

# Exploring lighting cultures Light & Emotions



Conversations with Lighting Designers

**PHILIPS**

# Francesca Bettridge & Stephen Bernstein

*“Layering light for a theatrical, enriching experience”*

“My background is in history of art,” explains New York’s Francesca Bettridge. “And then I went on to study design and architecture. I was lucky enough to meet Carroll Cline, one of the pioneers of lighting design, on a design jury and he asked me to come and work for him. In 1985 we formed Cline Bettridge Bernstein Lighting Design. I find it exciting working with different architects who have very different styles and types of building projects. We’ve never specialised: if you’re a good designer you can take what you do into a high-end residence, a performing arts centre or anything.”



Francesca Bettridge &  
Stephen Bernstein  
New York, United States of America

Education  
Francesca Bettridge Art History,  
Interior Design  
Stephen Bernstein Marketing,  
Accounting, Lighting Design

Design experience  
Francesca Bettridge 32 years  
Stephen Bernstein 28 years

Lighting association  
IALD, IESNA, DLF

Field of work  
Interior, exterior, master planning

Projects discussed  
7 World Trade Centre, New York,  
USA (2007).  
Estuarine Habitats Research Center,  
La Fayette, USA (1999).  
New Orleans Museum of Art  
Sculpture Garden, New Orleans,  
USA (2006)

Date of interview  
April 16, 2008

Keywords  
Brightness, colour, layers, interactivity

Agency  
Cline Bettridge Bernstein  
Lighting Design



7 World Trade Center, New York, USA

### How does architectural lighting influence moods and emotions?

Francesca: "For me, it's all about the colour of light, and I'm not talking about red, blue or green. We're very sensitive to the balance of light... if I go into a space that is completely evenly lit, it immediately affects how I feel. Light can have a very positive influence, it's not just an emotional reaction, it's also about how people look in the space. That then evokes the emotion. It may seem a bit superficial, but whatever space you're working on, what it often comes down to is the way the lighting makes people look in that space.

"When it comes to colour changing, there are certain colours that people react to strongly and like. So, if you put blue into a scene you'll find it changes people's perception. Even a 3000 K lamp will be much, much warmer. There are many architects or designers who, when they realise it is possible to change the colour of the light, immediately want to go into the blue range. This is the real danger of LEDs: it's like giving Dracula the keys to the blood bank! I suppose it's all a matter of taste.

"For a long time our approach has been to use layers of light. You really need to have light coming from different places. A lot of the tools we have for adding layers of light, for example

in offices, are being taken away from us now because the codes and conservation initiative programmes are limiting our watts and our design solutions. The idea of bouncing light off walls is fast becoming a luxury. Now we're really simplifying design rather than building up layers, which would enrich our design."

### Stephen, what are your thoughts on this?

"You know, without realising it, we always come back to Kelly's Three Principles of Light – ambient luminescence, focal glow and play of brilliance. You have to manipulate these three things and find the correct balance for each project. It's very much about layering. We really use these three concepts or attitudes of light to compose."

### What emotions or moods do you want your lighting design to evoke in the end-user?

"I don't think of it specifically as an emotional thing because we focus on the architecture and the people within that architecture. It's more something that supports the function of the space. I suppose it depends on what kind of space it is. If it's an office, I always try to make it as comfortable as possible. Francesca does a



New Orleans Museum of Art Sculpture Garden, New Orleans, USA

lot of theatre projects. That's almost like creating a living room on an enormous scale. These places are complete celebrations and very joyous. I don't think the emotion is something we consciously think about, and yet, I guess it's always a part of our solution."

### What mood or atmosphere do you want people to experience when they see your projects?

Francesca: "Seven World Trade Center, for example, was a wonderful project, the first building to be put up at Ground Zero. The architect and James Carpenter wanted the complete block to have the same shimmering effect at night that it has during the day. We used a combination of white and blue LEDs in a custom fixture for the lighting around the podium. The lobby was like the heart of the building. We lit it with white light during the day, changing to mauve at dusk. And then as night falls, the exterior is activated and the blue light inside goes on, first a light blue and then a deeper blue. The other sources around it turn to a saturated gold."

*You don't feel as if you're in a blue box, but in a very magical sort of space.*

So the serious daytime office lobby is transformed into a night-time New York experience."

### Why not just leave it as an office lobby?

"The building had to be something special, perhaps because it was the first to be built on the site of the World Trade Center, it had to have soul."

Stephen: "It's both serene and exciting at the same time – very unusual. I don't know whether that's from the saturation with blue, but it's very much a singular space where you feel those two seemingly contradictory emotions."

Francesca: "It's also reactive. When someone walks by, a blue band follows them down the street, as if the building is acknowledging their presence. If there are lots of people the effect is almost like a musical composition."

"We also did the Estuarine Habitats Research Center in Lafayette, which has a wetlands area outside. The architecture is distinguished simply by using the colour of the light source. Blue dock lights create a sparkle. The lighting seems to enhance nature and at the same time draws you into the warm lobby. It also defines the other



New Orleans Museum of Art Sculpture Garden, New Orleans, USA

parts of the building, with the warmth making this space feel more welcoming. The light reflects off the wood and brings out the natural materials, picking up on the warmth of the wood and enhancing the blue of the water. It's very simple, but it works well.

*The light creates a mood and directs people to where they need to go.*

It tells them architecturally that there are different parts to this building experience."

Stephen: "The blue is a bit theatrical, but it is architecturally sound and really makes the connection between the land, animals, water and what the lab is really about... it's a wetlands laboratory. It was just a little trick to underscore that connection."

#### **Can you tell us about another project?**

"We did the New Orleans Museum of Art Sculpture Garden. At night, it really becomes this kind of magical journey.

*There are glowing lantern structures as gateway elements, like landmarks guiding you around the garden.*



New Orleans Museum of Art Sculpture Garden, New Orleans, USA

The glow of the lanterns is welcoming and inviting. In an exterior project it is critical that the foreground, middle ground and background are well defined so you can understand the space better and feel comfortable there – if the background isn't lit it just kind of falls off and is rather foreboding. Here we tried to do two things: lead you through the park and show you the sculptures at night in a theatrical or dramatic way. We chose which sculptures to highlight in order to apply this notion of background and foreground so you get an 'a-ha' moment each time you turn a corner."

#### **What does that do to the atmosphere?**

"It makes it absolutely magical. You just don't know where the light is coming from. It's a matter of having enough ambient light so you can see the person coming towards you, but the contrast on the art work means that this is really what you are looking at. Here again, there's a lot of layering."

#### **Where do you find your inspiration?**

"Carroll Cline taught me to treat every project as something new. There are so many new

sources and aesthetics. Each project is different, each has its own special need and it's our responsibility to fulfil that need."

Francesca echoes this sentiment: "And not only did Carroll start by looking at everything new, with a fresh insight, he also quickly started calculating how much light we needed, bringing in the practical element of 'How are we going to achieve this, in a way that is different and innovative?' I find that truly inspiring."