Entertainment: an Architectural Prototype

by
Curtis Berkenbosch, B.A.S

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Abstract

A response to architecture in a consumer-driven environment

The increasing social influence of media corporations raises important questions in architecture. This thesis studies the "extreme" architectural models of the theme park, tourist resort, and entertainment district. The techniques and technologies that have brought these models success merit closer study.

Contemporary concepts of architectural performance and interactivity have expanded the appeal of theatre, gaming and cinema into recreation spaces. Public spectators wish to participate in their communities, and ask architecture to facilitate this inclusion. As new technologies raise questions of application, architecture could help discover socially conscious answers.

Market research and advertising campaigns present feedback loops with potential for architectural research and experimentation. This thesis proposes to manipulate public love of novelty in a hybrid resort-laboratory prototype. Within this environment, greater forms of complexity can find public funding and new technologies can be given critical content. The short-term potential may be entertainment, but long-term, this prototype could advance building sciences and design.
Entertainment:
An Architectural Prototype

curtis berkenbosch
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Preface:

Entertainment and Architectural Culture

Prior to the main text thesis, I would like to explain the emergence of its ideas and clarify a few points that I believe will render its reading more understandable and enjoyable.

First, this investigation grew out of the study of the Las Vegas Strip. Through an analysis of the historical and contemporary roles of the "Strip" in leisure culture, it was possible to identify the core values and opportunities that I believe have resonance within the general discourse of architecture. Subsequently this research was expanded to include other locations relevant to this interest including examples in Southern California and New York City.

Any attempt at a fundamental understanding of architecture within the context of a consumer-dominated culture must take into account a vast body of material. What began in the 1960s as a study of vernacular American pop culture has come to be understood as phenomenon symptomatic of a rather more global set of trends and values that make up the entertainment industry (of late-capitalism). Nonetheless, despite the massive range and dynamics of this industry, it still represents a relatively niche market for architecture. Because of the limitations of the Master's thesis this study and its related project is only intended to be a first step which points the way to a larger goal: the exploitation of the entertainment industry environment as a vehicle for architectural exploration and evolution.

Because of the nature of the proposal, non-traditional representation techniques have been developed over the course of research in order to express the novelty and spectacle at the core of this exploration. This has involved an increasing reliance on "borrowed or appropriated" imagery (Google). This technique corresponds to the notion of collaboration which exists at the core of this project. Fundamental to the understanding of these visuals is to conceive of the architect's role as a catalyst of processes that evolve quickly beyond their direct control. What is most important here is the process towards a new mentality, rather than a design.
Introduction

This thesis investigates architecture that explores the realm of the fantastic; environments that are enabled by late capitalism and rooted in consumerism. Often it is an architecture of excess, luxury, spectacle, abandon, illusion, and the ridiculous. In recent times this architectural genre has become more and more time-sensitive. In an extremely fast-paced and competitive market of evolving advertising campaigns, a realm where tourist environments attempt to fulfill public love of novelty, architecture is employed as a commodity and a promotional tool. New values in the public sector have blurred the definition and importance of "authenticity", while corporate environments have increasingly blurred the definition of the public sector. Accordingly, it is often difficult for traditional architecture practices to operate within this important market. However an identification of the positive aspects of this contemporary condition might allow the emergence of strategies which could take advantage of and make good use of the trends found in the controversial architecture of the entertainment industry.

Following this idea, the first chapter of this thesis attempts to give a summary of the cultural values of the entertainment industry and the trends that have led to the current state of consumer landscapes. Case studies are introduced to explore the different strategies that have been used to manufacture public interest in some of America's most successful entertainment destinations. The innovations that have been achieved in the context of these environments are discussed in terms of their influence and benefit for architecture. The characteristics of entertainment and tourist architecture that are highlighted here are developed throughout the text in order to inform the eventual strategies of adjustment proposed. Today's cultural condition necessitates a closer look at the potential of architectural strategies deriving from the values of the entertainment industry.

The second chapter examines the idea of performance in architecture in the context of event spaces, theater, situations, and spectacles. New ranges of technological marvels in the entertainment industry are transforming the way we experience space. In this chapter case studies are introduced to provide examples of this idea and quality of performance. It is rendered clear that in certain conditions buildings are understood as dynamic processes rather than static spaces. This chapter identifies how these recent advances in building "performance" have affected its entertainment, tourist
and cultural contexts. The study of performance opens the discourse to new interpretations of spatial use.

The third chapter deals with a second, and arguably more recent development in architecture in the introduction of interactive features. In interactive spaces, the contributions and actions of the public are essential to the experience of architecture. The case studies in this chapter identify some of the ways in which public feedback is integrated in the design and evolution of the built environment. The ever-expanding network of data that we interact with on a daily basis is progressively finding an interface in architectural design. The communicative aspects of architecture discussed under the umbrella of performativity are becoming responsive and reactionary through interactive technologies. The trends identified thus far all serve to transform the public consumer into a public participant, changing the very nature of urban space. Interactive technologies will allow architecture to harness these new potentials.

The fourth chapter begins to shape a proposal to develop these new fields of entertainment into realistic, efficient, and applicable architectural strategies. Experimental design is explored in the case studies, concentrating on the laboratory model and the current practical functions of testing and feedback. Experimentation is proposed as a way to enable greater complexity, greater connections between industries, and greater concentrations of ideas. It is hoped that this is what will allow architecture to keep up with recent trends in the entertainment industry. Also to this end, the public realm is shown to be an essential component of a process of experimentation. The construction industry also enters the discussion as an open-ended system that could provide a laboratory model and site for experimentation. This discussion of research in an experimental system presents an opportunity to discover the most suitable and profitable contents and contexts for the new technologies architecture is using.

The fifth chapter suggests a possible scenario (including a potential site) for a prototypical research condition allowing the progression of building technologies and the testing of new strategies. Examples of prototype communities are analyzed in the case studies, specifically regarding their contributions to the form of today's urban landscapes and conception of the city. The benefits and difficulties of such endeavors are laid out, and the strategies for public interaction are discussed and justified. The prototype is suggested as a promising model to allow architecture to generate more
responsive and adaptive environments. The discussion of the entertainment industry's potential culminates with its ability to generate revenue and interest for a project of this scale and nature. What is proposed is performative and interactive experimentation within a research and design prototype, located in the context of the entertainment industry and construction site. This chapter concludes the conceptual ideas and research and sets the stage for the project proposals that follow.

Although the innovations that are currently achieved in the entertainment industries are coloured by the single-minded goal of profit-making, these advances are the basis for a great opportunity. In my view the architect is in a unique position to take advantage of these consumer-driven entertainment landscapes, and apply their appeal with the popular masses for the purpose of social improvements in architecture, tourism, urban renewal and cultural conservation. The architects and artists incorporated in the projects discussed in this thesis are beginning to capitalize on the unique possibilities of invention offered in the entertainment industry. The next step is to turn the system on its head, making architectural innovation and experimentation the bottom line of entertainment endeavors. Profits can be re-directed towards research and a progression of the industry, as well as to individual firms. It is imperative that architects begin to commission branded corporations in their projects rather than the other way around.
ENTERTAINMENT

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Chapter 1 – Entertainment

No discussion of architecture and society can afford to ignore the entertainment industry and the spread of its values. Western society currently has an unprecedented amount of leisure time along with an unprecedented range of activity choices. The schizophrenic entertainment industry also adds daily to this range of distractions. The design of much built space is now tied intrinsically to the entertainment values of this media-driven industry, and the social responsibilities of architecture are changing to suit this fact. This chapter will discuss examples of the urban landscape that represent the cutting edge of design within the entertainment industry. In these examples, the nature of tourism is transforming to suit the contemporary availability of leisure time on an everyday and almost mundane scale. This chapter questions the historical context behind these urban environments and what they represent for architecture's future.

Tourists look to indulge, relax, and submit to entertainment. There is evidence that this vacation lifestyle is in turn becoming part of a daily routine. In the wake of the recent recession, transformations of shopping malls into theme parks, thinning airport crowds, and the abandonment of billion-dollar construction sites on the Las Vegas Strip, are all evidence of a shift in the balance of vacation time. Society seems to be spending more leisure time closer to home and in closer contact with their working lives. The underlying reasons of this emerging trend are not the focus of this discussion. Instead, the demand being created for experiential forms of entertainment within easy reach of the average public citizen comes under scrutiny. This may prove to have revolutionary effects for architecture.

STORYTELLING IN THE DISNEY LANDSCAPES

The fantastical landscapes that exist in the built imagination of Walt Disney’s pleasure grounds have evolved out of an acute understanding of “North-American” (and increasingly global) entertainment values. The common adage that people “vote with their wallets” implies that as a society we have chosen to help Disney become “the largest creative design and development organization in the world.” The architecture that has been employed to allow the achievement of this dream has been controversial since

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* All definitions are from: Oxford Dictionaries Online (Oxford University Press, 2011)
its inception, as it is based on the narration of an entirely fictional environment. However, this once-unique exploration of imaginary problems has led to innovative solutions in architecture and engineering that would not have otherwise come about. Story telling in the three-dimensional environment requires a different way of thinking about design, as space is choreographed and scripted, given a personality and asked to “perform”.

The Disney environments demonstrate that significant profits can be generated by, “concentrating on popular science, mass amusements, patriotic nostalgia, and industrialized mythology...” to create never-before-seen environments which nonetheless tell familiar make-believe stories. These are the tools for success in the entertainment and resort industries, and their applications are epitomized at Disney. These tools allow new heights of creativity in the popular realm of architecture, but they must always create quick emotional experiences and follow clear narrative structures. Beyond these principles, the sky is the limit. Disney’s amusements do not last long; they are able to satisfy the consumer’s longing for novelty and change by carefully avoiding their own over-extension. Thus, the length and lifespan of an attraction must be in keeping with current public attention spans, which are consistently being shortened.

Architecture plays an important role in Disney’s environments but it is never seen as separate from the experience it creates, or from the story it is telling. The buildings, forms, landscapes and overall aesthetics have been, from the beginning, simply a means to an end in this context. All of the rules and traditional practices of architecture are generally ignored as long as the mood and aura can be sustained in a more efficient and economical fashion. The notoriety of Walt’s landscapes is due to this reckless manipulation of all art forms for the sake of commercialism. “Architecture in the Disney view became a catalyst that facilitated a harmonious, visually persuasive, and psychologically reassuring consumer experience.” Gone were any critical considerations, and the Disney franchise set itself up in opposition to the architecture that was being built “for architects”. However what Karal Ann Marling defines as Disney’s “architecture of reassurance” in Designing Disney’s Theme Parks, arguably provides an essential social service. In this light, the social effects of Walt’s endeavors are not so different from those of more critically rigorous architecture.

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2 Marling, Designing Disney’s Theme Parks: The Architecture of Reassurance p. 27
THE FULFILLED DESIRES OF LAS VEGAS

Las Vegas has been popularly dubbed the “entertainment capital of the world”, and its architecture is a long way removed from the critical discourse. It is oriented instead to the corporate world of consumption, freedoms, and excess. “Indeed, Vegas is the museum of branding,” and market competition has reached as far as feasible into an architectural exaggeration. This resort corridor is designed to provide the spectating consumer with a constant and overwhelming source of entertainment, excitement, and awe. Architecture is driven by any means possible to convey the message that “this is where you can fulfill the desires you’ve been seeking.”

The forms of architecture that have been used to convey this overwhelming meaning are heavily reliant upon signage, spectacle and general hysteria. In the culture of fast-paced lifestyles, Las Vegas attempts to keep in step with the trends of commercial and entertainment industries. To that end, “…the intensity of light on the Strip as well as the tempo of its movement is greater to accommodate greater spaces, greater speeds, and greater impacts that our technology permits and our sensibilities respond to.” Here is an environment that moves quicker than our short attention spans. Las Vegas is a prominent example of what is most novel and desirable in entertainment, and has been for a long time. It presents a historical model for the study of contemporary architecture: a "real fake". Robert Venturi and Denise Scott Brown point out in the seminal studio research of “Learning from Las Vegas” that this city has developed in as authentic a fashion as any other, but, “in Las Vegas, this evolution is compressed into years rather than decades, reflecting the quicker tempo of our times, if not the less eternal message of commercial rather than religious propaganda.” Architecture needs to change frequently and communicate instantaneously today in order to remain meaningful, at least in competition with the public entertainment sector, as visitors are only willing to invest precious seconds in an attempt to understand an environment or message. The architecture of Las Vegas is exemplary in this respect.

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6 Izenour, Scott Brown and Venturi, Learning From Las Vegas p.106
The Las Vegas Strip and its architecture emerged out of a new urban perspective developed during the technological revolution of the automobile. Freeways foreshortened the space “in between” one destination and another, and the windshield provided a new frame for the city. This perspective is now applied to pedestrian landscapes as well, requiring shifts in scale and an overpopulation of signage and decoration. Visitors are no longer content to meander slowly through the spaces “in between” one attraction and the next, but require either entertainment or an accelerated journey. The resulting spectacles of this quirky urban condition extend to all aspects of its fabricated environment, with every surface, form and subtlety of design subjected to revenue-increasing enhancements. Today even demolition, “is celebrated as an urban spectacle in the anticipation of more innovative experiences to come.” Pyrotechnics transform the razing of landmark resorts into official celebrations, carried out in a state of reverie. Among our greatest desires is the opportunity to experience a new and exciting form of entertainment that implants itself on our memories through all of our senses at once.

THE ENTERTAINMENT COMMUNITY OF HOLLYWOOD

Contemporary entertainment values have primarily evolved through intangible forms of media – radio, television, cinema, and the internet - to become a significantly virtual aspect of our lives. North American culture is defining its leisure time by an absorption in representations of alternative realities, and it has been argued that, “Modern life takes place on screen.” We have developed a habit of immersing ourselves in these virtual environments to escape reality and access imaginary, and often more fashionable, communities from a safe detachment. In the oxymoron that is “reality TV”, viewers become participants in the shows, developing an affinity with the characters and fan base. These entertainments have been expressly calculated to create the illusion of inclusion. Architecturally, this phenomenon has been stretched furthest in the creation of a physical site to embody “Hollywood”. This is an urban entertainment district (UED), which turns mundane chores into pleasurable experiences. The revenue of associated businesses and the enjoyment of the consumer increase in unison.

The virtual entertainment community of the 21st Century can easily be said to have its center in the somewhat intangible location of “Hollywood”,

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7 Klingmann, Brandscapes: Architecture in the Experience Economy p. 189
8 Nicholas Mirzoeff, An Introduction to Visual Culture (New York: Routledge, 1999) p. 1
CA. For a long time tourism flocked here to find that no tourist entertainment mecca existed at all. It was a city like any other. In 2001, the entertainment district developed by Trizac Properties and named “Hollywood and Highland Center” took full advantage of this untapped potential by providing Los Angeles with an exciting, 635-acre tourist destination that was able to match public expectations. The Hollywood and Highland Center was built for the accumulation of paraphernalia, souvenirs, and pseudo-glamour, in order to take full advantage of the tourist appeal of a database of “Hollywood” imagery. The architecture (created by EE&K architects) consists of pure representation as, “The spaces of Hollywood and Highland all link outside the development into a database of Hollywood imagery.” It is the ultimate urban environment of De Saussure’s signifier as nothing concrete truly exists here, only a concentrated grouping of representations that embody the entertainment lifestyle and culture of fame. All of the tricks and trappings of cinema and television design are applied to the architecture while the marketing strategy employs, “A combination of entertainment, dining, and retail venues [which] secures a synergy of interrelated spending patterns that promotes rapid turnover of profit and encourages return business.”

SHOPPING AND SPECTACLE AT UNIVERSAL CITYWALK

“Universal Studios’ CityWalk” is another urban entertainment district in Los Angeles, designed by the Jerde Partnership, who pioneered the term place-making to describe their seminal practice. Typical of commercial tourist destinations, in CityWalk, “The art of selling now dominates urban space, turning it into a new marketplace for architectural styles and fashionable lives.” As an extension of the Universal Studios theme park, Citywalk applies an adapted theme park model to the (once-)mundane activities of shopping and dining. The sheer concentration of commercial venues is overwhelming in itself, and when combined with the fantasies of signage and architecture that smother the space, the result is a new form of urban spectacle. Anna Klingmann studies this form in Brandscapes, identifying the emerging characteristics of these spaces. She observes that, “Even though CityWalk is only a short strip in actual distance, it accommodates an unparalleled

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Pseudo:

adjective

1 not genuine; sham

- Oxford Dictionary *

Lifestyle:

noun

the way in which a person lives.

- [as modifier] denoting advertising or products designed to appeal to a consumer by association with a desirable lifestyle.

- Oxford Dictionary *

Placemaking:

“The magic of Jerde Placemaking starts by being authentic about a place, a city neighborhood, an historic district, or a waterfront. This magic is fragile. Baltimore isn’t Budapest isn’t Bombay isn’t Beijing.

-www.jerde.com

Crossover stage-set urbanism:

“What is happening here is the morphing of theme park into shopping center.”

-Ada Louise Huxtable, The Unreal America, p.58

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10 Klingmann, Brandscapes: Architecture in the Experience Economy p.93
Branding:

"A brand is not a product; it is something much less tangible – an aura of meaning. ... It is a person's gut feeling about a product, a service, or a company."

- Anna Klingmann, Brandscapes, p.55

**Branding:**

1 a type of product manufactured by a particular company under a particular name.

- a brand name.
- a particular identity or image regarded as an asset.
- a particular type or kind of something.

- Oxford Dictionary *

**Schizophrenia:**

noun

[mass noun] a long-term mental disorder of a type involving a breakdown in the relation between thought, emotion, and behaviour, leading to faulty perception, inappropriate actions and feelings, withdrawal from reality and personal relationships into fantasy and delusion, and a sense of mental fragmentation.

- (in general use) a mentality or approach characterized by inconsistent or contradictory elements.

- Oxford Dictionary *

The multiplicity of events, producing a bazaar-like atmosphere." It is a dense entertainment neighborhood, with its entire 3-storey complex devoted to exaggerated architecture, public spectacles, and excessive consumerism. While the effect is jarring to any architect who appreciates the tenets of Modernism, it is difficult not to enjoy the actual experience when approaching it as a public citizen.

The **branded** entertainment industry has been infiltrating daily life since the mid-20th Century, and CityWalk is an example of its most excessive manifestation in the context of the entertainment district. At CityWalk it is the consumers who dictate, through purchasing habits, how the entertainment district will be modeled and how far that building model will extend into the fabric of the city. The pop culture landscape generated by corporate branding is expanding rapidly with its innovations being awarded public acclaim. This is in turn coercing architecture into the role of the well-paid commodity. The social values that the architecture discourse has been exploring for millennia are now being transformed by entertainment and commercial industries, which currently have the resources to employ architecture as they see fit. This can be seen quite clearly in the redefinition of public and private space that has occurred in CityWalk. In *The Unreal America*, Ada Louise Huxtable expresses a very real concern that, "the increasing privatization of publicly used malls... marks a trend toward the end of public space." This is one example of the ominous changes that will take place if the architecture discourse as a whole does not take up a greater role in the definition of these urban entertainment districts.

The **schizophrenic** patterns of development in the shopping industry leave the future wide open. Franchises have become global and powerful economic entities. The shopping public continues to demand a broader scope of more personalized and entertaining stores, in more compact districts. Naturally architects should have a hand in these changes. Basement shopping through online sources allows the franchises to rake in huge profits with little overhead, nearly eliminating the need for physical stores. Needless to say this is not a trend that benefits the architectural profession. New novelties need to be continually incorporated into a physical shopping experience in order for the shoppers to trade convenience for pleasure.

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12 Klingmann, Brandscapes: Architecture in the Experience Economy, p. 104
THE MUSEUMIFICATION OF SOUTH STREET SEAPORT

Another important model of the UED occurs at New York City’s South Street Seaport, a historic district that has been revitalized to become a more attractive part of the city. This once-booming (and once-decrepit) neighborhood and its nostalgic atmosphere present an ideal opportunity to market commercialism. In *The City of Collective Memory*, Christine Boyer asks, “Can a better stage be found for a marketplace spectacle than recycling old mercantile areas that reek with the history of commerce and establish associative links in our mind?” Retail developers saw the same opportunities, and the outdoor museum that exists now has created another unique retail neighborhood for Manhattan. The architecture that has been employed in the refurbishment of this historic district is based around a *theme of shipyard authenticity*. The environment is intended to bring some of the exoticism of the past back into the public realm of Manhattan, yet sterilized and *gentrified*. In effect it is an outdoor museum, with ships, docks, fish markets and warehouses set on a stage to attract public consumption. Drama sets its stage along the urban shoreline and the ‘real’ city becomes a background for the surreal shopping of “fishing-town folk”.

The inception of South Street Seaport involved a naval museum from the beginning, embodying a similar education of the public that is inherent in art galleries and museums. The economies of extensive revitalization have, as is so often seen, demanded a significant entertainment factor in order to market the space. Boyer illustrates that, “Their advertising, which is the entire historical milieu, must be pleasurable, mildly educational, and definitely entertaining if it is to establish popular appeal.” This formula is applied to the now popular transformation of dilapidated historic districts into UED’s all across the country, and the result is gentrification, the ousting of local retail by corporate brands, and booming public use. In this environment architecture has a very specific role, that is, to recreate the stereotypical sights of the past as economically as possible through new techniques and technologies.

THE NEW HORIZONS OF ARCHITAINMENT

Social tendencies towards conservation, health, ecological responsibility and the arts have begun to be influenced by today’s popular marketing strategies. The subtleties of these trends and the rapid-fire

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14 Boyer, *The City of Collective Memory* p.438
15 Boyer, *The City of Collective Memory* p.438/439
Novelty:
Noun (plural novelties)
1. [mass noun] the quality of being new, original, or unusual.
[count noun] a new or unfamiliar thing or experience.
[as modifier] denoting an object intended to be amusing as a result of unusual design.
2. A small and inexpensive toy or ornament.

- Oxford Dictionary

Industrial Tourism:
"The sale of these messages, even in their least trammeled form is what iconoclastic author Edward Abbey called "industrial tourism", the packaging and marketing of experience as commodity within the boundaries of the accepted level of convenience to the public."

-Hal Rothman, Playing the Odds, p.143

(Re)volution of fashion and style in general means that consumerism is in constant flux. Lifestyle choices are becoming more and more temporary and context-driven. An analysis of the themed landscapes currently captivating the public masses shows that novelty is found behind every curtain.

Consumers want something new and something extraordinary, something unique and something exotic.

In the media, this trend is harnessed through a rapid progression of complex and high definition imagery. For architecture this has meant so far that, "as in Vegas, the lines between irony, kitsch, and criticism become monumentally blurred." An environment is created where in many instances, quality is derailed from reality and the sensational experience is all that matters; and it is achieved using every technique available. Edward Abbey calls this type of marketing "Industrial Tourism".

To speculate where entertainment and architecture are headed, we have only to look to the movies. A lot of science fiction is speculation into the future, based on what we know today, and we are proficient at creating these illusions of the impossible and fantastic. The result is the production of sensory realities. The entertainment industry's techniques, values, and technologies are vital tools for architecture. Designing within this industry keeps architecture current and relevant in today's culture.

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16 Saunders, Commodification and Spectacle in Architecture p.29
PERFORMANCE

THE MEDIA SCREENSCAPE OF TIMES SQUARE - p. 14
THE EXPERIENTIAL ENVIRONMENTS OF DILLER + SCOFIDIO - p. 15
THE MECHANICAL PERFORMANCE OF THE MILWAUKEE ART MUSEUM - p. 16
THE SALE OF THE SPECTACLE AT THE GUGGENHEIM, BILBAO - p. 17
THEATRICAL INVENTION GENERATED BY THE RADIO CITY MUSIC HALL - p. 18
PERFORMATIVE POSSIBILITIES - p. 18
Chapter 2 - Performance

Many of the demands made of today’s buildings are performative. This is a loaded term with many interpretations. This chapter (and thesis) explores performativity in terms of efficiency, success, expression, affect, effect, and theatrics. These are not new concepts, as architecture has always been a multi-sensory and experiential art, but buildings and spaces are now becoming animated in space and time. In order for architecture to keep its appeal long enough that a risky proposal is still viable, many aspects of any given building need to be adaptable; to respond to changing social and cultural values.

In many recent projects this theme has been expressed through varying degrees of innovation. The examples of this chapter highlight some of the latest successful techniques in building performance. Specifically, these case studies explore the redefinition and animation of a newly imagined sense of space. Fantastical and Science Fictional interpretations of the built form provide questions that architecture is trying to solve. Inspiration in this field is not limited by the canons of the past but by the creativity of the imagination. This chapter sheds light on the values of exploring this dynamic future for architecture.

**THE MEDIA SCREENSCAPE OF TIMES SQUARE**

Times Square in Manhattan is an emblematic example of architecture defining itself through its use of screens and media. The concern here is with an environment created by surfaces rather than forms. Visual spectacles (in the tradition of London’s Picadilly Circus) define the urban environment of the square, and compliment its agglomeration of entertainment and retail franchises. Eric Gordon identifies a milestone in performance here, stating that, “Times Square marked the beginning of a trend in American urban development wherein the experience of play was built into the city in order to attract an audience, further enforcing the public’s conception of itself as urban spectators.” As spectators, the public mainstream is no longer satisfied with static advertising displays, and instead the screens of Times Square emit rapid video feeds. The pixilation of the screen represents a primarily two-dimensional technology that allows the facades of architecture to become interfaces, extending space to include a world displayed on-screen.

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1 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.84
In this context architecture becomes secondary, a frame for the media content (currently mostly advertising) that it supports, and the two remain largely disconnected. The screen is virtual and dynamic; in contrast its architectural framework is material and static. Times Square represents the public value of dynamic and communicative space, and identifies the limits of the screen on its own. It is a great public success because of its, "technique and pumped-up visuality. For the pleasures of being deceived. For the raising of commercial speech to a shout, deafening as a rock concert." And with relatively low-tech architecture, it allows a massive scale of entertainment. This form of architecture is an adaptive application of existing and widely available technologies. The performance of cinema and film is brought into the street and applied to its facades.

THE EXPERIENTIAL ENVIRONMENTS OF DILLER + SCOFIDIO

Diller + Scofidio (+ Renfro) is an architecture firm at the forefront of environmental and multi-sensory design, addressing new forms of atmospheric performance. Their projects are highly experiential and stimulate a redefinition of the accepted boundaries between technology, special effects, landscapes, and architecture. Chris Salter, a pioneer in multimedia installations, advocates performance in architecture in Entangled, where he describes Diller + Scofidio as a firm, "captivated by the potential of the stage as a proving ground to research architectural issues, [so] the team devised a series of experiments designed to open up and challenge common precepts of architectural discourse." These experiments exist at the fringes of architecture as it is commonly understood today, where concepts of space are heavily influenced by cross-disciplinary influences and technologies.

Diller + Scofidio's Blur Building, which was a pavilion for the 6th Swiss National Exposition of 2002, demonstrated the ability of environmental special effects to create space, as mist and fog defined the condition of the experiment. The reference points of vision and sound were eliminated and visitors entered an environment existing somewhere between the man-made and natural worlds. This spatial expression of special effects typical of film and the performing arts, demonstrates the power of architectural performance. The pavilion had a dynamic relationship to varying weather conditions, as smart technologies allowed it to adapt accordingly. This exhibit generated

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2 Saunders, Commodification and Spectacle in Architecture p.32
3 Chris Salter, Entangled: Technology and the Transformation of Performance; Foreword by Peter Sellars (Cambridge, MA: MIT Press, c2010) p.79
awareness of the fact that architecture could be wide open to speculative experimentation in its relationship to environmental conditions.

The environmental concepts showcased in the Blur Building effectively challenged the commonly accepted boundaries of architectural practice. This challenge was given a permanent built form when the New York City Department of Parks and Recreation employed Diller + Scofidio to design its Highline Park intervention. Here adaptive reuse is applied to the fabric of the city itself, as the aerial greenway puts the practice of sustainable architecture to use recycling an old piece of railway infrastructure to generate new development along its length. The architectural team has reclaimed the rail line as a designed expression of architectural sustainability in the city. The park itself creates a new way to move through the city and helps to correlate the definitions of urban spectatorship and leisure. The park generates a new narrative through the meatpacking district, and has already encouraged the buildings around it to perform in new ways for the new pedestrian audience introduced.

THE MECHANICAL PERFORMANCE OF THE MILWAUKEE ART MUSEUM

Santiago Calatrava is an architect whose work exemplifies mechanical performance. With a strong background in the sculptural exploration of geometrical forms and in structural engineering, he has devised many kinetic and operable systems that allow his buildings to become transformational and dynamic events. The Milwaukee Art Museum employs an operational sunscreen that transforms the skin of the building into a mechanical reaction to environmental conditions. This giant operable sunscreen transforms the building from a static form into an event, as the architecture comes to life in a machinelike, systematic way. This represents an important emerging trend for architecture, as it becomes more efficiently capable of reacting to the surrounding environmental context. Building performance is increasingly optimized. Michael Fox and Miles Kemp explore kinetic motion in Interactive Architecture, and justify its need pointing out that, "Environmental conditions are dynamic with respect to both seasonal weather trends and the surrounding architectural environment," thus, any reaction to these conditions must also be dynamic.

Mechanical systems are, however, only one step along a complicated road towards our, "visionary fantasies of creating ephemeral, transformative, and kinetic architecture." Increasingly important are robotic and organic methods of change and movement. What the Milwaukee Art Museum represents is the public appeal of these changing structures. They become spectacles identifying and bringing attention to a building.

The Sale of the Spectacle at the Guggenheim, Bilbao

The Guggenheim Museum that Frank Gehry designed in Bilbao is one of the most famous contemporary marvels. The sophisticated daring of the forms makes the museum a spectacle in and of itself, and demonstrates that architecture has great potential to draw tourists, simply through the novelty of its expression. Joan Ockman writes in *Architecture and Tourism* that the museum in Bilbao is, in effect, "...a tourist attraction whose unabashed visibility might radically transform a shabby urban image, a catalyst for renewal through the apparently still potent vehicle of built architecture." The Guggenheim has become a social catalyst for the local economy and has had consequences for architecture and tourism on communal, national, and even global scales.

For the architecture discourse, Bilbao represents much more than just a daringly complex museum design and "must first and foremost be evaluated as a marketing tool." It represents the enormous success to be had through the use of architecture as brand equity. Here, Gehry's cooperation with the Guggenheim franchise has allowed him to become, arguably, the first "Starchitect", and propelled him into the realm of general famedom. The museum has also achieved enormous critical and popular attention through its unique marketing combination, dubbed the "Bilbao effect". The more architecture becomes associated with corporate representation, the more the public takes an interest in the architects employed in these campaigns. The profession is increasingly taking on a literal performative role, as it is seen as a catalyst that can affect change within its social context. Practitioners are given a more popular voice, and the opportunity exists to reach a greater audience.

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7 Klingmann, *Brandscapes: Architecture in the Experience Economy* p.240
THEATRICAL INVENTION GENERATED BY THE RADIO CITY MUSIC HALL

The Radio City Music Hall is a massive theatre that, upon completion in 1932, was the largest and most opulent in the world. However this made it ineffective for traditional dramas, and necessitated a new form of entertainment for its stage. Rem Koolhaas identifies the strange condition that arose, stating in Delirious New York that, “Light years separate the architecture of Roxy’s theater from the activity on its stage.”8 Theatrical invention was required and the “Rockettes” were born. Their performance was designed to better suit the architectural potential of this theatre. Here experimentation was sparked through the construction of a new venue and revolutionized dramatic performance entirely. The container of the Radio City Music Hall generated a new form of content, demonstrating architecture’s performative ability to affect change in the arts. The spectacle and novelty that this environment enabled made the music hall the biggest tourist destination in New York City.

The Radio City Music Hall created an alternate reality, a disconnected environment, where the spectacles on the stage are part of an invented fantasy of entertainment. Illusions and special effects also manipulated the interior environment in four dimensions, as its timeline was also transformed. “In other words, the 24-hour cycle of day and night is repeated several times during a single performance at Radio City Music Hall. Day and night are drastically reduced, time accelerated, experience intensified, life – potentially – doubled, tripled...”9 These new dramatic activities required a new architectural environment in order to come into existence. It is important that an evolving content forces the progression of its built context. And it is important for architectural boldness to generate new forms of entertainment.

PERFORMATIVE POSSIBILITIES

Architectural performance today exists most prominently in two building features, which can be exploited in a “dynamic” (or kinetic) way. These are: the digitization of the cladding and the mechanization of the structure. Many other performative functions have been embodied in significant architecture, but I would argue that these two currently define the primary tendencies of architecture as performance. They represent the viable starting points for an exploration of the possibilities of architecture that

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Event:

"We give such an experience the name event precisely because of the unforeseen character of what happened – real events are always more than what we expected of them."

- David Leatherbarrow, Performative Architecture, p. 11

borrows from digital, organic, and mechanical technologies to become truly dynamic. Architectural construction remains today in a state of the "snapshot": Complex organic processes are used to generate gestural and expressive buildings, but these effects are almost always frozen at an optimum point and the design evolves from that snapshot. These gestures achieve a single performance as built forms, a single structural iteration. The future of performative architecture will be based conceptually and mechanically on the processes themselves of the organic metaphor, over a lifecycle. Buildings will become more animated, with more than one expressive state and an endless communicative potential. This progression beyond mechanical and surface performance will allow the field of architecture to get back on top of an evolving market that no longer deals in statics.

Many of the most dynamic examples of architecture found today, those with the most performative potential, can be rightly considered event spaces. This chapter has therefore highlighted the techniques and qualities that turn entertainment districts, museums, expositions and theatres into events. The look, feel, and experience of these examples are based on the crowds of spectators, actors, and performers that inhabit them. The spaces achieve the exciting animation of movement. The architecture that encloses these spaces is scripted rather than designed. It formulates relationships with the changing and sometimes unpredictable crowds. Although it cannot yet participate in the activity, the ability to react can be imbedded in highly sophisticated structures and skins. Events and spaces designed for artistic performances strongly affect our imagination, as the built space transforms, through performance, to become a new environment with dynamic potential. When we enter a theatre, we are filled with the anticipation of entertainment to come. These spaces are incomplete until the performance is in full swing, and the more we treat these spaces as fluid environments, the closer we come to fulfilling our aspirations for theatrical space.

Of primary concern in this thesis is that architecture be able to keep up with the demands of a clientele increasingly jaded by entertainment medias. In order to do so it must lose its modern fixation on static forms and embrace the new potentials of dynamic performance. The novelties and buildings addressed in this chapter suggest that we are moving towards an entirely new form of design that is adaptable and able to evolve along with the changing circumstances it contains.
INTERACTIVITY

THE PEOPLE THAT DEFINE THE SPACES OF NEW YORK CITY - p. 21
THE MARKET RESEARCH THAT TRANSFORMS THE VEGAS STRIP - p. 22
ROLE-PLAYING AT SEATTLE'S EXPERIENCE MUSIC PROJECT - p. 23
THE PUBLIC INTERFACE OF THE BIX DISPLAY AT KUNSTHAUS GRAZ - p. 24
THE CONSUMABLE LANDSCAPE OF CHICAGO'S WHITE CITY - p. 25
WHERE WILL OUR EVOLVING INTERACTIVITY LEAD ARCHITECTURE? - p. 26
Chapter 3 – Interactivity

In typical urban entertainment, architectural space is becoming the interface of an interactive experience that is offered to participating consumers. This trend is transforming the public relationship to buildings beyond mere consumption, to the point that involvement and personalization of experience is in many cases an expected architectural quality. There are many benefits offered to designers through the incorporation of public opinion, feedback, and research. Performance, production, and exposure in the media have become readily available to the general public through virtual tools like Facebook and YouTube. This allows a freedom of broadcast and interaction that was previously unimaginable, and helps to generate incorporation of interactive technologies in contemporary lifestyles.

This chapter explores the ways in which people experience and interact with the changing urban landscapes of performative architecture. Public involvement is increasingly important in the success of an architectural project, and with all the simulations currently used, buildings are extensively redesigned with public inhabitation in mind. Interactivity allows the public to shape the present and future of responsive environments, ensuring that they are consistent with the culture and community for which they are constantly redesigned.

THE PEOPLE THAT DEFINE THE SPACES OF NEW YORK CITY

The people largely define the atmosphere of New York. The excitement and entertainment found in the constantly shifting metropolis is the result of what Rem Koolhaas calls a “Culture of Congestion”, where interactions are often fleeting and natural in the streets and public squares. The architecture of the metropolis is unique, as its urban complexity allows for a rich and multifunctional layering of activities. The movement and behavior of New York’s dense public is in response to the urban environment, but also has a direct effect upon it. There is a powerful feedback loop found here as, “Its occupants are at once the researchers and the researched.”¹ The relationship of people to place (of content to context) is a fluid one here, as necessitated by the high costs of real estate, the rapidly changing mentalities, and exposure on an international scale. The public that work, live, shop, dine and play in New York City are setting trends that have widespread effects for

¹ Koolhaas, Delirious New York: A Retroactive Manifesto for Manhattan p.91
Situationists:
"By unitary urbanism they sought to bring art and technology together 'for the integrated construction of an environment in a dynamic liaison with experiments in behaviour' whilst by 'psychogeography' they meant a study of the precise effects which geographic environments, consciously organised or not, had on the emotional behaviour of individuals."
-Jorge Glusberg, Deconstruction, p.29

Live Programming:
"...dubbed live programming, continually change based on the interests and whims of artists who would be invited to create works utilizing the technical infrastructure."
-Chris Salter, Entangled, p.315

Market Research:
noun
[mass noun] the action or activity of gathering information about consumers' needs and preferences.
-Oxford Dictionary *

many local marketing strategies. When one looks to NYC to see what the movers and shakers of contemporary society are doing, they run across all sorts of public involvement in the arts and architecture of the city. The metropolis is enlivened by its events, for example its celebrated New Years Eve and Macy's Thanksgiving Day Parade festivities. Increasingly the design of the spaces for such events are benefiting from interactions with the social and cultural context of public inhabitants. Outside of these official events, the metropolis is also a breeding ground for independent art movements like flash mobs, Situationists, and live programmers. Klingmann writes that, "Architects can achieve unique experiential value in the long run only if the principles of place marketing are successfully combined with local practices that invite people to contribute to shaping the identity of their city, further enriching it with their presence and behaviour." To this end, NYC is a great study of the encouragement of social interactions to enliven urban architecture.

If architecture wishes to become more important, relevant, and conscious in a society increasingly demanding of interactivity, it must begin by allowing the relationship of an environment and its inhabitants to benefit from built-in feedback loops. The corporations that are increasingly employing architecture as a commodity have known this for a long time. Marie Antoinette Glaser points out the reliance of large architectural projects on their relationships with the public in Construction Site. She points out that, "The design of large urban construction sites such as Potsdamer Platz in Berlin and Ground Zero in New York are meticulously monitored by the public relations experts." These huge under-construction projects are tourist attractions and part of a larger public conscience. The construction site is choreographed to provide a public spectacle and its design is adapted to generate public interest and approval.

THE MARKET RESEARCH THAT TRANSFORMS LAS VEGAS

Nowhere does market research have more profound and obvious effects on the built environment than in the architecture of the tourist industry. In Las Vegas, design and programming are based on extremely thorough research into rapidly changing markets. Every aspect of this environment, from the slot machines to the shows are synchronized with

2 Klingmann, Brandscapes: Architecture in the Experience Economy p. 284
3 Marie Antoinette Glaser, ed. Construction Site: Metamorphosis in the City (Baden: Lars Muller Publishers, 2008) p.17
tourist desires. The environment is carefully controlled and surveyed and all
guest actions are part of a feedback loop that allows the resorts to generate
maximum revenue. This becomes a difficult task when the demands of the
public are changing more rapidly than architecture and construction can
accommodate. With the delights and attractions of Las Vegas available in
shopping malls, and ever greater thrills and spectacles found in virtual reality
and 3D cinema, interactivity must also be applied at the scale of Las Vegas if it
is to continue to draw its crowds. The public performers that have always been
successful here are increasingly open to public participation, and if there is
anywhere the urban environment can be treated as a free canvas, re-
interpreted and challenged socially, culturally, and functionally, it is here.
Free-spirited citizens, graffiti artists, and the “urban prank artists” that are
discussed in Chris Salter’s Entangled, could find great potential in Las Vegas.

New lifestyle patterns are focusing on self-betterment, health-
consciousness and the productive use of time, and this has had a direct and
rapid effect on the Las Vegas Strip. Jeffrey Cass associates this trend with the
Luxor Resort observing that “The desire to vindicate the time spent on
vacation explains, in part, the recent development in strip megahotels of
incorporating famous art in their interiors; they have become, in essence,
museum sites for tourists who crave ‘useful’ as well as ‘wanton’ pleasures.”

This is a rapid fulfillment of observable public values that is aimed at social
trends on a large scale. Even more important is a feedback loop on a more
individual basis. Interactive technologies are being applied that allow the
people moving through strip resorts to have virtual effects on their
surroundings, and the newest performances adapt their shows to suit the
particular conditions of each audience. Las Vegas has always played to the
most carnal and banal desires of pop culture, and to continue to satisfy our
excessive entertainment needs, landscapes like these must transform
themselves in real-time with the changes occurring in our culture, lifestyles,
and eventually, in our moods.

ROLE-PLAYING EDUCATION AT SEATTLE’S EXPERIENCE MUSIC PROJECT

The Experience Music Project, or EMP, was founded by Microsoft’s
Paul Allen, and designed by Frank Gehry, for the purpose of allowing the
public to interact with and experience the history of rock and roll. Taking its
cue from highly successful internet franchises (Youtube, etc.) this complex

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4 Lasansky and McLaren, Architecture and Tourism: Perception, Performance and Place p. 251
Simulate:
verb
[with object]
imitate the appearance or character of.
- pretend to have or feel (an emotion).
- produce a computer model of.
  - Oxford Dictionary

Virtual Reality:
noun
[mass noun]
the computer-generated simulation of a three-dimensional image or environment that can be interacted with in a seemingly real or physical way by a person using electronic equipment, such as a helmet with a screen inside or gloves fitted with sensors.
  - Oxford Dictionary

Mass Customization:
"Mass customization thus entails not only the customization of the product but also a personalized engagement with the consumer."
- Anna Klingmann, Brandscapes, p.32

embodies the transformation of a spectator into a simulated participant (or producer). Here visitors are brought "behind the scenes" and encouraged to play the part of rockstars. While exploring this backstage filled with advanced technologies and interactive multimedia, they take away a knowledge and appreciation of music's history. The education factor is an inherent side effect of all interactive practices. Michael Fox and Miles Kemp have explored this phenomena in Interactive Architecture, pointing out that "Children seem happy to accept learning if it has an entertaining interactive component; they are engaged through the aspect of controlling the narrative." While most children find themselves deathly bored in a museum, where touching anything is strictly forbidden, within the novelty of, say, a virtual reality museum, they are fascinated. The EMP actively employs interaction and achieves much more popular results. These sorts of environments are an attempt to create an experiential "VIP" experience. Norman M. Klein has identified this shift in The Vatican To Vegas. He explains how; "increasingly, the movie set itself had replaced the premiere. One was encouraged to shop inside this movie set, as if waiting for the shooting to begin." It is this sense of inclusion that interactivity is capable of achieving.

The progression of this trend in entertainment and cultural centers is towards mass customization. What is being sold is not simply a physical product or service, but a relationship, a membership and identification with the lifestyle choices and value system of the brand. The brand becomes an interface between the consumer, the product, and the intangible values this product represents culturally. A sense of belonging is being marketed and sold as an extremely powerful tool for attracting an audience. If architecture, both its design and construction, is to become more attractive for the societies within which we are building, it would benefit greatly from generating an atmosphere of inclusion and participation. Interactive architecture, as it is seen emerging in many avant-garde projects around the world, is already achieving this effect (or affect) and will be instrumental in closing the rift between critical architecture and public culture.

**THE PUBLIC INTERFACE OF THE BIX DISPLAY AT KUNSTHAUS GRAZ**

A very important example of interactive architecture is the BIX lighting and media installation that transforms the façade of the Kunsthaus

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5 Fox and Kemp, *Interactive Architecture* p.103
Graz, in Austria. Here Peter Cook and Colin Fournier (spacelab uk) have created a performative skin that communicates the program of the museum to the public. This interface creates a very unique connection between the content and context of this project, identifying the important questions of appropriate content for our increasingly expressive architecture. Jan Edler points out that, “Today we are missing clear and convincing architectural concepts for the design of media facades, in addition to the content that they should show.”7 To a great degree, interactive technologies can provide context-specific answers to these questions through feedback loops between the environment, its users, and every sort of social and environmental condition.

The BIX has become both critically and popularly successful because, “The performative aspects of the building are all geared towards an “urban communication strategy”.8 The façade becomes an interesting interface between the building and the city. Media facades in general, are a relatively new technological instrument, and benefit greatly from the architectural experimentation of their possibilities outside of advertising. Exploring interactive technologies in the arts and architecture could allow for much more place-specific performances in the built environment. In this respect, the relationship between content and context becomes a fluid and evolving two-way street of information. Fox and Kemp see a lot of potential in this kind of relationship, explaining that, “The feedback from a system can be extremely important in measuring the effectiveness of the system, as well as in teaching users how to successfully respond to it.”9 As the built environment embraces this ability to become an interface between users and their local communities, the once-alienating world of media billboards takes on a friendlier face.

THE CONSUMABLE LANDSCAPE OF CHICAGO’S WHITE CITY

With architectural interactivity allowing a more personal connection to the built environment, the next angle to consider is consumption, as the public has always wished to acquire souvenirs of their experiences. The White City of the Chicago’s World’s Fair represents a technological milestone in the “ownership” of the landscape as tourists were able to capture and possess images through their handheld cameras. Eric Gordon writes that, “The goal

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8 Kolarevic and Malkawi, *Performative Architecture: Beyond Instrumentality* p.207
9 Fox and Kemp, *Interactive Architecture* p.142
was to create a city that was consumable and reproducible – where "form becomes formula" (Fojas 2005, 265). So while the structures were only temporary, the idea of the city, as manifested through the assemblage of beautiful images, could last forever. This is an early example of the appeal of interactive technologies, and it has been growing exponentially ever since. The cornucopia of new communication technologies that have been developed since the handheld camera means that there are now many lenses with which we experience space (and place). Experimentation in interactive architecture essentially looks at how these new technologies can inform the creation of a more affective, affected, and reflective built environment.

The White City demonstrated the beginning of a shift in power, "away from the designers of spaces and toward those who consumed them." The spectator and the tourist gained a great deal of influence as they became producers (of their photographic souvenirs) within this landscape. With the vast amount of technological interfaces affecting the perspectives from which architects design, cross-disciplinary cooperation and experimentation has never been more suitable. Interactive architecture is quite a few steps behind other, more interactivity-fluent professions, and through the adaptation of their strategies, techniques and input, buildings can become far more compatible with the technologies employed within them. Looking at the city through the lens of the camera led to the more "photogenic-conscious" design of urban landscapes. Similarly current fascinations with new forms of interactivity in the urban environment will force its widespread incorporation in architectural design.

WHERE WILL OUR EVOLVING INTERACTIVITY LEAD ARCHITECTURE

The greatest potentials of interactive systems in architecture are in their ability to allow buildings to be thought of as open-ended processes rather than completed forms and functions. This potential could find a multi-billion dollar market in today’s Las Vegas constructions alone. The crowds attempting to get a peek into the “opening soon” Cosmopolitan Resort on the Las Vegas Strip bear testament to this opportunity and demonstrate that tourists are interested in the potential of unfinished spaces. The Fontainebleau and Echelon resorts, just north of the Cosmopolitan, are empty and abandoned in mid-construction, bearing testament to the failures of our current, shortsighted process of economic funding and development.

Interactive Systems:
"A truly interactive system is a multiple-loop system in which one enters into a conversation: a continual and constructive information exchange."
-Michael Fox and Miles Kemp, Interactive Architecture, p.13

10 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.31
11 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.61
symbiotic relationship could allow the construction of a vast project to slow down, rely on feedback, and garner funding from partial and temporary inhabitation. What has been built thus far is not beyond the possibilities of inhabitation, or outside the realm of generating profit. Interactivity presents a methodology that will eventually abandon the concept of completion altogether.

The current media of advertising and entertainment play on sensory perception, but not in a balanced equation, as the majority of stimulus is directed visually. The architectural illusions employed in these spaces are most often deprived of haptic considerations. The current overflow of visual stimulus, product of our most prevalent technologies, draws attention away from our other senses and encourages alienation. Interactivity allows architects to focus on a much more haptic approach, as called for by Juhani Pallasmaa, to counter the current pattern towards “tunnel-vision.” The entertainment industry is the ideal context for architecture to apply interactive techniques and media in the development of more critical haptic environments.

The joint future of entertainment and performance lies in the spectator’s transforming role from consumer to producer. Its potential is in open-ended and interactive environments, where revenue begins at the groundbreaking ceremony and public involvement is a key component in the identity of the building. These environments don’t risk going out of style, or becoming outdated, at least, not as long as the architecture is sufficiently fluid, malleable and adaptable.

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Haptic:
*adjective
*technical
relating to the sense of touch, in particular relating to the perception and manipulation of objects using the senses of touch and proprioception.

- Oxford Dictionary *

EXPERIMENTATION

ARCHIGRAM'S OPEN-ENDED INFORMATION DATA NETWORKS - p. 29

LEBBEUS WOODS' PROMOTION OF THE 'PUBLIC CREATOR' - p. 30

THE MULTI-DISCIPLINARY EXPERIMENTS OF BUCKMINSTER FULLER - p. 31

THE POTENTIAL SEEN IN THE GROUND ZERO CONSTRUCTION SITE - p. 32

THE INNOVATIONS OF MANHATTAN'S 'RACE TO THE SKY' - p. 33

IMPLEMENTING EXPERIMENTATION - p. 34
Chapter 4 – Experimentation

The design of performative, dynamic, and interactive architecture is still in its infancy. It is difficult for progress to occur in this field if each new technology and each new expression requires a forward-thinking client, or a commission with very unique demands. Rather, experimental, exhibitionary and, “Artistic explorations in interactivity have more of a possibility for inclusive public use and exposure.” In this realm new technologies are explored in every expression imaginable before they are released as optimized tools, to the general market. To this end, the most useful context for application right now, in this emerging field of architecture, is liminal experimentation in the public realm of commercialism and entertainment.

This chapter explores the benefits and possibilities that would exist if the relationships between critical architecture and popular culture were explored through professional experimentation in the public arena. An extensive marketing campaign is essential to promote these experiments, and could bring public awareness to the architecture discourse and the values of good design. The following case studies outline examples of experimental architecture and the contributions they have made to the profession.

In contemporary practice it is possible to see the construction site as the most obvious model for versatile and open-ended experimentation in design and building sciences. It embodies the incomplete and liquid entity that can allow for real-time input, feedback, and change. Opening this transforming environment to public inhabitation and architectural research could generate potential and possibility for inter-disciplinary progress on an unprecedented scale.

ARCHIGRAM’S OPEN-ENDED INFORMATION SYSTEMS AND DATA NETWORKS

Archigram (members: Peter Cook, Warren Chalk, Ron Herron, Michael Webb, David Greene & Dennis Crompton) was an avant-garde group of architects in the 1960’s interested in conceptualizing “living cities” that would be able to transform, move and adapt. The hypothetical experiments produced by this group have had a lasting impact on architectural education and have helped transform the relation of architecture to the information systems and networks it both serves and employs. The interests of the Archigram group were not limited by the realities of existing technologies and

1 Fox and Kemp, Interactive Architecture p.169
building sciences, but frequently dealt with ideas from science fiction and imaginative speculation. The dreams of these architects shared many characteristics with the values found in today’s entertainment industry. In the editorial of their Archigram 8 journal, it is said of their transient projects that, “They are dreams because they may never be completely satisfied by what a designer or a strategist or any operator can do. They are open-ended, and, whatever we are doing by the time that you are reading this, may in some way have sprung out of a dream or two.”

What was important to Archigram was that someone was pushing these borders and exploring the fringes of how we envision architecture.

By investing in architectural fantasies, Archigram imagined solutions that have been influential in the progress of architecture as a discipline. Many of their interpretations of information networks became vitally important to the content and purpose of architecture, as it now exists. If the networks depicted in their “Instant City” project, for example, had been experiments executed at full scale, then perhaps our profession would be on the same page as telecommunications and virtual technologies. All experimental architecture, by its very existence as such, explores the same values that this paper has been promoting. This is evidenced when Archigram’s members attested, “that most of the projects we make are hybrid in content as well as notion. They themselves are in constant change of state, assembly, and value. This last is the most difficult: and may be what metamorphosis is all about.”

The walking, living cities imagined by Archigram are still dreams. But they are part of a long tradition of architects predicting dynamic transformations (Constructivism, etc.). Experimentation is happening, and building science is already progressing towards the achievement of these realities.

LEBBEUS WOODS’ PROMOTION OF THE “PUBLIC CREATOR”

Lebbeus Woods is an architect who works almost exclusively in conceptual and experimental architecture. His designs confront the existing urban landscape (usually in crisis) with a new order that destabilizes these fixed forms. He promotes the interaction of the public with the found wreckage of their cities in order to create their own habitats with what is at hand. This ad-hoc form of construction proposes a public society defining its

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3 Cook, Archigram p.74
**Stimulus:**

*noun*(plural *stimuli*)

a thing or event that evokes a specific functional reaction in an organ or tissue.
- a thing that arouses activity or energy in someone or something; a spur or incentive.
- [in singular] an interesting and exciting quality.
- *Oxford Dictionary*

**Ephemeralization:**

"...the term "ephemeralization", coined by Buckminster Fuller, which explains how we can literally cut an enormous amount of excess structure from our buildings when there is an active control system inherent in the building."
- *Michael Fox and Miles Interactive Architecture, p.47*

**Ephemeral:**

*adjective*

lasting for a very short time.
- (chiefly of plants) having a very short life cycle.
- *Oxford Dictionary*

own environment in a manner not far removed (though more dystopic) from the aspirations of interactive architecture. His work opens up possibilities and presents new tools along with *stimulus* and techniques for using these tools. This work has been especially influential among students seeking new systems of design that are more sensitive to the changing trends of contemporary life. Here the practice of architecture is a process helping public individuals to reshape their urban surroundings in an interactive and temporary manner. Woods writes that, "Once the performers are gone and the stages taken down, there are no permanently visible traces of them – only the residue of ideas, the most powerful things in the world." This statement suggests an architecture of brief and personalized events within cities that have no fixed or pedagogical identities.

Tracy Myers explains that, "Woods calls his work experimental architecture, by which he means architecture that is "open-ended [and] exploratory, "that is made with the purpose of gaining experience for its own sake."
In effect, he is not attempting to solve a particular functional problem, but proposing new methods of problem solving. He embraces a new role for the architect; as a catalyst for systems of self-design. In his fictional post-crisis landscapes he is promoting the popular "teach a man to fish" parable. Interactive and experimental landscapes would necessarily look like this, with each study informing the next and feedback driving the direction of development. The actions in this research-based scenario are far less important than the results, data, and memories that are left after the action is abandoned. These memories are used to build the actions of the future.

**BUCKMINSTER FULLER’S MULTI-DISCIPLINARY EXPERIMENTS**

Buckminster Fuller was an Engineer, designer and inventor, who was interested in developing new forms of transportation and shelter, using practical and inexpensive materials. His experimentation drew from multi-disciplinary sources, techniques, and technologies and led to great architectural achievements, most notably, the Geodesic Dome. He was an environmentalist who believed in "doing more with less", and he proposed that this was possible through more intelligent technologies. He called this practice "ephemeralization" and it allowed high-tech solutions to more

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efficiently solve some of a building's architectural dilemmas. His Dymaxion inventions were ahead of their time in terms of adopting unique, extra-architectural strategies; prefabrication processes, tensile structures and aviation materials (to name a few). If experimentation is to successfully lead architecture into the future, it must do so by embracing the endless array of resources provided by disciplines and industries outside of the generic limits of architecture with the enthusiasm that Buckminster Fuller exemplified.

Multi-disciplinary research and experimentation is incredibly valuable in that it can produce centers of knowledge that are constantly expanding through globalized exchange and discussion. The exhibition model is an important precursor to a more fluid and flexible research environment. Woods made this connection, declaring that, “An exhibition is an ephemeral form of construction, as is most experimental architecture. Both address conditions of the present and may or may not explore how these might affect longer-term conditions. Often, experimental works test some larger idea, a hypothesis or theory, against the stringency of a particular situation.”

Experimentation is therefore invaluable in the development of a critical architecture discourse, and is best conducted in close cooperation with other disciplines and in close proximity to the public realm. Architecture cannot achieve many innovations working alone, instead, “The translation of freeform, non-standard architectural designs into built structures requires the development of new modes of thinking from all project participants.” Perhaps it is time for experimentation to open its doors to all who are interested.

THE POTENTIAL SEEN IN THE GROUND ZERO CONSTRUCTION SITE

There is a potential that exists in a building under construction, or a site under preparation. It sparks hopes, dreams and visionary ideas in the architect. More often than not, the product of the imagination is more fulfilling than the reality that the finished building will become. This argument is better known in the comparison of a novel and its film rendition, with viewers critical of the adaptation and its portrayal of imagery and characters ("It is not as I had imagined it"). The imagination knows no boundaries, no limits and no restrictions. Realized man-made works just cannot quite reach that potential. The built environment then, can keep this imagined potential alive through incomplete and constantly evolving buildings, allowing the imagination to fill in the gaps and continue dreaming of possible futures. In Construction Site, a

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6 Harsten, Myers and Woods. Lebbeus Woods: Experimental Architecture p.37
7 Kolarevic and Malkawi. Performatve Architecture: Beyond Instrumentality p.146
work that specifically addresses this potential, Marie Antoinette Glaser writes that, "The construction site embodies dynamism, process and constant change; it is a state of suspense full of expectation, the promise of the new and the locus of transition amidst the otherwise regulated everyday urban environment."^8

"Ground Zero" is a high profile and politically important construction site in New York where the destroyed World Trade Center is being rebuilt. It has become a carefully promoted tourist destination that takes advantage of the inherent fascinations of an incomplete construction site. The "Winter Garden" which overlooks the site from Battery Park City, shows that the display of construction can fascinate the public by making a spectacle out of the architectural potential it contains. Welding arcs are not so different from fireworks, cranes are no less impressive than monuments, and gangs of workers are as exciting as circus acts. The design process for Ground Zero was, due to its political stigmas, a public affair. Its image became about the future of not only New York City, but the United States as well. "It is here that the act of imagining the city to come develops into a necessary element in imagining the city that is,"^9 and the new skyscraper needs to reflect the essential culture of America.

On a more general note, the potential of the construction site is an instrumental part of the identification of progress for cities and cultures. The future of the architecture profession can benefit by capturing this potential, and allowing research and experimentation to occur in this kind of open-ended environment. If we are to have a complex for research and experimentation, then let it develop its syntax within the model of the contemporary construction site.

THE INNOVATIONS OF MANHATTAN’S “RACE TO THE SKY”

To see the effects that experimentation can have on the urban fabric of the city, one must look no further than the metropolis of Manhattan during the “race to the sky” from 1890 to 1973. This was a period when nine of its buildings consecutively held the title of world’s tallest building. Rem Koolhaas explores this emergence of a new built condition in Delirious New York, describing how, “Especially between 1890 and 1940 a new culture (the Machine Age?) selected Manhattan as laboratory: a mythical island where the

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^8 Glaser, Construction Site: Metamorphosis in the City p.15

^9 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.99
invention and testing of a metropolitan lifestyle and its attendant architecture could be pursued as a collective experiment in which the entire city became a factory of man-made experience, where the real and the natural ceased to exist."\[10\] The city that emerged is one of the modern marvels of the world. Manhattan was built on a clean slate of gridiron planning, with emergent technologies and building sciences pushing architects, designers and engineers to ever greater heights. In Manhattan this progress through experimentation, generated new rules, technologies, and strategies: in effect a new architectural language that permitted a new lifestyle.

The skyscraper also brought about a new urban complexity, as it was effectively more than a single building; functions collided and interacted within its "vertical schism". When the metropolis is understood as an experiment, the value of architectural catalysts is given more concrete meaning. The individual architects of Manhattan's various buildings become insignificant in comparison to the urban effect of their work as a whole. What becomes truly important in this instance is the complex process that enabled the emergence of an experimental built environment on such a large scale. The context that drove the elevators up is immeasurably important to the success of the model. The development of an experimental discourse for architecture then, must take full stock of the economic, cultural, social, and environmental conditions that will best allow for its successful emergence. Koolhaas describes how, "In Manhattan the new and revolutionary is presented, always, in the false light of familiarity."\[11\] This is the strategy that generated a public comfort level and it must be maintained in order for rapid evolutions to gain acceptance.

IMPLEMENTING EXPERIMENTATION

Today, it is the entertainment industry that provides the most profitable and comfortable site for the exploration of new and potentially alienating forms of architecture. It is within this context that a balance can be struck between the discourse of critical architects and the values of the popular masses public. Expectations of change, surprise, and novelty in public entertainment architecture lead to environments of recurring blank slates, fertile grounds, and clean digital grids; ideal for the open-ended experimentation in question.

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\[10\] Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan* p.9/10

\[11\] Koolhaas, *Delirious New York: A Retroactive Manifesto for Manhattan* p.135
The laboratory is where you develop an experiment, and then you take the experiment to the breaking point so that through this failure, you learn about the subject. Well we should do the same thing with those urban problems which are the most complex, the most demanding. - Paolo Soleri, *The Urban Ideal*, p. 66

Laboratory: noun (plural laboratories) a room or building equipped for scientific experiments, research, or teaching, or for the manufacture of drugs or chemicals - *Oxford Dictionary*

The establishment of a laboratory to explore new architecture and building science designs, and more importantly the opportunities of collaboration and experimentation, could help to consolidate a symbiotic relationship between architecture's critical theory and its social practice. As an environment of both ideas and built forms, laboratories provide a middle ground where nothing is dismissed as too fantastic, too imaginary, or too "Disney". Additionally, within the tourism of entertainment, nothing is dismissed as too costly, and no results are implemented without extensive market research, feedback, and debate.

Laboratory research can target the imbalances between advances in entertainment technologies and the concepts and planning of their content. Current innovations in these media forms flex technological muscles rather than solving problems. The solutions, now supplied without problems, find their uses in novelty advertisements that profit by stretching the boundaries of what is possible. Architecture should be far more concerned with the content of current technological expressions, as this is where social and ethical values are concerned. The proposed cross-disciplinary experimentation can apply these techno-marvels to a variety of purposes and identify their best social uses, most critical goals and greatest potentials.

The project following this discussion is a response to the observation that the latest and greatest technologies in architecture have not found their optimal expressions or their most profitable content. An experimental research facility could play a role in transforming these technological novelties into architectural instruments, where content and context is of the utmost importance. The results of this kind of experimentation could then be injected back into our cities as marketable sources of entertainment and interactivity for the public.
PROTOTYPE

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THE COMMUNITY OF THE FUTURE IMAGINED IN WALT DISNEY’S EPCOT - p. 38
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THE EMERGENCE OF AN ENTERTAINMENT PROTOTYPE - p. 42
Chapter 5 – Prototype

Change and progress in architecture and urban design cannot occur by themselves. But if there is to be experimentation, it will require a site, a prototype. The prototype is a powerful model to push the envelope of community and building design. In a safe, controlled environment, collaborating designers can explore their imaginations, take risks, and make mistakes, before the successful and fully developed ideas that emerge are introduced into the urban fabric of our cities. This chapter argues in favour of a physical site for architectural experimentation; a prototypical research complex devoted to the progression of architectural technologies and the testing of new strategies, which take account of ideas emerging from architectural theory. In particular, this thesis proposes the creation of a prototype laboratory that could allow experimentation and research to develop new solutions, under the guise of creating novel entertainment spaces.

The location, of what Lebbeus Woods would call a “Living Lab”, at the heart of the entertainment industry (the proposed site is on the Las Vegas Strip) could attract funding and induce a greater public understanding of critical architecture. M. Christine Boyer argues that for the public to see architecture, “seriously, technically and poetically, will help us to make a powerful case that architecture matters at all and can produce genuine effects that people will notice, appreciate, measure, value, and ultimately demand.”

In summary, we must generate a public awareness of the benefits of architecture if we wish people to continue paying for it. “Intelligent” architecture must demonstrate its ability to improve lives and communities, so that society can make the choice to support more costly (and beneficial) solutions.

THE URBAN COMPLEXITY PROTOTYPE OF PAOLO SOleri’S ARCOSanti

Arcosanti is an experimental community that was begun in 1970 by Paolo Soleri and based around his notion of “arcology” (architecture + ecology), of which he writes; “it’s not a conservation. It’s an evolutionary attempt.” At Arcosanti Soleri is experimenting with an “Urban Effect”, where greater forms of complexity in community living are made possible through

1 Boyer, The City of Collective Memory p.20

 Prototype:  
 Noun  
 1 a first or preliminary version of a device or vehicle from which other forms are developed.  
 - the first, original, or typical form of something: an archetype  
 - Oxford Dictionary

The Living Lab:  
“The final component of Wood’s new city is the living lab: a structure in which the activities of experimental living are conducted and the instruments required for it...are created.”
- Tracy Myers, Lebbeus Woods: Experimental Architecture, p.12

The Urban Effect:  
“The Urban Effect, then, is the effect of miniaturizing our habitat.”
-Paolo Soleri, The Urban Ideal, p.35

“The cleverer I am at miniaturizing the world, the better I possess it. But in doing this, it must be understood that values become condensed and enriched in miniature.”
-Gaston Bachelard, The Poetics of Space, p.150
Complexity:
"how do you define complexity?"
-Michael Tobias
"In a way, the degree of liveliness that results from the interaction of the participant."
-Paolo Soleri

-Paolo Soleri, The Urban Ideal, p.105

Complexity:
noun (plural complexities)
[mass noun]
the state or quality of being intricate or complicated.

[count noun]
(usually complexities)
- a factor involved in a complicated process or situation.

-Oxford Dictionary*

miniaturization and more complex living models. He tackles questions of social, cultural, and ecological importance, stating his purpose in The Urban Ideal, that, "We're creating a setting in which a change of heart might come to birth." His communal prototype is an alternative condition from which the problems confronting today's more traditional urban conditions can be subverted. This prototypical "town", with its organic organization, is effectively a laboratory serving educational purposes through student involvement.

The complexity that Soleri addresses in his prototype community is a question that has become important with today's multiplicities of information. This experimental town in Arizona is inspirational for the manner in which is continuously being built by the members of its community. It is a sustainable model, as the early structures are reused and recycled back into the project when they are outgrown or replaced. Furthermore, the basis of complexity is a reshaping of the notion of what is public and private, as the space and amenities are shared amongst the community. These and many more techniques for improving the use of space emerge from Arcosanti, demonstrating that larger urban issues can benefit greatly from experimentation in a prototype community.

A prototype experimenting with entertainment technologies, however would not function in an isolated desert location. Its very nature requires the presence of public scrutiny and input. In tackling important urban issues, the hope is that this prototype would involve the public in its study. Inversely, there would exist an opportunity to make connections between sometimes overly abstract architectural theory to the popular values and new concerns of a consumer society.

WALT DISNEY'S "COMMUNITY OF THE FUTURE" DREAM FOR EPCOT

Walt Disney had a dream a prototype community. This went by many names: "Waltopia", Medallion City, Progress City, and eventually EPCOT (Experimental Prototype Community of Tomorrow). Today, this dream exists as a retro-futuristic theme park that incorporates a permanent World's Fair (The World Showcase). At its inception however, EPCOT was envisioned as a never-complete community of the future that took its cue from industry and was constantly showcasing, testing and demonstrating new technologies, materials and systems. Architects can learn many lessons from the Disney

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3 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.78
4 Marling, Designing Disney's Theme Parks: The Architecture of Reassurance p.163
Vernacular:

noun
1 (usually the vernacular) the language or dialect spoken by the ordinary people of a country or region.

adjective
1 (of language) spoken as one's mother tongue; not learned or imposed as a second language.

- Oxford Dictionary

World Showcase at EPCOT:

"It was a map of the real places in the world that had already been transformed into quasi-fantasy by Hollywood, paperback books, and the collective imagination."

- Karal Ann Marling, Designing Disney's Theme Parks, p. 159

Coney Island:

"Coney Island is the incubator for Manhattan’s incipient themes and infant mythology. The strategies and mechanisms that later shape Manhattan are tested in the laboratory of Coney Island..."

- Rem Koolhaas, Delirious New York, p. 30

Tourism:

noun [mass noun] the commercial organization and operation of holidays and visits to places of interest

- Oxford Dictionary

projects (both their successes and failures) but they must also be wary. As Klingmann warns, “The responsibility for architects today evidently lies in the creation of intense urban experiences that allow for the formation of collective experiences without the overdetermination and exclusivity that is so prevalent in the Disney projects.” EPCOT was no exception.

It is time to ask what needs of contemporary urban living can be improved upon by adapting the architecture of the theme park, the resort, and the tourist destination. The theme park model, for example, is useful in generating a market for disappearing vernacular architecture. The World Showcase at EPCOT demonstrates that the tourism industry can support the conservation of traditional building practices through its economics and public interest. In addition, the disciplined crowds and park-like settings that are achieved in these models set precedents for urban renewal. However, prototypes and experimentation are required in order to achieve harmonious implementations. The Disney resorts are landscapes built by an entertainment tycoon. It is time that this model's successes are attempted in the design of urban environments by architects working for the public realm.

CONEY ISLAND AS A TESTING GROUND FOR MANHATTAN’S TECHNOLOGIES

The experiments that were going on in Manhattan to enable the skyscraper race did not come about spontaneously, and innovations were not immediately applied in the city. The technologies that allowed such progress instead went through a development period, many of them in the tourist entertainment hub of Coney Island. Coney’s theme parks, just a little east and south of the metropolis, served as testing grounds for all sorts of new technological marvels. The leisure and entertainment industries thriving on the island’s tourist appeal created an environment where risks could be taken with innovative thrills and amusements that generated the revenue and experimentation to fuel Manhattan’s progress. Rem Koolhaas explained more eloquently that, “The paraphernalia of illusion that have just subverted Coney Island’s nature into an artificial paradise – electricity, air-conditioning, tubes, telegraphs, tracks and elevators – reappear in Manhattan as paraphernalia of efficiency to convert raw space into office suites.”

The entertainment laboratory model, it would seem, has been used successfully to some extent before. There were few architects, however,

5 Klingmann, Brandscapes: Architecture in the Experience Economy p. 80
6 Koolhaas, Delirious New York: A Retroactive Manifesto for Manhattan p. 87
marketing ticket sales or analyzing data feedbacks of Coney's thrill rides. The amusement parks were driven by a bottom line of capitalist profits, not a desire for architectural innovation. It is apparent though, that if we study carefully the ways in which we play, then new techniques and technologies can be incorporated into the ways we live and work as well.

**THE ATTRACTION OF CONSERVATION AT THE EDEN PROJECT, UK**

Sustainability has become an important buzzword and consideration in contemporary culture. It has begun to have an effect on travel patterns, and tourist projects where nature is (arguably in some cases) preserved, have successful paybacks. The Eden Project, conceived by Tim Smit and designed by Nicholas Grimshaw, is an ecological complex consisting of three artificial "Biomes" that contain a collection of plant species from all over the world. They appear as "a series of "soap bubbles", sitting lightly in the landscape."7 Built in Cornwall, England, The Eden Project includes the world's largest greenhouse and its success demonstrates the tourist potential of conservation and sustainability. This laboratory can serve as an important influence for the emerging architectural design concept of *biomimicry*: the synthetic imitation of natural systems. This entire facility is built to promote this organic form of architecture.

In a visit to the Eden Project, one is enveloped in the message of conservation. Education in the consideration of ecological issues is naturally a large part of the visitor experience, and a key memory afterwards. Following this logic, we can determine that the more environmental awareness and sustainability get built into public amusements, the more this consciousness creates an impression in minds of visitors. *Recreationists* can become the new conservationists.

Since society is constantly seeking to understand and apply nature's solutions to its range of design problems, the next step might be to conduct research and experimentation in a public environment. Adopting the most advanced media and entertainment values to promote issues of sustainability is the model that made Al Gore's *The Inconvenient Truth* such a widespread influence. Likewise, interactive and performative technologies can allow sustainable and organic architecture to generate a significant amount of excitement as well.

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7 Kolarevic and Malkawi, *Performative Architecture: Beyond Instrumentality*, p. 34
THE NOSTALGIC ROLE OF THE VIEUX CARRE, NEW ORLEANS

Planned, themed, and gated communities, which represent a contemporary trend in community building, are successfully marketing nostalgic enclaves that are stereotypically reminiscent of past environments. The speed of contemporary life has generated some negative side effects, and most people benefit from a comfortable sense of familiarity. This is difficult to achieve without relying on an architectural regression to earlier forms of design. Themed communities present a warning of the potential alienation of space-age architecture and its rapidly progressing technologies. Architectural progress does not naturally incorporate comfort and familiarity for the sake of mental well-being. The challenge for architecture then, is to balance the intelligent progress of urban living with an informed concern for the social health of its users. This is an incredibly complex condition and understanding it will most likely require decades of experimental living with an unimaginable amount of inhabitant feedback.

The French Quarter in New Orleans is a famously historic entertainment district, the entirety of which is protected as a National Historic Landmark. The Quarter is an emblematic American destination, with attractions like Bourbon St. and Jackson Square drawing international tourism. The neighborhood is also a gathering place for artists, musicians, fortunetellers and street performers, and is famous for its drinking establishments. Here, all of the trappings of entertainment exist within a (supposedly) real and "authentic" urban neighborhood. This nostalgic community is one of the few examples that have great appeal to both residents and tourists. It does not have the enclave aspect of the gated Seaside, Florida community or the segregation of Havana's, "Cuban-themed" resorts, but establishes a comfortable balance. Michael Benedikt describes a balanced tourist environment as, "a place where everyone is pleased to be a native envied by a tourist". When a boom in tourism does not destroy the sense of community that belongs to the residents, then the social catalyst is deemed to have been successful.

THE CONCEPTION OF THE ROCKEFELLER CENTER AS IT'S OWN CITY

Arguably the culminating result of Manhattan's experimental race to the sky, which began in the lab of Coney Island, is the massive complex of the Rockefeller Center. Incorporating nineteen commercial buildings, it was the

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8 Saunders, Commodification and Spectacle in Architecture p.13
largest private building project of modern times, and its design process generated huge amounts of press and public interest. The center was a headquarters for radio, and later television, and had an extensive public art program. Its many disparate urban functions were juxtaposed in a master plan that functions effectively as its own city. Eric Gordon explains that, "Rockefeller Centre, or what was until 1932 called "Radio City", was conceived as a single narrative, connected through a complex network of buildings and spectacles."9

The innovative complexity of Rockefeller Center was the result of the kind of experimental prototype process that this thesis hopes to propose. Its formula is now understood (after the fact) as generated by the unique conditions of the coming-of-age context of New York City. In contrast, the results of an experimental prototype revolving around the entertainment industry cannot yet be known. However, a study of the Rockefeller Center gives reason for optimism. It can be safely assumed that the architecture discourse stands to make great innovative leaps in contemporary city building through an open-ended prototype model that conducts research in interdisciplinary collaborations.

THE EMERGENCE OF AN ENTERTAINMENT ARCHITECTURE PROTOTYPE

The greatest potential of experimenting with sustainable architecture is to find progressive (as opposed to regressive) ways to live in harmony with nature. Our most promising technologies and designs are now replicating the complex animations of nature’s processes. We can increasingly mimic not only their appearances but also their actions and complex biological systems. The future is brightest if we continue trying to live in a symbiotic relationship with our environment: "as nature", rather than simply "with nature".

Experimenting with the complexity of the city can help to develop tourist, leisure and entertainment functions on a more quotidian scale, serving the needs of both local and visiting communities. In this way the "sense of place" that is created could have direct and positive effects for the localized social context in which it operates. This is the intention of implementing the lessons learned from the entertainment landscapes of the tourist world into the complexity of urban life.

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9 Gordon, The Urban Spectator: American Concept Cities from Kodak to Google p.106
In laboratory communities forward thinking individuals from many related fields can begin to put meaning and context to the new technological content now at our disposal. The inherent self-preservation instinct in man is moving inevitably towards a species-wide conscience. The notion of utopia is beginning to include everyone (worldwide) and ecological considerations are progressing beyond any class or national constraints to aim for concepts of global well-being.

In order for an architecture prototype to achieve a paradigm shift towards new performative and interactive functions, it must be built, tested, assessed, and improved upon. The architecture discourse requires such a prototype to explore dynamic construction and experiment with the new technologies that our buildings have not yet taken full advantage of. A cross-disciplinary exchange of ideas and a public involvement round out the proposed next step in the evolving relationship of architecture and culture.
Please note:

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Chapter 6 – Prototype Strategy (project):

The research component of this thesis proposal has established the benefits of incorporating pop culture values into the critical discourse on architecture’s terms. A need has been outlined for architecture to become more fluid and adaptable in order to take part in the animated context of the entertainment industry (fig.1.1). This prototype project and the process it suggests seek to allow an evolution towards more expressive and affective constructions to occur.

The prototype concentrates on four principles: Dynamics (fig.2.0), Spectatorship (fig.3.0), Interactivity (fig.4.0), and Three-Dimensional Circulation (fig.5.0). These divisions lend structure to the experiments, and each corresponds to particular aspects of the (almost intangible) program (fig.1.4). The prototype also responds as the next step in the development of the Las Vegas environment (fig.1.8a,b,c); one that embraces architectural evolution.

The design process of the prototype translates the role of the architect as designer into the realm of media and advertising (fig.1.2); organizing architecture as a catalyst that will evolve in multi-disciplinary collaboration. The representation techniques undergo a similar shift as a vivid sense of “place” is rendered (figs.1.5-1.7), in order to generate public interest in the proposed temporary projects of the prototype. With the prototype located on the Las Vegas Strip (figs.1.9-1.14, 1.16, 1.17), the entertainment industry and its value systems present the required public appeal to provide the funding and feedback that will help make such an endeavor a success (fig.1.15).

PORTFOLIO ONE: DYNAMICS

Dynamic experiments are crucial because in the entertainment industry, space is no longer static. It has instead become a temporary, changing, evolving, and morphing entity, as illustrated in the performative and interactive examples of the thesis. The built environment in the prototype is treated as a dynamic condition, with its architecture accommodating the multitude of events. (fig.2.2) Solid (modern) architecture has limited potential to incorporate the rapidly changing and trend-driven technologies of the mass media. However, architecture imagined as a liquid or organic system of forces, has endless dynamic potential. (fig.2.1)

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The prototype explores strategies for inhabiting the abandoned Echelon construction site as a new urban model that allows for open-ended progress and change. Current mechanical and modular technologies can establish a structure within which experimentation can take place with increasingly biological systems. The functional needs of the prototype are treated as the evolving content of the site, the infill, of which the dynamic architecture is adaptively supportive. (figs.2.3-2.8) The experiments conducted regarding dynamics will have direct impact on the planning of the project. The results of such experiments become the architectural framework that holds its fluid and temporary program. (fig.2.14)

These experiments bring light to the contemporary fact that it is becoming crucial for architecture to become more adaptable to the evolving needs of the clientele it serves. These experiments could provide strategies to help keep buildings from becoming so rapidly outdated, as they are unable to accommodate the rapid changes in use, technology, and fashion. (fig.2.15-2.17) The obvious application of the results from dynamic experiments is in retail design (fig.2.18,2.19). Here, new forms of structure, infrastructure, and servicing can give buildings in this industry a prolonged life expectancy.

PORTFOLIO TWO: SPECTATORSHIP

The spectacle has recently been analyzed and appreciated as a powerful tool for place-making. The tools of the theater, the media, and the cinema are being applied with expertise to create experiential urban entertainment landscapes, as discussed in the entertainment examples of the thesis (Disney, Vegas Strip, Hollywood). Design techniques prominent in these industries are applied in the prototype, with storyboards used to visualize its program (figs.3.1-3.3). Sequence and time-based techniques are likewise employed in order for the length of a performance to be envisioned. (figs.3.4,3.5) These and other tools and techniques of the entertainment industry are subjected to experiments in animating the built environment.

The public spectator is becoming increasingly demanding of multi-sensory and performative spaces, as they seek an almost constant flow of information. Architecture can benefit from a personification of the built environment, as it would be endowed with more socially affective qualities. The prototype's experiments render the process of architectural design transparent and accessible to visitors, in the hope that they will take away a greater appreciation and demand for quality and craftsmanship from our profession. (figs.3.6-3.8a,b)
With the incredible range of entertainment medias permeating everyday life, the static aesthetics of architecture are rendered almost dull. Experimentation in the emerging field of performative architecture will develop new forms of communication for the urban environment. The results of this prototype’s experiments could prove highly to be influential for the design of entertainment spaces in our cities. (fig.3.9-3.13)

PORTFOLIO THREE: INTERACTIVITY

The thesis has highlighted the architecturally controversial reception of entertainment landscapes. As a result, critical architecture currently suffers a disconnection from pop culture. In some cases, these two overlapping sets of architectural values exist in a state of mutual ignorance. A resolution of this condition demands interaction between these two industries. The prototype’s interactive experiments seek an incorporation of critical theory into the design of the public realm (figs.4.1-4.10), along with an incorporation of pop culture and entertainment values into architectural research (fig.4.11)

Interactive experiments in the prototype are loosely based on a marketing campaign model, using the techniques of branding, market research, and consumer profiling in order to manufacture public involvement. All of the research, experimentation, and evaluation benefits directly from a feedback loop established with tourists. The study of physical and psychological reactions, and of behavior patterns, becomes crucial in exploring the ways in which the project could be inhabited. (figs.4.12-4.15)

The marketing strategies employed by contemporary corporations are increasingly centered around the oxy-moron of mass-customization. Society wishes personalization in every aspect of their lives, and all of the toys we now bring home have become interactive. This trend creates a market that is waiting for architecture to take advantage. (figs.4.16-4.18)

PORTFOLIO FOUR: THREE-DIMENSIONAL CIRCULATION

Many of the precedent studies in the thesis have been enabled and limited by their available ranges of motion. (figs.5.1a,b) The open-ended and incomplete condition of the prototype will require an adaptable circulation technique; one that is capable of accommodating, alternatively, the public, construction crews, services and materials. (figs.5.2,5.3) Treating the project as a changing three-dimensional grid, movement will rely initially on hybrid and modular explorations of existing technologies. (fig.5.4) All forms of people-
movement will be considered, from gondola and rollercoaster systems to elevators and operable scaffolding.

The Las Vegas site, with its crowds and congestion can provide the necessary traffic loads to test the efficiency of these new initiatives (figs.5.5,5.6). For cities like Las Vegas to achieve greater forms of complexity, redefined freedoms of circulation are essential. New technologies for people moving can open up new possibilities for spatial design. Since the design of the prototype is limited by its circulation techniques, the intention of experimentation is to provide new strategies to inhabit a project under construction. (fig.5.7) Open-ended and flexible circulation networks can explore new forms of pedestrian accessibility. The results of these experiments could hold unpredictable solutions for the future of urban movement.

**CONCLUSION: THE AMBITION OF THE PROPOSAL**

It is my hope that this discussion and project have generated an excitement regarding the possibilities of the entertainment industry. This research provides a foundation to springboard into explorations of the potential of the prototype model proposed. The health of such an endeavor hinges on a close cooperation and understanding the architecture discourse and the popular culture of the public. As such, the intended friendliness and accessibility of this thesis and project are intended to begin the process of addressing architects and shoppers, critics and laymen alike.

The prototype is a catalyst and its process an extension of the thesis research. The results of such an establishment of experimental architecture could eventually resonate through every aspect of architectural design. The current focus in entertainment architecture is due to the observed fact that it currently represents the greatest form of interaction between the built environment and the public. The questions raised by entertainment, however, could find applications in the more critical design of urban life. It is for these end goals that the prototype is proposed.

Contemporary citizens are surrounded by and constantly absorbing information. The content of this overwhelming information medium is still in the hands of advertisers and has not yet achieved its full potential as forms of education, culture and community. Architects have a social responsibility to seek an amelioration of this condition. And if we can imagine a better use, then what is to stop us? If the entertainment industry has demonstrated anything clearly, it is that the imagination is no longer imaginary.
Purpose of the Prototype for the Architecture Discourse:

This project proposes an architectural research complex that masquerades as an "Entertainment-Resort", in order to engage the public in the development and funding of architectural experiments. In order to capture the (attention-deficit) interest of today's public sphere, the prototype will occupy the space of endless potential found in the incomplete and dynamic environment of an open-ended construction site.

A Response to Globalized Corporate Architecture:

Fig. 1.1: The Babel Condition of Globalized Corporate Architecture; Digital Collage, Author
Propose a new direction:
States the aspiration of the project, its reason-for-being in relation to a critical statement of a current condition.

Outline Public Benefits:
Sells the project as an attractive contribution within today's popular culture and entertainment market.

Create a 'Brand Identity':
Develops a personalized public face for the project; allowing the potential visitor market to identify with conceptual values of the endeavor.

Determine Interface Strategies:
Creates a relationship between the public masses and architectural discourse through technological research and experimentation.

Outline Desired Results:
Sells the project to the architecture community, stating ambitions for, and contributions to, the global horizon of our practice.

Fig. 1.2: Process Diagram, Author
The project is divided into four channels of experimentation that fuel its evolution and overall design. **Dynamics, Spectatorship, Interactivity, 3D Circulation.** These are the primary concepts that the prototype will tackle, and have been derived from the research and case studies leading up to the project. These four channels of research organize the experimentation that will help the prototype become an interface between the public and the architectural discourse.
The imagery for the prototype went through many visual iterations where the architecture types of resort, theme park, and construction site were combined in the attempt to create hybrid landscapes where the primary concepts of dynamics, spectatorship, interactivity, and 3D circulation were visually explored.

These explorations were modelled on and influenced by many related precedents, namely: Aldo Rossi’s Analagous City (as depicted by Canaletto), Constructivism and Futurism rendering techniques and styles, Disney and Las Vegas resort design renderings (especially the early stages), the exaggerated etchings of Piranesi, and assorted sci-fi, fantasy, and digital artists. The purpose has been to generate interest through vivid imaginations and rich multi-sensory atmospheres of “place”. These images can be understood and treated as examples of the pumped-up visuality of advertisments that are standard fare in the entertainment industry and its architecture.
The Las Vegas Strip was born in 1939, when the first casinos and motor hotels appeared. Tourism boomed with the aggressive marketing campaign that these initial establishments adopted. This was the beginning of a brand new form of destination entertainment.

When the Stardust was built in 1958, it demonstrated an effective response to the strip model; adopting its sign as its architecture. This trend led to the Las Vegas that inspired Scott Venturi and Denise Scott Brown, and to the neon facades that Las Vegas is still widely recognized for.
Las Vegas as spectacle

Around 1980 the major hotel corporations began to take over the development of Las Vegas. Skyscrapers replaced the massive signs and the Strip became a major urban corridor. From here on especially, Las Vegas has tackled the same growing pains and challenges that face every contemporary urban community.

1998 marked the opening of the Bellagio with its massive fountains extraordinaire! This spectacle made its way into the international consciousness through exposure in many Hollywood films (Ocean’s 11 for example). With this and other enormous and free shows, Las Vegas saw a shift towards the importance of pedestrian movement.

Caesar’s Palace, opening in 1966 was the first resort to create their own themed world. After this milestone, the theme became a necessary staple in the differentiation of one resort from the next.
in 2009, the Las Vegas City Center, the largest privately funded construction project in the U.S. opened its doors. With architecture by world renowned architects (Libeskind, Foster, Helmut Jahn...) and incorporating extraordinary public art works, the design of Las Vegas architecture can easily be said to have become a high art form. With LEED certification, only a single casino, and world-class spas and chefs, the emphasis is now more than ever placed on innovation, class, and luxury.

This is where the Entertainment Architecture Prototype begins to make it's proposals

Fig. 1.8c: Las Vegas Architectural Timeline, part 3; Digital Collage, Author
The Las Vegas (North-) Strip Today:

The "Resort Corridor" or "Resort District": a 4.2 mile (6.8 km) stretch of Las Vegas Boulevard

This is the location of many of the largest hotel, casino, and resort properties in the world (19/25 world's largest by room count), with a total of over 67,000 rooms.

The Strip is serviced primarily by the McCarran International Airport.

Footbridges have been installed to keep pedestrians and traffic separated.

Casinos and other public spaces are operational 24 hours a day.

Modes of Transportation:
- Las Vegas Monorail – behind the hotels on the east side of Las Vegas Blvd.
- RTC double decker buses (Strip and Downtown)
- Tourist Trolleys (Strip)
- Taxis - only allowed to stop at hotel entrances & designated spots
- Tram – Mandalay Bay, Luxor, Excalibur
- Tram – Monte Carlo, Crystals, Bellagio
- Shuttles (dependant on resort)

The Stalled State of the Construction Site:

Fig. 1.9: Echelon Construction Stalled, Photos by Author

Fig. 1.10: Site Model Perspective 1, Author (Text Source: Rothman, Hal K. Playing the Odds: Las Vegas and the Modern West, Albuquerque, NM: University of New Mexico Press, 2007.)
The Boyd Gaming Vision for the Echelon

- Source of Information: <http://www.vegastodayandtomorrow.com/echelon_place.htm>

- The site consists of 87 acres on the North Strip owned by Boyd Gaming. It is bounded by Las Vegas blvd.(east), Desert Inn road (south), Industrial rd.(west) & the Circus Circus resort (north)

- The property was formerly the sites of the Stardust, Westward Ho, Budget Suites, and McDonalds. The Echelon is going to be a $4.8-billion centerpiece of the new north strip with estimated completion in late 2010, it stalled in Sept. 2008; (for 3-5 years) with possible downsizing or phased construction. There has been no news since.

Program Proposal:

- 5,000 rooms in five towers [Echelon(2500), Enclave suites(650), Shangri-La(350), Modrian(860), and Delano(550)]
- 140,000 sq. ft. casino
- 300,000 sq. ft. shopping venue with 30 restaurants and bars
- 750,000 sq. ft. convention center
- 4,000-seat stadium-style theater
- 1,500-seat theater
- Each hotel will have its own spa

Fig. 1.11: Echelon Design Renderings, <http://www.vegastodayandtomorrow.com/echelon_place.htm>

Fig. 1.12: Site Model Perspective 2, Author (Text Source: Izenour, Steven and Scott Brown, Denise and Venturi, Robert. Learning From Las Vegas, Cambridge, Massachusetts: MIT Press, 1972.)
THE CLARK COUNTY, NEVADA, DESERT CLIMATE

- The Las Vegas Greater Metropolitan Area has a population of 1.9 million within the “The Silver State”. It is situated in a subtropical arid basin 2,030 ft (620M) above sea level, and surrounded by mountains (Mohave Desert). There are an average of 300 sunny days & 3800hrs of sunshine, with 4.2 inches of rainfall annually, with June - Sept. having a dry 34-40°C. The short winters have a daytime high around 16°C. The valley has seven known earthquake fault zones.

- The primary economic drivers are Tourism, Gaming and Conventions, Dining and Retail. There is also a high concentration of technology companies in electronic gaming and telecommunications. Nevada has one of the highest marriage, divorce and suicide rates in the United States as there are easier marriage and divorce processes in Nevada than elsewhere.

![Fig. 1.13: Las Vegas Entertainers; Digital Collage, Author](image)

"No paradigm symbolizes the joy better than this: No one has mercy associated with us than the King." - Hal K. Rothman

"We have described in the Las Vegas study the victory of symbols-in-space over forms-in-space in the brutal automobile landscape of great distances and high speed, where the subtleties of pure architectural space can no longer be savoured." -p.119 [Learning from LV]

"Indeed, Vegas is the museum of branding" -p.23 [Vatican to Vegas]

The entertainment industry can provide architecture with a wide range of new tools, techniques, and technologies that have already proven to be incredibly successful for the manufacturing of desire. The environments that have been explored throughout this thesis are intended to help develop a new palette with which we can now profit from the still relatively untapped potential of this market.

Fig. 1.15: Entertainment Values of Las Vegas; Digital Collage, Author

A NEW TOOLSET OF PUBLIC ENTERTAINMENT VALUES:
LAS VEGAS IS THE ENTERTAINMENT CAPITOL OF THE WORLD!

A map of the major shows occurring along the Vegas Strip during a 2010 visit. Collected from various magazines, catalogues, coupons.
The Echelon site is treated as a transforming network. It is developed through the lenses of each experiment concept and evolves as the experiments result in new programatic and formal iterations. The Las Vegas Strip context has direct bearing on the content of the site, and its architecture becomes a container for the relationship between content and context.

Site Plan
Within the Prototype proposal, the dynamic experiments focus on architecture’s ability to act as an adaptable and evolving framework or structure. The CONTENT (program, functions, events, exhibits, inhabitants) of each experiment is treated as a fluid and temporary variable that is reactionary with respect to its CONTEXT (cultural, social, economical and environmental conditions). Architecture’s responsibility in this case is to become a CONTAINER: a built interface between content and context that allows for a flexible and symbiotic relationship.
DYNAMICS

They are dreams because they may never be completely satisfied by what a designer or a strategist or any operator can do. They are open-ended, and whatever we are doing by the time that you are reading this may in some way have run out of a dream or two.” Archigram, p.74

The construction site embodies dynamism, process and constant change. It is a state of suspense full of expectation, the promise of the new and the locus of transition amidst the otherwise regulated everyday urban environment.” Construction Site, p.15

The city is framework, never subject; scaffolding, never structure; digital mapping and mobile networking use the city as an interface through which data can be accessed.” The Urban Spectator, p.198
STRUCTURE & INFILL:

These experiments treat the architecture of the prototype as the flexible structure for a constantly changing infill of events and programs.

The role of the architectural systems and materials becomes to establish an efficient relationship between content, context and container.

In order to achieve these results, research and experiments are carried out to develop "smart materials". These are defined here as possessing values such as:

- real-time response
- movement between possible states
- self-actuation
- discrete and predictable response
- direct response to stimuli

These material properties allow for architecture to become a more flexible container, and better adapt in service of its various temporary events.

Here we see movement away from the traditional credo of:

"form follows function",

towards a principle closer to:

"form enables dynamic and changing functions".
STRUCTURE:

noun
1. the arrangement of and relations between the parts or elements of something complex
   • [mass noun] the quality of being organized
2. a building or other object constructed from several parts

verb
[with object]
construct or arrange according to a plan; give a pattern or organization to

- Definition from Oxford Dictionaries Online

PROGRAM:
HOTEL ROOMS

The modular nature of resort guest rooms presents an opportunity to provide space for visiting architects and designers to develop facade and room prototypes, tests and mock-ups. These spaces effectively become workshops within which the public then infiltrate and provide feedback and review on the designs. This example of close-proximity construction and inhabitation is one of the core issues that is presented in the complex organization of the prototype.

- Fig. 2.3: Structure and Infill; Hotel Room Mock-Up Dynamics, Author
The dining and retail functions are the most subject to capitalist competition, and thus may present the greatest potential for innovation in design and aesthetics. The skeleton, as metaphorical structure, brings to mind biological flexibilities and adaptabilities in design.
PROGRAM:
LOBBIES & PUBLIC SPACE

SCAFFOLDING:

noun
[mass noun]

a temporary structure on the outside of a building, made of wooden planks and metal poles, used by workmen while building, repairing, or cleaning the building.
- the material as used in scaffolding

- Definition from Oxford Dictionaries Online

The lobbies and the public gathering spaces of the project will likely be the most fluid (as far as content goes) and the most eventfully inhabited.

As such, they must be able to transform rapidly to suit a wide variety of functions.

Scaffolding is the most temporary of structures and becomes an ideal metaphor for the kinds of systems that will be experimented with to allow these event spaces to become highly dynamic.

These renderings depict a few simple scenarios where the scaffolding determines the organization and use of the space.

Fig. 2.7: Structure and Infill; Lobby Scaffolding Dynamics, Author
Office space is typically organized in personalized modules. Organizational experimentation with the administrative components of the research labs will allow occupancy and use to morph this framework to achieve the maximum of flexibility and efficiency.

**FRAMEWORK:**

*noun*

an essential supporting structure of a building, vehicle, or object.
- a basic structure underlying a system, concept, or text.

- Definition from Oxford Dictionaries Online

**PROGRAM:**

OFFICES AND MEETING ROOMS

Fig. 2.8: Structure and Infill; Office Framework Dynamics, Author
The prototype will be a container within which designers experiment with the complexities of a changing content and context. As it expands, it will become a form of architecture that relies increasingly on biological systems to contain many discrete “lives” during a single, open-ended construction phase.
The planning of the prototype deals with establishing a symbiotic relationship between the proposed inter-related functions of construction, spectatorship and diverse and temporary programming.
**Dynamic Precedent - Constructivism**

*Kinetics*

The style of the Constructivists necessarily influences any exploration of an architecture enlivened by mechanical forces. Inspiration for the Dynamic experiments can come from the art works and architecture of this movement.

**Dynamic Precedent - Archigram**

*Modularity*

Much of the theoretical work of the Archigram group can inform the early dynamic concepts of the prototype. Their modular systems can set up networks and grids which are then manipulated as the experiments demand.
Step 1: Existing Site (see www.vegastodayandtomorrow.com)

Step 2: Temporary and partial inhabitations of site; exhibitions

Step 3: Increasing investment in, and development of, the prototype

Step 4: Performative and Interactive use of a dynamic site

Fig. 2.17: Morphing Site Elevation; Digital Collage, Author
The more we emulate the convenience of online shopping in pleasurable and entertaining social environments, the more people we will draw out of their homes and into the architecture of their urban neighborhoods.

The horizontal shopping mall has become too expansive and it demands extensive circulation from the shopper. Perhaps a new model could follow the dynamic logic of a Rubik Cube: presenting more stationary shoppers with scheduled and scripted options. Perhaps this Rubik Cube could be fed with cranes from franchise stockpile yards. Perhaps these stockpiles are on cruise freighters, traveling from city to city, carrying vacationers and shops up and down the coast.

New conceptions of complex spaces, treated as fluid events rather than solid forms, can allow for space-saving innovations. Retail industries are hungry for this kind of change.

Fig. 2.18: Retail Prototype part 1; Watercolour and Graphite, Author
Fig. 2.19: Retail Prototype part 2; Watercolour and Graphite, Author
Experimentation concerning the role of the spectator in the Prototype will address the PERFORMATIVE aspects of architecture. Design and construction are treated as public events, with public visitors experiencing the entire PROCESS (research, planning, schematics, development, realization, evaluation, etc.) of each experiment. The prototype is intended as a transparent project and a form of public entertainment. A display of the inner workings of architecture seeks to excite the public and keep them informed, educated, and critical of current issues in its theoretical development and global discourse.
SPECTATORSHIP & PERFORMATIVITY

"Adapt quickly to varying needs or circumstances by changing the physical shape, spatial and functional configuration, levels of natural and artificial light, overall aesthetic appearance, etc." - Performative Architecture, p.151

"To develop methods for a dynamic communication between the building and its surroundings..." - Performative Architecture, p.159

"Firstly, the whole theatre was a magnificent mixture of architecture, sculpture, and painting which invited the addition of living people..." - Actor and Architect, p.4

"The material, organizational, and cultural change that occurs as a result of this perpetual feedback and two-way transfer of information is performativity." - Performative Architecture, p.179
THE STORYBOARD AS REPRESENTATION:

Goal: the atmospheric enhancement of program and space.

Designing a project through a storyboard of experiential snapshots is a technique driven by the necessities of perception and narrative. The architects of entertainment environments have departed from traditional forms of representation in favour of what Walt Disney termed “Eyewash” imagery; where the most ambitious designs are drawn in absolutely convincing detail. Emphasis is on depicting the sense of place, by rendering the visual cues, changing ambiances and sensual experiences of the intended spaces. The techniques of film storyboarding are applied as a generative tool in architectural design.

“Choreography as a planning strategy is quite contrary to principles of composition, shifting the attention of architecture from the composition of objects in an empty container to the planning of situations, giving rise to a social environment that is no longer driven by the rigid determination of Cartesian geometry but instead responds fluidly to the movement and behaviour of visitors.”

-Anna Klingmann in Brandscapes, (p.206)

Fig.3.1: Venetian Experiential Sequences, Klingmann, Anna. Brandscapes: Architecture in the Experience Economy. Cambridge, Massachusetts: MIT Press, 2007. (p.206-212)

Fig. 3.2: Museum of Media Experiential Sequences; Digital Collage, Author
The prototype's galleries offer show space for smaller installations and experiments. The spaces are incredibly dynamic and temporary, providing the most recent innovations in the field on public display. These are free spaces, where exhibitions are held in response to the changing needs of clients, visitors and other and external circumstances. The public are routinely asked to help set up, dismantle, and participate in the installations, and there is a direct programmatic link to the research labs.

**CONSTRUCTION**

Ongoing construction is a major performative function of the incomplete prototype. The spaces being built, re-built, transformed and recycled are all accessible to the public audience through various strategies. The beginning and end of each stage of progress provide opportunities for spectacle and celebration in the Vegas tradition.

The public are routinely asked to help set up, dismantle, and participate in the installations, and there is a direct programmatic link to the research labs.

**LECTURE HALLS**

The lecture halls are part of the convention function of the complex, as guest speakers, symposiums and debates are accommodated. The public has access to these lectures as they occur, and the material is recorded and relegated to the library. These lectures take advantage of the most advanced and expressive medias available, often with the lectures themselves showcasing new forms of performance.

**THEATRES**

The theatrical spaces of the prototype are perhaps the most obvious link to the entertainment industry, providing an opportunity for the public to take in films and cinema of the most cutting edge sort available. The content is still driven by architectural production and dances the line between entertainment and education that maintains public appeal.

**LIBRARIES**

The libraries of the prototype provide an archive and research base for the ongoing experimentation. Documentation of results is found here, and the public has full access interactively to past projects. The display and interaction with the stored material is subject to the same performative technologies that are used in the experiments. The library is intended to provide an enticing and entertaining centre of learning.

**STORYBOARD DESIGN CHOREOGRAPHY**

Fig. 3.3: Storyboard Program Design Sequences; Digital Collage, Author
4-Dimensional Tourism

The design of resort architecture that has a themed plan for evolving expansion along a flexible timeline.

Caesar’s Palace on the Vegas Strip is an example of resort sprawl. It has expanded constantly with little forethought and no apparent direction, filling space with its “Ancient Rome” themed spaces and buildings. It is a miniaturized and compressed version of Rome, physically. I see a missed opportunity here, as Caesars is a snapshot, yet ancient Rome was in constant evolution and change, from its founding in 753BC to its sacking in 410AD, Rome progressed from village to kingdom to republic to empire to chaos. If Caesars Palace were to be rebuilt, could not its lifecycle mimic this progression? Expansion, climax, and destruction, with the architecture, decoration, spectacles and events in constant morphosis. This condensation of time in a Vegas resort mimics its condensation of place and allows the theme to progress to a whole new level. It also encourages multiple visits and historic festivities, allowing for a more authentic fake, a more complex illusion. Perhaps in the future our technologies and creativity will allow the lifecycle of Ancient Rome to progress from founding to anarchy over the course of a typical visitor’s stay, should the tourist attention span require this kind of immersion. The stagnant sprawl and conceptually deprived expansion of the mega-resorts of the world have only to look to their basic themes to find novel answers. And what financial backers would balk at the initial startup costs of building a small roman-themed village, with endless plans for expansion as it generates necessary profits.
Expressing the Architectural Design Process

Through the public transparency of the prototype, the architectural design process is re-envisioned as an open-ended timeline in public view. Architecture can be treated as a communal spectator sport.

Please see the following sample timeline.

Additionally, the broadcasting of this information can occur at multiple scales on the site. The design and construction of the architecture becomes the expressive element of the billboards and advertising medias.

A New Take on Educational Entertainment

With spectatorship increasingly immune to the novelties of the spectacle; our performative environments are in need of more potent content. As a research lab, this prototype will help to replace the current primacy of advertising with a far greater range of expression. Experimenting with the social and cultural values of expression in architecture can improve the public experience of community spaces.

For example, an architecture-entertainment prototype may replace a casino's dancing girls with artists.
The initial stage of design; when discussions of the functions, concept and impact of a project occurs is an opportunity to inform the public of upcoming changes. We've always been interested in what's happening in our communities, and while the broadcasting of these architectural discussions may not be riveting, it can present a strong niche form of entertainment in the Prototype.

INITIAL CLIENT MEETINGS

The schematic design of architectural projects is often the most creative and inspired phase. The wide range of technologies going into representation can provide a great source of interest for public spectators. With a project in its infancy, this is also a good point to collect public impressions.

Schematic Design

The site impact of a new architectural initiative has a profound effect upon its social and cultural context. The public has significant investments in the planning of a new project. Strategies of public involvement in these context-driven proposals can be developed in the organization of the feedback loops generated in the Prototype.

SITE DEVELOPMENT

The forms, functions and effects of architecture are limited by the capabilities of the materials used. The exploration of new materials and their uses provides a relevant and interesting showcase or exhibition that can bring awareness and creativity to both the architectural discourse and general public.

Material Explorations

Design Development
As a concept evolves into an end product, there are many exciting moments and processes. Here is where the public can play a more active role in informing design choices. At this stage of development it is also important to draw any related or concerned disciplines into the discussion.

Fig. 3.8a: Spectators of the Architectural Design Process part 1; Digital Collage, Author
A major function of the Prototype is to provide an environment for the creation and testing of experimental architecture details to be put into effect in new projects. These are exciting creative moments and can generate interest amongst visitors and collaboration amongst related professions.

committee presentations

prototypes, mock-ups & tests

This stage in a design is where the public is most openly encouraged to participate in important community projects. Their organization in the Prototype can seek to incorporate entertaining qualities into such presentations with the hope of drawing larger and more active crowds.

contract documents

As a project is drafted in its finalized state, coordination is crucial. Interconnected and real-time communication amongst all parties involved. The collaboration of these many discrete practices is a crucial element of spectator media investigations to be carried out in the Prototype.

construction

The physical construction of a project is a source of excitement and fascination for the public spectator. The Prototype looks to open this practice wide up as a performance for visitors, determining new strategies for the co-inhabitation of construction crews and pedestrians in order to keep as much of the event on display as possible.

evaluation

As architectural projects are increasingly developed as open-ended processes, the post-construction building evaluations become very important to that building's future development. Feedback initiatives can open such projects to public scrutiny and ensure their evolution towards common goals.

Fig. 3.8b: Spectators of the Architectural Design Process, part 2; Digital Collage, Author
Experiments in Spectatorship will re-define the traditional separation between viewer and participator. The notion of an event-space will become common-place as the entire environment is directed towards entertaining and communicating information to its users.

Fig. 3.9: Actor Audience Relationship Sketches; Digital & Manual, Author
Ideas competition for the creation of
"New York Theater City"

Proposal

ArchMedium wants to propose the design of the “New York Theatre City”. It is an urban theatre campus where smaller companies can dispose of rehearsal spaces, and the new spectacles can show themselves to the world offering an always young, new and different cultural activity.

At the same time, the campus is intended to turn itself into an incubator for new tendencies and talent, a place where theatres all over the world can go to, to obtain fresh ideas, and, why not, offer that sought job contract that can skyrocket a play to stardom. This time, however, that play will not be a well known company, but the younger ones who fight for a place in the tough world of show business, and who may want to look for their place out of New York, in countries where theatre hasn’t yet become a main entertainment feature, and where the people are anxious to see more dancers, musicians and actors doing their magic on stage.

For New York City, the campus must become a public space, where the citizens can go to and take a walk in an artistic environment out of the crowded Broadway area. They can also go in to one of the multiple rooms the complex has to offer, to be astonished with a new piece of fantasy placed on stage, for a couple of hours.

NYTC Ideas Competition = Theater Prototype

This competition identifies the desire for and relevance of such experimental performance spaces in today’s communities.
**Program**

The design of the Theater City programme and its required functions are subjected to storyboard design. The spaces of this prototype are envisioned as three-dimensional experiences, and their formal layouts grow out of this vision. The temporary nature of the experimental space is depicted in the visualizations and representations.

**Transformation**

The theater prototype begins by scavenging the residue and scrap from past shows, venues, and entertainments. While initially unrelated detritus, this resource is eventually transformed by the creative artists of Theater City to provide unique and liberating stage sets and inventive environments.
Interactive experiments in the Prototype generate active public involvement in research and experimentation. The entertainment industry provides tools and techniques to stimulate CRITICAL INPUT and FEEDBACK from the public sphere. Through the use of gaming, amusement, role-playing, and thrill-ride functions, the laboratories become environments of expression and play. The feedback systems built into this entertainment façade redirects the results (and revenue) of these experiments to the progression of the building sciences and critical design. This is the bottom-line intention of the prototype.
INTERACTIVITY

"It’s important to think of the researchers and the researched." —Delphic, New York, p. 91

"In what has been variously dubbed responsive environments, interactive environments spaces, performative spaces, technological enabled rooms and events toy with the set lines between spectating and performing." —Entangled, p. 306

...one that...
THE GRID AS DECONSTRUCTIVE FREEDOM:

The deconstructivists, and Bernard Tschumi especially, employed the grid as a method of disposing of traditional pragmatic limits. The organising structure existed independent of use and eliminated hierarchy and centre. This grid became a mediator, or locator, and resisted the “stamp of the individual author”, facilitating collaboration.

Within the grid there is freedom to:

- Crossprogram: use a space for a programme not intended for it.
- Transprogram: combine programmes, regardless of their incompatibilities.
- Disprogram: combine programmes so that their spatial configurations contaminate one another.

The Grid is an open-ended, infinite, incomplete, flexible and permeable structure. Within the grid, individual contributors are able to disrupt, distort, change, subvert, add, transform and fragment portions, without causing the organizing structure to fail.

The Grid has no specified use, and it is at the service of its temporary events. Meaning is always socially produced by its inhabitants rather than its formal order.
**The Site as a 3D Grid:**

Within a three dimensional grid, the retail, construction, landscaping, and accommodations elements of the program are given temporary expressions.

Fig. 4.4: 3D Grid Perspective 1, Author

Fig. 4.5: 3D Grid Perspective 2, Author

Fig. 4.6: 3D Grid Perspective 3, Author

Fig. 4.3: 3D Grid Perspective Sequence, Author
The Grid as an Interactive Interface:

The grid provides a blank a refreshing resource that also has the ability to adapt endlessly to public interaction. It is an infinite system that can provide a great model from which to begin experimentation with environments for the generation of feedback.

Fig. 4.7: Interactive Grid Exploratory Sketches, Author

Fig. 4.8: Electroland LCC, Fox, Michael and Kemp, Miles. Interactive Architecture. New York: Princeton Architectural Press, 2009. (p.143)

Fig. 4.9: Interactive Grid Circulation Development Sketch, Author
**THE INTERACTIVE GRID ON SITE:**

This model proposes the grid as a basis for the interaction of three primary functions of the prototype: construction (purple), public entertainment (red), and ecological leisure (green). Co-inhabitation of a system that resists over-arching designs (grid) will allow for complexities of interaction, as the site becomes about a responsive process rather than a hierarchy.

Fig. 4.10: Interactive Site Grid Sequence, Author
The Programming of Immersive Environments:

Interactivity lends itself incredibly well to entertainment functions, and the theme park aspect of the prototype will harness the techniques and technologies of gaming industries in its experimentation with new forms of responsive forms of feedback through entertainment.
**Hotel Fire Simulation: Research Gaming**

Challenging visitors to solve all sorts of architectural problems masked behind novel forms of entertainment can yield the information necessary to progress the user-related aspects of the profession and related industries.
Interactivity as an Art Form

Responsive environments are by their nature reliant upon the skills of the user. This condition inevitably breeds competition and it challenges and provokes the visitor creatively.

CREATE!

Fig. 4.14: nArchitects Party Wall, Fox and Kemp. Interactive Architecture. (p.157)

Fig. 4.15: Interactive Graffiti, Author
APPLICATION - RESIDENTIAL PROTOTYPE:

The prototype hopes to provoke a greater public understanding of architectural design by stimulating interest in the tourism industry. Vacationers will begin to notice, appreciate, and demand better design standards in their built environments at home. This prototype proposes that by engaging the clients it wishes to serve, interactive experimentation can bring the values of mass culture and critical architecture closer together.
Performative homes: community events can make use of the theatrical functions of their buildings in order to generate an atmosphere.

Homes that can build themselves: an ability to reconfigure and transform a building's own make-up, structure, layout, etc... can allow users to program their lives within an adaptable and learning environment.

Self-sustainability: as homes become more animated and feedback loops improve, the integration of smart technologies becomes easier and more economically feasible.

Entertainment centres: an ability to provide entertainment and spectacle for the inhabitants can make use of interactive personal systems and global networks.

Self-maintaining homes: performative systems can make use of new technologies to carry out the mundane tasks of indoor and outdoor upkeep.

Communal Interaction: a less independent neighbourhood demands buildings that are able to accommodate social functions.
Shared amenities: community living allows shared wealth between families not otherwise possible, the neighbourhood becomes a marketplace.

Adaptable Storage: more efficient and flexible storage units can create greater functionality of space.

Accessible homes: adaptable buildings can allow questions of access to be flexibly incorporated based on variable needs.

Alternative energies: an inherent ability to take advantage of variable and temporary energy sources, built in optimization strategies.

Informative homes: building enhancement through its expressive functions. communities are information networks and each home can become an outlet.

Self-marketing real estate: interactive technologies can allow real estate to become an informative and accommodating advertisement of itself.

Residential Animation Explorations: this study uses a Disney depiction of housing, in order to explore the performative functions that residential and communal planning will address in the near future, in order to improve social and ecological living.
changing conditions. Experiments with the definition of movement are necessary for spatial relationships to evolve. Circulation problems that arise will present opportunities for experimental solutions to yield innovative results for the site. These experiments focus on developing new techniques and technologies to allow freer movement in three dimensions. Dynamic structures can form the basis of such systems, interactive technologies can improve their efficiency, and performative technologies can enable more entertaining circulation.
3D CIRCULATION

The immediate priority is related uses, as in Main Street where you walk from one story to another, but not just walking along the strip because interaction is by car and highways...

-Learning from Las Vegas - A. 1973

"...an Manhattan's culture of congestion destruction is another word for presentation." Delilah New York, p. 771

"...the intricate circulation of traffic, under and around the city..." -Designing Disney's Theme Parks... -p. 52

The difficulty lies in how to handle crowds in two senses: the first in moving the sheer numbers of people through the park in an effective way, and the second, assuring that people act in appropriate ways... -Thema Park - p. 11.
Circulation Precedent Case Studies:

Los Angeles - Suburban City - Automobile Sprawl

Manhattan - Metropolis - Culture of Congestion

Las Vegas Strip - Resort Corridor - Crowd Control

Disney World - Theme Park - Thrill of Motion

Fig. 5.1a: Precedent Circulation Studies; Cartesian, Author
FREE MOVEMENT:

Our cities are currently based around the automobile, the elevator and limited public transit systems. Crowd control techniques, most prevalent in the entertainment industry have been developing relatively independent of critical urban planning strategies. This current state of circulation through the city is a large determinant in the separation of public and private space. As we seek to redefine this relationship in the experiments of the prototype, new forms of movement are essential to free the pedestrian from the constraints of current (Cartesian) movement through & around buildings.
The currently existing, proposed, and imagined technologies for various forms of movement will provide the starting point for the prototype's process of creative thinking and problem solving.
EXPERIMENTAL CIRCULATION PATTERNS:

**RED EVOLUTION:**
Public Visitor Circulation Flow

**BLUE EVOLUTION:**
Service and Construction Circulation Flow

The representation of possible scenarios through a film-strip, or time-lapse method demonstrates the temporal and evolutionary nature of the prototype model. The process proposed is a snowball effect where the experiments of visitors hinge upon the results and failures of their predecessors. Circulation models then, become unpredictable relationships between the multitudes of visitors to the site and their differing agendas.
Fig. 5.6: Circulation Evolution Sequence; Plan, Author
EXPERIMENTAL CIRCULATION PATTERNS:

Fig. 5.7: Circulation Concept Sketches, Author
Bibliography:


