MAGIC MAN

Charles G. Stone II, President of New York City lighting design practice Fisher Marantz Stone, discusses his principles, predictions and how he makes dreams come true for clients.





Above left 'Empty Sky', New Jersey September 11th Memorial, Jersey City, New Jersey (Frederic Schwartz Architects, September 10th, 2011). Above right Georgia Aquarium, Atlanta, Georgia (PGAV Destinations, November 2005)

Charles G. Stone II, President of Fisher Marantz Stone, has been involved in lighting design, one way or another, for three years shy of half a century now. Surprised? He doesn't seem old enough, does he? "I was about eleven years old and I wanted to be a rock & roll singer. But that didn't work out," he recalls. "I was playing with lights both in school and at the local community theatre in Harrisburg, Pennsylvania. I was guite sure I wanted to be a lighting designer before I knew there was such a profession. I then worked in theatre through all my high school and university days. I got excited by using light and what it could do to excite others." After graduating from Princeton University with a BA in English and a Certificate in 'Lighting Design for Theater and Dance' (a program he invented with his academic advisor). Stone was on course to continue in theatre lighting design until a meeting with architectural lighting design legend Sy Shemitz (founder of Elliptipar and renowned for his work on Grand Central Terminal in New York City and the Thomas Jefferson Memorial in Washington D.C.) changed his direction.

"He pointed out to me that in theatre, you design and build things that last perhaps two weeks or a year, but in architectural lighting it's 40 years."

And so a career in architectural lighting design was born. Jules Fisher and Paul Marantz started a business in Jules' basement in NYC in 1971. Charles Stone joined afterwards (following three years with Claude R. Engle III) and, in a meteoric rise, became a partner a few years later. Interestingly, Fisher Marantz Stone (FMS) and its sister firm, Fisher Dachs Associates (FDA) practises both architectural lighting and theatrical lighting design, although the two disciplines are very much separated in the studio.

"There are differences in time and point of view. In the last decade we have seen the influence of theatre on architectural lighting. It is not only colour and colour changing, but also the expectation of dynamic light. The fundamental difference in the two sides of our studio is, that in the theatre you sit in a chair and the scene changes in front of you or around you. In architecture you move through the 'theatre'. Understanding this difference is important for an architectural lighting designer."

FMS has six studio groups and five of them are headed by Principals, one by a very talented younger designer with nine years of experience. Stone has a very "deep bench", as he calls it, in the studio. "When we are working on a project, my team already know the answers. They are telling me the answers before we even have finished the conversation."

The mantra for FMS is that 'We create magic', using light to narrate the architect's story enhancing the communication of design through environmentally and economically conscious lighting solutions. It may seem like a romantic notion but it is one that Stone passionately believes in, even when it comes to lighting an office building.

"The client doesn't need to pay me to do calculations or to pick light fixtures or to light up a building because many people can do this. The manufacturers can do it. Engineers can do it. So when the architect or the owner comes to us he doesn't come to buy a lighting design. He comes to buy magic because my portfolio is full of magic. They will come and hire FMS because we are going to give them something special. I explain to my young staff: nobody comes to us for a good job, they come to us for a great job. You can say this is just talk for hype or sales talk but it is true. They don't come to me for a regular project. They want something special and that special thing is magic. So yes, if someone walks into an office building every day and it looks terrific and they say 'Wow', that's magic."

FMS, and Stone in particular, is engaged in many other parts of the world especially Asia, bagging huge projects such as Chek Lap Kok Airport in Hong Kong and Burj Khalifa in Dubai. Working around the globe poses challenges but Stone believes it should be simpler.

"Cultural preferences are an important parameter in design. But this gets confusing because, for example, the Beijing client hires a New York designer because they want something of New York - not because they want an interpretation of Chinese culture from somebody in New York. They can get that somewhere else. So this gets confused. It's not so clear to me. In addition, consider what the jet plane and the Internet do for mixing up all the



ideas from cities that are far apart with completely different cultures. There are two things going on: there is cultural interaction but also something specific imported from another place." One thing that remains the same around the world is the complexity of the building technology. With this rising complexity, is it more difficult now to realise a good integrated lighting solution recognising all the different building technologies? "The most difficult thing is that the people who manage the buildings, the facility staff, they need to have ongoing education. But I am unconvinced that we are making progress in this area. This complexity of systems is a big problem. Project after project I visit - not just mine, many it's so complicated, nothing ever works right. So I am trying all the time to make it simple, simple. Buildings are organic. Architects know this. But this is becoming a bigger and bigger problem for lighting designers with the emphasis not on just energy saving but digital lighting. All this solid-state lighting is much more complicated. When you made light with a tungsten lamp you have two wires and you turn the switch and light comes out. Now you have control gear, drivers, complicated dimmers, more complicated light loss factors and on and on. It's much more difficult than it was just a decade ago." Like all lighting designers of his generation, Stone has grown up with traditional light sources only for everything to be blown out of the water by the disruptive technology

of solid-state lighting. At the outset Stone was cautious about the speed at which LED technology would advance but he admits that he underestimated the LED tsunami, as he calls it.

"I was completely wrong about how long it would take for LED to be viable for so many applications. I thought it would take another ten years; and, I had been saying that LEDs were going to be a transitional technology. But I think I was wrong. LED and other technologies are evolving so guickly - how they make the diodes, how the heat management is done, and how the voltage is being handled with control gear. The opportunity that is presented is very attractive - the form factors for light fixtures can dramatically change. This is very disruptive because all the tooling you have for 150mm deep fixtures is going to get rusty. Because the new form factors can be shallower and smaller. But small is not always better, because smaller sources are brighter and this will dramatically effect fitting design. All the parameters that created dimensionality for light fixtures going back to gas lamps and the associated profiles are now subject to revision." FMS is an active member of both the United States Green Building Council (USGBC) and the International Dark-Sky Association (IDA). Their portfolio includes over 100 projects targeting LEED certification and over twenty projects that have achieved GOLD or PLATINUM status. Are these projects often a battle between efficiency and light quality? "No, not at all. I used to think that was

going to be the toughest challenge, but it's not. There are two or three things going on here. The fairest way to regulate energy consumption for lighting would be to go to the door of the building, make a determination for the total wattage of the building and say to the designer. There you have it. Use it the way you want. That's not the way it works. Codes are more prescriptive than that. You are limited by smaller areas in the building, generally speaking. Also it's not just power density now. LEED ties you to a standard called ASHRAE-IES. And ASHRAE-IES has other limitations such as exterior lighting power densities per square metre. But I would not say I feel limited by the energy code. Very rarely are we really stuck with not enough power. As the fixtures get more efficient this power problem becomes more manageable. That is not to say you can go to zero with power. But so far I think we have managed it pretty well." Approaching each project as a new challenge and searching for a design solution that best captures the identity of the project brings up its own problems. More and more, during the design development process, custom-made products are called for, even demanded by the client.

"The trouble is, clients always want to pay less. No one wants to hear the truth that on every project some percentage of the fixtures have never really been made before. They are custom to some extent. Many times the architects and owners have







generation becoming third generation of designers. There is this wonderful sort of ball of knowledge and experience that's rolling forward. When people bring us a design problem we can gather 100 years of experience around the table just by calling some people over to talk.

"There is this tremendous legacy of information and knowledge, and a way of practicing which is very collaborative and inclusive of the younger ideas, which frequently are the same as the older ideas. They just don't know it yet. I may be the spokesman today but there isn't anything special about what I know compared to the incredible talent in our studio. That's an important point. I don't think I am the best designer. This is not a single artist kind of profession. To do big architectural projects, the lighting is so complicated that you need a team of lighting designers to work very hard on it. I see it every day in the studio. They have the better ideas. They are the ones digging, researching and sketching. They are the ones coming up with the ideas and creating the specification - and the magic."

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Notable projects down the years from Fisher Marantz Stone include: (clockwise from top) Buri Kalifa, Dubai (SOM, January 2010); Washington Monument, Washington D.C. (2005); Space Shuttle Atlantis at The John F. Kennedy Space Center, Cape Canavera (PGAV Destinations, July 2013); Chek Lap Kok Airport in Hong Kong (Foster and Partners, July 1998).

HIGHLIGHTS

Projects that you would like to change:

I would like to get my hands on Biltmore Estate in Asheville, North Carolina, the White House in Washington, D.C., the Sydney Opera House, and about a dozen other important listed buildings out there. I would like to reorganize some of the RGB madness that overtook our profession. Apologies if I have upset anvone.

Projects you admire:

The Abu Dhabi Grand Mosque by the late Jonathan Speirs is a living concept. Also the Korean Department Store by Rogier van der Heide. They led the way to animated buildings.

I am inspired daily by the visionary and unbridled genius of the 50 year body work by my firm's founders. Paul Marantz and Jules Fisher, on projects around the globe - from Studio 54 to the Tribute in Light and the Barnes. Museum, and a thousand projects in between.

Projects you dislike:

I have grown weary of gratuitous colour on buildings of all sorts (a crime of which I too have been guilty). I'm going back to white light.

Lighting Hero:

Heroes for the ages - or perhaps they are lighting saints: Louis Kahn, Sir John Soanes, Ricardo Legorreta, and Michelangelo Merisi da Caravaggio.

Notable projects:

Carnegie Hall, New York; Hong Kong Airport; the Burj Kalifa, Dubai; The JP Tower, Tokyo; The Washington Monument, Washington D.C.; The George W. Bush Presidential Library, Dallas, TX; Space Shuttle Atlantis at The John F. Kennedy Space Center, Cape Canaveral, FL

Most memorable project:

For scale, scope and time spent... It is hard to top the Hong Kong Airport.

For emotion, the renovation of the Market Square Presbyterian Church in Harrisburg, Pennsylvania - where I was baptized long ago.

For patriotism, the Washington Monument.

For fun, my School-house workshop project at Alingsas, Sweden.

For school spirit, the fifteen projects we have done for Princeton University.

Current projects:

The new American Embassies in London and Mexico; super tall towers in China, Malaysia, and Indonesia; The World Trade Center site in New York: Memorial, Museum. Three of the four new WTC towers, and the New Path Station; the National Museum of African American History and Culture in Washington, DC; the National Museum of Civil and Human Rights in Atlanta; and we have just begun working on a lighting master-plan for Thomas Jefferson's Monticello. The Peninsula Paris, a fabulous and luxurious renovation two blocks from the Arc di Triomphe, opens on the 1st of August.

trouble understanding that and trouble believing it, meanwhile they are designing a custom architectural solution on every single building. But they want the light fittings to be standard. If you have a single owner or owner occupied project you are more likely to be in what we all call "project work". In that case there is more custom. On the other hand I try to explain to everyone - in our studio, to our clients - that everything in the catalogue is made once for the first time and on that day it was custom. The bad news is just because it is in the catalogue does not mean they have made it since, they may have only made it once. Being careful to specify exactly what you want is more important than worrying about whether it is custom." With his passion for design and determination to explore the unknown, Stone transformed FMS from a US-based design practice into a major international player at the beginning of the '90s, becoming president of the firm in 1999. He

also served as president of the International Association of Lighting Designers in 2004-5. Does he think that FMS and the lighting design profession is in safe hands with the younger generation coming up behind him? "We have become a very special organization since our founding in 1970 in Jules Fisher's basement. Here we are fortysome years later. Now we are in second