MITOCW | 11. Transformations IV: Chicago

JULIAN BEINART: The first sheet on the handout really-- I forgot to give it to you last time. It's simply the argument that for every major ideology associated with the change of a city, there's a housing type which it generates as well. And this is just a little sketch of some of the work that we've done in the classes-- London, Paris, Vienna, Barcelona, Sunnyside Gardens, and so on.

For those of you who are interested in architecture, that should be a help. There are not many cities which originated in the 19th century. Chicago is one of them and probably the major one. What was the population of Chicago in eighteein [INAUDIBLE] It doesn't matter. There were a few Indians living on a piece of land which connects the lake to the Mississippi River.

And Chicago-- I think it'd be silly to ask you what Chicago means. It's an Indian name for something, wild garlic. Many cities have an affection for nature in their names. Bang Makok is the Village of Wild Plum in Thailand. Mumba Devi is the godess of fishermen.

What is Boston? Saint [INAUDIBLE] town-- Saint [INAUDIBLE] is the god of fishermen, I think. Certainly, Boston comes from Saint [INAUDIBLE] town. Now, the extraordinary thing about Chicago is, compared to the cases we've done up to now-- number one, that it has no walls. Number two, it has no royalty. It has no invested aristocracy. What else doesn't it have?

STUDENT: History? [INAUDIBLE]

JULIAN BEINART: Yeah. No, you're right. You're right, absolutely right. The argument for Chicago has always been [INAUDIBLE] OK. Be why we talk about these generalities. The second page on your handout is 100 years of building activity in Chicago done by Homer Hoyt, the man who did the [? vector ?] theory of city form, which we dealt with a couple of weeks ago. This categorizes building activity in the city. And we will go through it stage by stage.

But it's remarkable that we can depict Chicago's history in terms of economic activity, whereas we haven't used that as an index for any of the other cases. Chicago is built by the private sector. It has no city-- or such a weak and corrupt city government that everything about Chicago in its 19th-century period, certainly, was based on the primacy of the individual making his own way against all odds. Chicago is referred to as the city of wind, not because the wind blows there but because of the hubris of its politicians and its salesmen. Wind refers to the air that's blown out of the mouth when you brag.

I will go through this in more detail. In 1848, when the railroads crossed this country and made their major midwestern stop in Chicago instead of St. Louis, which would have been a more direct route, this was all because of the bullshit of politicians. In 1893, when the Chicago World's Fair celebrated 400 years after Columbus, it should have gone to St. Louis. But it went to Chicago.

Chicago is the only city in the world which built the first skyscrapers on sand. It's the first city in the world and the only city in the world which built an illegal subway system, 50 miles of illegal subway built by private development without the city knowing. Or if they knew, they were submerged in bribes. I will go through all of these examples.

So we can characterize Chicago adequately in Park and Burgess's model of a concentric universe in which movement is outwards. To make it in Chicago, you need to immigrate. And the immigration zone is the inner zone of transition. And then you make it, and you move outwards. American cities are primarily immigrant cities, as opposed to European cities. And this model, plus the ethos of Chicago, represents, in more stunning detail, this phenomenon.

I was talking about Frank Lloyd Wright and one of his clients. His clients were new. They were people like the man who invented the zip. They were people willing to see technology as a possibility for advancement. People made enormous amounts of money just by being in Chicago. I'll go through some of the real estate transactions in a few minutes.

So the themes we can look at and I'll try to give some examples of, how the city is an economic engine. The cycles produced through advancement and setbacks in economics has fascinated cycle theorists like Kondratiev and Kuznets and people of this kind. But nobody has yet been able to perfect it. If you perfected cycle theory, you would be the wealthiest man in the world, I should think, or the wealthiest women in the world.

But the free market system implies risk. And therefore, a correct depiction of the way Chicago is built in the free enterprise system would suggest a diagram much like Hoyt's diagram. Secondly, the city and nature-- there's a wonderful book by William Cronon called *Nature's Metropolis* about Chicago. It's worth reading if you have nothing else to do, which is not likely. But *Nature's Metropolis* is written by a man who was a professor at Yale. And he's now, I think, in Wisconsin, where he's from. He's an environmentalist. And he depicts the natural state of Chicago, and its regional hinterland, and the transformations that occur.

To me, nature in Chicago was something that could be improved upon. As everything else could be improved upon through [? manual ?] labor and intelligence, so nature could be improved upon. Nature could deal with the consequences of modernism.

I mean, Louis Sullivan, in *Kindergarten Chats*-- his little book, *kindergarten chats*-- Louis Sullivan was one of the great architects of the late 19th century in Chicago. He and his partner, Adler, did the transportation building in the Chicago World's Fair in 1893. But Sullivan-- when I show you his auditorium building, you will read in the toilets the notion that-- no, no sorry. Forget it. I'm mixing the ideas.

You will see in the system of decoration an attempt to maintain an association with natural form, much like Otto Wagner in Vienna. These are hybrid people. Louis Sullivan was very angry at the neoclassical system of the Chicago World's Fair. He said it would set back America considerably. We'll talk about the Chicago World's Fair later in the class.

Let's look at some of the other themes. The distinction between the activity of the private sector and the weakness of the communal environment-- after the Great Fire of 1871, there were two responses. The one was, gee whiz, what an opportunity to rebuild Chicago anew. The other one was, we are guilty because we blasphemed God. Two positions expressed by optimists

It was the day after the fire. There was a-- you will see-- a real estate booth in the ashes selling land. You get, perhaps, the starkest interpretation of this theme in the book *The Devil in the White City* by Eric Larson, another book that you need to know about if you want to know about Chicago. Here, up to 200 women, young women, are killed by a sociopath in his hotel, up to 200. Who know whether it's 200. Nobody ever was able to account for the number of bodies that he either put into acid vats or burned.

These women just disappeared. There was no police to account for who would-- 27 million people visited Chicago for the six months that the fair ran. Women just disappeared. The only way in which Holmes was a sociopath was discovered was because of a private security insurance man in Philadelphia. A man named [? Geyer ?] started tracing what was happening in these deaths, in some of the deaths that were reported to him.

The Chicago city and the Chicago Police were ineffable. So you have this extraordinary view of the dark side of an environment at the same time as progress is next to what Burnham called the White City as opposed to the Dark City. The White City with this new Chicago World's Fair. It had its dark side as well, the [NON-ENGLISH] But the fact that in a city as late as 1893-- in Chicago's case, it was late, it was almost a century after it was formed, 70 years-- we could have the private sector maintaining astounding technological process.

I will show you a diagram which compares the Ferris wheel built by a young engineer from Pittsburgh for the Chicago World's Fair. For the first time, the public could circulate above the level of a city and see it. This was more astonishing than the Eiffel Tower four years before and, perhaps, even more astonishing than Tatlin's monument to the Third International.

This is the city which again defies logic by building skyscrapers without foundation. Well, the foundations are rafts which float on the sand rather than columns. There's no rock. This is the last place in the world where you would expect the genesis of the skyscraper. And the first tall building-- I mean, Otis invented the elevator, the safety elevator. Before, the elevators had been used since Roman times. But the safety elevator means that the elevator, if it breaks, it has the cable system which protects the fall.

The first skyscrapers, probably the-- I will get to that. I wanted-- will detail all of these things as we go along. The Chicago World's Fair was stolen from St. Louis. St. Louis got the 1904 Olympic games, the first one held in the United States and the second one in modern times. The first one was 1900 in Paris.

The Chicago World's Fair has a number of extraordinary things attached to it. The one is the building of the grandest environment ever seen in this country. The manufacturer's building could house St. Peter's, St. Paul's, the pyramids, the lot in one building. It was massive. It's extraordinary. At the same time, it had a branch or a road of 600 feet wide called the midway, where the vulgar aspects of honkytonk American culture could be associated with.

I'll briefly talk about the idea of the White City, Reverend Moody's city in Pullman, Illinois. What is a Pullman car as opposed to an ordinary railroad car? In a Pullman car, it's business class. There are black man dressed in black uniforms with white gloves who carry your bags and elevate the conventional train system.

120 trains entered near Chicago, as early as 1857, each day. Pullman built a new town at the entrance to the southern part of Chicago. You pass Pullman, Illinois if you came to Chicago for the World's Fair by train. Pullman, like many utopianists, tried to produce a culturally superior environment for his workers. And lastly, we'll look at Burnham's 1909 plan and subsequent attempts to modify the girth.

OK, back to the handout. The first peak, dated about 1830, is the building of a transportation connector, a canal which connects. The hypothesis about Chicago was it connected the world's waterways or could connect it was waterways. From the Atlantic, here are the lakes and a small [INAUDIBLE] You have the widest river in the world.

This is not a trivial opening. It never produced the effect that it was destined in the minds of investors to produce. There's no traffic which travels along this route. But it was a brilliant hypothesis which, in 1830, enabled Chicago to take off. You can see the peak.

The first boom in 1835, land values increased by 150% in two years. I quote from a journalist. "I have never seen a busier place than Chicago at the time of my arrival. The streets were crowded with land speculators hurrying from one sale to another. A negro dressed in scarlet bearing a scarlet flag and riding a white horse with housing housing of scarlet-- oh-- was housing [INAUDIBLE] scarlet announced the time of the sale. At every street corner, the crowd gathered behind you."

The total land sales, according to Hoyt in Chicago, in 1830 were $168,000. In 1836, it was $10,500,000, over 60 times in six years. 1848, the canal was finished. Chicago was developing as an agricultural center-- wheat, and lumber, and the beginning of manufacturing. But it was a town, I quote, "without pavement, sidewalks, sewers, gaslight, streetcars, or railroads."

The second boom came with the decision to have a railroad pass through in 1848. Our chief, ultimate importance of the canal, the lake, traffic, and the plank woods for a plank roads was that they gave Chicago sufficient advantage to attract the railroad. It was important in making Chicago a great wholesaling and manufacturing center.

In 1836, it took 30 days to get from Chicago to New York. In 1849, it took seven days. In 1852, it took 36 hours. [INAUDIBLE] the time construction between New York and the Midwest, when being reduced, amplified the centrality of Chicago in the Midwest. The slump of 1857, overspeculation in Western land, Michigan Southern stock dropped from $88 to $9. European demand for wheat in the 1871 Civil War meant Chicago kept economically after.

The post-war boom of 1865 to 1871 re-established in Chicago's industrial base. By now, it had manufactured the largest meat-packing industry the world had ever seen using a conveyor belt system which Henry Ford, amongst others, appreciate and introduced into his automobile plants.

1871, The Great Fire, one of the greatest holocausts in history. The resurrection is optimism or blame. 1878, the boom, improvement in the American economic condition, the first steel-frame skyscrapers. Home Insurance building, 1884. Steel-frame [INAUDIBLE]. [INAUDIBLE] building, 1891. 16 floors. So on and so on.

So if you're going to build the city through private initiative, private investment, you're going to have to deal with the cycle of economic advancement, and boom, and depression. Chicago managed-- you'll notice that in the European examples, post-Engels, I spoke often about the condition of the poor. The condition of the poor was not an aspect of civic consciousness in the time that I'm talking about.

If you went to Chicago, you made it. If you didn't make it, somehow or other, you survived, either by crime or by some other kind of device. There was no social program. The city didn't exist as an arbiter of human condition. Human condition followed what the market produced. The fire of 1871 paralleled the fire of 1666 in London similarly.

I mentioned the illegal building of a 50-mile set of tunnels in 1914. Earlier, the city, in 1890, had given permission to private building owners to dig in their basements to provide insertion of a telegraphic wire. The telegraphic cable was soon seen as a ruse for digging mud out of the basement of your building and connecting it.

At times, there was a train which carried mail and deposited goods in the basement of Carson Pririe Scott and Montgomery Ward, the two biggest modern department stores at the time. It even, at times, produced ice for air conditioning. It became transportation.

How did the city-- how did the businessmen deal with it? By bribes, of course. That was how all business was done, also by telling lies. The developers claimed that they were only laying cable for a telephone company. They dug at night so people would not notice the amount of dirt being smuggled away from the scene. They found that the tunnels were almost 13 feet high.

Part of this was that two people a day were being killed in the city by trains going through crowded crossings. But this is the only example in modern history, or even in any history, of the illegitimate building of a major infrastructure system underneath the city. It's a wonderful story. There's a part of me which rejoices in the idea of building an illegal sub, one day waking up and finding that you have a subway system under your city nobody knew about.

AUDIENCE: [LAUGHS]

JULIAN BEINART: No, there was no permission given.

STUDENT: But why?

JULIAN BEINART: But why what?

STUDENT: Why did [INAUDIBLE]

JULIAN BEINART: I think I've explained that the city was inevitable. The city didn't exist. Local government was corrupt [INAUDIBLE] Chicago is known as the Shock City. You could get away with murder, as many people did. The great murders in the history of Chicago are not fiction. They're reality that have become fiction in American violence.

The fact that human beings can do extraordinary things shouldn't surprise us. The building of the pyramids was as extraordinary, if not more extraordinary, investment in human labor and guile than the illegal building of a subway system in Chicago.

Anyway, the other advent in Chicago of significance was the attempt to extend buildings vertically. Chicago was hardly the place that one would expect this to happen. There was no rock or significant rock formation under the center of the city. You need at least that support system unless you can devise an alternative, which was devised, of floating buildings on platforms.

The Home Insurance building in 1884 was the first building built out of a steel frame. Before that, all building was-- by the way, I forgot to mention. In 1830s, there was a man-- and not an Indian, an American white man-- on a canoe on the Chicago River. He invented something which transformed the building industry of the United States.

Well, he devised a system for manufacturing wooden housing by using a balloon-frame system instead of a post and beam. A balloon-frame system uses two-by-fours or two-by-tens and make them into panels which become the sides of houses, as opposed to the historic system of erecting posts and then spanning the space with beams. This man revolutionized the construction of housing. And he's little known. He should be known more widely. Because since then, the pervasive building of single-family wood construction has manifested itself as a major economic force in the United States.

Anyway, back to the skyscraper. Under 20 floors of height, a tall building [INAUDIBLE] needs to worry about its own weight and, to a small extent, about wind. Above 20 floors, wind becomes the major factor in the construction resistance that you provide to the wind. These buildings are all under 20 floors.

Frank Lloyd Wright proposed a building a mile high. What was he thinking about? What did he have in mind? He wasn't a foolish man. I'm not quite sure I know, nor do I know that anybody knows. The [INAUDIBLE] building, at that time, would have been so outside of any technical calculation system.

The fact that you may be able to wrap a city in one building is interesting. The John Hancock building in Chicago-- who knows Chicago well? Do you know the John Hancock building? The John Hancock building, except for industry, has all the artifacts of a city in one building.

There's parking, shopping, offices, and housing. Accomplishing this one in Chicago, much later than Frank Lloyd Wright, perhaps suggests a remodel that he had in mind for building a Usonian utopia vertically. Frank Lloyd Wright built a small office building in Oklahoma. What was the uniqueness of his building, the small building in Oklahoma? Do you know? It's the only office building at its time that had offices and housing on the same floor. Here, the separation is vertical.

I've got to watch out for the time. It is long. Chicago's a long and interesting convoluted story. I'm trying to untangle it. I'd rather leave this out, but question as to whether land speculation in the form of a grid is a vehicle of capitalism is arguable. I've written, disagreeing with Mumford and Richard [? Sennett, ?] two formidable opponents, on this premise.

Mumford, for instance, says resurgent capitalism treats the individual lot, and the block, the street, and the avenue as abstract units for buying and selling. The rectangular street and block system projected indefinitely towards the horizon was the first universal expression of capitalistic fantasies. Each lot being of uniform shape became a unit like a coin, capable of ready appraisal and exchange.

Yeah, that means you can buy a piece of land in Florida without seeing it. I suppose that is possible. But with the grid system reducing the complexity of investment to a unit is all that goes on. What about [INAUDIBLE] plan? Here's a man who made an infinite-- the largest housing environment in the world, history. By using a 113-meter by 113-square-block system, with infinite variables in it, not built, but according to him, to his plan.

Is that a capitalism? Is that a result of capitalism? The other example, one of the largest buildings of mass housing, is in Soweto in South Africa. It's nothing to do with the market at all. It was built by a white government enforcing its power on--

STUDENT: Well, it actually makes me think of James C. Scott's argument about seeing like a state, and how states want to simplify things, and, I mean, how capitalism uses those [INAUDIBLE]

JULIAN BEINART: Yeah, I think he's right. Capitalism does. If I buy an IBM share, I'm buying one-hundred-thousandth of its typewriters and a hundred-thousand of its elevators and so on. Yes. And of course, that's understandable. But whether-- in a city, a grid system adjacent to a river is a good deal different from a grid system adjacent to a mountain. They are natural deformations.

And it's not as easy to-- what Mumford is saying is that in the case of Chicago, there was no care given to the modulation of the size of blocks to who developed where, and how, and so on. He's, in fact, saying that the free enterprise system has invaded the spatial property of a complex city and reduced it to barrenness.

It's an intriguing proposition, which I have-- you know, Boston doesn't have a grid system. And there's been as much speculation in land in Boston as there has been in Chicago. So give me a break. Those of you who are designers should stop thinking in terms of the geometry of things, in terms of simple outcomes.

STUDENT: I think that's true in the long term. But in the short term, I know specific examples where a community can't get a grocery store because it's an old non-grid layout, and grocery stores only want squares or rectangles. And so there, you have-- it's not because of capitalism, but temporary market norms, development norms realted to the grid.

JULIAN BEINART: What about Manhattan?

STUDENT: Yeah, It's not always true. But it's true of some [INAUDIBLE]

JULIAN BEINART: Yeah, I always get out of this by saying cities are more complicated than I know.

AUDIENCE: [LAUGHS]

JULIAN BEINART: There's a juxtaposition between the market, and between capitalism, and goodness of outcomes. It's like saying the American Express introduced the traveler's check for the first time at the Chicago Exposition. And there were new foods, things like fast food and so on. Is capitalism to blame for producing these innovations? Was capitalism to blame for-- I don't know. I think it's-- it strikes me as being too elementary.

Richard Sennett, on the other hand, has another argument. I don't have time to go into it. I want to spend a few minutes on the World's Fair and then-- the World's Fair, in many respects, was fundamental in the history of Chicago and, perhaps, fundamental in the history of the United States. The Crystal Palace, which is my favorite 19th-century building, produced a slew of exhibitions in Paris.

1851, the Crystal Palace; 1855, 1868, 1889, 1900-- five exhibitions between 1855 and 1900. They were all there to promote technology, newness, modernism, and the market. There was no internet, obviously. The availability of information-- there was no telephone. So this was almost back to Neanderthal times. So you needed these great events. The Crystal Palace had pieces of India in the first part of the exhibition.

The Crystal Palace genesis found its last major output in the 1900 Fair in Chicago, at least in Paris. But in 1893, seven years before Paris, this enormous task of building an environment which would be so impressive, so capitalizing on the energy that Chicago could generate-- if Chicago could build a skyscraper-- at the time, in 1893, there were really 20 skyscrapers in New York. They had the big department stores. They had mass methods of producing meat and food. They had enormous grain towers on the water or next to the water.

The idea of having to make something which manifests itself-- the second problem with an exhibition is that it only lasts a short time. It's, of course, an enormous advantage in that you can risk building a building which is more likely to be thrilling and dangerous than any before. The story of the Ferris wheel is a fantastic story.

There was a competition for a vertical element. The Eiffel Tower, in 1889, had dramatized the idea of an exhibition. Let me just draw this. Chicago faced the competition of the Eiffel Tower. In fact, the competition which was held, produced, [INAUDIBLE] fantastic entries. [INAUDIBLE] wanted to build a glass umbrella covering 193 acres, four times larger than St. Peter's. [? Proctor ?] wants to build a tower 1,150 feet high, 150 feet higher than the Eiffel Tower.

The competition was considered a failure. Eiffel was contacted and asked whether he would come and do something as well. This is a stark admission on the part of Chicago that anybody else in the world could do better. Somebody revived the idea of one of the entries in the competition by this young man, Ferris, who had proposed that you could create a vertical system, in this case-- I don't know what its height-- a system which could do what the Eiffel Tower-- and I may as well do Tatlin's Tower. It was never built-- that you could create an environment which moved.

36 cars-- the engineering consequences of putting people into cars and then twisting them, twirling them around in the air, was significant. No wonder the Ferris wheel was considered too dangerous. And they actually had to build a model of it. Well, it's not a model of it. They built it, finally, and tested it. And to everybody's surprise, but not to Ferris' surprise, it actually worked. It ran and provided a view of Chicago which people h ad never had.

The Ferris wheel was located not in the main space of the exposition. A significant notion about the exhibition, it had the Court of Honor of these buildings on either side. You came in by train, connected to the water here through a gate, secondary buildings along here, the idea-- at right angles to this, 600 meters-- 600 feet in width. It was something called the Midway.

The Midway was first going to be headed by a man called [? Putnam, ?] who was an anthropologist from Harvard University. He was going to use this environment to depict the human species in anthropological terms. He was proposing building a model of a man and a woman based on extracting images from 224 samples of Americans-- something crazy, all kinds of stuff.

For some reason or other, Burnham and these people decided that this was going to be boring and stupid. They brought in a man called Sol Bloom who was a 25-year-old showman from San Francisco who had already produced shows which brought in Egyptian women from dances from Egypt and sold them to American audiences.

Sol Bloom projected an environment in here which had Algerian, Egyptian, foreign to the American population. And the Eiffel Tower is located here, and not in here at all. So this was the White City. And this is the city of the-- Octavio Paz says Americans go to Mexico to fulfill the deep recesses of depression, something of this kind.

There is a wonderful piece, written many years ago, called *The Social Uses of the Slum,* arguing that the slum provides illegal advantages to people who live outside it and don't pay the costs of the existence of the slum. So you get the idea that there are two sides to America. There's the side of the establishment of the symbols of power. These buildings are bigger. The Manufacturer's building is bigger than anything in history.

[INAUDIBLE] is important ways of entering. And this is just at the road, next to which are the strangest things in the world-- not strange anthropologically, but strange entertainment-wise. Issues of sexism and racism clouded America at the time. 1904, the first Olympic games in St. Louis, anthropologists wanted to measure-- he wanted a day in which he wanted to measure why Black men ran faster than white men.

The Chinese-- I could quote you from the Chicago newspapers about the Chinese. Just assume that America had not liberated itself. This is premodern America. It had not liberated itself from the crutches of-- there was a Woman's Building. This was not the first time that a Woman's Building was built. A Woman's Building was built in the Philadelphia exhibition 20 years before.

There's something interesting about the Woman's Building, which was a fairly large building designed by a 21-year-old woman. There was a kind of competition which 13 women entered. Only eight women had graduated from architecture schools between '78 and '93. They were Syracuse, [? Cooper ?] Union, MIT. The competition was won by a 21-year-old MIT graduate called Sophia Hayden, H-A-Y-D-E-N.

Sophia Hayden had a tough time. She wanted to depict a modern environment for women. The people who were paying the money in Chicago, the ladies wanted to have a decorative interior filled with all of the fashionable items that women had in their lives. Sophia Hayden suffered a breakdown. And her story's well told in the book by [INAUDIBLE].

On the story of Holmes, the sociopath, you have to read the book to get the nuances of this man's guile and how he managed to offer accommodation in his hotel to young women visiting the fair. If there was a black part opposite to the White City, it would be this. I quote from his book. This is after the police had investigated the problem. The earliest phase of the investigation began when the police, holding their flickering lanterns high, entered the hotel basement, a cavern of brick and timber measuring 50 feet by 165 feet.

The discoveries came quickly-- a vat of acid with eight ribs and part of a skull settled at the bottom of mounds of quicklime, a large [INAUDIBLE] and a dissection table stained with what seemed to be blood. They found surgical tools and [INAUDIBLE] high-heeled shoes, bones, 18 ribs from the torso of a child, and so on and so on.

The book is an intriguing examination of what disasters could befell a city which was advocating, at the same time, these kind of displays, not only for its-- I mean, Americans had never seen anything as ordered as in this environment in 1893. There are stories. There are books of reports of letters written by grandmothers coming from Idaho or somewhere to the World's Fair, entering the Court of Honor at night and fainting because they'd never seen anything made by human beings quite that way.

The other story which I think is interesting is the story of Pullman, Illinois, the attempt to build a new town for workers to build these new railway cars. It was an environment which much paternalism involved itself in-- that is, to create an environment in which the workers would have a higher level of culture and education as a result of living in this town.

Pullman wouldn't allow people to purchase houses. He believed that they would become selfish and indulgent. He attempted to provide-- he produced the Hotel Florence in the center with Black waiters, a multipurpose arcade containing the town's post office, the Pullman loan. and savings bank, the arcade theater, the library, and others.

In fact, there is an element of the need to civilized people according to the norms of somebody, the owner. In Frank Lloyd Wright [INAUDIBLE] projects [INAUDIBLE] talks about Beethoven being played in the street or wherever. Shakespeare, in the upper part of the arcade, was meant to appease these workers who couldn't have prostitutes, who weren't allowed alcohol, and were divorced, and had to exchange the good life as destined by Pullman, who was making a lot of money out of them. The workers revolted, and the National Guard was called in in 1894, and Pullman was destroyed.

In 1909, Daniel Burnham, who was the architect and manager of the Columbian Exposition, was asked by the City Business Club, later become the City Planning Commission, to make a plan for Chicago. I will show you and discuss it when we look at the slides. I think let's leave time for a little looking at these illustrations.

There subsequently was a plan done by a German immigrant, [INAUDIBLE] in 1950 to reconstruct the grid system by cutting of some of the grids. Maybe I didn't explain things fully enough. Is there anything in this series of sagas, and hypotheses, and stories, and events that intrigues you that I haven't explained fully? No? OK. Well, then, I've done a good job.

The wild garlic piece of land between the Lac des Ilinois and the Mississippi River is the genesis of the city of Chicago. Its history of development is best explained by Hoyt's analysis. Next.

Here's the river and the first layout of blocks. That's a view of the town in 1845. Next. This is after the railroad. Next. The fire which, again, as in London, starts with ships and eliminates this large black area-- one of the major urban fires in history. Next.

Through the flames and beyond, as it was and as it is, Wells and Company. Post-fire, a real estate agent. Next. Chicago kept on spreading. This is 1893. Next. The [INAUDIBLE] building, I think about 20 floors in height. The traction system for use in the [INAUDIBLE] in the meatpacking industry. Next.

Some people argue that the French, the Parisian exhibitions had to produce all the technology which wasn't available in the city itself. Some people argued the Chicago World's Fair had all of these infrastructure already in existence in the city itself. Next. This is the ladies toilets of the Auditorium building.

Here is a city, and this is part of Louis Sullivan's decorative system. a city which is rough and speeding along has another aspect to it. You could argue that cities should first make money and then reculture themselves. The first [INAUDIBLE] argued in the Third World economic environment that first, make cities.

For instance, an alternative to [? Chandigarh ?] was presented as a city of mud growing, eventually, into a city of gold. The images is that the important thing is to establish the economic system, make it work. And then invest in the superficial aspects or the superior aspects of culture.

Here, in a city in which there aren't proper streets, in which people get killed in the street, get killed anywhere else, here is the cultural contribution. This is what the new middle class need to enjoy. Next. The part of the Colombian exhibition which involved the Court of Honor, the major buildings on the flank and the electricity building, the [INAUDIBLE] building [INAUDIBLE] administration, entry by train, the base and statue of the Republic, the harbour, and so on. Next.

The Woman's Building, you can see the Midway Plaisance in the distance with the Ferris wheel in position, as opposed to the neoclassical facades of the old part of the exhibition. Next. Extraordinary historical devices-- the crescent, the arch, the isolated sculpture. Next.

Louis Sullivan and Adler's Transportation building whilst Sullivan rejected the neoclassicism of this exhibition. He nevertheless had enough attraction to it to build this building. The Administration building, with a dam which is larger than the Capitol in Washington. Next.

Sorry, I made a mistake. This is a Woman's Building by Sophia Hayden. In the interior of the Woman's Building, a mixture of new electrical equipment for the modern kitchen and half-nude women dressed up in drapery as the other half of the woman's life. Next.

Ferris wheel. And you can see the Austrian village, the Algerian, the Moorish Palace, the street of Cairo, the German village, the Javanese village. Next. That's Sol Bloom, a little older than 25. Next. There's a kind of hybridity in looking at the history of cities. You could argue that almost any city in motion will produce hybrid versions of situations.

We've had a hybrid version of the independent woman-- on the one hand, dressed up as a nude model; on the other hand, percolating over a new toaster in the kitchen. The same with the American psyche-- what do you go and see, the largest manufacturing building in the world? Or come and enjoy yourself seeing the exotics of Cairo street? Next.

It all ends very quickly with fires, one in the cold storage environment, another in the Manufacturer's building. And this whole place is ruined. And it's back to scratch. Next. Pullman, Illinois, the Florence Hotel on the right with the clock tower, the typical plan of an industrial manufacturing town. Next.

The Arcade, perhaps one of the earliest shopping centers in the United States. Next. 1894, the workers and the National militia are called out to protect Pullman. Next. Burnham, on the extreme left, at the City Business Club and his plan to create a girdle around the city, six miles out, and to diagonalize the grid where possible with diagonal systems, leading to a newly created center civic promenade and a large cultural enterprise along the waterfront and the harbor. Next.

Originally, all the railroads would follow the same pattern, entering the center of the city. The park system would be greenery located in [INAUDIBLE] system. Next. Burnham had large drawings of Paris. Haussmann was a long time in advance. But neoclassical Paris was what Burnham was using as a model. Next.

This is the German urbanist, [INAUDIBLE] attempt to revise the grid system by cutting it in to different systems, breaking it up in places, leaving it where it is in places, instituting a different [INAUDIBLE] in some places, and really revamping the whole system. He was also attracted by [INAUDIBLE] tall office building and residential towers as a proposition. Next.

And the last of this is Mario Gandelsonas' book*The Urban Text,* an attempt to take the grid and the river and to reframe it, is best I can put it, as a set of steps that you take in reconstructing the deep structure of this grid and river into systems that look like that. Peter [? Eisenman ?] used the system in studios at Harvard. If we have a chance at one of the next classes, I will show some of that work.

It's a set of-- it's based on the notion that you can dig deeply into of an environment, reconstruct it, and re-elementize it in a new way, which is that. I don't know what the hell it means.

AUDIENCE: [LAUGHS]

JULIAN BEINART: It has no practical value. You should look at the book*The Urban Text* and decide on your own. I'll give you my opinion. Chicago is now considered as one of the greenest cities in the United States. What does that mean?

STUDENT: [INAUDIBLE]

JULIAN BEINART: Sorry?

STUDENT: The green spaces are mostly private.

JULIAN BEINART: Does it matter what they are? Certainly not as far as the environment, the air, and pollution is concerned. If you privatized all the roofs of buildings and made them green, you'd have an enormous effect on the energy output in a city. I'll just leave-- if you want to, I'll give you the reference to the study which posits Chicago is the greatest city in the United States. It's largely the greening of the roofs of buildings.

Chicago can do anything. It's an example of a city as an artifact which manufactures-- re-manufactures itself almost at will, just through a kind of sense and will. I mean, that sense of will--

STUDENT: How much of that will gets lost once the city becomes institutionalized?

JULIAN BEINART: A lot. You just can't bribe your way through. No, absolutely. Chicago as a story is a story of free will. Anybody coming in from anywhere making it, and behaving like an important person.

STUDENT: There's a sense of rapaciousness in the DNA that you showed.

JULIAN BEINART: Absolutely, absolutely, absolutely. The social cost of the free-sector environment was slowly picked up as the country-- I mean, this was a pretty-- [INAUDIBLE] I was trying to think of the percentage of Black people in this country who still live below the poverty line. I think [? 16%, ?] or 50% of the Black population lived below the poverty line in 2013. This is from William Julius Jones' work at Harvard. And the statistics are borne out.

This country has never caught up with the capacity to socialize poverty. It's assumed that-- Mitt Romney is an arch example of somebody who believes that the free market system will eventually produce enough social benefit to take care of the exaggerations of the market. I don't know what else to say. It's such a big generalization. We'll come into it later in this class.

Certainly, the European cities, from Engels onwards, face the-- and the Communist Party never had any leverage in this country. The trade union movement in this country doesn't resemble the British trade union movement in any way at all. The British trade union movement educates people in voting, for instance. The American trade union movement is-- half of the American South doesn't involve the trade union anyway. And that's where most of the new automobile manufacturing plants are going.