JULIAN BEINART: I want to focus on the American city, the contemporary American city, and the anomalous controversies which range both in the profession and outside the profession as to what the condition of the American contemporary city is, including everything from smart growth to new urbanism to the spread of [INAUDIBLE] city and so on. What I'm going to do is I'm going to give you a number of inputs. Some of them you will disagree with completely. Some of them you will agree with depending on your position.

I'd like you to listen to the comment if you want to, but I will continue this on Thursday first focusing a little more on decentralization technologies and climate change. I want to switch to another complicated project. That is the contemporary American city. It is, again, a project about which there is very little agreement except like cultural groups who have vested interests in believing that one form is superior to the other.

Cities have always expanded when they could. Horizontal land is cheap to build on provided you can get there, provided you don't have obstacles like defense, fortresses or topography or anything else. Assisi was built on the slope of a hill and all of the valley land could be used for agriculture. It was a very smart move.

It also provided better climate high up in the value and also provided protection if necessary. There was water around the city. These are all logical decisions. The American city was relatively contained until relatively recent times. I'm just going to go through and give you a sketch of the history of the American city.

Cities have always expanded horizontally and is covered by walls natural barriers or the inability to communicate over distance. Policies such as greenbelts or the exclusion of immigrants, the 16th and 17th century attempts to restrain the growth of London to exclude the poor or the apartheid restrictions on Black immigration in South Africa have not been able to maintain themselves over time. Recent urban policies have included allowing low density suburban expansion, building dense public housing on the periphery, establishing new towns or allowing poor immigrants to squat in minimally controlled settlements.

American cities was chosen in the first of these models. The suburbs in the early years of the 20th century were made up of large lots and made possible by the invention of the telephone and pre-automobile streetcars. The telephone-- *The Socialist* [INAUDIBLE] *Telephone* is a book which you should read. I'll talk about it more on Thursday's class. The telephone was introduced largely for rural populations to feel less distant from the rest of the world.

Before World War II less than half the nation owned their homes, and less than half the housing stock was in single family homes. After the war, the percentage of families owning their own homes jumped from nearly 40% in 1940 to 60% in 1960 due to a number of things, high incomes, the Federal Highway program incentives for home ownership as a stabilizing social force, Federal Housing Association, the Veterans Association, financing, and other factors. It's this combination of factors which created and still creates suburbia. It's not due to technology.

I'll give you a piece that I wrote attacking my Manuel Castells for some of the stuff that he was advocating. What has the cell phone done to the use of public space? Bill Mitchel, unfortunately, deceased now was dean here and wrote books about virtual technology affecting space was wrong.

AUDIENCE: Why?

JULIAN BEINART: Well, what has happened is that people can communicate with each other much better and much faster and much more frequently, but it doesn't matter where they are. You don't have to go into the Piazza to call somebody. It is a form of ubiquity rather than a form of concentration.

AUDIENCE: But there are some activities that before that technology came or the internet or data, wireless, there were activities that were heavily linked to a place. They had to be done there, and now you're not forced to do so.

JULIAN BEINART: Exactly you're agreeing with me. I asked you what the cell phone is contributed to the increasing use of public space. In what form? I don't understand the answer.

I can call you from here or I can call you in an office down there and say let's meet-- let's meet for a drink at Rockefeller Hotel at 8:00 tonight. What's different? Only the speed is different from me telephoning you in the morning or sending you a letter or sending your message via pigeon or whatever form of communication we used prior to cell phones, but the density of Rockefeller Center doesn't depend on the advent of the cell phone. The cell phone is more likely to be a ubiquitous distributor of the space used than a concentrator.

The same argument goes for computation. The number of people in the United States who work at home is measured in a number of different ways. If you have a cupboard and you have a computer in your cupboard, you work at home whereas in fact all you do is you most of the time play games on your computer and don't do any work at all, but you measure this working at home.

The number of people working at home is an uneven commodity. I was in a conference in Texas where they were discussing this phenomenon, and the real estate people were advocating all kinds of things. Let me just finish this, because I forgot to go through the reading list with you-- at least the handout with you.

Levittown built 150 standard 25 foot by 30 foot cottages a week, each costing $7,900 requiring with a government subsidized loan a monthly payment of $58 for 25 years. These suburbs attracted the planned shopping center and architecturally unified development with large amounts off-street parking. Suburban growth has broken the link between city center and its outskirts. In 1975, people who commuted from home to work in the suburbs outnumbered people who commuted to the central city were almost 2 to 1.

I wonder if I should take a break. Outlying suburbs now called urban villages or [INAUDIBLE] cities are more diverse in land use, have larger houses, in 2,000, the American house averaged over 2000 square feet, twice as large as it was in 1970. And they have become different cultural enterprises than the post-world World War II suburb. I'll go into that a little while later.

Private automobile traffic continues to increase from 1 billion miles in 1970 to 1.5 billion miles in 1987. And road space over the same time decreased from 61 yards per vehicle to only 31-- to only 39. While new cars are cleaner, the condition of the air is worse in part because of the increase in car use.

Now these figures are not updated to 2000. Laura, I want you to tell me what the recent figures are. You are our only transportation consultant here. These figures don't include for the increase in the purchase of smaller cars, hybrid cars, and so on.

But recent calculations of automobile distance traveled largely on social trips, not so much on journey to work trips, because journey to work is not very easily served by transportation. There's a diagram in one of the package I gave you by Robert Cervero, the author of *Transit Metropolis.*

Inner city had this form, and majority of the population worked in one place or encountered social activity in one place. This system, the line haul, was relatively elementary be it a street car, [INAUDIBLE], or later on a subway. The line all depends on accumulating people for the space in between the various line haul, and we get along good.

The problem, once the generation of trips starts being this-- to work centers which now proliferate outside the centers of city and form a random pattern. You get the problem of how to introduce public transportation into the distributed system, which is much more difficult than the line-haul system.

We did a project when I came to MIT trying to use dual-mode technology to have the same vehicle which operated on the line-haul leave the line-haul system operate on the distributor system and then join the line-haul system again. It involved a small vehicle which had the capacity to run on the rail and also to leave a rail and run on the land.

The distributor system would be serviced by the telephone. In other words, you would call and say, I want to go to downtown Boston. And it would say, wait. In 2.6 minutes time, you'll be picked up. And you'll be in Boston in seven minutes.

This project to link the distributor and line-haul system to make one hasn't been applied anywhere in the world. It depends on too many variables, and it's too expensive. But it is technically feasible. In the meantime, we have Cervero's diagram, which tries to make a set of concentration points outside linked in various ways, with small connectors out from this involving one of the problems of public transportation. That's interchange.

What an automobile provides you is one line to service, even if it's slow. You get into a car, you're in charge. You can decide where you want to go. The problem of moving from a fast underground line to a surface bus line is problematic. If you have connecting systems with a train running on the same level in a terminus with a bus system or many-rail system, you can simply cross. Some of the European systems are of this kind.

The chances are that you will not use the-- but can you imagine a system in Los Angeles today where you have to compete with an automobile on a freeway by introducing a bus and a train system as combining. The one is late. You miss one, you are to wait a half an hour for another one.

Public transportation is available only as a function of private use. The cost of maintaining a superb public transportation system depends on paying for it either through subsidy, which is never enough, as in the case of Boston. MBTA is constantly bankrupt.

And one of the things that congestion pricing has shown in London is that if you take a toll of private automobiles before they enter into a central space, you reduce the number of cars that are willing to pay the x number of pounds that it takes to enter the space, meaning that you can-- this toll doesn't pay for-- help the public transportation system enough. But what does happen is that, because the roads in this space are less heavily traveled by cars, it means that the bus system can move much more speedily and accurately.

I think after x number of years of the London congestion pricing system, they've introduced something like 100 new buses running on time and with air conditioning and all kinds of conveniences. 16% of carbon emissions have also been reduced as a result of congestion pricing. Congestion pricing is one of the new artifacts of the large metropolitan area. It hasn't been applied in New York because of a conflict between the city and the rural rest of the state-- a basic conflict in the United States system of government. We still depend, in the Senate, on votes of people in Idaho.

I was just thinking-- you know, we're talking about cities and having problems. How long have cities existed, including the first permanent settlements-- say, Jericho, 8000 before Christ? How many years is that to today? 20,000 years? What are we now, 2000? Add it to 8000-- 10,000 years.

It took 2.6 million years for human beings to develop a brain large enough to think. And we're talking about 12,000 years, which is nothing in time. And we're expecting perfect answers to communal settlements. So relax.

[LAUGHTER]

We teach-- I say this because I'm an architect and have taught design studios endlessly. We tend to idealize the world that we-- and smooth the world round. I remember when I worked for an *Image of the City*-- it's a research book-- with Kevin Lynch. Gyorgy Kepes, his compatriot, asked me to take a walk down Washington Street on a busy day and just note all the things that I saw.

I made this tabulation of all the things that I saw-- where the sun was shining, what noise there was, what signs there were, and so on. And I came up and presented my work and said, this is such an unbelievably confused Washington Street. I don't know anybody makes sense of it, because at that time, all urban design was Victor Gruen's work, and how to use modernism to clean up conflict.

Shopping centers had unified signpost control, and here I was trying to say the real world is infinitely complex. And yet, because we have 10 to the 12 neurons in our brain, each connecting to 5,000 other sites, we have the electricity, electronic system, which can manage such complexity. I think it's a message worth remembering.

Maybe it'll become much clearer. But I think working as you do as an urban design in the midst of a dialectic of opposites is an intelligent place to be. I don't know the resolution in the world's global economy between the idea that what is yours is yours, and what is yours belongs partly to a group of people, as Henry George would have liked to have argued.

In my life, the debate between socialism and capitalism has not abated. There have been modifications and conjunctions and attempts to develop alternative models. But essentially, most of you live in the capitalist world. You will be struck between the premise that you live in a liberal state.

You are allowed, in the liberal state, to choose what system of communication you wish. In this case, you will choose an automobile. There will be no taxation on your automobile use of street except what you pay for gas. And gasoline taxation for the use of the roads is minimal.

So what do you do? I'm just arguing-- you've got a decentralized city. You've got a spread city. I've argued that we need enormous incentives for people moving out from the dense center to horizontal space outside-- sometimes very long distances, sometimes more compact.

I'll give you a piece that I wrote on the change in the American downtown. There's been a homeostatic relationship between the American downtown and the suburban world. American downtown is now increasing in value and attracting more and more people. Only 17% of people in American downtown are under 20.

So the world is still one in which most people in the American city seeking to educate their children will move to suburbia-- often in the direction of places where suburban, because of residential real estate taxes, are paying for good schools-- rather than staying in the inner city. If you stay in the inner city in the Americans, and you have enough money, you pay for private school. So if you live in the Back Bay in Boston, you don't rely on the state to educate your children. You pay enormous subsidies to educate your children.

It's all crazy. It means that the incentives for living in suburbia are established very quickly and very difficult to dislodge in a free society. I don't foresee the American city changing its shape significantly.

AUDIENCE: I think it's-- I mean, I lived in DC for two years, and it's changing already there. And the other factor that I don't think people are considering enough is that poverty is moving to the suburbs and that's going to create a really fast flood.

JULIAN BEINART: Well, one of the arguments that I would have gotten to if we can get through all of this stuff, which is just stories about the situation, is that the fetish with home-ownership in this country has reduced the capacity for people to rent. And rentership allows much greater mobility than home-ownership. Home-ownership creates conservative investment in which you don't want new people to come in.

So you limit the building of new housing, especially affordable housing, because the great virtue that Herbert Hoover and Franklin Delano Roosevelt felt in stabilizing society through home-ownership is producing a model whereby the largest savings you can make in your life are the profits between the cost of your house on purchase and its sale. And that becomes an enormously conservative commodity that you have to maintain. Do you want a black family moving next year a house in Newton? Well, Newton is a liberal suburb, so it wouldn't matter. But in Des Moines, Iowa?

There have been a number pieces written on the difficulty now for young families to move into certain suburban sectors where the suburban tax base doesn't want to spend money on building schools for young immigrant families. So this decentralized, what Melvin Webber calls the spread city is not a simple proposition about having free space and unlimited automobile access.

Let me just go through this sheet of stuff that I gave you. The first is a controversial piece called "Prove It-- the Costs and Benefits of Sprawl." It's by two University of Southern California economists who contend some of the premises of densifying the American city. I'm not going to go through it in detail. You can read it. It's very well-established as the counterpoint, the pro-sprawl argument.

After that, just some newspaper cuttings-- they're now a bit dated. But it argues that the American house has doubled in size. The automobile numbers have increased. And whilst the emission control legislation is worse, Lester Thurow's next piece on the next page is an antidote to electronic commerce, the spread of electronic commerce, arguing that it's being counted by diversification. You go to a bookstore now, and it's a restaurant, as well.

One of the unresolved pieces of this whole puzzle is how human beings value face-to-face contact as opposed to machine-interposed contact. Melvin Webber's piece "Community Without Propinquity," which I'll give you on Thursday, is one of the classic pieces of writing, which argues that, in the modern city, you can maintain community despite distant geography.

And the last piece is a polemic from the New Urbanists. Now, given what I said are some of the problems of the decentralized city, let's look at what they offer. Half of this is untrue. It's just lies. But in the traditional of architecture pamphleteering, it is common to make statements which, if you say them aggressively enough, people will believe them to be true. Corbusier was a master at using words.

"By bringing most of the activities of daily living into walking distance, everyone, but especially the elder, gain independence of movement." What are we talking about? The densities that the urbanists proposed or the developers will minimize argue that Americans will walk seven minutes, at most, to a destination.

At the densities that you build in a decentralized American suburban situation, admittedly, there are as many attached houses in the United States as there are single houses. You can probably develop a market for a video store and a 7-Eleven. So the notion that you can wander all over the place purchasing whatever you want to is rubbish. It's nonsense. It's just pamphleteering. It should be stopped.

"By reducing the number and length of automobile trips"-- how do you reduce the number and length of automobile trips? If it were easy to do, we'd all be advocating it. Well, give me an example. Were you going to say something?

"By providing streets and squares, the pedestrians and neighbors walking come to know each other." There's evidence from Putnam's work in *Bowling Alone* that Americans who live in apartments get to know each other as well as people living in houses, that neighborly relationships are the same independent of the condition of the block that you live in. It's probably true that the poorer you are, the more you depend on your neighbors. So this is nonsense.

"By providing appropriate building concentrations at easy walking distance from bus stops, public transit becomes a viable alternative to the automobile." We can't finance the MBTA in Boston unless we pay enormous shares of money to-- which probably would be justified in a decent economy, but we're not doing it. So what is the New Urbanist project for doing this?

AUDIENCE: So I do think that, if you are walking distance from a bus or subway, you don't need a car. You can [INAUDIBLE]

JULIAN BEINART: But you need enough people to do it to pay for the cost of doing it. You can't run a public transportation system with six people in it.

[LAUGHTER]

It's unfortunately true. It's as true is eating carrots.

[LAUGHTER]

As true eating carrots are healthy for you, which I don't know. I don't eat carrots.

[LAUGHTER]

But the cost of public transportation can only be justified by seeing it as a socially important act-- keeping the air cleaner, having a much greater sense of belonging to a public, and so many positive attributes. But you can't do it at 10 people per acre. 10 people per acre is a tenth of an acre lot. If your family size is three, it's 30 people per acre.

30 people per acre generate one trip. If your school happens to be on a subway line, or you're close enough to walk, give me a break. Now, you're trying to say something. Tell me what you're trying to say.

AUDIENCE: No, I agree with the science. It's completely-- it's not possible. But what I want to say is that when there is also easy way for a car [INAUDIBLE] or moving by car, which I think is the case in Boston, then you can choose. And it's also-- it's as easy to move around your car and park and go on these superhighways that take you everywhere really fast.

JULIAN BEINART: Of course.

AUDIENCE: Then it's hard to decide to take the subway. But if you're in New York, where parking is such a hassle, then of course.

JULIAN BEINART: It's a hassle in Boston, as well.

AUDIENCE: No, but it's worse in--

JULIAN BEINART: In Manhattan, yes. People per capita walk in Manhattan more than they do in any city in the world, because of the restrictions on other forms of access, although Manhattan is a very good public transportation system. Well, it improved with the Second Avenue extension.

Why does Manhattan have a good subway system? London has the best subway system in the world. Why?

AUDIENCE: Because it was developed first.

JULIAN BEINART: Yes, correct. In London's case, it was developed early. No country in the world can afford to build a London transportation system today. Its way of predictability saved the society enormous amount of money. The subway system and the bus system in London cover almost every-- I think the average distance-- I remember saying it when we talked about London-- is very small.

Density is one of the argued solutions. You put more people into space, the more of them will likely be clients for using public transportation. And there's nothing that helps public transportation more than clients. It's such an obvious algorithm that the difficulty is knowing what to do with it. And that's where next-- the class on Thursday is going to ask you to come up with some solutions.

Let's say the following. American cities are going to remain largely automobile cities. Rest of the world will follow to the extent that it can because gasoline prices in the United States are a fraction of gasoline prices in other parts of the world and the automobile highway system has been subsidized by the state to an enormous degree under Eisenhower, starting with Eisenhower, and so on.

We don't pay for the roads that we use. A commuter living in Lexington passing through Cambridge every morning past my house doesn't pay for the cost of maintaining their street in Cambridge. It's free. We've gotten used to having free automobile-- but to get agreement in a country as large as this takes a lot of-- can you imagine the opposition?

I don't know what the senators from Texas would vote, in favor of or against taxation on automobile use, because we are using fuel produced in Texas. And the automobiles use an enormous amount of fuel. So does most of the transportation system in the United States. We service most of our delivery by truck, not by rail.

We have enormous difficulty in building rail. You just need to read about the controversies in California at the moment trying to link San Francisco and Sacramento on the way to Los Angeles. It passes through Palo Alto, and there's no place to put it in Palo Alto. And land values are so high in Palo Alto that you can't do anything politically about it. God only knows how it's going to be resolved.

Anyway, there are different kinds of suburbs. The suburbs that originally-- that Levittown was built on had a daily population of women, a single car, a station wagon. A Chevrolet station wagon's what people had. They had meatloaf for dinner. There were no restaurants and so on. *The Organization Man,* the book by William Whyte, describes the conditions in Park Hill-- not Park Hill. I forget the name of the suburb of Chicago.

He's in this piece in your reading list called "Stressed out in Suburbia," writes a description of the suburb, the new suburb of Naperville, just further away from Chicago, where all the restaurants are ethnic restaurants, all the stress in the community is on children getting higher grades. So American suburbs have grown in wealth. Houses are given French names. The neighborhoods are all given foreign names and so on. It's quite amusing.

Let me just pick up some other things. Robert Putnam from Harvard has written a book called*Bowling Alone,* which causes a big surge of interest in social science. He claims that what has happened in the United States-- and he's not blaming suburbia for it-- is that there's been a much-- strong tendency towards individualism as opposed to belonging to a community or sharing.

He quotes endlessly. Religious affiliation has dropped. The United States has more houses of worship per capita than any other nation on Earth. There's been a modest decline in all church-related groups over the past 20 years. Union membership has been falling for nearly four decades. The Parent Teacher Association has become-- which has always been an important form of civic engagement in 20th century America, has declined from 12 million in 1964 to barely 5 million in 1982.

Volunteering for traditional women's groups, the League of Women Voters, the Red Cross, Boy Scouts, all have dropped in attendance. He counters that by talking about groups that have increased in size. I didn't know this, but the American Association of Retired Persons, AARP, has grown exponentially, from 400,000 card-carrying members in 1960 to 33 million in 1993, becoming, after the Catholic Church, the largest private organization in the world.

When he asked in his social survey in 1974, "How often do you spend a social evening with a neighbor?" the proportion of Americans who socialized with their neighbors more than once a year has slowly but steadily declined over the past to two decades from 72% to 61%, whereas friends who do not live in your neighborhood appears to be on the increase. Oh, we have some time. I looked at the wrong thing on my watch.

The use of the automobile, in metropolitan terms, is interesting in another respect.

[DOOR OPENS]

What's--

AUDIENCE: It's 2 o'clock.

JULIAN BEINART: Oh, it's 2 o'clock. I'm sorry. I've got a dull watch.

[LAUGHTER]

I'll continue with some more evidence for you to put into your mincing machine. But I expect some feedback as to where you stand. In the end, maybe it's simply where you stand that matters.

Many of you architects will favor densification of the city despite any notion of how it can be achieved in a liberal society. Maybe an American city is just like American democracy-- slow and full of pitfalls, not doing anything about gun control when it's obvious that it should, And yet it's survived.