

Projections

FALL 2014

Planetarium Newsletter



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“Raising Thoughts” by Chuck Rau



Many of the discussions around the office land on important topics well beyond the scope of selling projection systems. Specifically, the topic of wanting to help planetariums operate successfully. Quite often, we hear about how a facility is run and can see where, in most cases, the planetarium is looked at as a cost center, rather than a profit center, therefore it is treated as such, with dwindling budgets and staffing. You can really only shave so much off, before just closing the doors, when the real problems aren't actually being addressed.

There are some good practices being used, but good practices for one institution may not work for another. I would like to begin to discuss some practices and concepts within our newsletter, but also welcome your comments and questions. In this new section of our Projections Newsletter entitled “Fixing the Planetarium,” I plan to bring up ideas and topics for helping you and your facility define and, hopefully, achieve success.

While in many ways my intentions are altruistic, stemming from my love of planetariums and science, from a practical viewpoint, a vital and profitable planetarium community has the added benefit of developing more institutions that can afford to provide the finest guest experiences in the world. I encourage you to consider the entire experience for your audiences.

Let's start to identify the opportunities as well as how size and mission impact providing the best possible guest experience.

I'd love to hear from you and discuss this further; call me anytime.

-Chuck Rau



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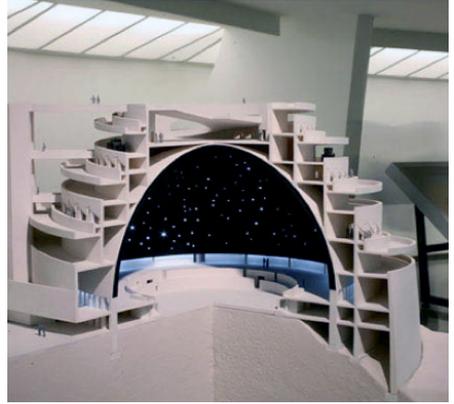


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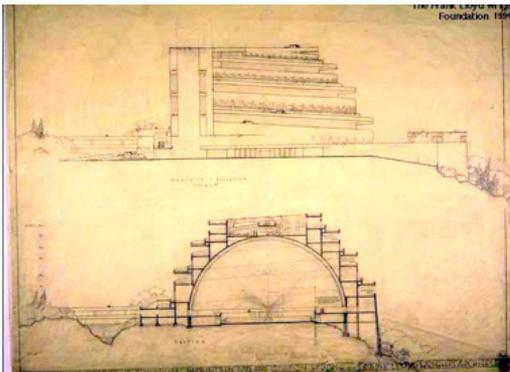
By Brian Wirthlin

"Mediocrity is expensive", said J Irwin Miller. In the 1950s, Miller had a problem. He was the Chairman of the Cummins Corporation, and the small town of Columbus, Indiana where he lived and worked was growing fast. The town's school board predicted that they would have to build a new elementary school every two years to keep up with the population growth. So they built their first new school in the post-World War II era. They built it cheap, and it looked cheap. Miller wanted to attract world-class engineering talent fresh from schools like MIT and Caltech to Columbus, and well - schools matter.



Miller approached the Columbus School Board and offered to pay ten percent of the cost of the new school if the school board selected an architect from a list of world class architects. The first school was such a success that the school board and other public authorities wanted to continue the program. The little town of Columbus, Indiana has been ranked as the sixth most architecturally-important city in the United States by the American Institute of Architects. Not bad for ten cents on the dollar.

Miller had a theory, "I've always made a distinction between building, sculpture and architecture. If it's space that physically encloses a human activity and functions at a reasonable level but has no capacity to elicit from you a desire to go further, think spiritually, worry about your fellow man, then it's just a building. If it's an enormously elaborate, beautiful, moving space that you can inhabit but it was designed as a symphony hall and you can't hear the orchestra in the back, then it's



<http://www.loc.gov/exhibits/flw/images/flw0099.jpg>

large-scale sculpture. Architecture to me is that fantastic combination of the two where it enhances and encloses human activity but it actually inspires you to do better."

There are stunning examples of planetariums that qualify as "architecture" by Miller's definition all over the world. There's something that inspires a great architect about designing a planetarium. The drawing above is a planetarium design by Frank Lloyd Wright from 1924. But even if people don't come from all over the world just to see your building, you can still aspire to greatness.

Miller said in a company film, "Whatever you do in this world, you've got a responsibility and a privilege of doing it the very best way you can... and whether it is architecture or cooking or drama or music, the best is none too good for any of us."

So my question is - is "good enough" - Really Good Enough?

Fixing the Planetarium

By Chuck Rau

But wait, is it broken? Well, that depends on your definition of success. If all you do is run around putting out fires, perhaps even literal fires, you may just be happy the place didn't burn down this week. That may not speak to your long-term goals for the facility or, just as important, those of your administration. Whether we are talking about the status of the physical equipment in the room, the staff, the show offerings, marketing or advertising, all of these topics and more will factor in when working toward and maintaining a successful operation.

Before you can determine what to fix, or how to work toward a goal, you need to define what success is. How do you define success at your planetarium, and how does your organization define success? Most of the time, there is talk of attendance, because "butts in seats" is an easy answer. It is the one thing that provides numbers that can be evaluated and compared. Often those numbers, multiplied against a ticket price, start to give you an idea of how much money you took in, or perhaps more accurately, how much less money your facility lost in a given amount of time. But from one facility to the next, attendance numbers won't mean the same thing, and they certainly don't tell the whole story.

Each facility has its own unique operational methods, goals, quirks and advantages. Your planetarium may be located in a museum, elementary school, middle school, high school, college, university, science center or even as a stand-alone venue. Your audiences may be elementary school, college students, public, scouts, churches and other groups, or a combination of several of these. You may charge for your shows, or perhaps they are free, rolled into the cost of general admission to a larger facility or available as an asset of the school district for student use. There is no single model to compare the operation of a large facility in a big city to a small town with a little dome.

How then, does one define success in common terms within a field that varies so greatly? How would a planetarium in a big science center downtown and a small planetarium in a suburban middle school in another town really compare notes? It's true that there are some operational processes that will largely differ in such circumstances, but there is one question that starts to level the playing field and define success in any situation...

DOES THE CUSTOMER WANT TO COME BACK?

No matter what scale of operation, we all want our customers to come back. It is easy to say we want higher attendance, and there are ways to increase your attendance that we will discuss in the future. An important thing to keep in mind is an idea that "mediocrity is expensive," as Brian Wirthlin elaborates on further in his article. More people visiting your facility and having a mediocre experience could do more harm than good to the success of your operation. If the show is not very enjoyable, but you have great staff, your audiences may just be polite as they leave and not return. Alternately, if you are doing something to put people off, it won't matter how well produced the show was. It is very important to identify what is working in both the organization and customer experience and what isn't, not just pat yourself on the back for showing up and not burning the place down.

WOULD YOU EAT THERE AGAIN?

Let's abstract this a bit. Like most people, I often ask myself these kind of question at restaurants. Would I go back? Would I eat there again? Would I order that again next time? And if I didn't like something at another restaurant, would I even try it again at this one?

There are other metaphors that one could use, but simply from a customer experience, when you think about a restaurant and a planetarium, there are

several similarities throughout the experience...before, during and after the customer visits the establishment. Without getting into the finer details and exact order of operation, think about your own dining experiences and someone visiting the planetarium as you consider the ideas from the chart below.

	Actions	Questions to consider
PRIOR TO ARRIVAL	Somehow, you found out about the place and decide to go. Everything that you have heard, seen or experienced up to this point, and whatever happens between leaving your driveway and arriving home once again is part of the total experience. Experiences and opinions about venue staff begin to form when you call ahead or go online to get information or make reservations.	<ul style="list-style-type: none"> • Was it easy to get to? • How did you hear about it? • What have your friends said about the place? Did you see an advertisement? • Was the website useful? • Did the staff help with parking tips or getting around the construction detour on the way?
ARRIVAL	You arrive and wait to be seated. This begins the atmosphere experience and face to face interactions with the staff. You probably look at what is available at this stage too. You may even start to notice how the staff interacts with each other.	<ul style="list-style-type: none"> • Did you feel safe walking to/from your car? • How long is the wait? • Does it seem like it is worthwhile? • How does the staff behave? • Are they friendly and attentive? • Are they knowledgeable and helpful? • Is there something to do while you wait?
SEATING	You are shown to your seats. Seating styles and methods may vary from one venue to the next, but there are certain expectations you have. Some styles work better than others for different people and situations. Sometimes novel can be fun in concept, but impractical in daily use.	<ul style="list-style-type: none"> • Do you get to sit where you wanted to? • Are the seats comfortable? • Was the area prepared before you arrived? • Is there trash left over from the last group? • Is the room itself inspiring, or bland? • How well lit is it? • Does anything good or bad catch your attention?
REVIEW THE OFFERINGS	You review the options and decide what to order, you may see something you would want to try next time.	<ul style="list-style-type: none"> • What looks good? • How are the prices? • Is there something for your kids? • Is this something I will enjoy? • Did I like this when I tried it last time? • Do they have my favorite? • Can I get both?
THE ATMOSPHERE	You observe the space around you with all of your available senses. Whether with a group or by yourself, you are out in a more public setting and probably have expectations about your surroundings and the behavior of people around you.	<ul style="list-style-type: none"> • How comfortable are the seats? • Is the place clean and in good repair? • Does anything disturb your experience? • Is the staff friendly and knowledgeable? • Does it smell good?
THE EXPERIENCE	You are presented with your order. You may have some ideas on what it should be like based on the description, past experiences or similar offerings at other locations.	<ul style="list-style-type: none"> • Did you enjoy what was presented? • Was it accurate? • Was it what you thought you were getting? • Did you devour every bit of it? • Would you get the same thing again next time?
AFTERWARD	Good or bad, you are likely to tell people about your experience. The lag time before sharing an opinion or experience has been drastically reduced due to social media and the internet. In person or online, negative reviews are still more likely to be shared than positive ones.	<ul style="list-style-type: none"> • Would you come back? • Were you delighted, indifferent or disappointed? • Would you recommend it to your friends and family? • Would bring people with you next time?

In the simplest terms, if you had a great experience, you will want to go back. If you went there and became nauseous, you aren't likely to return. It seems extreme at first, but you probably know more than one person that got sick from something they ate in a restaurant, and people they told have avoided that restaurant, yourself included. I've had to deal with more than enough cleanup from motion sickness in immersive theaters, perhaps you or your staff have too. Most parents probably won't be quick to bring their kids back if they got sick in the dome, and will likely continue to remind their kids that it happened, reinforcing the likelihood of the behavior.

Thinking further about the concept that negative opinions are shared far more than positive ones, a great example is stereoscopic 3D movies. From a technology standpoint, I've seen this done both well and poorly. It can be a great gimmick to get people to buy a ticket and it can be very enjoyable when done well. But when I consider the opinions shared, I have heard far more people complain by saying "3D glasses give me a headache!" than I have heard people boast about how great the 3D experience was.

Our goal should be to create two things in our audiences:

1. A feeling of inspiration.
2. A desire to come back and experience it again.

You cannot have the second without the first. If the show and the surrounding experience isn't good, people will not want to come back. With each visit, a customer will need to feel that inspiration and enjoyment if there is to be a subsequent visit. That inspiration isn't possible without a great presentation.

STOP THE SHOW, I WANT TO GET OFF.

Years ago, a friend of mine sat with me in the dome to preview shows at an IPS conference. At one point he leaned over and said "This is everything that is wrong with planetarium shows." There were quite a few moments like this, as there have been at other conferences since, where I've joked that one could have a style of voting like The Gong Show, where someone comes up and rings the gong to stop the performance.

I've actually considered that at conferences it would be a great way to use those interactive buttons in the seats that were once popular...after some point in a particularly long and boring show, the staff could fade up the lights, stop the show and say "Okay, at this time I'd like to let you all know that you

have voted unanimously to stop the show, so we are going to move on.” This may seem funny at first, or perhaps just cruel, but if your audiences are thinking of something similar, they may just walk out during the show or simply not come back. It is really important to know if this is how your audience feels, and equally important to do something about it.

SO WHAT MAKES A GREAT SHOW?

Great story telling. Sure there are plenty of well-known actors providing great voices to the soundtrack of planetarium shows, but that’s just one factor. Great story telling requires two things: a great story, and someone to tell it. I’ve seen groups of children and adults enthralled by live presentations and fantastic storytelling with simple imagery or none at all. I’ve been completely engaged by incredible story tellers and nothing but the presenter to look at.

In fact, recently I watched a video of a TED talk in which the presenter wasn’t even all that eloquent, but the story and manner in which the information was presented was lively and interactive. It was filled with emotion that was conveyed and expressed with passion, and by relating to the audience, connections were made through emotion and a seemingly flawed performance that taught me that not everything has to be the most well-polished, pre-recorded presentation. Perhaps that is why Sir Ken Robinson has nearly 7 million views on YouTube for his presentation entitled *Do schools kill creativity?* Well, that and the subject matter. I encourage you to watch the video and decide for yourself. As educators and presenters, we all have something to learn from this great topic. You can find it here: <http://bit.ly/1o0nSj9>

A Series of Imperfect Moments

By Brian Wirthlin

About a million years ago, I was teenager working part time at the McDonnell Planetarium bookstore. I was also taking a photography class at the Mark Twain Summer Institute. In class, we learned how to develop and print photos, various “rules” of composition, and the relationship between f-stop and shutter speed. But the most important thing I learned was both simple and profound: If you want to take a great photo then take a lot of photos. Overshoot! The reason we developed film and made contact sheets from the negatives was we had no intention of printing

more than a small fraction of the individual frames we'd shot. If you've only got one chance to take the perfect shot you will almost always wait until your chance is gone.

Why am I writing this? I've noticed something about the planetariums I've visited over the years. It sure looks like they're waiting too long to take their shots. They seem to be waiting to press the button, hoping for that perfect moment when budget, staff, hardware, software, inspiration and well - everything - all align to yield the perfect show, or mix of shows, or concept, or I don't know, but I'll know it when I see it - result. All I can say is - if you wait for that grand alignment without honing your skills along the way - you're probably going to miss your shot.

A friend told me a story about a photo. He was at an event where the Pope was going to walk by the spot he'd staked out. He waited patiently until the perfect moment and he hit the shutter release, but then realized he'd forgotten to turn on his flash. He didn't get a second chance. When he developed the film, the photo of the pope was fine. Someone else's flash had gone off during the 1/60 of a second his shutter was open. He refers to it as "his miracle photo of the Pope". I think it's a fun story, but if he'd shot a couple of photos before the pope showed up he'd have discovered his flash wasn't turned on.



Photographs by Steve McCurry - National Geographic

It still takes pictures, but now with a DSLR (and Zeiss lenses!), and I still take vastly more photos than I print. The photo above (left) was taken in December of 1984 by Steve McCurry on location for National Geographic at an Afghan refugee camp in Pakistan. Since running on the cover of National Geographic, it has become one of the most famous photos ever taken - but it was one (right) from the same photo shoot that was originally selected for the cover. At the last moment, the photo editor's choice was overruled. They're both great photos, but which came first? What if he'd stopped after the first shot?

An artist rarely just takes one shot at something. An artist sees the potential and rewards from experimenting and re-interpreting the subject. While planetariums are all about science there's an art to presenting the science. I have no doubt that there are many roads to success, but I also have no doubt that waiting for the perfect moment that may never come isn't the best road to travel.

Scary Psychology

By Chuck Rau

As we are near my favorite holiday, I thought I'd talk a bit about a little ghoulish fun I've had over the years.

The more senses that participate in any moment in a person's experience, the more impactful it is. This is why 4D motion simulators and, my favorite, haunted houses are popular. I've helped set up and run several haunted houses, and I noticed many years ago that the more senses you affect, the greater the emotional response. Turning off the lights and adding spooky sounds sets the baseline for getting it to be scary. Some haunted attractions don't go much beyond that and the decorations and actors, but that was never enough for my own personal benchmark for guest torment. With each additional altered sense, the scare factor is amplified, as was my cruel sense of accomplishment.

Strings and chains hanging from above, a lowered ceiling, moving floors, a blast of air, a spray of mist and changes in temperature are all great for a fright-filled sense of touch. Not very scary with the lights on, but with the lights off or very low, and creepy sounds added with the background spooky tracks, it can be quite effective.

I left out taste mostly due to liability and logistics, but for smell, there are devices made specifically to release scents into the air. A little earthy smell in a graveyard or sweet candy in a scary clown area, but what about some rotting flesh? Gross? Yes. Possible? Oh yeah. For the budget version, just get some durian fruit...that should do the trick. A friend of mine recently enjoyed some durian flavored crispy wafers. The package was left open overnight in the kitchen and by the next day the entire house needed to be aired out.

Retailers and theme parks have been using this kind of psychology for

years, just with different desired results. It's a little sneaky, but if you want to sell more popcorn, pumping the smell toward the group of potential customers is an effective tool. That also has the added benefit of selling more drinks. Balancing the saltiness of the popcorn in an effort to sell more drinks is quite the challenge, and one that I'm sure has been taken seriously for many years. You probably want some popcorn right now. I know I do.

Smell can have a big impact in the overall guest experience. If the venue smells good, that's obviously better than the alternative. You wouldn't go into a mall store expecting this, but even retailers will provide scents that help them sell more clothing, whether by providing the smell of various fabrics or by sending your nose on a vacation.

Fun Fact:

Continuous exposure to an odor, such as a perfume or cologne will dull your sense of that fragrance. Our sense of smell fatigues within minutes and diminishes with age.

Rather than applying the same amount of perfume they once used, some people put on enough so that they can smell it while the rest of us are left gasping for air.

Another important observation I'd like to share is that people don't know they want something until they see someone else with one. Very true for kids with toys, ice cream and candy. It's true for adults too, just usually with more expensive toys. I have seen groups of kids that were absolutely content and having a great time outside until someone plucked a piece of coal from the side of the road, then EVERYBODY wanted some. For this reason, placement of that popcorn stand, and gift shop, is important too!

I didn't do case studies on level of fright, bring in focus groups for or have a good metric when haunting a space, but when you start having people exit halfway through as a huddled, frightened mass because they see an emergency exit and are completely fearful of what is ahead, it is extremely disappointing, but you know you were doing something right and hope they come back to try to get through it next time. What a shame, I spent a lot of time on that troll bridge!

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