THEATRE AS A RITUAL PLACE: REDEFINING THE THEATRE AS A HOUSE OF STORYTELLING

by

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Submitted in partial fulfilment of the requirements for the degree of Master of Architecture

at

Dalhousie University
Halifax, Nova Scotia
July 2011

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Dated: July 6, 2011

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DALHOUSIE UNIVERSITY

Date: July 6, 2011

AUTHOR: Jay Pooley

TITLE: Theatre as a Ritual Place: Redefining the Theatre as a House of Storytelling

DEPARTMENT OR SCHOOL: School of Architecture

DEGREE: MArch CONVOCATION: October YEAR: 2011

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Signature of Author
For Bill W., Billy T., Bruce P. and anyone still out there.
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ABSTRACT

This project presents the design of a theatre. The theatre site is located in Halifax, Nova Scotia and will serve as the home for the Legacy Centre for the Performing arts.

A selection of theatre spaces and ritual spaces, including temples and churches are analyzed, with attention paid to performance theory research in order to interpret the shared activities within these two building types. Architectural connections between these spaces are made as well as a building language common to both.

A collection of theatre buildings, including the design for the Legacy Centre, is produced. Each design exhibits the line between front of house and backstage that has been established as being similar to both theatres and ritual spaces and that will enhance the experience of going to the theatre.
ACKNOWLEDGEMENTS

Roly Hudson. Your professionalism, dedication and absolute brilliance made this work better than I could have done on my own. Thank you.

The Great Barton Myers. Your energy and insight gave me the final push I needed. Thank you for taking the time to show me the ropes.

The Legacy Centre for the Performing Arts. Thank you for giving me the chance to play a role in your dreams. See you all on opening night.

Tod, Billie, Michael and Octavia. You’re the people who remind me everyday, why this profession is the best thing out there.

My Dad Bruce. Thank you for making sure I know that work comes before play, and for teaching me how to have the most fun.

My sister Alexis. I’m sure that I still can’t craft a sentence, but you still can’t draw a cat. You’re the smartest girl I know.

All of my friends in it along the way. Thank you for letting me get you into trouble, and thank you for keeping me dry.
CHAPTER 1: INTRODUCTION

Thesis Question

How could the study of theatre as a ritual space enhance the experience of theatrical space in a new theatre in Halifax Nova Scotia?

There are several well-documented similarities between the kinds of performance activities that traditionally occur inside of theatres and those based in ritual spaces. The most obvious relationship is that within both places, people attend in mass to be told stories of who they are and where they come from. The idea of the theatre began as a space for people to gather, with their attention centered on a group of performers in order to be told stories about life. Additionally, several of the original theatre performances were based on religious principles, as many still are today.

The less obvious connections are within the architecture of the two building types – theatre spaces and ritual spaces. The original Greek theatres did serve some exclusive religious purposes, and it wasn’t until after the Roman era that there was a somewhat continual and distinctive separation of church and theatre. In many ways the connection still exists. The theatre is one of the few building types that has both evolved and revisited its traditional spacial variations through the course of its history, and during the Reformation, there was a notable architectural fusion of church into theatre in its building typology (Kilde 2007, 67). Although the theatre has pro-
gressed in a variety of ways, it ultimately always returns, in one way or another, to its original form of a stage and an audience.

“Sarah at Rehearsal” drawing by the author.
CHAPTER 2: CASE STUDIES: THEATRE AS A BUILDING TYPE

The roots of performance activities date back as far as the beginning of civilization. Originally a circle drawn in the earth, the idea of a dedicated performance space began around 500 BC, but the ritual of recording knowledge and re-telling stories has existed since the beginning of humanity, as early humans drew on cave walls as a method of recording experiences and sharing stories.

Society has an instinctual need to share knowledge and experience through stories. As a society grows and expands its knowledge, so to do the ways in which we share knowledge need to grow and expand. Just as the development of language led to recording stories in a more effective way, and then led to primitive performance spaces, as our society continues to advance, we need to develop effective ways in which to share knowledge and experience with a growing audience by providing buildings necessary to accommodate this important cultural ritual.

It is important to view the theatre as a historical building typology through a set of discrete case studies, in order to understand the ways in which it has both progressed and remained steady, as well as to consider its similarities to ritual spaces, which are also a historical building typology.
Epidaurus, Peloponnese (400 BC), Odeon of Herodes Atticus, Athens (161 AD)

The enormous size of early Greek amphitheatres (532 BC - 323 BC) is impressive on two levels. First, the architecture of the building was extraordinary in its design. Loosely based on the natural contours of the land, the earliest constructed amphitheatres were raked into the hillside to provide optimum viewing angles to the stage. The acoustics and sightlines of the building are all noteworthy. While there were inherent acoustical problems in the design of open air theatres (Leacroft 1984, 20) that one could hear the actor from 100’ outdoors is still impressive.

During the Hellenistic period there was a site gesture that is key to the understanding of the theatre as a civic building. While the first period of Greek theatres were raked into the hillside outside of the city centre, the second period moved their theatres to the city core, in most cases orientating the stage towards the civic entrance of the space. Presumably one would enter the theatre from the stage side and continue up into the seats. The processional relationship between the city, audience and performers is fascinating. Contemporary theatres follow a model of hiding the stage from the city, where the Greeks seemed to give it all away. Because Greek theatres were a form of civic pride, most theories point to Greek theatres providing seating for all classes of people. While there were specific seats for different classes of people, the dramatic festivals were considered to be a town-wide event.
Section drawing of Epidaurus, seating for 15,000, Peloponnese Greece (4th century BC).

Section drawing of the Roman theatre - Odeon of Herodes Atticus, seating for 5,000. Note the addition of a connected skene which physically connects the backstage to the rest of the building. Acropolis of Athens (161 AD).

**Design Implications**

- Enormous size and scale building facilitated a moving experience upon entering the space

- Design capitalized on natural contours of the land

- Heavy stone material construction gave civic value and cultural pride

- Disconnected Skene in early Greek spaces kept space publicly visible and accessible at all times

- Acoustical and sightline challenges met with some adequacy

- Stage orientated to edge of civic spaces in Hellenistic period

- Shrine or temple common in Roman theatres
Teatro Olympico, Vincenza (1548), Teatro Farnese, Parma (1618)

This relationship between the audience and performers has been the most resilient factor over the course of the history of theatres. The playwright Bert States would agree that the architectural relationship between the actor and the audience goes beyond a physical boundary, noting:

When the blind Oedipus came through the central portal of the skene, the audience “saw” a palace much different from the one it had perceived when these same doors opened to reveal, say, the corpses of Agamemnon and Cassandra in Aeschylus’s earlier play. Even if nothing has changed scenographically, the play appropriates the stage as part of its qualitative world as established by its poetry. (States 1985, 53)

During the Renaissance era, the connection between audience and performers was arguably made even stronger through scenic advancements, namely perspective and changeable scenography. Olympico was the first theatre to apply the invention of vanishing perspective. The idea that one could peer deeper into the set through the use of perspective was entirely new to society at the time. One could believe they were looking down a city block, even though they were preconditioned to know that was not the case (the depth of the stage was under 30’).

The relationship of the audience member to the experience was metaphorically strengthened, with the provision of perspective illusion, luring the mind of the viewer deeper into the story.
Aleotti designed Farnese with a longer, stretched plan to accommodate a large orchestra section and deep stage vista, while also including wings large enough to accommodate multiple sets. Sliding grooves to allow some of the earliest multiple scene changes can be found in this theatre. In addition to providing a deeper lens into the performance, the location of the performance could now rapidly change along with the narration of the story.

Changing scenery on the fly was a precursor to the introduction of motion pictures, which would follow nearly 300 years later. These two innovations, perspective and changeable scenery brought the actor deeper into the set and allowed the possibility for the audience member venture further into the imaginative power of the show.

Although these advancements brought audience and performers closer in ways, it also saw the theatre becoming more exclusive, as prices of admission rose and, therefore, saw lower-class citizens unable to take part. This could suggest the start of a crack in the cultural ritual of theatre.
Section drawing of Teatro Olympico, (1548). Note the severe raking of the stage floor and ceiling intended to induce a sense of perspective illusion on the audience member.

Section drawing of Teatro Farnese, (1618). Note the deep and level backstage able to accommodate large sliding sets. Also, the sculpting of the elevations of the audience space begins to change the feeling of the room.
Design Implications

- Use of forced perspective created new dimension to scenography

- Invention of changeable scenery

- Creation of theatre machinery helps to create atmosphere

- "Heavens and Hells" uses machinery for ascending and descending elements

- Some control over light levels with gas lamps and candles

- Screens used to conceal machine elements

- Tighter sections brought audience member closer to the actor

- Use of proscenium as acting area and view into scenery

- Loges (balconies) introduced
Theatre Royal, Yorkshire (1766)

As Richard and Helen Leacroft point out, theatres are living organisms being altered and adapted throughout their existence to conform to changing and developing ideas and patterns (Leacroft 1984, 101). The audiences were becoming more numerous and developments in transportation facilitated the development of the provincial theatre. These small playhouses provided for the masses are known as provincial theatres.

The oldest surviving provincial theatre still in use today is the Theatre Royal, Bristol. This theatre exemplified the u-shaped auditorium which led to a tighter seating arrangement. The dimensions of the provincial theatre in many ways led to new design considerations which helped to improve the experience of the performance. A widening of the proscenium and an extension to the depth of the stage was made (Leacroft 1984, 101). The u-shape plan brought seating around the sides of the room that tiered vertically as separate boxes. Because the seating arrangement became more intimate it brought the audience members closer together and at a shorter distance to the stage. Although it wasn’t the most comfortable seating configuration it may have been a better scenic experience. The original style of the Georgian Theatre represents similar ideas of sectional seating, but had not yet moved to the u-shape in plan. Instead, the some earlier provincial houses represented a simplified version of earlier court theatres – those established inside of indoor tennis courts for travelling groups.
Section drawing of Theatre Royal, Bristol showing the development of a more intimate inter-audience relationship, Yorkshire (1766).

**Design Implications**

- Development of the U-shaped plan

- Boxes wrap around three sides of the room

- Tighter arrangement brings audience closer to performance

- Deeper stage facilitates new scenic options and more playing area

- Footlights help to define playing area

- Gallery creates more seating options

- Single source ticketing booth
Bayreuth Festival Theatre, Bayreuth (1872)

The end of the nineteenth century led to the transitional phase that historians refer to as the modern movement (Mackintosh 41). Several of the new theatres designed at the beginning of this period conceded to a fan-shaped or “democratic” seating arrangement, similar to that of the Greek period and were often devoid of side boxes or balcony seating. These theatres but opened themselves wide in plan to attempt to create equal unobscured sightlines and higher audience volumes. As Mackintosh observes, this arrangement was a direct forerunner to the cinemas that would develop a half-century later (Mackintosh 1993, 41).

Richard Wagner is a popular figure in this part of the history because the Opera House in Bayreuth which was created for the singular purpose of presenting Wagnerian operas. The sightlines and high number of seats (1,300) of this theatre would have major influence on a number of other buildings.

**Design Implications**

- Vomitorium re-introduced

- Use of a double proscenium
Theatre Espace Go, Montreal (1995)

Located in downtown Montreal Quebec, Theatre Espace GO was designed by French architect Eric Gauthier and constructed in 1995 at a cost of $5 million. The building follows a string of successful and popular contemporary performance spaces located in the province of Quebec. Along with Eric Gauthier, the French architects Saucier + Perrotte could also be credited with a number of successful contemporary performance spaces. The main performance space of Espace GO features a flexible plan for seating up to 240 people. The performance space is quite nimble in the number of seating arrangements it offers. At the lobby side of the auditoria, the space features a glass storefront system that looks into a small café and lobby area that is open to the public. This orientation offers a fascinating approach to combining the rituals of front of house and auditoria.

Design Implications

- Flexible space offers a number of seating arrangements
- Views into cafe from auditoria offers an interesting mix of programing elements
- Space features support spaces spread out across the site in plan
Espace Go, Ground Level Plan.

Espace Go, Upper Plan.

1. Administration/Reception
2. Administration
3. Bureau
4. Balconet
5. Regie
6. Mechanique
7. Depot

Front of House
Auditoria
Backstage

View into theatre
Espace Go, Seating Configurations.
CHAPTER 3: THE PROBLEM OF THEATRE

Commencing with the Greek invention of the theatre as a building typology, one can point to a variety of theatres throughout history that embody audiences similar to those gathered in ritual spaces, including diverse cross-sections of social and economic classes.

Sitting in the seats of Epidaurus in Peloponnese, one could find military commanders among servants and scholars among slaves, all watching the same story being told. When provincial theatre gained popularity in the small villages of England during the nineteenth century, it became a town-wide event to go to the show. However, as the theatre grew, so did the variety of available spaces.
As seen in the overview of the theatre as a building typology, there is a variety of available theatre spaces. Theatres typically vary in shape and size all long the central axis of audience and stage. Historically, there are several theatres that embody the idea of “small rooms” – performance spaces that accommodate fewer than 250 people. Small rooms provide a different experience by the vary nature of the shape and size of the space. By keeping audience members closer to the stage, the performance offers a finer grain experience.

In contemporary theatre design, often times in the design of a larger 500+ seat theatre there is a smaller 250 seat or less room in the program. This space is typically inadequate in its design due to a number of factors. Often times there is less time and money devoted to the design of the smaller space. Because of these design shortcomings there is a deficit in high quality small room theatres across Canada.

One can point to a handful of examples of very successful independent theatres across Canada and throughout the world that produce an exceptional standard of work, which, by first having a high level of architectural conception, not only allow, but encourage a wide social economic cross-section of audience members. Theatres including Montreal’s Theatre Espace Go, Kilburn’s Tricycle Theatre, and New York City’s Public Theatre all produce a high quality theatrical experience from small rooms.

Currently, in Halifax, Nova Scotia there exist a limited number of available performance venues. The Neptune
Collage showing clusters of successful professional small room theatre and dance spaces across Canada, the United States and United Kingdom.
Theatre serves the role of regional theatre, Dalhousie University also helps to fill out this segment, but smaller community groups struggle to find adequate performance venues that can serve their needs.

If the problem of theatre is partially attributed to the design of the space, what are some of the ways to investigate this problem? One method is to look at the history of the theatre as a building type in order to try to return some of the original spacial variations. Through the course of history there have been several developments and re-developments in the type, some of which could offer analytical value. For any real architectural study of the theatre to occur one must have a firm understanding of the history of that building type, as well as the contemporary work that is discussed in this study.

In gaining a better understanding of this building type, it is important to consider theatre as a ritual place. The architectural study of theatre spaces versus ritual spaces is compelling due to the similarities and connection in close human activity, the intended unity of those gathered and the fascinating and important connections in the architectural structure, which may very well be crucial in understanding how we can create a theatre space which, like ritual spaces, will encourage a high quality theatrical experience.

Front of house rituals including (from top): the ticket booth, lobby and programs.
Map of Halifax showing the current available performance spaces. Note the small cluster of independent venues (North Street Church, Bus Stop) situated in the city’s popular north end.
Three section models showing a variety of inter-audience relationships. Note that in fan-shaped seating the audience member is not able to see the front or side of any other audience members faces, leading to the possibility of a less civically involved story-telling experience. In the other two theatre types (in the round and amphitheatre) it is clear that one audience member can see the front or side of several other audience members faces.
CHAPTER 4: WHAT IS RITUAL SPACE?

The idea of “ritual space” is not meant to be obscure, difficult or aloof in any way. The use of the word “ritual” also is not inviting or expecting one to accept religion. The “ritual space” can simply be thought of as a place were a series of actions occur – actions which allow the opportunity for an individual to acknowledge the possibility of another world beyond their immediate reality. This is the world of storytelling, mystery, rest, retreat and/or affecting experiences. In architectural terms, this is no different than the space between the vestibule and front hallway where you drop your keys and pick up your mail each day after work, the place where you breathe deeply, take a quiet moment and change your realities for the rest of the day.

In terms of typology, one could reason that within a theatre building, there might exist a kind of space that allows the user to experience a ritual commonly found in sacred places in order to prepare them for a storytelling experience.

Architecture, as Louis Kahn would say is “reaching out for the truth.” This is to say that architecture assess what works best. Through history there has been a ritual element to theatres, including the performance of religious rituals, sharing of ritual knowledge and construction of ritual temples inside of theatres. Why would one put a temple in a theatre? Why would you put a stage in a church? Part of the importance of this thesis is to view ritual spaces versus theatres in order to decipher, in terms of space, what works best in order for its user to experience another world, a retreat, or a story.
Plan drawing of Newgrange burial grounds. Although pragmatically, the destination could have been at the foot of the entry, a long procession is included in the design. Ireland (3100 BC).

CHAPTER 5: THEATRE AS A RITUAL SPACE

Early theatre types often included a small temple on the central axis “reminding us that the Roman theatre like the Greek theatre had a religious function” (Leacroft 1984, 31). There are explicit connections in the performance activities that take place within theatre spaces and ritual spaces, which could suggest an architectural relationship between these spaces, although to date, most related research falls short of discerning these architectural connections.
A spatial graphing technique, known as gamma-analysis or justified gamma maps (Hillier 1984) shows that there is a connection between the stage and audience within a theatre space. Gamma mapping is useful as a way to study connectivity with the absence of style and scale, which could offer a deeper social understanding of the particular space. Looking at examples of the Greek amphitheatre and the Paris Opera house, each audience member is free to walk onto the stage at any time. In typical ritual spaces, as seen in the temple and the church, we are also free to walk onto and across the stage. The architectural structures of both theatre and ritual spaces create an interaction in which the audience is completely involved and absorbed in the knowledge being offered by members on the stage, but knows not to jump onto the stage.

Whereas a space, such as a baseball diamond, is often rushed by audience members after a performance, the architectural design of a theatre creates a sacred space, like that of a traditional ritual space, in which the audience feels connected and empowered but implicitly knows of the boundaries, and thus treats a theatre space as a sacred space.

Backstage rituals including (from top): the stage door entry, applying makeup, going over notes, setting up cues.
Gamma-analysis map of Westminster Abbey showing (at left) the architectural organization of sacred spaces, audience spaces and backstage (private areas) and (at right) the programmatic organization of the spaces. Note that in the programmatic use of the space the lines between sacred and audience spaces are blurred as the audience member is invited to partake in ritual ceremony.
Gamma-analysis of Buddhist Temple (at left) architectural organization of spaces (at right) programmatic use.
Gamma-analysis of Greek amphitheatre. Note that in both architectural and programmatic use the audience member does not cross the sacred space (in this case the stage).
Gamma-analysis of Greek amphitheatre Note that in both architectural and programmatic use the audience member does not cross the sacred space (in this case the field).
Play Theory and Ritual Place

During the Great Depression, cultural theorist Johan Huizinga published Man the Player. Using the term “Play Theory”, he defined the conceptual space in which “play” occurs.

The arena, the card-table, the magic circle, the temple, the stage, the screen, the tennis court, the court of justice, etc. are all in form and function play-grounds, i.e., forbidden spots, isolated, hedged round, hallowed, within which special rules obtain. All are temporary worlds within the ordinary world, dedicated to the performance of an act apart. (Huizinga 1955, 88)

Huizinga’s play-theory helped to define the places that are divergent from public or private life. While all spaces contained in the play-theory essentially fall into one or the other – public or private life – the characteristics of the activities were somehow difficult to define with traditional spacial definitions. While the ritual acts committed within a church were, by nature, private and deeply rooted to one’s own self-certification, the church as a building was an inherently public space. Several other buildings also fell into this category, including theatres, halls and other performance spaces, all of which fall into the building typology which would allow “temporary worlds within the ordinary world”.

Thirty years prior to Huizinga, Arnold van Gennep developed the concept of liminality, which helped to contextualize the function of ritual as a three-fold structure of rites, most importantly the “transition rites” in which a group of people follow a “strictly prescribed sequence”, allowing for “an actual passing through the threshold that marks the boundary between two phases” or “liminality”. 
Historian Sarah Bonnemaison would later connect liminality to the effect had on the life of Parisians during the period of May 68. Using Turner’s definition of the liminal state:

During the liminal period, the characteristics of the laminar (the ritual subjects in the phase) are ambiguous, for they pass through a cultural realm that has few or none of the attributes of the past or coming state. Liminars are stripped of status and authority, removed from a social structure maintained and sanctioned by power and force, and leveled to a homogeneous social state through discipline and ordeal. Their secular powerlessness may be compensated for by a ritual power, however – the power of the weak, derived on the one hand from the resurgence of nature when structural power is removed, and on the other from reception of ritual knowledge. (Bonnemaison 2008, 282)

Later on in the century, performance theorist Richard Schechner would help to evolve Huizinga’s theory by sub-dividing play-theory into three categories of performance activities:

Play

Game, Sport Theatre

Ritual
CHAPTER 6: RITUAL THEATRE: DEVELOPING A BUILDING LANGUAGE

With a sound understanding of the theatre as a historical building typology, and having analyzed this research through the lens of ritual spaces, the Pilot Project offered the opportunity to apply the research into a design exercise.

Introduction

The concept for the Ritual Theatre was to design a theatre that focused directly on the manifestations of the interior spaces and the path that moved through them. In order to achieve this study most effectively, the choice was made to design the building devoid of a contextual site. The result of this course of action offered the freedom to focus on the quality of the interior spaces and the procession that transferred the user through them, which represents an important aspect in both a theatre space and a ritual space, as the interior architectural design leads its audience from their outer, public life into the private, ritual space and, consequently, into these ritualistic activities.
Studies

Each of the spaces, including circulation spaces, were designed independently of one another. This technique allowed one to design each primary space as a whole, which therefore acts as an independent pavilion.

The circulation spaces were then added and wrapped around the primary spaces as a way of containing the overall building in a reasonable exterior formal gesture. The result is a set of proud spaces that reflect on each
Study model – procession into gathering space.
Spaces as Storytelling

The spaces were designed in tangent with the design of the scenography for the theatrical production of Eugene Ionesco’s, The Chairs, as well as the ballet performance of Shakespeare’s, Romeo and Juliet. This method was incredibly efficient in bringing a storytelling quality to each of the spaces. By way of reflecting on each of the spaces as having a story, it allows the spaces themselves to come alive in a way that had not been experienced before in a theatre building.
Four study models for a ballet production of Romeo and Juliet. The quality of the scenography helped to inform the quality of the spaces in the ritual theatre.
Study models for The Chairs

Set Development Models

Development Sketches

Opening Scene 1

Close Scene 1

Opening Scene 2

Close Scene 3
Private/Public Spaces

The program for the Pilot Project Theatre can be separated into two individual, albeit sometimes overlapping coupled spaces. The first couple is composed of private and public space and the second is player and production space.

The separation of private and public space is a common theme through theatre typological history – particularly during the second phase of Greek theatres that positioned the stage towards the city. The Pilot Project Theatre offers glimpses from the public realm into the performance space by way of controlled wooden baffles.
Rehearsal Hall

Theatre through lobby
Theatre from above
The outdoor amphitheatre, while serving as a dedicated performance space, also offers direct views into the performance area and backstage of the theatre. This overlap of private and public space helps to provide a sense of civic ownership to the theatre.

The second coupling of spaces is the player and production space. Player spaces house the rehearsal studio, green rooms and dressing rooms. Production space flanks the opposite side of the building and offers scene and costume shops, as well as production offices. The two spaces are connected through the backstage ring that wraps the performance space.
Lobby

Entrance

Street

Backstage

Four Levels of Light
Processional Journeys

The Ritual Theatre was designed by way of research gained in the analysis of the theatre as a building typology and the theatre as a ritual space. Through this research, a set of pavilions were designed along with a set of transition spaces. The pavilions were coupled together to create the primary spaces and the transitional spaces were wrapped through the primary spaces to create a liminal procession through the building. The idea is that the journey through the building might be a great enough offering, such that once the audience member reaches their seat, they are willing to accept a live performance in its most simple form.

Street entrance to theatre showing amphitheatre and lantern
The journey begins with the visitor passing through an exterior space, where the metal ribbon curtain wall pulls back to reveal a glimpse into the theatre. Next, the visitor passes through the ticket kiosk and is again greeted with a view into the main space. Following a sharp turn, one is sent across a heavy wooden bridge that cuts diagonally through and above the concrete clad main performance space. The bridge offers veiled and directed views to the stage. Through the bridge, you move down a final set of hallways that offer views to the rehearsal hall and main spaces. These halls open to the lobby, a large totemic space that acts as an anchor to the theatre. Between the lobby and the main space is a compressive corridor, which connects to the backstage ring.

This technique represents the awe inspiring moment of entering traditional ritual spaces which often completely enclose you in the initial magnitude of the space.
CHAPTER 7: THE LEGACY CENTRE: RE-DEFINING THE THEATRE AS A HOUSE OF STORY TELLING

Readings

Researching theatre as a typology and as a ritual space is intended to assist in the design of a performing arts center that will serve as a venue for a community organization known as The Legacy Center. The primary building program consists of a 240 seat dance theatre, 125 seat flexible space and all necessary supporting spaces. Additionally there will be rehearsal spaces and two classroom studios each capable of accommodating 25 students.
The Legacy Centre was formed in 2009 as a response to the lack of adequate performance space in the city of Halifax, NS. Through internal leadership, the group has formed a board of directors as well as several small groups each assigned with a specific mandate. In late 2009, the group received funding to solicit a feasibility study, which was completed in two sections. In 2010, the board expressed interest in gaining assistance in the schematic design of the building as a way of developing the project.
The Legacy Centre for the Performing Arts
Schematic Design 1
Ground Plan
Site

The Legacy Center is located in Halifax, Nova Scotia, in the heart of the downtown core. The region is set within rugged coastal landscape of the Canadian Maritimes. The regional landscape map below was digitally drawn and fabricated using a CNC mill. The map illustrates the subtle and rugged contours of the ocean location. This landscape is scribed onto the urban site, which slopes downgrade 28’ over the 300’ wide site, as seen in the site section on the following page. The sloping nature of the site is handled by submerging the buildings into the site to create a common grade. This move also brings the audience member down a path and deeper into the building.
Site Section looking North along Sackville Street.
The design of the theatres is situated on the site of a proposed development known as the Nova Centre. Situated over two city blocks, the Nova Centre proposes to develop 1.2 million square feet of new construction. The project is ambitious in its intent to revitalize Halifax’s central business district. The proposal for the Legacy Centre not only strengthens the existing development proposal, but also adds cultural value to the city as a whole. By incorporating the Legacy Centre into the development proposal it provides a cultural forum for both the internal community and visiting tourism to gather. The incorporation of training facilities in the proposal helps to connect the development to the community on a primary level. By providing a place where younger members of the community can learn to dance, it fosters a sense of artistic development that can echo locally through the city as well as internationally by way of visitors to the Nova Center and its neighboring facilities.
Long Section looking north.
Short Section looking west.
Program

The overall design of the building is defined by both the programing of the spaces and the rituals that take place within the program components. As the earlier case studies reveal, theatres are often divided into three primary components: front of house, auditoria and back of house. While this approach is pragmatic, it can limit the overall experience of the building. By overlapping these three basic program units, it can offer a deeper experience into the rituals of the spaces.

Two historical theatres (Teatro Farnese and Theatre Royal) illustrating a common procession: front of house (yellow) - auditoria (red) - backstage (blue).
The program design strategy of the Legacy Centre is such that the front of house programming is intended to overlap with the backstage programming. This mixing of spaces helps to both enhance and combine the rituals of going to the theatre. By introducing a series of rotating wooden shutters enclosed in a transparent fire and acoustic rated boxes (with operable doors), which can be controlled by the presenting company, it offers a new level of programming and experiential flexibility to the building. The shutters are located in the lobby and bistro spaces, along the public edge of the building. The units are capable of rotating at a variety of angles, each angle offering a different view into the backstage corridors and the back of the playing areas. The shutters are also sized large enough that the company could use the openings as the audience entrance into the performance spaces.
Program Parti of the Legacy Centre showing a more diverse organization of spaces.
Procession and Views

In addition to the shutters, there have been a number of strategic voids made in the building that help to frame views to the auditoria from the front of house. The programmatic layout of the building also offers views into the working backstage areas of the building, either during dark time (periods when a theatre is traditionally vacant of the public, and therefore not generating any revenue) or pre and post performance times at the companies discretion.
Diagram illustrating a typical front of house procession (red dots) and the views to the back house rituals (red arrows).
Stage Door

The resident companies suites and rehearsal hall are placed at direct street access off of Market Street. This entrance serves as the stage door in a less traditional manner. This face of the building allows a view to the public, helping to enhance the daily, public image of the theatre as a bright, accessible space. From this secured level, companies can hold meetings in the boardroom, load in shows and sign in before heading down...
the central stair to the off stage area. The central stair is at the axis of the rehearsal hall and the greenroom and overlooks the bistro. This move offers the dinning public quick glimpses into a world of rituals previously inexperienced.

The working spaces of the building have been grouped in such a way as to keep working trades people (props, costumes, technicians) on the stage level of the building. At this level, the stage equipment, dimmers and mechanical areas are also grouped together within central areas. At the center of the working stage level is the...
The training studios and flexible performance space (at right) facing the professional rehearsal hall and support spaces (at left) with the galleria at center.

greenroom that is directly on axis with both the central access stair and elevators for easy locating by touring companies. Flanking the greenroom are the dressing rooms, warm up area and musician’s lounge. This core of offstage support and performer’s spaces opens up directly to backstage access of both stages.

Within the Legacy Centre there are two primary performance spaces, at the west end a 240 seat dance theatre and at the east end a 125 seat flexible space. Each of these spaces are programmed to include all of the necessary technical requirements and supporting spaces. In addition to the performance spaces, there is also a set of training studios accessible via the Grafton Street galleria. The studios are designed to be bright, access-
ible spaces that are positioned to face the professional rehearsal hall and support spaces across the galleria in the west building. The design concept in this arrangement is such that the younger performers always face to the pros, so to inspire them for future development. Off of this block is also a flexible lobby that can be used as an additional performance space. Within each of these spaces is a series of reflective light baffles designed to bring in diffused light from above. Each of the openings is equipped with an operable shutter in order to control the amount of light let in. The quality (and quantity) of light offered into the space is pertinent such that one receives a nature of light that is indirect and comfortable to work under.
Studies

Sightline Study

The sightlines for the 240 seat dance theatre have been designed in order to provide a low arrival of point of sight (APS) for those seating at the orchestra level. The low APS is such that one is able to maintain a constant view of the dancer’s feet. The balcony level has been staggered at two rows high, which allows a comfortable APS for all audience members. The box rows flanking the sides of the balcony level are positioned such that the audience members are comfortable facing the stage and able to maintain a consistent view of the performers. The sightlines for the 125 seat flexible space feature a higher APS in section and an equal viewing angle in plan.
Sectional Sightline Study, Flexible Space

Sightline Study in Plan, Flexible Space
Structural Noise Control

The design strategy for structural noise control has been approached on two levels. At the primary level, the buildings have been designed such that the upper and lower floors of the building are supported with separate structures. The lower sections of the building, which contain the auditoria, are supported with a steel structure that is independent of the structure supporting the upper floor. Therefore, the vibrations from the upper floor (housing the rehearsal hall and company offices) will travel down a structure that is independent of the structure supporting the auditoria below. Secondly, there has been an acoustic ceiling drawn into the section, which should dampen any additional structural noise, as well as any HVAC noise travelling through the ceiling ducts.
Waterproof Membrane
2" x 2" Sleeper
3/4" Hardwood Floor
1" Insulating Blanket
6" Concrete Floor
1/2" Plywood
Vibration Hanger
5/8" Gypsum Wallboard

Structural Acoustic Strategy - Typical Ceiling Detail
Acoustic Strategy

Acoustic detailing and conceptualization is a critical feature of theatres. Within the Legacy Center, both of the auditoria spaces have been detailed to include an outer noise control barrier that surrounds the space and is independent of neighboring wall systems. Additionally, there are enclosed transparent fire and acoustic rated glass boxes which surround the wooden shutters which offer unique views into the auditoria. The independent noise control wall is detailed to include two layers of double 5/8” wallboard as well vibration hangers on the outside face of the system. The 1/2” space provided for the hangers also acts as an airspace that further reduces noise. Within the wall there is also a 3” sound insulation blanket that works to dampen traveling sound waves. In addition to the wall system there is an acoustical ceiling that has been detailed to reduce any structural noise vibrations that might travel from the upper floor. In addition to the structural systems there are a series of sound and light locks that have been designed into each of the auditoriums. These spaces act as interstitial spaces between the lobby and auditoria.
HVAC System Strategy

The ventilation design for the Legacy Centre auditoria utilizes a low feed system of air supply. Fresh air is brought in from the rooftop, therefore avoiding traffic fumes and acoustic vibrations. Under this system, cool air is fed through a mechanical plenum located under the seats. Warm air is then collected through ventilation ducts located in the ceiling of the auditoria. As the warm air rises, it is collected and removed from the space, so not to interfere with the fresh, cool air supplied at a low level into the space. During the colder months this system also sets up the opportunity for passive preheating from the thermal mass surrounding the space. The cycle shows potential to be driven entirely by audience heat and mechanically assisted when required. The mechanical spaces for the building are located within the mezzanine level of the backstage portion of the building. This spacing allows for a distancing of the noisy machinery from the auditoria as well as easy access to the loading elevator and other technical services of the building.
CHAPTER 8: CONCLUSION

Architect Barton Myers has been quoted as saying that the theatre is one of the most difficult buildings one could go about designing. Aside from requirements of the performance space itself, as well as the support services and management, there is also the deeper question of how to design the experience of going to the theatre. Theatres, like ritual spaces, are places where we gather as a group to listen, watch and experience someone telling us stories. The stories may be told through dance, they may be told through song and they can be told through absolute silence.

This study has examined a discrete selection of historical and contemporary theatres and the rituals that take place within them. Through this it has been observed that there are a number of rituals that take place both front of house and backstage. These rituals include audience members entering the lobby space and then moving into the auditoria. This particular procession has been identified as a liminal experience. By extending this sequence architecturally and offering the opportunity for the performing company to marry it with the backstage ritual, it has helped to provide rich new material for a designer to carefully handle the important and extensive environmental and programmatic requirements native to a contemporary dance theatre.
As a new method of reflecting on the building type, the theatre was observed as a ritual place, one that shares commonalities with typical ritual spaces. By analyzing ritual spaces using a method known as gamma-analysis, it has shown that while ritual spaces share some architectural commonalities with theatre spaces, one area of difference is in the space that the audience may engage. By nature of ritual space performances, the audience member will occasionally cross the line from the audience space to the stage or sacred space. This is dissimilar with theatre spaces that uphold an illusive barrier to the stage. This work has explored the architectural implications of bringing the audience members across that line. One result is that by bringing the audience member across the stage on entrance it could rearrange the perception of the space and offer a grander experience.

By studying the theatre in the light of it being a ritual space, it opens up a raft of new ideas about how one might design a building to hold performance. The building languages become more flexible than the traditional typology. They offer their lobby spaces as entertainment and dining spaces. The stage door becomes a public face of the building. Certain aspects of the building are hidden while others are given away entirely. This study helps to draw out the particular experience of going to the theatre.
Once the conceptual idea is well underway, the next task is to make the building work. Because the intention is to assist in the design of a new home for the Legacy Centre in Halifax, Nova Scotia, the task must produce a completely usable space. Wrapping the conceptual building around the pragmatic requirements of two small theatres and all of their support spaces means that compromises have to be made. Considerations for egress, fireproofing, structural acoustic separation and mechanical systems are all considered in the final design. In addition, a great deal of attention has gone into designing the spaces in such a way that they are not just moderate, but that they might also assist in making good work.

The project results in an evolved building that attempts to draw out the rituals of both front of house and back of house and wrap them into a building that is mysterious on the outside but offers answers upon closer inspection. The backstage of a theatre bares heavy, evolving traffic loads that need to combine elements of robustness with comfort. By creating a series of nooks and small hallways in the plan, it allows for retreat and private moments to occur – essential for a performer’s very public job. Additionally, the primary axis to the backstage support areas occurs at the cross roads of the greenroom and the crossover corridors for both of the houses. This allows for easy locating and a uniquely readable plan to those visiting the building for the first time.
Future Work

Part of the motivation for this work has been the warm response received from the board of the Legacy Center. While some of the response to the exposure of backstage rituals was somewhat cautious, being offered the flexibility of controlling views into the previously unseen parts of the building was uniquely appealing to the board. One would hope that this work could continue into the eventual construction of the Legacy Center as well as a number of other progressive new theatres.

In order to continue to properly credit the research that went into the eventual design findings of this work, it is important to continue the theoretical study of the theatre as a building type and how it could relate to that of ritual spaces. Principally it is important to continue with this study and place the work within the context of contemporary theoretical practice.
APPENDIX

Appendix A: The Day I Found the Stage

Perhaps one of the most moving architectural events in my life took place on the summer afternoon I wandered unknowingly onto the stage of the Stratford Shakespearean Festival. Born and raised in Stratford Ontario, I grew up working in and around the local theatre community. Having worked as a stage manager and stage carpenter, I was familiar with the workings of typical theatres. A relatively uncommon Shakespearean thrust stage, the Festival stage was first situated under a tent and designed by Tanya Moiseiwitsch in 1952. That summer afternoon I was invited by my girlfriend, an actress in the company, to a dress rehearsal for the 2008 production of Macbeth. The Festival Theatre is set by the river, raised on a plinth of earth and surrounded by gardens. The stage door is typically hidden down a back alley or around the side of the building but in this case it is next to a set of beautiful greenhouses. In and through the stage door I passed a number of nooks; scenic flats leaned against the concrete block walls, the entrance to the dressing rooms, the stage management offices. A winding and twisting hall that eventually changed from light to dark connected all of these places. Suddenly it was just above complete darkness and he only light at was low and blue.

The Festival stage has three stage entrances and three vomitorium. Center stage enters under a wooden balcony, a move adapted to the classical Shakespearean Globe Theatre. As I passed through the twisting tunnel
I noticed large signs with arrows that read “STAGE”. Busy carpenters and stagehands pointed me towards the signs until I reached my destination.

It wasn’t that I didn’t expect to walk straight out onto the stage - I thought I never could. Because that stage held a special place inside of me, I never thought that could be possible. That stage represented, and still does rep-
resent, a sacred place to me. It’s where I witnessed people bare the complexities of the world. Love, adventure and tragedy were all explained to me from that stage. Those floorboards were what separated me from some of the greatest stories ever told. But as I passed around the corner and between two painted black walls I saw a distant light that pulled at you in a way that insisted you be surrounded in absolute darkness for a moment. As I passed the dark and into the light I suddenly realized, that I was standing on the stage.

Stratford Festival main stage from above showing the classical thrust orientation, Stratford (1957)
Appendix B: Literacy Map

The roots of performance activities date back as far as the beginning of civilization. Originally a circle drawn in the earth, the idea of a dedicated performance space began around 500 BC, although the act of recording and re-telling stories has been here from the beginning. Story telling made advancements with the introduction of the Greek alphabet and then the recording of work by way of reading and writing. One could argue that literacy has both improved the act of story telling and inversely, story telling is good for literacy. Of course Shakespeare would have had a harder time writing sonnets had he not been able to write them down. But one could argue that Dickens could have been less inspired to write stories had he not seen Shakespeare’s told. In order for our culture to engage in the act of story telling we ought to provide ourselves with the buildings needed to accommodate this ritual.

As a way of tracing the development of the theatre as a building typology, and exploring the connection of literacy to story telling, a mapping exercise was created to negotiate an understanding of the history of the performance theatre activities alongside the development of literacy. By aligning the two units it allows one to view the development of a building typology along an imperial axis. What was discovered was not surprising: major advancements in literacy happened almost in complete parallel with progressions in performance theatre and then subsequently, in the building typologies. What was surprising though, was that in most cases, successful theatre types happened just after the particular advan-
cement in literacy or performance theatre. This is to say building form is codified after the art form is matured. Helping to serve a change in society is not a singular form of cultural pacification it is a method of aiding cultural growth and development. For our cultures to continue to grow we need to offer buildings that assist in the development of the changing movements.

The literacy study also helped to successfully map out four distinct eras in theatre building typology (Early Greek, Renaissance, Provincial and Auditoria).
<table>
<thead>
<tr>
<th>Theatre Event/Theatre Building Type</th>
<th>World Event/Literacy Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thespis wins drama competition, Athens, Epidaurus, Greece</td>
<td>Introduction of the Greek Alphabet</td>
</tr>
<tr>
<td>-650</td>
<td>-534</td>
</tr>
<tr>
<td>-340</td>
<td>First Roman public schools</td>
</tr>
<tr>
<td>0</td>
<td>Oxford University</td>
</tr>
<tr>
<td>200</td>
<td>1149</td>
</tr>
<tr>
<td>200</td>
<td>1150</td>
</tr>
<tr>
<td>1170</td>
<td>1200</td>
</tr>
<tr>
<td>1210</td>
<td>Urban revolutions, expanded uses of literacy</td>
</tr>
<tr>
<td>1374</td>
<td>1400</td>
</tr>
<tr>
<td>1534</td>
<td>Reformation, mass literacy</td>
</tr>
<tr>
<td>1545</td>
<td>1576</td>
</tr>
<tr>
<td>1592</td>
<td>1599</td>
</tr>
<tr>
<td>1600</td>
<td>Swedish literacy campaigns</td>
</tr>
<tr>
<td>1601</td>
<td>1618</td>
</tr>
<tr>
<td>1650</td>
<td>1700</td>
</tr>
<tr>
<td>1732</td>
<td>Enlightenment</td>
</tr>
<tr>
<td>London Royal Operah House</td>
<td>1830</td>
</tr>
<tr>
<td>Theatre machinery, Venice</td>
<td>1872</td>
</tr>
<tr>
<td><em>Hernani</em> provokes riot in Paris theatre</td>
<td>1903</td>
</tr>
<tr>
<td>Bayreuth Opera House, Germany</td>
<td>1914</td>
</tr>
<tr>
<td><em>The Wizard of Oz</em> opens on Broadway</td>
<td>1918</td>
</tr>
<tr>
<td>1939</td>
<td>World War II</td>
</tr>
<tr>
<td>1945</td>
<td>1949</td>
</tr>
<tr>
<td><em>The Glass Menagerie</em>, Tennessee Williams</td>
<td>1954</td>
</tr>
<tr>
<td><em>Death of a Salesman</em>, Arthur Miller</td>
<td>1955</td>
</tr>
<tr>
<td>Black Box Theatre, New York City</td>
<td>1959</td>
</tr>
</tbody>
</table>

*While this timeline is only a partial study, it takes into account theatres referenced in the overview of theatre as a building typology.*
Appendix C: Program Statement

### Front of House

**Public Spaces**
- Signage/Marquee 100 sf
- Readograph, Shadow Boxes 100 sf
- Foyer/Ticketing 400 sf
- Cafe/Bistro/Bar 1200 sf

**Ticket Holders**
- Admission Control 10 sf
- Coat/Bag Check 90 sf
- Lobbies 450 sf
- Lounge/Performance (Stage 4) 2,250 sf
- Food Services 225 sf
- Accessible Washrooms 80 sf
- Public Washrooms 420 sf

**Auth Personnel**
- Box Office 90 sf
- House Management 90 sf
- FOH Staff Room 90 sf
- Janitorial Closet 60 sf
### Performance Facilities

#### Auditoria

<table>
<thead>
<tr>
<th>Facility</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>240 Seat Dance Theatre (Stage 1)</td>
<td>2,400 sf</td>
</tr>
<tr>
<td>125 Seat Flexible Space (Stage 2)</td>
<td>1,250 sf</td>
</tr>
<tr>
<td>Chair and Aud Equip Storage</td>
<td>360 sf</td>
</tr>
<tr>
<td>Sound and Light Locks</td>
<td>300 sf</td>
</tr>
<tr>
<td>Technical Booths</td>
<td>200 sf</td>
</tr>
<tr>
<td>Sound Mixing Stations</td>
<td>120 sf</td>
</tr>
<tr>
<td>Follow Spot Positions</td>
<td>50 sf</td>
</tr>
</tbody>
</table>

#### Stages

<table>
<thead>
<tr>
<th>Area</th>
<th>Square Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1 Playing Area</td>
<td>1,600 sf</td>
</tr>
<tr>
<td>Wings 1</td>
<td>1,200 sf</td>
</tr>
<tr>
<td>Stage 2 Playing Area</td>
<td>900 sf</td>
</tr>
<tr>
<td>Wings 2</td>
<td>600 sf</td>
</tr>
<tr>
<td>Crossover Corridor (Stage 1)</td>
<td>280 sf</td>
</tr>
<tr>
<td>Crossover Corridor (Stage 2)</td>
<td>200 sf</td>
</tr>
<tr>
<td>Piano and Music Stand Storage</td>
<td>100 sf</td>
</tr>
<tr>
<td>Barre and Stanchion Storage</td>
<td>40 sf</td>
</tr>
<tr>
<td>Flooring Storage</td>
<td>100 sf</td>
</tr>
</tbody>
</table>
Back of House

Off Stage Support and Performer’s Spaces

- Quick Change 120 sf
- Unisex, Barrier Free Toilets 80 sf
- 4 Divisible Dressing Rooms 1,900 sf
- Warm Up Area 200 sf
- Green Room 400 sf
- Musician’s Lounge 150 sf
- Touring Company Office 100 sf
- Live Prop Lock Up 100 sf

Backstage Spaces

- Stage Door & Security 100 sf
- Loading and Receiving 300 sf
- Garbage Room 100 sf
- Janitorial Closet 30 sf
- Prop Shop 100 sf
- Costume Maintenance, W/D 120 sf
- Fitting Room 100 sf
- Dimmer/Amp Rooms 100 sf
- Audio Rack Room 100 sf
- Lighting Instrument Storage 100 sf
- Sound Equipment Storage 100 sf
- Crew Room 200 sf
- Toilets 80 sf
Training Facilities

Classrooms
- Studio (1) 2,250 sf
- Studio (2) 2,250 sf
- Studio Support - W/C (with lockers) 700 sf
- Faculty Lounge, Kitchen 300 sf
- Library 150 sf
- Janitorial Closet 30 sf

Rehearsal Hall
- Capacity for 50 (Stage 3) 3,000 sf
- Rehearsal Storage 150 sf
- Washrooms 80 sf
Administration and Shared Facilities

Facility Management Admin Offices

Facility Manager 120 sf
House/Box Office Manager 120 sf
Technical Director 120 sf
Administrator/Shared Space 120 sf

Facility and Shared Space

4 Suites of Offices 800 sf each 3,200 sf
Lounge/Kitchenette 350 sf
Boardroom (for 25) 350 sf
Mail/Copying/Admin. Storage 80 sf
Computer Servers 100 sf
Reception 150 sf
Coat Closets 20 sf

Mechanical Space

Passenger Lift
Freight Elevator 8 ft x 14 ft
Mechanical Rooms 1,000 sf
REFERENCES


