

世界建筑大师优秀作品集锦

THE MASTER ARCHITECT SERIES

CESAR PELLI

西萨·佩里



中国建筑工业出版社

CESAR PELLI

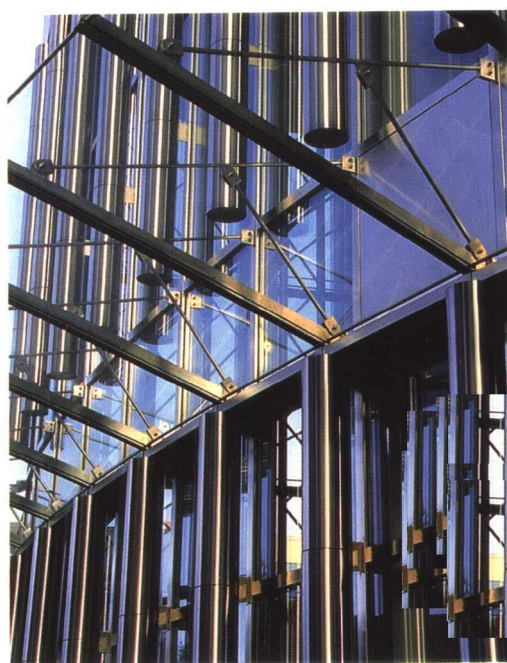
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西萨·佩里

卞致瑞 张延安 译



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著作权合同登记图字：01-2003-0639号

图书在版编目(CIP)数据

西萨·佩里/澳大利亚 Images 出版集团编；卞致瑞，张延安译。—北京：中国建筑工业出版社，2004

(世界建筑大师优秀作品集锦)

ISBN 7-112-06688-3

I. 西... II. ①澳...②卞...③张... III. 建筑设计-作品集-美国-现代 IV. TU206

中国版本图书馆 CIP 数据核字 (2004) 第 067534 号

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责任编辑：程素荣

责任设计：郑秋菊

责任校对：赵明霞

世界建筑大师优秀作品集锦

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中国建筑工业出版社出版、发行（北京西郊百万庄）

新华书店经销

北京嘉泰利德公司制版

恒美印务有限公司印刷

*

开本：787×1092 毫米 1/10 印张：25% 插页：1 字数：600 千字

2005 年 1 月第一版 2005 年 1 月第一次印刷

定价：218.00 元

ISBN 7-112-06688-3

TU·5842 (12642)

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(邮政编码 100037)

本社网址：http://www.china-abp.com.cn

网上书店：http://www.china-building.com.cn

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Introduction

A Conversation with Cesar Pelli
By Michael J. Crosbie

导 言

西萨·佩里访谈录
迈克尔·J·克罗斯比采访

“佩里”这个词在意大利语里有“表皮”的涵义。因此，按照西萨·佩里为他的建筑物所选择的表面覆盖物来组织这篇专题是再恰当不过了。对于佩里来说，表层是他表述建筑理念的主要方式。尽管其他一些关于佩里的评论都注重把它看作纯美学对象，本文却想通过所列举的建筑物来表达建筑师这样的思想：表层是结构技术的一种表述，是都市生活的创意，是20世纪末期对建筑设计精益求精的结果。本文把佩里庞大的事务所的工作过程与其设计同样作为论述的主题。佩里的合作者弗雷德·克拉克（Fred Clarke）也参加了访谈，他对西萨·佩里事务所的特殊工作方法作了进一步的阐述。

克罗斯比： 在阿根廷毕业后，你是怎样来到美国学习建筑的呢？

佩里： 我是土生土长的阿根廷人。直到很晚我才意识到我的家庭与典型的阿根廷家庭并不一样。我的母亲一生致力于教书、演讲和写作。我家的氛围兼具欧洲家庭和阿根廷家庭的特色。我妻子戴安娜的家更是如此。她的家人是欧洲人，1930年末为了躲避西班牙内战来到阿根廷。她的父母也都是教师。1950年我大学毕业，开始工作，与此同时结了婚，但是当时我并不安分，总想出去见见世面。我很想到国外去留学。一天我接到一封信，得到一个去美国伊利诺伊州立大学学习的机会。我母亲问我：“伊利诺伊在哪儿？”“芝加哥南边！”我回答。我们计划9个月后回来，当时完全没有不回阿根廷的打算。但是9个月后，我们有了个儿子，还有债务，我和戴安娜都被伊利诺伊大学聘为教师。于是我们又呆了一年。在那以后我得到了与埃罗·沙里宁一起工作的机会。在我得知这个消息前，我们已成为美国公民。

克罗斯比： 与沙里宁共同工作的头几年对你来说是否意义很大？

佩里： 在我成长过程中有两个关键时期：第一时期是我在图库曼大学上学时，那时我朝气蓬勃，才华横溢。在伊利诺伊，我遥遥领先，才能无人可比。对现代运动原理我理解得最完整透彻。可能这也正是教授对我印象那么深的原因，于是他把我推荐给他的朋友约翰·丁克罗，后者又给我提供了与埃罗·沙里宁工作的机会。这是我发展道路上最重要的一步。在学校里你学会什么是建筑，这是一码事，而成为建筑师则是另一码事。前者你只是学会游泳的理论，而后者你必须跳入水中游泳，且受到严格的训练。在与沙里宁一起工作中我经历了这些过程。在那里完成过一些优秀的有时甚至可以说是杰出的建筑，我们都参与其中。所有那些产生出优秀建筑的因素都展示在我们眼前。由沙里宁个人所创造的部分我们都亲眼所见，而由我们自己设计的部分就可以按照自己的意愿去表现。一般人认为伟大的建筑是不可思议的，是由非凡的人创造出来的，事实上它与所参加的每个人有关，只不过某些人做得更多些。

The name Pelli is also the Italian word for “skins”. So it is wholly appropriate that this monograph is organized according to the skins with which Cesar Pelli has clad his buildings. The skin, for Pelli, is the primary mode for expressing the system of building. While other reviews of Pelli’s works have focused on them as purely aesthetic objects, this monograph presents the architecture as the architect thinks about it: as an expression of construction technique, a generator of urban life, the result of a carefully designed process for making buildings in the late 20th century. The work process of this prodigious firm has been the subject of as much design attention as the work itself, and Pelli’s partner, Fred Clarke, joins the conversation to explain the work methods that are particular to Cesar Pelli & Associates.

CROSBIE How did you come to study architecture in the United States, after your education in Argentina?

PELLI I grew up very much as an Argentinian, and I realized much later that my family was atypical. We had fewer ties than traditional Argentinian families. My mother has been all her life very active in teaching, lecturing and writing, and we had a home environment that looked as much toward the rest of the world, particularly Europe, as to Argentina. This was even more so with Diana—my wife’s—family, who were Europeans, who had come to Argentina in the late 1930s because of the Civil War in Spain. Both her parents also taught. In 1950 I graduated, was working, and had just married, but was restless, needing to see more. I applied to study abroad and one day this envelope came with a ticket to study in the United States at the University of Illinois. “Where is Illinois”, my mother asked. “South of Chicago!” We were to come for nine months and we had every intention of returning to Argentina. But after nine months we had a son, we had debts, and both Diana and I had offers to teach at the University of Illinois. We stayed another year, after which I was offered a job with Eero Saarinen. And before we knew it, we were Americans.

CROSBIE How valuable to you were those early years with Saarinen?

PELLI There were two critical periods in my formation: the first was my schooling at the University of Tucuman, which was extraordinary, with great intellectual effervescence. At Illinois, there was no comparison. I was much better prepared than anyone there. I had a solid understanding of the principles of the Modern movement and I knew how to use theoretical constructs to design with—that’s perhaps why my professor was impressed with me and recommended me to his friend John Dinkeloo, who offered me a job with Saarinen. This was most important in my development. It is one thing to get trained in a school where you learn what architecture is about, but another to become an architect. In one you learn theories about swimming, but in the other you have to jump in the water and swim and are properly coached. This is what happened with Saarinen. Good, sometimes great architecture was being done there and we were part of it. All that it takes to produce good architecture was there, open to our eyes. It was being created by Saarinen’s efforts, which were visible to us, and by our own efforts, which we could interpret as we wished. Usually great architecture is seen as this thing that mysteriously happens, produced by extraordinary beings. The truth is that it is done by means that everyone has, some more than others.

克罗斯比：

有关建筑设计过程你学到了哪些？

佩里：

在沙里宁那里我获益匪浅，这段时间影响了我一生，当然也影响了如今我周围的团队。最普遍的方法就是开放式的设计过程。埃罗偶尔会从家里拿来一个建筑的完全方案的草图。我记得凡是这种时候事情总是进行得不顺利，过程也变得很艰难。如果设计过程是开放的，思路就会变得无限丰富，团队人员都参与使工作进展得更容易。因此我从不把草图从家里带来，也不单独在我的办公室里闭门造车。我独立构思方案，但当我决定第一次把它画在纸上时，我一定要让小组成员都围在我的身边。当我开始工作时，他们就会说：“嗨，你忘了，我们还没占领一块土地呢？”或其他云云。因此从一开始，每一个人的智慧都融入设计和研究中。

在沙里宁事务所，我们采用开放式过程，也使用模型。从设计纽约约翰·肯尼迪机场的环球航空公司（TWA）候机楼起，我们就开始经常使用大比例模型。在我没进入事务所以前，埃罗已经设计了候机楼，他为此付出了大约一年时间。接着制造了一个模型提交给业主，等待业主批准后就开始画图。然而第二天沙里宁就给业主打电话，告诉他们他不满意自己已完成的设计，希望再给他一年时间。他得到业主的许可，我们又重新开始。有些设计在平面图中看起来没有问题，可是当埃罗审视三维图时，他意识到这些部分非常棘手。他委任我解决建筑物支撑的问题，我想出了应用雕塑模型的方案，由此让我负责该设计小组的工作。一个全新的审美方法从此诞生了。最终我们创造了一个非常大、完全未修饰的模型，并用这个模型完成了所有试验。我开始意识到模型作为设计的有力工具，其价值巨大，它是审视建筑一种公平、客观的方法。假若我开始画方案，画完看起来不理想。有时我仅仅是把其中的一些线条加粗，同一张图看起来就好多了，其实建筑一点也没变——仅仅是把图里线条加粗。按照一个严格的惯例制造一个模型，这个模型虽然不能解决所有问题，但是它比图更接近实际。我喜欢与小组成员一起研究，和业主一起讨论。用模型效率也很高。我提出一些基本原则和方向后离开办公室，小组成员工作得都很努力，第二天早晨我再次审视模型，很快我就能找到美学或功能的关键所在，从而确定设计的最佳方向。

克罗斯比：

听说你采用模型的方法同时试验三、四种方案。

佩里：

是的。我们也和埃罗一起做这种试验。使用stabilo 铅笔画图的方法就是在该办公室养成的。从伊莱尔·沙里宁一直到埃罗都有这个习惯。我们办公室里几乎每个人都这样做。我喜欢用这个方法，因为它可以表现体积，可以用有形的方式描述建筑物。我必须承认自从计算机出现以后，现在这种方法我们用得少了。

克罗斯比：

你认为用模型和透视法与用计算机有什么相同之处吗？

佩里：

通常情况下，模型比计算机绘图能够给予我们的更多。这是因为计算机屏幕只能展现二维空间。但是在某些情况下我们使用类似于模型的工作方法。应用计算机图形我们同样要考虑大量的替换方案。我所关注的是用计算机在短时间里可以很容易地做出太多的替换方案。

CROSBIE

What did you learn about the process of architecture?

PELLI

I carry a number of things that I learned from Saarinen, of course transformed to the circumstances of today and my personality. One commonality is the open process. Occasionally Eero would come with sketches from home, with a complete *parti* for a building. I remember that every time he did that, things did not go so well and the process was harder. But when the design process was in the open, it was infinitely richer, and it was easier for the whole team to carry it further. So I never come with sketches from home, or do them alone in my office. I will conceive ideas, but I make sure that the first time I put them on paper I do so with my team around me. As I start working, they may say, "Hey, you forgot that we don't own that piece of land," or whatever. From the beginning, the design is informed by the intelligence of everyone participating, and by their research.

At Saarinen we had an open process, and we also used models. The regular use of large-scale models developed during the design for the TWA Terminal at JFK Airport in New York. Eero had designed the terminal before I was part of the team. He had been working on it for about a year. Then a model was built to present to the client, who approved it for working drawings. The next day Saarinen called the client to tell them that he did not like how the design had come out, and he wanted an extra year. He got it, and we started over. What happened was that when Eero saw in three dimensions forms that looked good in drawings, he realized that some were terribly awkward. I was asked to resolve a problem with the legs of the shells. I developed the sculptural forms that were built. Then I was put in charge of the design team and a whole new aesthetic approach grew. We ended up building a very large, very crude model and testing everything in model form. The extraordinary value of models as a tool for designing became obvious to me. They are an impartial, objective way of looking at architecture. If I start drawing something and it doesn't look good, sometimes by just thickening a couple of lines the same drawing looks very good, but the architecture hasn't changed—just the thickness of the lines in the drawing. Models are built following a rather rigid convention. They don't tell you everything, but they are much closer approximations than drawings. I can study them together with my team and share them with my clients. Models are also efficient. I make a few comments and give direction. I go away, the team works very hard, and the next morning I can review the models again and quickly understand what the aesthetic or functional issues are and decide on the best direction for the design to take.

CROSBIE

You also use models to test three or four ideas simultaneously.

PELLI

Correct. We also did that with Eero. The way we draw with the stabilo pencils also came from that office, starting with Eliel Saarinen through Eero. Just about everyone in our office can draw that way. I like the technique because it expresses volume and it renders buildings in a tangible way. I must confess that we use it less now since computers.

CROSBIE

Do you see similarities in how you use models and renderings in design, and the way you use computers?

PELLI

The model tells us more than a computer drawing does. A computer screen is two dimensional. But in some ways we use a similar process. We also study a number of alternatives using computer drawings. My concern is that with a computer it is easy to produce too many alternatives in a short amount of time.

克罗斯比： 是选择太多了吗？
佩里： 不是，问题并不是选择太多，而是这样不允许建筑师思考。我认为这样不好。如果在三个方案中选择最佳方案，建筑师就要绞尽脑汁去想，很可能其中两到三个方案都是很好的。如果用计算机，可能会产生出一千个毫无思想的方案。那样一点好处都没有，有的只是危险。整个过程变成仅仅是产生和选择方案，而不是设计。多方案比较只是设计过程的一个特定方面而不是整个的设计过程。真正指导设计的是意图。如果你有一个意向，就能选出更加接近目标的最佳方案，但这只有在你的目标十分清晰的基础上才可能办到。假如你并不清楚设计的意图是什么，此时的方案选择只会使你感到迷茫。如果说设计过程有一千步，每一步又有一千个方案供选择的话，那么仅仅方案选择就会使你彻底地迷失方向，所以意图是关键。建筑意图包括艺术目标、功能目标、社会目标以及有关建筑的所有复杂领域。

克罗斯比： 可以说你对所承担的项目都有很明确的意图，对吗？
佩里： 是的。

克罗斯比： 你是如何做到这点的？
佩里： 设计时我们的第一步通常是相同的。首先分析问题，与业主讨论，考察现场，浏览该建筑所在城市以了解那里的建筑风格和这个区域的传统风貌，研究程序，分析投资。我们还制造现场和周边建筑的模型。然后再制造两三个我们称之为“缺乏条件的”模型——非常简单而又一目了然的模型——目的仅仅是为了做方案用，看看在这个位置上摆放如此大的建筑是什么效果。到了这一步，建筑师就可以去表现其主观和灵感的跳跃。为了考虑到项目的所有因素，我往往用两三种方法去接近目标，由此将会得到最佳方案。再下一步是在粗模型上做各种替换试验，直到我感觉某个方案更具反响、更具有美学潜力、将创造出更好的建筑为止。你可能注意到在工作刚开始时我并不动手画草图或构思设计方案。一般我要等待自己对问题有了全面的理解后才开始动手，构想解决方法或构思外观。沿这条路走我们不会有错误的开端，而且设计从开始就对问题所有方面都有所考虑。每次我都试图用语言来描绘设计要达到的效果，因此每个设计方案从一开始就有一个理论支柱。全体小组成员可以用它作为解决小的和次一级问题的依据，或者根据这个理论在细节上进一步开发。目标往往是非常清楚的。

克罗斯比： 你什么时候向小组成员传达你的意图呢？
佩里： 尽可能早。多数情况是这样：如果项目很清晰，我比较早就能明确表达我的意图。在项目进行过程中还可调整并细化。以下事情也常常发生，即在过程中我们发现了另一种更好的方案，这种可能性在开始时并未显露出。在项目进展过程中我期待这种机会出现。

CROSBIE Too much choice?
PELLI No, the problem is not too much choice. The problem is that it allows the architect not to think. That's bad. In developing three alternatives, one has to think hard about it. Two or three alternatives can be very good ones. But with the computer, it is possible to produce a thousand thoughtless alternatives, and that's no good at all. That's the danger. Just producing and choosing alternatives is not design. Choosing from alternatives is one specific aspect to the design process, but it is not the design process. What directs the design is an intention. If you have an intention, you can choose options that will take you closer to your objective. But only if your objective is extremely clear. If you don't know where you're going in a design, just choosing will get you nowhere. There are a thousand steps in the design process, and a thousand choices at each step. So you can become thoroughly lost by just choosing. It's the intention that matters. The architectural intention includes artistic objectives, functional objectives, social objectives, the whole complex world of architecture.

CROSBIE So you have a clear intention in most cases?

PELLI Yes.

CROSBIE How do you arrive at that?

PELLI Our first steps are always the same. We start by analyzing the problem, talking with our clients, visiting the site, walking around the city to see the character of the buildings and understand the tradition of the area, studying the program, and analyzing the budget. We also build a model of the site and its adjacent buildings. Then we build a couple of models of what we call "dumb" schemes—very obvious and simple massings—just to have an idea of what happens when you put something that big in that place. At this point one has to make an intellectual and subjective leap. Given all of the factors of the project, I usually see two or three ways to respond to these conditions that will give us the best possible building. Then we test these alternatives, again in a crude form, until I sense that one idea is a better response, will be the better building, and has greater artistic potentials. You should notice that I do not start with sketches or design ideas. I always wait until I have a thorough understanding of the problem before I start conceiving solutions or forms. In this way we have no false starts and the design responds from the beginning to all the circumstances of the problem. Almost always I will try to put into words what it is that we are seeking. So each scheme has, from the beginning, a theoretical backbone—something that the whole team can refer to as they are seeking to solve minor or secondary problems, or to develop other elements. The purpose is always articulated.

CROSBIE At what point do you articulate it?

PELLI As early as possible. Most of the time, if the project is clear, I'm able to articulate an intention very early on. It gets adjusted as we go, and elaborated upon. Often we'll discover secondary but important possibilities that were not apparent at the beginning, and I count on those opportunities appearing as the project develops.

克罗斯比：你在解释自己意图时习惯使用语言还是使用图形？

佩里：都使用。我画非常简单的图，只要能够解释我的方案即可。有时我在图上用轨迹发展我的构思。如果我能用语言表达我的构思，我更愿意用语言。只有在必须用图表达时我才画图。

克罗斯比：那么这就是你与小组成员交流的方式？

佩里：是这样。我愿意与小组的每个人交流。如果有业主代表在场，我们一般让尽可能多的成员参加讨论。因为每个人都是过程的一员，应该听到第一手资料，他们都是我的合作者，而不是我的“工具”。

克罗斯比：听起来这很像建筑学校里一个设计工作室的工作方法。这是从教学发展的技术吗？就像在耶鲁建筑学院当院长那样？

佩里：当然是。但是在学校里这样做的目的是为了启发每个学生寻找自己对问题的视角。在这里，小组参与的目的是为了帮我拓宽思路。教-学的氛围与设计室相同，但是初始目的有很大不同。教书可以使你学会表达，帮你学会聆听。但是作为教师你不能插入自己对问题的看法。教书时我提供的是指导，而不是解决方法。在办公室，我用相同的模式提供的是解决问题的办法。

克罗斯比：多年来你与很多不同的材料打过交道，你是如何决定选择何种材料的？或者说在设计中你是如何评估材料的潜能的？用什么判断你的选择是正确的？

佩里：从开始工作以来，我一直试图了解和表达当今建筑的本质。考虑到我们目前的技术和标准，当代的建筑可以说是空间的容器，而这些容器需要有一个密闭的外壳。这与传统的砖石建筑完全不同。我要做的就是为这种建筑提供最美的外表，圣伯纳迪诺市政厅大概是最能说明我这个想法的范例。该市政厅的设计是一个非常具有教育意义的、有争议的设计。太平洋设计中心也属于类似范畴。从那时起，我开始越来越热衷于超越这种常规的做法，也就是设计保持相同的概念基础，而仅仅用不同的方式去表现的这样一种做法。要得到一个连贯的、整体外壳的惟一方法就是用玻璃。这是因为建筑物必须有窗户，故而占一定百分比的表面积必定是玻璃。可想而知假如你希望建筑物的表层用同一种材料，惟一的选择就是玻璃。圣伯纳迪诺市政厅是对这种潜能的最清楚的表达之一。而其后的美国驻东京大使馆出

CROSBIE Do you articulate the purpose verbally or graphically?

PELLI Both. I do very simple drawings, enough to communicate the idea. Sometimes I'll develop an idea over a drawing with trace. If I can articulate it verbally, I'd rather do it that way. I draw only if I need to.

CROSBIE So this is a conversation that goes on with everyone on the team?

PELLI Yes. I try to involve everyone on the team. When we have client presentations we try to include as many members of the team as possible. Everybody is part of the process and should hear it first-hand. Designers working with me are not my "hands", they are my collaborators.



CROSBIE This sounds similar to the way a design studio works in architecture school. Is this a technique developed through teaching, and as Dean at Yale's architecture school?

PELLI Of course. But in school the purpose is to encourage each student to seek his or her vision of the problem. Here, the purpose of the team is to help me develop my vision of the problem. The teaching-learning atmosphere is the same as in a design studio, but the primary purpose is quite different. Teaching helps you to articulate, helps you to listen. But as a teacher you shouldn't interject your vision of the problem. When teaching I offer guidance but no solutions. In the office, I do the reverse but in a similar context.

CROSBIE Your work has incorporated many different materials over the years. How do you arrive at the choice of a material—how do you appraise its potential power in a project? What makes it the right choice?

PELLI From the beginning of my practice I wanted to understand and express the nature of today's buildings. Contemporary buildings are containers of space and, given our building technology and standards, these containers need to be tight, efficiently sealed envelopes. This is totally unlike traditional masonry architecture. I wanted the maximum artistic expression of these qualities, and San Bernardino City Hall is probably the clearest of all of the buildings that I have done in expressing this idea. The City Hall is a very didactic, polemical design. The Pacific Design Center is in a similar category. I became interested in going beyond that—keeping the same conceptual basis, but exploring it in different ways. The only way to achieve a consistent, total envelope is to do it in glass. Because buildings need windows, there is a certain percentage of the skin that has to be glass. If you want the building to be one material, the only choice you have is glass. And the San Bernardino City Hall is one of the clearest expressions of that potential. The American Embassy in Tokyo required that the walls be concrete for

于安全考虑要求我们必须使用混凝土建造外墙。我应该怎样做呢？在使用混凝土确保安全的同时又要表现出围墙的连贯性。我必须重新思考材料问题，要把混凝土和其他材料比如石料都考虑进去。石料现在已经可以做成很薄的饰面，就像我们用在世界金融中心的那样。如果能借用查尔斯·穆尔的概念来解释，我要说多年来我一直在坚持不懈探索材料使用的更广泛性以及开发它们更多的表现潜能，然而与此同时还要坚持材料与当代建筑本质之间的合理完整性。

圣伯纳迪诺市政厅的设计暴露出我早期设计方法的一个弱点。从建筑学上讲那个设计是正确的，而且舆论和同行们对其评价也很高。但是我总觉得有些美中不足。对于该城市，我们没有做到它本应该得到的。问题在哪儿？当我开始在一些特定环境中设计更多的建筑时，答案在我头脑中越来越清晰。真正的考验发生在设计休斯敦的赖斯大学的赫灵大厦楼。当我去与业主面谈时，大楼管委会的人告诉我他们一直很苦恼为什么校园里没有人喜欢新大楼，所有人都喜欢那个旧的 Ralph Adams Cram 大楼。他们请我设计一个更像那个旧大楼的建筑。我告诉他们我也同意人们的观点，但我不知我能否做到，因为这样做只是模仿历史，而这正是我不愿做的。赫灵大厦帮我解开了一直萦绕在我大脑中的未解之谜。为什么许多在建筑界评价很高的建筑却不受公众欢迎呢？为什么这些建筑不被人欣赏且与周围环境格格不入呢？而这些要求却是任何好的建筑都必须满足的基本要求。解决这个问题的方法之一就是必须给出一些可接受的我的某些美学见解。以我的能力设计出有反响的、可信赖的，同时又能保持我们当代风格的建筑的关键是体系美学与建筑技术的性质和我们建筑始终如一系统的关系。在图纸构架上传达的每条线不仅仅是线，它还应该表达一个相互关系：非承重墙看起来就不应像承重墙。这一点有助于我保持工作逻辑的连贯性。

我们有幸生活在这样一个材料丰富的时期，许多材料都可以被我们利用。使用砖、不锈钢，或石料都没有错。如果我认为保持我的项目之间的一致性次要的，那我为什么要人为地限定自己的风格，使得我的作品看起来始终如一呢？建筑 and 它所处的环境之间的一致性或是与它的功能的一致性才是真实且重要的条件。我的方法是抓住不变的本质。如果我建造一个艺术馆，它应有它的特征。一个煤气站，一个工厂或是一个教堂都应各不相同。如果我为耶鲁设计一个新港，它是一种类型的建筑。当我要为东京的 NTT 公司设计，那又是另一种不同类型。每次运用同样的审美体系，使用同样的材料是自我标榜，出版界、评论界和科学界却都强烈支持这种想法。美学的一致性容易认识和理解的。保持固定的美学风格的建筑师能使他的建筑与公众认可的形象取得一致——比如理查德·迈耶、弗兰克·盖里、诺曼·福斯特、迈克尔·格雷夫斯。对于我来说，更重要的是把建筑物的功能与它所处的地点联系起来。这就意味着建筑的形象要随着特定环境的不同而变化。

security reasons. How do you do this and at the same time express the taut enclosure? I had to rethink the problem to be able to include concrete and other materials, like stone, which today can be a very thin veneer, as we used it at the World Financial Center. I have been moving over the years to be more inclusive—if I can use a Charles Moore term—in the use of materials and in exploiting their expressive potentials, while maintaining the intellectual integrity of their relationship to the nature of contemporary buildings.

The San Bernardino City Hall pointed up a weakness of my early approach. It was architecturally correct and extremely well received by the press and my peers, but in my mind something was wrong with it. It was not doing what it should be doing for the city. What was the problem? It became clearer to me when I started to design buildings in much more critical contexts. The real test was Herring Hall at Rice University in Houston. When I went to the interviews, the building committee said that they had been wrestling with the fact that nobody liked the newer buildings on campus. But everybody liked the older, Ralph Adams Cram buildings. They asked me if I could design a building more like those. I told them that I agreed with their observations, but I didn't know if I could do it. Those are historical imitations, and that I wouldn't do. Herring Hall helped to resolve in my mind what had been up till then an unresolved conflict. Why is it that so many buildings that are so well received by the architecture community are not accepted by the public at large, are not enjoyed, and do not fit in their surroundings? These are essential objectives that any good architecture must achieve. Part of the solution was that some of my aesthetic predispositions had to give. The key to my being able to design responsive and responsible buildings while remaining faithful to our Modern condition is in the consistent relationship between the aesthetic system and the nature of the construction technology and systems with which we build. It's not that we have to express every line in a truss, but there has to be a correlation: a non-bearing wall should not look like a bearing wall. This has helped give intellectual continuity to my work.

We happen to live in a period in which a number of materials are available. There's nothing wrong with brick, stainless steel, or stone—why should I artificially limit my palette to make my work appear consistent, if I believe that the consistency between my projects is secondary? The consistency between a building and the place it is in, or with its purpose—those are very real and essential conditions. My approach is what is constant. If I build an art gallery it has a certain character. A gas station, or a factory, or a church, all should be different. If I build in New Haven for Yale, it's one kind of building, and if I build in Tokyo for NTT it's a different kind of building. Using every time the same aesthetic system with the same materials is a conceit. But it is a conceit strongly supported and promoted by the press, the critics, and the academics. Aesthetic consistency is easy to recognize and understand. Architects who have been able to maintain a consistent aesthetic approach can have their buildings identified with a recognizable image—it's a Richard Meier, a Frank Gehry, a Norman Foster, or a Michael Graves. For me it is more important to connect with the purpose of the building and the real place where the building is. This means that the images of my buildings must vary to suit their specific circumstances.

克罗斯比：埃罗的作品也是如此。

CROSBIE That was also true of Eero's work.

佩里：是的，埃罗确实如此。当我与他在一起工作时我认为这是他的一个缺点——他没有一个公认的风格。他讲他正在寻找一个适合他作品的风格。我自己并不热衷于创立风格，但对建筑与环境之间关联的基本理念是不变的。我很幸运在成长的时期没有被灌输以下这样一种思想：坚持美学的一致性建筑作品必须要完成的目标。如你所知，几乎所有年轻建筑师的想像力都被这个观点所毁掉。建筑是一种比绘画和雕塑更应该随着周围环境变化的艺术。我认为对建筑艺术的评判一直存在误区，因为对建筑的评价完全受绘画理论和评价的影响。近一百年来，绘画已经成为权威的艺术，它的理论和基础已经延伸到建筑学。

PELLI Yes, it was very true of Eero. When I was with him I thought that was one of Eero's weaknesses—that he did not have a recognizable style. He said he was looking for a style for the job. A style does not interest me, but the basic intention is the same. I was fortunate that in my formative years I was not trained to believe that aesthetic consistency is an essential goal in an architect's work. As you know, the vision of almost every young architect is distorted with this presumption. Architecture is the art that should change more according to the circumstances, more than painting or sculpture. I believe that we have been misjudging the practice of the art of architecture, because architectural criticism has been overly affected by painting theory and criticism. Over the last 100 years painting has been the dominant art and its theories and biases have been extended to architecture. But architecture doesn't fit. It has very little to do with painting. It is a very different art and there are a thousand other dimensions to architecture—social, economic, physical—that have nothing to do with painting analysis, but it continues to affect the way we discuss and judge buildings and architects.

但是它对建筑学并不适用，建筑学与美术共同点很少。它是一种完全不同的艺术，有成千上万个其他方面的因素要考虑——社会的、经济的、物质的——这些在美术评论中都无需考虑。然而美术至今影响着建筑师和对建筑的讨论和对评价。



克罗斯比：因为这些讨论由评论家们掌握，他们熟悉的是艺术史，而不是建筑。让我们再回到对材料的讨论上来。玻璃、铝或不锈钢看来适合用在你所描述的建筑中——表现封闭的外壳。

CROSBIE These discussions are framed by critics who were trained in art history, not architecture. Getting back to our discussion of materials—glass, aluminum or stainless steel seem right for what you want to achieve in your architecture: the expression of a tight envelope.

佩里：这些材料能最清楚地表现我所推崇的当今建筑的本质。是否能最好地表现当代建筑的本质是我评判材料选择的一个标准。高层建筑可看作是一个薄的外壳。我相信高层建筑是今后我们将持续建造的一种类型，所以在此不仅指我的建筑，同时包括其他人设计的建筑，都面临一个任务，即怎样把一个既有表现力，又通用的、适宜的建筑用于所有的具有奇妙艺术的任务中，同时还要与我们原有的方法保持一致。古老的建筑的形式都是出自一种特殊的建筑方法。拱门、梁托、山墙、外角——所有这些建筑元素都是从承重石结构中自然形成，而且与我们常规所采用的方法完全一致，再没有什么更多的。

PELLI They are materials that express most clearly what I believe to be the nature of architecture today. This is one of the yardsticks that I use to evaluate the choice of materials: the appropriate expression of the nature of contemporary construction. In the case of multi-story buildings it is the thin envelope. That's the way I believe that we will keep on building, so it is essential not only for my architecture but for architecture at large that we get on with the task of figuring out how to do an architecture that is expressive, versatile, and suitable to all the tasks of this marvelous art, and consistent with the way we build. The ancient forms of architecture have all come from a particular way of building. Arches, corbels, pediments, quoins—all of these architectural elements grew naturally from bearing stone construction and are completely consistent with the way we used to build, but don't any more.

克罗斯比： 你的许多作品都扮演了表现都市化的角色，比如：哥伦布的大众活动中心和纽约金融中心。这些建筑是如何起到点缀城市的作用的？

佩里： 漂亮的城市，美丽的都市环境本身就具备了一定厚度、一定强度的底蕴，这种底蕴造就了奇妙的景观。当然，这些建筑融入其中就起到了锦上添花的效果。每当我有机会在都市中给人们提供一个赏心悦目的聚集场所时，我都非常兴奋。这些建筑物的位置都处于某一特定环境中心，它的存在决定了整个环境的好坏，这一点比建筑本身的审美更重要。要求该建筑既不能喧宾夺主，又要给城市增光添彩。巴黎就是一个很好的范例。在巴黎有许多伟大的建筑，但是使这座城市亮丽的是所有那些普通的但优秀的建筑，它们为生机勃勃、热情洋溢的都市生活创造了空间。都市的场所、街道、广场比任何一座建筑都重要。

克罗斯比： 你是怎样把这些原则用于你的建筑中的？

佩里： 印第安纳哥伦布的大众活动中心是纽约金融中心冬季花园的前奏。它们代表了一种新型的建筑。我把它们称之为公众大厅或叫公众场所。对于规划和城市来说它们是公众的活动空间，在那里举办了许多各种各样世人瞩目的活动。这些公众大厅都是都市生活中大众的活动中心。大众活动中心已公认是哥伦布的公众生活的中心。哥伦布的欧文·米勒原来想请我设计一个小型的购物中心。他希望这个购物中心能把都市生活重新带给哥伦布市区。但是一个购物中心是起不到这样的作用的。于是建立大众活动中心的构想就诞生了：在市区街道上创造一个空间，就像是一种街边生活的延续。让大众活动中心位于购物中心的一个出口，而不作为购物中心的一部分。它不是一个大型购物中心，更像是一个市区的活动室。人们可以从华盛顿大街的便道进入大众活动中心，它有自己的活动内容，所以功能便可以与购物中心分开。米勒问我在这个空间里能做什么，我告诉他我希望这个空间对 20 世纪末的美国人就像意大利那种特有的公共广场对 17 世纪的意大利人意义一样。多数时间它会是人们的休闲场所，可以在那里看报、喝咖啡、会友。偶尔它也会成为全城居民聚会的地方，每年会举办上百次这样的活动。公众大厅必须建在市区，因为这是惟一能使全城居民聚会的地方。各种经济和社会阶层的人都聚集在那儿，它为哥伦布的生命增加了新的活力。

我们刚刚完成了第三个都市广场，它位于北卡罗来纳州夏洛特国民银行合作中心。它正在改变夏洛特市区的本质。没有一个这样的公众大厅是业主规划内的。这三个都市广场都是我向业主建议的，让我高兴的是他们都接受了，大厅就建成了。

CROSBIE Many of your projects play important urbanistic roles: projects such as the Commons in Columbus and the World Financial Center in New York. How do these buildings energize a city?

PELLI Wonderful cities, wonderful urban places, are so because they have been able to achieve a certain density, a certain intensity of potentials, that make it wonderful to be there. It is much better, of course, when this happens in beautiful spaces with handsome proportions. Whenever one has the opportunity to accommodate and strengthen the forces that bring people together in the city, that interests me very much. Those qualities are at the heart of what makes our built environments good or bad, and they are more important than a building's aesthetics. There are places where the buildings are not extraordinary, but they make great cities. Paris is a good example. There are several great buildings in Paris, but what makes this city wonderful are all of those ordinary, good buildings that create spaces for activities and intense urban life. The urban places, the streets, the plazas are more important than any one building.

CROSBIE How did you adapt these lessons to your own architecture?

PELLI The precedent for the Winter Garden at the World Financial Center in New York was the Commons of Columbus, Indiana. They are representations of a new building type. I call them Public Halls or Public Rooms. They are public living rooms for the project and the city, and the number of different things that happen in them is extraordinary. These Public Halls are spaces that are centers of activity, focuses of urban life. The Commons is clearly the center of public life in Columbus. Irwin Miller of Columbus had asked me to design a small downtown shopping center. Miller wanted this project to bring downtown Columbus back to life. But a shopping center won't do that. The idea for the Commons was to create a space on the downtown street as a covered extension of sidewalk life at one end of the shopping center, not as part of it. This is not a mall. It is more like a downtown living room. You enter from the sidewalk on Washington Street, and it has its own life so it can function separately from the shopping center. Miller asked what would happen in this space. I told him that I wanted it to function for late 20th century America like a piazza functioned for 17th century Italy. Mostly it would be a great place where people would come, read the paper, have a cup of coffee, meet with friends. But occasionally something will happen there that will bring in people from the whole town. They have hundreds of such events every year. The Public Hall has to be downtown, because this is the only place that can bring all citizens together. People of all economic and social strata gather there, and it adds an essential dimension to the life of Columbus.

We just finished our third Urban Room at the NationsBank Corporate Center in Charlotte, North Carolina. It is already changing the nature of downtown Charlotte. None of these halls was in the program given by the clients. In all three cases I proposed them and, to my delight, they were accepted and built.



克罗斯比：弗雷德，在开展大型工程时，你们事务所是怎样与其他建筑师事务所合作的？

克拉克：当我们想承接大工程而事务所人手不足时，出于对一些实际问题的考虑，我们必须寻找其他合作伙伴。在这一点上到是与开发商的愿望不谋而合。由于市场或其他原因，开发商也希望设计部门与信誉可靠的技术部门合作。现在经过约16年与70多个建筑师合作后，我们的合作设计过程和建筑成品越来越趋于详细和完善。这并不是般人所理解的学校里的设计。除了规划和设计开发以外，我们还必须完成所有的结构文件，并跟踪工程的全过程。这也和某些著名建筑师所做的“设计咨询”不同。我们合作设计的过程是这样的：遇到非常大的或者是远离纽黑文（New Haven）的项目，我们做项目的一半，剩下的一半我们提供全面服务，采用的是比较传统的建筑服务方法。这就是我们与众不同之处。因为一般来说，人们只是希望在设计上与我们合作，并不要求我们全部承担。然而我们和合作者在关于设计方案和意图做进一步交流时，就会对项目的质量、全面服务图纸和技术要求的理解都产生不可估量的影响。我们的设计开发图、技术要求大纲以及随后的工程管理的水平都是最佳的。

克罗斯比：可否理解为当你们仅提供设计服务时，合作者只需要将你们已完成的设计进一步细化？还是说对于建设文件需要一种全新的方式？

克拉克：这是两种完全不同的过程。

佩里：我们把它们分开的理由是产生优秀设计的工作环境产生优秀施工图的环境截然不同。对于做优秀设计的人员，办公环境应宽松，适合人集中精力创新。设计人员更具独立性。然而当你采用同样的方法管理一个大的制图室就不合适了，甚至会出错。在一个管理很好的制图室，技术人员按规定的时工作，办公桌上整齐洁净，而设计室往往显得杂乱无章。

CROSBIE Fred, how did the firm's organization of collaborating with other architecture firms on large projects evolve?

CLARKE Our process for collaborating began when the firm had very few people and, for pragmatic reasons, we joined with other firms in going after large projects. This also coincided with our developer clients' interests in combining design firms, for marketing and other reasons, with solid technical firms. Now, after almost 16 years and more than 70 collaborations with other architects, our collaborative design process and products have become very thorough and complete. This is not design as you would understand it in school. In addition to schematics and design development we work through all construction documents and follow the project through construction.

This is also distinct from what is sometimes described as “design consultation”, which some well-known architects have done. Our collaborative design process is something we do for about half of our projects—for the very largest projects and those that are distant from New Haven. But the other half of the practice provides full services in the way a more traditional architectural practice would. This is a distinction that one always has to make because, in general, people like to associate us only with design. The collaborative work has informed the traditional in the sense that the refined level of our communication with our associate architect in terms of design ideas and intent has had a significant impact on the quality and comprehensiveness of our full-service drawings and specifications. The level of our design development drawings, outline specifications and follow-through during construction administration is extraordinary.

CROSBIE Was this a matter of amplifying what you had done while providing just design services, or did it require a new approach to construction documents?

CLARKE They are two very different processes.

PELLI The reason we separate them is because the workplace culture necessary today to do good design is different to the culture you need to do good working drawings. To do good design you need an office that is loosely structured, with an emphasis on creativity. People are more independent. If you run a large working drawing department in this way, you will either go broke or mistakes will be made. In a well-run working drawing department, people work regular hours and the tables are neat and clean. A design studio is rather messy.

如果同时存在这两种情况，可以用两种办法来安置他们。一种是把两种人员安排在不同楼层。另一种方法是整个事务所按照制图室的特征来安排，即规定工作时间，保持洁净桌面。这个系统很好管理，而且事务所的生存与最终施工图的好坏关系更大。问题是整个事务所过于严格，不利于创造性构思的涌现。于是我们经营事务所的管理方式如我们所希望的那样宽松，就像一个小的、有活力的工场，而与我们合作的事务所应具有那种严格的、整洁的形式。因为如果从事两种工作的人在一间事务所里工作，往往会互相嫉妒，但如果他们分别属于两个事务所，则不会产生冲突。与他人合作主要的原因就是想保持开放的、宽松的设计环境。其次是这样使事务所的规模比较小。对于工作量小的项目我们自己做施工图，工作形式比较宽松。安排两个人做所有的建筑图。结构图的设计则由小组中那些从头至尾参与设计的人去做。这里不存在任何专职部门。如果有一个15人的小组，让每个人完成一个大型建筑的一部分，你不能允许有任何松懈，也不允许有任何遗漏。

克拉克： 虽然我们的小组是竖向结构的组成，设计师、技术员和一个管理者都在一起工作，但工作氛围更偏向于设计室的环境。这也是我们全面服务与众不同的一点。从精神方面讲，团队的气质和文化是与设计小组的背景分不开的。

克罗斯比： 除了保留设计小组的企业文化，以及通过合作方式，小的设计所也可承揽大工程这些优点以外，合作设计还有哪些建筑上的优势？

克拉克： 还有一个优点就是我们的客户可以同时拥有两个独立的事务所，他们具有独立的任务，项目因此得到彻底的监督。如果项目由一个事务所负责，决策往往拖延直至过程的后期。但是在合作过程中这种事不会发生。另外如果一个事务所承办，还存在偏向技术还是设计的问题。如果两个事务所负责同一项目，对所承担的专业和任务就会更认真负责。一个工程在这种状态下可能会比一个事务所负责得到更多的服务和监督。

佩里： 我们并不总是与同一类事务所合作，对每个工程我们都会选择最适合的事务所。我们常和当地的事务所合作，因为他们最了解当地的人员和工序，而且由他们负责业主的服务很方便。我们根据建筑的类型决定合作的事务所，因此我们能获得最好的队伍。在一个设计所中不可能什么人才都有。

克拉克： 你可以随意思考采用何种最好的方法达到任务的目标，可选择最好的咨询家、最好的合伙人、最好的合作者以及事务所内部最合适的小组。

克罗斯比： 在合作中你们是如何保持对所有设计细节的控制程度？

克拉克： 我们的设计开发图和技术要求大纲基本属于预施工图。对于设计开发阶段考虑好的图纸目录和发图目录我们经常是从最重要的施工图开始，按难易顺序逐步完成。实际上，在规划阶段就已经计划好施工图工序，并在设计开发中已经实

When you have these two cultures together, there are two solutions to house them. One is to separate the two activities as departments usually on different floors. The other way is to organize the whole firm around the characteristics of a good working drawing department with regular hours and neat desks. This system is easy to manage and the livelihood of the firm is more at stake in what happens in the final working drawings. The problem is that the whole firm becomes tight, and the creative juices cease to flow. But we can run our firm as loose as we wish, like a small, creative *atelier*, and we associate with firms that run very tight, neat shops. If the two cultures are combined in one firm, there are usually extraordinary jealousies, but when they are in two firms, there's no conflict. The primary reason for splitting the work is to maintain the open, loose environment to work on design. The second reason is to maintain a smaller size firm. When we do our own working drawings on small institutional projects, we do them a bit looser. Two people do all the drawings. And the construction documents for these projects are produced by people who were on the team from the start of design. There's no division. When you have a team of 15 people, each one drawing a piece of a large building, you can't allow any looseness or something will fall through the cracks.

CLARKE Though our teams are vertically integrated, with designers, technical people and a management person all mixed together, culturally it's an extension of the design studio. This is what makes our way of doing full services a bit different. Culturally, the ethos and the values instilled in the team spring from the design-team background.

CROSBIE Beyond the preservation of the design culture, and the ability to do large projects with a small office if you associate, what are the architectural advantages of collaborating?

CLARKE The advantages to our clients of having two independent firms with independent assignments is that the project gets thorough scrutiny. When a project is done by a single firm, there's a tendency to let decisions drift until late in the process, which you can't do if you're associating. There's also a tendency to favor one aspect of the process—technical or design. When two firms are working on a single project, there is a devotion to your speciality and assignment. A project under these circumstances probably gets more service and scrutiny than a project done by a single firm.

PELLI We don't associate with the same firm all the time. We select the best firm for each project. We associate with local firms because they know the people and the process, and are there to service the client. We will associate with different firms depending on the building type, so we can get the best team of people possible. You cannot have that in a single office.

CLARKE You're free to think about the very best possible approach to getting the work done. You can choose the best consultants, the best associates, the best collaborators and, within your own office, the best team for that project.

CROSBIE In collaborations, how do you maintain the amount of control over details?

CLARKE Our design development drawings and outline specifications are essentially preliminary working drawings. Quite often, the list of drawings done

施。在合作中交流是非常关键的，在交流前时常需要考虑我们最需要通知对方的是什么。在这一点上，我们并不是简单地提出许多问题，因为这些与我们正在做的工作无关。我们注重于指导怎样画图，怎样用图形符号表达以及我们的员工怎样和其他事务所一起工作。

为了保证整个过程中细节的质量，必须采取最重要优先的原则。在一个建筑中有许许多多细节，但是从美学角度上说它们对我们并不很重要，对于水怎样排出、冷热风怎样循环等方面这些细节确实很重要，但是我们自己不必要关心。合作者会去考虑。我们教育员工寻找最重要的问题，然后彻底解决。

克罗斯比： 什么是最重要的问题呢？

克拉克： 任何事物都会对整体有一个视觉影响，这是一个范围很广的问题，这里包括关键外墙细部结构，材料如何从一部分过渡到其他部分，地板和顶棚的图案，墙上的照明开关和温度开关如何安装，扶手栏杆等等。

佩里： 如果我们开发了一个我们喜爱的细节，而合作建筑师告诉我们那样会导致渗水或会造成玷污，我们就重新设计以满足技术和实用的目的。当遇到业主要求高质量的建筑时大多数我们合作过的建筑所会主动找到我们。通过其他建筑我们所得到了不少的业主。

克拉克： 还有一个问题是贯彻始终的。在设计阶段，合作建筑所在所有方面都参与我们的工作。当我们结束设计开发时，对于其他建筑师不应该有什么不清楚的事。相应地我们自始至终也对施工图设计进行跟踪，当然一般到这个阶段我们的队伍只留下原设计开发阶段的10%~15%。我们知道业主不愿意我们撒手不管，我们也不愿意使设计意图失去控制。一般来说在我们的护航和负责建筑技术人员的共同努力下，建筑都会达到优秀的质量水平。

佩里： 有时我们会选用一种过去我们没用过的新材料，因为这种材料是最适合的。但我们必须确信对这种材料在美学、结构技术和价格上都有了很深入的了解。我们尝试用一种新材料的过程更像是进行一次探索，比如不锈钢的采用就是如此。但是一旦我们了解了它，我们在这方面的知识就更加丰富，在技术上和美学上它能做什么不能做什么都会很清楚。采用已经掌握的新材料对我是一个极大的诱惑：如果你熟悉砖，做每个建筑都用砖，这太容易了。发现一种新材料的感觉太妙了。而且一种新材料又促使我对建筑本质的扩展作新的思考。它使得我永远保持活力。一个人如果停止对新问题的挑战，他的艺术生命也就终止了。

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and the list of issues considered in design development is worked backward from the most important ones during working drawings. In effect you develop the working drawings process in its skeletal form and apply it to design development. Communication is crucial in collaborations, and you're always thinking ahead about what are the most important issues for us to communicate. In that regard we simply don't address many things because they aren't important to the work that we're doing. We're also attentive to how you draw it and communicate it in graphic terms, and how our staff works with the staff of the other architecture firm.

In terms of protecting the quality of the details throughout the process, you need to know what's important to set priorities. There are many details in a building that are really not important to us aesthetically. They are extremely important in terms of keeping water out, or cold air out and warm air in, but they're not necessarily what we concern ourselves with. The collaborating firm does that. Our staff has been educated to find what are the most important issues, and then to chase those thoroughly.

CROSBIE And what do those issues tend to be?

CLARKE Anything having a visual affect, which is a broad statement. This will include key exterior wall details, how materials transition one to the other, floor and ceiling patterns, how light switches and thermostats are placed on the wall, handrails, and much more.

PELLI If we have developed a detail that we love, but the associate architect convinces us that this detail will lead to water penetration or staining, then we'll redesign it to fulfill the technical, pragmatic goals. Most of the firms that we've associated with once will call us later when they have a client who wants a high design. We get a fair number of clients through other architects.

CLARKE There's also the issue of follow-through. During the design phase the collaborating firm is with us all the way. By the time we end design development there shouldn't be a single surprise to the other architect. Conversely, we follow working drawings and construction administration all the way through. Quite often our team size at the end of design development will reduce by only 10 or 15 per cent. We know that clients don't like for us to disappear, and we don't like the idea of losing control of our aspect of the project. Consequently, with us shepherding our work and the technical architect his, the buildings are very carefully put together.

PELLI Sometimes we will use a material new to us because it appears most suitable. But we make sure that we acquire a good understanding of how the material behaves aesthetically, in the construction processes, and in cost. We may approach a material new for us, such as stainless steel, rather tentatively. But once we understand it, we become very knowledgeable in what that material can and cannot do technically and aesthetically. There's a great temptation to use only materials that one has mastered: once you know brick, you do everything in brick. That's too easy. It's wonderful to discover new materials. And a new material forces me to reconsider to some extent the nature of architecture. It keeps me fresh. One dies artistically when one ceases to question oneself.

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