Transcript of the Ceremony and Roundtable Discussion
In Honor of I. M. Pei
Upon His Receipt of the
2003 Henry C. Turner Prize for Innovation in Construction Technology

National Building Museum
April 15, 2003

CAROLYN BRODY: Good evening, ladies and gentlemen, my name is Carolyn Brody. It is my
privilege and pleasure to chair the board of the National Building Museum. On behalf of the Museum, I
am delighted to welcome such a large and enthusiastic audience to honor I.M. Pei upon his receipt of the
Museum’s Henry C. Turner Prize for Innovation in Construction Technology.

Mr. Pei is the second Turner Prize laureate. His acceptance of the Prize lends great distinction to
it and as well as to the Museum. The Prize was established and endowed two years ago by Turner
Construction Company to honor its founder, Henry C. Turner. The Museum is extremely grateful to
Turner Construction Company for the creation of this award. We consider it — together with our Honor
Award and the Vincent Scully Prize — our most prestigious means to recognize excellence and notable
achievements related to the built environment.

I must also express the Museum’s gratitude to Turner for hosting the reception that we’ve all just
enjoyed. What a delightful prelude to what promises to be a scintillating evening.

A number of you here this evening are new to the Museum. I extend a special welcome to you
and invite you to return soon. The National Building Museum is America’s premier cultural institution
that explores the world we built for ourselves — from our homes, skyscrapers, and public buildings to our
parks, bridges, and cities. Through exhibitions, education programs, and publications, we seek to engage
the public in informed discussions about architecture, design, engineering, urban planning, and
construction.

To be able to mount exhibitions and to present programs like tonight’s, the Museum depends on
external sources of support. As a private, nonprofit organization we seek contributions from corporations,
foundations, associations, public agencies, and individuals like you.

It is now my pleasure to invite to the podium Thomas Leppert, the chairman of the board and
chief executive officer of the Turner Corporation. It is the leading general builder in the United States.
Tom has a wide-ranging background in finance, real estate development, and management and I am proud
to say that he is a member of the Museum’s Board of Trustees. He will speak briefly about the Henry C.
Turner Prize. Ladies and gentlemen, please join me in welcoming Tom Leppert. (applause)
THOMAS LEPPERT: Thank you Carolyn. It’s a special pleasure for all of us at Turner to be with you this evening. Over the last 42 years we’ve had a chance to work on 26 different projects with the recipient this evening. Those range from the John Fitzgerald Kennedy Library outside of Boston to the Rock and Roll Hall of Fame and Museum in Cleveland. Most recently we are working with him on a large museum in Qatar and the National Constitution Center in Philadelphia.

I think it’s most appropriate that this award is sponsored by and presented at the National Building Museum. This is a wonderful national asset. The Museum recognizes, acknowledges, presents, and documents the wonderful history of the construction industry. It provides a very important role in our nation.

The Henry C. Turner Prize was created and established to commemorate the centennial of our firm and also our founder Henry C. Turner. Back in 1902, when he founded the firm, the genesis of the firm was innovation — at that time, a very innovative and even radical concept in the construction industry. Throughout his career, he instilled a strong sense of innovation in our firm and throughout the industry.

As a result this Prize recognizes an innovation, an innovative methodology, or exceptional leadership to a team or an individual in the construction industry and construction technology. Our recipient this evening clearly would qualify under any of those three categories. From all of us at Turner, Mr. Pei, congratulations and thank you very much for all the contributions that you have made to the industry and to our nation. Thank you. (applause)

CAROLYN BRODY: Thank you, Tom, for providing background about the Henry C. Turner Prize. Now I invite to the podium the chair of the Turner Prize Jury, Norbert Young. He is president of McGraw Hill Construction and he too is a member of the Museum’s Board of Trustees. Norbert will explain the jury’s rationale in selecting Mr. Pei as the 2003 Henry C. Turner Prize laureate.

NORBERT YOUNG: Thank you Carolyn. For the past two years it has been my great pleasure and honor to chair the jury of what has now become a major new prize in the realm of architecture, engineering, and construction. Serving with me on the jury are four individuals each distinguished in their own right. They are J. Robert Hillier, FAIA, chairman and CEO of the Hillier Group, one of the largest architectural firms in the United States; Chris T. Hendrickson, chair of Carnegie Mellon University’s Department of Civil and Environmental Engineering; Clyde B. Tatum, chair of Stanford University’s Civil Engineering and Environmental Engineering Program; and Thomas R. Turner, vice president of national marketing at Turner Construction Company.
As Tom Leppert mentioned a few minutes ago the Henry C. Turner Prize recognizes advancements or high achievement in the process of construction, innovative methodology or exemplary leadership. The Prize is bestowed on an individual or a team for a singular achievement or for a lifetime of contributions to the construction industry. During the first two years of this prize, my fellow jurors and I have had a very easy time identifying exceptionally meritorious laureates.

Last year the inaugural winner of the Prize was an internationally acclaimed engineer, Leslie Robertson — recognized for his many engineering innovations related to the design and construction of high-rise buildings throughout the world.

This year our jury has selected truly a world-class architect who has been widely respected for five decades of elegant designs that have inspired many in the construction industry to carry forward his innovative thinking. I.M. Pei’s attention to detail in design has motivated engineers, contractors, and craftsmen to assist him in creating buildings and structures of extraordinary quality. He has thus become an important force for advancing quality among all of the disciplines in our design and construction industry. I need only cite but two examples. First his design for the Bank of China Tower in Hong Kong inspired engineers to create the first space truss frame for a tall building. Second his iconic glass pyramid at the Louvre in Paris required engineers and contractors working in concert with him to develop an innovative structural system to support the shimmering panes of glass.

I could continue this litany of achievements but we will hear much more about them in the program that follows. On behalf of the jury I salute you Mr. Pei and thank you for the many and tremendous contributions you have made to our built environment. (applause)

CAROLYN BRODY: Mr. Pei, will you please come to the stage to receive the Prize. Ladies and gentlemen as he makes his way to the stage, please give Mr. Pei a richly deserved ovation. (applause)

Mr. Pei, for your lifetime of design methodologies that has stimulated excellence in construction methods and innovations in construction technology as reflected in buildings and structures around the world — from the East Wing of the National Gallery of Art in Washington to the Miho Museum in Japan — the National Building Museum presents to you the 2003 Henry C. Turner Prize for Innovation in Construction Technology. (applause)

I.M. PEI: When I was first told about this Prize, I was sure that they picked the wrong man. I still am sure that they picked the wrong man but I do appreciate this great honor. I have to say a few things about what makes it possible for an architect to be named for innovative ideas in construction technology. We are not engineers. We are not scientists. We do not deserve this kind of honor. Then who does deserve it? I feel the people who work as consultants for me are the ones who really deserve it, like Leslie.
Robertson who preceded me as last year’s recipient of the Turner Prize. I thank you all. This is a great honor and with humility I accept. Thank you very much. (applause)

CAROLYN BRODY: Thank you, Mr. Pei, for honoring the Museum by accepting our Turner Prize. And now I invite three distinguished individuals to join you on stage and engage in a conversation about your influential career. Leslie E. Robertson is an acclaimed engineer and the first recipient of the Turner Prize. Carter Wiseman is an architectural critic and the author of two books. The first is titled “20th century American Architecture” and the second focuses on Mr. Pei, titled “I.M. Pei: Profile in American Architecture.” Finally distinguished architect David Childs is a senior partner in the firm Skidmore, Owings & Merrill, as well as a member of the Museum’s Board of Trustees. If time permits after what I know will be a stimulating conversation, Mr. Pei and the other panelists will entertain a few questions from the audience.

[From hereon is the substantive part of the program – a conversation among I. M. Pei, David Childs, Leslie Robertson, and Carter Wiseman.]

DAVID CHILDS: Let me begin by saying that one of the great treats in my life was beginning work in Washington, D.C., designing a Pennsylvania Avenue project, and just after I began in 1968, I was visited by a well-known man. I.M. Pei had just won the award to design the National Gallery of Art. He came in to see me and I was so eager to meet him. He said I have one question for you, “What is the exact degree of Pennsylvania Avenue’s angle to the grid of the city?” I knew then that this man is a great geometrist. Of course, his geometric exercise here on the Mall has transformed an extraordinary amount of architecture.

What you may not know is that 20 years before he did a piece of geometry called the Helix and I believe tonight we begin this show with that piece of work. I.M., you might take that as a challenge to talk about how geometry has influenced you or how you worked with it in your search for modernism in architecture.

I.M. PEI: The Helix has nothing to do with geometry but has a lot to do with time. I came to New York to work for William Zekendorf, a real estate developer whom I highly regarded. I think he’s still one of the great masters in his profession. In 1949 New York was full of big apartment buildings with large 15 and 20 bedrooms but no takers. Zekendorf said, “If you can only design an apartment building that can expand and contract indefinitely, we’ll make a fortune.” So I tried. That’s Helix.
LESLIE ROBERTSON: An unbuilt project, alas. Another unbuilt project was the Hyperboloid [in New York City], but you have to understand that this was a long time ago. Engineers and architects were not thinking of this kind of geometry or, in fact, the efficiency of this kind of structural system but I.M. really stepped to the forefront in this case.

I.M. PEI: If I had executed this proposal, I think that I probably would never have gotten the Kennedy Library commission because to build this project on this site of Grand Central Station would have meant tearing down the main building. Can you imagine what Mrs. Kennedy would have thought of me? Good thing the design was not published.

DAVID CHILDS: It is amazing how the Kips Bay Plaza transformed the normal living conditions in New York — a new vision to construct housing. Here you see earlier visions of how that was done.

I.M. PEI: By the way, do you know the site plan was made by SOM [Skidmore, Owings & Merrill]?

DAVID CHILDS: No.

I.M. PEI: The original plan was not two buildings but five buildings. I had to go to Moses to persuade him to let me change it. I don’t think you know who Robert Moses is.

DAVID CHILDS: The other Moses.

I.M. PEI: He was as powerful as the first one. I said, “five buildings are too many.” I wanted just two but he was very reluctant so it took a lot of talking.

CARTER WISEMAN: I.M., was there not a major discussion about how those flats were positioned because the conventional way to do it was simply side by side?

I.M. PEI: I learned that from Mies van der Rohe. Mies did it that way but with towers. Well nothing is original.

CARTER WISEMAN: But I think it’s fair to say that you were introducing into relatively low-cost housing some principles of architectural organization that the city had not seen in that kind of building before then. And I don’t think you should skip over the difficulty that you encountered accomplishing it.
I.M. PEI: I am very proud of this pair of buildings because the FHA [Federal Housing Administration] had very, very strict regulations as to what you could do or what you could not do in those days. In order to get financing from FHA, you had to have the right room counts. Therefore one way to get around this room count was to get more money per square foot. How do you do that? The only way I could think of was to get rid of the balconies. Balconies in those days got half a room count — meaning you get a bedroom or living room as one room count and a balcony as a half room count. What do you need a balcony for in New York? So therefore I came to Washington to talk to the FHA. If you give me that half room count, and let me enclose the balcony, then I can have a bigger living room.

DAVID CHILDS: What this does show is your fascination with concrete and the exploration of what it can do, how difficult it can be to pour the technology of it. I thought it’s been fascinating to you for many years.

LESLIE ROBERTSON: And also convincing because you have the nerve to build a mock up like this one. It must have taken a golden tongue. The interiors are wonderful, even today.

Here we should jump to one small anecdote that we discussed earlier today, which was also in conversation with Zeckendorf. I.M., if I remember correctly, had his eye on a Picasso sculpture that was going to go between the buildings to animate it in some way.

I.M. PEI: Yes, I remember that episode. Mr. Zeckendorf was running out of money. He seemed to be running out of money all the time, and yet he did wonderful things. By the way those of you who don’t know who Mr. Zeckendorf was, he was the man who brought the United Nations to New York. He was running out of money and I suggested that he acquire this piece of concrete sculpture, only for $25,000, which would animate the square, the courtyard in between two slabs. He said, “Now I will give you a choice. You can make a choice. I can give you 50 trees or the sculpture, what do you want?” I said, “50 trees” and that was the best decision I made in my life — except finding my wife. (applause)

LESLIE ROBERTSON: It’s good to remember how I.M. moved concrete technology in many ways — but perhaps the most obvious one here is the windows. The glass was glazed directly into the concrete without a window frame around it. First time it was ever done.

So we come to Society Hill and another beautiful example of I.M. Pei adventures in residential construction.
I.M. PEI: It’s a small and orderly piece of urban renewal development. The architecture is not really exceptional but it is a very major piece of urban redevelopment after the Second World War. A lot of that credit should go to the city of Philadelphia. It’s a very large area. It used to be slums and now it’s a good address. Ed Bacon was the chief of planning at that time. He was the one who actually helped select us in the architect and developer competition, first of its kind I believe.

LESLIE ROBERTSON: Now a completely different kind of project, this time in Taiwan. How did you get this project [Luce Memorial Chapel in Taichung, Taiwan]?

I.M. PEI: That’s something you can explain better than I can. It’s a piece of structure which you know best so you can talk about it.

LESLIE ROBERTSON: Well it’s a wonderful form. Won’t you tell us about the drawings, beautiful drawings?

I.M. PEI: Taiwan is today, I’m speaking of Taiwan now because in those days nobody knew about Taiwan, a place where you have powerful earthquakes and heavy winds, you know what that means. So it was designed as a stable pyramidal form consisting of four independent conoidal leaves. You can describe it better than I can.

LESLIE ROBERTSON: The picture does it better than either of us.

I.M. PEI: The form work for this building is beautiful.

DAVID CHILDS: That’s interesting and all of these were done without the computers that we have today or Frank Gehry manipulated. You were doing it before anybody.

I.M. PEI: I’m still a T-square and triangle person.

LESLIE ROBERTSON: [Speaking about the National Center for Atmospheric Research in Boulder, Colorado] How did you happen to work in such a remote place? I mean you were a New York architect.
I.M. PEI: I tell you when I saw that site, it just wouldn’t let go. There were many other architects competing for this one. I was the least known but anyway I was lucky enough to be selected because of Dr. Roberts, you know him [to Carter Wiseman], you can talk about Mr. Roberts.

CARTER WISEMAN: I think this is an opportunity to raise a point about I.M.’s career that like most architects, he’s done his best work working with wonderful clients. But unlike most architects, he’s had a lot of really good clients. And this particular one, Walter Orr Roberts, whom I interviewed for my book on I.M. was the first person I ever met who really did wear a belt and suspenders. So he was a rather wacky scientist who had very strong views about what and how science happens. According to I.M., they spent quite a lot of time out on the mesa in this wonderful setting, drinking a lot of cheap red wine, which I.M. no longer drinks.

But they understood as far as I could tell from Dr. Roberts what they were after, which was to create an environment in which scientific creativity could take place and which at the same time would do honor to the environment. Again if I remember correctly it was very difficult to get through the Boulder, Colo., restrictions on building in that area, which was essentially forbidden because of its scenic beauty. Because the architecture was sympathetic with the natural environment, the building was able to go forward.

LESLIE ROBERTSON: And now we’re in upstate New York — Everson Museum. I.M.’s first museum ...

I.M. PEI: My first museum.

LESLIE ROBERTSON: … of many, many, many.

I.M. PEI: Very important because of that fact. I got the National Gallery commission partly because of this building so it is important to me.

CARTER WISEMAN: As we were discussing these slides this afternoon on the way down from New York, I.M. looked at the previous image with pride and said those cantilevers haven’t sagged a bit.

I.M. PEI: A good engineer.
DAVID CHILDS: I.M., you might want to say something about what we talked about when this slide came on showing the dates 1961–68, a seven-year period of time. Projects take a long time. People do not realize that when they go through them.

I.M. PEI: Yes, on the average, projects take just about 7 years. But it depends on the client. If you have a government client it takes longer. Mr. Mellon for instance is easy.

LESLEY ROBERTSON: Now we’re talking about dates, this one is 15 years [John F. Kennedy Library].

I.M. PEI: No can’t be. But I guess it was 15 years.

LESLEY ROBERTSON: As I understood it, it took ten years to find the site. Now, here’s a building that you all know [East Building, National Gallery of Art, Washington, D.C.]. Tell us.

I.M. PEI: Everyone knows that building. (applause)

DAVID CHILDS: If you won’t begin I must say something about this building because as I’ve already stated the interest I had when you were doing this on Pennsylvania Avenue. There was a turn in the attitude of architecture at this time, or the architectural critics, to become what they termed, the awful word, contextual. It’s not an awful word but what it came to mean was so confused. It was an effort to try to fit buildings into the cities from where they came. Many people thought it was an historic method and that it was the only way one could achieve it. It always seemed to me that this piece of modernism derived its essential form and space from the very lines that L’Enfant laid out. There is no building that is more rooted in its context than this one. And yet it’s clearly a great piece of modern architecture that describes it of its time. I compliment you for being able to do that in a way that it is fresh, forward looking, and modern. (applause)

I.M. PEI: I am sure, David, you know the problem better than anybody does. On Pennsylvania Avenue, there is a certain height limit and then on Constitution Avenue there is another height limit. This site is in the confluence, the meeting point, of the two. The question is which height limit to follow. The high towers conformed to the Pennsylvania Avenue height and the low bar to Constitution Avenue. That’s the way I explained it to your Commission of Fine Arts [CFA].
DAVID CHILDS: Well, Carter Brown [former chair of CFA] told me, when you first went there, as Carter told the story, the commissioners voted six to one or five to two in favor of doing it exactly the way you proposed. Carter came out and said to you, “This is wonderful, we got five to two, we’re vetted.” And you said, “I want to go back next month. I want to have all seven.” Is that a true story?

I.M. PEI: No. The most difficult member was your ex-partner, Gordon Bunshaft. Gordon Bunshaft will always go down in history as one of the most difficult men to deal with. Maybe, the one no vote was cast by him. I don’t really know.

LESLE ROBERTSON: Here we see a place that is touched by probably as many fingers as any place on the planet.

DAVID CHILDS: The formwork for this building, the marble, is Tennessee pink. Most people thought the original building material for the National Gallery was actually in limestone. It’s not. It is Tennessee pink marble, which you found the last piece of the vein to match it across the street. It is slowly aging as the sulfur in the air changes the texture slightly. But the quality of the formwork for the concrete here is more beautiful in some ways than the marble itself. You had special pieces of fir that had the exact grain that you wanted. The people who built the formwork, again I hope this is not another apocryphal story, were actually people that built pianos.

I.M. PEI: But you should look at the West Building. I tell you this building [East Wing] cannot compare with the original John Russell Pope building, it really cannot. (applause) I tell you in terms of detail there is no building I know, including this one, that can compare with the original building. I think it’s the best neoclassic building in America. I learned a lot from John Russell Pope. He chose Tennessee marble with gradations from dark brown all the way to white. As you go up it gets lighter and lighter. By the time you get to the very top, the dome, it’s almost white. Now that kind of specification, detail is just something that is not matched anywhere, not in any other building that I know of in Washington. So look at the West Building, better than this one.

CARTER WISEMAN: Before we leave that one and I think this drawing indicates that I.M. is being self depreciating about his details. On the sharp edges of this building, as Leslie mentioned, there is a portion off to the right of the front door that is now stained black about four and a half feet off the ground. Lots and lots of little kids go and touch it because they can’t believe that a piece of stone is actually that sharp.
And, if I remember correctly, there was some conversation at one point about cleaning it but the I.M. paradigm of modernness, cleanly geometry, said no, leave it because that’s a mark of people loving it.

I.M. PEI: No that’s not true.

CARTER WISEMAN: Oh no. I sold a lot of books on that story.

I.M. PEI: I wanted the sample so that I could get the original color back.

LESLIE ROBERTSON: Then we move to Beijing. [Fragrant Hill Hotel] Why is this here, out in the mountains, I.M.?

I.M. PEI: Well, this is a very famous site because the little house behind it was occupied by Mao Tse-tung. After he came to Beijing, there was no place to stay so he selected this house and stayed there for quite some time actually. So we are right near by.

LESLIE ROBERTSON: But here, as I understand it, there is another story. China is a difficult place in many ways and bringing into a project technology of the place is thought good. Actually making it happen is much more difficult. How did you do it?

I.M. PEI: There is one picture, which you have chosen, when I was there with half a dozen bureaucrats, I guess in Mao jackets. You look at them and you just hope that we could anything at all. They will say “no, no, no” but somehow we managed to get this thing built and that was quite an effort. Now it is in shambles — badly, badly maintained unfortunately.

CARTER WISEMAN: Let me ask you a question, I.M., about this project because certainly on the surface this would seem to be unlike virtually anything you had done before. At the time some people attempted to tar you with that awful post-modern brush. It was my understanding that you were trying to do something here about a design aesthetic in China and to provide something that might be catalytic for the future. Is that fair?

I.M. PEI: That’s fair because I do not have a style. Am I right? I can do what I want depending on the site, the history of the place, the culture of the place, and the climate. I’m free so therefore when I went to China I said, “I will do something that grows out of local traditions”. This is why it looks the way it does.
LESLIE ROBERTSON: The Meyerson Symphony Center.

I.M. PEI: Well you were the engineer so you can talk about this one. It was done before computer.

LESLIE ROBERTSON: No, not before the computer actually. Now it’s my turn to say something. This wonderful curved wall is about 70 feet across here. In the original drawings that I received all of the mullions were in place. I went to I.M. and said, “We need something to tie them together so that in the wind they deflect as one rather than as a group.” He said, “Well what is that?” I said, “It’s bridging” and I just drew a line across them. Five seconds later came this design. I mean it was practically instantaneous. Marvelous, absolutely marvelous. This circle goes three quarters of the way around the building. It’s tied across here with the post tension tie. The sunscreen is an I.M. Pei trademark if there is one.

I.M. PEI: Is there one?

LESLIE ROBERTSON: Sometimes they’re round, sometimes they’re different shapes but they form wonderful patterns of light. Now, The Bank of China Tower in Hong Kong.

I.M. PEI: Now, Les, you have to talk about that.

LESLIE ROBERTSON: Well I could talk about it all day but I couldn’t make this wonderful form (applause) that comes from the genius of I.M. Pei. It was the tallest building outside Chicago or New York for many years.

CARTER WISEMAN: Maybe this is the slide I.M. when you want to tell us about some of the cultural, the unexpected cultural, encounters you had. The symbolism of your original design ran through a bit of a meat grinder if I remember.

I.M. PEI: That was the original design from the structural point of view. But the expressed X’s to the Chinese, because BOC was a Chinese communist bank, had negative connotations. So I asked Les, “Supposing I visually take the horizontal member away, what would happen?” He said, “it would be perfectly all right.” So then they accepted it. When you do not have that bar across it immediately I think for some Chinese gentlemen, it becomes diamonds, sort of a money chain. So there was no longer a
problem with superstition. This is acceptable, unless you put the line across, then it becomes unacceptable. That’s the way things go.

**LES ROBERTSON**: So he went from X’s to diamonds and the bank thought they were wonderful. The gardens outside are lovely as well.

**I.M. PEI**: Is that Sandy [I. M. Peis’s son]? Now this project [Bank of China Tower in Hong Kong] my younger son worked on so therefore I thought that might be him sitting there.

**LESLIE ROBERTSON**: This is the very top of the building.

**I.M. PEI**: This is on the 72nd floor.

**LES ROBERTSON**: I told an audience one time that this was I.M. stepping across some of the steel work and no one said anything. That was amazing. You have to understand that the lateral push from the wind in Hong Kong is maybe four times greater than the earthquake load in Los Angeles or Tokyo so the structures get to be pretty massive. Here is an enormous project but I notice that it’s a ten-year project and that, in itself, is absolutely astonishing.

**I.M. PEI**: [Speaking of the Louvre] That’s a model, one of the most beautiful models. In France their woodworking people can make fantastic models. You should see the model. It’s only about four or five feet long, that’s all. All the way from Louvre to Place de la Concorde and on to St. Germain.

**LES ROBERTSON**: So we have the pyramid.

**CARTER WISEMAN**: One of the things I think you might want to talk about is while the world focused on the pyramid, the pyramid was only an element in this whole undertaking. It was really about politics and planning as much as it was about architecture. Is that correct?

**I.M. PEI**: Yes, even though it only took ten years, those were very, very difficult ten years because the French just simply would not accept something new. They do now but they did not then. Also politically it was dynamite because to the French people the Louvre belongs to them and they didn’t want anybody to touch it. So when we proposed the pyramid, all hell broke loose. You should read some of the
newspapers that I still have. I simply could not walk the streets of Paris without being, I won’t say, I just wasn’t liked at all. But now I am remembered fondly because the design is accepted now.

**CARTER WISEMAN**: One wouldn’t want to cast any aspersions on the French but in the research that I did for the book the same newspaper that was most violent in its attacks on this scheme when it was presented was the first organization to rent that space for their annual party.

**DAVID CHILDS**: Now this picture is the most popular postcard in all of the airports in the city and thought of by the French as their symbol. Just as the Eiffel Tower was vilified in its own time. You had an extraordinarily client, Mitterand, at this time too. He backed you.

**I.M. PEI**: Absolutely. The reason the project took so long was because we had to wait for his second term. The pyramid was the first phase. The second phase was in many ways more important because it made the Louvre work as a museum. The second phase we just could not proceed with because politics changed. The Right came in and Mitterand lost control so the project stalled. Fortunately Mitterand was reelected in 1988 so we were able to finish. Otherwise you wouldn’t have this.

**CARTER WISEMAN**: I’m just a writer so those of you who are engineers and architects in the audience understand all of the technical details here. But as I was trying to inform myself in researching it, I had an extended interview in my very inadequate French with a French government official who had been assigned the engineering watchdog for this project. As we spent the afternoon on the site, the pyramid was in place but it was not finished. He explained to me that all his life as a French engineering bureaucrat he had been obliged to clean up after architects who didn’t know their engineering. When he learned that I.M. Pei was going to do this, he assumed that once again he was going to have to get out his broom and dustpan and figure out how to clean up after this mess. He told me that he watched with great interest as the structure of the pyramid was delivered onto the cambered beams. They deflected slowly, slowly, ever so slowly, and came to rest at dead level. Then he said to me “this was diabolique.” He had never met an American architect who had done it so well.

**LES ROBERTSON**: The glass structure also was very new.

**CARTER WISEMAN**: Didn’t you have a little trouble getting the French to do that glass?
I.M. Pei: I had a lot of trouble but the important thing, again, is when you have a good client, you can do the right things. When you have a double pane of glass, it’s green but when you have four corners, four panes of glass, it would be dark bottle green. If you have that kind of glass the whole Louvre would change because the building is honey colored. It simply would not be acceptable. I would be damned forever by the French.

So I went to Mitterrand. I asked him “Do you have that white glass?” He said, “What do you mean by white glass? Clear glass?” He said, “Yes, so why don’t we use it?” I said, “Saint Gobains won’t make it.” Saint Gobains’ chairman simply said “If you have one thousand pyramids, I’ll make it for you, but one pyramid jamais [never].” That was the beginning. But Mitterrand just said, “do it” and that’s it. So you have to have a good client.

Carter Wiseman: Now I’m feeling a little shaky about my anecdotes. This one may not stick but as I recall talking to your wonderful colleague, did you not find a German firm that would be willing to make their glass and then tell the French.

I.M. Pei: That’s right, exactly. The glass could be made, so if Saint Gobains didn’t want to make it, the Germans would.

I.M. Pei: These are the old courtyards. They used to be for the Ministry of Finance, but I think this one was a trucking courtyard. We turned it into a sculpture garden.

Leslie Robertson: Now a very tiny project in Shigaraki, Japan. [Bell Tower, Shinji Shumeikai]

I.M. Pei: Les, I didn’t know you designed those, did you do that? The bells, 48 bells, were made in Holland but you designed the support for it.

Leslie Robertson: It’s a beautiful project. They greet you when you come here playing your national anthem but from that small project came a bigger and much more important project.

I.M. Pei: There’s your bridge [referring to the Miho Museum in Japan].

Leslie Robertson: There’s your museum and a bridge.

I.M. Pei: You see the bridge that Les designed that won the prize later.
LESLIE ROBERTSON: You can see that almost all the museum is below ground. Almost all is underground. If I know the story in Shigaraki, the roads are made with tiles and Mr. Pei was not prepared to have a Japanese tile roof on his museum. He had trees and shrubs, beautifully planted ones. Do you want to talk about the processional entrance?

I.M. PEI: This site actually is inaccessible, no way to get up there. This was the only way. The natives wouldn’t permit us to cut any trees so there was no way to get there. The only way, and it’s a long story I won’t tell you today, was to buy the mountain and cut a tunnel through and build a bridge to get there. That’s what we did. It took seven years to accomplish. It’s the only way to get there. There is simply no other way.

LESLIE ROBERTSON: You said that’s the only way for you to get there but how about the food service and the sculptural pieces, there’s another tunnel to get to this museum.

CARTER WISEMAN: This I get the sense was one of the most perfect jobs that an architect could ever have because as I said before I.M. has had a lot of wonderful clients. This particular one, who is the head of a religious organization, apparently had no bottom to her pockets and was able to buy a mountain to build the bridges. At one point I had the temerity to ask her what the building had cost, was it too expensive? I knew that that was a bit out of line in a Japanese setting. She looked at me with a bit of a smirk and she said, “Well, you know I never asked what the National Gallery cost so there’s no way for me to know whether it was too expensive.”

I.M. PEI: I don’t know. I don’t know how much it cost either.

LESLIE ROBERTSON: But, buying mountains in Japan is not exactly wasting money, right? I mean buying mountains is buying property, which is very valuable and so that was an investment.

I.M. PEI: Creating land.

LESLIE ROBERTSON: In any event you come up this road and you pass through this first tunnel in a very elegant way.
I.M. PEI: Turner would like to build this building right now. This is the mouth of the tunnel. When you exit the tunnel you see the building. Only a little bit of the building, the rest is all underground so now this is your bridge, Les, talk about your bridge.

LESLIE ROBERTSON: I.M. actually started the whole thing because he wanted the bridge and the tunnel to be related, not just going out of a tunnel and onto a bridge but somehow tied together. You can see we tied it together very well. We tied it together so well that the contractor thought that all these cables were trying to pull the tunnel out of the mountain. So we finally convinced them that it was not the case. This is just part of an entrance, a very grand entrance, that leads to this museum. The lighting was done by Paul Marantz, a wonderful designer. In essence the bridge cantilevers from the top. Then there’s workmanship that I could never make happen but these joints are all castings. We’ll see more of them later and the kind of seamless joints between castings and pipe that I’ve never seen outside of Japan.

CARTER WISEMAN: Les, this might be a moment for you to explain that surface.

LESLIE ROBERTSON: It turned out that the drains to get the water off the bridge were larger than the structural members. It was a very worrisome thought that occupied some months of time. I was on the plane to Japan and I remembered a tennis court that I had played on that was developed from of a very simple idea. Then I went to a Japanese grading manufacturer and did business the usual Japanese way, over a lot of beer, saki, and many meetings. Then they made samples that were wonderful. I.M. liked them and Shimizu, the contractor, liked them so they got built. This is the main entrance to the museum.

CARTER WISEMAN: I.M. could I ask you to tell us a little bit about how you established the forms? For this, obviously, you didn’t want to do something that was imitative of Japanese architecture, but at the same time not want to do something that was a modern intrusion in a traditional setting. How did you come up with these forms?

I.M. PEI: A series of triangles, it is all triangles. Actually, if we look at Japanese roof, or Chinese roof for that matter, the triangle is there. They use wood instead of steel so I used triangles to continue to build up, a sort of a silhouette, which is reminiscent of traditional Japanese forms. I’m not trying to imitate Japanese things because this is entirely new, structurally very, very innovative. Les is the engineer. He can talk about it, but you’ll see later on the detail of this. It’s quite exceptional workmanship. It’s really very, very good. It’s one of the best I’ve seen. There are hundreds of those
joints. They are all different but they are all put together because the angle is different. The number of members coming together, there are sometimes four, sometimes three, sometimes six. This is a universal joint and it worked. Poor Les spent a lot of time on this project. We wanted this joint to be perfect and the Japanese could do it. They did it.

**LES ROBERTSON:** I think it turned out to be the absolute best solution. The universal joint was what we needed because we had so many different intersections because of these wonderful triangles. There is this one and that one and hundreds of different joints, 250 or more.

And this is another aspect that was fairly new to Japan — the kind of blending of stone, architecture, and exposed concrete.

**I.M. PEI:** Beautiful workmanship.

**LESLEY ROBERTSON:** There you have it, the mostly underground museum.

**I.M. PEI:** Now I have to explain this one [Bank of China Head Office, Beijing, China]. This building is a very big building, more than 2 million square feet. I couldn’t take on such a job. Now I only have two assistants, Nancy and Shelly, so I had to turn to my sons for help. This project was actually built by Pei Partnership. I had something to do with it but they were the architects. This is important because after 1990, I decided to retire from my firm so to take on a job of this size was unthinkable for me. But then I had to do it because I did the Bank of China in Hong Kong. They insisted. This is headquarters in Beijing. Pei Partnership are actually the architects for this project. I participated but that’s about all.

**LESLEY ROBERTSON:** Well I think it’s a wonderful collaboration between father and sons. (applause)

**I.M. PEI:** This is a sad project [Musée d’Art Contemporain, Luxemborg]. It just never seems to get done. For years it’s been under construction, just what you see. It’s like that sometimes. This is a model. The problem has been local politics. The project is still not built but it will be in 2005 I was told.

**I.M. PEI:** Now that’s the way it looks, it’s been like that for three years.

**CARTER WISEMAN:** I.M., explain the arrow head shape, that influenced the design, did it not?

**I.M. PEI:** Yes, that’s a fortress designed by an Austrian in 1800. It’s a well-known monument there. So
when they selected this site I decided that we had to follow the arrow. Everything is developed out of the arrow. The arrow actually gave the form and the form of our building emerged out of that. The inside is very beautiful.

CARTER WISEMAN: [Discussion about Deutsche Historisches, Berlin] There’s a fascinating dimension to this and I think it’s important to point this out if I may. From the Louvre onward, I.M. was involved in an architectural conversation with history in a way that I think you had not done in this country. When this commission came your way it was fraught with politics because it’s in the old East Berlin. If I’m right it was an attempt I think as you put it once to create a building in which the Germans could tell their own story, that story having been told mostly by conquerors up to now. It’s in a neighborhood with wonderful single monuments that also has buildings by the communist regime, so you were knitting a lot together it seemed to me.

I.M. PEI: There’s a lot of Schinkel, perhaps the most important German architect in history, more important than Mies. Schinkel was a neoclassic architect in 1800. He did some of the most beautiful buildings in and around Berlin, Potsdam, and elsewhere. Now what makes Shinkel’s work so special is that he designed monumental buildings like the Altes Museum, which is beautiful, and then he also designed very beautiful princes’ villas with very fine detail and a scale like Pompeii. He never lost sight of beautiful details. This side of our building is between two Schinkels so that is a burden. I haven’t succeeded I’m afraid.

This is a Follie, you know what a Follie is, and I could only do a small garden pavilion like this after I retired. I couldn’t afford to do it before but here you are a tiny little tea pavilion. [Oare Pavilion, Wiltshire, United Kingdom]

CARTER WISEMAN: Not in China.

I.M. PEI: No this is in England, in Wiltshire.

LESLIE ROBERTSON: You start from a grand house and walk down this corridor of trees. The far side is the project.

I.M. PEI: It’s so funny when you see it like that.
LESLIE ROBERTSON: It looks very distorted.

I.M. PEI: Les, you designed that frame for me, very simple. It’s probably also one of your smallest jobs. Am I right? Have you done anything smaller than this?

LESLIE ROBERTSON: No job for you is too small.

This opens next month. The wonderful attention to detail, all the structure being exposed, I.M., how did you get to Doha [Qatar]?

I.M. PEI: Well after I retired I decided that I was going to have fun. One way to have fun as an architect is to learn about new things. I knew nothing about Islam. I must say when this project [Museum of Islamic Arts] came to me, I said it would be a wonderful opportunity to read up on Islam. So I took this project as a kind of continuing education, to have fun, and also to learn. I learned a lot from it.

I can’t say that I know the Koran well but I know more about it now than before so it’s an important project for me because it’s something very new. Turner by the way is building this project for me in Doha.

You probably wonder why it looks this way. This is the Islamic system of building, always on a square to octagon, octagon back to a square, and a square again until it’s a combination of form. You see it over and over again in their ornaments, in their architecture. It’s all geometric. Geometry is the key to Islamic architecture. I learned a lot from the earliest work, which is in Damascus. Damascus had the first mosque built there but that mosque was not that important architecturally for me because it still has a lot of Byzantium motifs in it, a lot of mosaic, so it’s a continuation. It’s not pure Islamic architecture. You do not get to real Islamic Architecture until you get to Cairo. Cairo is where I saw the best example, Ibn Tulun Mosque. You have got to see it if you get to Cairo. It’s the beginning for me of pure Islamic architecture.

CARTER WISEMAN: I can’t help making an editorial comment here as someone who has written about I.M.’s career. There are a lot of wonderful architects who practice for 20, 30, or 40 years and get very good at a certain kind of building or a certain kind of form and essentially stop. When I.M. just said he was interested in this project because it would allow him to read up on Islam, I’m interested because one of the extraordinary things about this man’s career as an artist is that he has never stopped investigating, reading up, and changing. I think it’s extraordinary that you take on these projects and instead of simply depositing another piece of American architecture in someone’s backyard, that you go and find out what is appropriate for that area and try to inhabit it yourself. This is a fascinating exercise.
I.M. PEI: Thank you. (applause)

LESLIE ROBERTSON: And now we move almost to I.M.’s home town [Suzhou, China].

I.M. PEI: This is a Sung Dynasty map of my hometown. My wife told me “do not take any more jobs.” I said, “I won’t take any more, this is it.” Maybe she’s right. Maybe this will be it. The job is only at the beginning. I am interested in this project because it brings me back to my roots so let’s see what happens. I am trying to understand it.

CARTER WISEMAN: Do you want to fill in a little about the gardens in Suzhou and your own family experience in it?

I.M. PEI: Suzhou is about 50 miles from Shanghai. It's along the Yangtze River and situated only about ten miles from a beautiful lake called Tai. Now what makes Suzhou unusual for tourists is that it is famous for gardens. It has lots and lots of gardens but they’re not big. They’re the opposite of Versailles. When you go to Versailles you see this tremendous axis going on and on for a long way. Not in Suzhou, those gardens are very small. My family owned one of those gardens.

So when I was offered this job I found that the site is unique, situated between my family garden and the biggest garden in Suzhou. The scale of Suzhou is very small. The city is only gray and white. It doesn’t have any color. Except doors, sometimes doors are black. Sometimes they are deep, deep red. But the rest of city is just gray and white. So I followed that tradition, not trying to change it. The garden on the top of this plan is the Humble Politician’s Garden. Our family garden is at the bottom right. The site of the museum is in between. This is still called the Pei Garden, but it doesn’t belong to our family any more. It belongs to the state like everything else.

LESLIE ROBERTSON: This is the concept phase of design. Somehow it seems we’re still working on little details. It’s going to be a wonderful project.

DAVID CHILDS: I think that there has to be a final note or two here. Eileen [Pei’s wife] I know you’re right but I hope he never stops. I.M. said something early in this conversation, which struck me and has been rattling around ever since you said it. You said, “You don’t have a style.” It shocked me but in a way you do not. There is a sublime character to your style, which is about all those issues that architects
have dealt with for centuries. They are light, space, proportion, and texture. Those things are the essence of great architecture. But there is very little decorative style, which ultimately makes buildings dated.

You look at this extraordinary volume of work. It has continuity so, in fact, in the larger sense of style people could say that this is an I.M. Pei project — your style is clearly is one of excellence. Congratulations. (applause)

**LESLIE ROBERTSON:** I think there’s time for just one or two questions.
QUESTIONS AND ANSWERS

Q: Mr. Pei, I’m a native Washingtonian. When I moved to Boulder, Colorado, at the age of 23, I didn’t think anything could match the Rockies. I was offended if anything at all touched the mesas, but when I saw NCAR [National Center for Atmospheric Research] I loved it. My first introduction to you was to see NCAR. When I came back to Washington and saw the East Wing, I saw another iteration of you. And I loved that too. So my question is what is at the very heart, the very soul, of what inspires you to design projects visually so different but connected in their sense of excellence and in touching the soul of anybody who visits them? What motivates you?

I.M. PEI: That’s very difficult question to answer but I’ll try. I think context interests me more than many other principles of architecture. To judge the context is a challenge. Take Boulder, it’s a mountain. The scale of Rocky Mountains is something that I’d never dealt with before. I always had been an urban architect.

When I had to deal with that scale problem of what to do when you build in the foothills of the Rocky Mountains, I studied a lot. I went to the Indian reservation to learn about it. This is where one has to really be very humble. The Indian reservation at Mesa Verde taught me something that I never knew before — if you want to build in that kind of environment, at that kind of scale, you better be part of nature. All right.

Now NCAR, which is in Boulder, Colorado, I made the concrete out of the stone of the Rocky Mountains. Therefore when I crushed stone and put it into the concrete, the concrete became a brown color, just like the mountain background. In many ways the building merges with the background. I think that part of NCAR’s success is because it does blend with mountains so you do not have to compete with the mountain. I learned that from the Indians. Now Washington is something else again.

It’s another story that you already heard. It’s sort of a contextual problem as to what surrounds you. Who are your neighbors? You have to be comfortable with your neighbors. Just as you have to be comfortable in Boulder with nature. But the challenge is different. It’s a very difficult question to answer. (applause)

Q: Mr. Pei I happen to be a civil engineer who works at Andrews Air Force Base right outside of Washington, D.C., where all the action is overseen from one of your control towers. I have two questions, a little more mundane than the previous person. The first question, is the circular stairway at the Louvre framed in steel or concrete underneath? Then second question, for the Miho Museum in
Japan, is it possible for tourists to go there without having to use a car? I’m going there in a couple of years.

I.M. PEI: The Louvre stairway is framed in steel. As for Miho, it’s free and open for you to go but it takes a lot of effort to go there.

At the Louvre, on the other hand, you can freely go into the main hall but if you want to go into the museum, you have to have a ticket to do so. What makes the pyramid important is not the form but the fact that it enables you to bring light to two levels below ground. It’s a centralized entrance that enables you to go in the three surrounding wings of the Louvre, not one, because they’re all interconnected.

LESLIE ROBERTSON: I don’t know about getting to the Miho Museum from Osaka but from Kyoto there’s regular bus service. Most people would take the bus rather than drive.

Q: Mr. Pei I’m very honored to be able to ask you a question. I’ve looked up and respected you as an architect all my professional life. I’m very proud that you’re here on the stage and it’s a very warm moment for me as well. I have a kind of a serious question. I try to learn from concrete as well. I was driving under a concrete overpass on Route 66, which is outside of Washington, the other day and somebody had spray painted a question, “If I fear my neighbor, am I allowed to kill him?” It really made me pause. In hearing you talk tonight and showing projects from all around the world — how you’ve examined different cultures and religions, yet been able to contribute something on an international level to almost all of them, could you, as a leader amongst architects and certainly a person I respect deeply, touch upon your experience in learning from different cultures? In the first question you alluded to neighbor and context but what have you learned from all cultures that influenced your work on a global level?

I.M. PEI: We have all different cultures in the world but there is only also one culture. In many ways you find similarities one with the other — those similarities make it easier for you to learn, to find it, and to grasp it. There’s no question about it. History is a wonderful teacher. I cannot imagine doing a project in Doha that I also would do in China. I simply cannot do that. But when you really get down to it, deeply, you find there are similarities and to find them is a challenge. It’s a very interesting way to begin to see the whole rather than different parts. But it’s a difficult one. (applause)

LESLIE ROBERTSON: I think we have time for one more question.
Q: Mr. Pei, my question to you is how much have your spiritual beliefs influenced your works and how do they guide you on projects.

I.M. PEI: I cannot say that I do not have a strong spiritual belief but I’m not a religious person. I would like to think that I do believe in the spirituality of architecture, I do believe in that. But how it has influenced my work, I cannot say. I try to look into each culture. I have, ever since I retired, stopped doing work in the United States. I am looking for something. I am looking for that certain something which you refer to. To find it I have to go to new places with new history, new culture, new tradition, and I find that something comes to me. So it’s not so much that I’m giving them something. They are giving a lot to me. So is that spiritual, maybe it is. I have more fun now doing this kind of thing. (applause)

CAROLYN BRODY: Ladies and gentlemen, what an informative and engaging conversation this has been. I thank Mr. Pei, as well as David Childs, Carter Wiseman, and Leslie Robertson. Thank you again for coming to this program and to the Museum. Good evening. (applause)

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