

B. ARCHITECTURE

URBAN DESIGN (AR6711)

HISTORIC URBAN FORM

Lecture – 7

Urban Form through History:

Now we are going to look out urban form through history. Now whenever want to do the analysis or an evolution of urban form put the first thing in a form line, now what is the time line in work based on. Now to do in an analysis first of all we take the combination of scientific research, a lot of rational processes, and a method to find and apply it. Finally apply all these together to get very relevant image about the character of this urban form must have being like it any point or time. But there is a factor you have to know any member which is all interpretation are largely depend on, what are world view was at any given point or time. Also archeologically, we keep another thing new fact each time and with the news facts, the basics perception we have of what a character to form keep evolving the changing, now this particular analysis what are the present way in this session eventually is largely based on man-made interventions are very concise interventions made of cause of acts of men and that change the origin form, I will not largely be focused on how form change through time only the gradual change is discussed in process, But how man through his concise action changed in a urban form. Then I am also going to talk quickly about the frame work now, the framework of how to divide and study the urban form for this session and all these subsequent session I present is spaced on the major determinant on changes, influences or actions or events or that largely changed form are the nature of form. so we see the clear differences physically in the form and also how people they used it or how it was

formed and accommodated or how that form was appropriated by people that is the world how form has appropriated. So, what was the periods now I am got in ancient period and the medieval period and the pre-modern period and a modern period and the finally the currently phase we are in. But today we will start with the ancient period and end with the pre-modern period. Now if the questions is why I am ending the pre-modern session and now the framework is also done in the another different way and what is that method and I can also read the analysis are historic urban form largely based on pre-industrial revolution. Why on industrial revolution because on the nature of cities? As we knew them remained them on romantically changed posts in century because certainly density to increase? Why because factory is came out? Machine age change the way cities were lived in or how people migrated in to the cities and they became complex and dynamic entities the way they knew them. so I can also divide them with these period largely as pre-industrial and post-industrial period. Now in today session the time line I am presenting is looking at with pre-industrialization, which is ancient period with a few sub division to it. Then the medieval period finally the pre-modern period, which has three parts, Renaissances, baroque, in dawn of industrialization revolution. Now largely I will focused from the ancient period, which is Neolithic Proto-settlements until baroque. Why because after the down of the evaluation the suddenly moved into the transitional period of phase. Now in the transitional phase suddenly like the argued before the density increases in the very form shape characteristics entirely changes post these and we will look at these different session and see the modern moment which as the beautiful city with an city industrial by grainer which is New Utopias. how to we require the lot of architecture of contributed work here Corbusier, to probably Arco santi-Soleri, Archigram finally we do the current phase as the contemporary phase we may call it. In that contemporary phase, we see new urbanization we also see the architecture we also see everybody who was deconstructive the architecture contributing to the urban form in the city designers largely.

Ancient period:

Ancient period ending in Baroque. Now to begin a discussion on the ancient period. Ok urban origins in pre-history that is what I would like to say to call it. I will not talk about from the geological earth time and I will not argue about how man evolved or how mesopotamians came about, but focused directly when we found the settlement for all practical purposes see in that session, let's talk about that. Now when did it happen and why did it happen. In late Neolithic period are as settlements came about it. What were these settlements about? These settlements were a product of the agricultural revolution. What is that agricultural revolution that came about? Man suddenly no longer nomadic and he started practicing agriculture in the secondary as the life style. Now where all agriculture came about? Agriculture largely came about in all the parts you have in the marked drawing you are looking at. Now, of course the origin of it was in that Fertile Crescent, which is where mesopotamians are one of the earliest revival civilizations, came about. But, right now let's focus more on you know the largely late Neolithic settlements. So let's begin at the earliest and most famous of which is Jericho, now let's look at these slides and first look at the time and understand, what are you reading in terms of form in this now. This slide has the combination of an archaeological excavation a 3D image or a view showing you how to larger are contesting of present times then we looking at some artist some reconstructions and then some archaeological plans. Now what you notice about the defense of all you are also noticed the use of mud brick stone most of which is locally available in and around Jericho in the Jordan valley. Now hold on to the thought we will see one more now. Which one we are looking at shut all we look thus was that Anatolia in Turkey. What are all we looking at again we noticed we use the very local mud brick wall that's what we have locally available you see the use of the local material. And then try to see the beehive pattern in which these forms are interconnected to each other and then look at the way the roof the image is being used as the social space. Now there is also an image of the excavation that shows you the cohesive way in which these units are formed a plan, now the plan shows to the idea of how these forms are inter-linked to each

other and if I want to summarize the two slides we saw. What would it be? I will read all the further periods on its similar framework. First we will look at the factors let it to be mergences of any culture of civilizations of settlements. Then we will look at the factors affected then the urban form about it. then we will look about the response of the determinism in the previous sessions when I discussed about the determinant as the method of analyzing form I argue that you could have the natural man-made or the local determinant. Largely we will look at the natural and the man-made determinacy. So summing up on what did we learn in the Neolithic period settlements by looking about the comparison in Jericho and shatallheyoque? What we understood is that the urban form I looked at the walled city or the open city. As the determinant or the response which was natural you saw response topography it responded to the again it was situated in and it use local material and simple methods of construction that I could apply using stone tools because we are in the Neolithic phase. Then we saw man-made determinants. Now see society has not evolved to that extends its society no longer complex as we see today. So you simply look at the larger political structure may be economy depended on barter and larger worldviews. The early Neolithic settlements period from people largely focused on animism beliefs.so, the worldview guide the way you build.

Now the next set I am looking about the I move on into the idea of early river valley civilizations. The example we are put of Mesopotamia. But, before I dwell in to the Mesopotamia let's quickly bridge up the gape and talk about the argument that, if you are talking about the Neolithic settlements and then you have to understand that atthe end of Neolithic all of the sudden of the world. There is a different place to live in, now we are doing the large scale agricultural and agricultural always need the division of labors. Now with the division of labor and up having up the stratified society. And that stratified society takes you to trade and gives rights to writing and you have the civilization that you is born. In this particular one, what you really see you again? Is the same defensive wall. But the city is not complex now but when you look at the form of the city, you have what

I call the city will complex that religious structure or racy grate in this case. And we are looking at this the larger in a pattern urban form but the people lived as the second lower term pert. In the brief constructions, if we focus on the brief constructions we can also see the larger structure of the outside, which is outside the citadel complex very organic. Inside the citadel complex, which holds the palace racy grate, which is very organized, you almost see the geometric patterns evolving? So what would be learning in this? What was the factor? Most salient factors to remember is involvement determinism. All early settlements where based on to location they were how they were ended environmentally largely contributed to the successful evolution of these civilizations. Also they was irrigation and then just like the four basic ideas you do agriculture and then because of the agriculture you have surplus labor and labor division. Labor division leads to satisfies society that leads to hierarchy, powersystems and you know territoriality to trade and trade and because of trade you need writing so that is how societies evolved .And more interactions and more complex in this societies and more cities we will look at further we know more complexescities that is next one on this list is Egypt. Is example of Egypt is the planned settlement called Lahun or EI Lahun. In this example, you can see almost geometric order of organization of for whether settlements for building the pyramid. And then where the royals and the official's settlements are there. Now why is a clear division that because you are seeing hierarchical power structure that leads to this division? Now the truly constructions that are put of their or looking at their separations between the pyramid. When Look at this slide there when we look at the pyramid was the settlements what you trying to look out and understand is largely have that is more symbol of power of monarchy of the ruler was there, how the people who lived who worked on the pyramid. Now if I quickly some up what the determinant work? Just like we did with the previous Neolithic one, we will understand the topography and still place a large part. when you look at the mud-brick platforms, climate plays a larger part because if we know it is mud-brick wall was the thickness of the mud-brick wall that were used to control the inside

and outside temperature and the climate and then we are looking out various constructions techniques. So we look at the mud-brick constructions, stone, timber you see arches, walls, trabeated lent in length post constructions, then you see man-made. So you have politics writing systems, polytheism as the world view on the art and culture evolving all influencing the urban form. What I would like to retreat at this phase is that a largely a architect we always on monuments that's we understand we know buildings and immediate context, but when you do historical analysis of urban form what we do is look at the setting of this monuments and the settings of the larger settlement around them. We focus on both and try to see if there is a relationship that is developed between these two.

The next of course is the Greek city of the classical period. We are still an ancient period like that now so look in the image again you noticed in the there is an acropolis which is the higher which has the larger religious structures and then you are agora are the public place and rest of the settlement at the lower level. Now the Greek as we known it evolved in Greek times with hypodermis but, the grid largely response to terrain and if we look the example that is put a which is priene, Asia minor. As you see it responds to the topography and the lay of land what is the dictating how the grid is responding to it. Now we will look at the salient points. Now for the first time the notion of the polish or a city comes about, now what is the city that I am talking about? With the city of course the come in a citizenship which simply means that the country side and the city are two separated entities now. and then when I have a citizenship in comes an idea of democracy and democratic ideas also shape a urban forms. Here a have an intangible idea called in democracy that is used as the grid as the principle and organizing space. Now what was the salient urban form and what was the urban planning like? Now the righter way, which is the egalitarian society largely, organizes the form also the city consists as I argued before an acropolis and the lower part, which are residential quarters, commercial quarters, market place, theater, stadium and a harbor as well. In the early cities are largely developed by accretion of process by adding units. But, them with grid in later

Hellenic period what really happens? The grids are responding to terrains and you start seeing interesting grid the position of grid was the hilly terrain. So you get the step streets but the main streets leads to the agora would have been in the valley organized in a way where it is in the state agora is situated probably at the geographical center.

Now the next part is we have to talk about the how public place comes about in a Greek city. now, what is the public place? This public place I am talking about is where people meet and discuss because we are in a democratic setup. and this public place, so important when that all other buildings and administrative buildings, market places like the stova all come about around this agora. That would be the diagram we looking that and of the agora and the larger public buildings. Now how the agora does come about? For this let, us supply one of the methods we learned when we and discussed in design root of cities. That's the professional path called the panthenaic way is the blue line we are looking about is along which is gradually developed in an overtime slide1, 2, 3, 4 that you are looking at to finally became the space of the agora of Greek city as we know it today. The process is called accretion space is connective .Now to sum up the determinants. The determinants are topography climate, materials and you are looking at the posted relation constructions now and then the man-made determinants. Politics takes shape here and politics determinants or democratic ideas determines the form of the city too. And the larger world give the polytheism, theocracy and socio-cultural-art, philosophy, architecture everything develops here.

In the ancient period, we will also look at one more cities, which is the roman city. Now the roman and the Greek city are two different entities. What if we see the grid? in Greek times as well as the roman times, the roman were empire builders the focus of the builders grid was the idea was to use the grid to build colony's. It was the land organizing land for as the land division. Now if you look at the slide looking at the Timgad, which is the colony of the roman which uses the grid iron pattern to organize the city. Now the salient part of the city includes the public place called the forum, which is of course, were the

cardo and the decumanas marked out in the green and the red to main streets meet. You are also having the Basilica, the theater, library and baths and the other which this parts of colony. Now this particular modulelain down the grid is common in most roman cities. The exception to the rule of course is Rome. Because Rome was, the series of villages with join and developed over time. In Rome, of course you do not see the larger public space and then buildings developing around it. what would you see now the public space that is contained by buildings largely to you see compression a lot of large monumental buildings which is symbolize power with symbolize the empire building which are attach to each other. Now quickly summing-up. What was the factor? Now the factors in this case are how they are adopted Greek ideas. Whether it was the girder whether it was posted a little constructions and these adopted a converted all of them largely into firmly that help them in an aggressive and large-scale city building. Now this is when because add the early ideas of city planning of course was vitreous.

Salient Points:

We will also discuss about the public space of the romans of which is the forum. Now the image that you see on the slide, which is reconstructions of the imperial forum over time. Looks at how various emperors based on the conquers made addition to the forum. The forum comprises of the series of the colony needed halls co-round the central spaces. Now these colony-needed halls are organized on an axis which is each central axis this connecting the other is perpendicular to other in the organizer space around it. Now the image on top again going to back to the design root of the cities we were looking at corrections as an idea of city building. Now summing-up I will the natural determinant is bypassed at this time. Now the principle mode was quick easy efficient methods of city buildings. So the grid is the great method to divide land. And then you looking at the political idea might and power, legislation, defense these are the larger man-made determinant on which the city is designed.

Then we look at the medieval city. Now with romans completed the ancient period, which is, we started with the Neolithic period and then we ended with romans, is the classical city. Now at the end of classical city suddenly we have the Dark Ages. Now post dark ages we go back to the more rural settlements modules since the larger city building ideas are last. So what we look at the medieval city you see again, you know the church are this is the idea of the rise of the church the central focus here. So you see the church and then a square are a front space that comes about at the most important large open public places in the city. This is surrounded for defense purposes by you know a fortified wall. Also in the medieval period you see either organically grown cities like the example, which I have, which is Carcassonne France or you will notice off based or military colony. Of this is Monpazier you are looking at here, which were the grid id laid here hide on the cities, are organized. I visit a plants here of a medieval period of the form where the central space is here is colored in a different shape. And you can notice it that is the larger purpose phase and the rest of the form is more cohesive mode tightly bond. So if I want to talk about are sum up the factors I will talk about the post dark ages. So you were looking at the socio-economic decline graduatually shrinking of the old city it has been known from the roman times and the emergence of you know religion or church as the central power and then you see the feudal system taking shape now. now having discuss the larger form of the city the fort it is fortified with the church and the square. let's look at what is the church square of the public space then which is then in front of the church looks like. Now the principle to look at here is interlocking spaces is connected which is focusing on the image that we have here. In the reconstructions here the piazzia -Del popolo this one is Todi in Italy. are seeing how there are two small as squares which interlock with the large public square in front of the church and interlocking point always noticeable has the main public administrative building. Summing up on the response. What are the responses are the larger determinants. I have natural determinants, which is topography, climate (climate of course cold), close-knit streets, constructions you have materials, stone and brick you see arcuated as

well as you see the evaluations of buttresses, if you remember late gothic churches, you know presentations of religions are very dominant force. So you see the church or the gothic churches, you know so up the infinity concise of the power of the churches. These are man-made determinants.

The next of course we do the pre modern period. so, having completed ancient moved on the medieval which was post the dark ages were we had the city had shrunk to again relocate the city. In renaissance you again see how the medieval city now with trade coming in along with religion to see the world economy of the city improving. So the city becomes more complex gradually where we will look at the new classical city renaissance. What is the renaissances all about, the renaissances are the revival moment in art, philosophy, new interpretations and experiments in architecture and city planning. So from the medieval city which had shrunk in size which is all about fortifications, all about feudal system, we are looking at tray taking shape. And we are also looking at humanist ideas where you are rethinking or revisiting older concepts where of how a settlement type should be we are the now seeing how to introduces public space and how to concisely designa city. As visitors, avenue as views and this is of course the tie of the universal man, the multi fascinate universal man. We can all the member the famous architecture, sculptors, and Michelangelo, Da Vinci and even Alberti. Whotreat anAlberti what we coat to talk about you know the sudden change or in a perception award architecture should be like post renaissance period. Now this quick look at the idea of ideal cities, which we also take, places in the renaissance period. Now the idea what is the ideal city comes about time and arrival is the time and again. Good topic idea good city should be like or the good life in a city should be keep like rearising. In this case, see always the geometric pattern of city making. These are based also upon the Alberti's book of large principle that we lay down for architecture. now also moving the idea of the ideals city let's take the city and look at how public spaces were designed. Firstthing, we should know is these were designed as the public spaces, which is if you take the example that you have here in the Rome designed by

Michelangelo. you first take the set of despaired buildings which were largely disconnected on the terrain and then comes up with the geometric pattern to connect this to response territorial and you have a piazzawhich response to the topography as well as the entrances of the built the facade or redesign the stair cases. So of comprehensive idea of the public space comes about. Quickly putting the ideas of ideal planning together, I would submit as new experimenting city planning come about ideal cities based on Alberti's treatise come about and then discourage the idea of medieval multi-nuclei smaller towns for the larger cities to come out. Then the power of the church and the monarchy together to give new rights to experimental city planning and then street networks, they rethink to connect the city between the countryside and the largely examples are Naples, Rome, Pisa, Florence. What were the determinants they gradually understand now that the natural determinants do play parts? Topography places a part, climate place a part. But more and more the determinants have started turning in to man-made determinants religion, politics, power, economy mobility all these started playing a part. Now in the medieval city the wheel traffic was not much but as the trade improves wheeled traffic improves, streets could be no longer be narrow they have to be wider they become avenues. That is what you see in the renaissance city. Last of this is in the pre-modern period that is the Baroque city. Now the basic idea of the renaissance the father developed on, and the power between the monarchy and the church is highlighted here and you see the grand manner. City planning takes on the idea of the large avenues, monumental public buildings, and the forum, which we see in the plan of Rome the pope is the sixth is the fifth then image below. You see how these are designed spaces. City planning has moved on from being early about the important buildings, highlighting certain avenues to almost concisely pre-mediate the actions we design the city and streets form.

The other example is looking at the Versailles palace. Now summing up the determinants in this case are more politics, religion might and power esthetic qualities. Now down from pre-modern to Baroque we will quickly sum up and list are the salient points in the pre-industrial

period. now this a coat I have here Aristotle say's "Men come together in cities in order to live; they remain there to live the good life." which means the cities in the same life, the city with wider avenues, public spaces and it is no longer about subsistent rather the good life. now even though the origin of urban settlements were the proper settlements we saw in Jerry quan sat-alquicis the Neolithic phase or the notion of the urban life you see the time you are in Baroque or it may be the renaissance. You have to see humanity evolves cities evolved two. So urbanism and humanity are very interconnected they are almost inseparable in the evolution pattern. In the summary the other salient points I want to discuss is based on urban morphology, density, growth pattern from early civilization till late renaissance and Baroque is determined by the human endeavor. The argument is suddenly this scale character of the city is response to either the socio-cultural conditions the politics or human scale. How we experience the cities largely guided in the design of the cities. And then the ideas is ideal cities you know the pure geometric of ideal cities, how to defensive the cities, how to organize quarters in a city all these is determine or this experiential approach largely comes from the idea of the what is the good city form? For the normative idea of this good. It is the quest is that apart how we have evolved in thinking on a cities. So not is here is subsequent sessions when we discuss further into the postindustrial cities. We will again see the ideal cities. We will again see the topic ideas of good cities.