

History of Architecture and Culture – 5

Lecture - 8

Urbanization and Rise of Cities – 1

Urbanization is the process in which the urban area grow at a rapid rate. Grow means not only physical growth which they talking about here. They also talking about physical growth because the urbanization means the physical increase in size of the cities states here. But also the improvement and the quality of the living of people also in the improvement of economic life and spend ability of the people. So the urban areas grow in terms of size in terms of population in terms of economy and the same time in terms of work in terms of the quality of life that they have. In comparison with rule city but urbanization always hands up in not so positive node. If you have lot of people lived in space there is going to be lot of effects because they are going to be cases of epidemic. They are going to be cases of sanitation wishes and they are going to be lot more issues than just these two.

So it's very difficult concept to understand urbanization because urbanization is not completely a green situation it's not always easy to understand urbanize state and it not always easy to understand urbanizing city because always the positive things and negative things happening at the same time. Urbanization mainly occur because of migration of mass no of people large scale migration of people especially the rural areas to the urban areas leading to a sudden and often unexpected increase in the urban population. Urban area design for certain population the roads with cities even the size infrastructure everything was design to certain population and there if mass migration in a very short period of time into the city. So it is unexpected from cities point of view the unexpected increase in certain population is one of the key characteristic urbanization. There is also characterized by other growth of other modes of production apart from agriculture making more options of income accessible to the people. Which means

the city can search for any kinds of job and not only force to take up an agriculture. I can take any kinds of jobs they were variety of jobs that availability of disposal for people to choose from because to earn their living option of income was not very limited in a city.

Growth accelerated and was most remarkable in England in all countries and first half of the nineteenth century. Rather than other country it was most prominent in England. England was the first country to start industrial revolution and urbanization and other things we now that. So industrial midlands involving the cities of Manchester Birmingham and Leeds grew in an area which in the mid eighteenth century was almost entirely rural. So almost entirely rural population near Manchester's near Birmingham Leeds start developing into cities because started to build factories along this area. And Manchester was very famous in textile industries were other places got famous in other types of industries also Birmingham Leeds extra. So just like we saw the in the previous episode people started building factories. Factories started to accumulate people started to migrate to rural area to urban area. So they had economy they had people and so didn't they have facilities. So they start building the facilities so they started building the facilities hospitals college malls and other things. So the midcentury most of this area become close what cities look like. Meanwhile the great cities of London Paris Vienna Berlin Rome Madrid and New York these cities grew dramatically.

These cities industrial revolution happen earlier faster and by the time the other cities started building factories. These people was started different kind of building. By the time those people were build different kind of buildings. These major cities started having the government of its own so they serve body of its own. They started developing city the city grew exponentially. City grew in size and in number of people the rate of growth was so rapid faster that city services could not keep pace in which people are growing. The city which should certain service of its own sewerage system the saving system water supply system and other

things which cities usually needs but the rate of growth in these so huge that city services could not keep up with this.

So which means that general lack of sanitation almost all places in the city. Accumulation of sewage because there was large amount of sewage which pumped into small sewage pump pipe the service were clearly not enough. High rates of diseases because accumulation of sewage lack of general sanitation and hygiene. High rates of crime because diseases mint you cannot go to work. You will be ban from working if you have a diseases because fear of epidemics worst kinds of fear. So have certain diseases spreads you will not be allow to work if you not to earn your source of income is questionable. And if your source of income is questionable your entire life with questionable. So people started looking for other option and finally ended up in grime. So higher rate of crime is common in cities that point of time. Desperate poverty in many cases heavy use of coal and other things. Let to accumulation of dirt and grain in the roads itself. The use of coal was enormous because coal was used to burn and to heat things the steam engine work on steam. The steam was created by boiling water and other liquids. How steam is actually produced how water is actually heated the only reason is the use of coals. Coal was used so extensively the coal dust and particle is used in almost everywhere. Even in that time people who used to travel by trains when they get on the platform is after reaching designation. The faces and hands everything were soaked in suit. Because the some that carry train full of smoke. People cloths and everything was all dirty. So the entire city was dirty because so much extensively coal was being used.

When all these was happening urban planning at midcentury became a very common place because started to think that they are lot of problem. So what we goanna do the problem people started developing cities which most case meant that they have to rise out old section of the city. They have to demolish to destroy lot of buildings replace them with

broad revenues replace them with impressive buildings monuments and railway stations and other civic building. This pattern was established by the city of Paris in the 1850s under the rule of Napoleon 3. This was the success in Paris city which meant the other cities were following suit. Soon by the end of decade lot of cities were getting planned the new kinds of plan started develop. People started thinking about streets started thinking monuments and people are thinking about belonging to the city.

The original city the actual cities had of necessity been a walking city. Which means everyone living in the city should have to go to their work place by a walk. So original city plan was actually walking city plan. This major constrain means that the work place needs to be concentrated and the homes of all the people needs to be concentrated in a small area. The area is to be a smaller building become have been taller naturally. So building started to become taller usually the ground buildings are started to become G+1 become G+2 people started taller building. What eventually happened is the core city became so vulnerable and dirty. That the people who living in the cities were having a veryvery tough life.

Urbanization and Rise of Cities – 2

The wealthy might escape through because they use to travel in horse drawn carriages. So they can sort themselves from the things of the city. That is a great way of escaping a dirty city horse drawn buses also common place because the not the modern buses don't think of modern buses. Think about horse drawn carriage which can accommodate more people than just one person or two person think of horse and carriage of carry like ten people. So that was kind of buses were available so this was available for people after paying the nominal fee use horizon carriage which meant that. People aren't necessitated they have to travel from one place to another only by walk.

They have option of the travelling then horse's drawn or buses carriage. Horses drawn carriage there are advantage because the main advantages you can travel distance without getting tired and you can travel little faster than you're walking because you are in a kilometer you not be as fast as the horse can walk. So we can walk faster and the best part was in one horse carriage almost eight to ten people can go in a horse carriage. And the disadvantages mean we need to start building places for horses and the roads become dirty their works to be cleaned often. It was very unfit to people to walk on the same roads as horse carriages do. Think about the kind of dirt that will form on the ground. So there were advantages and disadvantages same thing.

In the later part of the decade horse was one of the main stay of city travel means horse travel. So you have to travel by horse drawn or buses. But by 1890s most major cities had electric generation plants which means that people are able to the electric tram car. People started built in electric trams and tram car became electric mode of transport by 1890s. By 1900 the lots of cities had trams our own country had trams Calcutta madras and we had trams earlier. So when tram became the major mode of city transport they were again lot of advantages when compare to horse drawn carriage because trams were faster than horses no one. Trams could take more people than horse carriage could do. Trams doesn't create dirty ness on the tracks the horse drawn carriages create dirty ness which was unfit for people to walk. So walk on the tram also if you want to which means horse carts was slowly replaced by tram car in the city.

So city itself surrounded by lots of building concentrated by buildings and factory's ban and other things. Including house people of other different classes living there. So city was very congested noisy and love to place live in unlike what is today. So what the wealthy people did was they started building large country side house in the surrounding places outside the city. And they commute to the place of business either by

horse drawn carriages or trams which were available. So the wealthy people clearly escape noise and all the dirty ness of the city there by houses on the country side. There also became possible for the upper middle class and some section of the middle class people to find outside of the city. Which means lesser congested than compare to the actual city itself there is poorest of the poor people. Who will not be able to offer a place outside simply because they afford the transportation cost? So they people actually who are living in the how much dirt and the grime in the central city.

You can compare with same scenario with modern day city were wealthy people live large houses little outside the city. And the middle class people were all live in outside of the cities live in apartments. Only the poorest poor people live in the core of the city in slams along the rivers dirty areas. So we can clearly compared that we are not very different from 1890s or 1900 cities. Even after one hundred twenty years pretty much still the same what we were one hundred twenty years ago. From 1870 to 1900 the United States became the world's pioneer in industrial nations. Because still 1850s, 1860s UK was the pioneer in the industrial nations and slowly France Germany and other started to become industrialization. After 1870s in the 1900 United States became the world's pioneer. It emerge in leader in large kinds of industry like timber steel meat packing mining of lot of material like coal iron gold silver when they started expanding all these things they emerged us in the leader industries. Mines forests livestock they are lot of thing available all these people. Because most of the resource in America were untapped that point of time. America didn't have very rich history like India or European countries because all the natural resources America had very fresh. If you want a timber fresh timber available to you. And if you for iron and gold everything was available because it is very rather new continent in entire world. Europe has been existing for lot of time and all the resource have been constantly depleting little by little and same was the case with eastern countries like India and china. We are

also ancient civilization but European countries started much more in an advanced manner because of the industrial revolution. And the industrial revolution slowly move to the America because of collimation and other things united states became one of the most richest nation because they started to their natural resources in the right manner. So started exploiting oil reserves mining reserves lot of raw material which are available to them.

So they exploited the natural resources may be became one of the richest country. As immigration exploded the urban population started at 6 million in 1860 in America was it 42 million in 1910. In 50 years the population became 7 times more in just 5 decades in a 50 years. Imagine population increase in 6 million to 42 million increase 7 times. Cities got bigger in population and size Chicago for example tripled size 1880s to 1890s in one year the size of Chicago town tripled. By 1900 three cities in America at more than one million people is ten lakh people New York, Chicago, Philadelphia had more than million people. New York had 3.1 people Chicago has 1.7 million Philadelphia had 1.3 million people. Chicago for example has been a rail road center it between the rail roads and see ports. So they were able to export they served the entire region as shopping hub for a wood lumber meat grain. By 1870 it can take a lead in steel production as well as meat packing.

So take a look at map of Chicago this is was Chicago was planned in the late 19th century. People started thinking about city plan and city problem and they have learned lesson from the European country. So started doing a proper job of planning cities. Just like Chicago lot of places started developing when their own manner. Atlanta after the civil war was another interesting and another important railroad hub it connecting lot of places look at map it also connect lot of places. And it was commercial center and developed a diverse manufacturing sector lot of manufacturing from Atlanta. And the product started moving different part in that country location. So Atlanta also became a very important

center. The best part about industrialization and that point of time United States was cities quickly identified with what they produce.

For example each city had certain specialization if one city made certain object and another city doesn't make same object. Makes different kinds of object mainly because to tap the market should available for different kinds of goods and some person is always necessary to make from which is necessary for the people. If there are large no of cotton industry only cotton industry in the country no other type of industries. They will be over production and over supply of cotton and textile in the market which means the cotton price will go down drastically. They were so much cotton available in the market with the common man it will easy for to buy cotton. He has if you want to buy a something else if you want to buy a wooden furniture or stool are something.

There are very less people to do in that city because in that particular location because it was not available. So price of that thing increase which means people made to flood different areas and different kinds of market. In the rise of transportation became very important because one particular city you have industry put to that particular thing. It was easy for them because people can collaborate easily and getting the raw materials and distributing and dividing them lot more easily. There were one type of product available which means they easy to process in get it. Rotation between jobs for workers also became easy people when they got trained for certain job. They not learn new kind of job in the same city. They had move the same job and do the same thing which they train to pervious work place. So it means that advantage for lot people and also advantage to employer because they were able to get employee with relative ease. And the transportation was the most important key element here because if I don't produce in certain element in my city. I can always get Trans from other cities which actually do it. So rail roads and sea transport shipping transport was the backbone of the industrialization. Because every city had an own specialty.

For example tory in New York made only a shirt collars any one make the shirt completely. They only make the shirt collars it is easy for them one to do that because the other thing were already done by other people. For example New Jersey and Paterson they started weaving silk they were pioneer in silk industries. And the other city which started doing other things Birmingham and Alabama started manufacturing steel. So if people in New York they draw a people in New Jersey want the steel they can always take it from Alabama because they easily available and the transportation system is easily available.

And combining similar industries at one place also increases advantages because palming the city become easier transportation planning the cities roads and everything become easier civic administration become easier. Because they are not different types of thing you can easily stereo type loss and other things. The waste generate most importantly the industrial waste that generated is of the same thing and recycling the waste or dumbing out the waste. What to do that the surplus material is all same for everybody so that they can collectively take a good decision. So groping up of similar the function is similar urbanization is similar factories always beneficial. Just like what we do in architecture if you take a house we always place similar group of function. The varieties are always together kitchen utility toilets because all the piping and everything forming line taken together. So we always group functions similar nature together in a same thing city level to. Minneapolis and Minnesota started producing lumber and wood furniture and other things. Toledo and Ohio made glass, Tulsa and Oklahoma harbored the entire oil industry the taped oil and fuel, Houston and Texas produced railroad cars because rail road cars one most important modes of transport lot of railroads were there cars needed to be manufactured every rail road wanted to have more cars and equal to transport badly. And rail road's car were most important sort for thing for that particular point of time.

Let us take a look at how the population changes transform the city. They transform the city in many level urban growth reflected the geographic mobility of the industrial age. It means that when a city grows people can also move from one place to another place that reflected the industrial age mobility. People move from city to city as well as in the city from one city to another city need to constantly move because just as explained earlier. If I am a trader of steel and if I am based a New York I have to keep moving from my base industry to that city produces the steel. So I can take the steel from there come back New York and they can sell it. So people needed to move from one city to another city as well as within the city so cities were becoming bigger. In this picture you can take a look at social condition of the life of people look at how many people do how many complex in and a small factories or small area. Rent and other things are higher in core city to get hold of his small place of manufacture import city is very difficult.

And if you take a look at picture on right hand side you can see very wide road with gutter side walk large side walk. And then buildings the side walk also has lamp post and the civic community is available but still people are who living on the street dirty things happening here. You can see what the industrial revolution did to the urbanization of city. City become developed road are wider easy of people to travel in two direction cars and horse drawn carriage. At the same time the social life of people so much imbalanced in the social life of the People. This is the one picture clearly explain both the ill effects and the advantages of industrial revolution urbanization of city and the rise of city. So with this quickly look at the outcome from in this lecture we saw the rise of cities due to the industrial revolution.