Published by the Boston Society of Architects
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July/August 2007, Vol. 10 No. 4, “night”

“Illuminating Ideas”

Pages 16-23
ILLUMINATING IDEAS

LIGHTING AND THE NOCTURNAL LIFE OF BUILDINGS
DIETRICH NEUMANN TALKS WITH SUSANNE SCHINDLER

Dietrich Neumann is a professor of architectural history at Brown University and currently Vincent Scully Visiting Professor at Yale. He is the author of Architecture of the Night (Prestel, 2002) and editor of Luminous Buildings (Hatje Cantz Publishers, 2006), the catalogue accompanying the exhibition Luminous Buildings, which opened at the Kunstmuseum Stuttgart in 2006 and traveled to Netherlands Architecture Institute in Rotterdam in early 2007. He was also editor and co-author of Film Architecture: Set Design from Metropolis to Blade Runner (Prestel, 1996). He was previously interviewed in the “Theater” issue of ArchitectureBoston (Winter 2001).

Susanne Schindler is a designer at Utile, Inc. in Boston. She previously practiced in New York City, Zurich, and Berlin, where she was an editor of archplus. She writes frequently for architectural publications and is currently working on a book, Growing Urban Habitats, with Bill Morrish and Katie Swenson.

Susanne Schindler: You have written extensively in recent years about the architecture of the night — the confluence of building, lighting, urbanity, and culture — and recently curated an exhibition on the subject that was on view in Stuttgart and Rotterdam. Your focus is architecture, but it’s also the historical development of lighting as a form in architecture. Designers first started to think of lighting in those terms in the 1920s. What makes it still interesting to you?

Dietrich Neumann: We’re now in a very exciting phase in this long history. A shift has occurred over the last few years as a result of new technological developments and technicians, lighting designers, and architects have rediscovered the possibilities that electric light offers. It’s much easier now to provide colored lights, to change colors in light, and to plan for artificial light as an architectural element. Now, when we see plans for new building projects, we are regularly given nocturnal perspectives showing what the building will look like after dark. That is a fairly new development: while light has been discussed as a great opportunity, it had not previously reached the architectural mainstream as much as it has today.

Susanne Schindler: What do you think is driving that motivation to think of light as a central element in design?

Dietrich Neumann: Even long before the development of the electric light, light always had the power to attract people at night. Now it has been rediscovered as an essential element in making cities more interesting, more lively, more photogenic. It has been used, especially in the United States, to enhance the visual attraction of cities and draw people back into urban centers. That’s part of a very healthy trend, because attractive urban centers will help to rein in urban sprawl and all the economic and environmental problems that go with it.

Susanne Schindler: With this rediscovery, do you see any changes in the way cities are thinking about lighting?

Dietrich Neumann: Many cities in Europe and the United States have developed lighting plans to coordinate the way the city looks at night, by setting aside funds to illuminate public buildings, encouraging business owners to light their buildings, and getting architects and lighting designers to collaborate in considering the skyline as a cohesive luminous image. Municipal leaders have realized that light has become an important factor in bringing life back into the cities.

Susanne Schindler: So the increased consideration of the city’s nocturnal appearance is frequently rooted in economic development.
Below: Shinjuku, Tokyo.

Became technically feasible. Interestingly, the concept of such devices was discussed long before they were even imaginable, just a few years ago. Now, we are seeing lighting applications that were not feasible, or even imaginable, just a few years ago.

— DIETRICH NEUMANN

Susanne Schindler: Can you give an example?

Dietrich Neumann: Peter Marino did a wonderful store for Chanel in Tokyo’s Ginza district, where the façade, or rather the “anti-façade,” is a gigantic media screen. They commission artists to produce films that run during the night. During the day, however, this media screen is translucent, so the offices behind it get daylight. One can also look at the Lehman Brothers building just up from Times Square, which integrates the media screens into the façades, on the spandrels between the horizontal windows, so that they are perceived as part of one unified image. There are many other possibilities, and that’s where interesting options for architecture lie.

One could argue that these kinds of devices are fulfilling the 1920s’ vision of Modern architecture, that eventually it would be entirely dissolved into light and air. This ephemeral quality of modernity that Baudelaire had already famously referred to is something that seems close at hand in these examples.

Susanne Schindler: Many of the current applications of lighting, media façades and images seem to contrast with what Modern architecture stood for, which included an honest display of structure and material, and an honest expression of function. Accordingly, old debates in architecture have been reactivated — about the use of color, for instance. For years, Modern architecture was perceived and created in black and white, which was largely due to the nature of photography. Now, color is back. One example is Jean Nouvel’s Agbar tower in Barcelona, for which the lighting artist Yann Kersalé designed a colored LED system that reinforces Nouvel’s colored aluminum

Dietrich Neumann: That is an astonishingly old question that is still right at the heart of the matter. The integration of advertising and architecture and the problems it poses have been talked about since at least the 1920s, if not before. There were heated debates at that time about the scaffolding that held those big advertising images in Times Square, which was, during the day, a rather unsightly addition to the buildings. Today, especially in Times Square, we have many cases where the media screens were attached to a façade after the fact and therefore obscure the building, as well as darken the rooms behind them. The great task for architecture now is to come up with an interesting integration of architecture and advertising, especially in the form of these media screens. Sometimes that happens in very intelligent ways.

Susanne Schindler: What effect does that have on new buildings? A media screen can be free-standing or applied to a building — which perhaps renders the building behind it less important. How do these technologies then allow designers to generate new architecture?

Dietrich Neumann: Yes, that is correct. But Times Square is actually not such a great example of the potential of these devices, simply because there are so many media screens there. In Times Square, advertising billboards and screens became mandatory as part of the campaign to revive the area in the early 1990s. Now it has so many media screens and moving images that their messages are probably not very effective any more. It’s just a moving, colorful environment without any specificity.

But I’ve seen a square in Tokyo with only one big media screen, where people stood and watched the short films that ran on it. Media screens are now so bright that they work during the day, so the architecture of the night that originally fascinated me is actually morphing into something else — an ephemeral, moving, media-generated architecture of the day.

Susanne Schindler: Times Square comes to mind as one example of such a public space — it must be one of the largest installations of media screens in the world.

Dietrich Neumann: Yes. But it’s also a strategy that has been enabled by technological developments that make spectacular lighting much more affordable. The new lighting devices are cheaper to purchase and cheaper to run — LED lights in particular are now much more affordable and use much less energy than the old neon and flood lights. And of course LEDs are now so sophisticated that you can program them to change colors and show moving images. We are seeing applications that were not feasible, or even imaginable, just a few years ago. Examples include the new gigantic media screens. In a way, these screens play the role of cinema in an outdoor environment, drawing people into public spaces and engaging them in a shared experience. Interestingly, the concept of such devices was discussed long before they became technically feasible.

panels. On the other hand, in your writings, you point to the fact that in the 1920s, light was used to soften, or perhaps make more palatable, the harshness of Modern architecture. It returned elements of surprise, of magic and playfulness to it.

**Dietrich Neumann:** Yes. Nocturnal illumination was sometimes seen as a corrective to the stern radicalism of Modern architecture. And you are right about color in Modern buildings, although there were of course some uses of it at the Bauhaus and in the work of LeCorbusier. Interestingly, European architects and lighting designers at the time considered the use of color in the illumination of buildings in the United States to be rather kitschy. Buildings in Berlin, for example, might have white or beige light, but not the rainbow range that American designers favored. When Europeans visited the US, they were often completely perplexed by the use of colored terra cotta or colorful floodlighting on the top of skyscrapers in New York and Chicago. One of them, the German modernist Wassilij Luckhardt, went as far as criticizing this approach as too feminine, as too concerned with superficial beauty and thus emasculating the skyscraper.

**Susanne Schindler:** What’s your sense of the key differences between European, Asian, and American approaches today? In contrast, if you look at new developments

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in, let’s say, Shanghai or Beijing, you find a sort of visual and luminous exuberance that goes beyond anything that you might have seen in the United States. But as far as I can tell, the most sophisticated new approaches to lighting are happening in Europe at the moment. Despite excellent firms in the United States, such as Schuler Shook in Chicago, Howard Brandston and OVI in New York, Color Kinetics in Boston, and many others, I think European designers are more often progressive in their attempt to integrate light and architecture and move toward a new, more ephemeral, more successful Modern architecture. And that seems to occur at very early stages in design in collaborations between the lighting designer and the architect.

**Susanne Schindler:** What do you think is guiding that trend?

**Dietrich Neumann:** It’s several strands that come together. One is certainly fashion, the wave of the moment. We’ve seen several of these waves come and go, in the ’20s, ’50s, and ’60s. Then there was a big break because of the energy crisis in 1973, when all the lights were literally extinguished. The Postmodern movement in the ’80s revitalized interest in lighting as part of the nostalgia for the ’20s and ’30s. Now we have a general interest in urban environments that coincides with the rediscovery of these tools, together with the broad availability and much greater affordability of new lighting technologies. And the possibility of putting a building on the map — or into the skyline at night — through the use of lighting is of course very seductive. Lighting can make up for a design that isn’t particularly remarkable during the day — after dark,
the building can suddenly stand out in time and in place, and for very little money. All these trends are coming together to create this surge of creativity.

**Susanne Schindler:** Of course, there are several reasons not to encourage more lighting. The energy crisis of the ‘70s could very well happen again. I recently found a grim, if rather imprecise, statistic: between 100 million and one billion birds a year die from flying into buildings, many of them hitting illuminated buildings at night. Some cities are trying to mandate switch-off times to reduce those numbers.

**Dietrich Neumann:** You are absolutely right. The likelihood of another energy crisis coming soon is rather substantial. One thing to remember is that the new lighting uses much less energy than older technologies. Nocturnal illumination is actually only a small part of the total energy consumption of our buildings. Of course it is extremely important that architects consider what happens aesthetically to a building when those integrated media screens are turned off one day.

The problem with migratory birds is something that has not been successfully solved; I wonder if there is something one can do in terms of switching lights on and off at certain times and regulating it very clearly. Another legitimate concern is the growing inability to see the nocturnal sky, which has been a particular concern to astronomers and growing numbers of citizens. An organization called the Dark Sky Association is leading an effort to decrease urban lighting to make it possible to see the night sky again. Here, too, the new technologies make it much easier to contain light very precisely to a façade or a sidewalk and not have it spill out into the night sky. But these kinds of concerns often lead to interesting new ideas and solutions, so it’s good to face them head on.

I’m very excited about Renzo Piano’s New York Times tower, which is almost complete. The façade was designed in collaboration with the lighting designer Enrique Peiniger and his firm OVI in New York. The façade has a screen of terra-cotta tubes in front of it, which will be illum-
deterred from hitting the glass. It’s an example of a very interesting architecture, a new form of luminous architecture, that addresses a number of these problems in an intelligent way.

Susanne Schindler: Will your work continue to explore the relationship between light and building?

Dietrich Neumann: Yes. I’m interested, for example, in individual lighting designers, such as Richard Kelly, who designed the lighting for the Seagram building and worked with Philip Johnson, Louis Kahn, and Richard Neutra. But I’m also interested in the integration of advertising and architecture and want to pursue that further. The new “urban screens” are a development worth watching, because they have enormous potential influence on the way we understand architecture, structure, and iconography. I wonder, for example, what the implications are for an architectural medium in which the language that is spoken and the images that are shown can change so quickly and can be programmed by those who rent the space and pay for minutes on screen. We’re seeing a growing interest in these urban screens, with some proposals to require that a certain percentage of time be devoted to uses other than advertising, such as artists’ projects — similar to the percent-for-art that we often require in public projects. I find that exciting — imagine exhibitions of photography or short video clips on these big screens, bringing art and life to urban spaces.

Susanne Schindler: There’s also the possibility for interaction by the public with the lighting of a building: in the project “Blinkenlights” by Chaos Computer Club in Berlin, people could use their cell-phones to play Tetris and other games on the gridded facade of a 1950s building slated for major renovations [www.blinkenlights.de]. But then questions come up regarding the programming of the lighting. An interesting example is the Kunsthau, the art museum in Graz, Austria, by Peter Cook and Colin Fournier, which has a long, double-curved, acrylic...
glass façade with a digital light installation — BIX, designed by Realities:United. Some museum people thought the display skin should be used to announce museum exhibits — they wanted to make it a big banner. Others, including the designers, insisted that it was for art, for more abstract applications and, so far, they have won out.

**Dietrich Neumann:** Obviously many of these developments in lighting are initially driven by commerce, but if we manage to get artists involved, then something fruitful can result. I’m a great fan of the work of Jan and Tim Edler, the founders of Realities: United, the Berlin firm you just mentioned. At the Kunsthuis in Graz, they decided to work with a simple media façade with very rough, large “pixels,” so to speak, incorporating only black-and-white imagery, almost reminiscent of early silent film. It was a conscious decision to create something that didn’t have the light, speed, and precision of the new media screens. Their installation makes you aware of the potential of this medium and the need to step back far enough to see the larger context, to think about values of brightness and the nature of imagery. It’s very thoughtful work.

**Susanne Schindler:** It’s unique because it’s so low-tech. Realities:United used standard fluorescent, round-tube lights — each one being one pixel. The project raises another basic question: who is driving what? At Graz, Realities:United came in late in the design process — but I would say that their light installation gave the building depth and made it whole. But how can designers use the technologies that are out there to generate new building form, not just to react to a form already created? Generally speaking, media screens are big, flat two-dimensional planes. BIX points to other options.

**Dietrich Neumann:** But dissemination of these ideas will lead to new architectural forms and experiences. Of course, it’s technically possible to apply those tiny LED light bulbs to any surface or form and do whatever you like with them. At the Cultural and Sports Center, designed by Burckhardt + Partner for the Beijing Olympics, all four sides will consist entirely of gigantic media screens, so people can just stay outside and watch what is happening inside. I think that’s where the greatest potential for new architectural development lies at the moment.

**Susanne Schindler:** Even greater than structural techniques or digital devices in architecture?

**Dietrich Neumann:** That is a question of interpretation. Frank Gehry’s Disney Hall in Los Angeles and his proposed Vuitton Museum in Paris, for example, are very exciting and are possible only because of computer-based design and construction methods. Despite their innovative forms, those buildings represent the evolution of traditional architecture. But the new lighting technologies, the growing application and development of media screens, and the opportunity to meld images and messages with the built form suggest that we may be on the brink of an entirely new architecture.