If All the World’s a Stage,
It Had Better Be Well Designed

in this issue:

SHAKESPEAREAN THEATER
It’s Not What You Think
A Michael Kahn Interview

An Actor’s Perspective on Theater Design
WITH HOLLY TWYFORD

Architecture & Dance

Winter 2006–07
“A pretty plot, well chosen to build upon!” This quote from William Shakespeare’s Henry VI hangs on a construction site a block away from the National Building Museum. Now under construction on that plot is the Harman Center for the Arts, which will provide much-needed additional space for Washington’s popular Shakespeare Theatre Company. The new theater’s opening, scheduled for fall 2007, is sure to draw renewed attention to one of the foremost figures in literary history.

Actually, 2007 promises to be a banner year for the Bard in the nation’s capital, thanks to the upcoming Shakespeare in Washington festival, organized by the John F. Kennedy Center for the Performing Arts with the cooperation of dozens of other cultural institutions. The festival is a multi-disciplinary initiative, involving a number of organizations not directly associated with literary drama. The National Building Museum, for its part, will present an exhibition addressing architecture, theater, and set design, called Reinventing the Globe: A Shakespearean Theater for the 21st Century. For this show, we have commissioned five architects and designers to re-think Shakespeare’s own famous stage and create a new venue for our time; I invite you to come and see the imaginative results. Until your next visit, enjoy this issue of Blueprints, featuring articles addressing the various intersections among architecture and theatrical performance.

And speaking of reinventing, you’ll notice that we redesigned Blueprints. We’re including more images in full color, a variety of new content, behind-the-scenes Museum news, and more. We also organized a new editorial board of staff members to help direct and coordinate our various publications (both printed and electronic), so be on the lookout for other improvements to our communications vehicles in the coming months. And let us know what you think—email us your comments at editor@nbm.org.

Sincerely,

Chase W. Rynd
If All the World’s a Stage, It Had Better Be Well Designed

Inspired by the upcoming exhibition *Reinventing the Globe: A Shakespearean Theater for the 21st Century* (January 13–August 27, 2007), this issue of Blueprints considers the integral relationship between architecture and theater. In various articles, a renowned director, an actor, and a theater historian offer sometimes divergent views on ideal settings for Shakespearean plays and other dramatic works, while an architect with a fondness for dance explores the connections between the human body and built form. Complementing these thematic articles are various Museum news items, a feature highlighting an artifact from the Museum’s collection, and the ever-popular Mystery Building challenge.

**Shakespearean Theater: It’s Not What You Think**
Michael Kahn, artistic director of the Shakespeare Theatre Company, explains why he had no interest in replicating the famous Globe Theatre when commissioning the new Sidney Harman Hall.

**An Actor’s Perspective on Theater Design**
Holly Twyford, winner of three Helen Hayes Awards as outstanding lead or supporting actress in Washington-area plays, discusses how the design of theaters and sets influences dramatic performance.

**Lessons from the Study of Historic Theater Architecture**
Why is it that some theater spaces seem to bring out the very best from relatively mundane productions, while others can deaden even the most spirited performances? Theater historian Franklin J. Hildy seeks answers from the past, with an emphasis on the Elizabethan era.

**Architecture and Dance: Intersections and Collaboration**
Architect and dance enthusiast Frances Bronet talks about her work on performance projects and teaching strategies that bring together these two disciplines.

**Museum News**
- Museum exhibition leads to commission for Danish artist
- Families flock to Museum for annual festival
- Reception and dinner mark inauguration of new Museum chair
- Board welcomes new trustee from overseas
- Thanks to Museum donors

**Collections Corner**
A-maize-ing capital added to collection.

**Mystery Building**
*I see a ship!*

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**shop!**

**Shakespeare’s Globe: An Interactive Pop-Up**
Open this book to reveal an amazing pop-up model of the Globe, just as it may have appeared in Shakespeare’s time. Then grab the accompanying play books and bring to life scenes from a dozen of Shakespeare’s most popular plays, including *Romeo & Juliet*, *Macbeth*, and *A Midsummer Night’s Dream*. Perfect for ages 8 and up.

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Visit the Museum Shop during Museum hours or call 202.272.7706.
An Interview with Michael Kahn

by Martin Moeller

Michael Kahn has led the Shakespeare Theatre Company in Washington, DC, for 20 seasons as artistic director, creating what *The Wall Street Journal* calls “...the nation’s foremost Shakespeare company.” He is also the founder of the Academy for Classical Acting at The George Washington University and the former Richard Rodgers Director of the Drama Division at Juilliard. His Broadway credits include a Tony Award nomination for his production of *Show Boat*.

Kahn is currently leading the Shakespeare Theatre Company into a new era with the creation of the Harman Center for the Arts, a two-venue performing arts center (including the new Sidney Harman Hall, currently under construction, and the existing Lansburgh Theatre) that will expand the company’s offerings while creating opportunities for artists from around the world to perform in Washington, DC. He is also serving as curator of the *Shakespeare in Washington* festival, which was conceived by Michael Kaiser of the John F. Kennedy Center for the Performing Arts.

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opposite: Rendering of a performance at the new Sidney Harman Hall. Courtesy of Diamond + Schmitt Architects Inc.
Learn more about the new Sidney Harman Hall by visiting the National Building Museum’s exhibition Reinventing the Globe: A Shakespearean Theater for the 21st Century. The design for the theater is presented through architectural renderings, a model, and a computer animation explaining the flexible stage design.
An Actor’s Perspective on Theater Design

Holly Twyford has been acting professionally for over a decade, appearing in more than 40 productions in the Washington area, plus others in New York, Boston, Philadelphia, and Santa Cruz. Twyford has been nominated for nine Helen Hayes Awards for Washington-area theater and won three, including two Outstanding Lead Actress Awards—for her portrayal of Juliet in Romeo and Juliet at the Folger Shakespeare Library and as Evelyn in the Studio Theatre’s The Shape of Things—and an Outstanding Supporting Actress Award for her performance in The Two Gentlemen of Verona. She has appeared in independent films, including John Waters’ Pecker, and on television in Homicide: Life on the Street. She recently assisted Joe Banno in the direction of A Midsummer Night’s Dream at the Folger.
of fact, once scenery was created. Shakespeare’s plays would probably be an hour shorter if he didn’t have to describe the setting, the climate, the time of day. And of course, some of his most extravagant poetry is in his description of scenic effects, of place, of weather. If there had been scenery, he wouldn’t have needed to do that, so some of the most beautiful passages about night, or winter, or flowers, or fields—you just wouldn’t have them.

When theaters got scenery, writers didn’t write about place anymore. People wanted to go to the theater to see what they considered historical reality. They would see painted sets of Rome, and they would feel that they were seeing Rome. Shakespeare didn’t care—he just talked about it. With the 20th century, with the invention of things like thrust stages, open stages, and arena stages, we began to move closer to an original Shakespearean idea, which is that it’s really just a floor and actors, and the creation of imagination by actors and by lights.

MM: I understand that you instructed the architects of Sidney Harman Hall to avoid any attempt to evoke, even indirectly, the character of the Globe or other Elizabethan theaters.

MK: I am not particularly interested in original practices. I don’t really know how the actors acted in Shakespeare’s time, and to be honest with you, I don’t care. Nor am I ever interested in recreating the [Globe]. I think that is a distancing device—it’s comfortable for people, and they think, “Oh, good, if I see Shakespeare like it was done originally, then it’s culturally okay.” It’s not in any way disturbing.

MM: And, of course, we don’t really know how it was done. What we do know is that the audiences in those days were probably pretty boisterous—eating, talking, and often drunk.

MK: Well, if you go to the Globe [replica] in England, it’s fun, immersing yourself in a form of theater that the audience hasn’t seen, standing and talking during it, and now snapping photographs and that sort of thing. But, without being rude, that strikes me more like a Maryland Renaissance Fair than a major theatrical experience. I think it’s wonderful that the Globe’s there, but I don’t consider that the way that Shakespeare should be done.

Martin Moeller: I assume that the physical character of a given theatrical space directly influences an actor’s performance. How consciously do actors react to different venues?

Holly Twyford: I think it’s pretty conscious. If you go to the first reading of a play and there are actors who have never worked in that theater before, watch their faces when they walk into that space for the first time, and you can see all of the wheels turning: “Okay, how can I use this? What do I have to do to reach the audience in this house?” If it’s theater in the round, for instance, it’s something completely different from what you have to do on a proscenium stage. “Is there a balcony? Do I have to pump it up a little bit, to make sure that the folks in the cheap seats are getting everything?” There are lots of technical adjustments that have to be made.

That goes to the director, too. Somebody directing at the Folger Theatre, for instance, has to be very careful, because the sightlines are extremely challenging. But it’s very fun to watch actors’ faces walking into the Folger for the first time, because it’s a wonderful replica of an Elizabethan stage [that really] takes you back, and there’s something exciting about that for any actor, I would think.

MM: One of the hallmarks of the typical Elizabethan theater was the intimate relationship between the actors and the audience.

HT: It was very participatory. At the Folger, in the area that we call the Main House on the floor, those seats would not have been there [in the Elizabethan era]. Those would have been groundlings [people who paid a penny each in order to watch the performance while standing in the unsheltered center of the theater]. Those people would have been eating, drinking, throwing things, and shouting!

MM: Theater in those days was a rowdy business, but that hasn’t stopped many people over the past century from pursuing the idea of recreating an “authentic” or “accurate” Elizabethan theatrical experience. How do you feel about that movement?

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**An Actor’s Perspective on Theater Design continued**

**HT:** If you are going for accuracy, that’s great, but it’s not necessarily going to be a theatrical experience or an artistic experience—it’s different. It depends on what you want to get out of it. I think that one pitfall of having a replica of an Elizabethan theater is that it is not always easy to work with. [At the Folger,] there are two big pillars in the middle of the stage, and there are places where the king or queen might have sat, presumably so he or she could be seen, but now you can’t seat an audience member there because they can’t see what’s going on.

**MM:** From your perspective as an actor, how well do you think set designers generally respond to the constraints and opportunities of specific theaters and plays?

**HT:** Any self-respecting designer would surely embrace what is there. For example, I would say that Aaron Posner’s production of As You Like It did a great job of using the columns [at the Folger]. In the first act, the design actually called for more columns on stage. Then when [the characters] were in the forest in the second act, all those other columns came down—they were symbolizing the trees, of course, and so the design really did sort of embrace the existing columns.

When I was acting in The Desk Set at the Studio, the designer did this great, almost Art Deco set for it. It made you stand in a certain way. If you’ve got a beanbag chair in your scene, you’re going to act in a certain way around the beanbag chair. All of those elements contribute.

**MM:** How do all of the design components come together in a typical production?

**HT:** Directors meet with all of the designers far before the first read-through of a play, long before they even assemble a cast. You want to make sure that whoever is designing the sets, the lighting, the sound, the costumes, and the director are all on the same page and telling the same story. The director might say, “I’m interested in this period of design, and I want to incorporate the darkness of this play,” or, “I want to incorporate the fantasy side of this play.” The designers will go off and come back and say, “Here are some sketches.” It’s back...
An Actor’s Perspective on theater design continued

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happen? ” It was interesting because one of the reasons

and forth. They work and they mold, so that by

the time you get to the first read-through, there

is a complete model from the set designer,

with at least 90 percent of the questions

answered as to what’s going to go where.

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later in the process, because they have to

depend on the actors. There was one play I did

with an actress who had beautiful blond hair,

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wonderful, kind person, and he lit that blond

hair so that you saw an angel. And that’s a

perfect example of contributing to tell the story,

because that’s what we’re all trying to do.

MM: Do you have a favorite theater in which

to perform?

HT: I can’t even say. They’re all so differ-

ent. I love the Arena Stage—specifically

what is now called the Fichandler Stage

there—because I love playing in the round.

There’s something about trying to reach

out to everyone who is in front of you, and

behind you, and to the sides. And the Folger,

obviously—it has such a personality. And

the Studio Theatre has a fantastic intimate

feeling to it, which I really love. On their thrust

stages you get to be right up with [the audi-

cence]—you can see faces clear as a bell and

there’s something fun about that. And I did do

a production of Romeo and Juliet outside, in

a redwood glen, at Shakespeare Santa Cruz

[in California]. Performing Romeo and Juliet

actually under the stars—that was pretty

remarkable.

MM: Have you noticed major changes in

attitudes about theatrical settings and set

design over the years?

HT: History is cyclical. In the early days, you

often had only one set for the whole play.

Arguably, in the Elizabethan era, you didn’t

even have any sets. Then, of course, setting

the play got more elaborate. But then in the

modern era, there was also a certain fashion

for minimalist plays with no sets to speak of,

like Waiting for Godot.

Nowadays, it can be one extreme or the other.

Look at Stop Kiss by Diana Son. There were

26 scenes. Do you actually create sets for all

of those? When I was in it, they actually did

create separate sets in various spots on the

stage. Other productions of that play have

been more abstract.

MM: In a way, as an actor, you are ultimately

the set designer’s client. In that capacity,

what sage advice might you give to an

aspiring designer?

HT: Set designers, like architects, are dealing

with a building—they have to think about

engineering, practicality, and all within a

budget. So it’s architecture, it really is.

The design of the set affects everything.

Ultimately, the job of the designer is the

same as the job of the actor, the director, and
everybody else: remember to tell the story. •
Professor Franklin J. Hildy is director of graduate studies for the Department of Theatre at the University of Maryland and co-author, with Oscar Brockett, of *History of the Theatre*, the most widely used text in the field. He is a member of the architectural advisory committee for the Trustees of Shakespeare’s Globe in London and convener of the Working Group on Theatre Architecture for the International Federation for Theatre Research. He has published extensively on the historic theatres of Europe.

Lessons from the Study of

**Historic Theater Architecture**
Why is it that some theater spaces are able to bring out the very best from even the most pedestrian of productions, while others can suck the life out of the most spirited of performances? This is a question that has intrigued me since I was a graduate student, and while I cannot claim to have found the definitive answers, my research has led to some interesting concepts that might be worthy of consideration.

Given that I am a professional theater historian who occasionally works as a theater consultant, it should not be surprising that these concepts are based on historic research. For over 20 years I have been examining theater buildings, especially historic theater buildings, from Taiwan to Ireland and from Sweden to Malta. I’ve combed over Minoan “theatrical areas” on Crete, Greek theaters in Turkey, Roman theaters in Israel and Jordan, 16th-century theaters in Italy and Japan, 17th-century theaters in Spain and Germany, 18th-century theaters all over Europe, and 19th- and 20th-century theaters just about everywhere. My original concern in examining these buildings was to try to understand the nature of the much discussed “actor/audience relationship” these theaters created. But I quickly came to realize that this was only a small component of a more important question, “How does theater architecture construct audiences?” That is, what is the relationship the architecture allowed the audience to have with itself, or perhaps more precisely, how does the theater architecture influence the relationship that the various components of that social grouping we call “an audience” have with each other, as well as with the performers they have assembled to watch? Good theater spaces facilitate the successful interchange of energy between the actors and the audience, but they also facilitate the generation of energy within the audience itself. In my early work as a theater consultant, I gained a good deal of practical experience in understanding some of the dynamics of this interchange of energy. But I soon realized that to attempt any reasonable speculation about what made a successful theater, I needed to explore successful theaters of the past.
There are numerous lessons to be learned from the study of historic theater buildings. I like to refer to this work as “applied theater history” because of its implications for modern theater. Among those lessons that seem most relevant for this article are three maxims I have developed for architects who may be involved in the construction of theater spaces.

Maxim One: There is no place for dead space in the live theater. Wherever one looks in a historic theater auditorium there are signs of life or the potential for life. Within each audience member’s range of vision while watching a play, there are other audience members to look at. In places where no audience can be conveniently located there are fake boxes that suggest the possibility that other audience members could appear there. Even doors, like those found at the end of every aisle in Wagner’s famous Festspielhaus in Bayreuth, Germany, suggest the potential for life to arrive at any moment. In locations where the architecture does not allow for such features, there are statues, paintings, decorative motifs of plants, or some other signs of life, and this exists virtually everywhere that might catch a playgoer’s eye.

Following World War II, however, economics, combined with the proliferation of cinemas, inspired some theater practitioners to ask that the modernist aesthetic of neutral space be applied to theater architecture. This, it was argued, would put all the audience’s focus onto the stage. There were numerous very articulate justifications for this approach, but ultimately it worked against the social nature of live theater. Live theater’s social nature turns out to be one of its most essential characteristics.

Maxim Two: Black is not a color that should ever be found in the audience space of a theater. The same modernist aesthetic that called for the neutralizing of space in theaters eventually argued for a theater space that would be an “empty canvas” for the creation of theater art. But stage lighting had achieved such prominence that this empty canvas could not be white, as it is for the painterly arts, so black was selected.

By the late 1960s “black box theaters” were being championed as the ultimate creative space. But black is not a neutral color and this concept led not to increased creativity but to a very limiting “black box mode” of playwriting, directing, and acting. Theaters must have the ability to become psychologically “warm” or “cool” spaces depending on the drama being presented. You never see black in the original color scheme of a historic theater because black can never be a warm color. You should never see black in the spaces occupied by an audience today.

Maxim Three: The space occupied by an audience during performance is known as “the house” to theater people—there is a reason for that! Admittedly this is a less tangible lesson and one I have yet to fully understand. But there is something about successful theater spaces that makes each member of the audience feel like they belong there, no matter how opulent or Spartan the interior decoration scheme might be and no matter how physically comfortable or uncomfortable the audience seating might be. And this is true no matter what the size or shape this audience space might take, or what relationship to the performers it might establish.

How this feeling is conveyed to an audience is one of the greater mysteries of successful theater architecture. But labeling this space merely as the “auditorium” on an architectural plan may well prevent an architect from giving the proper amount of thought to that mystery.
As with all historic research, there are limitations to the kind of exploration I do into historic theaters. Historic theaters which have remained intact have too often done so because they were not successful and were quickly abandoned but for some reason were not taken down. Successful theater buildings were often destroyed by fire and rebuilt in a new form. Those that did not burn have been continually redecorated and modernized so that a great deal has to be done in order to re-envision them as they once were. And some of the most successful theater architecture no longer exists in even a single example. The open-air theaters built in London between 1567 and 1623, for example, were part of a remarkable golden age of English theater, yet not a single one of those unique structures survived the turbulent middle years of the 17th century. To study these theaters we have to reconstruct them, or perhaps a better term might be “recreate” them. This is what we did for the Shakespeare’s Globe Theatre in London in 1997, a project I have worked on since 1984 and am still working on 22 years later. (It is also what was done for Shakespeare’s Blackfriars Theatre in Staunton, Virginia, home of the American Shakespeare Center and what will soon be done for the replica of an 18th-century theater in Colonial Williamsburg.)

It is very rare to be able to study a historic theater “in performance,” that is, while a play is going on within it. On those occasions when performances are done in a historic theater building, however, it is remarkable how even a modern audience—one which cannot see with the same eyes as the audience for which the theater was originally built—still experiences the energy interchange that is such an essential characteristic of a successful theater building. Perhaps this is why so many theaters have been so painstakingly restored over the years and why there are so many attempts now to recover lost theaters, especially in the United States.

Dennis Kennedy, in Looking at Shakespeare, has pointed out that theatrical productions are “manufactured for a highly specific geographical and sociopolitical audience” and over time “they will lose their significant connection to the culture they invoke” and therefore must be reinterpreted. The same can be said of theater buildings, and indeed such observations are often used to underscore the futility of projects like the reconstruction of Shakespeare’s Globe in London. We cannot be Elizabethans, they argue, so how can we appreciate Shakespearean staging practices? But what are the parameters of those reinterpretations Kennedy says we must do? If the past has no relevance to the present we should be writing new plays, not reinterpreting old ones, we should be building new theaters,
When it came to the staging of Shakespeare, this antiquarianism arrived just in time. In spite of the numerous changes in fashion, modern dress retained the ornamentation, color, flow, and stateliness that, if it was not a perfect match for the splendor of Shakespeare’s language, could at least hold its own against it. But as the industrial age took hold, clothing, especially men’s clothing, became increasingly stark with hard edges, decreasing amounts of detail, and less and less color. Actors using modern dress in the 1780s could just manage to look as if they should be speaking the elevated language of Shakespeare; by 1830 they would have only managed to look foolish trying to do so had antiquarianism not come to the rescue in providing the spectacle of historic costume.

Almost as soon as the “antiquarian” approach to the staging of Shakespearian plays became popular, however, there were those who rebelled against it. Just as the Pre-Raphaelites in painting had set themselves in opposition to the materialist art of the Industrial Revolution, there were those in the theater who set themselves in opposition to pictorial illustration. Some opposed pictorial illustration because they could not afford it. Others opposed it because the logic of using authentic
versions of the texts suggested the use of authentic staging practices as well. For them the historic accuracy they wanted to see in performance needed to come from the period in which the play text was written, not the period in which the play’s story was set. While the Pre-Raphaelites idealized what they saw as the purer vision of Gothic and early Renaissance art, those who rebelled against pictorial illustration in theater saw this same purity in the performance styles that had existed in Europe prior to the advent of the proscenium arch stage. This movement, known as the Elizabethan Revival, brought with it period costumes that were once again in tune with the language of Shakespeare’s plays and the thrust stage, which was in tune with the kind of staging that had made Shakespeare’s plays so powerful in the theater. Later generations would retain the thrust stage, but once “modern dress” for Shakespeare’s plays was rediscovered in the 1920s, would lose the understanding that there is a relationship between the style of language and the style of dress in any given age in any given culture.

The Elizabethan revival and the recreation of Elizabethan theaters it inspired have preserved essential parts of our cultural history and allowed theater artists to influence the present by taking a careful look at the past. The quest to understand Elizabethan staging practices has helped us to tell compelling stories by moving their action always forward, has revealed the value of putting the actors in the same volume of space with the audience, has offered new insights into what I have identified as the difference between audience participation and the authorization for audiences to respond, and has made us rethink the nature of audience comfort in a theater space. (No one believed, when we were promoting the London Globe project, for example, that 500-700 people would pay to stand at every performance, but they do.) The new generation of recreated Elizabethan spaces will allow us to explore the relationship between language and costume and music in ways that have never been done before. And the search for original staging practices can instill a discipline that could well lead to an entirely new approach to theater in our “anything passes for art” culture.

All this should remind us, when we need such reminders, that theater is about more than text—it is also about actors and buildings and costumes and music and movement styles and a myriad of other details that make up its complete system of signs. And it has taught us that when we are dissatisfied with the status quo, we are not limited to our own resources to begin new approaches; we can look back at what others have learned about how theater can work and benefit from their experience even though we are not the same people as they were. The more detailed and thorough our examinations of the past are, the more of its complexity we can see and the more sophisticated the solutions they can inspire. I cannot agree with those critics who say that it is somehow harmful, misguided, or irrelevant to look at theater history. I suspect there are few things that can be more informative.
Frances Bronet is an educator and practicing designer who holds multiple degrees in architecture and engineering from McGill and Columbia universities. Currently dean of the School of Architecture & Allied Arts at the University of Oregon, she previously spent two decades on the faculty at Rensselaer Polytechnic Institute.

Bronet has a longstanding interest in dance, and has written extensively about the myriad intellectual and physical relationships between dance and architecture. She has been involved directly in the creation of a number of performance pieces exploring these connections. Recent works include *Beating a Path* and *Spillout!*, both developed with choreographer Ellen Sinopoli, of the Ellen Sinopoli Dance Company in Albany, New York.
Spaces are occupied—they gain meaning from being inhabited.

Martin Moeller: How did you become interested in the relationship between dance and architecture?

Frances Bronet: It probably has multiple layers. First, I was a dancer myself. I was always interested in dance, even though it wasn’t part of my professional curriculum as an architect. Secondly, I was looking for a way to get my students to understand that spaces are occupied—they gain meaning from being inhabited.

At RPI [Rensselaer Polytechnic Institute], one of my colleagues, Ken Warriner, developed the notion of “variable commitment”—the question being, could space actually be transformed by the way that people occupy it? Let’s say you build an apartment building, and for the first three years one apartment is occupied by a single person, who then marries and has children, and later the children become close to a neighboring family living upstairs. Are there ways that those apartment units could be transformed based on the way that these people lead their lives?

I started wondering if there were concrete and much more immediate ways to think about space and movement. We know that great basketball players are always anticipating what space will be open next. They are working in a context of space in movement—space defined by how the players create openings. By contrast, in most of the spaces we occupy, things are completely predictable—the road goes a certain way; this space leads directly to that space. Must that always be the case?

Through Ken Warriner, I was introduced to a philosopher at RPI, John Schumacher, who wrote the book called Human Posture: The Nature of Inquiry. Together we explored the difference between what we called “ready-made space” and “space in the making,” borrowing from Bruno Latour’s concept of ready-made science versus science in the making. The idea was that when the context of the science shifts, will the configuration of the experiment and outcome change as well? Similarly, context (in this case, inhabitants) has an opportunity to actually transform space.

MM: Can you elaborate on the connection between Latour and architectural space?

FB: Bruno Latour’s Science in Action was a seminal textbook. One example in the book turns on a 1787 mission to sail far away from home and bring back a record of one’s travels so that the next person will know what lies ahead. When the captain of this mission runs across a native person far from home, the crucial difference between their lives is that the latter simply lives at a place that the captain must find a way somehow to “bring back.” The native people can help him find his way, say, by drawing something in the sand, but they could not care less when the waves wash it away.

The captain, on the other hand, would no doubt have returned to his ship to draw it again.

Latour speaks of this as a process of “making” what will later become “ready-made.” The captain’s work begins a long process of various ships bringing things back home until they accumulate enough to act at a distance. The action at a distance is all the more tricky as it becomes ready-made: the making is forgotten, and the action at a distance is put in a black box. Right from the start of his book, Latour makes it clear that he is going in the back door of science, the door of science in the making, at a point when context and content are still unmistakably fused together.

This is what we wanted to explore—where context and content are one.

Now [in architecture] we generally make boundaries that are fixed. The pieces that I have developed with Ellen Sinopoli challenge the apparent inevitability of that. In Beating a Path, we were trying to make a space acted as a beaten path. For example, if you cross-country ski, you as one person will not make much difference in the landscape, but if a thousand people do it, then you have beaten a path.

MM: How did you conceive and build the physical armatures for Beating a Path?

FB: Both pieces evolved from the nature of the movement of dancers. In Beating a Path, we lined up a space (a storefront in


above: Shadows cast by the dancers and the structure in a performance of Spillout!. Photo by Gary Gold.
downtown Troy, New York), and had no idea what we were going to do, except I had decided that we would attempt designing without drawings and at full scale right from the start—how the Greeks laid out their temples. To begin, we found a piece of cardboard and a pipe lying on the street. The dancers rolled on cardboard over the pipe, then they moved up to plywood, and eventually that became a trapezoidal platform, made of glass, lit by hundreds of mini-Christmas lights to look like a uniform surface of light. So [the design] evolved out of experimentation.

The choreographer wanted the dancers to use every surface, including the ceiling. There was also a column in the space where we attached one-by-twos as a makeshift ladder for them to use. The dancers had trouble climbing this painful and awkward set of rungs. By the time we manufactured a beautiful, maneuverable ladder, they had already learned how to use the impromptu device made out of one-by-twos to climb the column. What seems incredibly obvious now: it turned out that their bodies were able to adapt in minutes to what would take us weeks to produce. It became clear why we make ready-made space. It is harder, more time-consuming to manufacture built space than just to move your body. How can we work these simultaneously?

One of our other ideas was to completely erase the boundaries between dance and architecture, so that the human bodies and the architectural bodies all moved. We had a rolling platform, so when the dancers would run one way, the floor would move the opposite way. The audience stood right around them, and I hoped that the audience would move as the dancers approached them. The irony is that, on the opening night, the audience closest to the performance area didn’t move, they were so intent on watching the human bodies, and the moving floors hit them! It was a lesson for me. We really have given up haptic experience in our daily lives—everything is prescribed, at least in the U.S., so that a fully mobile environment can easily throw us off. I wonder if this is the same in places like Beijing where an amazing dance-like chaos seems to reign in roads and other public spaces.

MM: What role did light play in these pieces?

FB: In Spillout!, we anticipated how shadows would be cast on the existing buildings, and the silhouettes do create a completely other world. In fact, you can spend the entire hour of the performance watching the two-dimensional projections on the walls, which include the vibrating lines of the elastic and the hovering multi-scaled figures. Ellen Sinopoli wanted at one point to have the dancers fly out from the structure. By this time, the set was almost fully conceived and constructed,
and we decided that the fly-out could happen only through shadows. Until the last couple of weeks, we had not rehearsed the piece at night. When the lights went off, the dancers really had to know the relationship between the space and their bodies in order not to hurt themselves. And the wall itself appears solid when lit primarily from without; one wall fully dissolves when it is lit from within, and the entire structure almost totally dissolves when lit from above.

**MM:** During these collaborative projects, did the architecture side and the dance side generally see eye to eye?

**FB:** One of collaborative dilemmas was that I loved the wall appearing impenetrable, as a sheet of blue lines, but that stopped us from seeing the total movement of the dancers. Dance trumped. In modern dance, it is possible for many people to collaborate, and deliberately keep their disciplines separate, and whatever emerges, emerges and the audience makes sense of it. In our pieces, I don’t think the choreographer and I had exactly the same views all the time. In my case, I was really trying to explore the idea of how there can be reciprocal between space and dance. I was not interested in symbols. But I think the dancers began to see themselves metaphorically, for example, one dancer started to see herself as a different animal for each piece.

Then there was the music. William Harper, the composer for *Spillout!,* knew that [the choreographer and I] were both working within a modern paradigm, and he decided to go postmodern. His work is really heavily derivative from contemporary culture; it is not what I would have conceived, but he decided he wanted to push against the minimalism of the piece. Ralph Pascucci, on video, saw the wall as a screen. David Yergan used his lighting to magnify the dancers. One of the most difficult parts of this collaboration for me was the distance. The project of space-in-the-making is one which may require day-to-day intervention and iteration; my being on the west coast and communicating electronically with the team in Troy changed the nature of the process and hence the outcome.

**MM:** How have you incorporated these ideas into your teaching?

**FB:** When I started to do this with my students, it was a very intense way in a short period of time to get them to understand full-scale construction, the relation of body and space, other cultural and situational players, etc.

As an experiment [for one design studio], the assignment was to create “space in the making.” They worked specifically with people in movement, such as action artists and performers, and tried to study them and see how they occupy space. The goal was to try to come up with a kind of space that allows the performers the greatest possible freedom to do what they do—to develop a true “reciprocal space” that was structured.

The question became, if the students designed something starting with a particular dance company, and then a different dance company came to use it, would [the new company] use it in the same way? For this project, the most successful project would be something that was not only stunning visually, but also experientially very powerful and flexible, not suggesting a singular or even predictable use.

One group’s project, for example, made a spectacular image, but three different companies came in and they used the set almost identically. In this case, the project was therefore a failure in that the students had created a “ready-made space” rather than a “space in the making.”

There was another project that was perhaps a little bit clumsier from a formal standpoint, but it challenged the way everyone used space. The dancers, in fact, vanished in the rooms created in the space, and they discovered that they had to use their voices in order to discover each other.

Of course, I’m not saying that this is the way to design everything. This was an experiment setting up challenges to traditional, hierarchical space. It was a first year design studio, so it was an early opportunity for students to design at full scale and work with people who actually would be experiencing the spaces they created. How do we provide options for occupation without giving up formal and spatial visual quality?

**MM:** How did your students react after participating in your dance-oriented design studios?

**FB:** I have heard from some students who said that these exercises helped them understand space. I have many students who worked with me in these design studios who came back to work with me on the commissioned dance projects. A number saw how disciplines colliding opened up possibilities. Having done the studios about once every five years, I still think it is a great way to open up architecture—to get students to think about the social and the physical simultaneously.
Fall Festival Fun!

by Ellen Jacknain

This year’s Festival of the Building Arts went “green” as visitors focused on sustainable design and building to complement The Green House exhibition. Over 4,000 children and adults spent the day at the Museum on Saturday, October 7, participating in 26 different building projects. Throughout the day professionals demonstrated their skills, talked with visitors, and offered opportunities to explore their trades. Wielding hammers, laying bricks, thatching a roof, and plastering a wall were among the activities offered at this year’s family festival. The Home Depot provided an array of kids’ do-it-yourself projects, including bird houses and CD racks, to be constructed at the festival and taken home.

With the green theme in mind, visitors received a Go Green Passport that encouraged them to visit The Green House exhibition and participate in eight different green activities, including building model green roofs and designing green houses. After learning about the benefits of building with bamboo from the American Society of Interior Designers and about green roofs from Capitol Greenroofs, LLC, visitors received a bamboo shoot and plant cuttings to take home. Further encouragement came in the form of a green gift from the Museum—a magnet with five tips on ways to go green at home.

The 2006 Festival of the Building Arts was presented by the Associated General Contractors of America. The National Building Museum thanks all organizations, as well as the many individual and company exhibitors, for participating in this successful festival. Through this signature event, the Museum aims to introduce visitors of all ages to the building trades and building arts by offering demonstrations of crafts and building skills, many of which include hands-on components; special children’s activities; and displays of construction machinery.

above: The finished cast glass panel by Martin Møller, as installed in the house of Karl and Carrol Benner Kindel. 
Photo courtesy of Karl and Carrol Benner Kindel.

right: Learning about woodcarving at the Festival. 
Photo by F.T. Eyre.
Reception and Dinner Honor Outgoing and Incoming Chairs

by Elika Hemphill

On October 18th, the Museum hosted nearly 100 close friends for a special reception and dinner in the Great Hall. The event toasted outgoing Board of Trustees chair Carolyn Schwenker Brody, and served as the inaugural event for incoming chair Michael J. Glosserman. Many guests had ties to the institution dating back more than three decades, including former board chairs Kent Colton, Robert McLean, and Herbert Franklin (who is also a founding trustee), as well as founding trustees Dr. Cynthia Field and Beverly Willis.

During the reception, guests were treated to a display of an impressive assortment of items from the Museum’s collection. The objects included busts and molds dating to the renovation of the Pension Building, a newly acquired column capital from the Renwick Gallery (see “Collections Corner” in this issue), and a leather-bound photographic album documenting the construction of Cincinnati’s Union Terminal Station in the 1930s.

Executive director Chase Rynd thanked the past board chairs for the strong foundation they laid for the Museum, welcomed incoming chair Michael Glosserman, and then directed the spotlight toward Carolyn Brody. Rynd remarked on Brody’s successful tenure as chair, calling her “a wonderful spokesperson for the Museum, but also a steady and thoughtful leader, and a good friend,” under whose watch many significant accomplishments occurred, including three Honor Award galas that raised in excess of $1 million each in support of Museum operations.

Following dinner, Michael Glosserman spoke of the Museum’s future, highlighting a number of exciting projects that are already under way, including a major education initiative that will bring some of the Museum’s well regarded curriculum-based programs to new audiences across the country. The incoming chair’s forward-looking remarks served as a fitting conclusion to an elegant evening.*

Hardouin Joins Museum Board

The Museum is pleased to welcome as a new trustee Philippe Hardouin, senior vice president, group communications at the Lafarge Group. Hardouin has nearly three decades of professional experience in communications, branding, public affairs, and publishing. He joined the Lafarge Group in 2001 after holding executive positions at companies including Vivendi Universal, AlliedSignal, Digital Equipment Corporation, Alcatel-Alsthom, and others. Previously, in the 1980s, he founded his own publishing company, L’Equinoxe. He holds a master’s degree in economics from the University of Grenoble, France.

Philippe Hardouin

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The Museum thanks the following individuals, companies, associations and agencies for gifts of $250 or more received from August 1–October 31, 2006. These generous gifts provide essential support for the Museum’s exhibitions, education programs, and endowment funds. Some of the contributions listed below are in partial fulfillment of larger pledges.

- **$50,000 and above**
  - EPA/Energy Star
  - $25,000-$49,999
    - American Society of Civil Engineers
      - Carolyn and Kenneth D. Brody
    - Colonial Parking
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    - Criterium Engineers
    - Cynthia R. and Charles G. Field
    - FXFOWLE Architects
    - Marilyn and Michael Glosserman
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    - The Home Depot Foundation
    - International Union of Bricklayers and Allied Craftworkers
    - S. Kann Sons Company
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      - Jacqueline and Marc Leland
      - Lily and Bob McLean
      - The Honorable Henry Meigs II
      - The National Trust for Historic Preservation
      - Osthme, van Sweden & Associates
      - Kay and Robert Oshel
      - Parsons Brinckerhoff
      - Representative of the Electrical Construction Industry
      - Rippeteau Architects, P.C.

**Corinthian Corn Capital Added to Collection**

The National Building Museum’s latest addition to the permanent collection, a uniquely American interpretation of a Corinthian capital from the façade of the Renwick Gallery of the Smithsonian American Art Museum, marks a number of firsts. Not only is the work the first carved stone artifact in the Museum’s collection, but it is also the first classical column capital. Most significantly, the capital is from a designated National Historic Landmark, a priority category in terms of the Museum’s collecting criteria.

Cornhusks and tobacco leaves adorn the capital, which was designed by James Renwick, Jr. (1818-95) for the original home of the Corcoran Art Gallery (1859-61). Renwick was no doubt referencing the corncob-based decorative order that Benjamin Henry Latrobe had designed for the U.S. Capitol. Already well known as the architect of Washington’s Smithsonian “Castle” (1847-55) and New York’s recently begun St. Patrick’s Cathedral (1853-79), Renwick was commissioned by his long-time friend, William Wilson Corcoran, to design an art gallery for Corcoran’s private collection of paintings and sculpture.

Inspired by additions to the Louvre in Paris, the building was designed in the Second Empire style, and is considered one of the finest examples of the style in the United States. During the building’s restoration (1965-72) one of the original capitals was salvaged by a determined local artist, Merry Slocum Bean, who acquired the piece from the foreman in charge of disposing of the sandstone elements. Because of their deteriorating condition, the original stone capitals were replaced with molded replicas.

**Corinthian Corn Capital from the Corcoran Art Gallery, now the Renwick Gallery, Washington, D.C., 1861 Brownstone (brown sandstone). Gift in memory of Merry Slocum Bean.**
Mystery Solved!

The last Mystery Building was a tough one, given the unusual viewpoint in the photograph, but there were several important clues in the text: key terms such as "curve" and "useful signals" were intended to make you think of radio telescopes, while the mention of "tropical sun" was a hint as to the specific location of this structure. The pictured structure was, in fact, the radio antenna at the Arecibo Observatory, near Arecibo, Puerto Rico. The photo was taken from beneath the main surface of the antenna, which is actually suspended by cables from three concrete masts.

A popular tourist attraction, Arecibo served as a setting for scenes in the James Bond movie GoldenEye. The antenna itself is a spherical dish some 1,000 feet in diameter, making it the largest such radio telescope in the world. Its surface is composed of almost 40,000 perforated aluminum panels (which allow filtered sunlight to pass through, as seen in the photograph). The antenna is used to analyze Earth’s atmosphere, other planets, and other astronomical bodies.

The Arecibo Observatory was correctly identified by four readers who picked up on our clues as efficiently as well, a 1,000-foot dish antenna: Joe Jackson and Brent Kruse, both of Washington, D.C.; Lawrence Levine, of New Castle, DE; and Jeffrey L. Meck, of New Holland, PA.
William Shakespeare is arguably the single most influential figure in English literary history. To this day, nearly 400 years after his death, quotations from Shakespeare’s plays pervade our language, and his plotlines are routinely adapted for movies, novels, and new plays. Nonetheless, contemporary directors, actors, and technicians often have difficulty presenting Shakespeare’s work in ways that will engage modern audiences. Clearly, the design of the theater itself is an important part of the experience. With this in mind, the National Building Museum has organized the exhibition Reinventing the Globe: A Shakespearean Theater for the 21st Century, which involved commissioning five talented architects and designers to develop hypothetical settings for the presentation of Shakespearean plays. The results are highly inventive, thought-provoking, and often quite surprising.

The Museum’s exhibition is part of the city-wide Shakespeare in Washington festival, organized by the John F. Kennedy Center for the Performing Arts and the Shakespeare Theatre Company.