

'Evolution of Human settlements'
'Human settlements as Political Expression'.
Lecture 11

Plan of Washington D.C. 1

If you look at the timeline of Washington D.C, we are discussing the main incidents that triggered the successive development of the city. You can see that in the 17th Century, you have the native Americans coming into the city. In the 1788, James Madison argued the necessity for a national capital. The country did not have a national capital until then. In 1790, the foundation of the district capital. In 1814, the civil war and the raid, known as the burning of Washington which was a political movement, basically. Next, In 1871 you have the organic act where you have charters of individual cities of Washington And Georgetown which created a whole new territorial government for the whole district of Columbia. Early 1900s you have Washington was the first city in the nation to undergo urban renewal as a part of the 'City's Beautiful movement', then the next important date is in 1968 The Assassination of the civil rights leader, Dr. Martin Luther King which broke riots into the city, which made sure the city had to be reconstructed again. In 1973, the Congress enacted the district of Columbia, Home Rule act. So, all these parts of history have triggered the current planning of Washington D.C and is a result of why the city is like as it is, today. If you look at, the part of the plan of Washington DC Between 1791 and 1800, President Washington appointed Pierre (Peter) Charles L'Enfant to devise a plan for the new city in the area of the land, actually portrayed the, federal buildings or the government buildings of the capital. This was between the northeast shore of the Potomac river and the northwest shore of the Potomac's Eastern branch. So, L'Enfant was basically a french volunteer in the continental army. He presented a Baroque city plan for the new capital, which was inspired by a french city planning, particularly the plan of Shan ta loupe. Cantaloupe was a proper city in France which was designed following the very same principles. This city is oriented north long sixteenth street, and it is bounded by the Potomac river and the Anacostia Rivers. Next, you have the Piedmont Escarpment, which is the modern day Florida Avenue or the Boundary street. It was actually notoriously difficult ot work with L'Enfant, he was not a very well respected individual because of his temper, tantrums and everything. He was dismissed from the project eventually. So, there were a lot of changes that were developed from the plan and the final plan for the city was based on a lot of surveys that were conducted by Andrew Ellicott with notifications made by Jefferson. So, the new plan shifted and straightened the Massachusetts and Pennsylvania avenues as well as eliminating the destination quality of reservations. L'Enfant had set aside for "Statues, Columns, Obelisks or any other ornamentation". If you look at the planning principles of what was initially laid out. It was clear, it was going to be a Baroque city plan. The plan as made such that it was modelled on

large avenues, importance to landscaping, there was clear importance given to government buildings and federal buildings which was called the national mall, when you had the height restriction of all the buildings. Height of buildings should be the width of the road plus 20 feet, which is approximately 6 meters to 6.5 meters, depending upon the width of the road. The width of the road was again very much uniform throughout the city because it was built futuristically in a way that they knew, there would be an increase in the population, they wanted the city to be urbanized such that people from surrounding areas would come here and work because this was going to be the federal capital of the country. So, that was one of the main principles on which the city was based on and it was considered to be light and airy, should be green, the buildings should be low and squat, not high-rise buildings such that there would be national monuments which would be monumental and the other buildings should be much smaller. This was the typical plan of L'Enfant, which came about. Then Jefferson came up with a plan which was the first long discourse over the identity of the capital, whether it was going to be completely urban or will there be a rural aspect as well to it. So, Jefferson's plan is pretty much, if you look here, blocks of 650 ft by 650 ft blocks; surrounded and anchored on either end by Government buildings and it was going to be surrounded by green spaces. This is what Jefferson's plan was. This is the current plan of Washington D.C. So, Jefferson's plan was also incorporated in the sense, that yes, there was a rural theory kind of adopted into the city with the important green areas. You can see a lot of green areas being allocated, this is the Potomac river and the Eastern branch of the same. The city is actually bound between the two water bodies. So, you have the national mall, you can see the importance of axis and orientation over here. You can see the different nodes that are being created, the blocks being created at different nodes, as well as the intersections. So here, everything is at right angles most of the time. This bird side view drawing, shows that the south was truly emerging as the Civic space of the 1860, which was the mall, which housed most of the Federal buildings. This place was considered conducive because it overlooked the river. It had a kind of endpoint to it. Nothing could go beyond this, no buildings could come beyond this and they would have a majestic view of the river. Between 1800 and 1860, what actually happened. From the perspective of the other side of the Anacostia River, one can see the Capitol, the buildings along Pennsylvania Avenue and the white house which was built later in 1834. So, most of the development came in the form of Governmental buildings, though a dry rock which is visible in the foreground. You can see in that, in the building here, the dry-rock here in the foreground and all the government buildings that were flocking to the right of the mall. During this period, the Capitol Dome expansion, utilizing new steel structural technology began, as did the construction of Robert Mill's Washington monument. So, Government construction was given priority, here you can see between 1860 and 1900, the current city you can see is getting reflected in the plan. Axis being given importance, you still have a lot of green space, the built area and the green space are still not in the proportion you see today. This bird's eye view

shows the development of the mall properly. Here, you can see the mall being constructed and the neighbourhood between it and the Pennsylvania Avenue which is considered one of the most squalid and dangerous parts of the city even today. Even though it is close to the government area, it has the river on one side, which was initially considered as a very positive thing. Nothing else could grow there, but because of the waterbody on both sides, it crosses an area where no one can actually leave and a kind of negligent area emerged which leads to a lot of anti social activities at that point of time. So between 1860 and 1900, this was the period after the Civil war, they were actually engaged in a massive public works program to upgrade the infrastructure, maintain hygiene in the tropical area because of the increased population because of the end of the Civil war, the growth of the city had suddenly spurred on because of this. The investment in government buildings earlier in the Century was obviously very useful because now the city could concentrate on developing through private enterprises, industries and such like that. Now, between 1860 and 1900, here you can see the development of Olmstead Street plan for the capital, this is the capital complex near the mall, the capitol grounds. So, what he actually wanted to do is ? Let's take Jefferson's approach of pastoral approach i.e let's give it an impression of it being rural of having a lot of open and green spaces and then, this was going to be the precursor for the Mcmillan commission's plan for the entire Federal area. So, this was the precursor for the entire movement. Let's give the building also importance but we also have to give a lot of green space to make sure this looks even more majestic in the crop of short trees and plants. Now, we will go on to Macmillan's plan which came around between 1900 and 1940. What Macmillan envisioned was a Federal district set apart from the rest of the city based on the city beautiful premises. Emphasis was laid upon unifying the mall and claiming the area between the Pennsylvania Avenue and the mall for Federal business. So, when this happened, the negative parts and the negative elements were obviously removed. The Lincoln and the Jefferson Memorials would form new endpoints for the civic structure. The mall as envisioned by the Macmillan commission is what we see pretty much as it is today. So, what happened at this period of time was finalized. The area on either side of the mall is strictly only for Federal use i.e Government use and the mall itself is home to the Smithsonian monument and museums and many other monuments and museums. The combination of the Macmillan improvements, FDR's expansion of the Federal government and the impending war, led to a rapid increase of population. So, at this point of time the city grew exponentially population wise. You can see here, automobiles came into being, tramps came into being, buses came into being, this is one of the trolleys near Pennsylvania near 14th Street in Washington D.C. You can see the open space over here and the Federal building that still exists and the width of the roads are massive. Even though, back then automobiles were not prevalent, this was designed futuristically because they knew in the future there would be more vehicles and there would be more pedestrian movements as well. 1900 - 1940, this is the

emerging plan of Washington D.C, clear axial plan. A lot of importance is given to orientation and axis. The mall was clearly demarcated. Green spaces were still given a lot of importance.

Plan of Washington D.C. 2

Now, till date, from 1940 to the present, what has actually emerged? It has obviously been a victim of political non-commitment i.e lot of changes were happening but nothing was regularized as such. It fell truly in the hard times in the third quarter of the Century. You can see the future of the city in a few shots that we will be seeing. Many lots have been cleared for service parking and the urban fabric is indistinguishable from any other American city by 1970, it actually fell victim to something called urban renewal movement because as and when the city changed, parts of America were completely erased and rebuilt completely. Parts of D.C were also faced with that. These are the aerial photos we were talking about, this is the construction of the Pentagon, one of the most important buildings, a new political commitment was given to the city plus a growing sense by the residents that we should not fall into the trap of urban renewal. Instead, we should lead. So, by 2000, the district had rebuilt most of the surface parking lots downtown and now it has more jobs located on the urban core than any American city. Now, if you look at what happened in Pennsylvania Avenue rehabilitation and the South west urban renewal. We discussed that this was where most of the negative elements and anti social elements were congregating. So, Urban deterioration was happening at many nodes at this point, similarly, urban solutions were offered on either side of the mall. So, existing urban fabric was demolished to make way for a new highway and large footprint of Federal buildings. You can see that this is the site of the Freedom Plaza in 1958 and Freedom Plaza today. Not much of changes with respect to the width of the roads and all that and especially the open area but it is more demarcated and even more regularized. This here, you can see is the Pennsylvania avenue and so called heritage area of the city or the Heritage core of the city which was not tampered with, during the urban renewal movement.

We go on to discuss the urban fabric of Washington D.C. It consists of five types of building blocks; the party wall, the office building, the rowhome, the detached bungalow, the neoclassical institution and the urban villa. So, each makes a distinctive type of block and fabric. The attached buildings have given Washington the necessary density and it is obviously one of the most densest parts of the country. The neoclassical institution and urban villas are symbolic purpose idolizing the democratic values. That showed that there was a new nation that was emerging. The detached home was typical of any suburban development where families would reside and there would have a home away from the so called downtown area. So, here what happened is? For this to happen, for a reliable suburb to emerge it meant a reliable public

transit infrastructure was also required. The party wall rowhome was a traditional housing stock of Washington throughout the 18th and 19th Centuries. Though their heights varied, many had basement apartments and separate entries as well. You had party wall office buildings which maximizes the real estate in downtown Washington, all the building heights are limited to 40.5 m and office buildings typically have retail on the first floor in addition to lobbies. So, this you can see is the typical block. Here is the party wall office building and then an entire block of office buildings. Here you have the party wall rowhome, an entire block consisting of party wall rowhomes. This is a detached house and here you can see more green areas and density is less. Urban villa, even here the density is lesser. Obviously lesser families of dwelling. Institutional building, very large footprint and this constitutes a block by itself. The detached house was introduced in the outskirts of the city which was reminiscent of a true suburb, the block gave way to suburban serpentine street system which was typical of the mid and late 20th Century. This building type does not occur within the section of the city that was planned initially by L'Enfant. That's why it is restricted to the outskirts of the city. So, there was demand for the stately space in the capital which drove the development of the urban villas. So, they were actually prevalent in the embassy where you had a lot of diplomatic and charitable functions, this proved to be a processional entrance. The institutional building without doubt plays a very significant role in the landscape. It is set apart as neo-classical objects, idealized landscape green spaces around it and during the Urban Renewal in this quadrant, modern buildings were sited much in the same way but without the landscaping. So, during the urban renewal all the green spaces became parking lots, so that's what happened at this point of time. Here you can see the Dupont circle, which is the best example of how L'Enfant's reservations and square could actually work. This is a vibrant park and traffic rotary combined, it doesn't mean that just because it is a park it is away from the city, it is right in the heart of the city which offers a very good lung space. You have three major diagonal roads coming in from here and it is a mix of commercial retail and residential units and this is delineated by corner buildings, streets, mediums and trees. This is true Massachusetts Avenue, it is one of L'Enfant's planned 'grand traverse Avenues', it is 160 feet wide, 80 feet carriage way and 80 feet of pedestrian and trees. Modern day Massachusetts follows pretty much the dimensions of L'Enfant, so no changes in that. Except that, now it is limited to 135 feet and they share the walls. Here you have Q street which is one of L'Enfant's other streets i.e the lesser important streets, this is around 90 to 110 feet wide. This is basically residential in nature and they are traditionally only three or four story row homes. So, you have a front yard setback, trees and a parking lane dividing the space. If you look at the streets and spaces emerged over here, a lot of importance was given to the width of the streets, you had 130 feet roads, 110 feet roads and even 90 feet roads in residential areas. So, obviously, futuristically they were planning. Even today, they do not face congestion as a problem over there and public transport was given importance at a time when it was not in complete demand. So, today's scenario, public

transport is very much prevalent. Washington D.C gives a lot of importance to its open space which gives it, that particular character and makes it stand out from other American cities and the setbacks that are provided are prevalent even till date, which makes sure they are adequate trees and gardens that are abundant in the city. It has gone beyond the original area of the city and while the grid and diagonal system break down in between, the commitment to the openness and the green belt definitely continues. This for example is a Scott Circle, which is not a very good example or rather it is a less successful example of L'Enfant's reservations, even though it was formed to be a Dupont circle, now it has become a traffic node because you have six important roads coming in here and it has pretty much become a traffic circle. Here, this is the Rag Park which is the intersection of the 16th Street, Harvard and Columbia, it falls outside the L'Enfant's plan, this is not a part of the original plan but this is a true example of residual space. After all the leftover space, instead of letting it go wasted or let it go in the sense, it could be a place where it's alleyways or it could be filled with antisocial elements, it has been modified to be lovely park which encourages people right from offices, residences and even institutions to come here and spend the day. The concept of boulevard or wide roads, this again is a very important part in L'Enfant's plan and even till date. If you look at the civic structure in Washington D.C, as it was envisioned by L'Enfant, it was a series of sight-reciprocal squares, fountains and wide diagonal avenues anchored by a Grand Avenue 400 feet in width, about a mile in length, bordered with gardens. It ends in a slope from the houses on each side. So, communication was given a lot of importance, if you look at the skeleton of L'Enfant's civic structure, it remains till date. The only change is that the reclamation of the tidal Basin has changed and mostly, other than Dupont Circle, the importance of the squares as a part of the Civic structure has never been realized. So, only Dupont circle is a good urban space. Here you have, L'Enfant's plan from 1791, and this is modern day Washington D.C, 1991, not many changes have occurred. Obviously it is more cluttered and more clustered but the theory and the principles have remained the same. If you look at the good urban space, what is the definition of a good urban space? If you consider a good urban space and the characteristics of a good urban space, it should be near people, it should be legible to people, it should be accessible to people both in reality and perceptually. When you are inside the building, when you look at that space, you should be able to relate to that space, allow multiple layers of activity and movement. So, following these four characteristics, Dupont circle is an example of good urban space, it is located in the intersection of an office district, residential neighbourhood and the adjacent density of people is large enough to populate the space. Legibility is obtained through party-wall buildings which is of consistent height, and obvious routes in and out of the space. Despite being an overtly pedestrian area, the circle also serves as a substantial traffic role being an intersection of the districts three busiest diagonals. This serves to be a true good form urban space. Now if you look at the plan of the mall, we shall look into the defects or the problems that are occurring in the mall. Number one, it is too far from

the urban center of residences and offices. The whole idea of the mall is, it is a place of congregation but if it is so far away from the urban center, it is not some place that people would go to unless there is an event there. The McMillan plan effectively pushed all functions other than government administration north of Pennsylvania Avenue. It loses its legibility west of the Washington Monument. With no built edge to the south, the mall "falls" into the Potomac and loses its legibility as a space instead of a landscape. We just discussed the importance of legibility of how a person or people should perceive that space, even if they are not in that space, because of the Potomac river, it feels like the mall is just dropping into the river. It is strictly a ceremonial space because it is so far away from the urban center, it is not a place that people go and visit regularly. The primary use of the mall is to look at it and mainly tourists go there. It is an activity engaged in primarily by visitors instead of residents. Even if residents do congregate over there, it will be on election day, it will be to celebrate some great day like independence day or something like that but otherwise it is pretty much neglected. This is the image which illustrates how the mall is typically experienced as a landscape to the beheld but not as a space to be occupied. It also illustrates the openness of the Western end of the mall, with no built edge to the southern side. You can see here, there is just the river over there, you have the green space and just the river. Here again, inspite of being a very important node, it goes there with the obelisk, it is more like a park to be enjoyed rather than a place people would congregate for some important activities. So, that's where the mall actually loses it's significance. Here again you can see the Potomac river on either end. This is the branch of the Potomac river, the Eastern branch. You have the nodes marked out over here. Here you have the private areas, the residences and in red you can find the public or the institutional buildings and like we have already discussed, this shows that Washington celebrates the mall as basically an urban space instead of a pastoral landscape by developing the reclaimed tidal flats as a new urban neighbourhood. So, by placing the density of people and buildings on either side of the mall, it populates the area adjacent to it, creates a legible edge and introduces everyday use of the space in addition to the destination used. Such interventions address the challenges of a good urban space. So, that's what happened when the reclamation of the Tidal basin happened. When Tidal basin was reclaimed and buildings were built over there, you had other buildings coming up on the sides and that way, this got a lot more importance and people could see this mall from different avenues as well.