

B. ARCHITECTURE

URBAN DESIGN (AR6711)

INTRODUCTION TO URBAN DESIGN

Lecture – 1

Rural & Urban:

How slowly cities are being transformed and how was it before and how is it now. Taking a look at this image of footprint is not taking hundreds of thousands of years ago. This is just a couple of decades back where suburban took place and this migration as led to

What cities are now in this form?

So which means the morphology have completely change the major difference between the images you could see a lot of green space over here could you see any breathing space over here that is one major place and the city. So this leads to an understanding of moving from rural to Urban this transaction has led to a lot of advantages as well as disadvantages looking at the image on the left you see again a lot of green space, which is empty in footprint toward the right there is no footprint which is empty this is a lot of squatters and this is lot of scatters, so which means that there is a basic mismatch in terms of how we organise the urban where the rural transition happens and there is a boundary between these two. This understanding between the rural transition to an urban and regulating the urban movement in organized coherent way, to the study of urban design.

The question leads to

What are happening to our modern day cities?

You look at growth of a the advent of industrial revolution, you could see lot growth in industries and this industries as lead to air pollution, you could see lot of footprints of houses that are coming under which is lead to global warming, you could see lot of invent of technologies which is lead to more in terms of transportation, technological advancement leading to more accidents, more industries going less water shortage, more in terms of technological advancements.

We don't know where the cities is growing, the cities more growing taller in taller, so when the city grows in a particular manner there are much

more attributes in terms of problems that are arising on the other hand. So tackling these two and balancing is a good urban study.

The transition image or a transit image which shows difference between how the rural has changed into an urban district, so the basic thing which you could study in the images you could see a lot of water body, you could see a lot of vegetation which means that in rural nature, there are more of agricultural land more of pasture land and more of green in nature.

Now when it starts getting into a small rural reserve smaller buildings pop up around agricultural land, slowly city moves on into farming suburban district where small scale or low rise typology of houses are built around separate gardens. Now this suburban moment takes into the general urban form where there are lots of parcels of land in other terms called plots being developed and these plots having subdivided into residential category.

Now this generally urban form has been translated into urban Centre where the density increases the number of typology of houses increases and slowly the rural, urban transition happens at the stage. Now we move in to an urban core which means that the block of the house compared to the parcels of land which you see over here has become into a single Central typology which is big in nature and that can accommodate different kinds of uses in its form and slowly when it moves into district, so the transition which you see over here which is a lot of green and lot of Grey which means that rural to Urban transition has led to more of building blocks more of parking lots, than more of green spaces the Residue which are left on each parcels of land is the green space or the breathing space in urban cities which we understand, in the same images mean translated in the form of a figure ground where in urban designer could read the morphology of that same space in terms of a graphical representation in a figure ground manner.

Now this is a very interesting core that is given by Ralph Waldo Emerson when he says that city is force growth and make people talkative and entertaining which means that a lot of misuse factors have been induced into the city to make the people more socialize more socialize virtually and they also entertain but also make them artificial due to the technological revolution, we people move more towards more into a mechanical life rather moving into a social life. We could see lots of smaller or scatters of blocks than which are super imposed to natural ground on a larger blocks of parcels of high rises and these in terms are integrated with the natural environment. So in today's land this is much less the natural landscape is much less than artificial landscape that are much more created and are becoming busier day by day.

Elements of Urban Design:

Elements of urban design with composite so just as a Framework urban design in walls the design and co-ordination all that makes up citizen forms are all which is mentioned over here is nothing but the physical, physiological, geographical, morphological, social, economical and all other aspects including the political aspects of a city.

So if you can just break down urban design in to elements and if you could study everything and understand that could lead to an advent of what urban design is about buildings the basic form or the basic element in any city is building, so good building or a good group of buildings in a particular city shapes.

What a places about, it gives good character and quality of a space, so quality of space is achieved in a city or a sense of places create by a well-designed building and group of buildings. You could see a street, so well designed building in coherent manner or harmony in nature, it has uniformity, it creates balance in terms of height and it does forms water streetscape is about, so all these buildings are lined up in street, which means that this building have an attribute or influence over the streetscape as well and some of the buildings also relate to scale and proportion that are related human beings as well and some of the building are harmony in a nature as you could look at the images lot of harmonies window, the scale of and proportion of the windows are correlated to every building in a street cape.

So this is the facade of the street where user looks upon resembles but not in this, all the building are not the same but they are harmony in nature, it blends together with the landscape of a particular city, so good urban design should ensure the quality of building in well designed manners and organising it in a few taught lots.

Next important elements are public spaces otherwise called as breathing space or a liveable space of a city. This is a place where public usually comes and round into and this is much more sociable than compared to any other open space in a city a well-designed public space in the city ensure good quality of life public space could differ or could vary in terms of scale from a smaller public park to a public square to a Plaza to a larger rotunda or even green park and larger open space with water bodies.

Urban Problems:

We need to understand some of the problems due to the growth of cities; all of us know rural people move to urban, cities are growing. So when the cities are growing what the attribute it problem to it, one major problem is pollution after technological or a industrial revolution, people started into moving in the lot of industries, growth of industries as let to

growth of the warehouses, so which means that lot of air pollution is being caused which are hazards in nature for many of us and for addressing this problem. Ebenezer Howards is also let to what garden city is about, so this displaying these industries putting into the edge of a city or fringe of a city getting the living nature to the centre of a city. So that segregation of an industrial nature and segregation of people living inhabitable nature should have to be working separately, so that it ensures not hazardous environment.

Urban Migration

So this is as such, i mean everyone knows about how people move from rural to Urban looking out for employment opportunities as such, so urban cities or urban scenario provides more opportunity for people to drain into the cities which results in urban squat a problem, so you could see lot of high rise structures which are built but unoccupied and you could see a lot of squatter settlements which are temporarily in nature and more people occupied, so there is a biased between these two lot of buildings are built no one occupies it and these are temporarily built and everyone occupies, if there is a particular mismatch and this quarter has to be mitigated through urban policy and planning.

Urban public space problem

What you look at this image is an urban residue it's not public space, it is become like taro fare, you could see a yatch, you could see a water body and you could see a group of buildings that are organised around it, this central space could eventually become you could be well planned in design, so that every user accommodate his or her desires in public forum but rather than doing that this place is become left as a Residue where people just use it as a walk able space.

So urban public space problem, so there are many cities were public spaces not at all there and there are many cities which are redundant in nature. So understanding public spaces is a chapter of own but just in case to ensure a good viable public space need to have a proper social value which means that in improve the quality of social life of a people, it bring together or interrelates many people from different neighbourhoods to come in focus down to a single point and it should ensure environmental values which means that there should be reduced air and noise pollution. They should be much lesser footprint and ecological activities are ecological is sensitive nature and diversity should be bought into that space and it should also have increased economic vitality which increases the product value of that space.

So public space should be insured with three principles as a whole

Urban transportation problem

Much needed for Indian cities, where you could see lot of kiosk happening due to growth of cities and growth of population, more number of transport, more modes of transport have been introduced, from a smaller bicycle, to private bike, to private car, to share-auto, to call-taxi, to bus, to railways. So all these roads are congested which means that there is no particular planning of future there is no prospective approach in terms of planners and policy, makers to understand what city need and how the city grow, so without understanding that this Chaos would be result.

Now much more worser much simpler solution a creating freeways like this, much connected fabric like this, ensures there is a lot of redundant space which means this space or no use in a city. So if you had not planned at this stage which result to the chaos only resultant in terms of regulation regulating a traffic would be in terms of freeways, in terms of creating freeways you leave out a lot of open spaces which are completely unused and these are unused spaces are left over many parts of the city, you could relate to any city in which you live. More increased population and more increased automobile production will result in creating much more Chaos.

So there is a much inter twining of lot of layers of roads and freeways going on where user would be confused and this footprint is actually bad to environment suggest. Now even more so if the transportation planning is not at all regulated even at this stage, it resulted what this is a complete chaos. So people wouldn't understand way to go, so much chaotic result would be into existence if the transportation and regulation does not happen had a much more early stage of planning, there is a bias between non space, so cities are completely with buildings, cities are completely with trash, cities are completely with automobiles but the city is a design for people.

Now where are the people now people do have space to work, people have no space to socialize themselves, the people have no space to go anywhere, and people don't have breathing space, so which means that it more move into collapse of the city as an environment. So like city is being look a commodity, if you just have designs which relate to all these reduce and leftovers, where did the people go, so when designing it is far a people, it is for a people, it is by the people. So good urban design ensures quality environment where all the physical parameters of a city and social parameters of every human being is considered. So that's city environment changes from what this is to a transformative environment just to summarise what some of the problems that are association with these over first is the over use of land which result in poor quality housing that is otherwise slum housing.

Urban sprawl people move towards other fringes of the city and the definition of it would be covered in for the lectures. Urban land use shifting of land uses, congested cities centres there is no breathing space within the city, no education and lot of wasteland that have been thrashed out social problems, more people move in to cities but there is no employment high-density living, racial conflict, crime, homelessness, accidents, derelict building. So all these are some of the social problems and environmental issues, traffic condition, pollution, noise, visual pollution, air pollution, Slum growth, floods, landslides, you occupy a lot of land and that leads to floods.

So water supply being a problem no regulatory, what are planning leads to water shortage in cities and damaged to lots of buildings without poor quality of construction, there should be overall framework in an urban design which ensures that these problems of rapid growth or manage together. The last terminology looking at in this lecture is about peri-urban, so as you could see this is the city centre and suburbs grow out of the city in the out of fringes. Now these white parts are peri urban zones which city is moving outward in direction and all these are occupying the existing rural land and everyone should have come across or cities some parts, some parcels of land which are 40 to 50 km away from a city where the rural agricultural land have been converted into smaller parcels of land. We already some of the industries are housing have moved into it, is this peri-urban is good in nature or bad in nature, so before that so define as what is peri urban in much of Southeast Asia and south, rapid economic growth created strong pressure to convert agricultural land into industrial, residential and commercial use including infrastructure development tourism and speculation.

Speculation and land speculation is 1 or real estate development is one major problem in acquiring all the agricultural land putting into the difference use much of land use occurring in Asian cities and in areas that are described as peri urban conditions and it is estimated that peri urban population would approximately 200 million for the next 25 years which means that 40% of the urban population will move into the growth of peri urban areas and large manufacturing enterprises will move into that spot which means that we are taking away or rural and agricultural land and converting a into industrial use which creates more hazard development and hazards environment. So some of the problems that are created are intense pressure on resources with natural resources like land and water are being utilised by this people expansion of slums lack of adequate services like water and sanitation, degradation of adjacent farmland, this is one major pressure on peri urban area, these areas unfortunately life beyond cities and administrative limit which means that there is no

panchayat or city administration to look after these growth of the manage, the growth of the spaces.

Now there is a situation coming back to people like us waiting for giving back to the City a well-designed city should get back its social environment, political environment and physical environment all of this taking into consideration.

What are sustainable environment and sustainable future is about and the solution for that might be smart cities and these smart cities doesn't mean it is technological is smart but it should be technological smart but it should ecologically smart, environmentally smart, economical smart, physical smart, social smart and culture smart not only adapting technological city would improves the quality of life but understanding all these elements within the city and proposing a good strategy for it would relate to a good design of an urban city.