
- Depth
- Form
- Movement, etc.

PERCEPTION THROUGH SENSES

Sight gives us knowledge of three dimensions and colour.

Architecture relies more heavily on the Visual Sense. By arranging spatial sensorial features, an architect can lead occupants through the functional and aesthetic rhythms of a created place. Architectural building for all the senses can serve to move occupants - elevating their experience. By engaging all of the senses, form and function may be more fully expressed so occupants can have deeper, more meaningful moments Architecture is regarded primarily as a visual phenomenon. Thus, we have many buildings that are designed to please the eye but fail to delight the body as a whole. Eyes absorb the visual qualities of a space. Vision is capable of stimulating other senses in our body.

Light Quality – direct, indirect, natural, artificial, diffuse, dappled, focused –can be subtly manipulated in the design of a space to achieve the desired effects.

Listening helps us to feel the building from a safe and relaxing point of view, so that we can sleep in comfort.

Vision is directional while sound is omnidirectional. Thus, sight isolates while sound integrates. The loss of senses in contemporary interior design can be attributed to the ignorance of acoustic intimacy. Sound can lend characters to a space: intimacy or monumentality, invitation or rejection, hospitality or hostility.

The form and the volumes of a building and the materials, with which it has been built, contribute to the sound generated in its interior and exterior spaces.

Touch is very important, as an architectonic feeling of each and every object is perceived by this sense, for example, a faucet in a bath that is smooth to the touch, a towel that is soft to the touch, or soap that is leathery to the touch. The sense of touch is the most intimate when buildings are considered.

The boundary line between the world and ourselves is identified by our senses. All the senses, including vision, are extensions of the tactile sense; the senses are specializations of skin tissue, and all sensory experiences are modes of touching, and thus related with tactility. Our skin is the oldest and the most sensitive of our organs, our first medium of communication, and our most efficient protector. Touch is the parent of our eyes, ears, nose, and mouth. It is the sense, which became differentiated into the others, a fact that seems to be recognized in the age-old evaluation of touch as 'the mother of the senses.

Thermal Qualities – warm, cool, humid, airy, radiant, cosy - are an important part of our experience of a space, they not only influence what we choose to do there but also show how we feel about the space.

The skin is capable of reading the texture, weight, density and temperature of an object. The tactile sense is the one that actually establishes a connection between our body and the world. It is not just about physically touching an object but about accepting the volume and temperature of space. Great designers have created designs that appealed to the eye and also invited one to touch and explore.

Smell gives us a sense of cleanliness or dirtiness, of a turbid or rotten or fresh feel, and the ambience is felt first-hand with this sense.

Taste is not directly effective in buildings except ones with food & beverage.

There is a delicate transference between tactile and taste experiences. Also, taste is generated by the combined action of nose and tongue. Eyes collaborate with tongue as well. It has been found that certain colours and delicate details generate oral sensations.
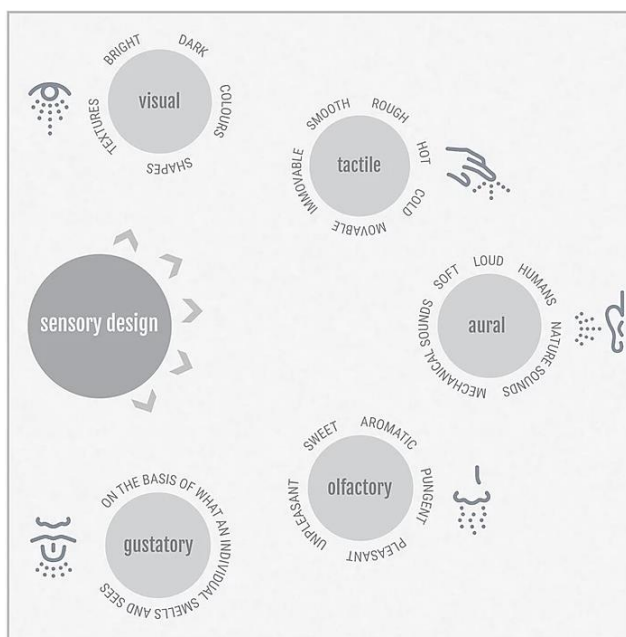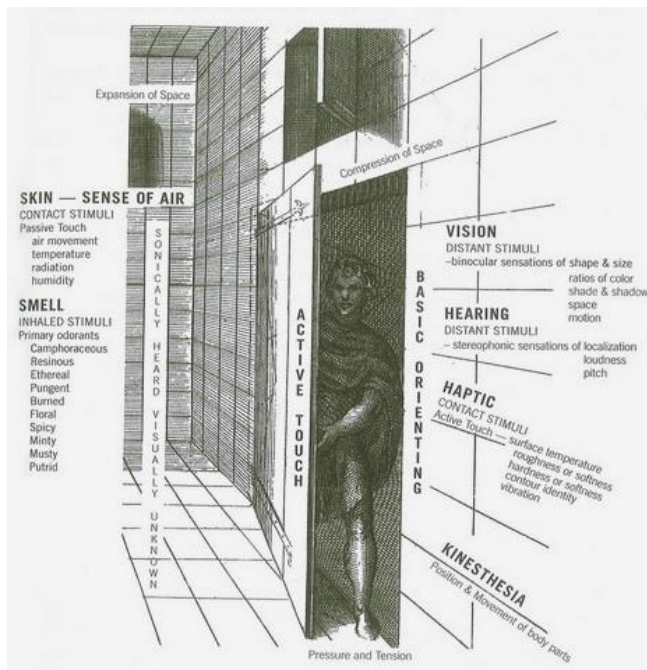
How to design for the senses? - Consider the shape of a space, the colour of a wall, the light from a window, the comfort of a textile, the sound of a floor. Each of these moments are key opportunities to think about the sensory signals of a space and what experience you want people to have.

Gestalt Theory

- Originated in Austria and Germany toward the end of the 19th century.
- Fundamental to several related disciplines including art, graphic design, web design, interior design, architecture and urban design.
- Focuses on the mind's perceptive processes.
- The word "Gestalt" refers to "a way a thing has been gestellt; i.e., 'placed,' or 'put together'"

The whole is greater than the sum of its parts. In viewing the "whole," a cognitive process takes place – the mind makes a leap from comprehending the parts to realizing the whole.
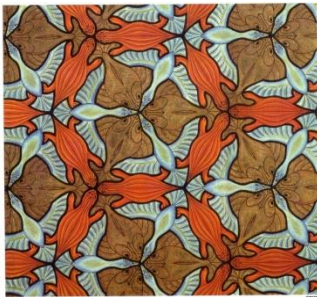
Figure Ground Segregation

When you look at the environment, you look at it as a whole picture, not separate parts. There are images in the environment that people are aware, this would be the figure. Images people are not aware of make up the ground.

The figure is what a person is concentrating on. The ground would be everything else in that environment.
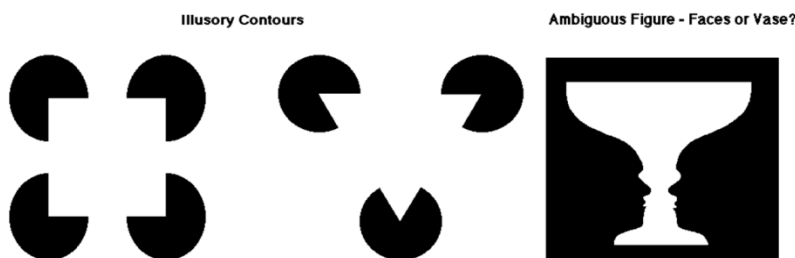
Some properties of figure ground:

- Figures hold more memorable association than the ground.
- Figures are seen as being in front of the ground.
- The ground is seen as uniformed material and seems to extend behind the figure.
- The contour separating the figure from the ground appears to belong to the figure.

Reversible Figure Ground:

- There are no correct interpretations to what the figure is and what the ground is; it is the individual's choice.
- People have different memories and experiences that influence their perception of images.
- We have seen that meaningfulness can help determine which area we see as figure.
- If something has meaning to someone, it normally "jumps out" at them, and is more noticeable.

Gestalt Laws of Organization:

Proximity - elements tend to be grouped together according to their nearness

Similarity - items similar in some respect tend to be grouped together

Closure - items are grouped together if they tend to complete some entity

Continuation – the eye is compelled to move through one object and continue to another object

Law of Proximity

- Objects or shapes that are close to one another appear to form groups.
- Even if the shapes, sizes, and objects are radically different, they will appear as a group if they are close together.

Law of Similarity

- Similarity occurs when objects look similar to one another. People often perceive them as a group or pattern.
- Our mind groups similar elements to an entity.
- The similarity depends on form, colour, size and brightness of the elements.

Law of Closure

- Gestalt theory seeks completeness; when shapes aren't closed, we tend to add the missing elements to complete the image.
- Although the panda is not complete, enough is present for the eye to complete the shape.
- When the viewer's perception completes a shape, closure occurs.

Law of Continuation

- Continuation occurs when the eye is compelled to move through one object and continue to another object.
- Tend to continue shapes beyond their ending points.

Cognition

- The process of thought that leads to knowing: The psychological result of perception, learning, recognizing, reasoning.
- Refers to the mental functions and processes (thoughts).
- How we acquire, store, organize, recall information about locations, distances, and arrangements in spaces.

Mental Maps

- Humans rely on Mental maps to store knowledge of places and routes in order to engage in travel and activities.
- These cognitive maps help us decide where to go and how to get there.
- A trip cannot happen without prior knowledge of a destination and the potential routes to it.
- As cities and buildings are becoming larger and larger good information about travel systems and opportunities is more important.

Better Design: Understanding of how people develop mental images of the environment help us design spaces better fitted to users' needs? Environmental cognition can contribute to practical environmental design.

Image of the City

Kevin Lynch was an urban planner with highly influential work in urban planning and environmental psychology. He dealt with human perception and form of urban environments and studied how American city dwellers used their observations of the city into mental maps.

Features of Cognitive Maps- Lynch (1960)

Kevin Lynch looked for ways in which people conceptualize the city. In doing so he was able to critique the design layout of a place according to its 'legibility' (or imageability). Legibility of a place is the ease with which people understand the physical layout of a place

5 important elements (of legibility) in mental maps of cities:

Path — distinctive thread that gives direction.

Edge — the boundary between two areas.

Node — important pathways come together, activity.

District — medium/large area with a common identity.

Landmark — reference point that stands out due to shape, height, colour, or historic importance.

What legibility helps in?

- Better navigation
- Better social interaction
- Preventing feeling lost
- Helping make the environment feel like "home"
- Establishing locations
- Linking locations in sequence
- Understanding distances between locations
- Comprehending direction of one location from the other
- Transferring knowledge from mental arena to surrounding physical environment

Paths

These are the streets, sidewalks, trails, canals, railroads, and other channels in which people travel. They arrange space and movement between spaces.

Edges

They are boundaries. They can be either Real or Perceived. These are walls, buildings, and shorelines, curb stone, streets, overpasses, etc.

Node

They are large areas you can enter, serve as the foci of the city, neighbourhood, district, etc. They offer the person in them multiple perspectives of the other core elements. "...the most successful node seemed both to be unique in some way and at the same time to intensify some surrounding characteristic."


District

Districts serve as a medium to large areas that are two-dimensional. An individual enters into and out of these areas. They have common identifying characteristics

Landmark

Points of reference person may or may not enter into. These are buildings, signs, stores, mountains, public art. At least one aspect of them is unique or memorable in the context they exist. Mobile Points (such as Sun) can be used as well
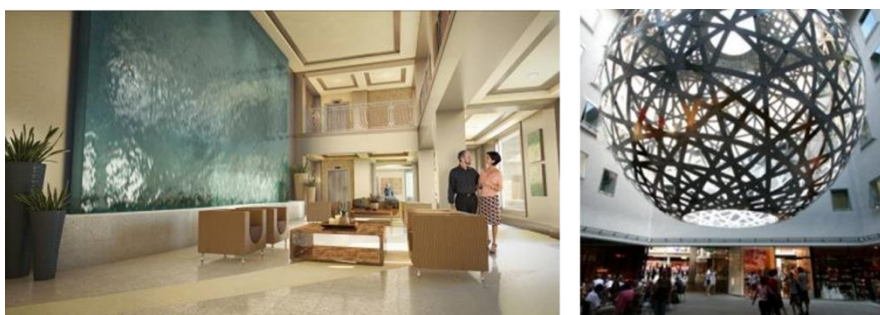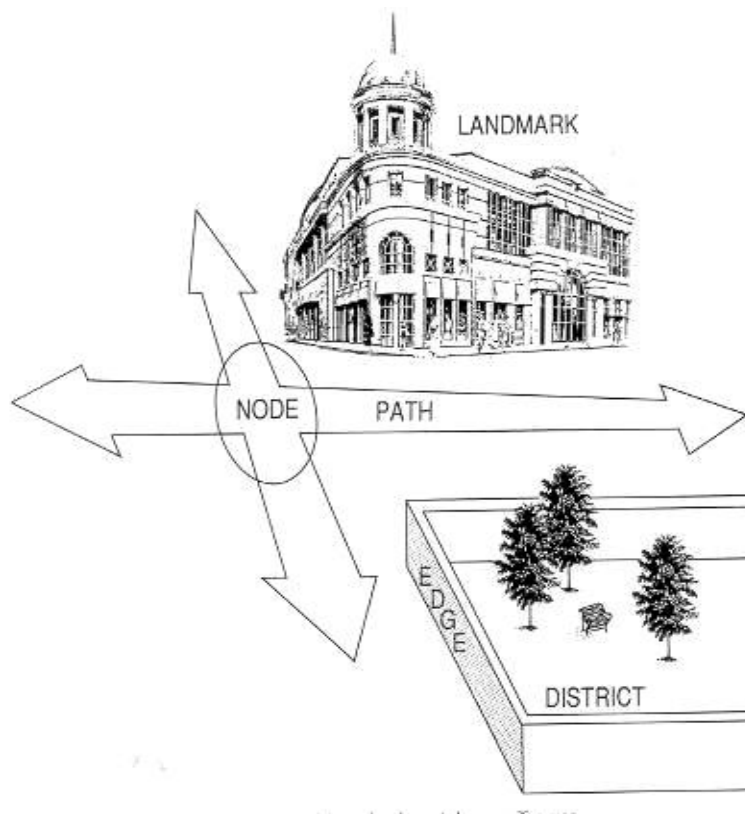
Wayfinding: Wayfinding: an internal psychological process, sequence of problem-solving activities. The process by which we navigate in our environment- Newcomers to an environment experience the stressful feeling of being lost.

Kaplan and Kaplan Preference Model

Coherence: making sense (an understandable context)

Legibility: the promise of making sense (for the person)

Complexity: involvement, number and variety of elements within a scene

Mystery: the promise of involvement

1. Coherence: ease of organizing and structuring parts, units, chunks, blocks or scene elements.mPatterns that result from many similar and repeating parts allow for easier human comprehension (similarity/proximity).

2. Legibility: is found in an environment that looks as if one could explore extensively without getting lost. Undifferentiated sameness causes low legibility.

3. Complexity: a reflection of whether there is enough present in the scene to keep one mentally occupied. Too little is boring, too much is overwhelming.

4. Mystery: occurs when a scene provides partial information about what lies ahead, inviting exploration. Things are obscured in such a way as to reveal their presence but not their full identity.

UNIT - IV

Urban Communities & Behaviour – SAR1303

Personal Space- Edward Hall
An area around a person that expands or contracts due to individual needs and social circumstance. Will vary with personality type. (introvert, extrovert)

4 Interpersonal distances:
Intimate distance (0-18"). Usually a private occasion
Personal Distance (18" – 48"). At hands length, shaking hands
Social Distance (4'-12'). Impersonal business, casual social gatherings, seating arrangements.
Public Distance: (12'-25'). Won't feel obligated to stop and talk, little personal interaction
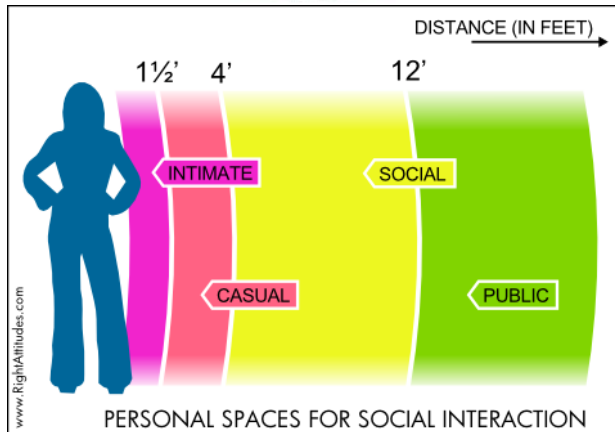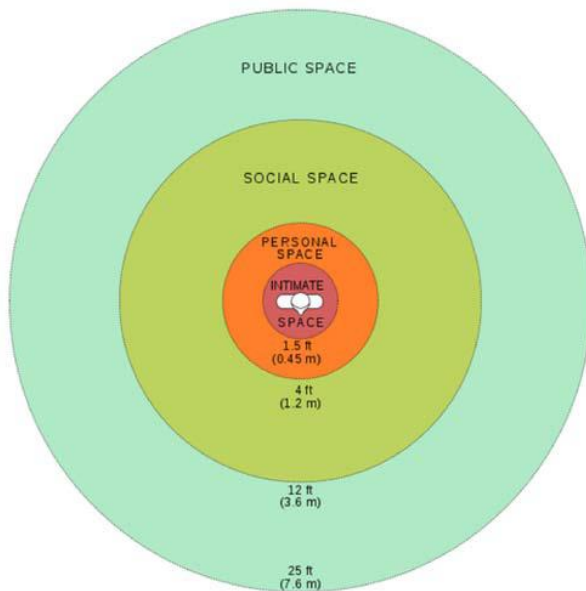
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Privacy
A process by which a person makes him or herself more or less accessible to others
Architectural examples: Doors, Walls, Window treatments, Porch location, Changing rooms, etc.

Territoriality
A primal instinct, it is the concept of making space with "ownership" either real (your home) or perceived (your desk area). We feel safe and in control in our own territories.
How do people mark their territory? – Fences, Closed doors, Signs: No trespassing, Do not enter, Nameplates, Personal items(plants, pictures), etc.

Type of territory

Primary- Used almost exclusively by the individual or group, usually in the long term. Eg- A persons or family's domicile (e.g. house, flat or room within shared premises).

Secondary- Used regularly by the individual or group, but shared with others. Eg- A person's favourite seat in a library; a group of friends' preferred table in a canteen.

Tertiary- Shared spaces to which everyone has right of access and use. Eg-Parks, waiting rooms

Crowding
- Leads to psychological discomfort.
- Varies by culture and personality type
- We can tolerate crowding on a temporary basis as in an elevator or crowded dance floor, but will become stressed and even panic if confined for a long period.
- Examples: Dr's office, movie theaters, shopping behavior, minimal design vs. nick-knacks

THIRD PLACE- "Third place" is a term coined by sociologist Ray Oldenburg and refers to places where people spend time between home ('first' place) and work ('second' place). They are neutral locations where we exchange ideas, have a good time, and build communities & relationships. (1)Home, (2)Work, (3)Third Place. Third places are in-between spaces that provide people with active and passive recreation — something to do, somewhere to go to, friends to connect with. Parks, libraries, community halls, cafes, bazaars all qualify. India has a rich history of vibrant third places evidenced in lively main streets, chowks, tanks and riverfronts, temple squares, churches, mosques and bazaars.

HOME
## What role does our home play in our lives?
- shelters and protects us from physical harm
- shapes our behaviour and productivity
- enhances self-image
- insulates us from the stress of the outside world
- provides a feeling of control over at least a small segment of our environment
- contributes to our health and psychological well being
- provides a setting for social interaction
- serves as an outlet for our need for creative self-expression

- The physical nature of the dwelling had a significant impact on altering the occupant's perception towards a home association
- The architectural elements within a dwelling can have a direct and immediate impact on the occupant's psychological state, thus determining whether a house is a home.
- It is through a deeper understanding of the occupant's needs, desires and behaviours that individualised architectural methods can be implemented which may instil a sense of home.
- The strongest sense of home commonly coincides geographically with a dwelling. Usually the sense of home attenuates as one moves away from that point, but it does not do so in a fixed or regular way

Subjective	
Degree of maintenance of neighbourhood	Safety
Appearance of place	Friendship
Apartment evaluation	Relationship with neighbours
Physical	Perception of overcrowding
Administration of neighbourhood	Homogeneity
Physical	Social

Single family / joint family	Owned / rented
Power supply / commitment	Time living in house
Noise level	Time living in neighbourhood
	Age
	Life cycle
	Presence of relatives in neighbourhood

Objective
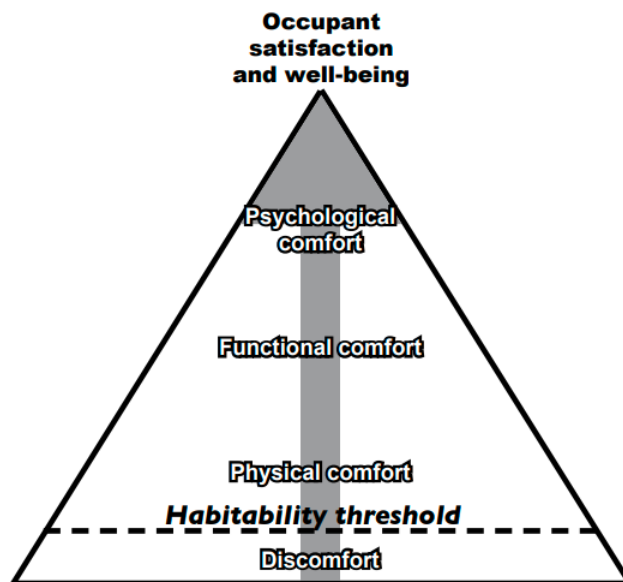
WORKPLACE

Environmental comfort model of workspace quality.
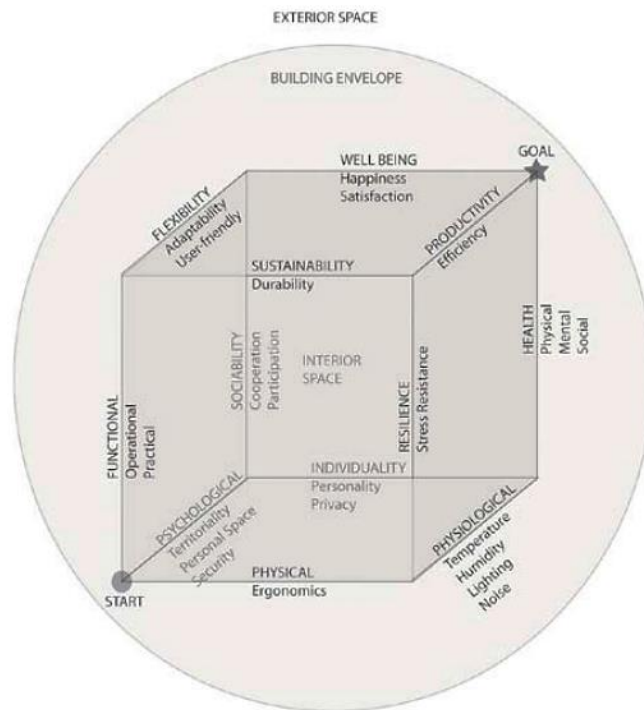
Dimensions of functionally comfortable workspace design.

Spatial Desnity at office: The amount of space provided per person in the workplace is known as spatial density

INCREASING SPATIAL DENSITY
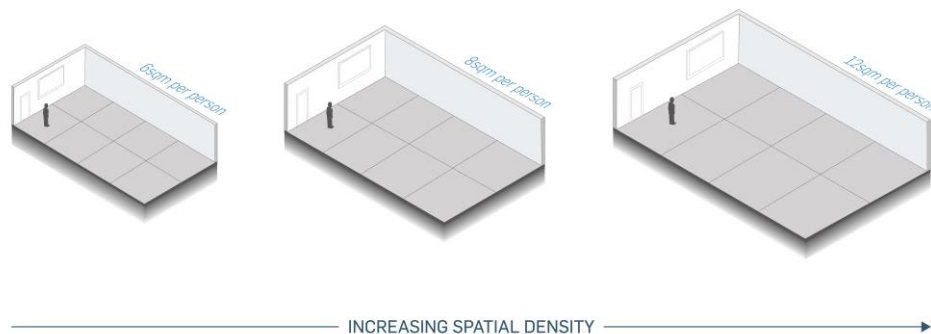
Social Density at office: The number of people in an office is known as social density.

| Single occupancy office | Multi occupancy office 8 persons | Multi occupancy office 16 persons | Multi occupancy office 32 persons |

INCREASING SOCIAL DENSITY
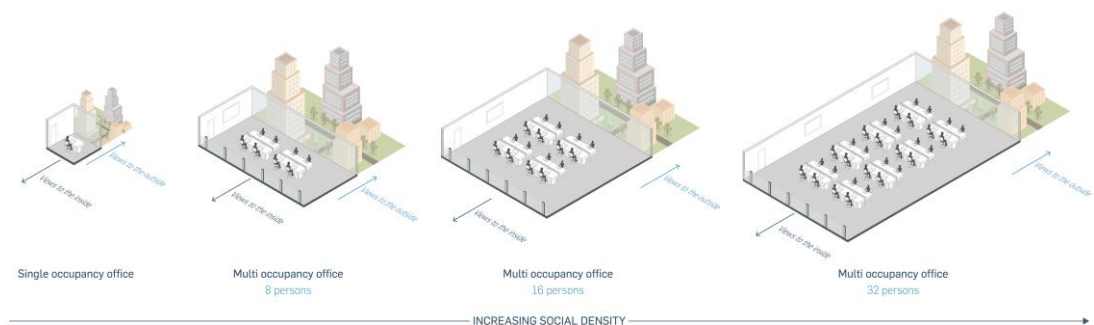
Top factors for environmental quality at the workspace:
- Stimuli & distractions in the workplace
- Spatial & social densities
- Control & variety of space
- Personality type of workers

Place Attachment
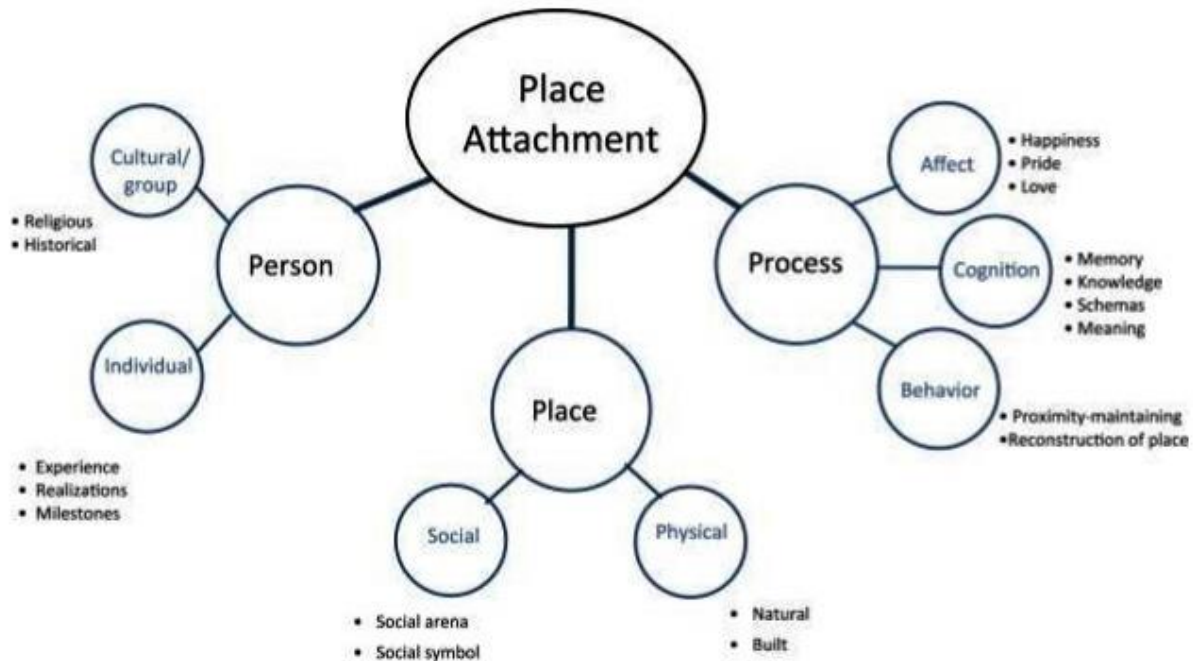
As knowledge grows about the specific levels within each of these dimensions, a comprehensive understanding of place attachment will be reached.

NEIGHBOURHOOD AND GROWTH OF NEIGHBOURHOOD- functional, self-contained and desirable

In its purest definition, a neighbourhood is the vicinity in which people live. People live next to or near one another in sections of an area and form communities. Those sections have some particular physical or social characteristics that distinguish them from the rest of the settlements. The clustering of neighbourhoods forms towns, villages, and cities.

The neighbourhood concept is arguably one of the major planning landmarks that shaped the urban form of the twentieth century city in many countries. Coincidently, both the neighbourhood idea of Clarence Stein and Henry Wright, exemplified in their plan for Radburn, and the Neighbourhood Unit idea of Clarence Perry were published in 1929. The urban design principles of Stein and Wright included the idea of a superblock of residential units grouped around a central green, the separation of vehicles and pedestrians, and a road hierarchy with culs-de-sac for local access roads. A cluster of superblocks was to form a self-contained neighbourhood. A group of neighbourhoods would then comprise the city.

**NEIGHBOURHOOD UNIT- Clarence Perry**

One of the modernistic concepts which is (unfortunately) still very much alive is the Neighbourhood Unit. This concept was summarized by Clarence Perry in 1929 for New York Regional Survey. For Perry the physical arrangement of the elementary school, small parks and playgrounds, and local shops was the basis of his neighbourhood idea. Each neighbourhood was to be a "unit" of the city.

Perry identified six neighbourhood unit design principles (Figure 4). First, the unit was to be ideally a shape in which all sides were fairly equidistant from the centre, and its size was to be fixed. Secondly, a central neighbourhood or community centre was to contain various institutional sites, including a school, grouped round a central green space. Thirdly, local shops or shops and apartments were to be located at the outer corners of the neighbourhood. Fourthly, scattered small parks and open spaces, located in each quadrant of the neighbourhood, were to form 10 per cent of the total area. Fifthly, arterial streets were to bound each side of the neighbourhood while, sixthly, the layout of the internal street was to be a combination of curvilinear and diagonal roads to discourage through traffic. Vehicular and pedestrian traffic was to be segregated. Perry's concept of the neighbourhood was as a relatively self-contained building block of the city, hence the addition of the word 'unit' to his concept.
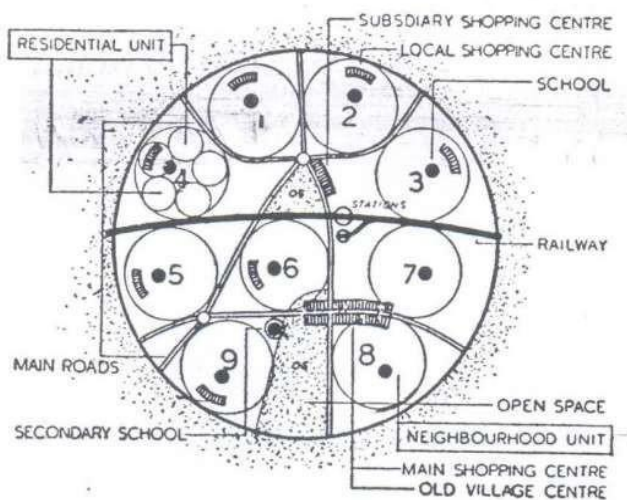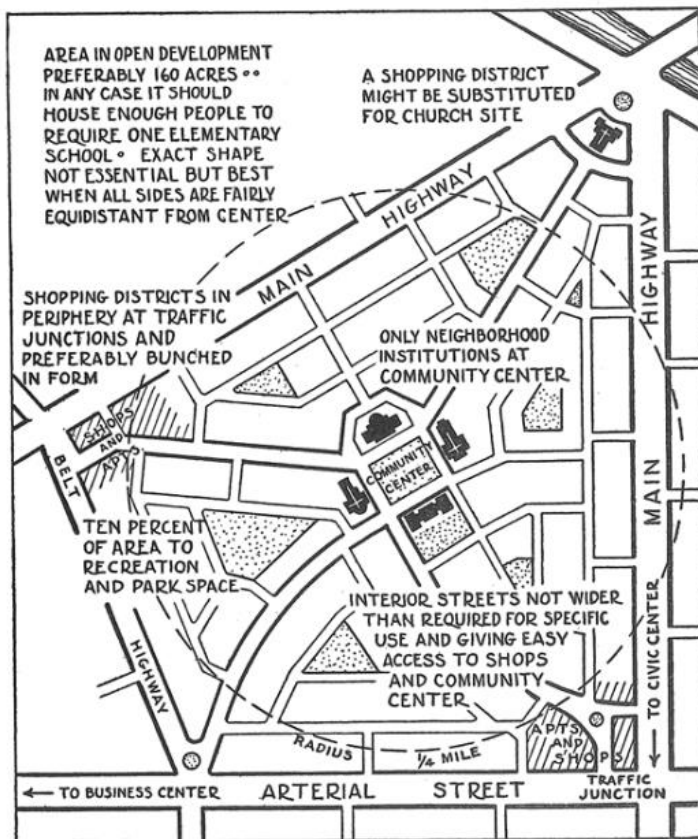
The diagram below shows how Perry viewed the classic American open-ended grid that is at the base of all the decent urbanism that still remains in the US. In his view the grid led to nowhere in particular, while his closed street scheme leads to "place where people want to go". In practice the grid leads to a myriad of destinations open to change and growth, while a closed and disconnected street network leads to a place that's quite resistible to change.
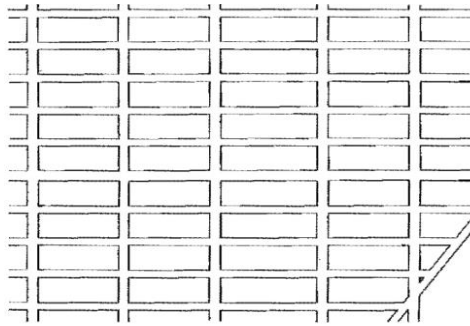
A.—LEADING NOWHERE IN PARTICULAR
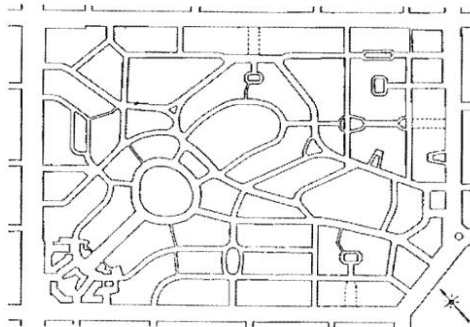
B.—LEADING TO PLACES WHERE PEOPLE GO

FIG. 32
CONVENTIONAL AND NEIGHBORHOOD STREET SYSTEMS

Maximum walking distances each proposed - 0.8 km in the Radburn neighbourhood and 0.4 km in the Neighbourhood Unit model

It is theoretical concept, actually the borders of neighbourhoods are very difficult to define and they are constantly changing when new objects appear. But the neighbourhood unit concept is the most effective way to organize public transport, social objects (schools etc.) and solve other problems of urban planning.

NU planning uses were based on the idea that significant reduction of urban social inequalities could be obtained (by means of the school location at the centre of the unit, commercial and everyday services at the margin). Along with a quantitative assumption on the importance of a population threshold (up to 4.000 adults), it was thought that NU would generate acquaintances among residents, especially those with children, and at the same time a certain degree of anonymity. Today, sexual division of labour within households is changing, extensive and complex commuting needs are prevailing, changes in urban time structures are striking when compared to the 1950s context, all these, among other factors, put into question the value of the NU. There is an important individual dimension to this through the perception of social benefits which people entertain by being residents of a certain neighbourhood - this psychological dimension can include aspects as diverse as belonging to a certain (possibly imagined) class / being able to afford a certain locus of residence or being able to tap community support.

IDEAL ASPIRATION	THEME	IDEAL NEIGHBOURHOOD
managerial and organizational efficiency -->	MANAGEMENT -->	an efficient scale for the management of urban resources
urban institution repair, better life quality -->	HEALING -->	a means for social reform and change in way of life
healthy condition, comfort and convenience -->	WELFARE -->	a means for the provision of the quality of life
an expression of intricate human relationships -->	ASSOCIATION -->	a link in the continuum of human association
methodical/logical urban environment--> processes	ORDER -->	a component of order in the urban environment
citizen participation in urban processes -->	PARTICIPATION -->	a framework for public participation in decision making
subjective needs adapted to objective conditions -->	IDENTITY -->	ecological conformity between residents and their environment
giving an urban place a specific --> significance	MEANING -->	a place with historic meaning for the social group

The eight themes or categories of neighbourhood research (Kallus & Law-Yone, 1997, p. 111)
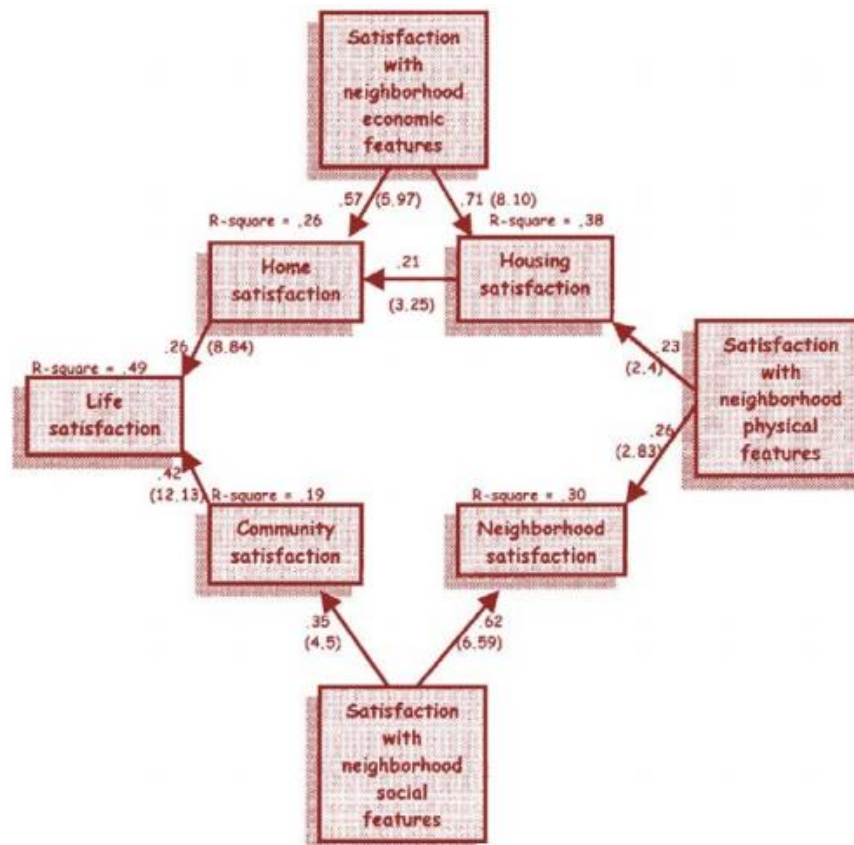
Sirgy and Cornwell's (2002) conceptual model to explain how satisfaction with neighbourhood features affect residents' quality of urban life

Ten neighbourhood attributes (The Young Foundation, 2010, p. 12)

A new strategy of sustainable neighbourhood planning: Five Principles

1. Adequate space for streets and an efficient street network. The street network should occupy at least 30 per cent of the land and at least 18 km of street length per km².

2. High density. At least 15,000 people per km², that is 150 people/ha or 61 people/acre.

3. Mixed land-use. At least 40 per cent of floor space should be allocated for economic use in any neighbourhood.

4. Social mix. The availability of houses in different price ranges and tenures in any given neighbourhood to accommodate different incomes; 20 to 50 per cent of the residential floor area should be for low cost housing; and each tenure type should be not more than 50 per cent of the total.

5. Limited land-use specialization. This is to limit single function blocks or neighbourhoods; single function blocks should cover less than 10 per cent of any neighbourhood.