MITOCW | 2. Normative Theory I: The City as Supernatural

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JULIAN

BEINART:

The next three classes deal with a discussion of three models, which we developed in this class with Kevin Lynch, and I've subsequently changed and added to. The three models are not unique.

They are examples of models which inform the form of the city, have instructions as who should take part, have premises of materialism or theism associated with them. I'll go through the first one today, what we call the cosmic model. And you can see that the definitions of states is subjective, control science, nature, type, and form tools will be what we will discuss in this class.

The most common theory associated with the beginning of cities has a materialist basis. This is of course wrong. The materialist basis is based on the notion that a surplus is produced through agriculture. And a surplus requires a system of bureaucracy, a literature, or literal elite, a method for controlling irrigation systems, and so on, and the primitive notions of trade.

Why don't I just read you a standard explanation of surplus, because you should remember the word. It's an important word in the theory of city form, the notion of the production of more than you need. It involves storage, it involves the world of-- that's why I regard the invention of the potter's wheel is one of the more significant inventions of humankind.

How do you store food? What do you do with the surplus of food unless you have commodities or containers that can separate the food from the corrosion forces of nature-- the surplus.

"Surplus production beyond the immediate needs of the community made possible the emancipation of some people from the toils of the land." Here's an interesting observation-- that if you produce excess, you relieve certain people of conventional duties. We have excess which relieves a man to become the conductor of the New York Philharmonic Orchestra. It's only when you have a surplus which is not taken into account in much of our modern economics.

"But this creates the opportunity for specialized source and groups associated with namely scribes, craftsmen, priests, warriors. Surplus production presumes irrigation and efficient irrigation system produces a complex bureaucracy. And that means cities."

This theory, materialist theory, is best written about in Gideon Sjoberg's book, *The Preindustrial City--* S-J-O-B-E-R-G-- and in Gordon Child, an Australian writer, who wrote a book called *Man Makes Himself*. These are classic depictions of surplus theory.

There's a version of surplus subdivision, of surplus theory into two kinds. One held by Jane Jacobs in her book *Economy of Cities*, which argues that in the town of Catalhuyuk-- C-A-T-A-L-H-U-Y-U-K, was the center for industrial production of obsidian. And agricultural served, as it does conventionally in our societies, as the source of production for industrial commodities such as obsidian. This is different from the agricultural surplus, which regards agriculture as the primary function and pays no attention to material production.

Most students of the origin of cities now don't believe in either of these two propositions. So forget them. They're not important.

The common version of this new theory suggests that original cities were ceremonial centers, places of holy ritual, which explains the risky force of nature and secured them for human benefit. Peasants supported them voluntarily, attracted by their holy power, thus arose a permanent priestly class, awesome and seductive. Only later did the marks of urban civilization appear-- ore, trade, writing, extensive cross-specialization, and so on. So that the first cities were mental weapons, not physical forces.

Now, let's look at some of this a bit more carefully. Joseph Rykwert in a book called *The Idea of a Town* writing about the definition of Roman cities-- "the Romans are considered to be the prime rationalists of ancient times and the towns are often seen as rational outcomes of surveying technique and military fortification.

I quote, Rykwert says, "the town is not really a natural phenomenon," here setting up a distinction between the form of the town and nature. We'll get into the fallacies of biomorphosis and so on as we go through this class. You will understand that I'm not a naturalist. I understand that everything that happens around us is processed by the amount of material, the 1,250 cubic centimeters in the human brain.

It's interesting in talking about the cosmic model to notice the definition in formal religion of the idea of heaven. Heaven is only a concept of humankind. We'll touch on that a bit later.

Lewis Mumford-- just choosing little bits from these sources-- "the original aspects of temporary settlements have to do with sacred things, not just with the physical environment. They relate to a more valuable and meaningful kind of life where a consciousness that entertains past and future apprehensive primal mysteries of sexual generation and the ultimate mystery of death and what may lie beyond death. These central concerns about is the very reason for the city's existence, inseparable from the economic substance that makes it possible."

Another item from Mumford talking about the exaggerated height and thickness of walls in earlier cities. The wall of Khorsabad which is an Assyrian town, the fourth capital city of the Kingdom of Assyria, built around 700 BC-- the walls are 75 feet thick.

There is no possibility that you build 75 feet thick walls for military purposes. In Mumford's term, it is only for the gods that men exert themselves so extravagantly. It's a wonderful phrase. Remember it, never forget it. It's only for the gods that men, if you wish to enlarge the notion of gods, and I'll discussed the notion of a god gene a bit later.

What we do is not only based on simple postulates of function. It's central to architecture as a discipline that it's only for gods that men exerts themselves so extensively.

Quoting from another source, "every feature of the city reveals the belief that man was created for no other purpose than to magnify and serve his gods. That was the city's ultimate reason for being."

Now here you have two postulates. You have to survive, you're at the birth of an instrument, a city, which both has to deal with-- so your survival possibility. You look to the stars. The stars are permanent. It's not really difficult to erect a vertical stick, a gnomon, in Mesopotamia. And at noon, the stick will cast a shadow to the north. You'll be able to build a compass around that.

At the same time it's doing that, you will wonder why the town of Chang'an in 190 BC in China is built according to the stars of the Dipper. I will show you a slide of that plan. It's one of the remarkable plans.

So the stability of astronomy in the earliest cycles of cities and the creation of a deity significance in relation to each of these acts, it's one thing to know where north is. It's another thing to build your city according to the primary objectives of religion. We'll go on a little, but picking up little aspect to this.

Most of the significant buildings built in archaic times involve enormous amounts of human labor. For the Pyramid of Cheops, which has nothing to do with function whatsoever. It has nothing to do with materialism. It is in fact such an exhaustion of materialism.

The Pyramid of Cheops took 100,000 men 20 years to build. The Great Pyramid of Cheops was built with about 2,300,000 blocks of stone, totaling about six million tons in weight. They have blocks that average two and 1/2 tons, but range up to 15 tons, which have to be quarried, handled, and transported up a river, lifted 100 feet to the level of the site with sledges, rollers, sleepers, ropes, and levers.

You don't do that for anything other than the belief in the post-secular life. Egypt didn't produce any large cities for various reasons, which we'll talk about later in this class. But many argue that much of the disposition of resources consequently centered on the building of post-contemporary life.

The most significant buildings in most of these early cities are religious buildings. They're generally built out of compression structures. Solomon's Temple at 1000 BC in Jerusalem, Herod's Temple, 70 years before the birth of Christ-- both enormous compression structures.

Associated with these compression structures, which in generally can't go up to more than 200 to 300 feet in height. The temples of Chichen Itza in Mesoamerica-- about 200 feet. The Tower of Babel is about 200 feet in height. The Tower of Babel has the Temple of Marduk on the top of the Tower of Babel.

All of this is synchronous with the fact that religion was interpreted not by every person but by gurus, by priests, people who achieved enormous power, but didn't distribute the secrets of their power. The Holy of Holies in Solomon's Temple is still being sought for by filmmakers and people who want to excavate under the Holy Mountain in Jerusalem. Of course, something which is prohibited by political forces.

The origin of the mosque, the church, and the synagogue is later, in my view. The democracy of religion, which we all know utilized, I think comes in a different pattern. The first action that I think in this direction comes from the Jewish exile in 700 BC.

Nebuchadnezzar and the Babylonian Army destroys the first Solomon's Temple. He takes the Jews in exile to Babylon. Babylon is the greatest city in the world at the time.

The Jews don't abandon their religion, despite the fact that they don't have a temple and they don't have priests. They start praying in schools, in homes. Ezekiel appears as part of-- how many chapters of Ezekiel are in the beginning of the Old Testament? A whole bunch of them. What are they about? They are all about measurements of a temple. These measurements have been interpreted in all kinds of ways over time.

The fact is that when the Jews were released from Babylon in exile, they returned to Jerusalem and Israel read the Bible to the people for the first time. Later on, I think one of the conflicts about Jesus, in my view-- and I will go into this in more detail in the story of Jerusalem-- is the fact that the synagogue and the democratic religion was growing in power under the Pharisees and that Herod's Temple was the last resort of the power of the priests.

And Jesus was a confrontation to the priests, to the Jewish priests, who are on the way out. And his death was the mark of the transition in Christianity from, well, the birth of Christianity to the church-- and later on, 700 years later, to the mosque.

So we have an image of the pre-democratic church environment as buildings of compression, no penetration of the building by the people, the slaughtering of animals. At Solomon's Temple, I think 200,000 animals were slaughtered, or 20,000. It doesn't matter. It's just a number. The giving a gift at the birth of a ritual is also part of that same phenomenon. Many of these priestly directions still occur in some ways in contemporary religion.

Anyway, so we have an image of a town as a pristine object which changes very regularly and under control. It doesn't change sporadically, it stays the same. Population growth is very low, death rates are high. Population growth rates in medieval Europe due to disease was something like 0.6% per annum.

So the idea that things change very radically and very rapidly is a very contemporary idea. You could build a city in which everything roughly was the same. And the routines for understanding it and managing it are also more or less the same.

This kind of city is a mental force in itself. It accumulates the understanding of it, it's perpetuated through rituals. Rituals, according to Mircea Eliade, E-L-I-A-D-E, a Romanian religious philosopher whom I will quote for in a few minutes, these are distinct-- oh, let's wait until we get there.

Human life is thereby given a secure and permanent place. The gods [INAUDIBLE] is kept often, not incidentally, the structure of human power, of priests and kings, and abilities is also maintained.

Let's listen to Eliade's depiction of archaic man. "If we observe the general behavior of archaic man, we are struck by the following fact-- neither the objects of the external world nor human act, properly speaking, have any autonomous intrinsic value. Objects or acts acquire the significance and become real because they reenact after one fashion or another a reality that transcends them." This is difficult stuff to understand.

"Amongst my countless stones, one stone becomes sacred, and then instantly becomes saturated with being. It becomes reality as opposed to an everyday reality. It constitutes a hierophany H-I-E-R-O-P-H-N-E-Y, because it commemorates a mythical act, and so on. The object appears as the receptacle of an external force to differentiate it from the crude product of nature. The object fashioned by the industry of man acquire the reality, the identity, only to the extent of their participation in a transcendent reality."

In relation to the form of cities, Eliade talks about three things. Reality is a function of the imitation of a celestial archetype. I mentioned before.

Number 2, the symbolism of the center. Why a center? The word Babylon means the conjunction of the heaven and earth and the subterranean. Jerusalem is known for its being a city on the ground. In Christianic terms, there's a city 15 miles above.

Raphael paints a wonderful picture of the earthly city, heavenly city. Pope Urban II in 1080 in talking to the Crusades in Europe before they set off for Jerusalem talks to them about taking the earthly city and the heavenly city. The invention of heaven is a human invention.

The Hebrews, the Jews didn't in early accept the idea of a life beyond the normal daily experience of life. The center is not only the position of maximum concentration, it is the position of maximum identification. It's described in many of these terms in cosmic terms not only as a functional economic center, but as the central place which distinguishes itself from other place.

In Eliade's terms, there's a difference between the sacred and the profane. The profane is the everyday world. Reverse it, our secular world is not in our terms profane. But in archaic times, he argues, the secular world is profane. The religious world, the only world, purposely created through hierophany of significance.

Eliade argues that the third impact on the form of towns were rituals, significant gestures to acquire meaning attributed to them. I might not have time to go into these examples in China, India, and Mesoamerica. But in the town of Madurai in Southern India, I will show you a slide of the ritual still practiced today of each cycle of time as time passes.

According to Eliade, progress does not seen in terms of time by archaic man. Time was not linear-- time was circular. There's no notion about the past. The present, the existence of important things is very much in association with the security that you give to everything.

I'm just conscious of time so I'm going to go through, skip some of this stuff and try to concentrate on a few of the items. What I'd like to do is in relation-- oh, I didn't tell you what I handed out to you. I'm sorry.

This is an image of a town. Where is it? It's a rather famous city. It's a classical city. It's Athens. The image shows Athens is being built largely around an elevated system of space called the Acropolis, a religious god.

And its extension to the water around the town of Pireas, the Harbor of Pireas, depicts the implication of building a town whose form is much more mechanical and much more of the kind that we will talk about next Tuesday.

We have two forms of the same system, one dedicated. We know Pireas is purely a place in conjunction with an expanded view of the Mediterranean-- the Acropolis of Athens plus the monuments of gods all over Athens.

Depicts a consciousness of what we might call the religious gene. The greatest gene is a term taken from archaeology relatively recently. And based on excavations in the Mayan world, which argues that belonging to religions was a very, very early phenomenon, largely because of the security the community gave-- belonging to the same thing provided fundamental security.

And the god gene, in a Darwinian sense, is built into all of us. Those of us who don't believe in god are not part of the Darwinian bet-- we are creatures of obstinance-- and since the Enlightenment have been free to criticize whatever we want to based on fact or on mythology.

I'm going to go through the components of a theory on the second page.

AUDIENCE: I have question.

JULIAN Yes.

BEINART:

AUDIENCE: Regarding the layout of having both Athens and Pireas at the same time.

JULIAN

Yeah.

BEINART:

AUDIENCE:

[INAUDIBLE] social division between them? And if so, what were the different types of social groups, like division one versus the other?

JULIAN BEINART: Athens during the fifth century, and only for one century, experimented with democracy. At that time, all citizens were considered equal, except for women or slaves. There's a machine in the museum in Athens which is almost like a machine in which you put in your fingerprint and it registers you for voting.

So in Democratic Athens, as Socrates would explain, all people were considered equal in the first notion of a crude democracy. It didn't last very long. Athens is situated in rocky country, very poor agriculture. So it's dependent on other sources of basic supply of food, such as wheat.

In later years, it was so desperate that it tried to attacked Sicily, which has always been a center of wheat production. So Pireas was part of the extension of Athens for food. It was purely a machine-like enterprise. It only had to produce goods for the service of the democratic capital, which was experimenting with all kinds of ways of life, including the purposeful application of democracy.

Within Athens, democratic Athens itself, yes, there were areas where the more powerful lived and there were areas with the less powerful. Socrates himself used to walk through Athens on a daily basis. It was small enough to do that. And he would go through different neighborhoods, according to his own descriptions.

Socrates never wrote, of course. So it's all told by Plato and other people. But that's the short answer to a long question.

The history of Athens is an interesting story in itself. And I hope we'll have some chance in this class to deal with it. I'm not sure that I am going to, but we'll try.

The other sheet is a plan of Angkor Wat, 13th, 14th century city in Cambodia, which I want to use as an illustration of the conjunction between built form associated with religion, built form also at the same time serving practical purposes.

The feng shui in China faces houses to the south. You are the lady who knows more about China than I do. Feng shui is a mystical system for the selection of the site for the location of buildings which, practically speaking, faces in the right direction. Feng shui would be hopeless if it faced houses towards the north in a climate in the northern hemisphere. The same with my description of the Hindu structure of Angkor Wat.

Let's look at some of these components of a theory. First of all, the notion of returning. If there is discrimination in places which have been struck by hierophany and therefore more significant, they would be relatively few of them. And some would be given particular mythological significance, and the idea of retaining would be significant.

Mumford says, in the history of cities the magnet comes before the container. It's an interesting sentence to remember. Movement towards cities, called urbanization in contemporary times, is a reenactment of a ritual of movement to special places-- in our case is now to secular capital cities or industrial cities or economic cities.

I will show you a slide of Olympia in Greece, the birth of the Olympic games, held every four years from 776 BC, a place to which we return in only four years. The contemporary Olympic games has also maintained the cycle of returning to a place every four years.

Hitler wanted the Olympic games after '36 to be in Berlin forever. In fact, he and Speer designed a stadium which was so large that the Olympic rules would have to be changed to fit the stadium. But that was Hitler's prominence.

Hitler also invented the idea of carrying the Olympic flame, which now becomes an economic popular piece of the Olympic games.

776 Olympic site was a religious site, which priests walked around. Hitler, in trying to manifest the assumption of the meritocracy of the Aryan race, made special attempts to link Germany under Hitler with Greece, with the Athenian culture. A lot of archaeology was sponsored by German researchers.

Hitler wished to combine the permanence and the predominance of the Aryan race. So he took the idea of taking the flame from 776, the site of 776 BC, and taking it to that point of the earth where the games would be held there four years.

There's no other significance to the carrying of the flame. There was no flame carried in the original Olympic games. It's only a creation of a manic manifestation of racial supremacy.

But there are places in the world which still venerate the idea of pilgrimage, which is still a fundamental source in Islam for returning to Mecca each year, places like Varanasi and Fatima in Portugal, places that have been sanctified in some way or other.

Pilgrimage-- I'll deal with pilgrimage in another class. Pilgrimage is a very interesting function of lateral movement between cities prior to the economic significance of economic trade.

Natural phenomena, number 2. Angkor Wat had a population of, some people argue, as large as a million people in the 14th century. I don't believe it, but there is no way of knowing. It's significance in size was based on the fact that it had enough water to produce more than one crop of rice per year.

Sometimes with that amount of water, you could produce three crops of rice per year, therefore feed an enormous population. The plan of Angkor has two large water systems-- two are called baray, B-A-R-A-Y. The west baray is about 7 kilometers in length. The east baray, about 5.

These are large bodies of water. They are precisely enclosed. The deviation of the rectangular geometry is something like 0.01% error. They are perfectly constructed water bodies.

Between the water are towers. In religious terms, in Hindu terms, the towers stand for the peaks of Mount Meru, between which are seven oceans and six continents, with Meru in the center. The lakes are the depictions of oceans.

When I visited Angkor for the first time, my guide said to me that there was no water outlet from these two baray water systems to an external water source. There's a large 87 kilometer lake a number of kilometers away from Angkor, but these are religious items, these water bodies, but they have no practical significance. Recent archaeology has established that there's a big water supply system from Angkor to Lake Tonle Sap, I think it is.

So here you have the ambivalence-- the city in creating an ambivalence of symbolism. It works symbolically and also works practically. Whoever you are, you can associate the significance with symbolism. It's a kind of curious democracy that you can choose which system you want to believe for the genuine authority for your town.

We give everybody the chance, if they have any kind of-- forget about contemporary analogies. I don't want to make contemporary analogies.

Another aspect of significance in [INAUDIBLE] we talk about archaic times is that one of the reasons we don't know about the origin of language because there is nothing about language that is fossilized. Much of our knowledge of what I'm talking about is based on fossilization. And stone fossilizes much longer than wood. The empty space where the king of Angkor Wat or the emperor of Angkor Wat sat is now a blank space because wood is deteriorated faster than stone.

Measuring the stars-- all the Babylonian cities had the archive in the [INAUDIBLE] system. The City of [INAUDIBLE] was marked after the Cancer. The city of Nineveh was marked after Ursa Major. The City of Assur-- after Arcturus. I've already mentioned the creation of the City of Celestials, Jerusalem, was created by God before the city was built by the hand of man.

St. Augustine found three versions of Jerusalem, sometimes referring to the earthly Jerusalem, sometimes to the heavenly, sometimes to both at once.

St. John-- forget about St. John. He had an extraordinary-- his size of Jerusalem was about 1,500 miles long, about half the area of the United States, so much for believing the disciples. There's a book called *The History of Heaven*, which is an interesting bit of little book.

He discusses how contrived the notion of heaven actually is and how as far as the money is his religion became stronger as Christianity took over from Judaism and Islam took over from Christianity, Islam occurs a millennium, 700 years after Christianity. The Koran has much more attention paid to it to ecclesiastical circumstances to post-living circumstances.

You could almost understand in the Koran is when I read it, how joyous it would be to be in the afterlife then in secular life. This notion of privileging the afterlife is of course criticized by Marx as one of these many critiques of religion, that it is nothing natural about making humankind suffer through the abuses of mankind in return for which you have promised ecclesiastical benefit.

Just want to rush through these so we have time. Fixing places. In the feng shui system, there are ways in which you can find a site for a town. The tradition of divining, dousing, geomancy, astrobiology, were all primitive methods, if you want to call them pseudosciences for determining a place.

A place is not to be taken by a developer as a site for an old age community. A place is one which has sacred significance in this model.

The center of the Earth, the Axis Mundi, is the center of all the centers. It is an accommodation of the cosmic model. In the Jewish religion, the Temple Mount in Jerusalem is the site of Adam, and each of the site of Abraham and Isaac's offering to God and God's willingness to stop Abraham sacrificing Isaac.

All of this is sedimented into the Jewish religion. The Temple Mount-- both Solomon's Temple and Herod's Temple are built on the Temple Mount, making this the center not only of Judaism but of the world. And Judaism was arrogant enough that until the birth of Christ it was the center of the world.

Christianity, for reasons which I'll go into in the history of Jerusalem, in the case study of Jerusalem, didn't abide by. For 500 years, the Temple Mount was a dump of Roman ruins. The Church of the Holy Sepulcher was built to turn away from the Temple Mount.

When the first members of Islam came into Jerusalem, and they wanted to choose the site for their own religious place. They chose the Temple Mount, not the Christian sites.

The Christians finally turned-- it's too much of a detail. I'd have to draw it to make it more sensible.

AUDIENCE:

Why did they choose a Jewish site versus--

JULIAN

Because they--

BEINART:

AUDIENCE: A Christian site?

JULIAN BEINART: Because they claim to have many of the same religious heritage, Abraham, many of the religious gods. Jerusalem was always considered the second or third largest, most significant in the Fatiha literature, which celebrates cities.

Jerusalem, after all, the mythology of the ascent from the Dome of the Rock to heaven is important mythology in Islam. The Dome of the Rock is one of the most significant buildings in Islam. It's on the Temple Mount. Al-Aqsa Mosque is on the Temple Mount.

There's a continuity of even violently different religious forms, excepting Axis Mundi. There's an economy of religious sites. If you're not sure about your god, maybe the fact that the previous god sanctified a place. It's like buying into a firm that's had a good economic record, even if you are in competition with the firm itself.

AUDIENCE:

Were they expecting a grid system by doing that?

JULIAN BEINART: I don't know. We'd have to get in when we do the case study in Jerusalem. And I can talk about it in more detail. We can talk about-- there's only one place in Jerusalem where all three religions are represented vertically. It's the Christian, Islam, Jewish-- the Tomb of David, the Christian Last Supper, and the Islam Ottoman Manifestation above it. I'll go into that with diagrams and show.

How are we doing? OK, we've got a few more minutes. Another aspect of this kind of city is the definition of boundaries. Boundaries and ritual perambulation-- the celebration of the Kingdom of Phnom Penh involved people circulating around the town. Joshua and Jericho, a circuit of the white walls of Memphis for each new coronation of a pharaoh. A Jewish synagogue where you perambulate around the central-- not the Torah, but the central locus from where the prayer is read is a perambulation. Romulus in the circular rampart traced by the plow to ensure the safety of Rome. The Roman Mundus, the meeting of the Earth and the lower regions.

The Laws of the Indies, which built much of Central America and St. Augustine in Florida all the way to Los Angeles, says that the settlement should have a stockade, even though there is no fear of military action from residents. The idea of mocking away your world begins and ends is significant.

We have a problem about cities now which dribbled into some other form, then what architects consider to be the central site of a city. The bimodal or the bi-- I don't know if it's exactly bimodal, it's not bimodal. It's the concept of having more than one allegiance, which is baffling.

Cities are always, as I quoted Marx, class, cities presume any difference between the country and the city, that as long as that mark was clear and understood through walls, everybody was happy. Once the city expanded beyond the walls, we have been left in doubt. This model made no place for doubt. [INAUDIBLE] the center is circumvented by a form.

There's another pretty curious example of this kind. In Dorset, in England, there are stone mounds which, seen from the air, form giant forms. In southern Peru, the Nazca lines are huge conglomerates of huge spiders, identical, these lines up to 900 feet long. In Glastonbury, in England, there's a planispheric circle 10 miles in diameter. There's a Gemini figure made up of field forms. These unexplained natural devices, which must have in some ways had to do with a system of cosmic identity.

The geometry of the land. The Romans, despite their great rationality, used the system of augury to find the right place in the countryside from which to survey could begin.

They ended up with the Decumanus Maximus being the east-west, and the Cardo Maximus being the north-south axis of a town. This directional cardinality occurs in a number of places. The Kaaba is depicted with four quarters and diagonal lines running to the corners northeast.

The Union Jack is a flag of the same plan. Not only does it symbolize the center of the Axis Mundi, but it depicts things, that you get the quartier in France as a part of the city. You get the notion of the headquarters-- what is the headquarters? It's a Axis Mundi in military terms.

I'm tempted to, in this case, just do a drawing. This is an early symbolic map of Mexico City. The Aztec leader's name is Tenoch. He's depicted as next to an eagle landing on the water with four streams, of course, suggesting a connection outwards to the rest of the world.

I choose this as an example of this kind of figure. I choose it for another interesting silly reason. What is the name of the first city in the Bible, the Christian-Jewish Bible?

AUDIENCE: Enoch?

JULIAN Why do you know it?

BEINART:

BEINART:

AUDIENCE: It's Cain's son.

JULIAN Yes.

LIAN

AUDIENCE: And then it's that name minus the [INAUDIBLE].

JULIAN

Why do you think there's a conjunction in the name?

BEINART:

AUDIENCE:

I have no idea.

JULIAN BEINART: I haven't the faintest idea either. The first city in the Bible is curiously called Enoch. What is Enoch? It's the name of Cain's son.

Adam's Hut in Paradise, Joseph Rykwert's book, presumes that paradise was perfection. There was no need for shelter. There's no need for architecture in paradise. We have changed that view, of course. Architecture is important for everything.

Cain is banished from paradise. He's a murderer-- he murders his brother. He forms the first city, the first cities of crooks, murderers. The first urban community in the Bible is a community of retrogrades, of people who have been expelled from paradise. The Christian view of this is that there must be something extraordinary about the city and goes into the question of salvation, and so on and so on, which I don't understand.

But Enoch is the name of the town. The whole idea-- Kevin Lynch was always fascinated by the idea of why people name towns after their children. And he had a kind of convoluted theory, which I can't remember as to why that occurs.

But here, Enoch is the first city in the Judeo-Christian enterprise, a city of evil, although it's been sanctified in other ways. But this is Tenochtitlan, having a assuming a similar kind of reach out, an Axis Mundi, where the most important thing takes place, the eagle is a symbol of some kind, in any case, the leader is next to the eagle. It lands on the water. The site is a lake.

The cactus, for some reason or other, is the permanent prodigious natural form. Do you know anything about cactus? I never know to explain the cactus, anyway.

The second last of these items is the consciousness of place. I haven't got time to go into this phenomenon except to tell the story of Levi-Strauss' telling in *Tristes Tropiques*. Levi-Strauss studies the Bororo. The Bororo are a primitive group of people in the Mato Grosso in Brazil.

Much like the Dogon in Africa, they are a kind of naive people. The Dogon do wonderful sculpture and put their sculpture often in places for posterity.

Bororo is a system in which the town or the village is circular. Each place has a particular identity. And what are called moieties. There's a belief systems are related to the place that you occupy.

When the Salesian missionaries came to missionize the Bororo, they replaced the circular locations with rectangular constructions. The Bororo lost not only their sense of place, but their sense of identity. So responding to the existence, the psychic existence, was their position in place.

We have elements of it today in our religious life-- those of you who have religious lives. The position of place in front of the altar in relation in front of the cross, the carrying of the cross, and so on.

There's a story in South African history of the famous battle between the Zulus and the Afrikaners in Natal in which the versions of history are very different. The Zulus claim that the white settlers tried to get into the women's quarters, which are highly separate identities in a circular system.

The Afrikaners claim that the white people were attracted to the center of this town and were then killed, leading to the famous Battle of Blood River, and so on and so on.

Numerology, which I won't go into, if you read the cosmology of Chinese cities, we should have enough. The nine square system, figures adding up vertically and horizontally to the number 15.

I'm throwing at you a lot of little stories, fragments. There's no coherent overall text on what I tried to describe. As for what it means today, it's up to you to-- or up to us to make sense of this.

We still have people standing before judges. We still have a significant night. Why build a Tower of Babel 300 feet high? Why built the Temple of the Moon. It's the Temple of the Moon. In Tenochtitlan on the Street of the Dead, to the same height and put the priests on the top.

There are many fragments of this which make up an idea of a kind of city which is no longer prevalent in our thing but still remains to the extent when I said in our last class that we cannot under Darwinian science explain phenomenon such as consciousness or mind. Quoting from a recent book called *Cosmos of Mind*, which is a critique of Darwinian science, "architects more than planners, by and large, have a sense of the innate importance of experience and believe through working at it and every day observation and studying things you can approximate good solutions."

Whether a street in Fifth Avenue in Manhattan has cosmic significance, I don't know. Whether the Macy's parade adds to that significance I don't know. I certainly know that the parade in Madurai is different from the Macy's parade. This Macy's parade is not a godly phenomenon-- it's the experience phenomenon.

As we go on in this case, I'll be fussing around with this epistemological problem. How much is assumed in our construction of the form of cities in the rational system, which we've learned since the Enlightenment? To what extent do we consciously or how much do we attempt to maintain an interest and extend in our explicit interest in symbolic form?

Symbolic form is a powerful measure of the success of this generation of cities. There's no question that all the evidence suggests that our cities start with a consciousness and expression of religious form. There is the stories. You have to believe me-- no reason to.

Let's look at some pictures. This is Kevin Lynch's depiction of the sites of cities that we're talking about, Mesoamerica around about 1100 BC, 700 BC, Egypt, well, 3500 BC, Jericho, 8000, Sumer, 4000, Indus, 2500, Shang China about 1700 BC.

Next. OK, this is a painting of the town of Catalhuyuk, which Jane Jacobs claims to have been a center for the production of obsidian and used the agricultural area around it as servicing the industrial function. The curious thing about another depiction, which is on the other slide, is that there is hardly any public space at all. These are obviously alleys from one group of houses to another.

AUDIENCE: What's the name of the [INAUDIBLE]?

JULIAN Catalhuyuk-- C-A-T-A-L-H-U-Y-U-K. It's in Anatolia. I don't know whether it's in Irag or Turkey.

BEINART:

AUDIENCE: It's in Turkey.

JULIAN It's in Turkey. Catalhuyuk is Turkish, isn't it.

BEINART:

AUDIENCE: There is a book by Bill Bryson called At Home where he talks about the ceilings and how peculiar are the

entrances and exits between buildings. How is that reflected in the map? I'm trying to--

JULIAN I don't know. These maps, like the map in just outside Oman, the first map of Jerusalem, are very abstract

BEINART: depictions. This is a wall painting.

AUDIENCE: [INAUDIBLE]

JULIAN And the other one is an abstraction. I would place very little faith in the observations of these towns. Archaeology

BEINART: is safer, and I don't know how much archaeological investigation has been done at Catalhuyuk.

AUDIENCE: That's why he talks about double spaced in between and a [INAUDIBLE] grid.

JULIAN I don't think it's Jane Jacobs, but somebody has spoken about the roofs as being planes of utility. I don't think

BEINART: there's much to be gained. It looks like a contemporary drawing for a squatter settlement.

Next. Returning to particular place. Banaras is on the left, Kaaba on the right-- an annual pilgrimage, an every

day pilgrimage.

Next. Catalhuyuk-- the notion that the water is the replication of the ocean and the vertical building the depiction

of a mountain. Mircea Eliade often talks about mountains and cities as being center in this kind of cosmic model.

Next. One of the reasons for the towers is because people have no capacity to span any large distance, so the

distances are very small. Here is a parade of stone figures on a sports field, where it's just behind this. The royal

palace doesn't exist anymore because it's built out of wood.

Next. The phenomenon, and this is Chichen Itza.

Next. Chichen Itza, Masada, one of Herod's vacation homes built on the side of the hill. Again, the notion of

building on top of something. The Romans finally conquered Masada by building a earth bridge to the top.

Next. A depiction of the Babylon tower. Not a very good one. And the mixture of astronomy and religion in the

case of Tenochtitlan. Equinox sunrise over the Templo Mayor.

Next. Here's the city of the Dipper. The constellations Ursa Major and Ursa Minor superimposed in the plan of Han

Dynasty, Chang'an. The popular belief of subsequent generations that the city was consciously designed to this

pattern is unsupported by any independent event, nor do the positions of the imperial palaces coincide with that

of the pulse star, and so and so. There's some doubt about this, but it's a nice drawing.

Next. The astronomical observatory in Chichen Itza. A temple town in Southern India. Now in each of these vertical constructions is not an astronomical tower, but there's a regularity of the vertical phenomenon throughout the town depicting something or other.

Next. a gnomon, a tool used by the Romans for finding a propitious site. And the geomancer's an astrobiological instrument for choosing the right site.

Next. Chinchiri in Anatolia. Interesting, the first town-- settlement is fortified with a wall that is small that surrounds the town as intimately as possible. When the town is economically successful, it builds itself in the first century before Christ a surrounding wall which is based on a superior geometry, a perfect geometry, a geometry which can be associated with centrality, with permanent symbolic enclosure of high order and so on.

Here the town of [INAUDIBLE] in the 1st century BC. It used to be in the south of the USSR-- I don't know where it is now-- which has an astronomical center. It has astronomical observation site in the center. And the town follows the pattern as it moves outwards.

Next. The town of Edfu on the Nile. Peculiar. A marvelous conjunction of light and shadow in the marking of a special place. Edfu is the town. It's a small town on the banks of the--

AUDIENCE:

Of the Nile.

JULIAN BEINART:

But you have replications of this in Luxor and in Karnak and so on. I chose that one because I happen to photograph it myself and I was still struck by the conjunction of the positive light in the form of the towers.

Here's a typical perfect Chinese town. The emperor is in position number 1. The subsequent position's in 2, 3, 4, 5, 6, 7, 8. But the town is symmetrically divided between right and left. There's a color for the right, there's a color for the left. This is a town which is perfectly controlled. And its form is a pristine object for depicting symbolic security and actual security.

Next. Jerusalem is the head of the three continents. The Temple Mount, which I will describe in much greater detail as we go on in this class.

Next. Oh, here we've gone out again. Those are the formation seen from the sky in Glastonbury and Dorset.

Next. The map of Mexico City and the actual first settlement.

Next. The moiety town of the Bororo, the position of the clan system, and moiety A and moiety B, specifying the significance of place. Place is not arbitrary. Place is connected to fundamental existence.

And here in the town in Cameroon we have a similar disposition of man, wife, man, man, man, man, man, man, mife, wife, wife, and so on. Not to be mixed up. No cohabitation.

Next. The depiction of place. This is the Gate of Heavenly Peace, the marker of the distinction between the whole Heavenly City and the Sacred City, marked here by a more recent emperor.

And here are the location of the Mausoleum to Mao on Tiananmen Square, bereft of any disposition of location which is fundamentally wed into the system of the town. It is anywhere. It looks as if it could be anywhere, and it doesn't.

The strength of that pattern on the left is infinitely larger than the strength-- the construction of the right is not wed, is not bred into the large identity of the city.

Next. It could be anywhere. Let's just pass this. This is a feng shui problem.

Next. Depictions of the system of approach to the central imperial position in the city. Here are the idea of a set of boxes, revealing more as you go into the system.

Next. The mandala, the central premise of the Indian system. A depiction of the body of the Brahma in a system of subdivision of land here.

The Hindu religion has a number of texts about this siting of place. The south Shilpa Shastras. Here you see some depictions of the way in which the basic mandala system can be demarcated.

Next. Let's take one of them. The village [INAUDIBLE] is appropriate for retired life. The village is one, two-- five parallel streets from east to west. Can you imagine us living in a system where we control the environment so religiously that a developer in Florida would be told to build a religious center on this basis of a mandala construction. It's beyond our belief system.

Next. Jaipur.

Next. In Madurai the rituals performed regularly throughout the year conforming to the town's structure. So that when you are performing a ritual, it is territorial-- you're passing through territory. Number 2, it is reinforcing your notion of the plan of the town.

What do we do today to reinforce your understanding of the plan of Boston? It's unnecessary. Maybe if you're driving a car and you move along the river, there's some sensibility about the movement from the suburb to the center of the city.

Next. The Street of the Dead. Here's the vacant geometry of a typical settlement in the Mayan world. Apparent lack of axial relationships, the so-called vacant city because there's very little evidence the way people lived. Again, what is left are elements of stone construction, monument. I think that's the lot.

On Tuesday, we will look at some examples of a completely different formal system, one which is open-ended, loose, not regulated by a central force. So, have a good weekend.