

Evolution of Human Settlements- AR6004

Unit 2

Historical Periods and Growth of Human Settlements

Lecture 4

Medieval Settlements

Now, looking into the medieval settlements, the kind of villages and the principles of classifications that emerged. If you look at it, the two key questions that we get about medieval settlements remain is, when and why did villages become established. We learnt all this only because of archaeological excavations and work that has been happening since 1970s but all these villages have occurred and developed between the beginnings of 9th and 10th Century AD and the peak of their development by the time we studied them. You have the basic shapes here, of the different villages. You have the irregular row plans, you have the regular row plans, this is the agglomeration where you have a cul de sac and then you have a kind of across the road, agglomerated plans. So what usually happened was, you had a road and then this town would develop with a regular pattern and then you have irregular kind of patterns that happened with the dispersion that was not completely inorganic. You could actually see the natural way, the town developed. Here you have the importance for greenery, this town like you see over here. The lack of greenery is obvious; there are only towns and the road. Here, in the Middridge, it's just the opposite, the presence of a green belt is what made the town possible. Here again, you see the very small presence of a green belt but otherwise the town is completely proliferated. Again, absence of a green space, absence of a green space. So, greenery actually started becoming an element of a village and towns began to recognize that we don't have to have much of a belt. Again over here, you have few elements and towns that have grown with a lot of greenery. Wall bottle, Gamblesy and Greysouthen again with no spark of greenery at all. So, you have two concepts of towns that emerged with greenery and without greenery and what they felt was, the ones without greenery would aim to grow towards a larger town with greater expansion details. But what they failed to understand was because of the green belt and the whole element of greenery and water attached to that town is why that town prospered. This is a composite or Polyfocal plans i.e. you had more than one nuclei, you had one, two and three nuclei in this. Here again, you have the importance of greenery given on both sides but the town is developed heavily on one end. So, this is where the polyfocal and composite kind

of plants come into being. So, what actually happened was, this was completely an organic process of change, no one woke up one day and decided let's move in this direction, let's move in that direction, these were all changes that were made by the community and most of these were rural reorganizations. Where there was more greenery, it was obviously more agriculture oriented vs the non-green towns could be tradesmen oriented towns or service oriented towns. So, most analysis of settlement types and patterns has been morphological i.e it has changed over a period of time, it has not emerged overnight. Documentary sources could add to this picture but most medieval settlement formation took well before any sort record keeping became the norm. So in 13th Century, 14th Century only, records, drawings, all of them came into being. But the villages and towns we were talking about, emerged way before that. So, many villages had part time or seasonal work outside agriculture, this was in terms of potting, iron making, the extractive activities like woodland exploitation wherein they would get wood from the forest, they would rear sheep for wool, they would get animal skin, they would get different animals as hunters for food, so all of this was the ancillary professions and along the coast, obviously fishing and all these things may leave a visible or archeological remains in and around the settlement but it is not necessary. Now again, if you look at this town, this is the town of Wharham Percy in North Yorkshire. This is based on the sketch that was found over there but this is based on excavated evidence which was taken from a particular satellite. You can see there has been a kind of development because around the Church and the manor house, this green forest area was very important, it is from all the timber and firewood came about. The excavation clearly shows the visible level of forest that occurs there even now. Here you can see the development of town that has happened. Here you see the centre of the village space or the village square which is now very prominent. From the excavation details to the painting that found in the place, it is actually supported by an evidence and by the way of life by the people, it hasn't changed much over the past few years. So, while the investigation of standing buildings, especially vernacular houses, all that is obviously very important but cannot be taken as the only way of studying, what actually gives the local and regional, distinctive flavor?

Renaissance Settlements

Now, we move on to Renaissance Settlements. So, what are the new elements that came about in Renaissance and Baroque? Aesthetic determinants, aggrandizement and urban scenery. So, these are the three elements that were brought about. Aesthetic determination is new humanising ideas i.e you know they started having elements just for the sake of having elements, it did not have to have a purpose, it was meant to appreciate beauty. This is a plaza, where the town gathers, let us put up a sculpture over here, let us put some flowers or a garden around it, so that people can enjoy it. So, importance toward beautification was very important. This is a typical plaza again, you can see the Oblys that was made. The Renaissance was basically a cultural movement that happened right after the Dark ages, roughly from 14th to the 17th Century. It began at Florence in the late middle ages i.e in the sense, as the Dark ages was coming to a conclusion, the Renaissance movement began at Florence, Italy and then it spread to the rest of Europe. This term cannot actually be directly used because different parts of Renaissance took over in different parts of Europe in different parts of time. That is why it is from 14th Century to 17th Century and this term covers all those time periods. So, if you look at it as a cultural movement, it was a resurgence of learning i.e when people refuse to believe the feudal law just at their face value. They want to understand the religion, understand culture and question why everything was happening. So, there was a perspective in painting, gradual educational reform and this intellectual transformation resulted in the renaissance being viewed as a gap between the middle ages and the modern era. The middle ages where when people were completely ignorant and now the modern era is a period where people are completely over confident. The renaissance was a true time period of learning. So, although renaissance saw revolutions in many intellectual pursuits, as well as social and political upheaval, because people protested against the feudal laws, they were like, "Why should there be a feudal law? We can take care of ourselves." There were a lot of revolutions happening, lot of wars happening, it is best known for its artistic developments and contributions of Leonardo da Vinci, Michelangelo who inspired the term "Renaissance man", they were the main thinkers and philosophers.

Now, if you look at enclosurement? What was the main reason this happened? This was because of growing and centralization of various autocratic political and

economic powers. They wanted to make sure it was fortified, a castle was built, a gate was built. So, such kind of things were happening and urban scenery became very important because they wanted to start spending money on beautification, they decided to let's make the place beautiful, economical capacity to promote, complex urban operations, so it was very crucial. You can see the difference in the medieval settlement and that of a renaissance settlement, it's more organized, it is more neat, clearly laid out and well defined and nothing is completely left to organic chance or nature's chance. You have unifying buildings, this is the main plaza and you can see a network of buildings that have formed, a roadway for horse carts, pathways for pedestrians, it was clearly demarcated and enclosed spaces were made. No more walk places open minded, the open spaces were itself enclosed. So, there was a sense of security and guarding that could happen. Canon-proof Geometries; this was the next important development that happened. In the renaissance stage like we mentioned there were wars, there were a lot of revolutions and as time progressed, there were new kind of weapons, no more bows and arrows, they had cannons, cannon balls. So, they started having new senses of geometry to protect themselves as well as to make sure there were watchtowers to watch out for enemies who were coming. So, this kind of geometry emerged in most urban planners, town planning and most of the villages had fortification resembling this shape because you could protect the inner building. This was a typical ground plan of a city which was inspired by the Octagon. If you look at the Octagon, it has eight towers, the center you have the Citadel, radiating streets of 16 Oct streets and here you have the watch towers and the cannon ball towers to protect themselves and the main Citadel. These are ideal cities of the Renaissance time that came about with the defence wall. Defence was given a lot of importance. This was all that happened in Italy, you have the La Sforzinda by Filarete, Filarete was a very important architect or urban planner at that point of time. Those titles, didn't particularly exist at that point of time. You have Giovanni of Verona who came up with a couple of them. But you can see what is the common factor amongst all these plans, it is the sense of stepped geometry, you had the access points define. Octagon and Hexagon played a very important role and they were all radially situated and if not radially situated, outward they were octagon so they can be linear in the center. So, these were typical plans of the Renaissance towns that were propagated to make sure all the palaces and forts could be protected. So, it was during this period that architects began to

systematically study the shaping of an urban space. How that is an urban space comes into being and just not as a building itself, but the entire city itself was given the status of a piece of architecture. So, it has to function, it has to be functioning well. It has to be aesthetically pleasing, it has to have great public spaces, Italian cities date from this era, most of the old Italian cities and they were rebuilt to create elegant squares, long street vistas and symmetrical building arrangements. So once aesthetics and functionality came into being, a town got a new form by itself and responding to the advances and firearms during the fifteenth century, new city walls were designed with large earthworks to designed artery and star shaped point to provide defenders with sweeping lines of fire. You have the Spanish Colonial cities or the new world which were built according to rules. So, there were particular rules that were made. This is called the laws of the Indies 1573 which specifies the orderly grid of streets with a central plaza, what kind of defensive wall is required, so that there is uniform building style that is emerging. Now, if you look at the features of a Renaissance style, a new style of fortification of Earthwork, bastions and artillery resistant walls developed. So, it is very important that warfare had to be given importance. Yes, aesthetics were given importance but functionality was also very crucial. Vast open spaces were left at the center of towns for community activities but it was within the fortification, the open spaces could also be guarded. Great emphasis on elevation treatment of building roads can be seen, trades brought the concentration of people to the town, situated in the main cross roads, owners of the lands shifted to the merchants and the power of feudal rulers diminished. Printing press was invented and ways were devised to improve the simple hand machines. Gunpowder was invented in 15th C; and therefore new techniques of warfare were introduced which changes the war strategies and old fortifications became redundant and inadequate. New kinds of walls and fortifications were required. The contrast between the rich merchants and the poor increased, so there was an insecurity of life amongst the poor, so there was a feeling of unrest even within the town. So, even the palace had to be protected, even the rich merchant's house had to be protected against the poor people who would attack them. As a result of a religion becoming more important; exhibitionism i.e the towers, the soaring towers, the cathedrals, the basilicas, all of that began construction of formal and monumental buildings to show off the kind of style that emerged. So, two types of manifestations are noticed in this period; you have new towns which were found in which the central and most dominating

buildings were that of the nobles i.e the kings. For example, the Versailles in France, Canberra in Australia and Washington D.C in U.S.A and other major parts of London, were designed by Christopher Wren, following this very example. In the old medieval towns that existed, development was done in public congregation places like squares, piazzas or plazas. In Italy it was referred to as Piazza, you have the piazza of St.Mark's, Venice, then you have the piazza of St.Peter's, then you have the Piazza Del Popola, Rome and Place de Victoires, in Paris. So, all of these also gain importance. So, number one you had the importance of the castle, then you had the importance of the plaza for the common man. Now, we come from the Renaissance to the baroque which is a later part of Renaissance. So, here what happened was the Axial system of planning which was introduced by Lorenzo Bernini, this happened during the Renaissance period, it was developed during the Baroque period. King Louis XIV ordered all to remove from the palace, the congested Paris, to a more open hunting ground of Versailles and that is where the new plan according to the Baroque kind of planning emerged. So, what happened over here is; after Napoleon III came to power, the cities became congested with slums. A lot of people moved from so called agricultural lands to the trading land to make sure they had more money. So, that was the kind of organization that happened at that point of time. So Paris basically started to crumble and deteriorating. So, the King himself did not want to live there, he wanted to move out. Mechanical traffic had to be introduced on the roads, it was an urgent necessity to check haphazard growth of Paris. So, instead of repairing it, he decided to leave and go to Baroque style of architecture that developed in Versailles in Paris. So, George Eugene Haussmann was the main guy who came up with the Baroque city kind of development where you had straight avenues, geometry was given importance, axis and Fountains. So, these are the four main features of Baroque planning. Of course, there were some height restrictions that were introduced, boulevards were made. Vistas were given importance i.e views from these particular roads were given importance. So, in terms of Versailles in France, what actually happened. St. Louis XII ordered Le Norte to design the gardens of Versailles. The spaces created were unparalleled proportion and beautiful in size. So it was both the combination of Colonnades and entrance lined by avenues. Colonnades were from the renaissance period and the avenues was an introduction of the Baroque style. Staff shaped fortification obviously which we discussed is very important. Then you have a central core which was considered the ideal city.

So, renaissance designers froze the streets which radiated from the centre. So, that is what was done at that point of time. All the roads lead to the center of the town, towards the palace and plazas were open and less confined in the countryside. So, what is the difference between Paris and Versailles? They basically reduce the congestion but they did not want to make it completely security free. So, the star shaped fortification still existed but they made the plazas more open and all the roads lead to the Palace. So, we basically associate the Baroque city with the emergence of many states between 1600 and 1750. YOU have ambitious monarchs which came up with new palaces, courts and many administrative offices. The grand scale was sought in urban places; long avenues, radial street networks, monumental squares, geometric parks and gardens. Versailles is a clear expression of the city building model and in United States, it is Washington D.C. So both of these were an expression of Baroque style of town planning. So, if you look at the Baroque principles, it was done completely by Baron Haussmann and it was his way of restructuring Paris that happened. It was just a beautiful accident that happened in place. His job was to basically come up with another town in Versailles, that he came up with an entire town planning type. He carved a new thoroughfares through the tangled web of old Parisian streets, making sure that the major sub enters are linked to the city. So, that people can travel and commute, so that was the beginning of the first suburban city. So, that was the first step to what we refer to as 'Suburbanization'. Thus, we conclude that in the Medieval Period, the main emphasis was given to the 'mass' of the buildings, in the Renaissance period the importance was given to the 'space' but it was truly only in the Baroque period that the importance was laid upon both 'mass' as well as, 'space'.

Industrial Age Settlements

Now, we will move on to Industrial Age Settlements. What actually happened after the Renaissance time is, constantly people were moving forward, there was no turning back. There was a time of inventions, it was a time of education, it was a time where culture was its peak. So, as we are talking about a invention, it was the beginning of Industrial Revolution on human settlement. The main pocket of Industrial revolution, was around over here and we see a lot of development happened around that point of time. It refers to the profound influence of new developing science and technologies. It began in the 1870s, so production, commerce, trade and distribution of goods expanded rapidly. So, dependence

shifted from renewable resources to non-renewable resources. New machines were then created and large scale production became prevalent. More food and supplies became available, so population began to grow rapidly. Political aspect what happens is the crown declines; the power of the king actually became lower. The merchants and the trades people, the nobles also declined. The industrial entrepreneurs emerged as powerful bodies, merchants and traders became the new age kings. Administration becomes difficult because as industries increase, population increases, towns increase, the density of population increases and that was the beginning of colonization because they were looking for people to work for them. They started to travel, the steam engine was invented, the ships were set out to bring in people to work, trade routes were discovered, trade routes were beginning and all of this was happening in the political aspect. Geographically what happened is; newly productive industrial areas opened up in areas which are not necessarily good for agriculture. So, different patterns of settlement actually start and a sense of regional planning came into being. It was no more city/ town, it was even more focussed. Now we will come to the; Effects of Industrial Revolution.

Here we can see how it began, with the invention of the steam engine, mechanical power became independent of hand operation because of that entrepreneurs applied this power to increase the production at a very fast rate and because of that it led to the increased production of goods, trades increased and expanded. As a result of that, mass production made it possible for more people to have more things. A sense of commercialization began at that point of time. Capitalism of industrial system started. Number of employees in proportion to owners increase. With increased trading, the shop moved from home into shop garter. So until then, trading happened within a residential area, it was just a separate building but now with the Industrial revolution a proper industry was set up away from the city and based on that a shopping area was required or a market area was required. The factory became a magnet, drawing more number of young men and women for work. A new need was felt for an ever increasing number of workers' dwellings, schools and shops and as population increases, you have to feed that population, you have to make sure that population is supported by dwelling units, schools, shops and their standard of living. Then you have traffic congestion that is parallel in the increase of population density. As people increase in an area, obviously the

traffic congestion in that area increases. So, this ended up being a cyclic chain of events that led to the decrease of standard of living in a particular town. What happened to public health and safety? Measures for public health and safety were extended during the 19th Century. By then, it became terrible, there was lack of sanitation, there was overcrowding, children were dying again initially the benefits of industrial revolution were being reversed. The first system of water supply by gravity flow was installed pumping systems were in general use and methods for disposal and treatment of sewage as well, improved. What happened initially with the Industrial revolution is, as production increased, those elements could even be applied to agriculture or food increase. So, drought, all those conditions were not there, there was adequate food. But everyone decided that factories pay more, let's go there, but because of congestion and working in a factory surrounded by coal and the smoke emitted by these factories, health completely declined. People's health completely deteriorated. Sanitation was gone, water supply wasn't sufficient so it was basically terrible conditions of living and thereby causing the mortality rate to increase. The heavy buildings cover on the land, reduced the natural drainage of the city. So, it was not insufficient but extensive street paving permitted effective cleaning and strong sewers augmented the sanitary equipment. Common use in street side were the lamps, the city began to replace gas for street lighting. So, safety also became an issue at that point of time. Advantages; services for the health, safety and convenience of the urban population advanced. Glorification of the industrial system and the fruits of its new-born activity blinded the people to ruin and havoc spreading across the urban community. Disadvantages; Public health became obsolete in the sense it was not sufficient, Diseases were becoming rampant, problems both economic and political emerged. So, the factory town and the city emerged for the first time. The steam main road made sure this happened and the amenities of the urban life was sacrificed to the requirements of the industrial production. So, people were sacrificed, the cities were sacrificed and everything in relation to this was going down the drain in terms of mortality rates, in terms of standard of living of people.