ICJMT Report: Experience Design
ICMT Project Report

Experience Design: Study into the Formulation of Interactive and Live Spatially Based Experiences

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Introduction:

During the Fall Semester of 2012, a team of five participants (four faculty and one graduate student) gathered to envision the possibilities of an interdisciplinary course of study in the field of Spatially-Based Experience Design. The genesis of this concept stemmed from a Spring 2012 sabbatical taken by THDN Associate Professor (and professional theatre stage designer) Bruce A. Bergner. During that sabbatical, Bergner took the opportunity to research the latest trends in commercial entertainment design by visiting design firms around the country. The most fruitful of these visits was to the design offices of the PGAV firm in Saint Louis, an industry leader specializing in the design and creation of interactive Destination Sites around the globe, such as attractions, museums, zoos, aquariums, parks, monuments and exhibits.

Bergner’s visit to PGAV began with his intent to develop a professional familiarity with the current practices of the destination design field, an ally to his own field of theatre design. He intended to bring the understandings gained from observations of the workplace to CU students of theatre design so they might stretch themselves toward new employment horizons. In the process, Bergner discovered much more than practical techniques and methods. He discovered a cultural ritual manifesting in the vast studios of this firm. There, well over one hundred diverse, creative minds were working collaboratively on crafting live experiences for the benefit of the public. In their process, they were writing cultural stories, conceiving how those stories are to be told at a spatial site and then devising the spatial environments, the mechanisms and all of the details for bringing that cultural story to “life”.

Essentially, designers such as those at PGAV are the new cultural storytellers: telling tales, educating the masses and establishing modern myths via the molding (or DESIGNING) of live experiences that can transport the attending public to tangible manifestations of what they imagine, moving people to reconsider the grounds on which they reside, to viscerally comprehend aspects of life they may not have yet encountered.

Interactive space exhibits at the NASA center, holocaust museums with spatial arrangements that depict the narrow corridors of Dachau, vividly detailed attractions at the worlds top theme parks, and aquariums that allow visitors to literally walk underwater with the sea creatures are only a few of PGAV’s typical creations. These projects are much more than diversions or entertainments. If observed with an open eye, they emerge as rich cultural engagements for a mass public, powerful ways of communicating the nature of our world, past present and future. It has been argued that we live in a society valuing experience over manufactured goods. And it might be argued that the design of these experiences is becoming one of the more noble and vital pursuits in our culture and our economy.
PGAV uses the most advanced technologies and engineering methods available. And the fruits of their labor aren’t lost to obscurity. The experiences they design become some of the globe’s most attractive destinations with attendance figures in the many millions and testimonies and assessments of greatness abundant. The process PGAV’s designers undertake to arrive at these experiences closely resembles the process of collaborative art, especially theatre. The workers must establish a story, imagine a live telling of that story in many dimensions, research the elements that should be used to frame the story, conceive a world that the story can live in, and design that world’s life. They then follow through to the realization of that design on a site that calls in its public.

The head of one of the world’s leading business schools recently made the assertion that tomorrow’s MBA is the MFA. In other words, creativity and collaborative creativity in particular, will be highly valued in the business world. A glance at current retailing trends reinforces this notion. One can walk through any Target store in American and see the influence of design on business. One can peruse the Apple Store website and quickly appreciate the importance both experience and design has in our culture. Walt Disney, who has rarely found much favor among academics, did hold up a credo that inspires the central core of this take on experience design: “if you can imagine it, you can make it.” That spirit remains evident in the studios of field practitioners. And that “Disneyesque” inspiration, it can be argued, would be a valuable energy in a classroom. The participants of this ICJMT team support an interdisciplinary course or program of study in the informed, inspired and collective making of live site-based experiences.

**An Academic Opportunity**

This form of Experience Design utilizes a creative process that is not taught in traditional academia. Architecture schools, arts schools and engineering schools currently train individuals for some of the skills needed to complete this kind of work. But these institutions address specializations. No one, based on some deep research into existing curricula in America, is currently putting all of the components of this collaborative/creative process together in the manner of industry practitioners. There is no academic program specifically devoted to this kind of experience design. By its own vitality, it is a subject that begs to be addressed. A program (be it a certificate program or even an MFA program) could transcend skill training. It could teach the values and strategies of collaboration, conceptualization, imagination and promote alternative ways of thinking. It could introduce a creative process for students interested in writing, engineering, business, design, art, architecture, film, anthropology, media, music and theatre. It could put minds together for the sake of exploring broader and more universal creation. It could well serve the liberal arts ideal.

“Collective design” of this sort might be a fresh and enticing new form of interdisciplinary study and could serve a broad band of interested students at CU-Boulder. The participating team began by envisioning a single course of study, perhaps a year-long course, that would be project based. Students would work in collaborative teams in a design studio environment. Based on specific prompts, they would evolve designs from a root story, fable, moral, lesson, theme or concept, into detailed plans and specifications for site-based experiences that could engage an attending group.

Naturally, such a course would entail using design graphics technology, and would include graphics exercises and other practices germane to architectural or theatre design. But the
stress would be on the conceptual components of the projects, allowing those students with little to no experience with graphics, to be equal partners in project work. The focus would be on group problem-solving and effective communication of ideas. The more diverse the classroom population, the better the classroom experience.

Some of the participants suggested that course work could extend to include experiential sculpture and spatially integrated installation art, as these are expanding subjects in the art world. The common thread between these practices and those of the commercial vein involves the creation of a live experience in some form of dedicated space for the sake of telling a story or inspiring thought and feeling. In many cases these are collaborative creations.

Long range, one could envision the establishment of an MFA program. This would require a proper facility with a dedicated studio, available computer stations with advanced software, a core faculty, and the support of working professionals who might recruit the graduates. Working professionals have already pledged some practical support, no matter what the scale of an eventual course of study becomes.

**Participation from the Design Industry**

Senior designers and leaders from a number of commercial firms were consulted about the notion of training for their profession. This inquiry was met with uniform enthusiasm. It seems that one of the greatest frustrations among those who practice this kind of design, is in finding adequate new personnel. They have no trouble finding people with appropriate skills. The issue is finding people with the ability to “think” creatively and collaborate productively. A number of those consulted claimed that their industry is starved for “fresh blood”, needing new imaginations, new perspectives and those willing to explore outside the traditionally accepted methodologies. A select group of these professionals have verbally pledged to participate in a course of study, with hopes that doing so might yield future recruits to their field.

A senior designer at PGAV, the CEO of the worlds largest water spectacle/attractions company, the owner of one of Los Angeles’ most called-upon attraction animation firms and the production supervisor for Cirque Du Soleil’s, Macau team have each agreed to skype live with a class at CU, offer feedback on student projects, help design the curricula and even supply the class with real-life paperwork/specifications and documentation packages from their companies’ archives to use with class projects. This kind of professional contact would elevate the program to notability and could attract many students who have contemplated this kind of work.

It should be said that these professionals all echo the sentiment mentioned above that a core value the diversity of expertise among students. These firms employ artists, writers, composers, historians, psychologists, illustrators, architects, engineers, scientists, poets and inventors to name a few. That spectrum should be reflected in a course of study. This is a new way of expressing, a new way of making and a new way of knowing. Many can benefit from the broad offerings of the right kind of course. And, for those who seek employment in the specific field of destination experience design, the participation of field professionals would be invaluable. The ICJMT groups suggest any kind of future coursework engage the
profession while maintaining an open mind about inclusion for those with less commercial interests. The course should serve many.

**Resources and Practical Concerns**

An obstacle to this academic venture would be the lack of available space on campus for a viable studio. Some inquiries into using ATLAS were conducted. ATLAS may have some of the technology needed and studio space for certain portions of the course, especially those that might utilize film and projection media. The ATLAS black box would be a nice space for exploring the impacts of space on experience, to an extent. But the trouble with ATLAS is that it is a fairly well protected and rigidly scheduled facility. It suffers a bit from a lack of available flexibility. This course of study calls for a space where a group can be free to be a bit “messy”. It needs storage for a variety of materials including those used for crafting three-dimensional constructions. It needs a studio where painting, sculpture and scale model building could occur. The space needs access to the computers for research and documentation. ASSETT is being engaged and may be able to provide mobile computer labs for such a course in an unusual space.

The ICMT team felt that a “proving ground” space would be needed as well. This could be a large open space with the ability to be darkened and have power supplies for light and projection devices. This proving ground is where students could test ideas and investigate the impact of spatial arrangement on experience. Some form of open theatre space would be best, one with availability. The industry professionals who spoke with us suggest that one of the projects be an actual, realized spatial construction executed on campus somewhere, possibly outdoors. The general population of students would encounter it and engage with it. Such a construction would require a bounty of logistical negotiations, but might be worth the effort. Well-made spatial constructions, and the resulting spatial experiences, might become a campus tradition and might gain some PR for the University.

A course of study would need artistic supplies and workstations, woodworking and metalworking capability, a computer lab, access to the university’s 3D printer, the proving ground mentioned above, access to specialized lighting equipment, and ability to work with projections and film media equipment. This is a costly venture to be sure. But, perhaps there could be some sharing of resources with THDN, ENVD and FILM. There is a space on east campus, with the onetime moniker of “The Center for Creativity and Innovation” that might be investigated.

**A Note on the Term: “Experience Design”**

It became known that there is another popular use of the term “Experience Design” that refers to product design with a focus on the kind of experiences that can be gained by the consumer of said product. Our use of the term stems from the destination design field who have peripherally adopted experience design as a concept for describing their work. We suggest that someone amend the term if a future course of study develops to something like Experiential Design or Spatial Experience Design or Live Experience or Site-Based Experience Design to clarify our identity.

However, we are convinced that Experience Design is the most concise and accurate name for what we are talking about. This could and should become a subject of further discussion.
Such a discussion should be engaged with members of the profession so that we are “all on the same page.”

**Documentation from ICJMT Group Meetings and Research**

What follows is a collection of documents that members of the ICJMT team assembled as it conducted its meetings during the Fall 2012 semester. Each item is titled and is fairly self-explanatory. These are the guiding ideas cobbled together from discussions and contemplations among the group.
ICJMT Proposal: Experience Design

Original Description – Definition

Creating a New Course of Study in the Creation of Live Experiences

Experience design is a term coined by some professionals in the Destination/Attraction/Event Design Industry. These are the people who create site-based and interactive experiences for the public (e.g.: theme parks, museums, zoos, aquariums, casinos, exhibits, etc...). While it is easy to for academics to assess this field as an industry of “mere amusements’ or “cultural fluff”, one cannot deny its impact. Billions of dollars each year are exchanged at the ticket and merchandising centers and the foundations of these parks and destinations, etc. This draw is culturally rooted.

Our culture craves live experience. And we expect a certain level of quality, novelty and in many cases, message, to be inherent in the experiences that are created for our consumption. The professionals in this field talk about their jobs as being “storytellers.” They are telling stories rooted at various degrees of cultural depth. The stories can be fables with moral messages, teaching the young to mind their ways. They can be lessons from history or projections for the future. They can be artistic and freeform, expressions that try to invoke, provoke or evoke. No matter the specific goal, or root text, of the story, the design comes from a desire to make a statement or have an impact on those who engage with it.

The story is told by the design of a live experience in some kind of locale or site, a destination provided for the public. The process of designing that experience is collaborative, creative and even ritualistic, a way of establishing community. The makers of experience come from many disciplines including art, architecture, writing, theatre, science, psychology, anthropology, business, engineering and many more. The professionals in this industry want “fresh blood”, new recruits who possess traditional design and graphic/presentation skills AND can think creatively, communicate in myriad ways and collaborate on a creative team effectively.

The ICJMT proposal intends to develop either a class, or more ideally a program, in Experience Design. This would involve a class composed of individuals from many walks of life: storytellers/writers/artists, designers, theatre/music practitioners and engineers/problem-solvers who would gather together to complete several mock projects in devising living/interactive experiences with the guidance of professionals in the related field (via skype, written interaction, etc.). A few professionals in the field have pledged to assist with this class/course/program.

But the outcomes would transcend training people for the industry. A larger goal is to expose students from many backgrounds to new ways of seeing the reality around them, new ways of knowing their culture, new ways of creating, of resolving problems, of expressing ideas and new ways of telling stories. Essentially, it’s a course in using a new language.
Experience Design – Values

The following are values, important considerations or components that should be woven into in a course on Experience Design.

**Experience** is a trend and a theme in society. We are in an experience economy. We manufacture experience before goods. And the goods we value most are often facilitators of experience.

**Design** is a collaborative ritual, and perhaps a cultural imperative. Design is informed problem solving, a process for honing things down to the essence. Experience Design can emphasize this.

**Storytelling** is the primary function of Experience Design. The design process solves the problem of how the story should be told.

**Technology** is central to our culture and its rapid advancement must be followed in Experience Design. Technology is both a tool of the process of design (graphics, CAD, engineering), but also is a component in the product of design (E-device have become appendages of spatial interaction, for instance).

**Business and Entrepreneurship** is a consideration in Experience Design. Find the link between the adventurous dream and the fiscal reality.

**Creativity** and the creative process are at the center of Experience Design and the teaching of those things is a vital component of training in many fields.

**Environmental Responsibility** and sustainability are considerations in Experience Design. Experiences, and the machines that foster those experiences need to always refer back to the concerns of a limited planet.

**Community** is built through Experience Design and this should be encouraged.

**Collaboration** and the collaborative process are paramount in Experience Design. Design is not a solitary but a communal ritual. Making is bred of many minds.

**Attraction and Destination** are notions that should be central to Experience Design. We do not merely create or facilitate experience. We must call our community in to participate in the experience and provide a marked space for the event to occur. We need to design the drawing mechanism.

**Event** is a keyword in Experience Design. We should remind ourselves that we don’t only design space, but time as well. The thing we are making is an event that will be experienced. We need to think of what happens.

**Diversity** of audience should be a accommodated. We want the live experience to be accessible to a complete range of participants, to allow for those who may be challenged in
matters of sensory abilities, language or other matters, to still be impacted by the designed experience.

Notion: We suggest that this be structured as a studio class, wherein there are collaborative team projects all stemming from a great story that should be told and leading to the design of a site-based experience that helps bring the story to life.
Experience Design – Early Curricular Concepts

The following are early concepts for a potential course of study, including objectives and possible projects. This assumes that the class-work would be studio-styled mock/paper project work focusing on creating designs for live and site-based experiences for human consumption. These experiences are usually rooted in some larger story or message that we desire to tell/convey. The course work would be monitored, advised and assessed by professionals working in the field of attraction/destination and other forms of experience design. To an extent, this course of study aims to provide skill training for the field. But its larger goal is to provide students from a variety of disciplines the opportunity to explore new and multi-dimensional ways of creation and expression via the design process.

Objectives for a Course of Study:

- Allow students to find new means of expression.
- Allow students to discover the nature of the design process.
- Define Experience Design
- Identify the factors that determine what stories we should tell
- Identify the factors that determine the kind of experience we should create
- Investigate differing kinds of “live experiences” and their makeup
- Explore the nuances and potentials of “live experience”
- Investigate the relationship between space and experience
- Devise news ways of telling stories (via the creation of fully dimensional events)
- Learn to Create Collaboratively: Imagine, Devise, Communicate, Test, Hone and Realize (together as a team)
- Facilitate the transition of the imagined to the real
- Explore new or unimaginable live experiences by improvisatory creation in a working laboratory/studio
- Put new ideas to work – provide a proving ground
- Develop skills in collaborating toward a unified vision
- Develop skills in expressing the vision graphically
Develop skills in achieving clarity of communication in the process of going from dream to destination

Develop a new language of space/time/event

Understand the business of experience design

Train for the business

Link to the industry

**Suggested Projects**

Collaborative Exploration: Making Something from Nothing, devising moments from ideas

Practical Project: Science Focus – Telling a Story rooted in matters of the Physical World/Cosmos by devising a engaging and illuminating spatial experience

Practical Project: Cultural Focus – Telling a Cultural Story through tangible/visceral/transformative experience

Practical Project: Spirit/Psych/ Human Focus – Non-linear/non-narrative in regards to “story”; devising an experience that touches the “inner self” of attendees

Practical Project: Entertainment Focus – Telling a Story for amusement (possibly in “magical” ways) by creating an attractive experience.

**Possible Approach Angles for Projects:**

Freeform/Artistic: Devise an experience that expresses something compelling/interesting/moving/engaging for the attendee through a unplanned exploratory creation process

Planned Presentative: Devise an experience that “presents” something to mind and senses of the attendees

Planned Interactive: Devise an experience that facilitates interaction between attendees and the experience

Planned Immersive: Devise an experience that allows immersion of the attendee into a new/alien/alternative kind of reality

Planned Linear Journey: Devise an experience that takes the attendee on a specific journey
Spatial Discovery: Devise an experience that fosters wandering and free discovery - in a flexible space where attendees can “invent” their own experiences

Possible “Mock” Constructions for Projects:

Entertainment Attraction or Amusement

Museum Exhibit

Zoo or Aquarium Exhibit

Maze

Interactive Site

Park/Play Area

Theatre Event

Installation Art/Sculpture

Accidental Space (a space one is not directed to, but stumbles upon and a experience ensues)

Cyber Experience (???)

Possible Project Sequence:

1. Identifying the Objective and the Story to be told
2. Identifying the Site/Space and all related Parameters
3. Establishing a Goal or Overall Production Concept
4. Identifying the Design Problem
5. Research and Conceptualization
6. Roughs
7. Addressing the Problem by Creating a Master Plan
8. Testing the Plan via an initial “focus group” assessment
9. Composing the Design from General Identity to Specific Details
10. Review by outside assessors
11. Refining and Revising Designs per review assessment
12. Final Design Documentation
13. Final Review by outside assessors
Experience Design – Early Curricular Concepts with Notes from Dave Cooperstein, Senior Design at PGAV Inc – Designers of Attractions and Destinations

Dave’s notes are indented

The following are early concepts for a potential course of study, including objectives and possible projects. This assumes that the classwork would be studio-styled mock/paper project work focusing on creating designs for live and site-based experience for human consumption. The course work would be monitored, advised and assessed by professional working in the field of attraction/destination and other forms of experience design. To an extent, this course of study aims to provide skill training for the field. But its larger goal is to provide students from a variety of disciplines the opportunity to explore new and multi-dimensional ways of creation and expression via the design process.

I think this summary is spot on. I think it's really important to make it clear that this course is not only about the investigation of real-world projects and goals, but also about students discovering new ways of collaborating, designing and working.

Objectives for a Course of Study:
Allow the student to find new means of expression.
Allow student discover the nature of the design process.
Define Experience Design
Identify the factors that determine what stories we should tell
Identify the factors that determine the kind of experience we should create
Investigate differing kinds of “live experiences” and their makeup
Explore the nuances and potentials of “live experience”
Investigate the relationship between space and experience
Devise news ways of telling stories (esp. via the creation of fully dimensional events)
Learn to Collaboratively Create: Imagine, Devise, Communicate, Test and Realize (together as a team)
Facilitate the transition of the imagined to the real
Explore new or unimaginable live experiences by improvisatory creation in a working laboratory/studio
Put new ideas to work – provide a testing ground Develop skills in collaborating toward a unified vision Develop skills in expressing the vision graphically

This is a REALLY hard thing to do, and could be even harder to evaluate in a workshop setting. It's a lofty objective, but a potentially rewarding one.
This would be an Objective that I would imagine could be targeted early on in the course...as part of a 'warm-up' project.
Defining this parameter could be a challenge. Even if it's a 'real-world' design problem, it's not necessarily one that is going to be built/created full-scale. Finding ways to 'realize' the solution could lead to an interesting creative challenge. Perhaps it's in the
presentation technique. Perhaps it's in a scaled down version, or a 'mock-up' of a piece of the experience. Lots of implications here...
I think this is where TECHNOLOGY will play a key role...audio, video, architectural projection, augmented reality, gamification, etc...
This is the MOST satisfying part of my job. Seeing an idea come to life.
Capturing this in a classroom was always a challenge for me in school...
I think this is a REALLY interesting avenue to attract students from OUTSIDE the typical design fields of study...like Business Majors, or Economy Majors, or even Marketing Majors. One of the reasons PGAV gets hired over other firms is because of the Business Analysis and Planning that we do as part of our Master Planning and Attraction Development work. We analyze and understand a client's BRAND before we begin to develop new products for them.

Develop skills in achieving clarity of communication in the process of going from dream to destination
Develop a new language of space/time/event Understand the business of experience design Train for the business Link to the industry

**Suggested Projects**

Collaborative Exploration: Making Something from Nothing
Practical Project: Science Focus – Telling a Story rooted in matters of the Physical World/Cosmos
Practical Project: Cultural Focus – Telling a Cultural Story through tangible/visceral/transformational experience
Practical Project: Spirit/Psyche/Human Focus – Non-linear/non-narrative in regards to “story”, an experience that touches the inner self of attendees
Practical Project: Entertainment Focus – Story for amusement

**Possible Approach Angles for Projects:**

Freeform/Artistic: Devise an experience that expresses something compelling/interesting/moving/engaging for the attendee through an unplanned exploratory creation process
Planned Presentation: Devise an experience that “presents” something to mind and senses of the attendees
Planned Interaction: Devise an experience that facilitates interaction between attendees and the experience
Immersive: Devise an experience that allows immersion of the attendee into a new/alien/alternative kind of reality
Planned Linear Journey: Devise an experience that takes the attendee on a specific journey

This is the HARDEST of these to design, build, and express. But, if done well, probably the most rewarding. Like a beautiful dance piece, that takes you somewhere incredible, even though you're not
sure how you got there.
Again, a perfect outlet for the exploration of TECHNOLOGY...either using it in the design of the experience, or in the actual experience itself.
This is the biggest trend in the Themed Entertainment industry right now....Immersive design that brings the guest into the experience, and even makes them a PART of the experience. In some cases, they may even get to chose the outcome.
This is another big trend right now, and where TECHNOLOGY is playing a huge part. Letting guests use their smart phones to explore in a non-linear way. Or a play space for children that fosters exploration and interaction.
Spatial Discovery: Devise an experience that fosters wandering and free discovery - in a flexible space where attendees can “invent” their own experiences

Possible “Mock” Constructions for Projects:
Entertainment Attraction or amusement Museum Exhibit Zoo or Aquarium Exhibit Maze Interactive Site Park/Play Area Theatre Event Installation Art/Sculpture Accidental Space (a space one is not directed to, but stumbles upon and a experience ensues) Cyber Experience (???)

One you left out is a LIVE EVENT...something along the lines of a Celebration, or Festival. Like a Major League Baseball Fan Fest, or the NHL Winter Classic. Something that is about space, activity, entertainment, show, play...over a long period of time.
Exhibition/Experience Design Reading List/Potential Bibliography

These are the beginnings of a reading list on the subject, both for purposes of better understanding the subjectband as potential reading for students in a class.


MacLeod, Suzanne; Laura Hourston Hanks; and Jonathan Hale, eds: *Museum making: narratives, architectures, exhibitions*. New York, NY: Routledge, 2012 *

* Available at CU Boulder Library for review