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## City Design Lecture Series: Linking Transportation and Land Use Planning

Mark L. Gillem  
*University of Oregon*

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**OTREC**

**FINAL REPORT**

OREGON  
TRANSPORTATION  
RESEARCH AND  
EDUCATION CONSORTIUM

## **City Design Lecture Series**

**OTREC-ED-10-03**  
**May 2010**



# **CITY DESIGN LECTURE SERIES**

## **Final Report**

### **OTREC-ED-10-03**

by

Mark Gillem, PhD, AIA, AICP

for

The Oregon Transportation Research  
and Education Consortium (OTREC)

P.O. Box 751  
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**May 2010**



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## EXECUTIVE SUMMARY

There is a pressing need to provide broadly accessible education on the benefits of integrating transportation and land use planning. In response to this need, the University of Oregon and a variety of co-sponsors hosted a City Design lecture series in Eugene.

The objective of this multidisciplinary educational program was to host a lecture series that will inform area professionals, students, and the broader public about the need to consider transportation and land use strategies in concert that can jointly create more livable cities with enhanced safety, reduced congestion, greater mobility choices, and more housing variety. This lecture series meets the Oregon Transportation Research and Education Consortium's (OTREC) goal of encouraging "... multidisciplinary educational programs and experiential learning across disciplines in the transportation field."

The lecture series brought a variety of nationally known experts in the fields of transportation planning, urban design, and transit-oriented development. These lectures were free and open to the public. Attendance was required of University of Oregon students enrolled in urban design courses. Over 600 participants attended the lectures. In addition, the videotaped lectures are available from the University of Oregon's website as podcasts.

### Dan Solomon: **Rich Admire Richard Meier: Whatever Happened to Modernity?**

Dan Solomon, FAIA, is the principal of Solomon-ETC, a WRT Company and author of *Global City Blues* and *Rebuilding*. His firm has designed award-winning projects across the country that incorporate environmental sustainability, socio-economic diversity, and transportation efficiency.

### Paul Crawford: **Shaping the Public Realm: The Role of Form Based Codes**

Municipalities across the country are recognizing that traditional zoning codes do not support the types of buildings and open spaces appropriate in today's transit-oriented developments. They have replaced these outdated rules with form-based codes in an effort to regulate the form of development necessary to support a safe and vibrant public life. Paul Crawford, FAICP, discussed recent applications of this new zoning concept and its applicability to projects that support livability and transportation choices.

### Elizabeth Macdonald: **Building Multiway Boulevards**

Multiway boulevards are one tested approach that can meet these diverse demands. Elizabeth Macdonald, a professor in the Department of City and Regional Planning at the University of California at Berkeley and the co-author of *The Boulevard Book*, discussed her research and practice experience in designing and building multiway boulevards.

### Shelley Poticha: **Building the Livable Region: Transit-Oriented Development and Development-Oriented Transit**

Shelley Poticha discussed how such development could enhance regional livability. She is the President of Reconnecting America, a non-profit organization working to integrate transportation systems and the communities they serve.

Clare Cooper Marcus: **Clustered Housing, a Sense of Community, and the Needs of Children**  
As Oregon cities search for alternatives to single-family housing at the metropolitan edge, the needs of children cannot be overlooked. In this lecture, Clare Cooper Marcus discussed how to make housing in the city appropriate for families. She is Professor Emerita in the Departments of Architecture and Landscape Architecture at the University of California, Berkeley.

Galen Cranz: **The Changing Roles of Urban Parks**

In this lecture, Galen Cranz discussed how urban parks have evolved over the last century and, how, in their latest role, these places have become essential components for cities interested in issues of sustainability. Galen Cranz is a Professor in the Department of Architecture at the University of California, Berkeley. She lectures widely on urban design issues and is the author of *The Politics of Park Design*.

Richard Francaviglia: **Main Street: Past, Present, and Potential**

In this lecture, Richard Francaviglia discussed the evolution of main streets. He is a Professor of History and Geography at The University of Texas at Arlington and the author of *Main Street Revisited: Time, Space, and Image Building in Small Town America*.

Allan Jacobs: **Great Streets**

Allan Jacobs is the author of *Great Streets* and *The Boulevard Book*. He was the Planning Director for the City of San Francisco and a Professor and Chair of the Department of City and Regional Planning at the University of California, Berkeley. He is the Principal of CityWorks, a planning and urban design firm in San Francisco. He has designed numerous great streets, including Octavia Boulevard in San Francisco and International Boulevard in Oakland. In this lecture, Professor Jacobs discussed the role streets and boulevards play in the development of livable cities.

# CHAPTER 1

## BACKGROUND

This lecture series recognized that to be valued participants in the planning of solutions that address the complex and interrelated needs of transportation systems and land use proposals, students, practitioners, and members of the public need to be educated in transportation and land use issues. Effective and informed decision-making requires participants with knowledge of the issues at hand.

Specifically, this lecture series met the OTREC’s goal of encouraging “... multidisciplinary educational programs and experiential learning across disciplines in the transportation field.” In addition, this project follows the OTREC goal of encouraging the “participation of public and private organizations...” While the University of Oregon coordinated the series, it is also the outcome of a collaborative effort, with funding and organizational support from multiple agencies:

The City of Eugene, Planning Department	\$5,000
The City of Eugene, Public Works/Transportation Department	\$2,000
Lane Transit District	\$1,500
State of Oregon Transportation and Growth Management Program	\$2,000
American Society of Landscape Architects Willamette Valley Section	\$300
American Institute of Architects Southwestern Oregon Chapter	\$1,000
University of Oregon (not including faculty time)	\$5,000

One of the key priorities of the lecture series was to publicly present and discuss what the U.S. Department of Transportation’s Strategic Plan calls “context sensitive solutions.” Such solutions are essential elements of the USDOT’s Environmental Stewardship objective. In addition, the lecture series supported the following three strategies outlined in the 2003-2008 USDOT Strategic Plan: 1) Encourage public involvement in the transportation planning process to develop transportation solutions that support community needs; and 2) Foster dialogue, education, and communication about transportation alternatives and choices that improve compatibility between transportation and communities and encourage consideration of the full range of transportation options, including pedestrian and bicycle travel, to address mobility and environmental challenges.

The body of an education or technology transfer report is not expected to be more than 2-5 pages, but a complete description of the project is required. If the project is very technical in nature, PIs may also use and adapt the OTREC Research Report template.



## CHAPTER 2

### **RICH ADMIRE RICHARD MEIER: WHATEVER HAPPENED TO MODERNITY?**

**Edited Transcript of City Design Lecture by Dan Solomon**

*Dan Solomon, FAIA, is the principal of Solomon-ETC, a WRT Company and author of Global City Blues and Rebuilding. His firm has designed award-winning projects across the country that incorporate environmental sustainability, socio-economic diversity, and transportation efficiency. From discrete buildings to large-scale master plans, he shows how architecture, landscape architecture, and urban design work together to create more livable cities. This was also the Thirteenth Annual McKeown Memorial Lecture in Landscape Architecture. The lecture was given on May 18, 2006.*

When Mark called me and invited me to talk, I was sitting at my desk and next to the phone was the real estate section of the New York Times. And the lead story was about the sale of the top floor condominiums of the Twin Towers on West 10<sup>th</sup> Street designed by Richard Meier for \$14, for \$15 million each. Calvin Klein and Martha Stewart, who were respective buyers of these two condominiums, now live 60 feet apart. Separated by two walls of floor to ceiling glass.

So this is the fate of a modernist aesthetic that began 100 years ago as part of the social ferment that led to the Russian revolution. The journey of the same symbols and the same architecture from Bolshevism and capitalism gave birth to the smart-ass title of this lecture.

In the months since that day, I've had more thoughts to ruminate on the origins and transformation of modernism. And this talk is something much more ambitious and complicated than I originally intended or than Mark probably bargained for.

The impetus for the growth of this talk was the incredible burst of hostility from within the architectural establishment and within architecture schools to the initiative taken by my new urbanist friends and colleagues to deal with the hurricane Katrina devastation in Mississippi and New Orleans. This hostility ranges from absolutely seething anger from deans of two major architecture schools, Eric Owen Moss and the provost office at Tulane to a brand new, not yet published, brilliantly nuanced and scholarly critique of new urbanism by Michael Sorkin.

For some of us who helped launch the new urbanist movement it's not a small matter that so many smart and influential people, particularly our friends in architectural education, perceive us as a bunch of hacks; as aesthetic and political reactionaries whose ideas are discredited upon arrival because of the imagery in which they are cloaked. John Norquist, the Executive Director of CNU, is one of those concerned, and he asked me to give a plenary talk at the Congress of New Urbanism. Since I am only capable of running and holding one stone at a time I decided to kill two birds with this stone and this talk is more or less what I have prepared to give at the Plenary in 10 days at the Congress.



I've always argued that the Truman Show perception of new urbanism was a malicious caricature and that we only had to do a better job of communicating the true nature of our work as new urbanists and our beliefs about the future of cities for everyone to accept us and to love us. I've come to find out that my optimism on this subject was stupid. I have a friend who says that an optimist is someone who is simply uninformed, and in this case he was right.

The set of ideas and practices that we named new urbanism 14 years ago has a history that long pre-dates our movement. Our ideas about the relationship of urban land, about the role of a city with its transportation infrastructure, about the city to its own history, and about the role of public space in the culture of the city came together long ago. In their earlier incarnations they were resisted and ultimately crushed by the same collision of rigid modernist orthodoxy and rigid historicist orthodoxy that threatens new urbanism as a movement today.

This school of thought really began to cook a few months ago in New York. With the simultaneous presentation about two blocks apart of two strange museum exhibitions. One was the Guggenheim's mess of a show called Russia, which was a weird *mélange* of miscellaneous, held together only by the common thread that these were works of art that had to be executed in Russia. The other was a beautiful and much more focused exhibition of women's fashion and the Metropolitan Museum called "Chanel," curated, designed and sponsored by the current director of the House of Chanel, Karl Lagerfeld in an extraordinary coup of marketing exhibits. I was struck by the juxtaposition of these two unrelated exhibitions because both of them in different ways dealt with the relationship of modernism to a long cultural legacy that predated it and the transformation and differences in the meaning of the term modernism in various contexts in which the term is used.

I'll come back to the beautiful clothes and the amazing life of Coco Chanel, which I find completely inspiring, but let me begin with Russia.

If you arrange a bunch of things chronologically on the great spire of the Guggenheim, the space itself and procession of one thing after another creates its own narrative, whether or not the presenter of the objects had any narrative in mind at all. It's the post-modern tutorial. Normally Guggenheim exhibitions are organized so you take the elevator to the top of the building and then view the exhibition as you walk down the ramp. And I suppose because it would be just too depressing to portray the history from pre-history to post-modernity as the decent of a downward spiral. Russia though got it wrong as we get the story straight, to the chronology straight you had to walk UP the 6-story ramp.

The story begins with magnificent medieval Russian Orthodox icons. Oriental, indigenous, different from western European art at the same time. After a couple laps around the ramp, you get to the court of the Czars and a culture that is increasingly French-ified and neo-classic. You keep going around the ramp and eventually you get to the middle of the 19<sup>th</sup> century after a couple hundred years of neoclassical material. Then you get to an equally French-ified focus on realism and the life of peasants and common people. You see the emergence of a political sensibility and a stirring of revolution and artistic movements that supported the revolution. Then after the turn of the 20<sup>th</sup> century, the turmoil of the revolution churns among avant-gardist

modern art, first filled with incredible inventiveness and energy even a hinting of modernist explosion in France and elsewhere.

Then abruptly in 1928 with Stalin's purge of Trotsky modernism and the revolution and Stalin institutes the era of socialist realism, a new neoclassicism as political art. After Stalin's annulment of the brief marriage of modernist aesthetics and the socialist revolution, avant-gardism was like the 8-year old protagonist of the movie Home Alone: a rootless, untethered energy left alone to effectualize whatever fantastic whims it could conceive. Malavich's famous Black Square was the spiritual grandfather for generations of conceptual art. In many ways that is where we still are today – on a 10<sup>th</sup> or 12<sup>th</sup> sequel of Home Alone. Just check out this year's biennial at the Whitney Museum or the last six months of *Architecture Magazine*. The protagonist is an old little boy, and for many of us the formula of the script grew tired several sequels ago.

In the decades since the 1920s modernity has taken many twists and turns. In America, the term "modernism" in relation to modern architecture and modern town planning and to a lesser degree landscaping has a more specific described and radical meaning than it does in other places and in other disciplines. The person that most clearly identified with this radical movement was Walter Gropius, as Director of the Bauhaus and later in his role as the head Harvard School of Architecture beginning in 1957. In the nearly 70 years that architecture has been taught at Harvard, variations on Gropius' curriculum became normative in schools of architecture. And ideas hatched at Harvard became an almost universally shared and rarely questioned set of received opinions amongst American architects. In that 70 years there have been many people with extraordinary and diverse abilities that have taught at Harvard's GSD and their individual accomplishments are indisputable.

But for purposes of assembling this talk, I don't want to focus on the achievements of people on the Harvard faculty, which are fine. On the influence of the school itself which I believe - I wanted to take the case that the way in which modern architecture is introduced at Harvard, to this day is one important source of the debilitating style wars that now swirl around questions of urbanism in a way that can only be destructive.

Gropius' idea of education of modern architects represented a kind of fundamentalism that shared his basic idea that fundamentalism is a thing that comes to Cultural Revolution – where the fundamentalism is the Taliban. The idea is that young people need to be protected from corrupting themselves with knowledge. Gropius did everything he could to insulate young architects from architectural history and from traditional mimetic and representational skills. Architectural education became a widespread and dominate cult of un-learning.

Gropius crossed architectural history as traditionally taught out of the curriculum. But at Harvard, modernism needed some new theoretical grounding. To fill the bill, he launched his colleague Siegfried Gideon on the writing of two extraordinarily influential new books: *Space, Time and Architecture* and *Mechanization Takes Command*.

For my generation of architecture students, even 3000 miles from Harvard, *Space, Time and Architecture* occupied the position next to our bosom that Mao's little red book did for the Red

Guards. The thesis of *Space, Time and Architecture* goes something like this: the way that people see and perceive things changes with the times. As evidence, Gideon evoked the standard art-historical view of the relationship between renaissance chauvinism and the discovery of laws of perspective. We then find a similar relationship between a series of modern phenomena including the theory of relativity, construction, and transportation. The term “space time” is just short hand for the modern version of perception and the perception of architecture and the perception of cities.

In the 65 years since the Gropius onset at Harvard, things have become more sophisticated. Professor Michael Hayes teaches architectural theory at the Harvard GSD in a survey course that is required by all first year students. The text for this course is *Space, Time and Architecture* although I think it’s safe to say that most architectural historians now regard it as an ingenious work of propaganda masquerading as history. You have to insulate the students from this hermetical view. Professor Hayes tells his first years how to read Gideon by providing in the syllabus a handy quote, “modern architecture plays a significant role in an ongoing cognitive revolution. That extended process of intellectual transformation were by a society whose life habits in perceptual apparatuses were formed by other, now anachronistic, modes of production and are effectively reprogrammed for a life in the new industrialized world.”

So if I can paraphrase Professor Hayes’ paraphrase of Gideon in other simpler words, he’s saying that people don’t like the metrification and abstraction of our brand of architecture – don’t worry about it. It’s their fault. As a modern architect, and as an initiator in the inner workings of historical process, you have an obligation not to listen to them.

To measure this argument, Gideon and Gropius took a leaf from another great branch of 20<sup>th</sup> century modernist pseudo-science: Freudian psychoanalysis. Freudians constructed a system in which resistance to his claims were defined as illness. If you thought the idea that you wanted to kill your father and fornicate with your mother was nonsense, you were suffering from repression. Just lie down, open your checkbook and we can set the record straight. The infuriating smugness of these self-validating systems of psychoanalysis and pedagogy of Gideon and Gropius were bound over time to create merciless backlash. But more about that in a few minutes.

I’m not talking about smugness as an unattractive personal habit, but smugness as a theory and a worldview that enrages people like the great skeptic Frederick Cruz. Right after reading that in the syllabus, now in the second week of graduate school comes and the introduction to the Frankfurt school of social research with special references to Theodor Adorno and his philosophy of modern music of all things, published in it’s final form in 1949. If Gideon is the foundation for a system of ideas, then Adorno is the keystone.

The thrust of his book, *Philosophy to Modern Music*, is to compare and contrast false modernity and true modernity represented respectively by the music of Stravinsky and that of Arnold Schoenberg. Schoenberg on the left, Stravinsky on the right. Stravinsky was the prisoner of historical sentiment; his music was filled with references to folk tunes, marches, and classical structure. Schoenberg on the other hand was the true adventurer in the modern spirit with his system of pure abstraction: the invention of the mind incapable of reference outside itself.

What's more, Schoenberg's harsh dissonances are an appropriate art to the harsh turmoil of modern life as opposed to Stravinsky's "neoclassical projectivism," a construct of what he called "premature harmonies" or ignoring the persistence of social contradictions. May God spare 1<sup>st</sup> year architecture students from suffering premature harmonies.

Another lesson this Berkeley scholar would observe was that most of the Marxist intellectuals at the school were like Karl Marx, Jewish. And although they were assimilated and secular they retained an element of Jewishness in their thinking and freely appropriated the Jewish doctrine of the messiah by giving it a new name: The revolution. Until the revolution came, society would remain in a fundamental state of disorder. The function of art is to give expression to the state and disorder and thereby raise social consciousness and hasten the revolution. Therefore all worthy art must have an element of negativity or dissonance about it. Art that does not suffer from "premature harmonies." So sorry everyone, no joy allowed until after the revolution. One of the forms of premature harmony that Adorno would attack most viciously was the art of American jazz, which he pronounced "yatz" and associated with the German word "katz," a pejorative for the baying of a bloodhound.

In a long and vituperative essay on jazz written in 1933 (after having never heard jazz in live performance), he continued revising this essay making it even nastier after he came to this country in 1940. In jazz he saw American Negroes as complicit in their own oppression. He dismissed the jazz of the 1950s as watered down Major C. But try telling Dave Lute that or John Lewis that they're watered down Major C. If he found one thing positive that is in Marxist terms negative, the instrument was the saxophone. He observed that the saxophone is a metal instrument played like a woodwind. It therefore has a kind of sexual ambiguity, and since androgyny represents the critical challenge to the established sexual order of society, the saxophone is okay.

Newly entered graduate students at Harvard take in their second week on this through a looking glass journey through the topsy-turvy world as a Marxist aesthetic theory. The positive is negative the negative is positive and the redeeming quality of the saxophone is its androgynous. In fairness to Professor Hayes, his course goes on to present other and contending points of view. Some of those by confidant Robert McMurray, more congenial to new urbanists. But these later lessons are like comparing religion as taught at Notre Dame.

The institution has a point of view and Professor Hayes' message to fledgling architects at Harvard and to those unfortunate enough to be elsewhere, is clear. Populist hostility to an abstract modernist is a form of philistine ignorance to be ignored. References to vernacular building, the imperatives in place where classicism are inadmissible and dissonance not harmony is the order of the day.

By the second week of school, the seeds of hostility to new urbanism are well sown and harvested. If Michael Hayes' tune has a familiar ring to it, it's because you cannot listen to a Charlie Rose interview with a star architect without hearing echoes of it. These ideas are completely pervasive in architectural culture whether those who believe in them have any idea of their source. From the studiously unpretentious language of Mike Gary to its opposite in the many big words of Peter Isaac, what unites the purveyors of the block to those of the wiggles of

the shards is a set of ideas that comes from Siegfried Gideon and Adorno and taught by Michael Hayes.

The egalitarian view of history that revolutions breed counter revolutions equals an opposite force. If this is true, it explains why after 70 years, the Gropius curriculum schools of architecture, something like the institute for classical architecture, should suddenly appear on the scene and flourish with such remarkable vitality. I think there's no question that the Institute of Classical Architecture (ICA), many of its members and the architecture school of Notre Dame are doing something important and desperately needed after the modern academy's 70 year assault on architectural knowledge. Recovery of the knowledge that helped make the world civil for centuries is unquestionably a good thing. But the ICA is tinted in a way, and notice I said "tinted" not "tainted" or "stained" but tinted in a way that sets it apart, I think a long way apart from the intentions and the values of the Congress for New Urbanism or urbanists or landscape architects in general.

I receive announcements for ICA events all the time. The subject matter is usually something about a collection of dresses in porcelain or the tour of a 200-room estate or mansion owned by Doris Duke or someone like her on a 1,000 acre estate in Santa Barbara or Newport or somewhere. Last year I found myself by fluke at an ICA gala. The annual Driehaus awards dinner in Chicago. The room at which this dinner occurred was way up in a high rise and thanks to American building technology of the 1920s, it was the largest English gothic interior I've ever seen next to Westminster Abbey. It was twice the size of any singular room at Cambridge or Oxford. There was a sprinkling of people I knew from CNU and Notre Dame, but mostly it was a big crowd of strangers and most of them are surprisingly young. The young ladies, and there is no other way to describe them, were absolutely radiant with the kind of fragrant pre-Raphaelite innocence that I thought had been sponged from the world forever by Coco Chanel 20 years before I was born. Astonishingly for an architectural gathering there was not an unstructured black jacket in site. And aside from the conspicuous and decidedly frontally presence of the CNU board, the men, hundreds of them, seem to frequent the same tailor as Prince Charles. What in the world, I wondered, have these people shun?

The highlight of the evening was the awarding of the Driehaus prize for the English neoclassical architect Quinlan Terry. He accepted the award and he said the following in relation to his work:

"We must build in the manner of our forefathers in brick and masonry. If we do so, the natural borders of architecture will reemerge. The idea, the ionic and the cairn."

He said this with a straight face to enthusiastic applause while standing on the 22<sup>nd</sup> floor of a tower surrounded by the architectural treasures of Chicago loot.

The skillful and intelligent architect Quinlan Terry, neither saw or acknowledged any of that – it was clearly a matter of choice. It's the same choice to resist assimilation into the culture in the name of traditional values of the Hassidic Jews of Brooklyn. It's a choice that I think is perfectly okay for an architect. It's like a musician joining an early music concert, but it's not a choice for urbanists. Urbanism is engaged with the history of the city. And the gear cluster of a city, like that of a good bicycle, has many speeds forward, but like a bicycle, no reverse. Many people

outside of new urbanism think that we are all just like Quinlan Terry: trying to ride our bicycle backwards and like him refusing to engage in what is around us.

What is around us are the forces of technological change, population pressure, global warming. The Driehaus award was a gathering of committed self-help that is attractive to some young people, but I think not very many. Where'd the others go, and why? Most of them do not choose to de-contextualize that I'm right. The fact they regard being with it and with where people are going is of high virtue. We can thank Rem Koolhaas' newest book, *Content*, for defining the very look of "with it" and for contextualizing the work of town planners and landscapers more vividly than any new urbanist.

At the same time he portrays the dark side of globalization in a way that is more terrifying than anything I have seen. That single exception was an extraordinary program on Frontline on the scale of what can only be called slave labor in China, under the ironic name of communism. Rem understands and actually diagrams how China's sweatshop economy has sucked the economic life of Europe and the US and he knows the enormous social consequence. Rem puts his dark insights about the world right on the cover of the book. Big brother skyscraper, sweatshop economy, to me it's simply amazing, the gleefulness with which he cast himself in the role of the prince of darkness according to his own vision of hell. He clearly has a moral compass but sometimes you have to wonder which way he points. He records for our amusement the banter of Prada fashionistas about the desperate poverty of Laos. And he sneaks in some Larry Flint-style photographs of female genitalia. Naughty, naughty I guess. His design for the CCTV program in Beijing is not only a dazzling symbol of oppression; it's the very instrument of oppression. CCTV's control of information is dastard and more insidious even than its coconspirator, Google, who eradicated the existence of tank mail from the internet.

Imagine a situation in which 97% of the residential fabric of New York and Chicago including the most vibrant neighborhoods were demolished through a massive campaign – and the population was forced to relocate to sterile new suburbs through a massively corrupt system of masked procreation. Imagine that occurring with television and threats forbidding any murmur of protest. Without any exaggeration, that is exactly the case of Beijing today and it's what Rem's building celebrates. To achieve this terrifying symbolism that is about to topple through the cantilever of the CCTV building, Koolhaas enlisted Arab engineers. In this little essay he labels postmodern engineering and he discusses how engineers used the computational power of their computers to analyze the indeterminate redundancies of the concentrations of lows and the exposed press work pulled up the enormous cantilever. At the end of this article he wonders about what happens to scientific rationalism. And it concludes it by saying, wistfully, "why don't they just say no?"

The cadence of Winston Churchill during the fearful days of 1940 comes to mind. "A new Dark Age made more sinister, and perhaps more protracted, by the lights of perverted science."

This is social housing as celebrated by the Museum of Modern Art in the New York in 2006 and in an exhibition of new architecture in Spain called "On Sight" curated by Karen Drier. These are the buildings in which the Spanish put their Algerians, their Turks, their Africans and their

Arabs. This is day care play space for the next generation. The social housing on site is exactly the opposite of what new urbanists were able to accomplish through HUD's 6 program symbolized by a project of ours in Seattle called Othello Station.

In the HUD 6 Program, at it's best is where immigrant populations were integrated into classic American neighborhoods. HUD 6 is where the aesthetically conservative strain of new urbanism has found a high social purpose. New urbanism finds itself in a living situation – on one hand there is a populist modern establishment comprised of the best universities, museums throughout the world, the professional architectural press and most newspaper and magazine critics. For them, our building and architecture are history-less and apolitical subjects. Reference to anything prior to the modern period is culturally inadmissible and belief in social purpose is just not kept. There are of course exceptions to this, Yale as a school I think is an exception to some degree. But the exceptions are just that, exceptions to the juggernaut of modernist right thinkers. On the other hand, exposing the juggernaut, here is this now threatening revivalist movement even within a movement that seems woefully oblivious to the demographic and political changes that distinguish our time from other times. New urbanists have an agenda about the city, which seems rarely connected to this kind of debate. But we find ourselves in crossfire of an intolerant modernity on one hand and a revival of classical knowledge that seems attached to the rest of the writing of the hounds' society that was eradicated in World War I along with it.

I would like to focus for a few minutes on my own little list of cultural characters that seem to me to point away around the cultural schism that threatens urbanism and new urbanism as it were.

Let me begin with Coco Chanel. Consider for a moment, the quintessential modernist object. The supremely beautiful, elegant and unchanging 60-year old design for the bottle of Chanel No. 5. At first glance this appears to confirm Adorno's conception of a modern. It's abstraction and it's rejection of a narrative reference. Before Chanel No. 5, perfumes all had names like "Night in China" or "Harro the Musk" or "Dark Fantasy." The Chanel No. 5 bottle rejects all that in favor of an abstraction, a bit of pseudoscience implying the formulation contesting that Chanel's number 1-4 which of course never existed, and also a love of the beautiful abstract form. Now Coco Chanel was not selling perfume bottles, she was selling perfume. Perfume is all about sexuality and smell, the most animal of the senses captured in a bottle. It is the abstraction of the bottle that makes the sensuality of the contents all the more vivid and meaningful. The bottle of Chanel No. 5 is like her clothing and like her life -- a splendid contradiction and a seamless synthesis of opposites. Chanel was not only the most original, prolific and gifted designer for generations; she was a business genius on the scale of an Andrew Carnegy. She started absolutely penniless and she built an industrial empire all of her own conception. She was the first and probably most powerful woman CEO. What she never concealed and was not the least embarrassed by was the fact that she began her career as a women whose rich lovers competed for sexual favors with gobs of money to back her first ventures. Karl Lagerfeld says, "Chanel was a mystery and a paradox. Reality was bearable only if it was made up with such things."

In her cosmos, it was inconceivable that femininity and feminism could be considered a different idea. She wanted to dress a woman so that she could enter a room on equal terms with a General, a Bishop, or the head of state as confident and reassured by her dress that the vision of

femininity was simultaneously egalitarian and aristocratic -- simultaneously athletic and erotic. She dressed a woman to go to the opening Paris opera in a way that she knew she was capable of climbing a tree. She believed in physical ease as the predicating condition for elegance. She referred to classical antiquity in clothing made of industrial mass-produced fabric like jersey. The October 1926 issue of Vogue called her classic, “little black dress” the “Chanel Ford, and the frock that all the world will wear.” She absolutely mastered the traditional crafts of the milliner and the tailor.

Chanel’s two main ideas – her conception of women and her idea of her relationship of abstraction to life – are completely congruent with a friend and a collaborator, George Balanchine. The second, almost the biggest figure on my list. I think it is not overstating the case to say that Balanchine used a classical tradition with modernism with more originality, more force and enduring success than any other artist in any discipline. In this regard, his work, his contribution, and his lifestyle are one in the same. If one tries to draw some lessons from the synthesis he brought about it is worth knowing how Balanchine became Balanchine because his story is as rich with contradictions as Chanel’s.

His career began at the age of 10 when he was accepted into the Imperial Ballet School in St Petersburg, part of the court of Tsar Nicholas II. He was raised in court of appearing in the fabled Maryinsky Theater with its greatest stars of the Tsars, classical ballet.

After the turmoil of WWI and the Revolution he found himself at age 21 undernourished and unemployed in Paris. The 20<sup>th</sup> century’s greatest genius at recognizing genius, Sergei Diaghilev, invited him to audition. Diaghilev audaciously made this superbly classically trained dancer and the most supremely elegant of all the 21-year olds at the Ballet Master of the world famous Ballet Russes. His first assignment was to collaborate with Igor Stravinsky and Henri Matisse, no less, on a reworking of the ballet, *Le Chant de Rossignol*. Matisse did the sets, the costumes and the make up and arranged the red and white chrysanthemums in the hair of the principle ballerina, Alicia Markova. Coco Chanel hosted the cast party after the opening and Stravinsky played the piano at the party. Can you imagine?

The other ballet artists that Balanchine was thrown in with included Picasso, Prokofiev, Tchelitchew, Jean Cocteau, Kurt Weill, Lotte Lenya – an unbelievable list. He went from the Court of the Tsar to Diaghilev’s court of modernism at its absolute pinnacle of excellence.

Michael Hayes begins his education of architects with Adorno’s sour diatribe against Stravinsky. It’s revealing that Stravinsky found his natural collaborator, George Balanchine, in the most sensual of the arts – ballet. Just like the bottle of Chanel No. 5, the most characteristic and famous of the Stravinsky-Balanchine ballets strip away all narrative reference: no storytelling, no sets, costumes that refer only to the dancer’s bodies. There was nothing on stage but the life force of the music and the geometrics that Balanchine made of the dancers themselves.

Balanchine’s dancers were better schooled in classical dance and better disciplined than any dance company than had ever been before. Balanchine ran abstractions, demanded more from the court of ballet in addition to the principles and soloists, than had ever been asked of them before: more athleticism, more musicality, and more speed. When his vision exceeded even



what his own superbly trained corps could do, he arranged a soloist in formation and used them like a chess master attacking with his bishops. Balanchine was a modernist who extended the tradition of classicism he inherited. He was also a modernist who was not a slave to modernity. He carried the whole history of ballet in his head and he did all kinds of things with it: narrative ballets, huge spectacle ballets, he even did musical comedy, which he revolutionized and he did movies.

Over their long careers, Stravinsky and Balanchine managed a trick that town planners and architects should be able to do and one that is strictly forbidden in the dictate of the Harvard aesthetic theory. They were able to engage popular culture on its own terms, excel within it, and never compromise their own standards. It's hard to imagine Theo Adorno joining Stravinsky and Balanchine in this publicity photograph for the ballet. Although if Adorno had been there he might have faced his cards in the right direction.

When things got slow in 1941 Balanchine even took a job with Ringling Brothers choreographing elephants. He asked Stravinsky to collaborate with him, Stravinsky had only one question: Would the elephants be young? Balanchine assured him that they would be young and beautiful and the collaboration proceeded.

I thought the third of my three cultural heroes would be Winton Marsalis. I love the way Marsalis plays; I love the way he shifts high, to Morton, to Coltrane with the same authority and the same fluency as Balanchine. He jazz is surely one of the great American institutions. I called my very learned jazz composer and musician friend, Pat Gleason to ask him what he thought about this, and he said "no, no, no, no, not Winton, he's a very good musician, he's a really good composer, he's a great teacher, but he's absolutely not the Balanchine of jazz. Duke Ellington is the Balanchine of jazz. Winton is a giant but he is conservative and a divisive force in music. For him Cornett Coleman doesn't exist, Myles Davis and Herby Hancock are apostates, and rock and roll and hip-hop are worthless junk. He is to jazz what your friend in Florida is to new urbanism. Let me write you some notes about Duke Ellington."

I didn't quite agree with what Pat had said but I understood the point. The next day, I received this incredible two-page email in praise of Duke Ellington. A bit too long, too dense and too technical. This thing included references to rhythmic structure, monochromatics, Romanoff, Tchaikovsky, the blues, The Everwaters, European royalty, movie stars, quality drug addicts, from low life to high life, and everything in between. It kind of convinced me that Duke Ellington should be my number three.

These three people that were such complete masters of the discipline, they carried the whole history of it in their heads, they could draw on it as a situation demanded. None was ever prevented from doing anything by technology or aesthetic that made something off limits. I think it's interesting to compare three comparably famous photographs of Gropius, Adorno and Schoenberg. I think I know which crowd I'd rather hang with.

A question to ask is, were there ever people in the world of architecture and urbanism that are as cosmopolitan, eclectic and simultaneously modern and as embracing of history as Chanel, Balanchine and Ellington.

The fact is that modernity as a driving force in architecture and town planning predates the rigid prescriptions of Harvard modernism by almost a century. During that long span of time there were classically trained architects in many places, fascinated by the implications of new technologies and problems and possibilities of the modern city. Cities and city dwellers suffered in many ways. From the 1850s to the 1920s, but one thing the cities and city dwellers did not suffer from during those years was the systematic unlearning of their historic craft by architects and builders. That came later.

In 19<sup>th</sup> century European colonies on the frontier of the American west, there was an expected level of architectural literacy. However brutal the treatment of indigenous peoples by European colonists or American settlers may have been, they treated their own kind with remarkable civility, even in the remotest corners of the globe. In 19<sup>th</sup> century colonial garrison town, India to today's vast utterly grim settlements of suburban American to that Halliburton has built for US forces in Iraq. Inside each air conditioned pre-fab there is a frozen pizza, 37 flavors of ice cream and video games. American culture and the American city are a perfect idealized type for them.

There is a long list of architects from this proto-modern period who were cosmopolitan eclectics in a way that seems appropriate for role models for contemporary urbanists. Of this list the one that stands out for me as the most gifted and the most interesting is Otto Wagner, architect to Franz Joseph, the last Hapsburg Emperor. He perhaps more than any represented the contribution that an architect should make to urbanism and as a teacher of what architectural training should be so that generations of architects can contribute to urbanism as the conditions of the city of change.

Wagner was a schooled classicist who consciously put himself in a competition with Michelangelo and Bernini every time he built. He considered it his mission as an architect and as a teacher to move from classicism to a modern, eclectic negation that was directed at an appropriate expression. He was fascinated by the special order of the traditional city and the new infrastructure of the industrial city. To his beloved pupils he wrote, "If you're heartfelt and forward, you're on the right path."

Otto Wagner, architect to the Emperor, died of starvation and influenza in 1918. The collapse of the Austro-Hungarian Empire brought up a completely new and economic situation in Vienna. And it was Wagner's pupils who had exactly the right skills to adapt and build magnificently in the ruins of the tough economic time. There is a splendid book called *The Architecture of Red Vienna*, which tells this amazing story of Wagner's students in the new Marxist Leninist government.

After the war a new government controlled only the destroyed city center and not it's surroundings. They had an urgent need to house a dispossessed urban totalitarian. And they had to be housed quickly and economically in the midst of the remaining Baroque and Imperial city. But they also supported the worker as the backbone of the new economy – who better than the Wagner pupils to bring back the synthesis of new circumstance and the historic city.

To this day the social story of Red Vienna is one of the glories of the world that represents a synthesis never equaled in classical architecture. The architecture of Red Vienna put in a brief appearance in the United States in the 1920s garden apartment movement in New York in a series of social housing projects in the Bronx sponsored by the garment worker unions for their members. The planning, the programming, the decorative language in these enduringly beautiful buildings are straight out of Red Vienna. Even today they are some of the most livable dwellings in New York City.

Abruptly however another form of Euro-modernism came to an end as another form of modernism seized the stage in the 1930s. We all know the rest of that story. Simultaneously the architecture of Red Vienna itself came to an even more abrupt symbolic end in 1934 with the routing of the socialist movement in the Administration and the shelling of its most famous monument of Karl Marx, felled by right wing militias.

It's significant that the Wagner pupil ethos was eradicated by the same cultural forces that new urbanism is battling today. In Europe it was wiped out by the appropriation of neoclassicism under a conservative vernacular by the political right. It's amazing to me the adroitness with which the architectural and aesthetic movements switch their political allegiances as opportunities for work shore up. In America the cultural wipeout was in the hands of hegemonic modernism.

What I've tried to show, is that at the very same this cultural wipeout was occurring with respect to architecture, the very same attitude that the Wagner pupils embodied was flourishing in other art forms and is still flourishing to this day with an incredible continuity. Balanchine teaching the young Edward Vija, who became a principle dancer at the New York City Ballet and is now erecting a magnificent Balanchine-based company based out of Miami, the Miami Ballet. This student of Balanchine is now a great cultural force. That attitude consisted of, on the one hand, the fascination with what's new and unique in the historical moment. On the other hand, it consists of reverence for the historical paths of one who's mastered those techniques and the ability to bring the whole inherited legacy of one subject to the new matter at hand. An essential characteristic of each of these artists is the simultaneous fidelity to the highest standards of excellence in an absence of rigid dogma about what excellence consists of; an ability to pull on their discipline with a playful eclecticism that allows you to do many things and perform in many situations. Wit and joyfulness also seem to be part of the plan. This happens to be Peter Martins who happens to be the current director of the New York City Ballet.

It's one thing to talk about the work of geniuses and another to imagine how what you take from their work suddenly applies to the ordinary task of building. I want to conclude by trying to make this leap and show how the sublime can conform to the ordinary.

I'll briefly show three current invited competitions. These three competitions are opportunities to engage in some of the main ideas that I believe new urbanism is really all about. These are:

1. To restore new life to a historic town center
2. Programs that address social inequities

3. The evolution of building techniques and an accompanying aesthetic devoted to the urgencies of, if I may use the lumpish word, sustainability, for the most burning issue of heart and soul.

The first of these is something called the David Brower Center, which is on the raggedy edge of downtown Berkeley across the street from the UC Berkeley campus on what has always been kind of a messy street. It is an extraordinary mixed-use program for a LEED-platinum office building for environmental nonprofits, 96 units of low-income housing, a Patagonia store, an organic restaurant, and a city-parking garage. This is the project. It is intended as a kind of green building, I like to call it green expressionism. The office building is all about green technology. So it is a sort of a classical building with a side bar, elements related to energy production, daylight filtering, but it relates to the classical buildings surrounding it. The skin of the building is different north to south, each of the floors is different, each of them has a set of wide shelves or sun shades in different combinations, sky lighting on the top floors and south facing next sun and shade, on the north is something called lightly breaking glass.

The second project is one of the projects that we did with the city of San Francisco to repair an infill on the central freeway corridor where the freeway was damaged in an earthquake. This is a very slowly unfolding policy including a piece of urban repair, which is nearly complete. We're now focused on this site, which is a centerpiece of an important public policy initiative. One is this freeway corridor, the second is the mayor's initiative to take homeless people off the streets and create supportive housing with medical care, psychiatric care, exercise, and nutrition. So this section is a restaurant that will provide employment training, here are the residents and the building, we have workshops, there is a streetscape which is part of the neighborhood and then there is a building which takes this idea of urban expressionism that we began with and took it to the next steps.

And the final one is a competition we are waiting to hear the outcome of next week, which is amazing; it's really a centerpiece of the Sonoma-Marin rail initiative, which is something that we are trying to pass through the electorate for the last thirty years. So this project really is almost 25 acres and it's a symbolic project dealing with the issue of sprawl and agricultural preservation. The site is at the location of the old historic railroad station in the historic downtown. This is really butchered by a big mall and a freeway. The project restores part of the historic downtown and creates a new type of space at the plaza at the termination of the already terrific revitalized street corridor. And this will become a major public space; this is a restaurant, a food and wine center, straddling the plaza. The other section will be a culinary program, a food and wine institute, and we'll have townhouses facing into the street. We will keep up the historic look of the buildings, red awnings, through the main plaza. Here is the historic water tower, which we will make a water restoring system.

Summing up, new urbanism I think is place making. It's about place making in a world that is changing rapidly, in a world that that is increasingly complicated. The nuances in place I think come from a place and a place maker, I think, supplements a mastery of craft with an adaptability that has been systematically eliminated from architectural training by a modernist agenda. It also demands an alertness of what's happening in the world. That is exactly counter to the spirit of classical revival unlike Quinlan Terry, uninterested in his surroundings in Chicago.

For new urbanism to succeed, for urbanism to succeed, we endure as Balanchine's influences have so brilliantly. We must embrace architectural literacy, but we cannot be an architectural stark. To be a maker of place we must climb trees, we must view opera like in Frederick Freddy and King Oliver and to be able to enjoy parade route elephants. Wagner did all those things.

## CHAPTER 3

### SHAPING THE PUBLIC REALM: THE ROLE OF FORM-BASED CODES

**Edited Transcript of City Design Lecture by Paul Crawford**

*Municipalities across the country are recognizing that traditional zoning codes do not support the types of buildings and open spaces appropriate in today's transit-oriented developments. They have replaced these outdated rules with form-based codes in an effort to regulate the form of development necessary to support a safe and vibrant public life. Paul Crawford, FAICP, discussed recent applications of this new zoning concept and its applicability to projects that support livability and transportation choices. He served from 1980-1990 as Director of Planning for San Luis Obispo County and executive director for San Luis Council of Government. Paul received an award of excellence for his distinguished leadership as planning professional for California Chapter of American Planning Association in September 1998. Finally he was elected to fellow of American Institute of Certified Planners, March 2001. The lecture was given on May 26, 2006.*

I'm here tonight and I because I'm a code geek, which is to say most of my life revolves around the drafting of zoning codes. That sounds like a terrifically boring pursuit. But in actuality, something I've learned through growing up in planning practice in city and county planning departments, is that the zoning codes determine how the community turns out daily, basis project by project. It is sad that a book of rules really governs how people develop property and how each individual project adds up to create a place or not. So we're talking about form-based zoning codes, as an evolution of the planning tool known as zoning and it's something that has been around only for about the last ten years in its current incarnation. What we're going to talk about this evening is first an overview of community planning tools for place making, how conventional zoning works to control form. Then I will provide you an introduction to form based zoning codes that are used in planning practice.

I know from an earlier meeting with some city staff that a number of you are literally planners in the trenches working with zoning codes on a daily basis. Probably some of you work with codes from the standpoint of development and are trying to design a project to meet the city's expectations and sometimes this can be quite a challenge because often-conventional zoning codes are old if for no other reason. They are also organized so that it's difficult to find information you need to understand. When you find information it's often incoherent. Different people reading the same words can come to different conclusion about what words mean.

The zoning tool as a mechanism for informing applicants about city expectations is often problematic. But if we look at zoning codes across the United States. Whether they are half inch deep or two inches thick they all really contain only three things. They provide information on land use of property which answers the key question most property owners have most of the time when working with codes. What can I do with my land? They have standards for planning and

design and development and those are often keyed to the zone where properties are located and they have a series of procedures for project review and approval and the administration of the code -- who has what authority to make decisions how the codes administered procedurally on a daily bases.

Conventional zoning as probably most people in this room have experienced it, either as a professional working with codes on a daily bases or as a citizen trying to understand them, has a series of problems and among those is the emphasis not only on the zoning side but also on the planning side of regulation by land use type. Single use zoning districts -- residential, commercial and industrial, for example, manifest themselves in maps like this one that divide the community according to what is supposed to happen in different locations. It is pretty abstract; residential is here, commercial is here, industrial is here. That certainly gives a general picture of the city's intentions but leaves all the details to the code itself. And in this relatively small community you can and see this zoning map contains just about every possible zone, residential, commercial and industrial, within fairly close proximity.

A second problem with conventional codes is that there is an almost complete disconnect between issues of land use and issues of urban form design and in fact most zoning codes use one size fits all standards. To the point where a community updating its zoning codes using conventional zoning techniques may have in mind the creation of an economically vital pedestrian-oriented commercial area that looks something like this. But because of the lack of attention to urban form character in most zoning standards, the updated code may indeed allow this, and would also allow this, which isn't quite what the community had in mind and perhaps this isn't the end of the world, but the point is what they have in mind.

This map illustrates this one-size-fits-all standard. This is the city of Sonoma California and the recently updated general plan, which was updated before the zoning map was drawn and before the form based code was written. This resulted in different zoning maps for the same areas. One zone includes a postwar neighborhood of tract houses and the most loved 1920s bungalow neighborhood in the city. Perhaps this is an experiment to see how they would turn out over time with the same rules for both. But this is actually running a risk of completely destroying the character of the twenties bungalow neighborhood. We can see this in conventional codes in a number of communities. Santa Cruz, California literally applies the same zoning standards to both of these neighborhoods and obviously they both have substantially different character.

The third problem is that the standards in conventional zoning codes tend to be ineffective in producing the character and quality-developed communities' want. And they also ineffective in accommodating the developers needs for a particular program on a particular site; exceptions often become the rules. So variances are granted frequently and in states like California and in Oregon as well.

Developers resort to what's called planned development zoning or planned development permits. They sort of function as a grand variance allowing the standards and zoning code. In Santa Rosa, we rewrote the city zoning codes. They have four hundred fifty separate plan development zones. Each with its own rules for site layout, building height profiles, and the land uses. This creates an administrative nightmare for staff and real problems with coherence and understanding among

the public and in the development community. Because of the volume of information and difficulty of locating information in conventional zoning codes, we often see difficulty in administration properly balancing certainty and flexibility; both of which you need in good measure to administer zoning codes properly and to accommodate changing conditions within a community.

This pattern of zoning, this approach to zoning and planning that occurs across the United States has produced a series of problems we are all familiar with. The first is that we say in most of our communities we have dispersed land uses with few distinguished centers. We see spatial separation of nearly all key daily activities, we see as a consequence of both of the above, and not surprisingly, excessive land use. We see as a result of the above streets designed for cars rather than people. And as a result of the above, not surprisingly, transit can be convenient or more cost effective but it cannot be both. There's limited choice and housing supply because limited use of a single new zoning reinforces the tendency of housing producers to generate single product types rather than developing neighborhoods with a variety of housing types to accommodate a variety of household needs. And last but not least, conventional zoning has produced in many smaller scale communities and in virtually all but the metropolitan, a fear of density. Because when people think of density, people think of density in San Luis Obispo, people think of density in Englewood and often when they think of density they don't think about buildings like this courtyard housing project that my colleagues designed in Pasadena to fit into the fabric of the surrounding single-family neighborhood. They don't think about this neighborhood in Davis, California, which successfully integrates multifamily housing with single-family development. They don't think of the Crossings in Bend where these duplexes are indistinguishable from single-family homes at first glance because of their house form. Instead, what they think of when they think of density, are projects like this, they think of this, they think of this, and people in existing single dwelling neighborhoods have no concept that density could fit in or that a variety of housing types could fit in with the context of a single-family neighborhood because there are no examples they've ever experienced of quality. Now all of this adds up to a level of expectation of the community's development management process. We really have experiences in the past and a level of expectation about the performance of zoning codes.

Zoning codes historically and initially were formulated to prevent bad things from happening and today we expect them to help execute a vision of a future. We expect them to help create places and that's not what conventional zoning was designed to do. If we think about place making, and if each of us think about our favorite urban place of the city, either nearby or faraway, a place that you love spending time in, a place you would go back to again and again because you love the experience so much, then we should think about what makes it special. For city government, the ability to affect these places is centered really around three things.

The first is the nature of the streets and blocks and lots, the spacing of intersections, the dimensions of blocks, of lot sizes within blocks. This is a key determinant of the character of the urban place. But it's one we often don't notice or think about as we are walking along the sidewalk or turning the corner or driving through a place. But this is literally the foundation of what provides a character of place.



The second component is the streetscape itself. In the streetscape is what is going on within the public right of way. That includes the width of the right of way, what is going on with the right of way, in terms of the width of sidewalks, whether there are street trees, tree wells or parkway strips, how many travel lanes there are, whether there is on street parking. These characteristics of the streetscape also determine the urban character of the place. The final component is the built form the buildings themselves and their placement on the property, their performance, and their style.

These three things together make an urban place, define its character, and create the experience we either enjoy or dislike. Interestingly enough, we can compare these three components of urban place making to conventional zoning codes. Conventional zoning codes only deal with the third of three but if we are going to create places, we need to think about all three of them.

If we look at how we are accustomed through the planning process in the United States to dealing with issues of urban design, as I said earlier that in conventional zoning codes, it's almost completely disconnecting land use and urban design issues. That isn't to say that we don't think a lot about urban design in community planning and there are a number of ways in which we can do that and then describe community expectations regarding urban design. And the first of those is in courses on comprehensive planning across United States where we typically talk about community in terms of goals and objectives and policies, programs and standards. And while these discussions may address many topics in the life of community, also talking about a city's future and how it's expected to involve urban design can certainly be one of the topics of planning courses.

Conventional zoning subdivision regulation is absolutely a factor of urban design, although it may be not exclusively, and may be not international. In conventional zoning, there are design guidelines and design review processes. There are specific plans, which allow you to target a particular area within the community and develop detailed regulations. There are urban design visions that comprehensively consider infrastructure, urban design, land use, and economics, in a single package. There are planned developments, which are often misused but can be a handy tool in the absence of some of the others. And then more recently we've used form-based development codes as a tool for explicitly addressing desired urban design outcomes in new development incrementally.

If we look at conventional zoning ordinances and how they do their work, they first started with use based zoning classifications: residential, commercial, and industrial. Communities are mapped according to land use types and then we regulate land use types and allowed zones and sometimes we regulate obsessively. Now there are form-based development standards and rules for building height and placement on the property according to the zone you are located in. We regulate density of residential development and then we have numerous other standards. The volume of the other standards usually depends on what's gone wrong in the city in the past where people decided what they don't want that to happen again so we need to have some regulations in zoning codes that addresses these problems.

Those other rules start with landscaping, parking, and signage and often these are as much reactive as they are proactive. But they go on beyond that depending on the nature of the issues a

community may be grappling with from the past. So standards are developed for home occupations and telecommunications facilities and all businesses, for service stations, and for how many chickens you can have on your property.

If we look at the tools of conventional zoning to get to urban design we have setback requirements -- minimum distances by which buildings must be separated from property lines. We have height limits -- maximum height of buildings usually expressed in feet. We have floor area ratios that limit the total floor area of the building to a percentage of the land area. And we have a maximum lot coverage that determines maximum footprint of structures on a property based on some theory about what's the reasonable amount of coverage in a particular part of the community. These are classic, common, universally applied tools (with the possible exception of FAR since not all of communities use it) that shows up in conventional zoning codes in an attempt to address some urban design issues.

Some communities go beyond this and are concerned about infill in the urban context and infill development, particularly housing being sensitive to its contexts. This is the response to monster house where the property values in communities increased beyond the value of some older structures. Some places like city of Pasadena identified a series of neighborhoods where they wanted replacement housing to be sensitive to the existing contexts and so they came up with a series of standards for averaging the setback and block face to determine appropriate setbacks for new housing. Other communities have looked at increasing intensity and density and allowing increased types but trying to locate these types in ways that minimize the impact on the streets.

So it's not to say that conventional zoning codes don't try to address issues of form, mostly they don't do so effectively; mostly they do so only in terms of setbacks and height limits, floor area ratio, and maximum lot coverage.

But some communities certainly have gone beyond that. Some communities have also tried to get at design issues more explicitly at least in terms of expressing community preferences by adopting design guidelines. The key difference between design guidelines and zoning standards is that the standard is a shell. The extent to which design guidelines are effective depends on how they are applied in the context of the city's development review process. So there are formal design reviews. Or if a development project requires a conditional use permit approval, design guidelines sometimes involve a mandatory basis. If neither of those two things applied, design guidelines are sort of like saying "pretty please, we really would like you to design the project in this way, but we can force you to do that." So the building should be at the back of the sidewalk, awnings should be placed within vertical elements. So there is an expression of community preferences they may or may not be effective in really shaping design unless they're applied to some discretionary review process.

Now if a community wants to make its code more effective, to address urban design more effectively, to create walkable pedestrian-oriented places to shape the public realm of the street more effectively, there are a number of ways a community can do that.

The first is that it can adjust the standards in current codes; this might turn to quick fixes. You can do special purpose zones or overlays that target particular areas or communities where the

community determines urban design is an important issue in either preserving the look and feeling of a place or transforming it into something else entirely different. A community could adopt optional traditional neighborhood development ordinances that would help greenfield development be designed in a manner that is more pedestrian-oriented. You can also do a comprehensive plan code update, which is really the best of all possible worlds. We find as we do a lot of zoning codes that a lot of our code works follow updated general plans and comprehensive plans. Oftentimes it is problematic to try to make the code consistent with the comprehensive plan because the plan did not think through implementation.

Let's look at a couple of these. Quick fixes are real tempting because of exactly what the name says. You can get some results without a lot effort, so you can revise building regulations to deliberately shape public streets, you can revise parking location requirements, and you can allow, within the context of conventional zones, greater variety of land uses to create vitality, synergy, and enhance the pedestrian experience through build-to lines and setback requirements.

You can establish requirements that say put the building here. You can have height limits and adjust them based on the width of the street to more elegantly enclose the public realm of the street. You can say in the code, "put the parking in the back." Remarkably, five years ago this was a radical notion that met with lots of resistance but it's a pretty mainstream idea in development community today. And you can allow mixtures of land uses.

What is mixed use and what does it mean to most people? When urban planners think of mixed uses they typically think of a place that looks something like this -- commercial on the ground floor, residential or office above. In this place the architecture, although a little over the top, certainly looks like a place that might be interesting to wander around. But it's pretty urban mixed use. In the context of a smaller scale downtown, mixed-use might look something like this. This is a recent building in downtown San Luis Obispo that replaced a surface parking lot and includes one shop on the ground floor, and an apartment for the shop owner on the upper floor.

But mixed use is also this. And this is mixed use, not quite what you had in mind. This is one of the perils in trying to do some of the stuff in the context of conventional zoning codes. Ideas are often imbedded in a linked paragraph but sometimes you need pictures to really show what's intended and certainly in this community this was not it. Then there's the issue of mixing housing types if we are to increase the housing supply and the supply of housing available for a wider range of household's incomes. Then we probably need to have neighborhoods instead; neighborhoods that are not simply dominated by single dwellings. But the issue of mixing housing types in the context of a conventional code really does not address issues of form. It is problematic. Here we have a neighborhood characterized by these kinds of nice homes. Let's put some multifamily in the neighborhood, well, maybe not, this is multifamily or it is a medical clinic or it is a motel because the conventional codes address this issue only in terms of height limits, and setback requirements. It did not work.

These kinds of adjustments to conventional codes are certainly possible but they need to be done with great care. Form-based codes differ from conventional codes both in concept and in terms of substances.

So, first the conceptual differences. Rules for building form are as important as land use regulation. Contrary to conventional wisdom, form-based codes do still regulate land use, they just do not do it quite to the extent that conventional codes do. But the rules for building form are as important if not more important. There is typically an emphasis on greater mixture of land uses, a mixing of housing types. There is definitely greater attention to the streetscape design and to the role of individual buildings in shaping the public realm. Standards for building form and mass are consciously based on contexts and desired changes. This is a really important point because form-based codes are often interested in particular communities and are often adopted to either preserve places or transform a place or do something in between. I will come back to that notion in a second and talk about the different degrees of change that a community might want to pursue and encode in planning.

And then finally the public process in both preparing and adopting the form-based codes is intensely design focused both in terms of the public process and in terms of the existing conditions analysis. Each of these points will become more clear in a little bit after I walk through the process of preparing form-based codes. Back to that point of change -- if we think about the role of planning and zoning processes in managing change and fundamentally that's what they're about, communities typically see changes occur in the physical character of the place in four different degrees. There are, in most communities, places that the community simply wants to preserve. We want to keep the place exactly the way it is. We want new development to either not occur all or to exactly replicate what is there. So that's the preservation objective.

Then in the same community there may be places where everyone was pretty comfortable with it the way it is but they'd like to see it keep getting better. Some changes would be ok and so they decide to enhance these parts in the city. Then there are other places where the city is entirely open to change but it's willing to wait for that to occur according to the timing of individual property owners based on their expectations for return on investment. So in these parts of the city things will move on, the city will facilitate as much as they can but it is kind of speed that the development community and individual property owners decide to move on.

Then finally there's the transformation areas where the city wants to become something completely different from what they are and is willing to pursue that through redevelopment, through public private partnerships, through enhanced code enforcement programs, and a variety of other tools to move things on add a very fast pace. So each of these has different implications in terms of the planning that precedes coding and the nature of the standards, the code, and in the nature of the boundaries that the code draws in different parts of the community.

Interestingly, form-based codes include most of the same standards you see in conventional codes. That is to say there are rules for building placement in terms of setback, height, and lot coverage. There may be limits to building height profiles in terms of height limits and projections into setbacks encroachments. Interestingly, form-based codes often limit height based on stories rather than feet. If you limit by stories you get more variety in the urban landscape than you would if you limit feet because everyone will build numerical height limit. Parking, landscaping, and signs are also regulated.

The regulating plan instead of the zoning map maps intensity and form and character rather than simply land uses. This is a key distinction so a regulating plan which actually could still be called a zoning map for form-based codes is based on different organizing principles and distinctions between residential, commercial and industrial uses. This regulating plan or zoning map is from the form-based code for downtown Ventura developed as part of a specific plan for downtown. Its zones are called urban general one, urban general two, urban general three. Corridors are urban center in downtown and those designations are as much or more about describing differences in form character and intensity than they are in distinguishing land use types although they also distinguished land use types.

This example is from a downtown code and specific plan that does the same thing. This has three zones: urban center, urban general and urban corridor. And it has four districts that identify areas that are more single-use. And then to show another distinction, this is Sonoma's zoning map -- residential, commercial and industrial land uses made for a land use diagram consistent with the comprehensive plan. This was before we started form-based codes in Sonoma. This is the map the Sonoma form-based codes relied on. Notice the boundaries in some cases are the same but in many cases they are different. These boundaries and designations identify the neighborhoods, districts, and corridors in Sonoma which get to where people live, how they move, what they do in these different places and how and where the key distinctions are in the form and character in density development more so than in land use types.

Build-to lines may replace setbacks; we already talked about build-to lines -- they say put the building here rather than setback requirements. When you think about setback requirements, they have no urban design precision whatsoever. A setback says put the building at least twenty feet back from property line but by implication if not explicitly in the code as long as you put it at least twenty feet back you can put it as much farther back as you like. And in some parts of a community that may be fine and there is maybe nothing whatsoever wrong with that but in downtowns you really don't want the building to be away from the sidewalk except under very limited circumstances. So build-to lines say put the building here.

For each street type, requirements shape the public realm. A frontage type may sound arcane but is actually pretty simple. A frontage type describes how a building addresses the street how; its public interests relates to the street. And this is a list of typical frontage types that show up in form-based codes. Common yards, porches, fences, terraces are keyed to the frontage type. When you think about it, they're actually pretty simple too. A common yard is a frontage type for every for single family home that any of us ever lived in. There's this house and it is set back from the property lines; there is a yard in between. As we move up this continuum of intensity, and that's what is represented by the order from top to bottom of these illustrations, development becomes more urban and so towards the bottom of the page we have a shot from long running is the frontage type of every store you see in a downtown. That's the back of the sidewalk. Then we move to the gallery; a more urban frontage type or it can be extended over the sidewalk to provide a shelter over the walking space with a column near the street line. And then the most urban frontage type is the arcade where the upper floors of the building are extended over the sidewalk to create sheltered walking space. Now not all of these belong in every community and

certainly not all of these belong in any particular place or any place in a community, they fit in particular places.

Building type requirements relate buildings to one another and the street. By building types we mean simply things like this: single dwellings, duplexes, row houses, town houses, courtyard housing, mixed-use, flex buildings -- these are building types. If we began to think about the desired look and feel of a place, what we want it to become, it's very useful from an urban design standpoint, from an enhanced encoding standpoint to think about a palette of building types that might be appropriate in different areas of the community. And once we develop that palette of building types, we can begin to think about what is at stake to design one of these buildings appropriately based on our expectations of community. And by design I do not mean architectural style, I mean how the building relates to the street and surrounding buildings in terms of form, mass, and overall character. If you want to identify palatable building types you can use this kind of an illustration to talk with the community about the level of intensity of each building type and where they might belong. And so the diagram arranges building types on a continuum from least intense on the left to the most intense on the right. This table then is an example from a form-based code that shows how these might be allocated to different zones. And then once they're allocated you can have rules or codes to talk about the urban behavior of each of these building types. In designing the standards you're thinking about how each of them relate to one another and how each of them, if they're individually built, will together create the places you want to create.

Street standards are considered or revised when determining frontage types and building types. Most conventional zoning code updates have nothing whatsoever to do with street standards or consideration of them. But if you want to create a place, you want to create urban places that have identity and character, that are places that people want to come back to, then you need to think about the relationship of buildings to one another across the street. Because that's the public realm and that public realm is shaped by the buildings themselves and what's going on between the buildings, it's pretty hard to come up with a concept for a place if you don't think about all those things together. So in a form-based code, oftentimes there will be revisions to the streets standard. This is an illustration out of the city of Cotati, a citywide form-based code that shows one of the street types. This page from the city of Azusa California's citywide form-based code that also shows street type standards.

If a community is interested in form-based coding, then there's a number of different ways to approach it, actually two very different ways. One is to design the place in detail, come up with a detailed plan for a place, and then you code the plan. And then the second is to define generalizing physical vision for a place. A sample existing and desired physical conditions and calibrate the code. This becomes clearer as I walk through this next example, which is preparing form-based codes. To get a complete understanding of form-based codes, you really need to understand how they are prepared because the method of preparation is also a way that distinguishes form-based code from conventional codes. And the preparation of the form-based codes starts with existing condition analysis inventory. What this means in contrast to the conventional code update is focusing and going out to the community to walk around and measure things. Conventional zoning code updates often focus on how the process is working --- what kinds of land uses should be allowed in different places but there's rarely a serious

questioning of setback requirements, height limits, maybe height limits, but the rarely the others. That usually isn't on the table. But all of that needs to be thought about if you're really interested in the code that creates places that you want.

This is an example of a worksheet for the city of Sonoma code preparation process where the community was divided up into different districts and corridors. For each of those we have this kind of worksheet to generate an inventory and then detailed sheets where we record street types, block types, building types, open space types, parking types and natural features. The community wondered about the crowds of consultants and city staff wandering around neighborhoods and stepping off setbacks. But it was to understand what quantitatively about the place gives it its character. In another more formal example, this is an existing conditions assessment of a particular area of the city. You can see the diagram on the map, the circle is really important. The circle is both a useful analytical tool and a planning tool. It is a half-mile diameter, a quarter mile radius. It is the pedestrian shed. Probably most of you know of the pedestrian shed. It means a five-minute walk from the center to the edge, that's a quarter mile, that's the longest distance that most people are comfortable walking anywhere. And so if you're thinking about creating pedestrian-oriented places, then you need to understand how far people are willing to walk to help you think about the organization of activities, building types, and land uses within that pedestrian shade if it's going to be a successful pedestrian-oriented place. And so this example, like the other one but more nicely drawn, looks at that the existing character of a place and tries to distill the DNA so that it can be used in encoding to either replicate the existing condition for purposes of infill or transform it into something else.

The second step is that some public visioning oftentimes takes the form of a charrette. How many of you have participated in charrettes? Lots, great. You know those can be a train wreck, they typically combine consulting teams with city staff, with stakeholders, with community and they take a variety of forms. Usually of a lot of public participation with the consultants working intensively together over a period of five to seven days, generating a lot of designs and testing with the community that is present and working toward some sort of first draft, administrative draft, and conclusions about the planning code in a particular area that is being dealt with. I have wondered about the scalability of this technique but then I had the privilege of being invited to participate in the gulf coast hurricane relief effort in a charrette last October. This charrette involved 200 people doing work, including about one hundred Congress of New Urbanism members from different parts of the country and about one hundred local staff and elected officials. Unfortunately, there was not a lot of public participation because they had moved away. But some incredible work was done and it definitely demonstrated the scalability of this technique -- in this case dealing with eleven nearly destroyed communities on Mississippi gulf coast and trying to envision a restoration and future for each of those from the standpoint of planning and urban design. And they all come down to this. If you have participated in a charrette, then you know the last night is typically long. As soon as I shot this picture, I put the camera down and picked up the colored pencil and started coloring drawings. But the public gets to see the design process under way in a transparent fashion it has a wonderful way of engaging the public and encouraging consensus on the results.

I am presenting this process in a wonderfully linear and orderly way when in fact it is also a complete train wreck as those of you know who ever participated in any kind of effort as detailed

and as controversial as the planning process. You take a step, then you go back, revisit something else you did and you work through the best way you can. But if this were a linear process, the next step would be preparing a regulating plan in zones and this isn't what we're doing. Instead, typically our regulating plan may be based on different organizing principles, residential, commercial, industrial zones. Those may include transects, something called neighborhoods, district's, corridors. A regulating plan or zoning map may be based on streets which is to say the rules for buildings and building form very according to the type of street you are located on. You may have a regulating plan based on overlays or special purposes zones but more often than not these days the planning site of a form-based code is based on an organizing principle called transect, which probably most of you have heard of. Transects simply looks at the human ecology alone a continuing intensity from least urban to most to the most urban. This is the model, this is almost never appropriate to pull out of the box with six zones applied to a city; you need more zones if you're trying to draw distinctions informing character between different parts of the city. But this is a way of thinking about and organizing a mapping process that gets you away from residential, commercial and industrial and begins causing the thought process to focus on intensity form, and character.

A particular example was this project for the city of Fresno. We were hired to do quick and dirty planning and they wanted to understand how form-based codes worked. They wanted a quick demonstration project of charrette at work and so we did two-day urban design workshop where we focused on an area of Fresno west of highway 99, mostly greenfield (brownfield in summer). And West Shaw Ave. defined the area, which is the middle of the planning area that's identified here. It is an important east-west transportation corridor on the development part of the city. It's mostly undeveloped but you can see there's some developed areas, an older single family neighborhood centered around an elementary school, a brand new suburban single family residential subdivision right next to a brand new water park, right next to industrial area -- its zone industrial but not developed. When you look at the zoning map it is Crayola zoning at its best. Let's take the colors out and see what patterning we can come up with, residential, commercial and industrial. That is not going to determine our results in any decent urban design outcome unless there's a lot of discretionary review associated with each individual project. So the city said, take this place as a pilot project. You don't need to pay a lot of attention to existing zoning but the property owners would be interested in something approximating this. So let's rethink it, from the standpoint of neighborhoods and pedestrian orientation. So it started as many of these greenfield urban design projects do by thinking about where could neighborhoods align themselves based on the concept of the pedestrian shed and their relationship to the corridors. And as the work continued these notions became more and more detailed finally resulting in the street network and distribution of form intensity and land use that led to a preferred alternative that established a series of zones and a circulation system with detailed ideas in some parts of it and not a lot of detail in others. Remember this was a two-day exercise. So then, as part of the process of mapping, we had to think about what these zones mean. So we came up with a series of zone types descriptions like the town center zone. Then for the purposes of public participation and understanding, we provided some cluster of photographs to show each area. So this is the town center, this is the neighborhood center (actually it's a photograph from The Crossings over in Bend), and then this is the corridor, which shows what needs to happen from an urban design and transportation standpoint along Shaw avenue. The neighborhood general zones described primary fabric of the neighborhoods themselves and neighborhood's edges are



where the city would continue to be vital open countryside and needed to be more compatible with the continuing commercial agricultural operations beyond the city fringes.

In a built-out condition, the exercise is completely different than for a greenfield/blank slate/start from scratch/everything's on the table approach except for environmental constraints. But in the existing built environment it is often completely different. This is part of the specific plan and form-based coding effort for downtown Newhall, which is part of the city of Santa Rita in southern California. If you've heard about Santa Rita at all you probably know it because that's where Magic Mountain is, a theme park north of Los Angeles. Downtown Newhall was a downtown at the very beginning; an urban place but it devolved overtime into a couple of commercial strips. The city decided that because it is characterized by suburban development everywhere, they wanted downtown Newhall, they wanted a real downtown back. And so there were two charrettes. This was last year's plan that showed in plan view one of the ways in which this place could become a real downtown. Then from this plan we developed a regulating plan that identified different zones -- urban general one, two, urban center, corridor and district. So these examples are designed as a place and then we code the plan.

Another regulating planning example this is from the city of Azusa in southern California. This is the regulating plan for the entire city, an entirely built out city actually. This looks like a conventional zoning map but it is built on completely different principles. This was constructed based on an analysis of the city. We first identified its neighborhoods; these are places where people live, mostly, some of them have identifiable centers, some don't, some have places that could become centers. In fact we found three different types of neighborhoods in Azusa. There were traditional neighborhoods built before World War II; they contained a mixture of land uses and a mixture of housing types, although residential has been dominant in terms of land use types. There were suburban neighborhoods with postwar classic southern California tract houses built in the 1950s, and then transitional neighborhoods, which were mostly multifamily neighborhoods, built in the 1950s and 1960s, which have badly deteriorated. In fact, some of those terrible examples of multifamily create a fear of density. So these transitional neighborhoods were ones where the code focused on transformation but still maintaining a primarily residential character. These are the districts in Azusa. Districts are either more mixed use or more single use neighborhoods. In the center of the screen, the downtown is the most richly mixed-use district. The industrial districts on the west of the city are more single use and are expected to remain so the folks who own industrial businesses there don't want people living near them because people won't like it and they will complain. So these needed to be single use. Then over here we have a couple of university districts or entertainment districts. Connecting neighborhood districts in Azusa are the corridors, like most of southern California today. These corridors are street commercial but the General Plan was updated simultaneously with the code and called for these to become places in their own right -- mixed use pedestrian-oriented. Then of course this will occur over a fairly long period of time because the city itself can only do so much transformation absent redevelopment and it requires individual property owners to rebuild according to the planning code for transformation to occur.

We looked at downtown Ventura briefly earlier. This exercise started with an analysis of pedestrian sheds in downtown and then defining individual zones within the downtown. We came up with basically six different zones:

- Urban general one - these are urban neighborhoods in historic neighborhoods in downtown Ventura that the city wants essentially to preserve
- Urban general two is also intended as part of this planning effort to become residential although now it's a worn out service commercial area and the lot sizes too small, the location is in good in terms of traffic just needs to become more urban residential but with different character of the urban general one
- Urban general three is also predominantly residential with some mixed use office uses, but this is urban housing, this is where the city is intending to accommodate more urban housing types in a larger population
- The corridors and Ventura extend outside the downtown and there were three different corridors each of which has different urban design objectives. The urban centers would provide for the daily convenience and shopping needs of downtown urban residents. And then the downtown core, the business center and the place where the buildings should be tallest, the parking is mostly structured with liners so it isn't making parking structured along street and this is the pedestrian-oriented vital heart of the city. And then for each of these zones in part of the planning process, a series of examples and photographs and sketches show what the intended building types would be and the levels of intensity starting with urban general one going to the downtown corridor.

And then finally there are regulating plan examples. This is a street based regulating plan. This is for central Hercules in the San Francisco Bay Area. This is an east bay community where there is a specific plan of defying the development of a brown field area to become of the center of this otherwise suburban community development. This is underway and is very successful. The planning has occurred in four steps and included developing the urban standards, street blocks, building placement and the heights, and land uses. And in a form-based code this is what they looked like. This is a page of standards for a particular street type code dealing with the street right-of-way in terms of pavement width, traffic movement, parking, intersection types, curb types, and so forth.

It is important for the code to talk about how the division of property into smaller lots will affect the character of the places and desired outcomes. So this page from downtown Ventura's code looks at some blocks and it can be further subdivided and describes how alleys can be appropriately included and how lots can be divided within a block. Notice the emphasis on illustration, the rules are described in words as they would be in a conventional zoning code but the standards are illustrated applications of standards so that everybody can understand what this means in terms of physical form and character.

And here is an example from another type of form-based code. Some of you may have heard terms like smart code. That is a type of form-based code, it is a template that can be downloaded, and fit to particular community if you like the way it is organized and the nomenclature it uses. Here are a couple of pages from smart code and then finally here is the page of the code that has the building standards based on the street type you are located on.

Then we get to land uses: bakeries, banks, barber shops, beauty salons, etc. I am sure no one sees zoning codes looks like this. Actually probably most of you who ever see zoning codes can see

one almost exactly like this. This is a classic example of zoning code trying to find universal possible land use types. This doesn't work because as soon as you come up with what you think is the perfect land use, someone will invent a brand new one the very next day and you never thought of and you have to figure out whether it fits or it does not. This sometimes gets to obscene extremes. In the city of Norwalk, California, a southern California community, they had a single commercial zone that listed 250 uses. These are some of my favorites. Use Number 19, Turkish baths. Use Number 25, boxing arenas. You can have the retail sale of cellos. You can have a bombing business and you can have physical culture institution whatever that is because and no one knew because there were no definitions of any of these in the code. You can manufacture potato chips and only potato chips. You can have a tombstone store if you want one. This doesn't make any sense and so what do we do in form-based codes with respect to land use types? We regulate what matters and what matters in terms of land uses.

Let's think about retail as an example. It is not really important whether a store is selling books or clothes. What's important is how the use operates. Is it operating outside normal business hours? Does it sell alcohol? Do they have drive-thru facilities? Does it sell used merchandise? Does it have a floor area ratio above a certain threshold? And the threshold would be based on what you want to be in either pedestrian-oriented storefronts or what you are willing to accommodate in a more auto-oriented context, which needs larger four plate stores. Is there outside production of items sold? These are factors that might determine whether a use should be permitted by right or require a conditional use permit. And these are factors that might determine whether a particular retail type would be allowed in certain areas in the city not in others. But this really gets to the heart of the matter in terms of what impacts retail has on its surroundings. And it's really, I think, a more thoughtful way of dealing with issues of land use. Then the land uses are more often than not arranged in tables that are much more brief and consolidated than you can find conventional code.

This is an example of the smart code with about the same number of use types that really focuses on land use regulation in terms of what's really important and spends most of the time of code, dealing with issues of forming character.

This leads to the development of architectural standards and by architectural standards I do not mean style because mostly style is not regulated in a form-based code. I should say most form-based codes do not regulate style. If you do, it is because of particular community interest but that's not a common component of form-based code. So these include building types, the building types are regulated in the code based on the existing conditions analysis and what the community wants to have happened in terms of preservation or transformation and anything in the continuum between those two extremes. This is the list of building types we came up with as being appropriate within downtown Ventura in various places. And then once we determine the palate it became necessary to figure out where these are located and we determined that some of them are more appropriate in some zones and not others. We also determined, and when I say we I mean the entire team -- city staff, the consultants and the community, that they also made sense or not depending on the width of a lot of they were located on. Because again this is a built-out downtown we're talking about infill or refill development and need to think about the context vary significantly.

So in urban general one zones, the emphasis is on house form buildings with the more urban types not allowed or limited to larger lots, and the most urban types are not allowed at all in urban general one. Contrast this with the corridor house form types allowed and the emphasis is on the most of urban types. The distribution is based on a particular urban design outcome the community wants to achieve in each part of downtown Ventura. And then for each building type, there's a page standard that talks about rules for accessing, parking, open space and landscaping in frontage and building size. That was an example from bungalow court. This is an example for commercial block the most urban of building types. And then the code also can deal with issues like mixed use more graphically, here you can see where residential was allowed in relation to nonresidential activity in different arrangements. Frontage types in the code illustrated here show that a continuum of intensity from the least intense on the left (the front yard porch) to the most intense on the right (the arcade), and how they play themselves in a cross section. These are some photographs of the code that are not regulating but are showing examples of how these different frontage types can be designed to highlight the fact there are many different design solutions that would apply in these urban conditions and in particular areas in the city.

Finally, if this were linear process we would allocate standards to the zones and illustrate them. Although form-based codes are illustrated, they also use words but they give the users a pretty clear understanding of what the intended look and feel of the place is. This is from a form-based code we did for a new neighborhood in a small community in the Monterey/Salinas valley in California. You can see from the illustrated drawing the look and feel of places as intended and the standards for land uses allowed, architectural types allowed, building types, placement, frontage, and parks. The point of this technology of coding is to, within the context of developing communities, look at places like this that are essentially character-free and as individual development occurs begin to create places that overtime become better and better and better. This is an example of a photo-simulation done by Steve Price, an urban designer in Berkeley who does wonderful work as you can see. This obviously is an example that reflects traditional urbanism and traditional architecture. That does not mean that the same kind of transformation in new urban places could not be done in modernism as long as it is dealing with the aspects of urban place and pedestrian orientation that we know works from what attracts pedestrians and keeps in place. If you're interested in pursuing any this further, more information can be found on the Form-Based Codes Institute website -- [formbasedcodes.org](http://formbasedcodes.org).



## CHAPTER 4

### BUILDING MULTI-WAY BOULEVARDS

#### Edited Transcript of City Design Lecture by Elizabeth MacDonald

*The City of Eugene is considering proposals for Franklin Boulevard that can accommodate transit, increased vehicle capacities, and an improved pedestrian environment. Multi-way boulevards are one tested approach that can meet these diverse demands. Elizabeth Macdonald, a professor in the Department of City and Regional Planning at the University of California at Berkeley and the co-author of The Boulevard Book, shared her research and practice experience in designing and building multi-way boulevards. The lecture was given on June 7, 2006.*

I am really happy to be here tonight. What I'm going to talk to you about tonight is the multi-way boulevard. Specifically, I am going to talk about what these streets are because it is an unusual street type and everybody does not know what they are nor do they have experience with them. I am going to tell you about a large research study that we did looking at this type of street and I will show you some example boulevards from around the world and then I am going to show you some boulevards that my firm has designed; two have been built and one in which the design has been approved but it's not yet been built. So that's where we're going.

The images you see on the screen in front you are Octavia Boulevards in San Francisco. We'll get to the specific design in just a moment. When I get to I will tell you some details about the actual functioning of the street, and how it works in a fair amount detail because it is really important to get these streets right if you are going to do it. And of course if you want more details afterwards, if there's any question that comes to mind, I am happy to take questions at the end of the presentation.

So, first of all let me explain what a multi-way boulevard is. By the way, my partner Allen Jacobs said I actually invented the name for this type of street because there was really no name for this specific type of boulevard. We've seen this as a very particular type of boulevard that is different than other types because of its cross-sectional design. How that cross-sectional design really works to enable both through traffic movement in cities and in places where it is necessary to handle that kind of through traffic, but to do so in a way that is not damaging to the local environment is of course one of big challenges we face today in street design. We have a lot of single purpose streets that have been designed as streets to move traffic, but in general they're not very good places for pedestrians. So this is a street type we think can work well for both moving traffic and for pedestrians.

How do they work? At the center of roadway is the through-going realm that allows relatively fast moving through traffic, usually moving in both directions. On either side, there is a one-way side access road for relatively slow moving local traffic and for parking. So there is no parking in the center realm, it only occurs on the side access roadways. Then separating the two realms are tree-lined medians either with single road trees or double road trees. These are the places where pedestrian activities can occur; perhaps there might be a bus stop where there can be a transition

between pedestrian and transit rider. Now this is an example of a multi-way boulevard. This is an image of two boulevards in Brooklyn -- Ocean Parkway and Eastern Parkway. They are really sister boulevards in Brooklyn. Ocean Parkway is 5.5 miles long and Eastern Parkway is 3.5 miles long. And they really function as open space in the neighborhoods and yet they carry significant amount of traffic. Ocean Parkway carries 7,000 cars a day, which is a major traffic street in Brooklyn. But yet you have this very pedestrian-oriented median that also works as bicycle way and a green walking path for pedestrians. This is on Eastern Parkway, you see all the traffic moving in the center roadway, the tree-lined medians and then that's the character of side access road way. So some of these boulevards have a particular residential like character of a local road, a local residential street along the side of a major traffic-moving street.

Now multi-way boulevards were built in a number of cities in the mid and late 1800s, particular in places like Barcelona, which is shown here and also in Paris. I already showed you images of Ocean Parkway and Eastern Parkway look -- those streets were built in 1870s. They were designed by Fredrick Law Olmsted and were really his interpretation of European boulevards into America context. He gave them a different name; he called them parkways. That was what Ocean Parkway looked like in the 1880s. This was a time when communities were grappling with how to deal with new forms of transportation that were coming into being, specifically relatively fast moving carriages, such as this is, but you still had lots of people on foot and you still had lots of people in relatively slow moving wagons. So this was a street type that allowed all of those different types of movement to happen but to do so in separate realms. This is an image of Ocean Parkway from the 1890s when bicycles came into widespread use and the medians were actually turned into bicycle pathways. An interesting thing about this street is that they were built as I said in the 1870s and significant development actually did not happen around them for almost 50 years. These streets fit in a fully planned landscape with trees, fully graded for roadways for 50 years and they became more or less landscape feature; a really identified feature in suburban Brooklyn.

So why don't you see multi-way boulevards in our cities today? You see a number of them still in European cities but they have not been built in American cities with one exception I know about and that is Chico California, other than that they have not been built in this country since about the 1930s. There are two primary reasons for that.

First of all, they do not fit into the so-called functional classification system, which is a system traffic engineers use to categorize streets and different street types. This is the type of curve that is used to simplify that functional classification system. According to this curve, it's impossible to have a street that has both high movement function, which they call a freeway here, and a high access function, because, simply, it doesn't fit into this curve, it's not possible. A multi-functional street like that cannot fit into this system.

Secondly, multi-way boulevards were deemed unsafe because of the conflicts in intersections that result from multiple roadways and adjacent roadways. Traffic engineers analyze streets often in an abstract way such as this. This is a potential conflict point diagram for multi-way boulevards. If you look at this diagram, multi-way boulevards, assuming all movements are allowed at intersections, you have 50 potential conflict points as opposed to 16 on a normally

configured street. But this kind of abstract analysis really does not tell the whole story. It does not get what the street is all about.

That leads to our research, when my partner Allen Jacobs suggested using multi-way boulevards for particular situations that seem appropriate as far back as the 1990s; he was basically told that it couldn't be a safe street design. When he asked why it was unsafe, people were unable to actually give him data that showed people had proved that this street was unsafe. Our experiences of multi-way boulevards, we know from other countries, were that they work perfectly well. Actually they made for really wonderful pedestrian-friendly environments and everybody seems to be able to negotiate the complexity of the streets just fine. So we engaged in a very long-term research project where we looked at multi-way boulevards in the United States and in Europe -- over two dozen of them. We created maps and compared existing boulevards to normally configured street in the same area as close as we could carrying reasonably the same amount of traffic. We looked at them periodically and looked at how the traffic was moving. We did diagrams of traffic flows and we also compared the accident data for the streets. Basically what we discovered is multi-way boulevards are not less safe than normally configured streets if they are well designed. That's absolutely the key. Poorly designed multi-way boulevards really give the street type a bad name.

So let me illustrate what I mean about design. These are two sections of multi-way boulevards, Ocean Parkway on your right and Grand Concourse. Ocean Parkway is a very safe boulevard and it is many people's favorite street in Brooklyn. The Grand Concourse, on the other hand, is not a safe boulevard; it has one of the highest accident rates in New York City. So we looked at these two streets very closely, we came to understand even though they have the same kind of cross section, they are actually really different. The difference lies primarily and what happens over here on the side. On Ocean Parkway you have this narrow side access road, which is 25 feet wide and you have two lanes of parking and one go lane in the middle of it. So it is relatively narrow where as on Grand Concourse in 35 feet you have three lanes and two of those are movement lanes, just one parking lane. So you have as much traffic moving over here in that direction as you do here and of course the medians are very different in width. Also along the length of the street these medians are cut into periodically sleeves, to allow cut through cars. This is what they look like in plan. The way that these intersections are controlled is that on Ocean Parkway, the center roadway and cross roadways are controlled by signal lights whereas side access roadways are controlled by stop signs in every intersection to discourage people from using them as through routes. On the Grand Concourse, both the center and the side are controlled by signals as well as the cross traffic. So on the Grand Concourse there is almost as much traffic traveling on the side roadways as in the center and the travel is just fast. That is the reason why it is unsafe because people get killed even though they can walk over to that median which they do and yet this traffic is moving really fast. So it's not safe.

Whereas on Ocean Parkway, because of the stop sign on every intersection, almost all the traffic moves in the center roadway not on the side. So yes, you have a lot of movements going on here but relative to the whole traffic flow, there is not really a lot of it, it happens randomly that you have additional movements and people. On the side are access roads that have the lowest priority. So design really counts and we came to understand by looking at this kind of comparison is that what makes a boulevard safe and what makes it functional well is if you



create a situation where you have what we called an extended pedestrian realm that goes all the way from sidewalk to the outer median. That is what you get on Ocean Parkway whereas on the Grand Concourse, the pedestrian realm is just confined to a sidewalk although that was getting dangerous because people try to cross the center. So creating an extended pedestrian realm is really what it's all about. And you do that by also closely planting lines of trees that create an invisible fence if you will that separate the pedestrian realm from the fast moving realm. You create situation where this roadway is very narrow so the pedestrians feel like they can cross the side road.

Multi-way boulevards come in all types. They might be bucolic like this one in Italy where the side access road really functions as bike path and motor scooters also use the sidewalk realm and the buses and cars flow in the middle realm. Or like as bucolic as in Chico, California where the side access roads are used by cars, by bicyclists and actually by buses. Or they might be very urbane, such as multi-way boulevards in Paris that cluster around the Champs Ellysees in the western part of Paris. The Champs Ellysees, which you know is very wide street, used to be a multi-way boulevard but has been reconfigured. They put all the parking underneath the street and they took out of all of access roads and turned them into very wide sidewalks so that it is no longer is a multi-way boulevard. But probably the more interesting types of streets in this area of Paris are narrow multi-way boulevards. There are a number of them that are about 120 feet wide and they have very narrow side access roads like this on the Ave. Montaigne. And this is a sketch we did of boulevard Corsel, which is near the park Monsell. And in this case 14 feet accommodates both parking lane and go lane. This is a very pedestrian-oriented realm. These streets are some of the most elegant streets in the city, with very expensive hotels and very expensive shops on these streets.

Or multi-way boulevards might be granted an elegant setting like this one in Barcelona, which has is 200 feet wide from building to building. It is a street where everybody comes out to in evening and goes for what they call a Passeggiata, which is the evening's stroll. Everybody got dressed up and here the wide median is actually configured in a bunch of different ways going along the street. There are stairways that allow you to access an underground parking garage below it. Some of those stairways go down to train station, which intersects the street down below so there is a lot of multi-level things going on along the street and that all happens in the median. In some places they cut out a little bit of the median to park cars diagonally. But in all that the tree planting remains relatively consistence. That is the plan looking down the intersection, it has amazing details to it. These are paving stones that were designed by Antonio Gaudi, this is a beautiful paving stone and it has wonderful tile also designed by Gaudi. But in terms of creating a pedestrian environment, the really important things include marked crosswalks. So even with all of that traffic that flows in the center of this, when you get to an intersection you know this is a pedestrian realm; that the pedestrian has priority through there and really all along access road.

So let me turn now to some of our work, which is really on a scale of smaller boulevards because we're working with space constraints in all of our projects. The first one is Sierra Road, which is in Ahmadabad, India. This is the first multi-way boulevard that we designed. This is how it looked before we did the design. What happened was that an Indian architect, who is a very well known architect in Ahmadabad who did his PhD at Berkeley, came back to Berkeley, actually to

finish his dissertation work when we were doing the research on multi-way boulevards. He saw the drawings we had on our drawing boards in Wurster Hall at Berkeley. He looked at what we were doing and he said, you know what, I have a street design that I am working on and I am doing it all wrong. You know I am designing a bad street. Will you come to Ahmadabad with me to help me design this into multi-way a boulevard that works. So we did.

Sierra Road is basically a ring road around the old city, it was rapidly developing into a major shopping street and this is what the building typology looking like. As a shopping street, there was ground floor retail and often two levels of offices and housing above. It was very disorganized at first. That's the cross section that we designed for the street so it is in a 100-foot right-of-way, which is very narrow. This is narrower than we what we would be able to in this country because of the standards. But here it works because people were willing to accept lesser standards because they knew it would work and they are used to tightness and much worse situations than we are used to in this country. That was what it looked like in plan, what we did was we kept the existing trees wherever they occurred, like those places where diagonal parking happens and, maybe you can barely see it, these are plum trees, better planned here so whenever we want to put tree we just sort of bumped out into the parking space and put trees and eventually those would grow into tall trees and create a real marker in this part of the city. Sure, we would like to divide the median here so we can put big trees but it just wasn't possible with the limited cross sections we had. So this is what we came up with. One of the things about it that works really well is that we put this roadway adjacent to the sidewalk and people flow out from the sidewalk, right onto this lane which is 8-foot wide lane which keeps traffic very slow moving. So it really is claimed as a pedestrian realm. And yet cars can come in here and use the space and park, etc. but it is really a multi-purpose shared space, which is exactly what we're trying to create. Notice that materials on this street are pedestrian scale materials to make it comfortable place and to signify to drivers that this is a different realm on the side. A little bit closer up detail shows how it works with little details that we really liked. We ended up doing a double-step curb here on the side because the existing curb was very tall, so we put next step and people actually sit along here, gather here, particular in the evening. It is a kind of fun detail.

Now lets move to San Francisco. Octavia Boulevard, which is really our best-known project, is one that has been getting a lot of awards lately. Let me get you oriented to San Francisco. This is Market Street here; the red line is the BART System, an underground rapid transit system that follows Market Street. This is Van Ness Avenue coming down. This is the Panhandle going on to Golden Gate Park, and the Civic Center is in this area. Octavia Boulevard replaced a little, brief freeway, which is called the Central Freeway, right here. The Central Freeway was built in the early 1960s, which was part of traffic plan that was developed for San Francisco in the 1950s and partly implemented. Believe it or not, San Francisco actually planed to put a freeway down Van Ness Avenue. Freeways would go on either way of Golden Gate Park and freeways would have been going through the center of the park and out to Golden Bridge. All of that was planned. They built some freeways around the edges through the industrial area and basically through the lower income areas of the city. When this freeway started heading towards the wealthy part of the city people protested it and the rest of the plan was never implemented. But what happened is that this neighborhood, which is called Hayes Valley, was left with this spur of a freeway, this double-decked spur. To get you oriented again, this is Market Street, this is heading towards the Bay here, this is City Hall and then this is Van Ness Avenue right here. So Hayes Valley was left

with this freeway for over 25 years and you can imagine this was not a very desirable place to be. Under that freeway was really a place that attracted a lot of prostitution and some not very pleasant activities. And it really cut fine scale neighborhoods in half for all of those years.

Well in 1989 we have the Loma Prieta earthquake and many freeways in the Bay Area were damaged and this one in particular was damaged. So right away they took down this spur going to Van Ness and they took the double-decker out off. But it is sat there like that for a number of years. In 1997, there was a debate. Should we rebuild the freeway or we should do something different? There was a lot of going on in the public realm. Finally citizens started to take things into their own hands and in California citizens can put measures on the ballot to be voted on. So people who were living in the western part of San Francisco put a measure on the ballot in 1997 to rebuild the freeway as single level structure that was four-lanes wide and that passed. But the next year people who live in Hayes Valley, the local neighborhood where the freeway went through, put their own measure on the ballot which was to take down the freeway and replace it with a surface boulevard of the type we were doing research. They knew about the research we had been doing at Berkeley and that measure passed. So at that point, Allen Jacobs and myself were brought in to design a new boulevard, which we did and I will show you in a minute. In 1999, there were two measures put on ballot, one to rebuild the freeway and one to build the boulevard as we had designed. This time the citizens in San Francisco actually had the boulevard design in front of them so they could see what it looked like; we had a lot of flyers going around. The short version of the story is that the boulevard initiative passed. The one we designed is the one that went forward.

It was really the people in Hayes Valley that were responsible for taking the freeway down. These people were struck with the idea of doing something other than a freeway for over 10 years and then they finally got it approved by voters and then they made sure that the design we had designed was actually implemented. So the local constituency was absolutely behind getting this boulevard built but it was going against a lot of norms.

So let me show you our design. One of the initial design decisions we made that was really important was to keep the boulevard absolutely as narrow as we could because you see when the freeway was built, they actually had taken out of the ends of all of these blocks so they could get a bigger right away. They put the freeway over Octavia Street, which was an existing street but it needed to get wider so they just took a bunch of units along here.

In order to for the boulevard to make sense it was really important that we could rebuild that frontage and have building facing out onto the boulevard, onto that side access road, to really make sense. Some of those parcels would remain narrow, as narrow as 15 feet. We just accepted that as a design challenge and that we could figure out a way to do good buildings in that amount of space. So this is the cross section of the boulevard, it is 133 feet wide, with 11-foot lanes, two of them each way in the center and on the side 18 feet wide, with a 10-foot traffic lane, plus an 8-foot parking lane. We actually would like to get that a bit narrower but that was as narrow as local engineers were willing to accept. That's what it looks like in the center. One of the things really makes this work is that since there was no parking lane here in the center roadway, there was no friction in the middle so these vehicles can actually move relatively easily. That is what it looks like along the side access road. In our design we actually called for surfacing on the

roadway that would be similar to what happened on median space so it would look like more of a pedestrian realm. Unfortunately, that wasn't implemented because of cost saving reasons but fortunately the city is now discovering new pot of money and they may put some different kind of paving, probably at least at intersections if not the whole lane. That is the artist's rendering of what it might look like when the property along the sides are actually built.

One of the issues that came up was with the fire department and the desire to be able to get on the access road to fight any fires that happen on the property should that occur. So the solution, instead of providing 15-foot wide lanes here, like they originally requested, was to keep the trees in the median towards the center and have a low curb on this side, so a big fire truck can come in here. Their wheels can jump the curb. The fire department was perfectly happy with that solution. For their vehicles curbs mean absolutely nothing so they knew that would work for them. That is the kind of thing that hopefully never happens, but if it does happen it is a very rare event. So in the mean time, instead of putting extra space into a roadway, which encourages people to speed along that roadway, you put space into this median, which becomes a place for people and creates the pedestrian realm. So it is a really an important lesson and important detail.

Another thing was a real design issue was how to design intersections on the boulevard. We basically came up with three different alternatives for the design. I should tell you the way we structured this project was that my partner Allen Jacobs and myself acted as the lead designers working directly with people from local Public Works Department and engineers from Parking and Traffic Departments. We sat around the table and worked this design out. We came up with these three alternative intersections. One was traffic flow directly across the intersections on the side access roadway. Another was the traffic was forced out into the center roadway before the intersection and again here on the other side slip back in. The third one is a hybrid where the traffic flowed into the center street before the intersection but it could go straight in on the other side. Within our design team, we all agreed that any of these alternatives would be acceptable. Then we would leave it up to the local neighborhood to decide which alternative they would prefer. Our agreement was that we actually preferred this design because since there were residential properties built along this boulevard, if we did with this design, it would allow people to live along here to remain in the local realm within local streets without ever getting into that heavy flow of traffic which was headed for the freeway. They would sort of maintain a better local realm. This in fact was the way it was designed and implemented. Again as I said, we are not really happy with the way was finally built. Hopefully with this new pool of money, we may actually be able to narrow this down and put in some paving changes right.

People probably don't necessarily always come out and say things that didn't get implemented properly in their projects but I think it is actually important to talk about some of those things with urban design projects like this. Of course they happen over a long period of time and there are many people involved in the process, many decision makers and sometimes there are compromises that happen. One of things that we really wanted but we were not able to get is that we really wanted this freeway toned down. This is the freeway coming down to Market Street so the freeway ended and you can call this the off ramp from the freeway that ended along this line here at Market Street and then became the multi-way boulevard. We argued that this off-ramp should become like a local street. In other words, lanes should be narrowed and maybe there should be bumps, something on the roadway, and planted with trees if all possible. So way back

up on that realm, people would get the idea, hey, you are no longer on a freeway, you are actually on a city street and they would start to understand earlier than this intersection that they were expected to behave a little bit differently here than they were behaving on the freeway. Unfortunately, Caltrans, which is the highway agency, wasn't willing to do that so we ended up with it too wide there. This is in fact what it looks like. This is Octavia Boulevard and Market Street here and then the freeway off-ramp is happening there. This is what it looks like with big lanes on the side. So as you can see here, there is a little bit of an issue with too much speed coming on to the boulevard so the city put things like this like sign to warn people that hey you are going too fast and you really need to slow down to this speed here. Hopefully, maybe that is something that we can do a little bit better. So right now this entry to Octavia really serves as a major entry point into the city for many people -- as a first place where they get off the freeway and actually get into the city so we designed it with large trees at the entry.

One of the things that we are most happy with this project is a little park that we designed at the end of Octavia Boulevard at the point where all of the traffic would come off this and turn out towards Golden Gate Park. At that point, there was a transition that needed to be made from wide boulevards into the local street system where we have streets just 60 feet wide. The initial proposal that Caltrans came up with was basically a block going down until it met up with the existing street but to us it was very clear that this was an opportunity to get a local neighborhood park in an area that doesn't have very much in the way of park space. We proposed the idea and immediately when we started working on the design, it was immediately accepted by the community, and also by planners, and by the politicians. Everybody just thought it was wonderful. So this little park which we call Hayes Green and it goes from the end of boulevard here to Hayes Street, which is a local neighborhood shopping street and you can see the way the side access road here that goes along the boulevard actually continues along here, along the side of the park. But here they were done with a material that makes it look more like a pedestrian realm. So this is the park and there is actually a kids play structure right here believe it or not. See the other intersection, some more images what it looked like when it was opened a year ago.

We had an event we called World Environment Day in San Francisco last year, with mayors from cities all around the world coming to San Francisco to talk about environmental initiatives that were going on in their cities and to listen to examples from elsewhere. So we opened Hayes Green on World Environment Day. And we had this wonderful temporary structure that was built into part of the park. This is actually a structure this guy makes out of recycled materials; he takes the leftover pieces and turns them into sculpture art. So it is all recycled, absolutely wonderful.

So this is what Octavia looks like. It went from an overhead freeway that darkened environment and, because of spending money that came with a disaster relief funds after the freeway was damaged in the earthquake -- instead of spending that money to build an even wider structure that would created more dark areas and would have taken out more homes -- we end up with a situation like this which moves as much traffic as the freeway but does so in a way that creates a better local environment for the people who live around it. Again that's what it looks like -- you can imagine when the trees grow up, this is a Chinese Elms planted about 20-foot on center and when those grow up get tall, they create real a canopy over the side realm.

Now there was one more part to this story I just want to touch on very briefly. All of those sites that are shown in red are all the land we got back by taking the freeway down. What has happened with those sites is that most of them may be used by the city as places to build affordable housing, which is a real issue in San Francisco, there is just not enough of it. There was actually some rezoning that went on as a part of whole process later on after we designed the boulevard and there was actually a neighborhood planning process that was done for this whole area, called Market - Octavia neighborhood. One of the things we proposed was actually down-zoning, believe it or not, because when the freeway was built here they actually up-zoned so you can have 80-foot tall buildings where all this red color is, which would be similar to what has happened along this area Market Street, which never made any sense for the neighbors so they never ever been built. Our proposal was instead to make the heights along the boulevard similar to what was happening in the local neighborhood. So you actually have heights of 50 feet right along the boulevard and along the side street was a 40 feet high and along the narrow alleys there was a 30 feet high. So this is about making boulevard be a part of the neighborhood instead of something different. Because they have had this overhead structure for so long, in this particular case it really make sense to do something that more than rebuilding back. We didn't need a big commercial street here because this street right here is a major commercial street and there was no reason to put more of it on Octavia Boulevard and create competition for the existing retail street, which was already working really well.

Another thing that happened was that people got pretty interested in these narrow sites along the boulevard itself because they were so unusual. So in order to see what the possibilities were for the sites, a number of people gathered together and sponsored a competition for these sites. It was done through a group called San Francisco Beautiful, an organization called San Francisco Urban Planning Research as well as Planning Department and some other local civic groups. We came up with a number of proposals, over 100 people entered proposals for these sites. Some of the proposals perhaps were not so great -- this one here it did not quite understand what we really needed to have; you know some transparency on the ground floor and units with directed entries on the street. Others they had more transparency at the ground level. Actually some of the residential units could be very attractive because they spread out along the boulevard and you could have a lot glazing and a lot of frontage.

This is another example at the corner of Market Street showing how you can have tall buildings, and even a significant building at the corner of Market Street helping to create a gateway where people enter the city off the freeway. There is already a brand new building on the other side of intersection that the proposed design would play off. So we really spurred a lot critical thinking in the city and a couple of these projects may in fact go forward.

Now the last project I am going to talk to you about is our redesign for Pacific Boulevard in Vancouver. This is a project that has been designed and the city council actually approved, which I guess is something for Vancouver. But it has not been implemented yet. The situation was that this is Main Street through there one of new high density neighborhoods called False Creek North, which some of you may know of. It is one these neighborhoods where they're building really high-density residential towers on top of podium bases. Many of these buildings actually have townhouses that occur at the ground floor -- not so much right along this street but further down within the whole neighborhood. You have this townhouse that form the base.

Anyway, this is the major street that was going through the neighborhood and it was a real anomaly in Vancouver. Vancouver as you know is a city that never built freeways. But they did in the 1960s implement this street (they called it a connected street) as a way to get from downtown over to the east side. It was built quite wide with very wide lanes. When developers built this neighborhood they kept the basic configuration of the street although not the lane width; they basically doubled the sidewalk with some new paving and some new tree plantings. When the neighborhood was built out, people started moving in, including a lot of families with children. And there are several senior housing projects in this area as well. Planners look at it and they thought that this is kind of street we need for this neighborhood but it is (currently) just not pedestrian friendly at all, and that it is a problem. And they looked at the street and they look at all of the other streets they have in their downtown. All the other streets have traffic lanes three meters wide so it is a little bit less than ten feet wide and they said to themselves all of the other streets work without this lane width, why can't we do it here? If we do it here, we can get so much more area back for pedestrians. So they came to us ask us to do that. So this rarely occurs - traffic engineers came to us basically giving us space out of the roadway of the street.

What we ended up designing for this street was something of a hybrid street. So there was a different section or configuration of the boulevard depending on the land uses that were going on around it. So in the center area the boulevard was really intended to function as a commercial high street for the neighborhood. That is an English term, basically the concentrated area of retail for the neighborhood. In that area, we actually designed a center median boulevard, which made sense for this area. We could have this wide, tree-lined space in the middle that would really break the scale of the street and we designed it to have really beautiful maple trees in the center realm so they would have this incredible fall color, which really make the street stand out as something special. And the idea here was that along the side of the street we actually have flexible zones so that sometimes you would have a parking space here but it would be slightly raised curb at the edge and the cars would drive onto it when they want to park. When the local community wanted to, they could restrict parking for spaces and actually use it as a wide sidewalk space so they could have market stalls out there if they want to. They can have book stores, they can have art fairs, they could have cafe tables if they wanted to, and maybe individual business along the street would choose to not having a parking lot in front but instead use that as a space for something else.

That is what the intersection looks like in the center of the street so we basically left these curbs...so instead of crossing from here to here you now can cross from here to here in a very safe realm. So this really cuts down the amount of roadway the pedestrians had to cross. At either end of the boulevard we had a situation where we had these residential town houses I think you can see them along here were facing directly onto the street at least it happened on one side of the street. The other side of the street was basically like this built relatively recently but unfortunately didn't have any uses fronting onto the street. But you can imagine what would be like on the other side live on the street that wide. So basically what we did here is we create a one side multi-way boulevard. So we had those town houses facing on to the street they get their own local access route here by the way there were also bicycle travel and roll skaters can use it as well. On the other side where we did not have uses fronting directly onto it you just have typical situation with this faster moving traffic lanes in the middle. Then there's an option what you see is there is an option take street car they decided to build it either down the center of the

median or it could happen in share lanes just in case to that median. That is the detail of that side access road and we have a situation where we go from having an intersection in that residential area that looks like this absolutely enormous to nest down situation that looks like that. This is where side access roadway begins here and residential along here.

So it is really about reclaiming as much of the roadway space as possible for pedestrians and other uses and also for greening and for creating permeable surfaces so we can have better water retention and the like. So these streets can contribute ecologically to the local environment. So in conclusion, I just would like to say a couple of things regarding the implementation of these boulevards that we have found to be really crucial.

One thing is that people have to understand this is a different type of street; different than the types of movement streets that we're used to. This is multi-functional street that plays many different roles. A phrase we like to use about multi-way boulevards is that no one gets everything but everyone gets a lot because when you have a street that plays all those roles you cannot have the absolute ideal. So there are some compromises everywhere but basically the people moving in the center roadway get relatively efficient lanes for relatively fast moving cars because they do not have friction along the side. The side access roadways create really positive local realms for people who are living along it and still perhaps have to deal with the traffic of the center of the roadway but this creates buffer zone. By the way, I work on a research project with Professor Bossleman at UC-Berkeley where we look at the livability of multi-way boulevards and we compare low traffic streets with just a couple of thousands cars a day with medium traffic streets that have 14,000 cars a day with multi-way boulevards that carried up to about 70,000 cars a day. We did livability studies of these residential streets to see which street people who lived along perceived to be more livable. And what we found is that people on the boulevards consider them to be more livable than people on the street that carried about 14,000 cars a day. So the configuration of the street with that side access realm turned from being a relatively unlivable street to a livable street that people actually had a lot pride in because they live in a very special and unusual street.

So for implementing boulevards it is absolutely critical to fight for every foot and every inch. What I mean here is to keep things absolutely as narrow as you possibly can on the side roadways and do not go too overboard in the center realm because you also want that to be a place that pedestrians can cross with ease. And another lesson we really learned from Octavia Boulevard is to do something as unusual as this, to do a multi-function, high traffic street, it really takes a lot of will power on the part of a lot of people. For Octavia Boulevard, it was a local neighborhood that made it happen, that stuck with it, thought about the ideas, thought that it would be appropriate for their neighborhood, and thought that they could get a better environment out of it. And they went to all those public meetings. Once the street was designed, they were the watchdogs over it and made sure that as much as possible what was designed actually got built instead of something different. So really strong involvement on the part of the public, I think, is crucial to getting communities to act, perhaps to get communities to the point where they implement unusual streets like this that can make communities better places, even where you have to carry a large amount of traffic. Thank you very much.





## CHAPTER 5

### **BUILDING THE LIVABLE REGION: TRANSIT-ORIENTED DEVELOPMENT AND DEVELOPMENT-ORIENTED TRANSIT**

**Edited Transcript of City Design Lecture by Shelley Poticha**

*Lane Transit District's EmX line began service shortly after this lecture. It connects the downtowns of Eugene and Springfield with a bus rapid transit system. This project is already opening the door to more appropriate development along the line. Shelley Poticha discussed how such development can enhance regional livability. She is the President of Reconnecting America, a non-profit organization working to integrate transportation systems and the communities they serve, with the goals of generating lasting public and private returns, improving economic and environmental efficiency, and giving consumers greater choice. The lecture was given on October 26, 2006.*

Thanks everyone. It's great to be here. There is always a lot of romancing when I come and this is sort of an awesome audience to be able to be part of because many of the people I respect are here. So it's really wonderful to be here, this is where a lot my interest in cities began. I thought tonight that I would talk a little bit about some big transitions I see happening in cities then I want to try to experiment a little bit with you to try out some of my new thinking about how to analyze cities for their potential to rebuild around transit. Some of the techniques I am starting to look at attempt to make cities as accessible as they possibly can be. Now for those of you who are here for, hopefully, my lecture will be a little interesting. Then we can get to a conversation at the end because there is much new work that I want to show you.

Now as Mark said, I run a non-profit organization, it's a national organization called Reconnecting America. One of our big projects is the Center for Transit-oriented Development. We formed this group about two and half years ago after looking around at the projects that were built under the moniker of "transit-oriented development" in the 1980s and 1990s. But we have been really disappointed in a lot of projects we've built. And we felt that one of the things that was really a challenge for cities as they were interested in barking on the path was that they really had to become super researchers to learn everything they could about this topic. So the center for Transits-Oriented Development is really intended to be, almost like a clearinghouse of information, practices, techniques, policies and ideas about how to make transit more development oriented and how to make development more responsive to transit. We get funding from all kinds of different resources, including Federal Transit Administration and some other government agencies, foundations, like the Ford Foundation, sponsored engineering firms, planning firms, and cities to try and help these issues. And in some cases, cities have tried to figure out how to really get to next level.

So we all know traffic is everywhere, it is not going away. And none of the stuff I am going to talk about tonight is about getting rid of traffic. It's about enhancing the capacity of our regions

so we can all get around better. And that is a main reason we are starting to get traction with Transits-oriented Development, people are sick of being stuck in traffic. The other thing is that gas is not getting any cheaper; the numbers are sort of in flux. I am from California where it's still over 3 dollars a gallon, but people are also sick of paying high prices. It's not getting less expensive; the price generally is going up. That is beginning to hit people in their pockets. Now the other thing is that the same time we are stuck in traffic, we pay more for getting around. There seems to be something else going on. There are transit projects getting built in almost every metro area in the country. We built a database at the beginning of forming the Center for Transit-oriented Development that includes 40 regions in the United States that either have transit or are going to build transit. And we put in our database every station in the United States and drew a circle around each one representing the walking ratios around all the stations. We found that there are about 3,300 stations in United States, about 27 regions; automatically we are going up to 4,000 stations in next 20 years. So there is real interest in transit, a huge growth. Now part of that is become demographics in America are really changing. Singles are soon to be the new majority, and those can be old Americans and younger Americans. So we all know we are in an older, aging population in America, that's real. And it means we have to look at new housing types, new ways of building our cities, not looking into a mirror about how to build our cities. The other thing is that almost half of the US population by 2050s could be nonwhite... making for an increasingly diverse community. We are changing in many different ways. A pattern of building is really needed to reflect that.

The other thing that started to happen is that we've seen all across the country is that people really love living in the city. There is a sort of ground swell change in community preferences. I started collecting data from different kind of resources: mainstream media and consumer publications. Cities have real estate and transit publications. This is one of those kinds of inside publications from real estate industry. So there is real interest in building community, in locating next to transit. Now part of the reason for this is that there is huge growing evidence that we can make great, wonderful places, mixed-use places, that give transportation options and that connects communities to the region by transit. This creates tremendous real estate values; I have this whole library of real estate studies that shows how in Dallas, Texas and Salt Lake City, Utah and Denver, Colorado and Washington, DC, and Norfolk, Virginia, and Seattle, Washington, tremendous value in real estate that is clustered around transit networks, particularly when we built in ways that make great places. So one of the things I've been tried to do is to say let's capture some of that value and use techniques to deliver some of the things that help make cities really wonderful that are not necessarily provided by market place, like wonderful streets, like income diversity in housing, like great public spaces.

So this is one of a few ways that cities are really vital right now. So we can begin to capture some of that value to do the things we know are right. That seems to me a good path. And we've been collecting evidence about this. We are actually publishing a book in about two weeks on streetcars, and streetcar development. This is just a little one of the slices of that booklet where we looked at four different cities that recently built streetcar lines and using some the same measures, economic use, federal transit administration use, we broke down the investments that the public made building these transit lines and looked at how much development clustered around those transit stations, and tracked how much return on investment was there. In every single case it was close to over 1,000% -- so this is a very safe approach to leveraging public

dollars. And in many ways I think this is not how we've been looking at transit. Let's look at public investment as building our cities, not as subsidy for low-income households.

Now I want to make sure that we are all talking about the same thing, because this notion of transit-oriented development has been bandied about in a lot in different terms. In the early 1990s, I wrote a book with Peter Calthorpe called *The Next American Metropolis*, in that book; we had a series of transit-oriented development design guidelines. And looking back on that, it was really groundbreaking, it was probably the first time in recent history that anyone had tried to kind of come up with ingredients that make great places that are transit connected. But at that point, we thought of transit-oriented development as a recipe, you have this among that -- we did not think about performance, we did not think about what kind of place outcomes we were trying to create. And I've tried to get down to the foundation that what we are really trying to achieve when we were talking about neighborhoods connected by transit, not looking at so much of the numbers, so for me the foundation of neighborhoods connected to transit is Walkability. When places are walkable, they are enjoyable for pedestrians and they are really the best places to generate transit ridership. And in fact, the research now shows that people who live near transit are five times more likely to use transit than anybody else in that region. Employees who work near the stop are three times as likely to use transit as any other employees in the region. So collocating development around transit makes sense because this generates ridership that transit systems need to function. So that's one thing. We need to make sure we are creating places that are truly walkable.

And if we want to dig deeper, the other thing about transit-oriented development is the synergy between land use and transit and the way this reduces our need to use the car for every kind of trip. And when we really looked at what we were trying to achieve out of this model of growth, we are trying to achieve, again, walkability, we want to make sure these places are interesting to be in. So we want to make sure they are vital, they are mixed-use, and that people actually want to use transit. We want to make sure that people have shopping and housing choices; they can get around in a variety of different ways, biking, walking, and transit. They need to be connected to the region, and that can be either through the transit itself, but also through connective streets coming from the rest of the city.

I already said that I think it is really important for these projects that we recognized the value that is created by these projects, but the other thing that we learned when we looked at the first generation of TODs -- because many of them were done without regard to the marketplace so they required tremendous public subsidies just to have the development because we were not savvy enough about, you know, where was the market for the type of housing we were looking for? Are there enough homes in this neighborhood to support the real estate that we were planning? We need to make sure the places we are planning for actually can be supported by the marketplace and that they work, they do not need tremendous amount of subsidies.

The other thing is that increasingly I am trying to educate transit agencies that transit-oriented development in itself is a low cost approach to generate ridership because people are walking to the station and the transit agency does not have to build a bunch of parking lots. The transit agency does not even have to necessarily provide much bus connectivity although over time. So there are a lot of things that come out of the balance sheet for the transit agency if the private

sector is delivering the ridership. So again, we want to make sure that we have great mixed uses then we think carefully about how people use place. Again, it is not a recipe thing, you know, we need 15,000 sq ft. retail here, it is more about can I have a store on the way home? Can I go to the gym on the way to work? Can I drop the kids at day care? Is there a pleasant walk from my house to the station? Those should be the measures of success. Another important piece, which often gets left off, is the transit itself, is it necessarily delivering ridership? We have to have this sort of fine network of streets connected to the station to make sure bikes can access the station and have a place to park; that we have calibrated parking standards in the area to reflect the fact that people do not own many cars when they have a transit option and linkages again, from surrounding neighborhoods. And on the flip side, I think it is important for us to demand that transit responds to what we want. I think it is really cool when can you look on your cell phone and figure out you have another five minutes before the next train comes or bus comes. That means you can grab a cup of coffee before you head into the station. Or there is a place on the bus to hang your dry cleaning or your groceries or every bus or train has a place for bikes. So these things we all are demanding of transit service and in some cases they are true and there are many cases that they are not.

Now when we look at integrating transit in the cities, this is sort of one of my pat pieces, I guess you can see ways in we work in seclusion. Each discipline is working on their own track, engineering is over here designing a line then we have the city planners and architects designing the city and never the twain shall meet. And we need to do a very good job of integrating the two, if is going to be about weaving transit in the cities and making transit development as oriented as possible. So I've been starting to think about how we then can look at all the ranges of transit opportunities and types of places we have in our community to begin to think about how technology can be inserted into the cities.

So I am beginning to break it down into different ways that we can provide transit in the city. I want to show you this because you have grass in the middle of the BRT lanes. So it creates one to approach to the way people engage to the city, putting the street car or train or the bus out of the edge of a street right along a curb creates a different interface in the city and may want to have a different character as you move through the city itself. And think about what some consequences are of this. So, for instance, here people can just jump on the train from the sidewalk, whereas the centerline approach has people walk across the line of traffic. You have to think about what experiences that actually can be and the sort of complexity of these places is also something we have to think about. I have been working in since Houston last summer and Huston is a very strange place to work because they do not have any land use regulations but they also have sort of situation that too many cooks spoiled the pot and so we have a transit system that barrels down the middle of the street. But since people in Huston could not think about inconveniencing the cars, every single intersection has a left turn in front of the train. So the problem is there are a number of accidents, so instead of just saying, you know what, we kind of have different city, you have to take the right turn around block to go across, like a city; in Huston they said, no, cars are king so we kind have this situation and there are probably more accidents on their lines than any other rail system in the United States. So these are all great ideas. But the problem is there are still a lot challenges, there is still recent movement and we need to do a lot more work to make sure that we can really achieve these big goals. And I just want to pause here for a minute to point out just a few things that keep coming up in my work.

One is that there are so many places where this notion of integrating transit in the city gets off track when we have not built strong vision of what we were trying to achieve at the outside. And that is very important in getting agreement on what we were trying to do. It can really help smooth the decision making down the road. I had a group of planners and engineers in my office yesterday from Honolulu. Honolulu is planning their first transit line, their bus, trying to think about doing either BRT or rail system and they cannot decide if the transit system should service the existing neighborhoods or whether it should be catalyst for new growth. And that means they could have two different lines running in parallel. They are having a really terrible time coming to a decision on one that they are going to choose because they have not started with the fundamental understanding of what they are really trying to build in their community. So getting an agreement on what you are really trying to do is very important.

The other thing that happens is often there is a tension between making a great place and a great transit system. So a lot of times, people come to me with these projects where the transit agency says we need this stop to be a transit first station, therefore we need 12 busses running in every four minutes and we have a lot of buses running around this area. And the city says no, we want this to be a main urban center and we want to be completely walkable and fabulous. You know what, in some cases those two objectives are inconsistent, you have to either think way out of the box on to how to integrate those buses into a walkable urban place or you have to say this is going to be a different kind of place. I think we need to be a little bit more honest with each other about that. Because you have the transit agency, you have the city, you have the different departments of the city, you have the private sector, you have the nonprofit sector, you have all these people so it is more complex and it takes more time. Finally a lot of projects we saw that were built in the last 20 years felt short because they thought just adding transit service was enough to create real estate market. These projects have to work with the real estate market with or without transit; they have to stand on their own. Transit can really boost many of these projects and their potential, but you do not have a market for the retail or the housing or the office. Transit by itself cannot delivery that market.

So what I want to show you now is sort of new thinking I am trying to develop around how to pick apart where transit is appropriate, how to think about how to look at in a more performance based definition. There are three scales I've been looking at: region, corridor and district. I raise this because in many communities I've been working in, I only see an intense look of the district level. So I started to develop a typology of different transit systems at the regional scale based on the number of stations in that system. So it is not the number of lines, it is real stops. When you begin to map these regions all at the same scale, you can see very clearly that Huston and Washington, DC function in really different way. Part of that is that there is no way that real estate markets can fundamentally change to relate to transit if it is just started as lines like in Huston. It is just too small to make a tremendous impact. It will make a difference, but it won't be a sizeable as Washington, DC or Chicago or so many regions' destinations that are linked up by transit. So in this database we have we started to look at all kinds of different information points to understand at what point do people begin to change their behavior? At what point does the real estate market begin to change? At what point do incomes of households living near transit reflect the regional average? I am just trying to understand how these places are really functioning. One of things we found when we looked at all 40 different transit regions and all

4,000 transit stops is that people who live near transit own fewer cars. You know what? This is across the board: Huston, Dallas, and Eugene. Everywhere in America with transit, people who live within walking distance with good service own fewer cars than the region as a whole. This is important because what it means is we do not need to build as many expensive parking spots. That might help make our buildings more economical to build. But it is a very important set of data that we need to begin to analyze and look at.

So people, if they see that the transit network can get them to the places they go, not just for work, but also for recreation and another services like shopping, then people begin to take on this one less car lifestyle. So that is another thing we might think about is how do we begin to make regions that are growing over the long term? One of the important ingredients is to go beyond, and think longer term, add more and you will begin to have a new performance metric for your region.

The other thing I began to look at -- I am going to return this later on -- is that where people live has a really big impact on how much they spend on transportation every month. This is from the Denver region where you can see these red lines are planned transit system and those circles, a lot of colors, but those circles are all planned transit stops in the Denver regional system. If you look at those crosshatched areas, you can see right here in the center of the region, these people are spending about 500 dollars a month just on transportation expenses. Then we go out farther and we see people are spending up to 700 to 750 dollars a month on transportation. As we get farther out, people are spending almost 1,000 dollars a month on transportation. And then we go out farther and people are spending almost 1,200 dollars a month on car purchases, insurance, gas, maintenance and transit. So it is a very expensive proposition to have a region with limited transit service.

Then we go down one more level to the corridor level, so we have regions for those kinds of fingers of transit service and each one of those fingers is a corridor. It is important for to me to begin to look at this corridor scale for a number of reasons. One is that for the transit systems that are planned, there is a very well developed methodology for planning transit system at this corridor level. Many of us look at land use do not, hardly ever look at this scale. There is a real need to broaden the land use methods out to this corridor scale.

The other thing that we are learning is that when you insert transit into a community, the real estate market changes when you look at the corridor scale. When people are able to live near one stop and work or shop at other stop, this changes the dynamic so the real estate market creates a different kind of metric for how much development and what types of development you can capture. The other thing that is very important is that the city has almost no money to build almost anything. But if you look at this corridor scale instead of the project scale or site scale, you can begin to use financing tools that actually have some and generate enough money to be able to finance some of the things you want to see in your community that the transit budget can pay for. So increasingly I am trying to encourage cities to put some of those mechanisms in place at this corridor scale.

We are just finishing a project that was jointly funded by the Federal Transit Administration and the US Department of Housing and Urban Development. This is the first time they have ever

worked together, which is just pretty amazing because and we are looking at housing and affordable housing in five regions and one corridor in each of those regions.

We also came up with four different types of corridors, one is community corridor. One we looked at in Boston is actually more like an urban community corridor that brings people from a series of neighborhoods into the downtown area. We looked at the Portland street car as our example of district circulator -- it is not providing across town kind of service, but it is looping around neighborhoods and providing local service. And the destination, the connection corridor is more like a standard kind of transit line where you have a series of attractors located along the system and they generate tremendously high ridership. So we mapped each of these five corridors in several different ways: we looked at land use, this is a little hard to read because all of them are on the same sheet, but you can see the yellow color being residential, red being commercial, blue being public owned, purple being industrial use. You can see different kind of patterns for each one of these corridors.

The other thing we started to do was we started to bring data for each of these corridors looking at different mixed land uses for each one of these corridors, and what kind of densities are already existing in these places. The first three corridors, Boston, Portland and Minneapolis are all built. Shelby and Denver are planned. If you look down at the bottom at the density calculations, we see Portland has the highest density of the three built corridors with residential densities at the time the data was collected at about 40 units to an acre on average that includes stuff that is not built, and stuff that is built. We have Minneapolis and Boston, pretty much the same density -- I would never thought of that, but it is actually true. Then we look at Shelby and Denver, fairly low density, six and nine units to an acre compared to basically 17 units and up. So we can see sort of before and after from this.

The other thing we did is we started looking at redevelopment opportunities along each of these corridors. If you just look at the black areas, these areas were then a half mile of each station, some interesting things came out of this, one is that Boston has very little development opportunity, you can see just a scattering a little black sites all along the corridor, this is basically neighborhoods existing for quite a long time with very small parcels, an old railway, and all the development has already happened in this corridor. This will have little opportunity; this is not going to be a place where substantial development happens. Minneapolis has a lot of land both in the downtown. In Shelby, look at how much black is in there. These guys choose these areas to basically create a new development area for their city. So they have a different set of challenges say than the Boston corridor, which is all about little tiny infill. These guys have big parcels that need to be revitalized and coming up with strategies to do that at this scale is a whole different ball game than little tiny infill in Boston. And Denver, this is the west corridor, you can see they have a mixed big opportunity of sizes out of, there is a Federal Center, downtown and all kinds of stuff in between. So they are sort of hybrid case study.

We also looked at where development was already happening and that is interesting. Again, the three corridors to the left are all built and operating. You can see all kinds of little dots; they are all individual different development projects either built or under way. Shelby and Denver have much less. Shelby has a bunch of stuff downtown, but nothing around any other stations. Denver is pretty much the same thing. So what this begins to tell us is that the market is beginning to



respond to transit investment and it is not a huge time frame -- it started maybe two years before the transit was opened. So that is another piece of information which I am not sure we knew about before, and we started collecting all kinds of data for each of these corridors about all different projects and the tools used to create them. We've also started looking at affordability because we are trying to understand are there any people who are working in these corridors that are building housing that is affordable to low income households. So again, Boston, Portland, and Minneapolis have projects pretty much through the corridor and we looked at different mechanism they used to create that. Shelby and Denver again, have very little activity. Although I would say this is a kind of striking thing about Shelly and Denver – as land prices climbed substantially even though transit was not rebuilt for few years.

So we have the corridor level and then we go down to the district level, the level around each station. This is something I think that we need to, also again, get to comments and definitions. When we look at transit-oriented development, I think we need to look beyond just one little site connected station which many plan's focus on -- just the little one or two parcels next to the stop. We need to look at whole neighborhoods, that whole district, that is connected to the station. It is very important because what does is pretty much perceptive. It creates greater critical mass of creativity and development. Also from a development perspective, it allows for different sites within that walking area to provide different functions. So you might have a single-family site, a townhouse site and an apartment site that constitute mixed-use and probably it is sufficiently dense to generate a good amount of ridership but each individual parcel can provide a role in creating the whole. It also means if you think out beyond the station you are able to provide connectivity that allows people from neighborhoods to connect to transit in a more affective way.

Now the things I always try to say is that not every place that is connected to transit is going to be the same. This is very important. When I do work in Washington, DC, everybody thinks transit-oriented development is six-story buildings and nothing else. Our regions are very complex places, so we ought be able to find models of more intensive development or more neighborhood development.

Now we have been working for the city of Denver to try to take this idea of creating these place types and connecting them to the transit network. So each of these little color circles represents a different type of place, different character, different scale, and different mix of uses. This has been very helpful for a kind of unusual reason. Those yellow areas you can see along the transit network are existing neighborhoods that come up to the transit. One of things this map does is it says to the neighborhoods you basically can stay where you are, there might be a little bit of fill, a little bit of new stuff that happens next to the transit station; second units behind the main single family house. Basically we leave you alone. Now developers, if you are interested in doing intensive development, mid-rise development, high-rise development, more intensive development, see those red dots, go there, but you cannot go anywhere else. This has basically calmed down a lot of neighborhood opposition to transit-oriented development. It has just taken a lot of anxiety off the table because we got this vision defined.

Now we can go back and start working on some of the tools that help develop those things like form based codes. But essentially this provides the framework for that. The other thing we are doing is looking at how we actually develop mechanisms for implementing this lovely idea of

TOD and these place types. This I think is another area where the practitioner really could begin to do a lot more work. This is from Minneapolis where one of the stations is in one of the low-income communities and connects up to a transit station. We have this lovely drawing that was created as the vision plan. The vision plan was fine; it was great. But the problem I think was the city went way too far before the transit system was built with this plan. They put in place fairly rigid codes. This is picture of what could happen but nothing else. Now we are faced with changing market conditions, different property owners, different desires from the community, and we have this extremely rigid site and codes, but do not let anything new happen. We can see in the middle, this site is a case in point. This was a site for a strip mall on it, right next to the transit station. So it is a very important site and the plan says strictly to put ground floor retail and housing above. OK, that sounds good. The code also said that is the only thing you can do on this piece of property. In the meantime, in the intervening five years, the property changed hands, and the new owner has invested in that strip mall. They had series of business there that actually were very well matched to the low-income communities that was in walking distance. Low cost clothing, pharmacy, drug stores, low cost services, and all kinds of little shops that were very well matched with the low-income population. The guy who owns it said I would like to build the only grocery store that comes to the neighborhood with fresh food. I want to build a grocery store with fresh food and I want to build it in the parking lot of the strip mall. And the city said no, because the code said no, the grocery store they thought that was going to be was like a big building in back and a parking lot with bunch of parking spots in the front. They did not think that was transit-oriented. So it took six months of negotiations to unlock this plan and come up with an agreement that now has a grocery store with two floors of affordable housing on top and renovated said business in the back in a little village character rather than kind of scrape off in redo mode. Getting down to the practical aspects of how cities change and grow is very important. In this case, we started identifying all the state codes in this neighborhood and gave them essentially a to do list. So they could understand what to do first, second and third and set goals for them.

Now the last thing I want to talk about is about making transit-oriented development really fulfill the promise of being as inclusive as it possibly can be. This is something to me that is very important because I think that often this gets left out of these planning and design studies but in many ways I think that it is very important for us to recognize that locating development near transit in itself is a step toward making our cities more affordable. So if you look at the middle pie chart here, housing costs for average American families are about 30%, and transportation is the second largest expenses of the household budget above food, above health care, about 19%. In our database, we looked at places where you did not have an option except you have to use your car for every trip. We found people were spending over half of their income just on housing and transportation on average. Then we looked on other side - of transit reaching environments. Look how small transportation expenses are in the typical households' budget -- down to 9%. That is not even trying very hard, this is not Shanghai. So we ought to be thinking about the kinds of places we are creating, not just as good urbanism, not just as good transportation but also about making our lives more affordable. And it gets even more important when we look at the burden of housing and transportation on low-income households. So you can see when you kind of spin this out even further, the people at the lowest income sectors are spending quite a substantial more -- a really serious portion of their income on housing and transportation. This is not healthy. This means people are not eating well, and it means that they are not saving for their

kids' college, and they are not able to really participate fully in society. XXX So I think more and more we ought to be using a notion of clustering neighborhoods around transit as an affordability strategy. But if we are going to do this, we need to make sure they are exclusive. And I've been working with the Ford Foundation for the last year so to try and think more about what are benefits of working in this way because on the one hand we talk a lot about the benefits about transit-oriented development, all the mobility choices and benefits.

There is a whole crowd of people out there who has been interested in mixed incoming housing where is all about getting people to be more part of society and connected to jobs and de-concentrating poverty. But to me, blinding the two is really the merging of both our transit investment and our thinking about affordability. It is also very important because when we look at the demand for housing and transportation near transit in America, we just recalibrated are assessment we published two years ago and now we find we are going to add over ten million households by 2030 who want to live near to transit. That's more than doubling the demand, almost tripling the demand. So people really like this idea. The dimorphic idea that wants to live near transit is exactly in sink. Who is going to be in America in the future? So there are a lot of interested in this. The challenge though is that there are not enough places that are ready to accept this concept, this kind of growth. So we have a huge demand, and we have scare city of land. And simple economic tell you that ends up diving? To the highest of market, they do not need to build their projects with income diversity in them. Now in addition to all of this, when we took a cut this year at what portion of that demand for housing near transit, is likely from low incoming households. This is a big number, like 40% of the market. On the top 60% could come from people who are singles.

So this just really changes what are demands. We really have to think about not only housing product, but also what kind of product, who is for. And addition, what we finding when we look at all those corridors for affordability is that in many cases, low-income households are renters that are pretty standard in many regions. They are in housing often sub-standard as neighborhoods become attractive because it is connected to transit. They are often the first one to get pushed out. We do not really have a lot great tools and place to address these kinds of communities. So I say we ought to start to make part of the challenge of request for housing development near transit. We all explicitly say we want have low-income housing as part of this. We all have income diversity neighborhoods around transit. Now another really good reason is because people who do not have a lot of money tend to use transit at higher level than people have the choice to drive. So they are dependent and reliable. That is really good for the transit agency. The other thing is they own few cars so the developers do not necessarily to build many park spots for affordable housing near transit that makes these projects are very expensive to build a little bit easier to do. So I've been looking at what are tools, what are different communities using to both create new affordable housing in transit serve neighborhoods on their a lot of different ways doing it. We talk about reducing parking requirement increase density so there are more units to spread cost over, purchasing land and setting for low income housing, counting housing in transportation cost in the way we look at, financing housing and maybe even just build more transit would help make more affordability. On the other side, all those neighborhoods were transits go and real people live there. We ought to think about whole another set of tools to insure there is affordability in those neighborhoods as they become more

and more attractive. So this is an area that really needs a lot of work. We have not too many tools in place to do this.

So two very big challenges. Now I just want close with the case study I've been using which you might have seen a little bit about. But it shows sort of shows the roll out of notion of using a performance based metric for transit-oriented development, so getting away from the recipe and more toward looking at the outcomes.

This is in Roseline, Boston corridor in Washington, DC. It is a corridor, metro line connects to downtown DC but it goes out to suburban Arlington County. This was an area 20 years ago, actually more like 30 years ago, was basically street commercial big box development, big street, big parcels, a big, basically a highway and transit coming underneath that big roads, so it is a subway, it is not quite the same as EmEx, not quite the same scale, that is ok, use your imagination. The community leader said we want our vision to be the intensive development in this area will happen around transit corridor. Let it all happen there but everything outside that we want to preserve our single-family neighborhoods. We do not want to intensify these lovely walkable neighborhoods sit on either side. If you look at this picture you can see these big buildings right along the street and everything else are trees and single-family neighborhoods. That was the policy the vision that was put into place. Now when we look at what happened in that innerving period, they have this remarkable transformation, almost  $\frac{3}{4}$  people using transit, walking to transit. They had 58,000 trips a day to the transit, and 38% of the residents near the station use transit getting to work. This area actually has higher than the average income of the region as a whole. So this is not a group has to use transit, they are choosing to use transit. 12% of households in this corridor do not own a car, zero which is compared to 4% of Washington, DC region. I mean on the region as a whole, a region has a really good transit service but not necessarily great land use patterns, 4% do not own cars. So just a really amazing statistics there about the third county real estate tax revenue comes from about 80% of land area, and this is particularly important because this is not only an income stream to help continually improve the quality and character around those stations but it also provide an income source for connectivity, sidewalks into surrounding neighborhoods, they use this to improve the parks and the single family neighborhoods. They continue to layer on new bus and other kinds of transit services into the neighborhood. So this really helped financially sustain this new way of living.

Now the other thing is you can see this bar charts going up, a lot of new housing but really also tremendous amount of employment in this corridor. And when they look at traffic volumes at key intersections, the traffic either stay the same over 25 years or went down. So this bar, that was projected this traffic could be. And if you look at this in the right in every case that is what happened. So here they have this awful specter, all the new development was just going to mass things up with all the traffic. What happened was a person changed, they started walking and biking and taking transit. This created a new way life in community. So it is a very powerful example of the place that I did not really think you could really change, you know, street commercial is very hard to do but they did it. So I use that as my inspiration. So anyway, that is my story. I am trying to do all kinds of things to just focusing on making transit and transit-oriented development possible and it's been real pleasure for over last a few years and I hope have good ideas about how we do better. So thank you very much.



## CHAPTER 6

# CLUSTERED HOUSING, A SENSE OF COMMUNITY, AND THE NEEDS OF CHILDREN

**Edited Transcript of City Design Lecture by Clare Cooper Marcus**

*As Oregon cities search for alternatives to single-family housing at the metropolitan edge, the needs of children cannot be overlooked. In this lecture, Clare Cooper Marcus will discuss how to make housing in the city appropriate for families. She is Professor Emerita in the Departments of Architecture and Landscape Architecture at the University of California, Berkeley. She lectures widely on urban design issues and is the author of numerous books, including *Housing as if People Mattered*, *People Places: Design Guidelines for Urban Open Spaces*, and *House as a Mirror of Self*. This lecture was presented on November 16, 2006.*

Thank you all for coming out this evening. It is a great pleasure to be back in Eugene, Oregon. It has been years since I was here last. I want to share with you tonight some thoughts about medium density housing, sense of community and needs of children. I am going to be talking about some case studies, some of them I have done, and talk about guidelines for how this kind of housing can be designed better to fulfill the needs of users and particularly the needs of children. So, I am going to start with, let's see, yes, definitions. So we are all on the same page to speak. This maybe pretty obvious but I just want you to understand what it is I am talking about.

There are four kinds of outdoor space: Private outdoor space, which is obvious to all, might be attached to a home, definitely private; Public outdoor space, the parks of the city and the plazas; the third category is not so obvious. Privately owned accessible open space: most campuses are actually private owned but accessible, such as many corner plazas are. Finally the last category is what I am largely going to be talking about. Space owned by a group, generally accessible to members of that group, but often the public has access. I will show you some examples. This is what we are talking about: [image] those common areas of co-housing, clusters housing and condominium apartments. I will not be talking about country clubs and golf clubs that are in that category.

So the idea of shared outdoor space is neither private nor totally public. It is not a new idea. The court of, courtyard often came with college. For example, [image] a beautiful example from hundreds of years ago, if you wandered the street you could walk to one of these courtyards, but you will have a feeling that this is not really public space. Yet, there is nothing present to prevent you from entering.

Another more recent example is the very beautiful bungalow courts we find in parts of Pasadena, California. There are some beautiful ones in Berkeley, CA. They are much sought out and perfect for student apartments because the houses are quite small with shared open space. So again, [image] here is a cluster of dwellings looking on to some shared space, if you walked on by the street, if you walked up these steps you will have a feeling you were in a space which is not quite public and yet, it is accessible.

Here is an example from London [image] I came across recently because one of my relative lived here. The dwellings on the right, probably built in 1920s, are three story apartment buildings, looks like other, not so great housing in London from that area. However, when you look out the back windows, this is what you see: [image] a large city block with the centre of the block full of trees. There is a tennis court, play area, rose garden, terraces, and a very nice accessible green space. Accessible in terms of people being able to get in and out of the space and being visible from the windows. This is a more historic example.

So I am going to take you through a number of case studies, actual places and how they seem to work for people. This is one example in San Francisco built during a period of urban renew, three story garden apartments, built around three courtyards. This is a remarkably successful piece of design. This is what it looks like now. It was built forty-some years ago, it still looks great, and there is still a waiting list for people to move in. It has been and still is successful.

[Describing an image] Here is an access point. Here is a design based on a pattern such as San Francisco. While designing the streets, the non-designers could not build over a specific area, so you see a long line going through the middle which is parking and a walkway bisecting it, another parking lot and then three courtyards looking into the woods, parking on periphery dwelling units looking in the woods towards the landscape courtyards. This [image] is looking towards to the courtyards. Back in the 1960s, the area was unionized (the I. L. W. U.). The union surmised that members of public, not just members of the union but low to middle income people who would like to raise their children in the city and who did not want to go to suburbs, where most housing for families would be offered. So, the designers were mandated to create a green, quiet and safe environment in the city that would be appealing to families that they would find as appealing (even though it's a higher density) than living out in the suburbs. Longman C (name), a very famous landscape architect designed the courtyards very carefully. He insisted from the beginning that a large proportion of the budget should go into the landscaping. This was a very wise decision. Those of you in the design fields know that the landscape budget continuously cut and becomes the smallest portion of the budget. The place fails most often because poor stuff is put in and trees are snapped. Landscaping is not well thought of or budgeted. Therefore, this was very thoughtfully done and all three courtyards are highly used by children and families. The union was correct in thinking that people did want to live in the city and not move out to the suburbs.

This [image] shows behavior mapping completed some years ago, but I think is still relevant. The observations were done over a week between 8a.m. and 8p.m. and shows people use of outdoor spaces. [Description of map] The solid black areas are adults, children the open circles. I do not think you can see them but this area is in a parking lot and getting into their cars or leaving or coming back and all the rest of adults and children are clustered around a specified play area. The one to the left over here, the blank space with north arrow is an elementary school. There is a school within walking distance of all of these courtyards. Children could walk to school, walk or be fetched from Saint Francis square even if they did not live there. Moreover, you can see they use the whole site for play because it was so carefully thought out to be usable.

Some of the other reasons that this place worked and works so very well in terms of just the human environment are the size of the courtyards. The squares are approximately 150 sq. ft. and

more importantly, the height to width ratio, something that when I was in planning school I did not know about until someone mentioned the idea. The importance of the width of the space between buildings and their height is the ratio, in this case about 1:6. This is fairly a human scale. If the green space was much bigger, I will show you some later, it completely loses human scale and it is not an attractive environment. Of course, if it were a much smaller ratio it would not feel very pleasant either.

Just to emphasize, some of the ways in which why this space has worked very well here is another example. There are narrow entries into the courtyards from the adjacent streets. None of them had a gate and yet when you walk through those entries you have the sense you enter a space that is not quite public and there is nothing to stop you walk through. One clue it gives you is that there is a very strong sense of community. A clue that you have entered a place with a strong sense of community is if you wander through and there is nothing to stop you. A place where someone can wander up and say, "Can help you" or someone helps you find an address you are unfamiliar with, but he or she are not making you feel uncomfortable about walking through or being a stranger. Therefore, the narrow entries gave you a sense that this is not public space and there was this huge attention to the quality of landscaping. Therefore, the whole site was usable by children. [Description of plan] In this site plan the green is grass and the white is concrete pathways. Research shows that the majority of children's play actually takes place on hard surfaces. So, if I was recount the adults on that early plan I showed you the majority of them would be on the pathways because a lot of children's play consists of a using a ball, roll skating, tri-cycling, and playing hopscotch. All of these activities require hard surfaces that should pave over the green spaces in between; it means that there should be many pathways for children to do that as well as plenty of grass areas. What is important here is that almost every square inch of this space is usable? [Description of plan] The yellow shows the private balconies; the purple shows three play areas; and the few areas where you see brown up here and is what I called keep off landscaping. So this is pronto ivy here because people parking are very close to people's front doors other than that, this whole area is usable now. The reason I emphasizes this so much is that if providing medium density housing for families with children research shows that probably 80% or more of the use of outdoors will be by children so it's better to be designing for children's use. If it is not, if it's covered, if it is created in a way which would be lovely let's see senior housing projects with rose beds, and some flower beds you can be sure that kids are soon gone to tare up not in a malicious way, but only because they want to be outside. They want to play. So we have to remember that they are going to be the chief user and making the place hardscape would work for them.

Another important way in which Saint Francis square works is that the building is three stories high and the size of the courtyard is that you see down into it. This picture was taken a very long time ago when I actually live there for a year and sublet. One of these tiny figures was done while there by my son who is now 34, 33 and I am astonished when I look at that picture I felt secure enough as a mother in a third floor apartment, letting him play down there alone. Now the reason I felt secure is three stories is close enough, I could hear him he could call, hear me if there is a problem. I could be down there shortly other parents will be out there. It was so very safe and when we are thinking about designing housing for families and let's say maybe it's a single parent family or maybe two parents they worked, they came home, they were tired, the fact the child could play outdoor safely alone, very close to home within calling distance from



home is very critical. It is not enough to say there is a park, three blocks away and in the half hour between dinner and homework, dinner or something we would be go down. Kids want be going out and you want to encourage them to be out because there it is good for their health and exercises and it just doesn't work to say we have a neighborhood park that might be wonderful on Saturday or when you have time to walk your child there without anything going wrong. Of course, we want parks. But the whole theme I am going to present to you today is to say there is no alternatives, there is additions we need in the cities, not alternative. That is these kinds of spaces, close to home, right outside your home. Another important aspect to the design and made it work very well is making a very clear distinction between private outdoor space and shared space. This may seem obvious but I will show you some examples later while this was sort of overlooked.

So you don't have a private space, you do not really have a shared space. This is not separated and what is also wonderfully done here was the actual detail of this fence. I just want to emphasize to you students that you have to think everything from the site plan, where the cars go, where the people work down, to the details you may not get to in your studios. But you will be someday as a professional details of the fence, why was such a wonderful fence while you noticed the wooden slats, I do not know, there is about an inch wide and an inch gap so you know slat gap. This is such that John, someone I know still lives there, raise all his children there. They all left home and he lives there. He is working in his little patio, as someone walked by, you could see him or her in those afflicted ways and they could see you in an afflicted way. However, in no way could they look into your face, if you were sitting in a patio having a cup of tea, you would not feel exposed. If that fence was solid, it is about six feet high you will feel your patio much more like you in a pit. In addition, you would not have a sense of community passing by outside. So that is a very important detail.

All right, I am moving on to case study No.2 which is a co-housing community in Sacramento, CA. How many people know, have heard the term of co-housing? Oh, nearly everybody, should I define it? I just define it into two sentences. Co-housing is clustered housing, usually medium density, could be apartments, could be single family housing, could be town houses where a group of people got together decide they'd like to live in a slightly more communal way. They have many meetings, they hired architect, they found a site, and they got a bank loan, and again lots meetings. Moreover, the principal of co-housing is that people have their own complete dwelling unit. This is not a commune. Everybody has a complete dwelling. In addition, there is a common house which is designed where people have a commercial sized kitchen and dining rooms so you could choose whether to have meals together, the group decides maybe one day a week, maybe three days a week, might be once a month. Often-common houses have other things that people would like to have communally: like a photo dark room; a teenage musical room and things like that. Anyway, this is Sacramento. This is a gridded street system, close to downtown; there are alleys with parking off the alley. There is an original, refinished two-story Victorian house along with newly built houses and a shared outdoor space. [Image] Here is a large one and a smaller one on this side. Here is the housing looking into the shared outdoor space. Now here is the definition between private and shared. It is not nearly the same as St. Francis Square. I presumed that was the choice of residences since they worked closely with the architect is to what they want. I have visiting this recently, I noticed for instance, these people had put up some lines and blinds and made them more private. However, people can do what

they want in terms of creating more privacy. At St. Francis Square they share space predominantly used by children and because its children then adult meets each other through that interaction. Children are coming out and bringing the adults to meet their neighbors. Interestingly, here is the house facing a street and for those of you who know something about new urbanism, I think you had several people speak about new urbanism. One of the things new urbanism does is put porches on houses. New Urbanists argue that this is a great way to promote community because people sit there, they chat to people passing by. Well, if this is one example the reverse is actually true. The interior of the block is so social and people love it. That is why they chose to live there. They use the porches when they feel they want more privacy. They do not meet people passing by, they do not meet the neighbor, and they sit there and read on the porch.

Ok, Cherry Hill is in Petaluma which is a small town north San Francisco. This is moderate income housing, again, purposely built for families. Here we have yet again a different kind of site plan: a narrow entrance where cars driving very slowly around this loop or into one of four courtyards and there are things that they would, I think they would build second phase but it did not happen so it is fenced off. So, the traffic is calmed by the short span. A shared community space is in the middle and dwellings that are townhomes around. Here is one of courtyards with shared parking, people work and this was behavior mapping study I had a housing seminar in 1993 where we did a lot of observations of people, who is outdoors, then we did interviews with the residents. So you can see here the children, red dots, are all over the place, they are sharing the courtyards where parking is because people coming in there are their parents. So you can see the driving is very slowly. Normally, I say you do not want to mix cars and children, in this case it worked because they were really very few cars parking here so they won't come in very often. When no car was there, it was a good place to throw baseballs, cycling. They played on green space and a little community center. In the interviews, people liked the site plan very much they felt they encouraged community. It is an amazing fact that 15% of the parents said the children watched less television since coming here. The other said either they watched the same amount or they do not have televisions. The reason they watched less is that they could see other kids outside, in the green space, on the street, whatever and that was much more attractive is than they stay inside and watch television. So this is another argument, I would ask why this kind of space, right outside of dwelling, you can run out there and play for a 15 minutes then come back in is very important. Therefore, the kids are attracted to going outside and not to be ruttet to the video game on the computer because this is really nothing else more interesting to do. As you can see the figures from the interviews show that the adults were extremely happy with this site plan arrangement, new people could recognize strangers, etc.

Now this is a very unusual situation. This is in Berkeley, a typical street with Berkeley houses built around 1900, 1910. Back in 1970s, a professor of real estate of Berkeley, acquired three quarters of the houses around a city block. He wanted to do an experiment. He got the houses rented them out to students and took all of back yard fences because he had the idea that it would be a nice communal space in the center of the block. This was back in the 1970's. In addition, very recently, a visitor who heard about this asked if it was still the same way. I said I have not seen it for years I know he has sold all the houses a long time ago so they are now owner occupied and likely they put the fences back. So, we went and parked in someone's driveway and met residents and said, could we go and look? They never put the fences back.

[Image] This is interior of the block now, part of the block. They are beautiful material trees, they use it for gardening, children's play, BBQ, etc. everybody has a private space whether it is a deck or a patio. It's pretty obvious when you get into private space and I am sure someone is going to ask me and I do not know the answer, how this is, I know how it is maintained but I do not know anything about the legality. I do know if everybody is responsible for a portion of common space that previously was not fenced in. So they have to come out, move along, etc. Whether that is a home or an association here, I do not know. However, it is interesting they give it a name, it called Meadows, they do not say I live on Wall Street, they say they live in Meadows. Everyone, anyone come to visit, especially people with children, they say, wow, this is great, how can I move in? You know no one is moving out because people like this so much more than owning their own homes.

Years ago one of my students did his master's thesis on this block because he lived there and was so captivating by it. So he did a study of where people neighbored. So you can see this is the block where no fences and people neighbor, next door neighbor or across, feel across the road and here in contrast is in control block nearby with fences up. I am not saying either type of the neighboring is right or wrong, he is the neighboring you would expect from regular block, neighbor to neighbor or across the road and very few people across here because I guess you do meet people across back yard fence so that is a way just go back that one could if you could get all the owners to agree that one could recreate a shared outdoor space in a regular neighborhood with fence and yards. But whether you would get everyone to agree take down fences is another question and it is the only way this happens was someone once owned them all. He is the owner, he took them out and nobody wants them back because they see the marriage for their life and children get outside.

[Image] This is a similar situation, quite different density at Davis, California where a group of people are interested in doing, having an instant co-housing, not one was designed and built but just created. They bought one by one some modest 1975 suburban houses and they converted one into a common house, took out of all the fences, put in vegetable gardens, pathways, children's play areas, users shout back. And again here without the necessity to have high fence because all these people know each other very well and it's pretty clear just from the edges here, this is someone's private patio and because it is co-housing people looked from own neighborly life they actually wanted that way. Someone walks by and says how are you doing Joe. They do not want a fence separating them. Here is an interesting way the wood had been used for fences they created and nearly the last of the case studies that have most famous of medium density ecologically forward looking developments in Village Homes in Davis. One was created by Michael and Judy Colbert, a couple who had this idea to create a much more ecological subdivision. They went to the banks at Davis they thought they were totally nuts because the things they wanted to do and so that eventually they got built and now ironically, is the highest priced area of Davis and the houses do not tear down they live here are much more healthier than people who was originally built for. So just to point out the site plan, here a collect road, here whole series of here the houses black in between walkways, beautifully landscaped many terminating common green.

Two very important ecological things they did at every house was to design for game and the runoff was not putting into pipes it is surface drainage. Those of you are familiar with new

urbanism will see this completely breaks all of rules of new urbanism who believe we should not be using code on the sites and we should get back to the grade. This is a very popular and successful place. It raises questions, how can many so many nice streets curb people to not drive too fast, the trees keep the neighborhood cool in summer, people park off street, they hit back of the house looking onto the shared space again there is not a fence, but some planting which indicates the way you are getting into something semi-private. Here are some walkways between the houses and all the trees planted are food (berries). That was part of the ecological goal of the original design: either food or nuts; and an interesting thing has sort of happened in the beginning: all the people moved in were very ecologically aware and people thought it was strange and they wanted to sell panels or plant food trees in that garden. Now, I mention that as a very high demand and the people moving in I think do not really know that much about the original goals or care that much I always take visitors this is a very famous place, when people visit it, architects and planners, they often say can you take me to see Village Homes? I do. I've been there a few of times. I've been there in summer to see fruits rotten on the ground that people do not seem to care anymore. I suspect people see fruit trees rotten on the ground and go to Safeway and buy peaches in plastic bag.

Coming from a period of history when I grew up and live in England I have intimate knowledge of food wasted so whenever I take friends there I take a bag with me pick up the falling fruits. Anyway, it is wonderful to see the fruit, it is not wonderful to the fruits, and it is wonderful to see the trees. Even the new residents, they may not understand the issues of solar gain and surface drainage, but it is there the thing, still a great marriage.

Recently graduate students did a study comparing Village Homes with two other subdivisions at Davis. These were kind of things people describe their neighborhood and they much value the greenbelt, some the pathways, and this was often the place they most often met, the neighbors, central green.

The final case studies is a much more regular subdivision near Village Home, same city, same density, not much emphasis on the ecological design, but still that you can see and central greenway which looks something like this [image]. Again when I question people like the one the fact, like the greenbelt, trees and so on. I am not going to show you all three sites some students studied. The reasons why residents moved in, the greenbelt was by far the most important one, much more important than being an affordable location was most important than greenbelt and Village Homes neighborhoods in beyond and so on.

So I show you this just to say when you do shared outdoor space whether it is a courtyard or a small courtyard such as St. Francis Square in the city or a long large greenbelt as in these more suburban densities. People highly valued it will choose that subdivision over another because they perceive the value for them and for their children.

Now a little debate about the new urbanism and this image. The new urbanism will argue that with connectivity, either connectivity by car or by foot, but here for example, it is completely connected for people on their feet and in many cases the system doesn't have a direct pathway it is for people who ride their bikes. Davis is a university town and probably one of most bike

oriented university towns in the US. So you got these bicycle paths connected the whole city under the streets by tunnels, etc. a highly connected city.

So these arguments tend to dig into new urbanism, which is urging to do is to drop the code and I would argue the greenbelts I have been showing you. A place like Davis would not be possible without codes, dead-ending into them. You wouldn't be, you maybe, you might have shared green spaces here. Here is the classic new urbanism diagram [image] about the site to say the new urbanism does not quite believe and shared outdoor space and had quite serious arguments with Andrew Duany, the king of new urbanism, who insists that shared outdoor space never ever works. I heard him said this to a large audience have challenged him. The general thesis of new urbanism is green space should be provided in public spaces and I'm not arguing with that. This is not any argument against parks I am just presenting you with an argument for different kind of space we should have in addition to parks. So what kind of spaces do new urbanism offer?

They do emphasize parks, public parks. Here is a lovely example in central seaside, a classic new urbanism community in Florida. The homes share space and alleys, part of the thesis of new urbanism is to improve of the streets scale, you are trying to get rid of parking and you have the backs of the houses with garages accessed by alleys.

Some of them are actually quite attractive such as this one called Celebration, Florida. In addition, they do act as a place where kids would also ride their bikes and play. But the sad thing is this thing had to happen, the developers picked up new urbanism and said this is a good idea. People seem to want to buy this and here the alleys become, both in New Mexico, hot and bleak places that is advertised in subdivisions. They suggest a place for children to play so I suggest to you that these are not very good places for children to play, they are shared with cars, with garbage cans, sometimes with power lines, with recycling and so on. And one could speculate that the environmental values of children growing up here would be extremely different than those growing up in Village Homes with access to greenways and streams, fruit trees and birds, and animals.

This is a new urbanism project in San Francisco [image] and again here I question this emphasis on the elimination of parking from the street which admittedly makes the street frontage of the building maybe more attractive and showing here in the [image] top diagram. But where does the parking go in the center of the block? I think I was very shocked to see the center of the block; where you see this car, [image] is labeled as a parking play court. So it is assumed that this is the place where the children will play. I am not saying it is very dangerous. I have shown you examples that children also play on in courtyards (Cherry Hill). But this is the only place they have and to my mind we have just lost something very important by insisting on the aesthetics of the streetscape and getting rid of cars and curb cut surfaces that we might have put in the central block that would be more people friendly and especially used for children.

So to summarize some of characteristics of successful shared outdoor space, it is bounded by the dwellings it serves and it is clearly not a public park, although most of the cases you can have access to it. A gate, or a symbolic entry, or the narrowness of the buildings allows entry, conveys the message that this is not a public space. This one on the left [image] is Vancouver, British Columbia. Here you have an open gate but that locks by opening the gate and you then realize

that you have entered into something that is not completely public or really what you need here as an affordable housing. In this example in Northern California, you just entry through a little gate, without a gate there was a sense that you were entering some different kind of space. The narrow gap between buildings may be enough. Back to park [image] Sacramento, here is how not to do it. It is Milton Keynes in the UK with a huge major pathway which leads from some of housing into a shopping center so everyone and his brother is walking through your shared outdoor space. That's not the best way to do it. The height to width ratio is very critical, the bottom image is how not to do it. I am sorry to say this is designed by, I think a rather famous British architect Norman Foster. I think he is now Sir Foster, whom I think has better done things since this. Unfortunately, people tend not to really think about space, greenways and heights of buildings sectors. Some think that if green space is good, why not have more green space. More is better, isn't it? So here is more green space in the bottom image. You have a green desert where you think the children are playing and people chanting to each other. Nevertheless, they are not. There are on the other side of the buildings, on the street side because what child would want to play out here in nothing, there are no pathways, nothing, just grass. I guess if you play football with gang of friends, this would be a good place, but other than that, it is not scaled well.

Therefore, I have mentioned this already but what is interesting here at St. Francis Square is that I know the guy who lives here. This is part of the shared space and he has taken over this little space outside his fence because he wants more gardening space and many people have done that. So the original landscape material, which I think is bushes, something very boring, has been turned into so lovely personalized space that people have taken over the area just outside the fence and added to the general environment. Here are two examples.

This is in Oakland [image]; this is in Berkeley [image]. Because of either budget or just not thinking there is no distinction between the privacy of dwelling and shared outdoor space. Here is an attempt with a funny little red bench with a field of BBQ, but here is the living room so what is result of this? No fence to provide privacy, what are people to do? Keep that? What are the implications that happen? You have the lights on all day, so in an energy way, all these things: the details of making a show that there is a fence there when you were in a high-density area. It is critical that you leave the fence because you save the budget and neither the so-called private space nor the shared space works and then people had drinks all the time.

Just to re-emphasize this issue of the children's primary use. Here [image] is a time at St. Francis Square showing the adults. Pretty much they around noon and then they pretty much came to a level here children, many more children than adults. I should say this was done some years ago and I recently visited it. I go back there quite often because I'm so interested in this place. This playground has completely gone, replaced by a beautiful little Japanese garden built by the residents because the number of children there has now decreased to such an extent that they do not need a playground. The reason they decreased this is that people love this place so much it is a co-op, they bought into it, they neighbor it, they love it, and they do not want to leave. So the people who raised their children there 1970s, 1980s, are now empty nesters getting older, say, well, it is nice to have a little garden now. Probably at some point to turn around it again, they will go senior housing. Sometime the children will come back and even though this is not the original but something rather than boring. And [image] this was built by the residents themselves out of telephone poles and things like that.

Here are two examples of how not to do it. In the lower [image] case, public housing in Atlanta, a typical public housing development there probably was no budget in the first place for landscaping because it was seen as a cosmetic extra that could not be afforded. In addition, there was certainly no budget for maintenance. So here is what you get, typical public housing. Here is affordable housing recently built in the Mission District, San Francisco, quite handsome dwellings, but really there are threatening spaces between the buildings which are all hard surface that would not be so terrible except the management does not allow ball playing, bicycle playing...anything. I took my students there on a field trip, we met with the manager because I think it's very important for architecture, landscape students to realize the best extension of their designs, the way they managed later by the management may entirely engage or disengage what they were hoping to have happened. So here are the rules for what children cannot do. Doing virtually anything except sitting outside doing nothing, so they probably stay home watching television. People are not allowed to personalize outside their dwellings and we walked around and thinking we do not allow people to put flower outdoor, anything, wind chimes, nothing. So not all management is like that, but this one was. The nature of shared space I've been talking about can vary all the way from rambling greenbelts such we've seen at Davis to a really quite small courtyard. This is an illustration from one of my student's papers, when I taught at Berkeley, every class I taught I had students do what I called write their own environmental autobiography. They had to start with most remembered childhood place and then go up to the present with environments that are still memorable through them. Then they had to finish the essay by saying that looking back that, just say anything about why you chose to become an architect or landscape architect. Very often it ends with their paper, experience because they realize the environment they lived in, all the environment they used to play has really touched them so deeply were destroyed. They chose to become a landscape architect or planner.

This is a young woman who grow up here in Stanford, lives in married student housing and is also the details here, every little details at the corners we play this game, here we pick berries, here and you will probably have memories of that from your own childhood. So again important, it does not have to be a great big place, in fact if it is really oversized, that's one I showed you in Milton Keynes is not kind work at all.

Budget, maintenance, things most focused on, I did not talk about the idea of lower perceive density. Some research shows when you are looking from some buildings to some other buildings, as here in St. Francis Square there is no attempt to make buildings looked different from each other. The fact there were large trees between you and buildings opposite lowers perceive density. That is, you perceive the density to be low because you are looking at it through the full trees. I emphasis the importance of a landscaping budget. Otherwise, people would see these buildings are too close, they do not like living in this density. Therefore, the lack of many of these central design characteristics made many housing projects, planned unit developments from the 1960s sort of non-functional and they were criticized by people, particular Oscar Newman and very often this kind of space. This was what it looks like before and suddenly we want to improve that. So what happens is this space has been reassigned to private space everyone gets a courtyard which is important. However, the idea of some shared space for the children again has been thrown out because people have said these dwellings are public. It doesn't work. It turned into this. It does not have to turn into this. I think I have shown enough examples. It does not have to turn into this.

If a design works, people will actively seek to live there. There are many people living in co-housing communities built in North America and about a hundred in planning stage. Everyone of them has chosen the site plan like this [image] which is the first co-housing built which was in Davis, parking on the preferred, housing looking onto interior shared space, walkway, upper image here is orchard, play area, common house, common community green, etc... They all chose this site plan because it creates a sense of community and safety of children.

Finally, there are social benefits of this space and a sense of community. I think it is important to remember that people have a need to relate to a group. If you look at city plan said this is the occasional neighborhood or something. It is unlikely you probably relate to that as a neighborhood, you probably relate to your block or one next door. We have the ability to relate to a relatively small amount of people and so that is one of the benefits of this kind of space. Here is Vancouver, I do not know how many people live around this space, but probably 70 or 100, the parents meet each other outside and so this is an opportunity for children to play and allow the parents to have a place to meet.

Children's safety: we talked about that a lot and it very important since recently both parents are working. There needs to be a place where children can be outside without constant supervision. This image is back to St. Francis Square, which is a co-op during its 40 years and has gone through numerable changes made to the shared outdoor space by the residents. For example, this is what happened when we were there. It has gone through tiny macro changes, just this one slope. In the original plan, it did not put ivy here, so this was a key part of landscaping maybe because it is the hill. Well, soon kids play on the ivy; they want to play on the hill. So the neighbor took out the ivy and put grass. When we live there, the grass was worn away; the leak of irrigation, then the kids play on the sands. So the residents, a co-op resident said I think we should do something about that slope, ditch in square. One guy said, well, I can get hold some beans from the dogs. Therefore, we did not inquire how he got hold of them but he produced these wonderful beans from the dogs. It was announced they would be a workday on Saturday next week and people came out. If people do not want to do physical work, they bought food at lunchtime, enjoyed over the course of two days. They built a retaining wall here to reduce the slope, reduce the erosion. That stayed for many years. I visited just a few weeks ago and I felt much attached to this retaining wall because I was there and helped in the process. Visiting very recently, I found that it is gone because the wood actually rotted. There are changes happening all the time because this is a co-op and people have a chance to make decisions about their own environment.

Finally, this is perhaps the most important point I want to make here. We cannot open a paper now without reading about the obesity epidemic of adults and children. Moreover, it is shocking that children, not only in this country but also in Australia, in UK, and other western industrialized countries are becoming increasingly sedate, unhealthy, obese, overweight. So this is another argument for the importance of shared space close to home, right outside the door where you could run out after dinner, whatever. And it's not sufficient to provide a sidewalk, going to parks that are important to, this is equally important. A laming train that you may or may not have heard of is a school district, obvious that school districts in this country are eliminating resize. Can you imagine that? An eliminating resize is because tax cost is so low, what can we do? Oh, keep the children in school longer. Then we wonder why 85% of the



relevant product in the world is produced in the U.S. and given to our children. You know it is not allowed to resize, no wonder they are going crazy. They have A.D.H.D. and they still have problems sitting. Very recently at some schools in Massachusetts, they ban children playtime because they might bump into each other and injure themselves. It is just insane what is happening. That people are so over protective of their children and then we wonder why they are getting obese, getting type (?) diabetes and everything that leads from that.

Finally, is green space in the core of the block, the only answer in terms of shared space? No. Another form of outdoor shared space is one that has been beautifully developed, now well developed in Western Europe, called where it is the street shared space and you entered this street and you know from the sign and a curb and paving. This is a street where a car has to drive very slowly less than 5 miles/hr and shared with pedestrians. The street will have in it, plants and play equipment and benches and is a place where the pedestrians have the right of way. Here the study showing two streets in Germany, here is the street before they turned it into a woonerf, here is the street afterwards [images]. This is even more dramatic, quite a lot of kids out, but look here, after they reduce the flow of traffic, put in plants, only people who live here can drive in the street. Street has been given back to the people. You can still drive to your house but you have to do it very slowly and carefully.

Finally, an example from, oh, these are two examples from Israel and the Netherlands. You can see that there is nothing to stop you from driving here. [Image] Here is the garage entrance and here is the car. However, just a fact, paving changes alert the driver to entering something different. Now I have to be very careful. Here is an example of a different take on it from the UK. Here is what would be a black asphalt end of a street. When I first saw this, I looked in here, I thought, oh, I see there is a plaza between houses and then I realized this is garage door, the whole place taken from the other direction. So you driving here and you drive very carefully around here, around trees into your garage, of course you have to drive slowly. Instead of having black asphalt holds that which is not attractive, you are now running reserve parking. I actually finished visual part of it. So I just want to conclude by saying that I hope, I emphasize, you will take away from this message that we need a lot of, much more collaboration than we have already between architects, landscape architects and planners. I hope it also demonstrated that when building, residential development, medium or high density there must be attention to high quality landscaping and sufficient budget for planting. Without this, I think most projects I have shown you would look bleak indeed and would not be used.

And then I want to emphasize another kind of inter-disciplinary necessity. Design professionals is a group need to make research and policy connections, public health community and I just want to end with a little story and something that happened in Berkeley just last week. I had lunch with two professors in the School of Public Health, both M.D, both, MPH, whatever you get in public health. They have just been asked by the American Association of Pediatricians to come up with a policy statement on how the built environment affects children's health. I was so happy to hear this, they said this is kind of amazing fact that we've been asked to do this because until this time professional pediatricians, the only interests they had in environment has been an (?). That is very important. And B, can children get substances under the sink and poison themselves. Other than that, built environment they do not know what it means. I just read a statement that these two doctors written very beautiful statement about importance of built

environment, they stopped by defining what it means because most pediatricians would not even know what it meant. It is very important that the pediatric, medical and public health community are recognizing that opportunities for exercise is closely tied to the design of the built environment. And as we design and plan our neighborhoods and housing we must not only consider the needs of residents in all social needs which we've been doing thankfully for many decades now, but how and what we designed affects people's health, not just ecosystem health, but the planets, and the health of human beings inhabiting our environments. In creating central park, New York, Olmsted many years ago, the man who is considered the father of landscape architecture, cited the importance of green spaces for people's mental and physical health. Now we have ample data to support what he guessed and he was so right.

So I want to urge those of you in the design and planning professions to let us use what we now know to create beautiful environments and healthy ones for generations to come. Thank you.



## CHAPTER 7

### MAIN STREET: PAST, PRESENT, AND POTENTIAL

#### Transcript of City Design Lecture by Richard Francaviglia

*Communities across the United States are looking to the historic main street as a model for development. In Oregon, Cottage Grove is hoping to revitalize its legendary Main Street. Springfield has plans for its Main Street. And Eugene is considering ways to improve Broadway, which was historically one of its main streets. In some cases, communities are looking to infill their main streets with smaller scale projects, in other places, like Eugene, the model is more akin to a "lifestyle" center - a pattern that adds considerable retail space. In this lecture, Richard Francaviglia will discuss the dynamic tension between linearity and nodality - and between business/commerce and community/residential use - over time. He is a Professor of History and Geography at The University of Texas at Arlington and the author of Main Street Revisited: Time, Space, and Image Building in Small-Town America. This lecture was presented on October 18, 2007.*

I got my doctoral degree in the 1970s from the University of Oregon, Department of Geography. I am nervous because my supervisor is among the audience. It is great to be with you and great to be back to Eugene. Now I am going to talk about Main Street. I want to focus on smaller community for the most part such as Cottage Grove. I will also mention some larger communities to give a sense of what has happened to main streets. In smaller towns there is a microcosm of urban areas, so certainly some dynamics are parallel, other things are quite different.

Mark has asked me to talk about Main Street: Past, Present, and Potential. Is that better for you to see? OK. Looking at these three pieces, Past, Present and Potential I want to talk as a geographer historically about the morphology, shape, and architectural design of main street as it changes through time - in the consistence of revolution. The present is something we see today as well as potential things we might see in the future. I tried here but did not work out how to flag out of this definition. A main street is typically the major thoroughfare in a community and is largely an American phenomenon. In Europe and British alleys and streets adjacent to itself is the most assemblage of commercial, residential, and civic or public buildings and buildings are operated here and things are arranged public rights-of way, like streets, alleys and sidewalks and so on. Then open spaces such as courthouses, parks and so on. The reason I put this RVF at the end of this because I filled out the space with my Initials.

We will now go to the next slide quickly. This is much better. Revolution results from technologic developments and social changes or fads. This is not just a cultural phenomenon but is also a very, visual economic picture for a town. For reasons that will become obvious to you, technology and society are extremely important to culture for indicating shapes of main streets. Now we have main streets like this, as seen maybe 50 years ago in Ohio. What I find very interesting is to do then and now comparisons and now and then comparisons. If you keep an eye on this building right here, and this building right here, and look at the streetscape we see one side of this street. Looking at the next picture, we see that it is almost exactly the same place, this

building and this building. However, there have been phenomenal changes to this streetscape in a hundred year period. Henry Howe, the Ohio historian, did beautiful job in his historical collection of the state. He also wrote about the American West. He has been in these towns. It is very interesting because he was a young man when he sketched this scene. He first visited here in the 1880s and then later came back to town for his subsequent volume. He would draw from about the same place. You can see this is based on part of a photograph that he then rendered as a sketch. Henry Howe offers comparisons even into the 1900s. Most of his work was done in the 1880s so his book was published before 1900. So, we have a treasure of his material on towns in a variety of places.

Ok, the buildings on main streets have humble and sometimes not so humble origins in residential and public architecture. There was a time when people who worked on main streets lived right above their store or shop or whatever it might be. It was a very compact virtually integrated sort of experience. Sometimes it is difficult to say whether it was a residence or work place because it was both. Public architecture also influenced style. In America, we want to make sure that we also had public City Halls, county courthouses, and alike. Town halls were so called upper houses, but were really city buildings. Where did they take this style from? Often from public architecture, notably the classical world. Here is very mundane example. This is a central house built between the 1840s and 1850s. If you have been to rural Oregon you see these sorts of buildings. Here it is not in a rural setting but in an urban setting. The façade is brought right up to the sidewalk. It becomes an urban building by being virtually integrated into a townscape. This is a house, but buildings like this can also serve as stores with some modifications. Here is a good example of a house that is a residence and store of Mr. John Perkins in Athens, Ohio. You can see that what they have done here is for all intensive purposes a central hall house. They opened a couple of doors here, put an window here, put up a sign, and had the store a part of the first floor of the entire unit. They would live upstairs. But, a residence would become a commercial building when the need arose. Perfect, that is what it was. Here we have another building integrated within the townscape. Some of these buildings were built by crafts people and so on. Again, here the buildings are part of a streetscape along the national road. Streetscapes were thoroughfares that ran from the east coast to the hard land of America and really exhibited some beautiful architecture.

In Oneonta, New York we see a grand representation of all these, but these buildings now have their original roads running here. They were originally housing type buildings but now are integrated into a cityscape, if you will. This is typically city developed in the 1840s and 1850s. By that time, you started to see a reference to main street and you also found people selling wears. To exhibit and bring people into shops they began to open up the facades, often times with pilings up here to load up and open them to large glass windows. So there we have main street emerging sort of full blown onto the frontier in 1840s and 1850s of upstate New York. I am taking you on a geographic journey. Now I am taking you down to the American Southwest, then up to the Northeast, and to here, in Oregon. In Santa Fe, basically what you have is the standard rectangular Latino Hispanic architecture, and it's right up to the street. These buildings can be found in urban and rural scenes. In the urban scene, they might have a courtyard behind them. Again, domestic architecture right up to the street serves the purpose of residence and sometimes commercial. In Tucson, you can see this is an adobe building and related building. There's often times a combination of Anglo and Latino going on at the same time. This is

Tularosa, New Mexico. It is showing quite clearly here, this is stack outside on the wall and you can see these buildings are part of the streetscape. Here in Tucson, you can see these buildings, numbers of them, were constructed with adobe, and yet what we were doing is putting up our most important face to the public and with signs that look like this for shops for cigars and whatever else going on here. A barber poll here and many other buildings jump off sidewalks covered up by porches and have extensive signage over them.

So here is a good example. Victorian style featuring Anglo-American and Latino architecture come together right on main street. You know El Paso; you have here a hardware store, a place to work and so on. You notice here that the streetscape is pretty Victorian in nature with the tower on the corner here and carts here. This is El Paso around the mid 1890s.

Let's talk a little bit of the styles mentioned before. You can never separate the design of a main street from the individual components. I also should say that on main street what happened is the buildings became narrower as commercial property values increased. You had less of an opportunity to get a long façade on Main Street because you would have had to pay for it. So the buildings go narrower and deeper. All of your sales and emotional emphasis is in front of the building.

Let's now take a look how some of these might be involved in the classical world. I will take you through housing as well as civic buildings. So here we are in upstate New York, this is a beautiful Greek Revival building. Now here we are in Ohio moving westward, and you can see this structure has some visages of Greek Revival. Its rich columns seem pretentious on the street. The water drains from the roof down along the sides. Here we have some styles we have already seen. Here are nice drawings of different styles in Indiana from a Federal style to Greek Revival. Genovis, Nevada, we have some of these larger, maybe fraternal organizations. We have visages of the temple front. I was just cruising around the internet to get my pictures. I think this is fun to do. And here we have a small residence in Salem, Oregon. The next one shows a city hall in the west central part of the valley. Again, notice what we have here is just columns and patterns that face the street. You know this is very modern example, sort of vernacular example of Greek Revival. It goes all the way down, if you will, to the vernacular on the main street.

Italianate high style, a very common Victorian period. I just want to give you an example of something you can find. Here is a freestanding stylized vision of some building supposedly in Italy but actually on in Lake Plains, Ohio. Again, you can see the trim here is very Italianate so this building is a freestanding house. It is creeping out to the main street. More and more the buildings will be brought onto the main street. So the Italianate became very popular in 1840s and 1850s and by the Victorian period and it was very common. Here is a good example of it right on the main street. Incidentally, porches like this; with this modern style copula on the top is a relatively small part of Ohio morphology, and nowhere else. Right? With this kind of trim. What I am suggesting is main street is becoming American phenomenon. Because you know people say I just cannot stand McDonald's. It is uniform and like everything else. By the 1860s and 1870s we were standardizing architecture on main street knocking stuff out. It was from the Sears catalog. You fill out some cards, the send it to you by train and you build it. So this is not focal architecture where people were going here chasing all the stuff off and put it on main street. So here is a good example, is it a home or is it a commercial building? The answer is both. Very

narrow footage, maybe you know 20 feet across and 60 feet deep. They could order from a catalog all of these sorts of materials here. This is just awful. Today we say, Oh, I love this stuff, it is just tremendous. But you know that is the way it was. You can also get stuff from the catalog. Oh, I've been to Italy and this is very popular on main street. Want to have the most impressive façade. The façade is the most important elevation on any building on main street. How about this? In Linn County, Iowa remind us these names architecture defused all the way to Oregon. So this is beautiful example, are we in Italy? No we are in ( \_ ? \_ ). They try to have a visually integrated and it's very Romanian some of beautiful streetscapes in Europe. That is what we tried to do. In a sense, America in the 19th century, was not particularly innovative, it often copied Europe. An architectural historian said, "the only thing different in America was they built a lot more in wood than in Europe " otherwise they just patterned European designs. Milan, Ohio, Thomas Edison's hometown, shows a good example of Italianate architecture on main street. In Philipsburg, Montana, we see a good example of an Italian building with a mansard roof again, a French inspiration from Paris. Legibly involved when they taxing people on number of stories. So this wasn't technically a story, it was just an attic and you can could get away with this entire new floor and not have to pay the taxes. A man started its fascinating many incantations on main street. I will show you some of those in just a little bit. From the late 19th century to the early to mid 20th century architectural style on main street. Let's take a look very quickly at some. Romanics came in and we have these buildings with arches and so on in 1890s, a very important style. And moving across here and we see these things to the 19 century we have here Chicago commercial, we were using steel now. They now open up the front of these to be almost all windows that is very interesting in the upper floors. It's kind of remarkable. We still also have classical thought in this period. This is New Castle, Texas; it's a Greek or Roman building. Where is it? It's in Texas. Of course, it was built about 1910, but it is trying to look like it is 2000 years old. Architectural designers, Louis and people, are using some ancient architectural rules, but putting things together in very novel ways. So we have the sort of Chicago Style buildings that are turning architecture kind of upside down, radicalizing it because these people are disgusted with these emphasis on American classical. This is Kewpee and it is a good example of the deco style from the 1930s. Main street here at the Greyhound Depot in Tennessee, the architecture is reflecting more horizontal less highly detailed styles. This Greyhound Depot is a great example of that. This bus depot in Tennessee is also a good example of that. The shape of main street is dictated by kind of transportation. Horseback is different than an automobile where you are doubling and tripling speed and are moving 25 miles an hour. So your horizontal view becomes important. This is the cause of international style even in Missoula, Montana. I like this picture because what we see here is this building across the street which here reflected in it. It's built of steel and glass and there it is, it looks like the bottom of 92-story building. This is very exciting but a lot of people started thinking, wait a minute, I think this is very cold and impersonal. I do not like this modern stuff. I do not think we are getting back to this. But, only in the 1950s and 1960s were they saying that. And about the same time the buildings were being built here, people were saying I do not know, things are going a little too far, it is too cold for me so it's time to get out to post modern architectural styles. Sometimes a building could be a façade of a building. A piazza here taking on a snowy evening. It's meant to draw you in but it's almost a food place and it's got song but there is on main street. Sometimes we do renovations that are not particularly sensitive, right? In other words, obviously the person did this later. It's like a crime scene for architectural historians. But look at this; they obviously did not care much about this. They just gave up on the whole thing and built another

building on that. So here we have that and then we can do this. That's what we were seeing here flapping off this loose skin that covered up so much rich architecture. So we can here and on the other hand sometimes they just put it up and they left everything underneath it. So we can have something now to restore. I called this revenge mansard? In France, you have a two-story building. It's not really, but this somebody got really fascinating about mansard. They did not have a good sense of visual portion, right? So they I do not know, its looks like somebody put wrong scale on top. Anyway, so there it is but it's older sort of Italianate building. If you like this kind of stuff, hang on, if you like one mansard, why not make it two? I do not know French ever say something.

This is Athens, Ohio, typically a college town where you have a lot vibrant things going on in the town. There are a lot residential uses above this. I think this is enough to make architectural historian pull over and have to take a picture to share with audiences. Again, I can say this is not the way to do things, but it's the way they did it. I think it is a very interesting attempt to find a solution to many problems. It is was not a problem but somebody thought that it was. All the shingles look the same on this building. It is exactly bio-symmetrical and at one time very Victorian. Look what they've done here, somebody got a good deal on shingles, I guess. So we can say this is building has shingles, we are king of using medical term at the same time. Ha! Oh you say, Professor R are you talking about Victorian architecture? I have like this Victorian style building with a mansard roof. This building was built in 1980 it replaced a gas station on that side. In this town, Median, Ohio, there is sort of in interesting history. They said well the gas station looks bad so we are going to replace it with a building that looks old. We are going to build a new building that looks old and hey, that's pretty much what they did. Median is a town built in frontier Ohio in 1801 or so. Here is a public square looking almost like a village green. It is all about how you organize and how you lay out your street plan to begin with. Do you lay it out in rectangular fashion or do you cut off the intersection at each block. This is labeled as Philadelphia Square. When I was a student, I was very excited about this because no one ever studies the regional attributions of these townscapes.

Here we are in Wax Hedge, Texas (not Wax Hedge but by the way) this building in White County in upper Texas. It is sort of a romantic courthouse on a square. Here is a view of one of square block, designed in the good old days when a cart was major part of daily life here.

New Bridge, South Carolina was hit by a tornado very badly those subsequences this picture taken in the early 1970s. But notice here we have this Greek temple front going this way and number of other buildings fronts looking at the township. This was developed at a certain time and is part of their regional character of the south. What surprised me here is that the central courthouse square had pattern something like this. You look at this and automatically you can trace this. This is not so much New English style as it is from this area. You begin to see we have these regional patterns.

Now we got to Oregon. I want to share you just a little bit here. Here is Snob hill. I took a bunch of students when I taught in Ohio down to look at the early type or maybe at least one of type kind of. This was go all the way of (?) into Texas. This design goes all the way to Texas too. I took this at St. Mark's in Texas 20 years ago. So here we have a plan, and that is a county court house. Notice the streetscape here has a lot of white painted buildings. We are now getting into



sort of the upland south down to southwest. This is in Moffat, Texas at the county court house. This is great. Here the courthouse is situated right at the end of the street. This is a classical west Texas town. But remember that these towns hired people who did design subsequently.

Here we are in Disney World as opposed to Disneyland. Very different scale and architecture is much more ballistic than you will find on main street in California's park.

Here we are in New Mexico at a plaza, they would call this a plaza now. It is no longer a square but it is like a Spanish plaza serving a very similar purpose although it was a military plaza originally. This is likely just an open square today. In San Antonio, Plano Della Poblacion, here the plaza is very important, two blocks, rectangle spot. This could be in Louisiana or could be in many other places. But the Spanish very need for plaza just like Anglo American were con for a square. So regionally very quickly, the town either from Mexico itself to west, or from these major cultural in the United States move like so. But right about here with this type you start running into many influences and start mixing styles and adding technologies. Water also becomes so important. So you water down rich hearts if you want rich architecture design but they do manifest themselves all the way down to the west. In the Pacific Northwest most of the influences basically come from the mid-Atlantic with some New England influences too. This elaborated with more influences and so on. Around the 1800s everything started to become railroad oriented and transformed towns like this. Towns lay out by the hundreds all the way into Oregon and Washington and onto the Pacific Coast. So quickly was recaptured this New England village, which is a type. Here we are in New Haven, Ohio, so we see an English influence on the design on the move to the western frontier. We have a place like this in New England where the courthouse is not important and certainly the town square is not important whatsoever. Now we are out in Forge Hill, Wisconsin, down in the south. Development of this civil war type monument was very important. All the way into the deep south we find these kinds of monuments. Another pattern here is a building raised up several steps. Here we are in Georgia across the Mississippi were a classical southern almost industrial town was developed. Here we are in Douglas, Texas, this little place right here is supposed to be original or sub-original style. Somebody from a manufacturing company marked these things and carried them out that way. Here is Bend, Arizona; somebody tried to reflect the Hispanic character of the southwest. Buildings with an arched structure are very closed to the railroad tracks. Again you can see the colonnaded colonial town. Taos, New Mexico, like Santa Fe is very stylized. A very trendy sort of place. It does not look like the old Santa Fe. Santa Fe styles become important with simulated Latino architecture making it much more stylized. Everybody has buildings that are adobe color or white. There are no purple buildings or anything like that. Here again is a county court house, it has a southwestern style plaza but it really functions as a country courthouse square. You can see there was an art fair going on that day. We now have a town in Minnesota that is trying to develop its ethnic history using European style architecture.

Now we go to Cottage Grove, Oregon briefly. Some of the buildings seen here are fairly functional buildings serving the railroad and logging industry and so on. And here we have again, the upper floors in this case, serving as hotels. Sometimes these buildings are residential above. This is the place where we are going to talk about the potential main street where more and more people are encouraged to live above the commercial buildings on main street. Sometimes they may occupy the entire building and the residences might be right on main street itself. How many people have been to Cottage Grove in last 5 years? Let us see a show of hands.

That's pretty good. That is 50% of the audience. But only 50% of the audience? You go down there; it is a really nice town. We have a smaller building here on main street. I would argue that Cottage Grove might have very nice (?) per square foot in virtually in every town. This is really a fine mural here. How many people know about Opal Whitley? I got a feeling you are going to hear more about Opal. She was a phenomenal character and a very interesting writer. She is, I would probably say, one of the earliest green people in Oregon. This is a green state. Opal said she was an abandoned daughter who found friends in nature. She said she was a French nobelman's daughter or something like that. She wrote a dairy that was very popular in the 1920s. People said she was a fraud and so she left the country and went to Europe where she died in a mental institution. Anyway, her diary is fascinating. She became a prototype modernist or something like that in the early 1900s. So this is a really beautiful picture of her on the main street. The former building site here is now a park. So it brings a little bit of that greenery and sort of, I might add, a rather than perfect landscape, it almost has a wild look. Things really come into the town center and bring a little bit wildness, represented by Opal. So again, how many people know Opal? Just a few. I think you would hear more about her, many books are coming out about her. So this is a collective history goes to Main Street U.S.A. Main street U.S.A is what every town should look like. This is in Median, Ohio. A great Victorian town center but they did make it even more Victorian. I wrote an article about this. The mayor was furious because I said Disneyland inspired the town park's revitalization. There was a mandated retraction. Hey, how can I try to retract this stuff? I got into this town in the early 1970s. I interviewed the mechanist and they said yes we went to Disneyland, we saw Disney what can do, so why can't we do it too? Why can't we make Median like this using our old buildings, as well as, new construction and make something memorable. So we have Main Street U.S.A. They prepared this book, here it is, Main Street U.S.A. Of course, Main Street U.S.A. is in Disneyland, subsequently in Florida. This is a real design and Disney and his designer Harper Geoff, who grew up in Colorado, knew at the end of you have to have a winey street. I do not want to get into the fraud on this one, but I will see those vertical things on the end of the street I think you can see it like a hot dog, everybody can see it rabbit. So I do not know. But Harper Geoff, one of Disney designers, he designed along with some other folks, the beautiful square here. It loops around main street and itself with simulated intersection here and a plaza down here. It is a very interesting a plaza. Of course the Sleeping Beauty Castle at the end. Then I guess is the winey? That's interesting itself, Sleeping Beauty the winey? This reminds me here what you do is you do automobile behind then enter protect the environment, everything is carefully controlled, so in a sense this is a little bit in romance of what happens when you go into the standard shopping mall. Now it's here at Disney. It is a beautiful example of Disney's sense of community on main street. He romanticizes this is the best time in his life, this 1905, 1907. So he wanted to recreate some of these. Here we have it, right here, this intersection in Disneyland, the main intersection with all of these beautiful Italian buildings. Harper Goff, I can remember thought banks should look like banks, he decided to reproduce these Victorian style buildings. This is town he grew up in, Collins, Colorado. I went here to study this town and see what is like. It's amazing because it had a railroad street with the railroad depot at the end of the street. Harper Goff studied this town too. So Main Street U.S.A. is partly Collins, Colorado as well as a lot of other places. Here we are in Disneyland with the railroad station at the end of the street like Collins. Here is Disneyland from above. I could not resist putting in this slide because you track your good you do things very so people on main street the tourists on main street never see the earth inside things. The way it's similar in the mall

too. That is to say, you are developing the high retail here and you are providing nodes, and so on, where people can intersect and interact.

You guys, where is this, do you know? It's the Valley River Shopping Center. I got this picture from a developer in early the 1970s. This is what made people get into wanting to do something to Willamette Street. There was a closing off of Willamette Street. They tried to make pedestrian mall because people said well, if this works, in the sense that a pedestrian wants the inner retail environment, why don't we do the same thing to main street. But it does not work on main street. We know that now. Here we are in Grapevine, Texas and a lot of these places do not have gazebos like this. It did not have a real square but they decided to put in a gazebo in this stylized poster of main street. But it did have a place where certain civic things went on. Here we have this little Victorian half type gazebo thing where people did perform. Notice the first woman, the only woman in the band. I said to the mayor, if you got such authentic town here, why was this built? You built this like a 1980s replica of band in Ohio about 100 miles down the road. Being an Italian you can have this once a while. Ok, how about a new place? This is brand new; it is in Texas, the Southlake area. With these stores, there is a desire to automatically have things going on up top. They are just there for looks. So more people are realizing wait a minute, if people might live in the place like this. Why not? So this was built in 1990 look at that, does it look like 1918? 97? No. Main Street Hardware would be Rural Hardware or Smith Hardware, right? You wouldn't want to anything as anonymous. So this new "old" main street phenomenon was moved to the 21st century and looked something like this. By the way, this is great because it is from Linn County. The idea of resurrecting combined commercial and residential uses. How about this first slide? Now this is a house a town in Linn County. But it really was a house that became a business. Right? So you can see it grew here and falls from façade right here. It's kind of interesting. But let's get now to more modern period. Bend Oregon is a typical example. What's happening on main street is the upper stories are being used for residential and even new construction and is mirroring the model of retail down below and residential above. They are 3 or 4 stories buildings. It's a vibrant town. There is a lot desire to live in this town. So these are just quick shots of that kind of townscape. Even along the river, you know they open these in the back. So former buildings were buildings that have been redone or rehabilitated. This desire to shop, to walk and shop, to walk to work, is something maybe only 1% of American population might do. But still it is a big number if you think about it. And it is occurring in many places. Southlake, Texas is all brand new, but notice it does repeat some traditional architectural elements and so on with towers and again these upper stories. We got to keep an eye on this because I will contend, Mark contends, the paper he has written, we also have a scholar here, he has done work on what it would be like to live above the store? So we keep our eyes on main street.

Now last, I want to show you a few things going on also in Texas. McKinney Ave. is in Dallas where a travel line was built to resurrect the old-fashioned train systems. So this new construction is basically built on the pattern of older life. This is an Australian train here. It is probably from 1920s and converts that feeling of a history of urban life pattern, which everything is getting close to get together. You can take this train right into downtown Dallas and back into a really nice retail and civic kind of environment right here with nice loft and apartments and so on. So these are just some shots of my area to give you an idea some things that are going on. Even in Texas, there must be something going on? Right? Because it is going on everywhere and

we really should be aware of that. Here it is again, some brand new construction on McKinney Ave.

I want thank Edward Price, he is in audience here, for his inspiration. And Ann Jennings, my secretary, she really help put together a lot of this. I could not get the sound working tonight, a lot of times I have troubles, you know, getting my computer started. But she was very helpful. I am enjoying PowerPoint and enjoyed putting this together. And many people from coast to coast who really share their vision this is great to drive around the country and people are extremely friendly want to talk about their towns. So thanks very much for your attention. I appreciate being with you.



## CHAPTER 8

### THE CHANGING ROLES OF URBAN PARKS

**Edited Transcript of City Design Lecture by Galen Cranz**

*Magnificent urban parks are the norm in many American cities large and small. From New York's Central Park to Vancouver, Washington's Esther Short Park, these parks have served many uses. They are places for recreation in the heart of town. They are retreats from the pace of urban life. And they are green islands in the heart of grey downtowns. In this lecture, Galen Cranz will discuss how urban parks have evolved over the last century and how, in their latest role, these places have become essential components for cities interested in issues of sustainability. She is a Professor in the Department of Architecture at the University of California, Berkeley. She lectures widely on urban design issues and is the author of *The Politics of Park Design*. This lecture was presented on November 5, 2007.*

I do want to talk to you tonight about parks. I understand this timing tonight is amazing because there is a vote tomorrow on the issue of burying on parkland but I am not going to talk directly about the vote because I do not know enough about that. I am going to talk about the history of ideals about why we have parks. You will see that parks have many different sets of ideas historically. I am going to review these visually with words. We have a piece of paper as handouts right Mark. Yes and I did not do a power point. Therefore, I do not have text tonight; it is visual so I actually made a summary on a piece of paper so you have a take home party favor. The big news is I identify four major historical shifts people think about parks, but the big news is we are in the middle something new, what I call "the fifth model" and it has to do with sustainability. So I am going to do the whole four and move into the fifth because the fifth one is the process in which we are involving in right now. In our culture, it is not sharply defined but it is an extremely rich perceptive. So let us get going.

On the pleasure ground, the first park in the United States is just a property somebody gave away because you could not do anything with it. The first time public money was spent on a park was Central Park in New York City. Originally, the argument was that the park should be down where people lived which would be on the lower eastside on the John's woods. I think we need a little focusing on this side. You see it is a map and the park could be on the edge. In fact, legislation was passed for that. Oh, the commercial interests did not like the idea of valuable lands been taken out of the market so they actually resent that legislation and put the park in the center of the island. It is a geographic center of the island but not the population. Population was so far away down here and three miles away there is this little village Chauncey. That was so far away up there they might be in north side of the Dakota. So the first building was built on the edge of Central Park was in fact nickname Dakota so still you know unfortunately John Lennon was killed. Initially we want to say here was commercial focus; here was against the establishment of parks. They did not like it because it took valuable land out of taxable land inventory and off the market. However, it turned out that population growth was extensive. The land value around park had much more worth than anywhere else, so business interests became the chief motivation of the park. Other cities, like Seattle a man built a railway line around to this park he owned privately and used this as a way to take people on Sunday trips. He handed out

little handbills saying if you took my trail everyday and brought a spot right here on the side of this thing you would be able to commute to work and use this lovely park and use my train for commuting and live rural life style and be able to work in the city. So business interest very quickly caught on to the advantages of parks and in fact the next big park was built on the east coast was Franklin Park in Brooklyn was promoted by Authority of Railroad business interests.

Now originally the idea of the park, the esthetic idea was what we come to call the English landscape tradition. We think of it as a very natural in fact the correct word is very naturalistic: it looks like nature but it is not nature. Nature is on the right here in Chicago parkland that is not yet developed. People were out drawing and using it but it was not developed. It is a mass that does not look pretty at all. Here in Chicago things look very pretty but a huge artifice to create this kind of naturalistic landscape. Note here the water is in smooth ponds it first to be smooth because Olmsted says ...either...everything was running and much too stimulating. The other reason it should be pond it is flat with surrounding trees and the sky. So there would be an illusion of infinity you do not know where water began and in sky vice verse. This was because city dwellers according to Olmsted had too much rational means calls effective relationship. They need a different kind of mental experience so infinity would be part of that. Also, the shape, the color, the things they would say were what he want to promote called shape esthetic movement were not needing mathematics linear stuff.

In addition, you noticed flowers here. Flowers typically indicate the hand of the man. They are too artificial and you notice I will tell you that all these trees here are all indigenous species, no exotics because Olmsted says if you use exotics you stimulate; you say oh I never see a purple before, oh get excited in that intellectual way. You want to do not think he wants to use native species. He would think tend to shape this space so you would walk in it automatically be around probably been here he could affect your movement without having any signs that say: casino here; access entrance here. He did not want any words and arrows. He again wanted what he called classical opposite conditional uses. We again called it right atmosphere so a very rich set of ideas behind this simple landscape. Again, if we were to have a natural landscape this was Golden Gate Park look like. Shifting sand tones, this is big deal to change these tones. It looks like what we called natural. Because there was so much work converting these landscapes to certain esthetic, it meant certain parks long impact with politics so you can work on get a job on this circus if you voted right and that connection stay with this. There are a lot of principles of layout should be delineated so it should not be look like in the city then there should be meadows and there is a role of architecture. What should that be? It should be rustic first; it was beginning in the 1850s, in 60s and up to 70s. It was rustic style, but citizen did not think it was smart or noble enough to spend public money so casually. So they come to this style for the buildings in the parks: notice deep romantic roof, many materials, stone, wood, every window set different hand an symmetric plan and elevation. Towards the end of this period, toward the 19<sup>th</sup> century, the neo-classical flavor. Wealthy people started having European trips. They want elegant when they were in Europe so they wanted symmetric buildings with material, like marble. However, throughout this period I found it is interesting, amazing that this rustic staircase beginning this period and redone in Georgian classical style. This is exactly the same staircase. They are proud of this as a major improvement so the program for the park remains more or less the large principles of landscape even more or less the same this very interested variance regarding architectural style. Still in each case, the role of the building ideally contributes to the overall

composition of the landscape but not to dominate it. So this building in Chicago to landscape and this is it looks like inside on you right. On the other hand, the building could be exotic; this building is a conservative copy of the palace of an important English exposition. Remember this before TV, before radio, so what would be exciting things to do: To go to this building; to go inside, to see this exhibition of giant lily pads. These were major tourist interactions. They were exotic enough to be accepted. They are not like ordinary images of cities with their regular setbacks; it does not look like a business building so it is OK. Now socially it is supposed to happen, it is supposed to be people by natural roots it is the language that day. What is natural root, I wondered? It means family or religious groups primarily. This is Sunday school in Seattle under a big tree. Sad thing is here I grew up near Seattle, I know there are no giant trees left in Seattle. Therefore, Olmsted said save some old trees and of course, they did not. Very sad I think. Now only San Francisco has some giant red woods. In addition, here this is a little graphic of New York, taking juice water on Sunday morning why they are supposed to have juice water on Sunday morning I think good reason is people are supposed in church on Sunday but these people are they done their duty. |So it is OK to have a party on Sunday morning. Noticed that there is little girl here and in the corner, there is a little boy over there, so we see both sexes. There is an ideal here, age and sex integration so it is in that sense also natural. The controversy was what should happen in the park and what should not. One controversy was about music, it is supposed to be classical, nothing popular. Popular music at that time was German polka music. It made people dance. Dancing might have bodies too close together, very bad, not allowed. People sometimes thought classical music was just a little bit too formal, so compromise was proposed. Several cities let classical music affair. Clearly, this man, Mr. Powers, the commissioner of the New York City Parks at the time was against this compromise because the writing. He sings to Mr. Powers to change the program time and program time up there. Poker says that here Mr. Powers, you see the shocking Sunday concert in full black, and still, the world moved on. This Sunday secret concert up there has been massed with adults and kids. Therefore, it has a little argument what was called natural and appropriate. Meanwhile we still have them today. Belong to the park and we said yes this season now there is hip-pop. Defiantly, statues were not supposed to be there because there was too much like museums to be excluded because they were too delicate but ethnic groups happened to have on their culture stored in the parks. So here, the German community witnessed monument because everybody was in there, everybody wants their people there. There is now numbers of flowers showing. The fact is, the theory people charge these parks super attendance often German and English to bring attendance and they like this Victoria practice getting out where you used to plant material to make borders to make textiles so here Washington Park in Chicago this live-able things so popular they have to have squares around to stop people from trampling it. This thing is amazing. This is called after the presidential chair. The question is who is a person there who will be president 1892. I know this thing was popular for a long time because there is another photography says 1896 so obviously the theory has one set of ideas the people had another. Another controversy was that parks had the best roads in town, so people were racing their carriages on it and it got out of hands. So the park commissioners had to decide on what days we will limit fast driving, not racing, they limited Tuesday and Thursday. Now what workingman is going to be out on Tuesday and Thursday? The site is remote and cost money to get to. So these parks, although they were intended to be a democratic arena, the rich and the poor would own in common together and this will help fight 1950s and 60s socialism in Germany. In fact, these parks became local parks for the rich rather than for the community-wide parks for all classes. In fact, here is a private house



built right at the edge of one of Chicago parks so this crowd can use public lands for racing their carriages. Now another thing is not supposed to happen is no politics or wall but every group wants their wall installed so these people from America want their wall established into a Chicago park. These pleasure grounds seize in the amusement park. This is bad. Why? Because it shows the handy man all over the place, it is construction, and notice the façade there reproduces the city street even setbacks. Maybe, even worse than all those little flags, but surely the worst of all is the line of electric bulbs. Here you can see that line of electric bulbs there. It is very bad because this keeps you up at night. It is artificial, so you stimulate people who have already been stimulated from living in city. This is really the park put itself in the position of an amusement park. Close to the museum so the pleasure ground sits between these two extremes. Mistaken occasion on one hand and amusement on the other. So in between this and this we have more rough concepts of pleasure hence the name pleasure ground that will have very real meaning.

Now, people did not notice that this is the idea pleasure ground principle of map of a circulation defining meadows, a smooth long flat body of water, a berm. Separate the building from the meadow, this miniaturize the principle of pleasure ground and put it in just you know 4 or 5 by 4 or 5 square blocks. The pleasure was large: you know thousands of acres because they were on the edge of the town, the land was cheap. But people notice that only the rich will use them so they said we need to make these parks smaller so we can get them into the already parts of the town into working class district. At the same time, small park advocates were pushing this kind of thing. There was a movement to create safe play for children right over might playing in streets. So the playground movement, the small park movement gathered around 19 century to create I called reform park. The word reform because the whole area processed reform. This model did not last very long. Instead moved toward a much more symmetrical plan with boys and girls separated and illusion of a meadow building around the whole thing. So let us see, the park advocates sand lawns for children this was a big deal in late 19 century. This is a playground in Boston -- this is the first official playground for children. The new park type had new building type in it called the field house which used to be working man club house and it would have classes to teach people how to do American things even fill out natural papers to demonstrate like what is industry? Or things going on here on the right. This optimized contrast to the pleasure ground you no longer have a berm around the edge, any illusion where you are and you are trying to make the city go away. Here you have indoor recreation that was the first indoor recreation. Notice these are all girls all about the same age, doing the same thing with the same piece of equipment. That was different back then. Remember the little graph of Central Park with little boy, little girl, parents, and everybody socializing, kind of a party in a natural way. These people are being supervised because a new theory has come to play from psychological development, the needs of little boys and girls are different, four years boys are different than eight years boys, etc. Therefore, everyday is divided up into recreation plans just for girls and just for boys in different ages so forth so on. You also need somebody to organize this so very different concept of recreation is now coming into play. An industrialization, except the very procedures, are governing all industry and society and bringing those now in our recreation as well. Therefore, this is a major shift. Now crafts in pleasure ground would be worked literally because they use muscle groups. What do they mean by that? You know that's like what you do in the factory they want to do to get run and roll do what they called large muscle groups. This is why crafts were evil but they said ok this new building type the field house we were supposed to use for community we better to bring in the woman. To bring in the

woman, we have to include the crafts. They are remarkable. There is no temptation to involve museums because working class would not like that any way. There was a lot of efforts to try to both compete with and integrate with schools so there was a school park called park garden where after hours school hours there will be these plots that each kid will get to farm encourage to plant carrot at the same corner, tomato in the same corner, zucchini. The supervisor can walk by quickly and say hey, good carrots and your carrots are not as good as his carrots, and you think you should work on your carrots today. So the rule in industry model here of what recreation should be, not introducing you to fun because you like it but rather because you did not have a place to play in 10 minutes so this would be a way to do so. So you came in you have an hour to do everything then it will be the girl's hour. Another no- no would be dancing. Remember German no pop music? Parks were promoted a long time as compete with the evil dance floor. There is a Russell Sage Foundation, what extend dance wizard to be before parks but in the end, they could not fight it so they decide to join them. Libraries, integrated with the field house, also, you know Olmsted would turn off his grade because they are using other part they bring. However, they figure they got integrated with literacy into recreation. A big shift happened. The new recreation turns, supervisors all these, notice half males and half females. In the 1950s, they said, "oh finally we male professionals are proud they do not have these women." But I am jumping ahead, we are not 1950s yet, to leave this, actually this Golden Gate Park after earthquake, you are not supposed to have anything practical, like living in a park, for some reasons this recreation and practical should go again together but they always do make it exception when there is a big emergency. Suddenly we are in 1970s, and Robert Moses had been made commissioners' parks in New York City. In addition, he said we would make no more a parks but rather fulfilled mandate provide recreational services. So now, recreation is just now governmental function and so what I called the end of ideology, what would seem to us now as different? Conceptions of what park should do with the city. But nevertheless in complex ambitious program, very ambitious reduce classic conflict, save the family which was perceived by boarding house living integrated with socializing with immigrants in an American way of life, beautify the city and control urban growth to some extent, it's part of the beautification plan. Anyway, the very ambitious idea even there realized they produced forms they were also rich and complex. That comes to learn this historical stuff is that phrase, do you know that phrase that make a little plans, somebody in planning said. When you have very ambitious plans, the form is usually rich and complex. What happened in 1930s-1965, when we decided recreation was just services we would not make it any more claims absorb otherwise. Everything was just for fun of it. So only in the 1960s, you see the word of fun in any writing. In addition, I called this ideology so we are not accomplishing anything here. We are having fun. The park loses its richness and complexity. This is the best of that era. It is dull. This is the best but on the right, you get stadium with surrounding parking lots. That is managed by a park department but it does not look like a park that we think of it, you know have anything to do with the greenery. It is open and recreational and a park department manages it, it is a facility. That is the name of the era facility where we are just reproducing standing out to the suburbs and having this big massive, passive recreational environment. You get a lot of blacktop in this period you saw the highlight at the beginning showing you what was has dominated. A lot of emphasis on just keeping things clean. Perhaps the most interesting use of the parks was using them as condos works this quad house San Francisco at the time people did not think they belong to the public, people were afraid in it. It has very difficult time finding its ideal use. It now serves as a museum. But in the war it also served as a temporary housing for soldiers on the way to the Pacific. We use parks to practice

building and we had victor gardens, we have victor gardens at different times in our history and they are always been more popular then greater demand of them, they could not fulfill the supply. I do not know why we do not do this a lot more. See we have this idea park should not be productive landscape. We exclude something practical like growing vegetables, but it's actually great pleasure for people as well as something practical and I think we should do a lot more of it. Little innovations are esthetically or stylistically in this period. It's mainly been characterized as the rubber mosses and tiled lavatory style but there were some innovations, the bay area, ( ) was hired to make these place structures.

The car has played an interesting role in this period. Remember one of the things was famous about Central Park is its long and skinny. There is four transferred roads and they go under the surface so the pedestrian never has to worry turning right or left or watch out being leftover. The pedestrian is the king. Who is the king here? These guys are waiting to break the traffic. But something more is going on here too, this surface is very expensive, merchandizing the surface had to be done for the cars. That surface took increasing large hunk of municipal park budgets. And now also for the first time substantial numbers of other democracies taking a piece of the American budgets of juveniles courts, planning, zoning all these different agencies at the beginning parks came in only fires and polices. That is about it. Therefore, it is a big deal to spend money on public domain this way. Now the park has a smaller and smaller piece of the municipal budgets so they have to try to figure out the way to generate money externally so they dig out underneath whatever park is in their CBD, their Central Business District, dig out under it, turning it out into parking. Here we are in San Francisco Day, four days in Union Square. Small park Chicago did anyone who had a little one who can dig out to do it.

Now we are switching into 1955. Linz, the Mayor of New York City, he issued a white paper of parks which he claimed them as a vehicle for social control, social engineering, social betterment, whatever you want to use. He hired designers to make them interesting, again, artistically, visually and architecturally. In the previous era, a recreation facility is the standard. The idea that the city needs so much acres parks for so much residential for so much industrial for so much institutional for so many streets for so much retail and you get that the parks should be on the slope, has to be on the whole block with a bunch of rules. Until now, those rules went away. Here I use this image as a performance walking on water to suggest that recreation is anywhere just pick you got a little land in this case the right fulfillment so you can? Here under the bridge in New York a tennis court is in an inflatable, which is run by a park department, break all the rules of recreation era but they do not care. Now small parks, small playgrounds started to use temporary vacant lots. Take these vacant lots and turn them into playgrounds. Eventually the idea of playgrounds picked up from the English kind of float the Atlantic I think they drop the most adventures you know kids there raise animals, built things, use fires, tear things down you know it's very creative. We settled for three forms of that adventure but things changed from the swing, slide and the teeter toddler of the recreation era. There was a fear that big park were not being used there, is a fear walking through the dogs so they open parks on Sundays try to bring middle class back into central parks, the Central Park in New York City and other central parks small piece. I go through abuse even though it's not American important competition in Paris the early 1980s, 1983, where I worked on the ski winter park of ski in Paris and I assume because he pushed me very hard to say what is 1983? We look ahead in the history what is the park in 19<sup>th</sup> century. What is that kind be called? Notice these models they seem to be

35-55 years in 1983 we were even in 20 years early to open space ideology he pushed me to say there is a new park type and indeed this park is unusual because it has three different systems. System of geometry, system of points and system of lines, super oppose one another; create seemingly accidental relationship between program elements. So for example, I got a jogging path through a bar, this celebrate the idea of position, so instead to create balance for the city, you see accidents occurring. In 1850's building is next to 1920's building next 1980's building they have different window heights, you things do not fit but because the modern photography and device frame we learn how to see if things are right, even chaos look good so here is the principle of chaos being allegiant to esthetic ideal. I think it is real open space ideology because city is being celebrated here even it is creation so I include this to show precedents break skim? Still it's part of open space ideology. We are not yet where I think we might be today. The same criticism it is not even a criticism how were we thinking in 1980s. I entered a competition for St. Paul and decided to have it even I were just a sociologist but I knew so much about parks kind make me a sense. I made a proposal for this sloping bit of land, it's part of St. Paul's new entry sequence to their new Central Business District. The ideal is for the major user is in the cars that drive around so I organized these grid things like an orchard. When you drive by you know how things line up and fall into parts how fun that when you see drive by. Therefore, that was one of big ideas. Then that was supposed to be all / each of those things should meadow things to different sounds. The whole thing is a big music instrument you can play. Well, I see this is open space. But guess what, there is nothing going on here it is sensitive to be natural environment in terms of ecology, restoration and urban ecological systems. I do not think we are ahead of ourselves. I think 1991. I have personal evidence that I have done much systematical analysis. The park has been published in landscape magazine. Since 1982, the politics of park design up to 2002. I started to categorize every park that was published and we categorized four models just laid out for you and then we look forward new qualities have to do with ecological systems, natural resources, recycling, restoration and so forth and so on. It turns out in 1991 there is a shift in the literature in the flavor of this ecology. This might be call sustainable quality. Personally at that time in 1991, I just add a review of projects in New York City between 1959 and 1972, 13 big city blocks on Manhattan on the west side. They were using de-industrialized lands. Chase Manhattan bank, proposed to build a new high rises here for people to live and to this into a park. This is an old elevated highway where this change would take place. Originally, Trump has proposed (something?). And all the organizations and the city gathered and fought that proposal. They said why don't you work with us at the beginning so I do not have to fight with you all the time. They did. They developed this thing and called a compromise proposal. The buildings are much shorter. The way the taller one behind them and they had this park. But because there was no organization left in town when the time came to evaluate this plan, they said, "oh, we have to bring in some outsiders, sample the team 12, experts from around the country to come into look at the park." I got to be one of these 12 and what I saw here was 19<sup>th</sup> century thinking: the pleasure thinking that the city said is a necessary evil. We decided to stay with form era so we rationalize education in much more of an industrial direction. Then in the recreation facility we see the city is like a machine and you get the parks gear and ratio formula right. The open space era: we say the city is a good thing. An artifact we love. The viewing points in that period and miniaturization. We see miniature of LA or miniature of St. Paul or St Louis whatever; a miniaturization of a city would be a park. There are several proposals along those lines in that era. Well, for the first time, the city becomes positive, but the love within the city and the artifact. Here I said why we are doing this 19<sup>th</sup> century thing, because people were objecting this

because 19,000 new units in these buildings are going to flush their toilets and overflowing sewage treatment plant above 25th streets they were already overflowing two out of three days and smelling very badly. You know about environmental racism why sewage treatment plants here above 25<sup>th</sup>, I wonder. Nobody living near the Hudson River can open their windows or use their balconies because of the sewage treatment plant up there. So, they are going to add a 9,000-toilet problem. People did not like it. There are many things they did not like: being too crowded on the sidewalk, the people behind here can lose their views. It is an impressive environmental problem to me, one sewage treatment plant. I said, "What if this land, here this park, what if this park turned into biological treatment?" Therefore, you use rushes and shrubs and catfishes and all the snails and right plants and turned sewage into drinking water. That water could stop going up to the Hudson cleaner than what could it coming out of the sewage treatment plant and you can build recreation around all of those things. Well, nobody ever thinks anything like that. Therefore, that was for me a personal turning point in 1999. Partly because I read a book called, it is a Matter of Survival by Gordon and Suzuki. Has anyone read that book? No one? Well I recommended it. He is a biologist from UBS and he summarized a lot of watching from institution they said we are ten years left and I think they are probably right we have ten years and we wait for 15 and now we got things going on and probably never reverse and I doubt. It is true, maybe we had ten, and we do have some irreversible stuff going on. Anyway, that book influenced me very profoundly. That is why I start rethinking what parks can do. It turns out I was not alone because in 1991 other people began to publish a very different kind of park. So let us think some of those features. So you can perhaps integrate the beautiful and useful. Environmental consumption would be everything pretty and you do not produce something. But here in China, Ming's Tomb, these formal, symmetrical, very formal elegant landscape. But these, here are apple trees. Why not? Here at the entry to a Chinese park, the entry is the nursery, we used to hide the plants behind the screen, as if I've been to the screen being the gate with the nursery, you are not supposed to see it. Here they use it to show up the brightness color at the entrance. So, why not? Also, another Chinese example, west lake in Suzhou, has all these layers with reflections and underneath you see the plants moving, the plants growing in the water are moving, you see fish moving through all that, and you see some parking on the surface. And they harvest things from these ponds, they harvest the fish, they harvest the green stuff and feed to pigs and so forth and so on. The beautiful is productive landscape. Why not? Now here close to home Davis village home where you rely on swales and they do not fences between each house, they also have these fruits as a part of their communal landscaping and people do pick that stuff. So I entered a park competition again in Illinois, the northern suburb Chicago. And this was existing park, suburban neighborhood, and they want to buy this land and double this park. But there was this 19-century barn here and they want it to be capped on the side. They made a big points that these suburban houses, that look like over here on this block for some reason here they were houses here to be scraped here. They made a big deal in their presentation materials, soil difference never I have seen someone taking about soil differences. There was line here says soil A, here soil B, between B and C, line is here. So, I use those lines to express those differences one has one type tree grow and one side different kind of other tree. This I turned into a neighborhood-recycling center. This slide here eventually will show you close up to that. I would not talk about this because it did not get any price. But interestingly it got public criticism in the magazine competition talks about the results of the competition. They said all these skins. at least ¼ of them, there was surprising number of ecological-oriented skins? Surprising number, here we are in 1990, three or four, they surprise people thinking about ecology. They

said even one dog tail skims. Proposed resources recycling for neighborhood building. That was me because I propose this catch hold area houses around here could recycle their stuff. They pill paper here; the store of the barn will be used for glasses, metals so forth and so on. Then I will build little education center here to teach people about gardening because over here this would be composed for 19% of miniature of the city. 19% is long and clipping and tree stuff. Not bad garbage, not plastics, not metals, not all that stuff, just yard waste, 19%. You can just take that clean 19% and dump here, you can have earth in the form stacks the stuff, and you can use the soil here for a line of gardens. Remember how popular those are? So here the education center here would help people with gardening what are tricks what are not. See windows here create energy something there. Enough sets here, oh, the tennis court here was here because of body energy we do not want to move it.

Then some standard roles I thought could be integrated with sustainable thinking. You have your meadows with shadows on the south with beautiful patterns; double uses trees can be used in the winter for speed ordinary sports activities. One of those rural houses was missing so we grow up prairie grass. And this was A, B soil distinctions here we just make existing a little bit deeper for ducks migrating. Now very different modes, then some ideas about sustainability. One of my students and colleagues, Michael at Berkeley argued that French form garden is better for animals than English naturalistic landscape because human are captured in very specific places. That means animals and birds feel free to nest and reproduce. A surprising way to think and ask of sustainability. Another different approach in Denver, which is Denver back there. Very deeply polluted site that Mile Chan artist propose, he worked with scientist which plant pulls worst chemicals out of the soil so it will be planted in this scientific skim? Here and this is real life, what it turned to be look like. Mile's question here is what it is pulled out. Eventually, you could expose burning all those and get those bad chemicals all concentrated on and made some incredible pressures on something out of it? I do not know. But it is a set of idea what we have to think about. Very different idea, Nancy Hall move the plants with what happens on earth in connection with water and so forth. Or, James Whines, each strip here is ecological, obviously not natural created one next to each other exhibited fashion, but another way to glean nature and to think about it or very different approach, this mass coming out the sites. This is wind collection, very high tech way to express sustainable values. And I think we are very close to the end here. This is Toronto, again this is only symbolic, the native flower is used artistically in a very big city center to emotional and literally to talk city itself what is in center land. A very different attitude towards maintenance here, it's a garden in Demark; it's a slide I took 10 years ago. This is a big tree here, it has fallen, instead cutting it in the way, they let decay in place because it is these things' mother and small animals. Very different attitude towards maintenance, you let things decay in place. That's a small country they do not have a lot space. Akida, North California, they have day, every year flush with pride festival because they are proud these sewage plans, biological based treatment plans. Remember those guys do not like the rustic building things back in the 19<sup>th</sup> century? Similar today when you do an ecological restoration like this one or this one, people do not they were a lot of money to spend to this fact. So people landscape architecture often propose a little signs or things mowing edge so you leave a meadow looking natural and big grass all waving around look like nothing has been done but you maybe mow the edge to show that waving around is intentional. So, that is one of the issues of sustainable design and I do not have answers to that. This is my last picture This is on Rockefeller Center and I am ending with this one because it is in the center of a very big

downtown and I think one of your issues are whether or not a park has a place in downtown. I have a general rule, which is the higher level of density we live, the greater amenity we need. Another way to say that might be to say that there is a perm? Culture rule that I like it very much, a land should be left in pure wildness. No people let the animals have their patterns. 1/3 for agriculture and 1/3 for settlements. If we tighten up and live in the city, have to keep our farmland and beyond that people are wildness, people have live in higher density. And if we are going to do that, we have to live in higher level of humanity? That means to me almost literally beats need to be paved with gold. Not literally with gold, but it means it has to be gorgeous to live in the city if we are going to save our wildness, not to bleed out into suburbs. So, I like using this image of our biggest most dense city have this little an agriculture display here. They happen to use these corns and ad? Particular time and you know they change their displays. This one I found in an apple and pear trees in Colonial Williamsburg to me put on a new trailer collector and I just love this idea this is very organic look but civilization is clearly here we shape the thing we got them on the little structure. It's real fusion between nature and civilization. I think that is my hope for our cities. They can emplace nature to a pleasure for us to live in them. Yes, we have beautiful Italian plaza with marble surface I just heard about one at dinner tonight, but we also have natural trees, we have flower boxes everywhere, we have swales, we have all aviate corridors perhaps even at least around if not through our city. We have water in city, like fiber little trees, fiber Germany has creek channelized control but still it's open, you can touch it and play it right in the heart of the city. So I think these for me are both nice images to end on suggesting be synergy, harmony between civilization and nature and I am happy to take questions.

## CHAPTER 9

### GREAT STREETS

#### Edited Transcript of City Design Lecture by Allen Jacobs

*Allan Jacobs is the author of Great Streets and The Boulevard Book. He was the Planning Director for the City of San Francisco and a Professor and Chair of the Department of City and Regional Planning at the University of California, Berkeley. He is the Principal of CityWorks, a planning and urban design firm in San Francisco. He has designed numerous great streets, including Octavia Boulevard in San Francisco and International Boulevard in Oakland. In this lecture, Professor Jacobs will discuss the role streets and boulevards play in the development of livable cities. This lecture was presented on November 5, 2008.*

These introductions always remind me of a story about Bill Bradley, who was once, you know not all that long ago, the Senator from New Jersey. He went to an upper scale New York restaurant and they showed him to a table. The first waiter came by, the guy who puts down the bread and the butter, he puts down the bread and the butter and Bradley said, "Excuse me," he said, "Can I have another pat of butter?" and the waiter said, "No." "I just want another pat of butter." And the waiter said "No." Bradley said, "Do you know who I am?" And the guy said, "No, who are you?" And he said, "I'm Senator Bradley from New Jersey and I was captain of the New York Nicks when we won the world NBA championship and I was voted the most valuable player. Before that, I was the captain of the basketball team in Princeton when we went to the finals of the NCAA and I got voted the most important player, the most valuable player, and I went on a Rhodes Scholarship, and I would like another pat of butter." And the waiter said, "Do you know who I am?" And Bradley looked at him and said, "No, who are you?" and he said, "I'm in charge of the butter."

Well, I'm in charge of streets tonight and as I have done a lot of these talks, not necessarily on streets, but with all that background you can imagine I've talked a lot. And I'm sort of getting to the point where I'm not going to do that anymore and, in fact, I am getting to the last talk. The last four times that I've told people that this is my last lecture, they've treated me nicely even though I've maybe said some stupid things. So, this is my last talk.

It's going to be about streets. Because there are a lot of students here and there are professionals here as well as other interested and involved citizens, I am going to talk a little about how all this research started and how this stuff comes about. Because I think it's important, particularly for students. We were doing a studio class, I was in Mark's class today, and we were doing a studio class and it was dealing with Van Ness Avenue in San Francisco, a major, major street. I gave a short period [of time], I stopped the research for a short period of 2 or 3 week period--2 week period actually, and we picked a number of streets, a number of types of streets, and the students were to look them up and find out information about those well known streets, not to...not to copy, but just to look at examples. What we found, and what they found, was that there was very, very little written information about streets. Oh sure, and almost no measurements. There were



some drawings, but no measurements, they were all at different scales, it was hard to relate to real world experience. One of the students, Michael Friedman, who now runs a very good and fine consultant office and does a lot of street design, Michael said, "What kind of university is this? You know, this is supposedly a research university and there is nothing out on streets. Why is that? You know this is 1980 whatever the hell it was and why don't we know? What kind of research university is this?" And I thought that made sense--made sense to me. So I started doing research on streets. To find out everything I could about noted good streets--raises a question what's good--what is good. Overall, I'll get to that, overall the objective was to make available to professionals, students and researchers, and citizen activists, objective, measurable, easily understood information about streets. This was before the, you know, the laptop were big, before all of that was really in swing the way it is now. I envisioned cabinets, filing cabinets with street drawings and data about them that could be made available to people who were interested, that was the objective in what I started doing. The idea was to determine the physical, designable, buildable qualities of the streets most associated--that most people associated--with the best streets, I call them great streets. I don't have in mind great in the sense of big or grand. I had in mind the idea of if I'd been out on a street and spent some time in a day and I came home and my wife said, "What'd you do today?" I could say, "Oh I was on a great street." That's what I had in mind when I started the research, simple as that.

What was the research? Well we did some seminars at Berkeley to define what good streets were...[again people come in if you'd like there's room here walk across, sit along the side, what the hell, you came all this way.] Uh, so it was so we had some seminars, I then did some literature research and I found, again, surprising little objective data. Again, very little in terms of dimension, some early German and English publications on streets, good stuff, and some wonderful essays and stories. If you haven't read the short story *Nevsky Prospekt* you've just got to read it--of what goes on in Nevsky Prospekt in Russia in St Petersburg. Goethe wrote about going to Rome and walking up the Via Del Corso and everything he saw on it and he measured--crazier than hell--he measured the length. He never measured the width; he measured the length. It's a good read. It was soon after he left Germany, he was going to become some--he wanted to become an architect and he went to Rome. Marshall Burman's *All That is Solid Melts Into Dust* is a spectacular book about the Paris Boulevards. But again, I can't do anything with it, except--the exuberance and the beauty of which it was written--I couldn't do anything with it to help somebody know anything about the design of streets.

So I did a lot of visiting, measuring, and drawing of streets. I did a lot of measuring, visiting, measuring, drawing of streets in my field notebooks. Basically, spending lots and lots of time on streets. Measuring; measuring the street, measuring the walk, measuring the widths, measuring, counting traffic, counting the volumes, the turns, the lights, the poles, the statues, the volumes of people--stuff like that. Drawing them, seeing what happened. Marking the building locations, their heights, their widths, the lengths of buildings, the doorways, the windows, the lengths of stores, and stuff like that. Drawing all of the above in journals and sketchbooks. Noting maintenance, such as windows, watching people and their behaviors, sketching, sketching, and sketching. I took pictures, but that was the last thing I ever did in studying a street. Why? Because when you are taking a picture, you're taking a picture, you are composing it, and you are concerned with getting a good picture. If you do that at the beginning, you won't look. I never let students, at the beginning, take pictures. It's so easy to do that and then bring them

back to class. You don't look when you do that--you take pictures is what you're doing--and that's OK, but you're not setting the street.

I did a number of surveys, surveys of professionals. What were their best streets? This was international, I wrote all over, got lists of everybody I knew, got lists out of telephone books. What were the best streets, and why? Leads to a question, another good question, what are you going to do with the findings when they tell you? What are you going to do with them? Well, what I did with them is make lists--I made lists with the ones that got mentioned more than any other at the top and in descending order. That's not scientific. But then I never intended to be scientific. Then I began to find out, so I had these lists. I began to make columns next to the lists and either find out or write because I knew a bunch of categories of the physical and socioeconomic characteristics of the streets or the streets around them. Were they straight or were they curved? Were they wide--you had to make up your mind what wide meant? Were they narrow? Were there trees, weren't there trees. Was there somebody in charge of taking care of them, or not. All kinds of questions. What were the socioeconomic characteristics of the street and the neighborhood through which it ran? All these columns, and they got more and more, and I had to add more paper. And you find out--you put all that down, you find out the characteristics of them. And that was some of the research; patterns begin to emerge.

I did surveys of people on streets, the Jacobs Five-Question Survey. "If you could have a fine street, a great street, what would be the physical characteristics of that street?" By that I mean things you could build things you could touch. What would be the physical characteristics? Question number one. Question number two: "Is there such a street like that in this city?" They'd give you a street. "Why?" That's the third question, why. You take down everything they say, everything they say. Fourth question: "Is there a street somewhere in the world, not in this city, that is a fine street, that you really think is a great street?" They give you a name. "Why?" and take down everything they say. Well, that's kind of interesting. Again, you get characteristics you know and you begin to look at what they say and learn of things they all say. By the way, men more than women, say smooth, no potholes. And you think that is not what I had in mind. Wait a second! It doesn't matter what you had in mind! Smooth, no potholes, you get a lot of that. Well, again, pretty soon you get all kinds of answers and you can take them all down and you can begin to find the things that people in the street think are wonderful streets. Trees were big. One of the things that I'll never forget on Union Square in San Francisco...I'm at the corner, across from what is now that Texas store, from Texas, and a very elegant lady is describing a good street, and what she's describing is a medium-width street, undulating through the countryside, through an area with lots of big houses, well set back and trees and lawns. And she describes that and it's lovely and I get to the question about anywhere in the country, anywhere in the world, rather, and she says, "I love those streets--I can't remember where exactly the city--but in Greece, those little narrow streets with the white houses and the steps coming down..." and she's talking about them with a certain excitement, and she stops. She said, "Wait a second, I'm talking about everything the opposite that I said in the first question!" I'm just taking it down. Fascinating, what you get and I found that kind of helpful.

We did studies of scale. Peter Bossleman and I did studies of scale. When streets became too wide for the height...Did more visiting, measuring, drawing. This time, of all the streets that were most mentioned by the professionals and others, and also by friends, and also, I added some

that were my own. Such as Roslyn place in Pittsburgh, that I remembered. So I went and revisited it and re-measured it. Yeah, Roslyn Place in Pittsburgh--great street.

In many ways, the research actually continues, some times in different ways. Professional work is, or should be considered as, research when you do professional work. As a result, for example, of our initial research on boulevards Elizabeth McDonald and I have been asked to design a number of streets. We do our best, but no matter how well or poorly we do, we criticize our finished work, and we observe carefully the design process, and what administrative and legal factors and what professional mindsets helped or hindered our final design. So the research, now all of my research, on this is about 25-30 years old. I still do measuring, visiting, and drawing.

What about the importance of streets? We tend to take them for granted, but streets are more than traffic carriers, more than access to property, however important that may be, more than places for utilities, more than for access to public safely vehicles and people. Streets, in very large measure constitute what I, and others, now call the public realm. They're places to walk, places to meet and see people--neighbors and strangers alike. They're socializing places or places to be alone. They're political places where people demonstrate, express joy and remembrance or anger--a parade. Try, by the way, having a demonstration in your nearest shopping mall--see where you get. You get thrown out, is what you get, if you're lucky. They're places that afford sunlight. If they have trees, they become ecological places. I don't know about you, but I've played on streets, and so do kids on my street now--trouble is, there just aren't enough kids. Streets, public rights of way, occupy between 25-35% of all developed urban land. That is way beyond anything you'll see in parks, public buildings, the space of public building. You probably know San Francisco a little. Golden Gate Park is a thousand acres, to say nothing of the panhandle. The Presidio is about as big as Golden Gate Park. McLaren Park, no one knows, but it's there, and it's huge. Add all of that stuff up; it doesn't come close to what's in streets. And that's so in almost every city I know. So in large measure, streets represent the public realm, and, and, and, they are owned and controlled by the public. So, design streets, and in large measure, you have designed the city, simple as that. Therefore, for me at least, a worthy topic for research, studies, and designs.

I knew I was going to do the Grand Canal as a street and so I did a square mile of Venice, honest to god, that's the same, that's a square mile and that's a square mile. I'm not kidding you. And I thought, I must have got the scale wrong. I must have done it wrong. And I have checked that and the other one maybe thirty times, and it's right. You know, there are places, like where the bridge goes over there, where the Grand Canal is just a little bit wider than Market Street. That's most of Market Street--most of Venice is in there, in that square mile. Very little of San Francisco, which is considered a dense city, is in that square mile. And that got me thinking...this is how you take a tangent from you research. And so you know that's got 1,700 and some intersections on it, an intersection being where you have a choice to go one way or another--you have choices where there are intersections. San Francisco, which is considered a dense and small-scale city, has maybe 300 or so. That's a big chunk of Rome right there. You know, just off to the left above is the Vatican, Piazza Navona; that's a lot of Rome; Paris at a very different scale. That's Ahmadabad, an Indian city, a Muslim city, lots of big blocks, and fewer blocks, fewer--no, that's got a few less intersections than Venice. Fascinating--very different. I began doing all of these counts. From all of these, I have the number of

intersections, and the number of blocks. Tokyo is like a plaid; it's like a tartan plaid somewhere, very small, got lots of intersections. LA, you know I use this map, I use a print of this map for another bit of research, and I give a print of that map to students, professors. I've given it to elected officials and 2-3 weeks ago I gave that map to a bunch of Abu Dhabi emirates. And I said to them, "OK you are going to be taken, you have to walk a square mile. That's a square mile, your job is to walk and to get to know a square mile and someone is going to take you to", I don't tell them what city that is, that's LA, "someone is going to take you there. Where would you like to start your walk on that?" Between 55-65% of the respondents say right there (point to lower left hand corner) It's the one place where the streets are real screwed up—it's not a big grid. It's kind of interesting to me that at that time it was the most dangerous section in Downtown LA, but that's what they picked. Santa Monica, very regular, important alleys, try Brasilia, 60 some intersections, or try Irvine, 15 intersections in that square mile. The mayor of Irvine once wanted me to come there, and his mother had come from the east, Larry Agran, his mother had come from the east and she said to him, "Larry, where's the downtown in Irvine?" And he realized, they didn't have one and he wanted me to help him get a downtown. What I did was I showed him the map of San Francisco, I showed him the map of Santa Monica; I showed him a bunch of different maps. What I didn't show him was the map of Venice, because that would have been nasty. Then I showed him that and his mouth dropped and he said, "That explains it...and how do I get a downtown." And it was easy to tell him, divide any of those big blocks into 9 blocks with a maximum dimension 300' on the side of a block and that's all you've gotta do, that's all you've gotta do. And very soon, you'll have a downtown--simple as that. Well, nothing happened. The Irvine Company--Larry, bless him, got a law passed that said that nothing that you could not either sell or produce anything in Irvine that put fluorocarbons into the air and the Irvine Company spent a fortune making sure he was dis-elected very soon after that.

There you get Portland, 200' blocks. And Boston. Notice in the 1895, that is Boston, the hub they call that, in 1895. I wanted to get a map and I didn't realize that I got this map, "whoa, that's not the map I'm looking for I'm looking for it now." And I got another map that's in 1955 and you know that's changed, hadn't it. Aside from the freeway that went through it. And then I got it in 1970, changed again. The number of blocks went down, the number of intersections went down, and all that's in the book. What happened to them? What happened to them, well...the land was assembled, the streets were vacated, the land by and large was sold or given to large developers, either public developers for the city hall, or private developers. That's what happened, and the intersections went down. Think about intersections, remember I said, this is really related to cities and streets, think about intersections. Intersections, I said, are places where you have choices to go one-way or another. I didn't pick the word "choice", it just came to me. Choice, that's an American Value. Freedom of choice. Isn't it interesting that in cities over time, we have been doing away with choice and we have been giving land to either big developers or big government? That is not unrelated to values that I'm going to talk on as we move ahead. I'm sorry that's not a great slide, but that's three time periods.

So what are the physical, designable characteristics of the best cities? Oh I'm sorry, this by the way, this is back to that other subject, it is at another scale. These are the same areas, the bottom is the number of buildings in the 1970's or 80s and in the same area, that's the number of buildings in the 1950's. Scale has changed, but what isn't just, that stuff doesn't just happen at the block per 1 sq mile scale.

Anyway, physical design characteristics of the best cities: These men walking on the Rome, or these people on Queen Street in Toronto are walking with obvious leisure as they stroll. The people on Avenida Florida in Buenos Aires are more crowded, but also at this point at leisure, the people on lower Broadway, are more crowded, which led me to begin to count people and width and time, as well as long observations of people's behavior to begin to know the need for space and how people use space. When I get to things like this, at 18 people per meter of width per minute can be very crowded. You get that those kinds of number on to Stroget in Copenhagen or Via de Giubbonari in Rome, you can't walk fast at those numbers. You will occasionally brush by somebody and they will feel you, or you will feel them. But, interestingly enough, if you stand and watch people enough at those volumes you see a lot of the same people over and over again. They're strolling, even with kids, and I found that pretty fascinating. At 20-24, as you get on a crowded day on Avenida Florida, it's very crowded. If it gets under 5 or 6 people per meter of width per minute, the street becomes somewhat empty, particularly if it is a commercial street. These are people walking on Omotesando in Tokyo. These are on Robson Street in Vancouver. The problem, there's a problem, though, that is developing. And I tell it to you either as citizen activists, students, professionals, researchers; a problem is developing.

Until recently, there weren't such standards such as how wide a sidewalk had to be given the number of people walking on it, in the same way the traffic engineers got to notions that they call Level Of Service. A, B, C, D, F--you know, they went directly from D to F. And you wanted to be an A. Nobody thought to tell them that maybe D was good, It's what you wanted—it was really slow. They're doing the same thing now with sidewalks. Everybody wants to have a right to have some of the space of the right of way so you figure up a standard that you need for a pedestrian. And, that's the standard. Most of it is rot. It's pure rot. I, you know, I ran into this once, not all that long ago, in Vancouver where there's really sane people, really sane people, and we're designing the street and the transit people say, "Aha! At the bus stop, Jacobs, you've got to have 1 square meter during the peak hour for everybody in the queue for waiting for the bus. The standard is 1 sm. I say, "Where'd you get that standard." "Oh, we've used that standard for a long time." "No, that's not the answer to the question. Where did you get the standard?" Oh, we worked on it in the offices, we worked on it and we came to it." "No, that's not the question, that's not the answer to the question." So, I wasn't going to get the answer, so what I did was I marked off a meter on the floor, and I stood in it. Ooh, look, there's a lot of space around me, isn't there. And I said, "Would you come up here and stand next to me in that meter?" And the guy did. I said, "Ooh, we can both fit in here, can't we?" And I said, "Look, there's some more space, would you come up and stand in the space too? Ooh look, we're beginning to touch a little." "We're not going to use your standard." "Fine, and when you use it, and I present this to the city council, then I'm going to do this experiment with the city council in front of them and ask you to stand in the square meter." Well, on the one hand that's called hardball, and on the other, you can be damned sure you're not going to get another job. Beware of those standards, and I hate, hate, and hate, to say this, but beware, as well, of some of the standards on how much space you need to plant the tree. Beware, just beware.

Comfort. Comfort, as I use it, refers to physical comfort. The Esplanade in Chico, a multiway boulevard: Extraordinarily comfortable place to walk. The streets in Bologna have shade when it's hot. What about when it's cold? They still have shade. In truth, you know, the reason why they were built there was as much--partly it was to get out of the elements. But In Bologna, they

were built the way they were built because in times of a siege, or of warfare, when someone was trying to invade the city, they needed space for people from outside to sleep in you know, protection from the elements. And that's why these were built this way. India has sun when it's hot, but also shade. It has shade when it's hot. The streets, deciduous in the summer, non-deciduous, or bare, in the winter give sun. In the Via Montello in Rome—spectacular--give shade in the summer sunlight in the winter when they want it. Wind can be a factor. These people are not broke, nor are they doing some kind of exotic special dance. They're in front of a plaza building in San Francisco and they've been blown over by the wind created by the buildings. The wind did that. Laugh, but it's not so funny to them. For that reason, at one point in San Francisco we, honest to god, had a law, that if you were going to build a tall building, significantly taller than those around it, you had to do wind study tests. You've all had that experience somewhere when, all of a sudden, the wind hits you...whoa, what caused that? It was the building that caused that.

Definition. This is on a sketch along the Omotesando. Definition comes from buildings or trees or both, something that defines the edges--that gives distinct edges to the public right of way. A sketch in Rome. Our studies show that definition starts when the defining element has a height that is at least  $\frac{1}{2}$  the width of the right of way. This is Philadelphia, the narrow streets in Philadelphia. New development in Vancouver. Philadelphia again. Notice that's a street with a streetcar line. The Greek and Roman ancients used these proportions. We did our own studies, Bossleman and I, and found that the old boys were right,  $\frac{1}{2}$  the width of the right of way at least. In New York, famous brownstone numbered streets. Definition also occurs at the ends of streets, or as this shows, on Regent Street in London, where the form of the crescent shapes creates the enclosure. There are obviously many, many examples where trees are the defining elements. None better, I think, than in Vancouver. I'll get more into trees later.

Transparency: An ability to see or think you know what is beyond whatever it is that defines the street. A sense of what is behind the definition. As here in old Shanghai--I'm sure this has been torn down. Residential windows do it. New York streets again, residential streets. You know, or think you know, whatever takes you beyond the defining element. That was a blank façade many years ago on Union Street and that's not a new building, but a new façade. They used to tell you, "Oh, on a commercial building you can't have windows", because of how you show the clothes and all of that. How come you can do it in Macy's? They learned it there. Glass is not always--they didn't learn it at Neiman Marcus in San Francisco either. Glass is not always transparent. That's on in Pasadena where they have the Rose Bowl Parade. You know, you automatically know that nothing good can be happening in a building like that. Laughter. On the other hand, it can be very, it can be subtle. So, that Venice alley is less than 3' wide, and notice there's two doors, but more important, the shrubbery comes over the wall and takes you inside, you go inside with it, or think you do. It can be a very subtle thing. It should be noted, however, that this quality on residential streets is to a very considerable extent a western phenomenon. It's not important, or even remotely desired, in the Middle East. Buildings that complement each other but are not necessarily the same are what you do find on good streets. The best streets, keep in mind our subject is streets, not individual buildings. And so, the buildings along Princes Street in Edinburgh, Edinburgh, where they consciously set out to build a great street--that was their intention. Guess, what? They did it. They did it. The buildings are

all kinds of buildings, but they complement each other in scale. They do on Stroget in Copenhagen.

Maintenance is important. It seems obvious, but is remarkable how often otherwise fine streets are poorly maintained. You know, my mother would have made me go wash the windows. Merchants know that, when they can, they make sure the windows are clean. It's an important matter, by the way, for people who use streets, our survey showed. As implications--the maintenance have implications for design. It means choosing materials that are easily and normally maintained, and it means designs that can be easily maintained. As I said at another occasion, I think that your design on Broadway, the design itself is a really good design. I think that's nicely done, in a lot of different ways. I hope that there are bricks around and lots of them and a commitment to maintaining that—really, incredibly important.

Physical elements that combine that make the eyes move constantly are very, very important. Not only do eyes constantly move--one of there great, wonderful qualities. You know, try looking someone in the eyes and see whether they move their eyes or not. They always do. They must move. There are studies of that. Eyes hate boredom. Eye movement is critical. That's along Colleen and Prospect in Moscow, and it's not terribly interesting. It's fascinating, by the way, of what you would paint if you had the chance to paint or draw. Never, rarely would you draw something like that? Rarely would you try to paint it--you don't do watercolors with stuff like that unless you've got to--unless someone says, "I want a rendering of so and so, so I can sell this building." So you do that, and you make the sun go over it and everything. Physical elements along streets that catch our eyes, interest our eyes, keep the eyes moving, are critical elements of the best designable streets. This is in Paris, and this is shade, obviously, and it keeps moving and so do your eyes with it. Good lights and light poles. This is on Aix en Provence, the Cours Mirabeau. The light that keeps moving along the street, the shadows that keep going, and the light poles. I'm sorry this is in Barcelona. They're smart, they don't use clear glass for the fixture, and they use white glass so that it catches the light, which is what clear glass doesn't do. Once again, the trees in Rome do for your eyes. All of those verticals in Tokyo. Honest to God, by the way, that's a building. These are buildings. Any sensible land economist will tell you that you've got to have a big site to design a tall building. So I guess the Japanese were stupid. Tell me about that. You know, what they did was to follow Jacobs Rule #4 about land economics. Which is: If you think that a rule or a law cannot be changed, then it will be economic to develop within the rule or the law. If, on the other hand, you think that the rule or the law can be changed, then it will not be economic to develop under the rule or the law. It's called speculation. Anyway, I'm talking about the physical elements that combine and the moving shadows of leaves of trees or of light moving over buildings details catch the eyes.

There are qualities that contribute to great streets, but which may or may not be necessary, and one is obviously trees. Not all streets should have trees, but if appropriate, they give the most for the least expenditure of money--the biggest bang for the buck. This is Oakland at Mills College, the street. This is in Paris. They have to be well done, which raises the question of tree type, their planting, and spacing. Vancouver. 15-30' spacing, depending on the tree. Have to come close to the intersections, not some arbitrary distance away from the intersection. The traffic engineers will tell you in different cities that they have to be different distances from the intersection for safety reasons for view cones. So that you can see, so that the car can see the car

on the main street or the car on the intersecting street can see the other cars coming and be safe. How come they have those big poles on the corner that are bigger than most trees? My great partner Elizabeth--I've fought this so many times--and then Elizabeth last year, year before last, did a detailed study of people's perceptions and what they see or they don't see in these situations. And guess what? It isn't the tree that causes any problems. It is SUV's parked--SUV's where you can't see, or rows of newspaper kiosks--they'll do it. It's not the trees. There's objective research on the matter. They should be on continuous lines, and if you really want to have an impact, for gosh sake, do what Vancouver did, and say you have to have one species--you can't have more than one species per block. You can change it block by block if you want but you have to have one species, at least, for the block if you want to have an impact.

Good streets, not required, but have beginnings and endings. It's important that the street is long. A column at the end of the Las Ramblas in Barcelona. Many, many small buildings are generally better than a few larger ones. Grant Street in San Francisco. They understood that. Guys who designed Main Street in Disney Land did that. They look like a lot, a lot, a lot, of little buildings--you go inside, and it's one damned building. If you've had that experience. But they knew that about what made a good street--it's fascinating, Disney Land. I had an incredibly sad experience that time with Irvine, when I was in Irvine and I had a weekend and I had to do something over the weekend. I'd never been to Disney Land so I went to Disney Land, and I went to Main Street, and I measured Main Street, and I watched the people on Main Street, and I spent hours on Main Street. Then I came back to Irvine and I did one of my questionnaires. Do you, you ask people, Do you go to Disney land?"...not very far. "Yeah." "How often do you go to Disney Land?" Lots of them go twice a year to Disney Land. "Do you like it?" They love Disney Land. "Do you like Main Street?" Everyone loves Main Street. "Would you like a street like that in your city, Irvine?" Not one person said yes, everyone said no. Not one person said that's good for them for Irvine. Why not? There'd be homeless people, there'd be drugs, there'd be panhandling, there'd be dirt. In other words, if you paid what at that time, this is giving myself away, the price of admission, which at that time was \$29.90, to get in then you were sure everybody was like you, and you didn't have to worry about homeless, panhandlers, and the rest of it. That didn't make me fee--that's research I'd rather not do. Places and spaces especially important if the street is long. These are murals in a little space on 24<sup>th</sup> Street that everybody told us would be a failure and the muralists helped and took over and put a little space and made it a wonderful space on the street. They still do the murals. The space again in Eugene.

Details are important. Benches, on the Paseo de Garcia. Gaudi designed those. Benches, Gaudi designed those. Details catch the eye as interest on the Paseo de Garcia. Fascinating details--fascinating, isn't it, that Gaudi, who was I would suspect, I would suggest, was more inventive architecturally than any of the brilliant signature architects we have today. You know who want their names all over everything--so and so did that. Gaudi could build his buildings, and design his buildings, except for a special building like the cathedral, within the right of way, set back exactly the way the rules said, in Barcelona--fascinating he could do that. Sculpture, fountains, and joy--you know how to put joy in cities? And before I quit, I've gone on for almost an hour and a half, that's crazy. I did a multiway boulevard, since multiway boulevards are a big thing here--being thought about--I thought I would show you a multiway boulevard. The first one that Elizabeth and I designed in Ahmadabad, big street in Ahmadabad. That's what it looked like--I



mean, that's a crazy street, right, that's a big street, a big circumferential street. A great young architect, who was one of my students, came by actually was coming by to hand in his work on his final work and hand in his dissertation for a PhD. And he looked at stuff that we had on the board, and he asked what it was, and he said, "Jake," he said "I'm designing a street in Ahmadabad, my first street, he says--I think I'm screwing it up." Would you and Elizabeth come to Ahmadabad? And we did. And that's what we saw. And we worked with him and a nutty wonderful administrator, that was the city administrator, and that's the street we designed. That's how it ended up. We couldn't touch the middle thing, which was there, they had invested in that. It's not backwards, that's how the Indians drive--like the British. And so that's the multiway boulevard. That's got to be the narrowest median you ever saw. The trees are going to grow--are growing. Indians don't know how to park parallel, so you have to make it angled parking, and we did that. That was the design, what we did. I mean, that's really working small. You know, I mentioned, Elizabeth hates me to mention that she still thinks we could get liability suits for designing something where the bumper can go right into the main street--you know you shouldn't do that. But they all wanted it, and we did it. But look, the people are using--this is all, from here to the building, is the pedestrian realm and people are using it to walk on. They feel totally comfortable walking on it and it works, it really works. They have postcards of it. We didn't take out old trees, no matter what, on that one. There you go. Same thing at night. I love the two steps, rather than the simple curb. You're up when you're walking; you're really up over everything in this case. You're in your own realm, and it's kind of fun.

Ok, so when all is done, let me just conclude by observing that streets, public rights of way, account for 25-35% of all developed urban land and they are owned or controlled directly by the city. Design them, and design them well, and you will have designed the city. I think it's a worthy subject of design. Thank you very much.

## **Appendix: Posters**

The University of Oregon School of Architecture and Allied Arts, the City of Eugene, Lane Transit District, and the Oregon Transportation and Growth Management Program, with the American Institute of Architects Southwestern Oregon Chapter, and the American Society of Landscape Architects Willamette Valley Section present a public lecture series:



**Dan Solomon  
Rich Admire Richard Meier**  
**Whatever Happened to Modernity?**  
Thursday May 18, 2006. 7pm  
182 Lillis Hall  
University of Oregon, Eugene

Dan Solomon, FAIA, is the principal of Solomon-ETC, a WRT Company and author of *Global City Blues* and *Rebuilding*. His firm has designed award-winning projects across the country that incorporate environmental sustainability, socio-economic diversity, and transportation efficiency. From discrete buildings to large-scale master plans, he shows how architecture, landscape architecture, and urban design work together to create more livable cities. This will be the Thirteenth Annual McKeown Memorial Lecture in Landscape Architecture.

**Paul Crawford**  
**Shaping the Public Realm:  
The Role of Form Based Codes**  
Thursday May 25, 2006. 7pm  
University of Oregon's Baker Center, 975 High Street  
Downtown Eugene

Municipalities across the country are recognizing that traditional zoning codes do not support the types of buildings and open spaces appropriate in today's transit-oriented developments. They have replaced these outdated rules with form based codes in an effort to regulate the form of development necessary to support a safe and vibrant public life. Paul Crawford, FAICP, will discuss recent applications of this new zoning concept and its applicability to projects that support livability and transportation choices.

**Elizabeth Macdonald**  
**Building Multi-Way  
Boulevards**  
Wednesday June 7, 2006. 7pm  
University of Oregon's Baker Center, 975 High Street  
Downtown Eugene

The City of Eugene is considering proposals for Franklin Boulevard that can accommodate transit, increased vehicle capacities, and an improved pedestrian environment. Multi-way boulevards are one tested approach that can meet these diverse demands. Elizabeth Macdonald, a professor in the Department of City and Regional Planning at the University of California at Berkeley and the co-author of *The Boulevard Book*, will share her research and practice experience in designing and building multi-way boulevards.



All lectures are free and open to the public.  
For more information, please call 541.346.1999.

The University of Oregon School of Architecture and Allied Arts, the City of Eugene, Lane Transit District, and the Oregon Transportation and Growth Management Program, with the American Institute of Architects Southwestern Oregon Chapter, and the American Society of Landscape Architects Willamette Valley Section present a public lecture series:



**Shelley Poticha**  
**Building the Livable Region: Transit-Oriented  
Development and Development-Oriented Transit**  
Thursday, October 26, 2006. 7:30pm  
University of Oregon's Baker Center, 975 High Street, Downtown Eugene

Lane Transit District's EnX line will soon begin service and connect the downtowns of Eugene and Springfield with a bus rapid transit system. This project is already opening the door to more appropriate development along the line. Shelley Poticha will discuss how such development can enhance regional livability. She is the President of Reconnecting America, a non-profit organization working to integrate transportation systems and the communities they serve, with the goals of generating lasting public and private returns, improving economic and environmental efficiency, and giving consumers greater choice.

**Clare Cooper Marcus**  
**Clustered Housing, a Sense of Community, and the  
Needs of Children**  
Thursday, November 16, 2006. 7:30pm  
University of Oregon's Baker Center, 975 High Street, Downtown Eugene

As Oregon cities search for alternatives to single-family housing at the metropolitan edge, the needs of children cannot be overlooked. In this lecture, Clare Cooper Marcus will discuss how to make housing in the city appropriate for families. She is Professor Emerita in the Departments of Architecture and Landscape Architecture at the University of California, Berkeley. She lectures widely on urban design issues and is the author of numerous books, including *Housing as if People Mattered*, *People Places: Design Guidelines for Urban Open Spaces*, and *House as a Mirror of Self*.



All lectures are free and open to the public. Free parking is available - if needed, please use 10th Street to access the parking lot directly behind the Baker Center.  
For more information, please call 541.346.1999.

# City Design Lectures



**Richard Francaviglia**  
**Main Street: Past, Present, and Potential**  
 Thursday, October 18, 2007. 7:30pm  
 University of Oregon's Baker Center, 975 High Street, Downtown Eugene

Communities across the United States are looking to the historic main street as a model for development. In Oregon, Cottage Grove is hoping to revitalize its legendary Main Street. Springfield has plans for its Main Street. And Eugene is considering ways to improve Broadway, which was historically one of its main streets. In some cases, communities are looking to infill their main streets with smaller scale projects, in other places, like Eugene, the model is more akin to a "lifestyle" center - a pattern that adds considerable retail space. In this lecture, Richard Francaviglia will discuss the dynamic tension between linearity and nodality - and between business/commerce and community/residential use - over time. He is a Professor of History & Geography at The University of Texas at Arlington and the author of *Main Street Revisited: Time, Space, and Image Building in Small-Town America*.

Presented by The University of Oregon School of Architecture and Allied Arts and the Oregon Transportation Research and Education Consortium.

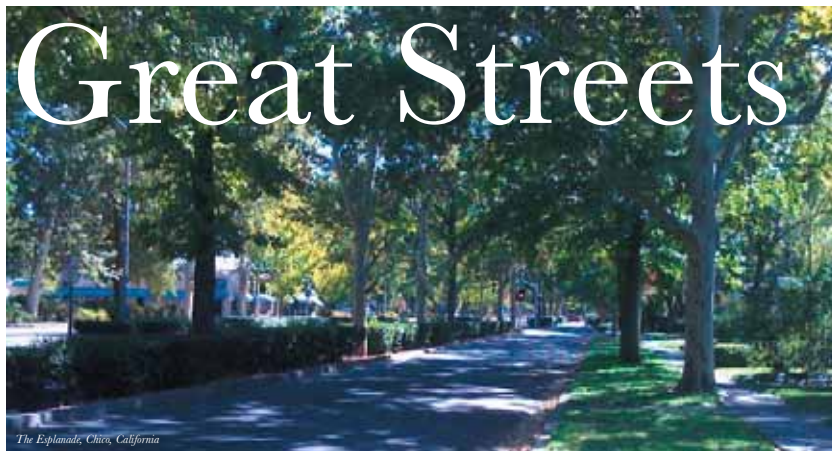
**Galen Craz**  
**The Changing Roles of Urban Parks**  
 Monday, November 5, 2007. 7:30pm  
 University of Oregon's Baker Center, 975 High Street, Downtown Eugene

Magnificent urban parks are the norm in many American cities large and small. From New York's Central Park to Vancouver, Washington's Esther Short Park, these parks have served many uses. They are places for recreation in the heart of town. They are retreats from the pace of urban life. And they are green islands in the heart of grey downtowns. In this lecture, Galen Craz will discuss how urban parks have evolved over the last century and how, in their latest role, these places have become essential components for cities interested in issues of sustainability. She is a Professor in the Department of Architecture at the University of California, Berkeley. She lectures widely on urban design issues and is the author of *The Politics of Park Design*.

All lectures are free and open to the public. Free parking is available - if needed, please use 10th Street to access the parking lot directly behind the Baker Center. For more information, please call 541.346.1999.



The University of Oregon School of Architecture and Allied Arts, the Lane County Farm Bureau, and the Oregon Transportation Research and Education Consortium present a public lecture on:



*The Esplanade, Chico, California*



## A City Design Lecture by Allan Jacobs

Wednesday, November 5, 2008. 7:30pm. University of Oregon's Baker Center, 975 High Street, Downtown Eugene

Allan Jacobs is the author of *Great Streets* and *The Boulevard Book*. He was the Planning Director for the City of San Francisco and a Professor and Chair of the Department of City and Regional Planning at the University of California, Berkeley. He is the Principal of CityWorks, a planning and urban design firm in San Francisco. He has designed numerous great streets, including Octavia Boulevard in San Francisco and International Boulevard in Oakland. In this lecture, Professor Jacobs will discuss the role streets and boulevards play in the development of livable cities.



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P.O. Box 751  
Portland, OR 97207

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