Design in action with Samantha, a puppet made from recycled materials (operated by Jessica Biernacki), and Magician, (Nic Blevins). Photo Credit: Minnewaska Theatre Preserve
The International Museum Theatre Alliance (IMTAL) is a nonprofit professional membership organization and an affiliate to the American Association of Museums (AAM).

The mission of the International Museum Theatre Alliance is to inspire and support the use of theatre and theatrical technique to cultivate emotional connections, provoke action, and add public value to the museum experience.

Editor's Note: Eye on Design

Marcos Stafne, Editor

Design is integral to the process of theatre, though for many it can be an overwhelming and last minute element thrust upon a wearied actor at the end of a long rehearsal day. We often wear many hats as museum theatre professionals: producer, writer, actor, stage manager, crew, (add the 80 + titles that could follow). Sometimes design falls to the wayside to provide enough energy to make sure that the show goes on – but I argue that the design process is just as vital to production as writing, directing, and acting. Theatre is an aesthetic experience, and our choices (or lack there of) in costume, set, lights, and props can speak louder than our words.

In this issue of Insights four different approaches to the design process are revealed: The Kentucky Historical Society utilizes computer technology (Sketch Up and Power Point) to pre-plan and implement different aspects of set and show production. Melanie Wehrmacher, museum theatre costume designer, writes about how context plays an important part in planning for appropriate attire. The team at Minnetrista partnered with a university to create a magnificent puppet theatre, while Georgeanna Smith writes about her first time serving as actor/costume designer for a production that had to live up to the fashion standards of Barbie.

Each article showcases a different approach to the design process, and serves as innovative inspiration for productions to come. How does your museum theatre program integrate design into the planning process? Are you left on your own, or do you have institutional support? How can museum theatre programs have influence on exhibition and museum design?

How are you keeping your eye on design?
The Kentucky Historical Society engages people in the exploration of the commonwealth’s diverse heritage. Through comprehensive and innovative services, interpretive programs, and stewardship, we provide connections to the past, perspective on the present, and inspiration for the future.

One of the biggest challenges at the Kentucky Historical Society (KHS) is designing creative museum theatre programs that fit within and complement our exhibitions. We made the decision years ago to perform all of our performances in our exhibitions spaces. Well…truth be told, the decision was made for us because we didn’t have a fancy theatre space or stage. We did have a permanent exhibition hall filled with great scenic spaces that just seemed like perfect sets for our productions.

Our plays reflect the people and history of Kentucky, and we perform right next to the material culture that represents those things. Conversations with audiences often turn directly to the artifacts nearby for reflection or reference, but challenges arise during the design process for each new exhibition.

It took several years to earn a place at the design table. Offering consistent quality programming with proven success through evaluation and visitor response helped our theatre program to earn respect. Learning to speak a common language of design helped even more. Finding new ways to ensure that the
artifacts and collections of KHS are used closed the deal. With each new exhibition, we are invited to the table earlier and earlier, and our suggestions have more weight.

Exhibit design at KHS has changed too. Our newest exhibitions are more modern and open, with fewer artifacts, and more direct educational goals and messages. We rarely design sets or full sized diorama for our exhibitions now, and this challenges the development of our plays too.

We believe in the ability of a talented performer to transform any space in the minds of the audience, and often use a minimalistic set design. A chair and open floor space is often all we need. But I like to push our program and our organization when possible.

Over the years we have used technical elements like special lighting, audio, and projected images to define a performance space in a minimal exhibition design. Of course any time I ask for more lighting, I make the curators cringe. If I ask for a set, or just a simple platform, there is the question of where to store it in between performances and how to safely transport it in and out of the space without putting the artifacts at risk. Not to mention the most difficult task: where to seat the audience? Thirty chairs require a lot of space, and what do we do with that space in between shows.

My favorite tool for running sound effects is PowerPoint. This commonly used program allows me to create a sound cue list and layer multiple timed or actor activated audio effects. We have discovered simple ways to hide the speakers, laptop, and the mouse (needed to click and advance the show) within our set design. The program is easy to change, and works really well in application on stage. We have even used PowerPoint to project background images on walls, special screens, or on the actors themselves.

One of the best tools our organization uses to design public spaces is Google SketchUp. This free downloadable program is used by our exhibit design team to layout our exhibits in 3-D before construction begins. We also use it to design our theatre sets and discuss positioning within the exhibit. The program is very simple to use, and there are thousands of downloadable object models that allow you to quickly add chairs, tables, vehicles, and household objects to your exhibit layout or set design. It is simple to rescale these objects to “see” a performance space before construction begins. There is (as with any computer program) a learning curve, but in the hands of our design team it is shocking what they are able to create.

Recently, I used Google SketchUp to design our most intricate one man set to date. Our newest play Theater of War: Unresolved Conflict of Vietnam was designed to be performed in an exhibit space that was open, included no diorama or settings, was relatively dark (to protect the artifacts from light damage), and had an irregular performance space. During early exhibition team meetings, we discussed artifacts to be considered, signature stories of brave Kentuckians and possible ways to arrange the exhibition titled Kentucky Military Treasures: Selections from the Kentucky Historical Society Collections.

Our biggest concern when planning for the play was the constantly changing artifact list (something beyond our control). This seemed to necessitate minor changes in the layout once a week. This affected the intentional connections we planned to make between the actor and the artifacts on display. Finally, two weeks before we opened, we knew the final layout. We had been in rehearsal for at least a week, and the blocking was still somewhat fluid, so we were able to make the necessary changes. We made sure to position metal weapons that aren’t as damaged by light near the performance space, so that we could use more lighting on the performer. The open floor space designed for audience seating was balanced by leaving similar spaces in other places within the exhibit. These open spaces have allowed us to seat students on the floor or to speak to large touring adult groups during regular exhibit programming. It also allows for clear views from one section to another, and our Guide staff can make connections for our audience with objects in different parts of the exhibition.

The set, although it looks heavy (with sandbags and all), weighs less than 80 pounds and can be easily placed one end at a time on furniture dollies and rolled into a planned storage space behind the exhibit walls along with a large rack of 40 folding chairs. Everything is attached to the base, so it can be transported on its side, or through most doorways for outreach.

I’m sure many of you struggle with these same design issues. That is one of the many benefits to membership in IMTAL, I know you all are out there experiencing the same issues, and coming up with creative solutions. If you have further questions, or suggestions for some of the problems I have mentioned feel free to contact me. Greg.hardison@ky.gov
Balancing Act: Costume Design for Museum Theatre

Melanie Wehrmacher

Science Museum of Minnesota’s Museum Mission: Turn on the science: realizing the potential of policy makers, educators, and individuals to achieve full civic and economic participation in the world. Science Live programs combine dramatic theater, science demonstrations, and interactive children’s programming to create a diverse repertoire for all ages.

An early assignment in my first college costuming class was to design two versions of a single character. The first design was a strict historical representation of the character’s nationality, period, class, gender, and age. For the second design, we were given several personality traits and instructed to imbue the design with them. The goal was to retain historical accuracy while infusing it with drama. That is the same balance that a museum theatre costumer must strike with every design.

Museum theatre exists to both educate and entertain. Typically, a design for a superhero or a raindrop can be more inventive than a design for Marie Curie or Charles Darwin. But in any design there will be a fulcrum between fact and fantasy that must be found.

I recently designed The Spirit of the Mummy for the Science Museum of Minnesota. In this show, we wanted the costumes to realistically represent ancient Egypt, yet still stylistically incorporate Egyptian pyramid art relating to the afterlife. For example, the ba spirit is often represented as a bird with a man’s head. I gave the actor a traditional Egyptian garment, but topped it off with a cape made of multicolored feathers in bolder, more theatrical shades of the hues found in pyramid drawings.

One must also consider the audience and venue when designing costumes for museum theatre. In looking at the photographs of the original production of Spirit of the Mummy, produced in the 1980s, I saw that the men were costumed in very short schentis (pleated loin-cloth-like skirts) with no shoes or shirts. This was historically accurate; however, performance space is also a consideration. Spirit of the Mummy is presented in the small gallery that houses the mummy, with the actors in direct contact with the audience. For the comfort of actors and audience members (a large portion of which are children), I felt it was best to give the actors sandals and full-length tunics. In a large auditorium setting, bare feet and chests might be not only acceptable, but also very dramatic; however, on the gallery floor, bare chests and feet may make the audience too uncomfortable. It all depends on the situation.

I’ve found that accuracy is particularly vital for historical interpretation and reenactment. I recently performed in Science Museum of Minnesota’s Titanic exhibition, which had actors portraying crew members. Visitors would frequently ask if my costume was an exact replica of what a Titanic stewardess would have worn. In this sort of situation, I feel it’s important to be as exact in costume detail as possible, or else to have an incredibly good answer for that question. Of course, for ease of wear and laundering, items will often have to be made of materials or notions that are not historically accurate, but they should certainly appear to be so. You leave the actor in an awkward position if a visitor asks about the Velcro holding on her collar.

Performance schedule is another factor in museum design. At the New York Hall of Science, we typically presented one show at a time, for a month or two. It was presented in an auditorium with a backstage dressing area, and allowed the actors the time and space to get into wigs, full make-up, astronaut suits, or anything else that was required. In contrast, Acorn Theatre at the Central Park Zoo presented five minute shows every 20 minutes. The stage was right in the middle of the Children’s Zoo, and although there was a
cabinet for props and sound equipment, there was nowhere to change clothes. Therefore, the costuming for zoo theatre was always a zoo-logo polo shirt and khaki pants or shorts. Various items could be added as needed: a pointy wizard’s hat, a snow leopard print vest, seal flippers or a hard hat were often all that was needed to transform from one character to the next.

Costuming for museum theatre does present more limitations than costuming for traditional theatre. At least as many decisions are based on budget, logistics of space and staff, and factual research as are on simple aesthetic. This provides a fun challenge, though, and a chance to use your craft both to educate and entertain. And really, isn’t that what theatre is all about?

Melanie Wehrmacher is an actor and costumer for the Science Museum of Minnesota. She has also worked as a performer, playwright, and costumer for the New York Hall of Science, Wildlife Conservation Society/ Central Park Zoo, and numerous Off-Broadway, Off-Off-Broadway, and regional theatres.

Partners in Design
Tonya Kunkel

As the Theatre and Outreach Manager of a new museum theatre program, Minnetrista Theatre Preserves, I needed actors, playwrights, and designers to get our program on its feet. Minnetrista’s close proximity to Ball State University offered us the opportunity to partner with the architecture department and provide an immersive learning opportunity for students while creating a quality set design.

Michael Gibson, architecture instructor and advisor of an advanced digital fabrication seminar the fall semester of 2008, and his class met with George Buss, Director of Experience and Education and I to begin discussions regarding a set design. Minnetrista had initiated the planning process for a puppet show that would teach the important message of reduce, reuse, and recycle. We were also seeking sponsorship for this production and found this to be the perfect project to create a partnership with Ball State.

At the time, Minnetrista used a puppet theater that was not meeting our needs for outreach program. We presented the Ball State class with our traditional, wooden, tri-fold puppet theatre, allowing them an up-close look at some of the problems we faced with the design. The challenges we presented to the design students were the following:

Create a structure that is durable, weather-proof, and environmentally-friendly.
Provide options for lighting, both natural and artificial.
Create a structure that will enhance the sound quality.
Develop a structure large enough to keep the attention of a full gymnasium, yet light and portable (it had to be moved easily by two actors).

The class took these challenges and created several design concepts (see page 2). The students presented the top three designs, walked us through digital models, and provided a visual interpretation of how sound and light would interact, based on the design elements.

The criteria of durable, weather-proof, and environmentally-friendly led the class toward High-Density Polyethylene (HDPE), which is considered to be one of the most environmentally-friendly plastics because it can be formed and recycled at relatively low temperatures and with little pollution.

During this time we contracted Jonathan Ellers, playwright and puppet maker, to work on the project. As he wrote the script for Creature at the Edge of Town, the design of the puppet theatre informed the direction of the script and puppets. Jonathan designed using recycled materials such as water bottles and cereal boxes, even incorporating the theatre as a large scale puppet as the largest form of the garbage creature from the story (see front cover).

Using the feedback received during the presentations the students used design software to create detailed, 3-D computer models of the final design. Working with computer models, the class decided the way to build the theater was based on modules—building blocks—that combined thicker plastic frames with a lighter-weight skin. The modules fit together like a puzzle and when assembled, would create a strong shell. The final model had 10 modules, each with its own unique skin and frame components. The final design was presented roughly two months after our initial meeting and construction began.

The architecture class used a computer numerical control (CNC) router to cut out each piece of the puzzle. The CNC router can cut with an accuracy of 1/10,000 of an inch and cuts at speeds of 1 and 3 inches per second. This machine allowed for more accuracy than is possible using common hand tools and reduced the amount of waste.

The semester-long project was completed the summer of 2009. Ball State delivered it to Minnetrista and gave us a crash
A course on how to put the structure together. The new puppet theatre has allowed us to strengthen our message of sustainable living by being an example of sustainable practice through design. The theater has become an interesting conversation starter for audience members and guests furthering our message even when the theatre is dark. This partnership was a wonderful way for our museum to build a relationship with the local university and provide an experience with a different viewpoint on design. Seven months have passed since we received the final product, we have kept in contact with Ball State to share new thoughts on the project, struggles we run into, and ways that the design class could improve a project like this in the future. This collaboration was and continues to be a great learning experience. Working with the Ball State students on this project has opened my mind to new perspectives when I have my eyes on design.

Tonya Kunkel is the Theatre and Outreach Manager at Minnetrista where she directs and performs alongside two actors. The program tours using a theatrical approach to engage elementary school students in educational topics. She graduated from Ball State University in May 2008 with a degree in Theatre Education.

The mission of the Children’s Museum of Indianapolis is to provide extraordinary learning experiences that have the power to transform the lives of children and families.

The Actor as a Designer

Georgeanna Smith

One of my favorite things about my job as an Actor/Interpreter at The Children’s Museum of Indianapolis (TCM) is the opportunities it affords offstage as well as on. I was thrilled to serve on the Barbie: The Fashion Experience Interpretation planning team; a team that created programming specific to the newest TCM exhibition paying tribute to one of the greatest fashion icons of the twenty-first century. As a member of this team, I was one of the Interpretation representatives who worked with the planning team on both the exhibition design and the interpretation plan.

The exhibition was designed with programming in mind, including studio space that accommodates workshops led both by staff and professional designers, and my favorite element of the gallery: the runway. Complete with a resplendent backstage, the runway features flashing lights, thumping music, and plenty of seats for adoring fans (or parents.) All we needed was a fashion show! Cue the actors.

My character is Bianca Harlow Harleston; a “world renowned” fashion designer who graces the museum with her presence during an interactive program called “The Pink Power Fashion Show.” When I heard about this assignment, I perked up immediately. I love Vogue and Versace! If I possessed any actual skill or original ideas, I would have tried my hand at fashion design many moons ago. Instead, as an actress, I get to play dress up for a living. Thus, when it was decided that the actors would get to choose their own costume pieces instead of using a contracted costume designer, I relished the opportunity to flex my creative muscles. Let the shopping begin!

I was instantly overwhelmed. I wanted Bianca to look fashionably fierce, but stay within a reasonable budget. As an actor, I was concerned about looking like a realistic fashion diva while also being approachable. I would be playing a woman who doesn’t just wear fashion; she CREATES it. So, I scoured fashion websites looking for information on what was happening in fashion right now. As this is currently the only Barbie exhibition licensed by Mattel, we had to turn in our visual research to them for approval, and I was nervous. Mattel created the first fashion doll; surely they would see through my ruse and realize that I’m an off the rack girl, not haute couture!

After a few weeks of anxious waiting, I received Mattel’s approval! With renewed verve, I spent hours searching for “the look.” I was able to purchase most pieces off the internet (ah, technology!), but alas, I was unable to find a suitable shirt. I had to take my search to the streets, and hit the mall right in time for the Christmas rush. Three blouses, two returns, a bottle of aspirin and a new respect for costume designers later, I had the look.

Barbie” is now in full swing, and the fashion show is a rousing success where visitors of all ages learn about the magic and theatre of runway shows. As the music blares, lights flash, and young visitors run around dressing up in “Bianca’s” latest fashions, I catch a glimpse of myself in the mirror. Thanks to “Barbie,” I still get to play dress up, and my job is one big game of make believe. Time to hit the runway!

Georgeanna Smith graduated from Butler University with a degree in Theatre. She works as an actress and dancer in the Indianapolis community. She is a company member with NoExit Performance, Inc. She has been an Actor/Interpreter at The Children’s Museum for almost two years.
IMTAL

2010 Regional Conference

IMTAL at Twenty: Charting the Future

August 20 – 22, 2010
Hosted by the Missouri History Museum
St. Louis, Missouri

Conference Registration
Conference Fee: $175

Conference Location
The conference is being hosted by the Missouri History Museum whose mission is to deepen the understanding of past choices, present circumstances, and future possibilities; strengthen the bonds of the community; and facilitate solutions to common problems. During the conference, we will have a very special exhibition in, Splendors of the Vatican. Your conference registration will include a ticket to the exhibition, all of our other exhibitions are free. Our museum theatre programs include Theatre in the Museum, one person plays in the museum’s galleries or Grand Hall; Teens Make History, a work based learning program for teens who research, write and perform plays in the museum; and the Performing Arts Series, a presented series of local theatre companies.

For more information visit imtal.org

2010 Theatre in Museums Workshop

Hosted by
Children’s Museum of Indianapolis
Indianapolis, IN

September 20 - 25, 2010 (Parts I and II)

Part I
Basic information needed to start a theatre program and an opportunity to hear about and observe other museums’ programs.

Part II
An opportunity to work on your own script or to participate in the process of working on others’ scripts. Please note: in order to enroll in Part II you must have taken part in Part I this year or in the past. If you are submitting a script for the workshop, it must reach the Children’s Museum of Indianapolis by August 13, 2010.

Presenters include the Children’s Museum of Indianapolis staff

- Tessa Bridal, Director of Interpretation
- Lori Pillion-Baltrusis, Manager of Interpretation
- Gary DeMumbrum, Theaters Manager
- Donna Ison, Playwright in residence
- Nine full-time actor-interpreters

For more information or to receive a brochure and registration form, please email Patricia Daily at patriciad@childrensmuseum.org or call (317) 334-3819.

In 2009, over twenty participants from museums across the country participated in the Workshop. Sessions and performances were presented by Minnestrista Cultural Center, Muncie, Indiana and The Bakken Museum, St. Paul, Minnesota.