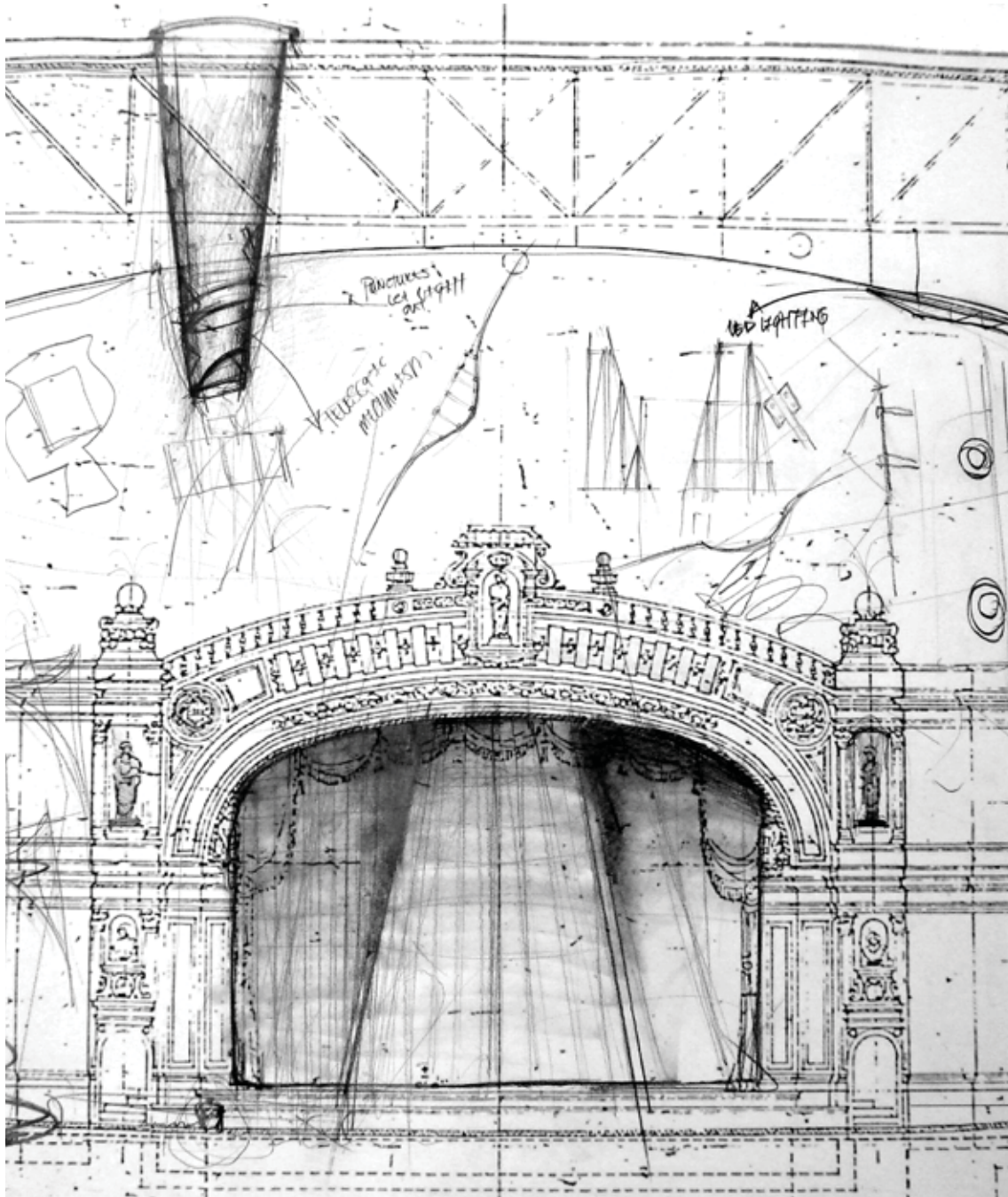




Part 7 Design Explorations

Figure 7.1 View toward stage September 2009



extending the skin

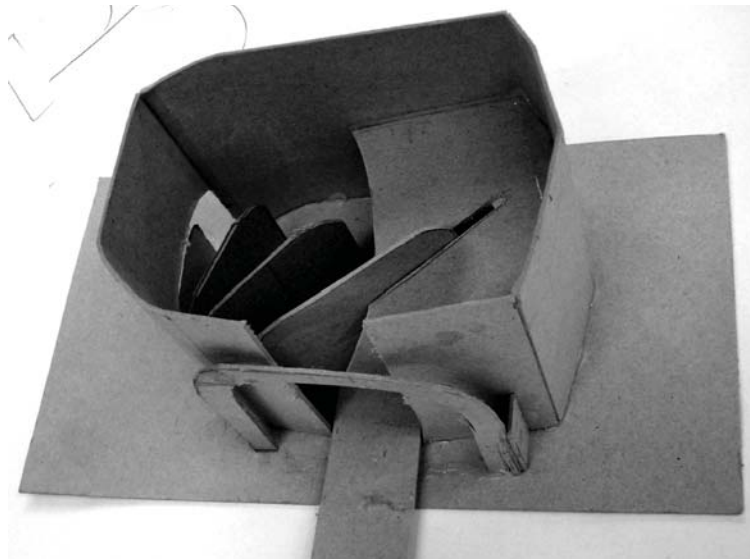


Figure 7.2 Concept model, unfolded western interior facade, February 2009

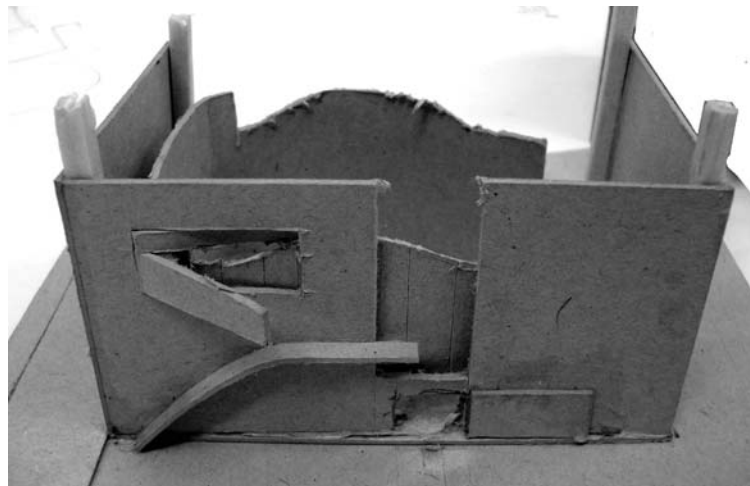


Figure 7.3 Concept model, unfolded eastern exterior facade, February 2009

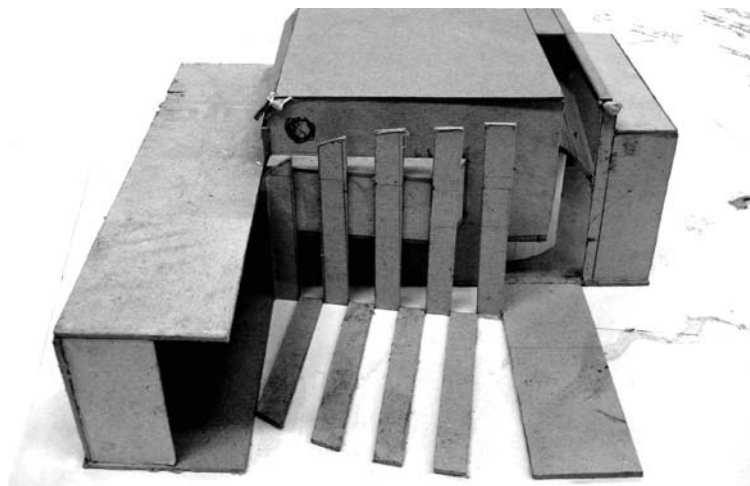


Figure 7.4 Concept model, unfolded western interior facade, March 2009

7.1 Introduction

A basic spatial framework was developed early in the year for the building as a whole. This framework concerned the basic programming of the foyers, with the main focuses on an intervention for the auditorium and the exterior space. The Entrance Foyer is to maintain its function as the restaurant and cultural centre. The Grand Foyer is to be programmed as a gallery. An installation of Boswell Circus imagery as well as handcrafted costumes will be displayed in the Grand Foyer. This space can, however, also accommodate other exhibitions. The space underneath the balcony is programmed as an audio and projection gallery.

The initial conceptual models explore and identify some of the strategic objectives that guided the design process throughout the year. Even though some of these evolved throughout the process, the objectives remained. The models explore the basic envelope of the auditorium and various possibilities of unfolding and revealing the spaces to each other. Initially the objective was to manipulate the auditorium and the western facade. Attention was placed on opening up the auditorium to reveal the interior and fold it out to the exterior and fold the exterior into the interior space.

The models explore the beginning of questioning the means of entering the auditorium, whilst retaining the existing entrances. These include an investigation into a mechanical means of accessing the auditorium, such as a carousel or a Ferris wheel, elevating the viewer from ground level and onto the balcony of the interior.

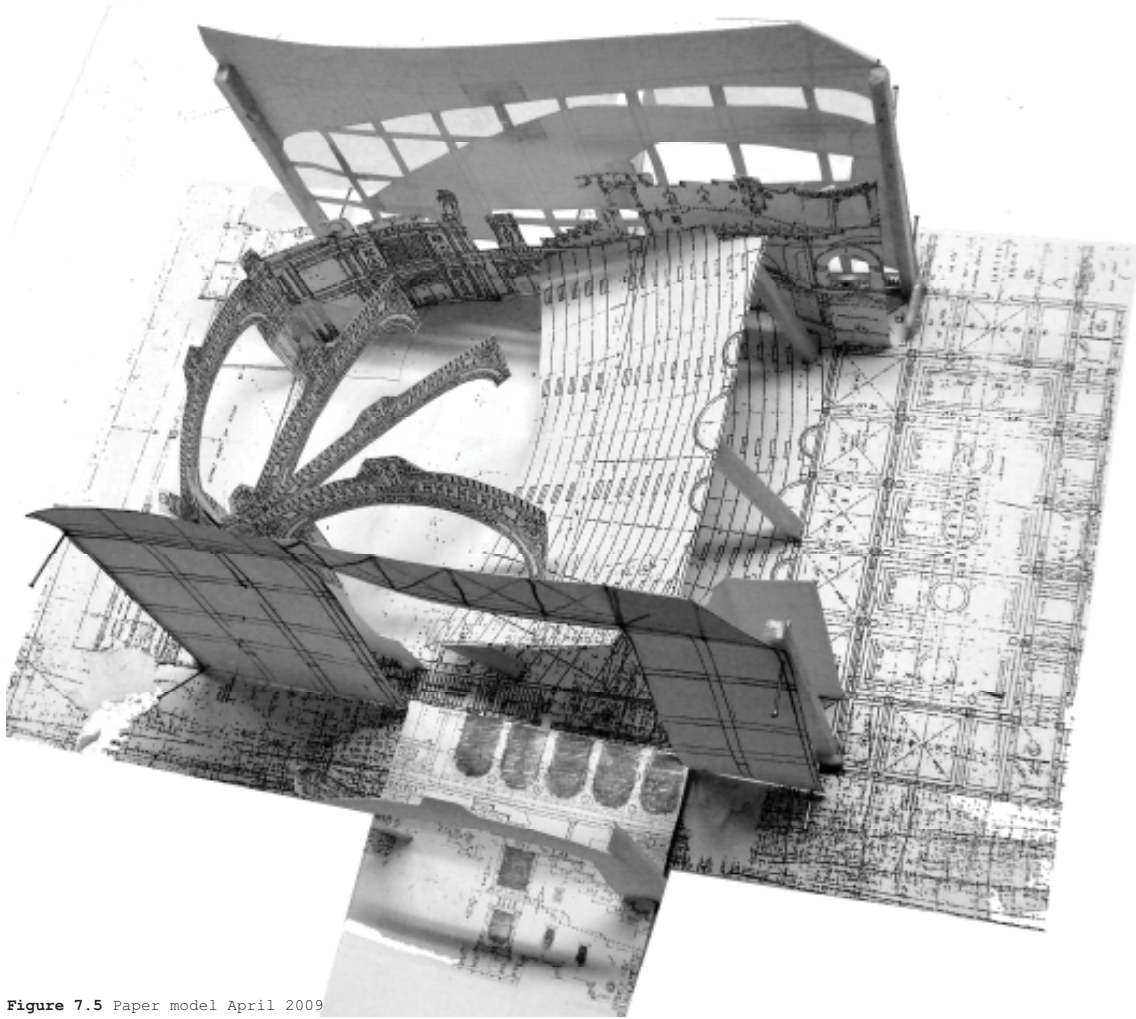


Figure 7.5 Paper model April 2009

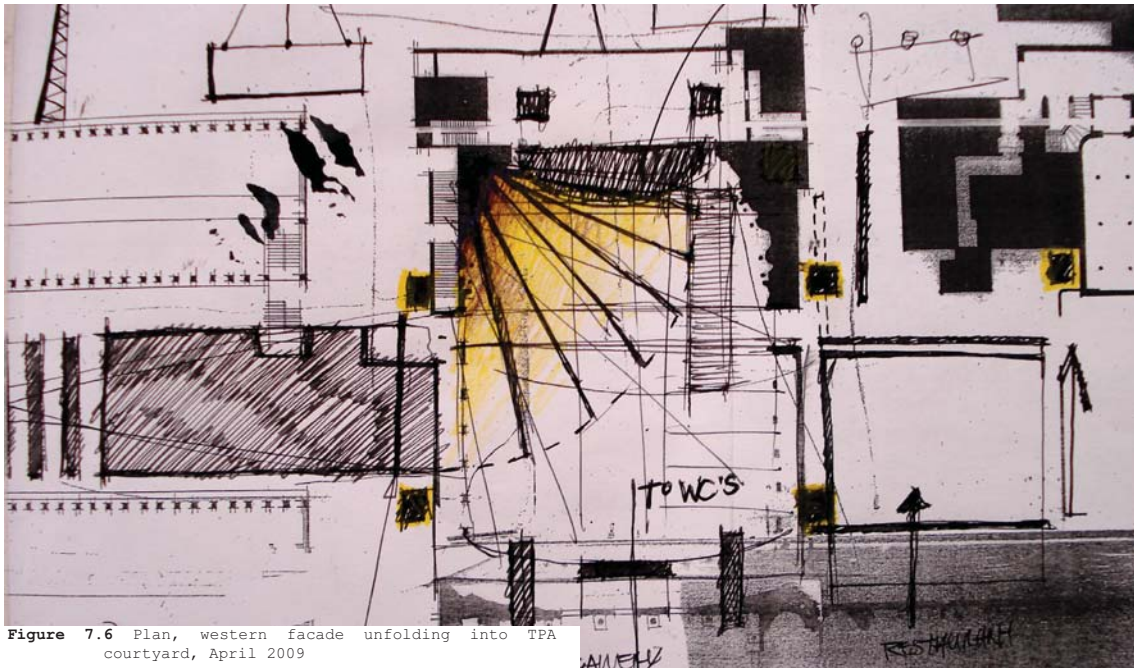


Figure 7.6 Plan, western facade unfolding into TPA courtyard, April 2009
extending the skin



7.2 Exploration A

This intervention explores the possibility of unfolding part of the western facade into one of the courtyards of the TPA building. This will form an amphitheatre between two of the towers of the neighbouring building. The amphitheatre has access from fountain lane as well as from the TPA itself. Unfolding the western facade reveals the interior of the building. The proscenium of the stage is mimicked and unfolded from the original to the western facade. The form of the proscenium is repeated on the exterior of the building, framing the interior and providing structure off which to suspend, but not functioning as a fly-tower. The eastern facade is manipulated to reveal aspect of the interior. From one of the doorways of the exterior, a glass box projects, a cantilevered stage in which a performer can perform. The brick infill is removed in reference to the dome structure at its apex. Access to the platforms of this facade is from the interior only.

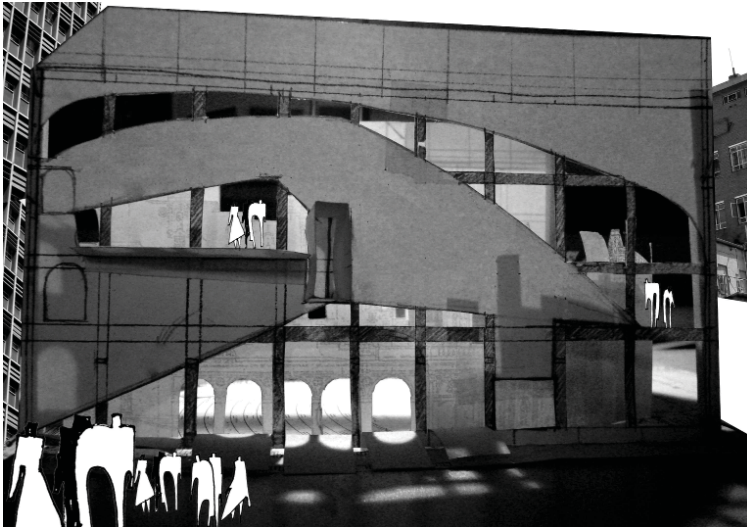


Figure 7.7 Eastern facade, April 2009



Figure 7.8 Unfolding proscenium, April 2009



Figure 7.9 View from TPA courtyard with repetition of proscenium, April 2009

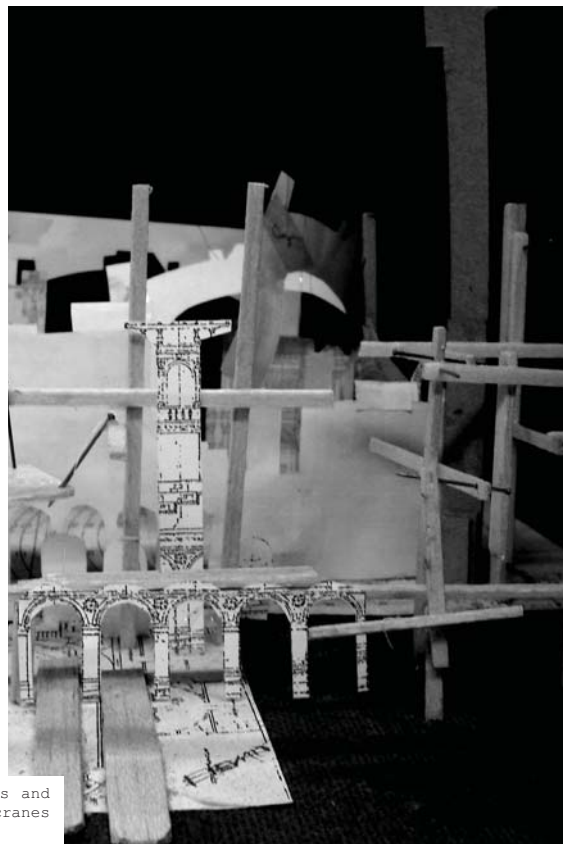
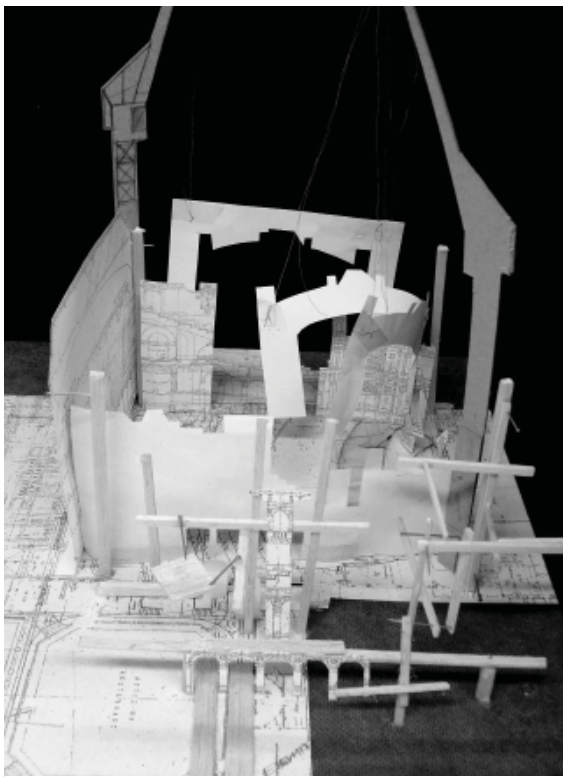
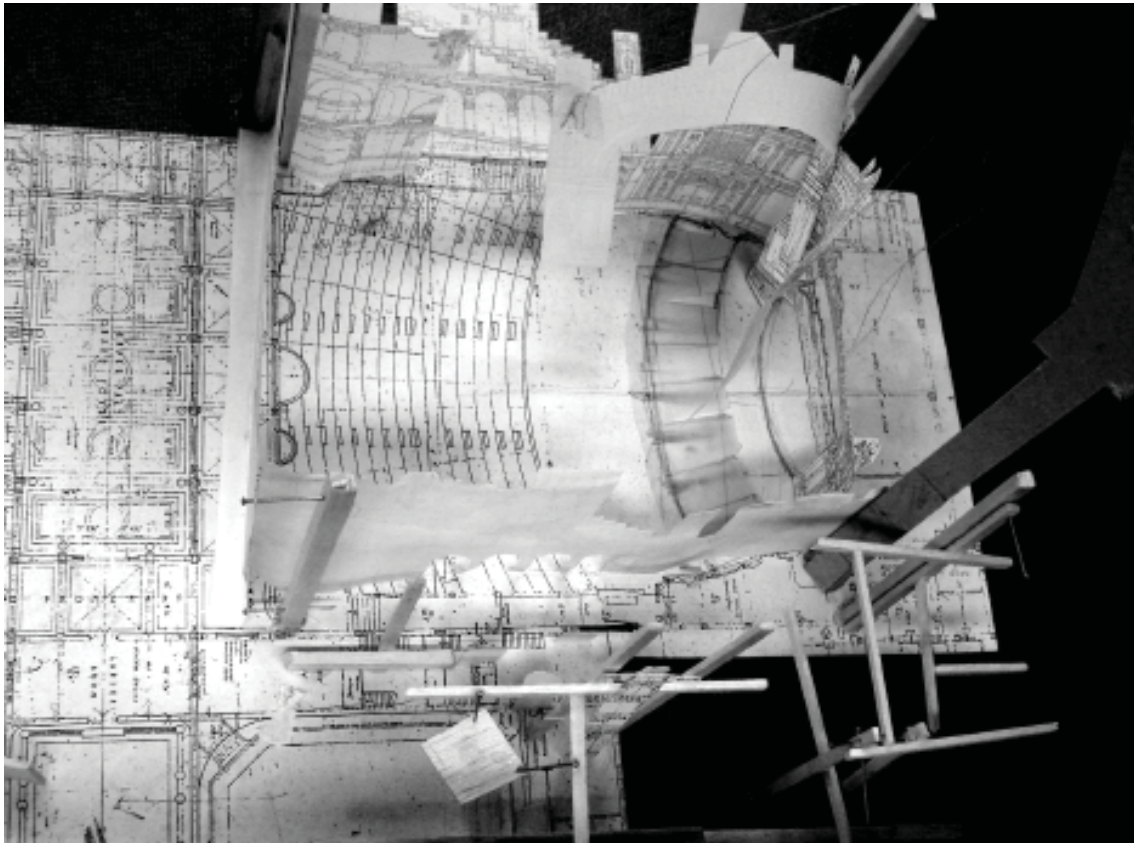


Figure 7.10 Model with super structure repetition of beams and columns in eastern exterior space. Insertion of cranes to aid in skin manipulation. April 2009

extending the skin

7.3 Exploration B

This intervention developed from 'A' continues with the exploration of unfolding the western facade. Cranes are inserted into the design, as a process of construction is explored, the cranes, as part of the process, becoming permanent fixtures. Four are inserted into the buildings, assisting in the manipulation of both facade and interior. The proscenium, similar to 'A' is repeated, but this time, brought upwards, the foot of the last proscenium resting on the balcony. The exterior wall is unfolded into the TPA courtyard and the interior wall, unfolded and layered on top of the exterior wall, becoming a stage. The niches and opening are filled with concrete and raised, becoming platforms on the stage. The cranes act as a fly tower the amphitheatre in the TPA courtyard, whilst on the eastern side of the building; the cranes are used to 'lift' sections of the exterior wall, revealing the interior. Within the eastern exterior space, the structural grid is repeated and columns and beams extend from the auditorium, enclosing this area.

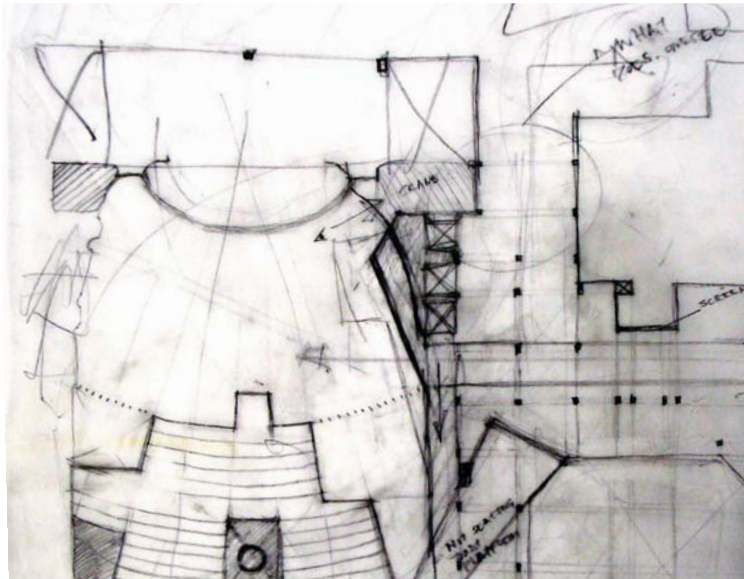


Figure 7.13 Conceptual plan, unfolding of exterior and manipulation of balcony. April 2009

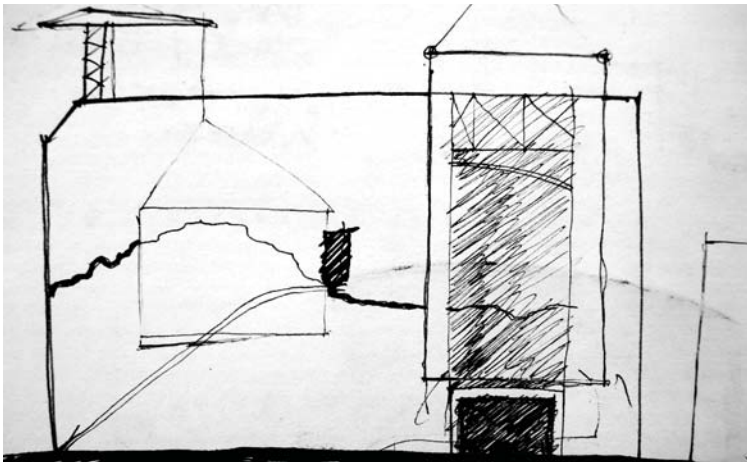


Figure 7.14 Eastern elevation April 2009

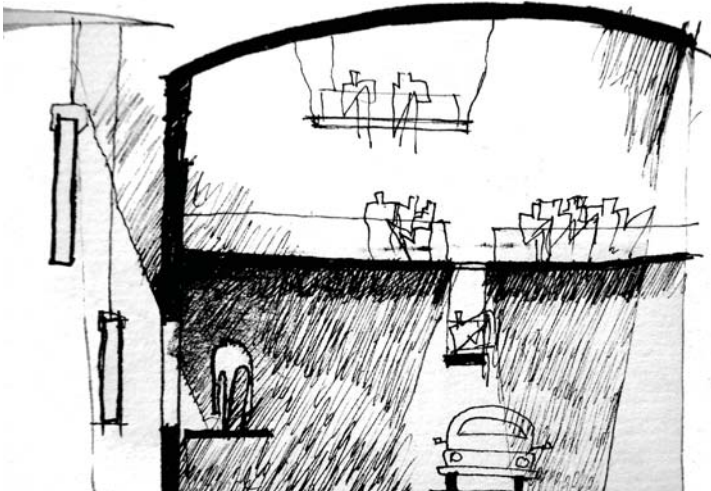


Figure 7.15 Section with manipulated balcony and eastern facade. Decision to keep vehicular access on ground floor. May 2009

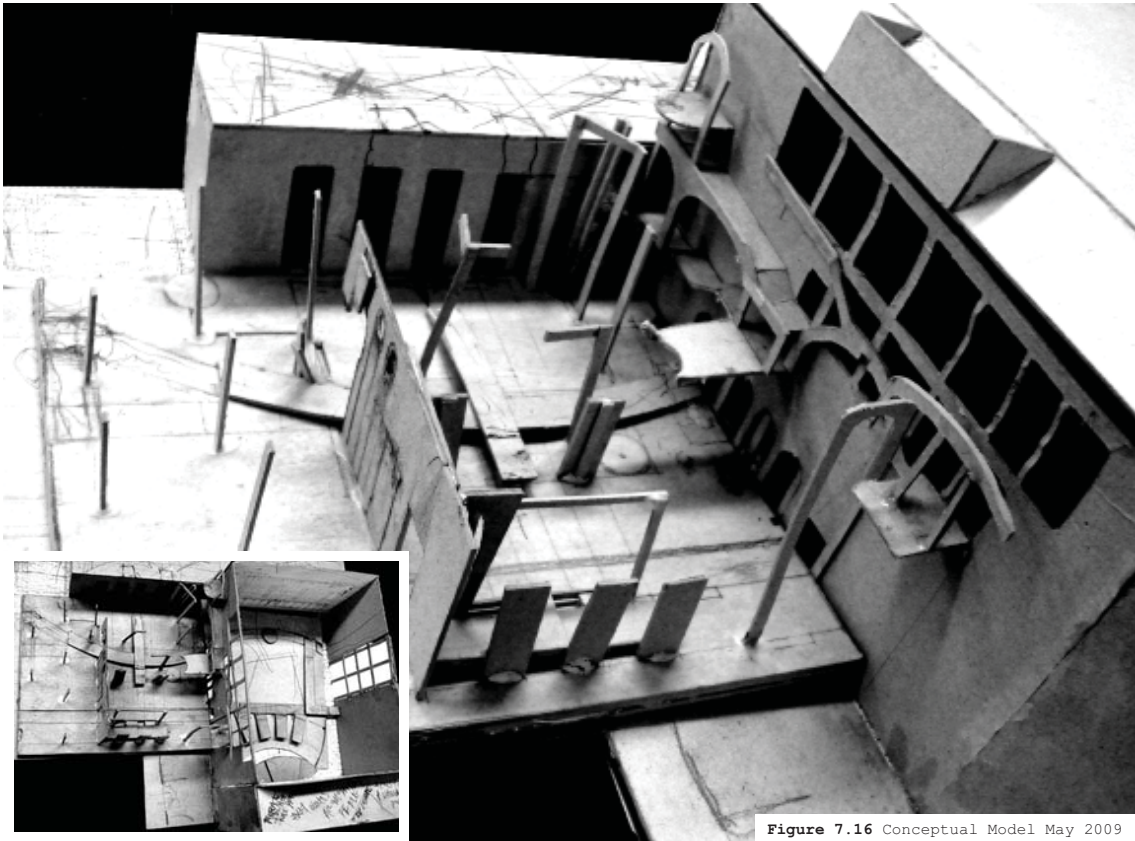


Figure 7.16 Conceptual Model May 2009

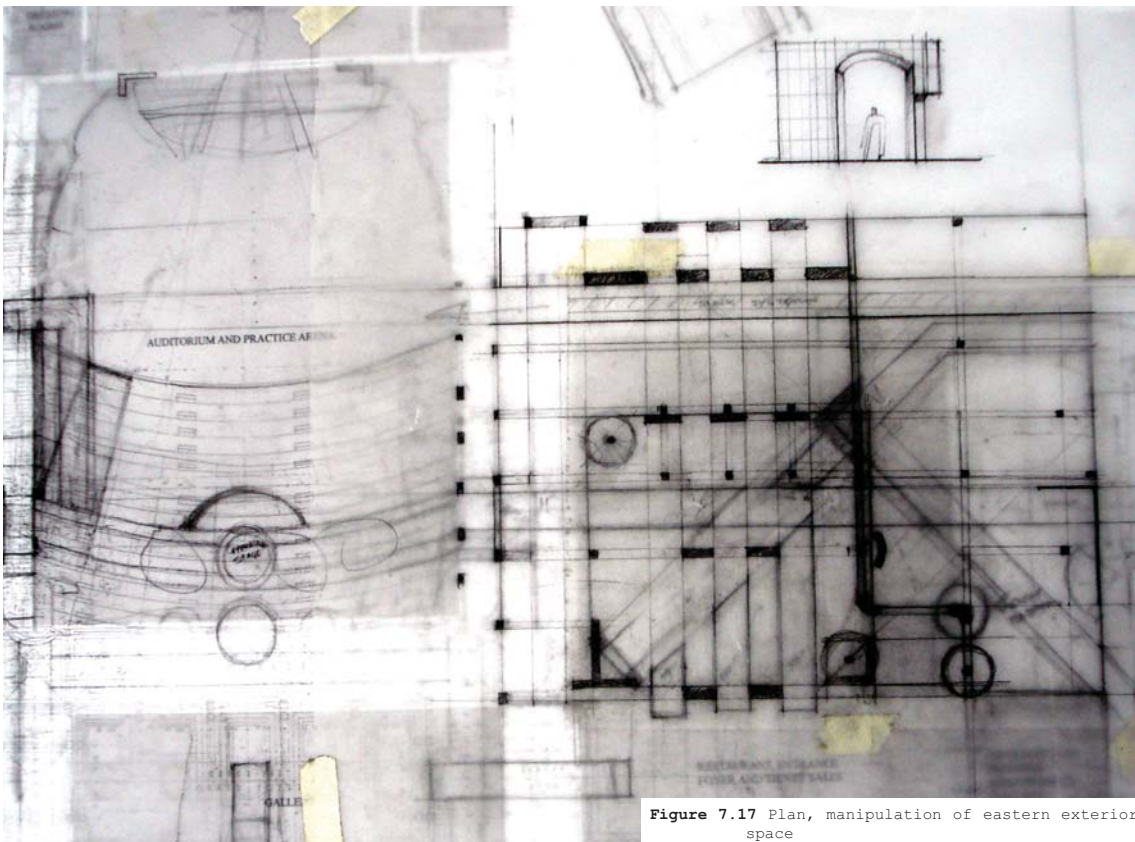
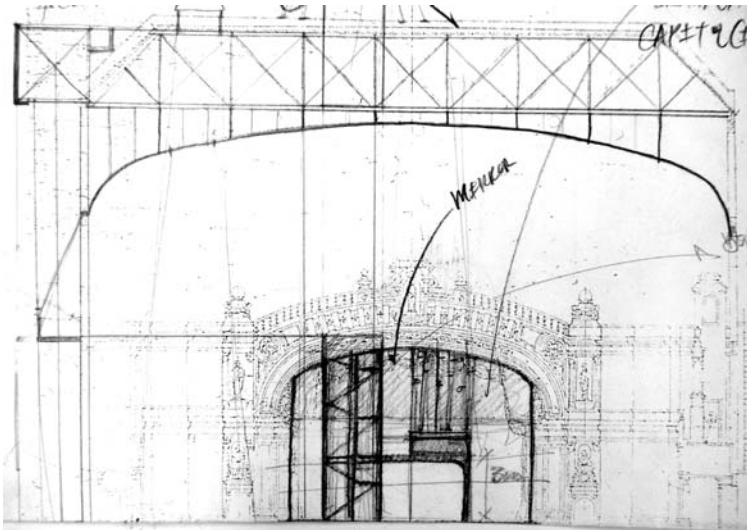


Figure 7.17 Plan, manipulation of eastern exterior space

extending the skin



7.4 Exploration C

At this point in the process the integrity of the dome is considered. The openings of both facades are reconsidered as the extent of interventions 'A' and 'B' renders the acoustics of the auditorium null and void. Exposing the roof structure of the auditorium becomes more important. The eastern exterior space, takes preference to the courtyard of the TPA, in order to activate the street edge on which the site is placed. Putting more focus on this space will encourage viewers from all corners of Church Square to enter the space. Vertical circulation in the form of spiral staircases is introduced in this exploration. A staircase is fixed to the facade and others are placed at certain points of a column grid which refers to the interior columns of both the auditorium and the foyers. Those that are placed on the grid serve as viewing platforms as well as columns to which tightropes may be attached. The addition of the circulation not only the northern facade but also the Entrance Foyer facade introduces the need for a roof terrace. The roof terrace can then be accessed from the interior of the building as well as the eastern facade and a staircase placed at the meeting point of the TPA wall and the Entrance Foyer. Through this placement, it is decided to remove part of the wall, and score its presence in the ground place, respecting where it stood. The thought of single permanent additions to the interior is withdrawn and rather a flexible 'rib' system introduced which allows for the manipulation of the interior space.

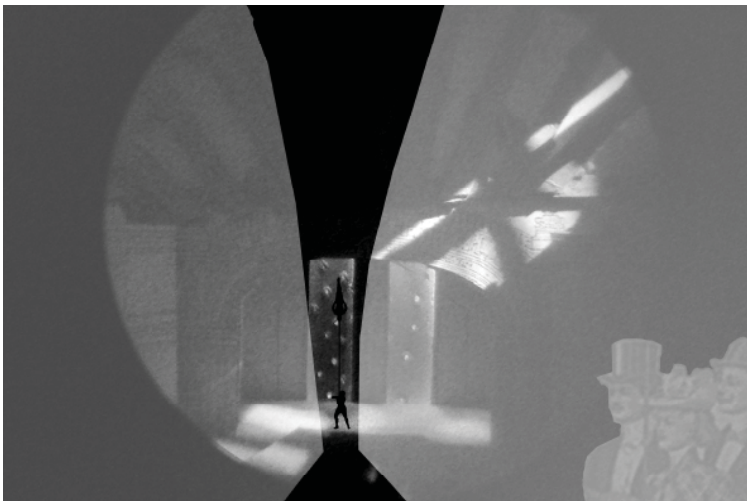


Figure 7.18 Auditorium Section June 2009



Figure 7.19 Digital collage illustrating vertical circulation July 2009

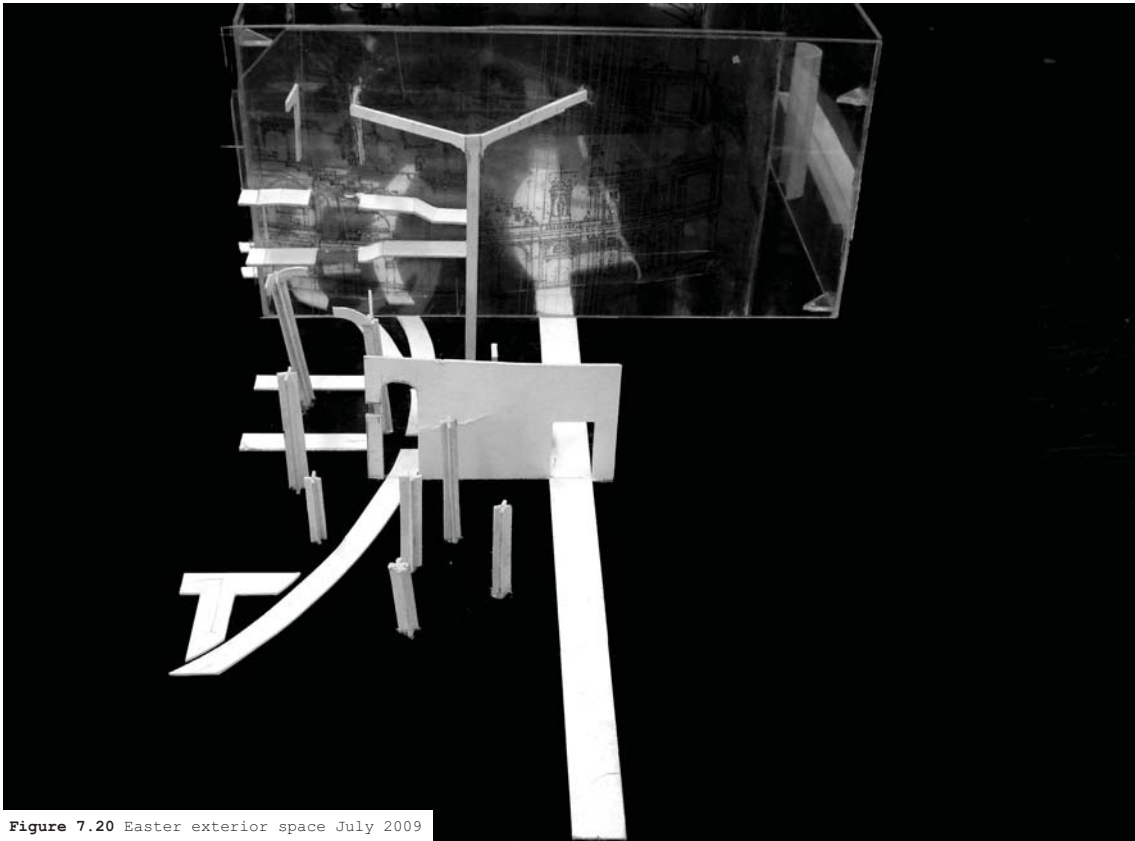


Figure 7.20 Easter exterior space July 2009

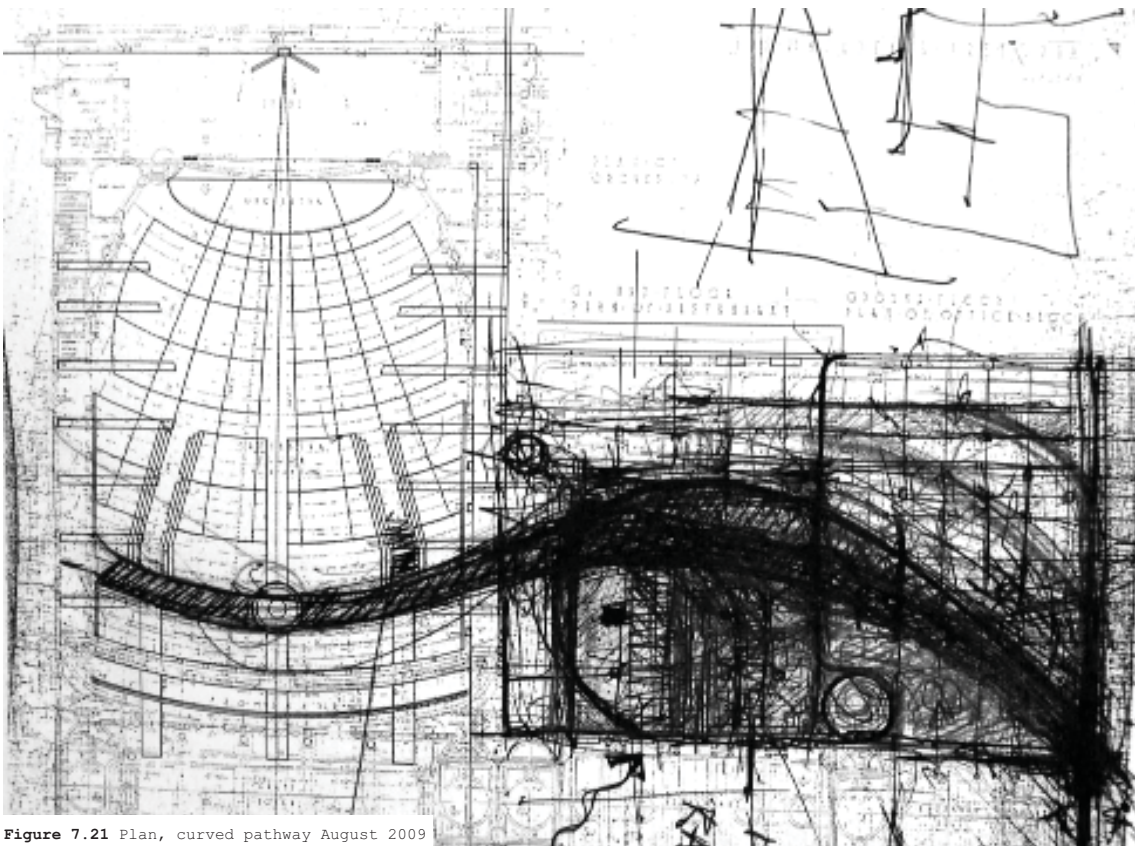


Figure 7.21 Plan, curved pathway August 2009
extending the skin

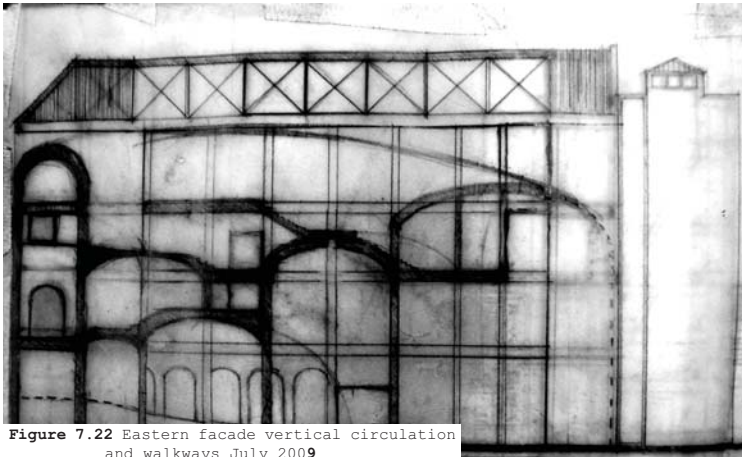


Figure 7.22 Eastern facade vertical circulation and walkways July 2009

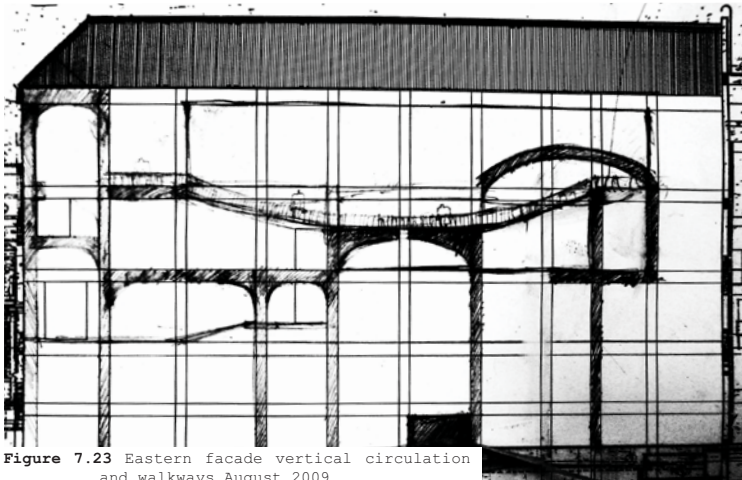


Figure 7.23 Eastern facade vertical circulation and walkways August 2009

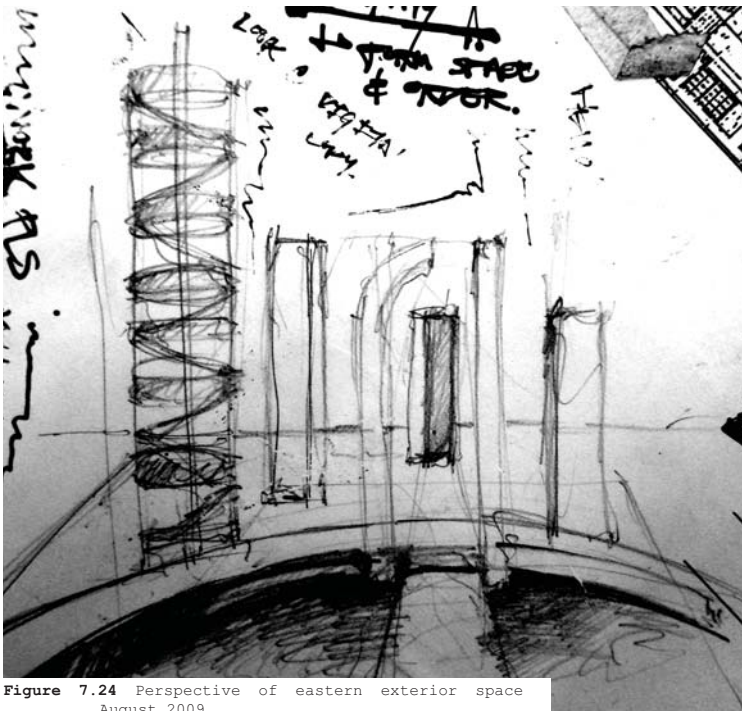


Figure 7.24 Perspective of eastern exterior space August 2009

7.5 Exploration D

A series of walkways on the Eastern facade are explored as various methods of entering and experiencing the facade. The interior passageway to both doors on the facade is extruded from the interior and additional openings placed at both the balcony and the mezzanine promenade, allowing for two more access points from exterior to interior. This archway system is supported by the addition of columns in the exterior space, both framing views of the space. The structure of the rib system within the auditorium is refined as to be able to suspend freely from the dome. Through the addition of a floor structure to the orchestra pit so as to increase the floor area of the stage, the decision to use a hydraulic floor is negated due to the spatial restrictions of the orchestra pit. The pathway from the street through to the interior is generated from the previous seating plan of the auditorium, curving from the interior through the exterior space and integrated with the sidewalk.

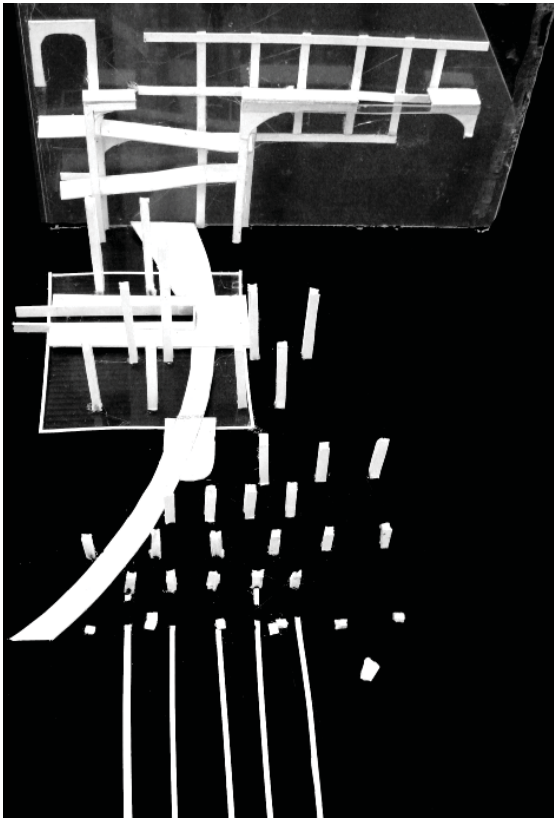


Figure 7.25 Model of eastern exterior space August 2009

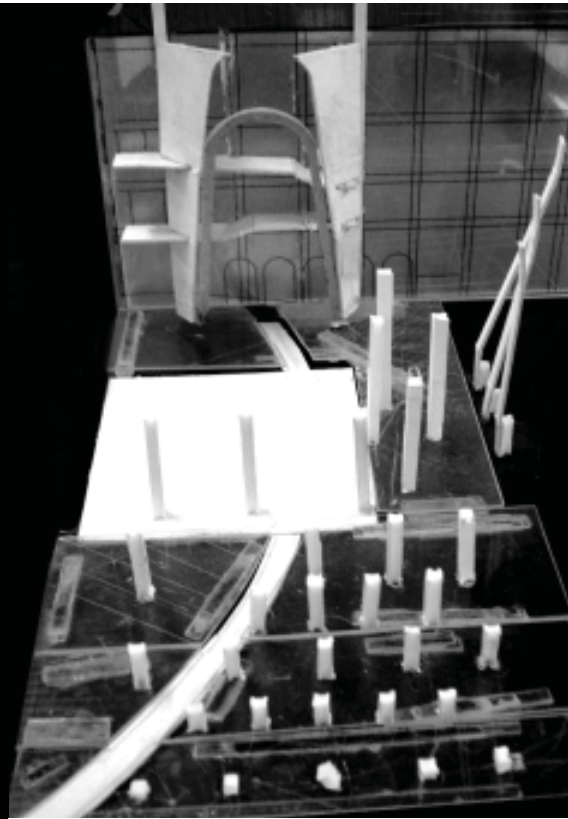


Figure 7.26 Model of eastern exterior space September 2009

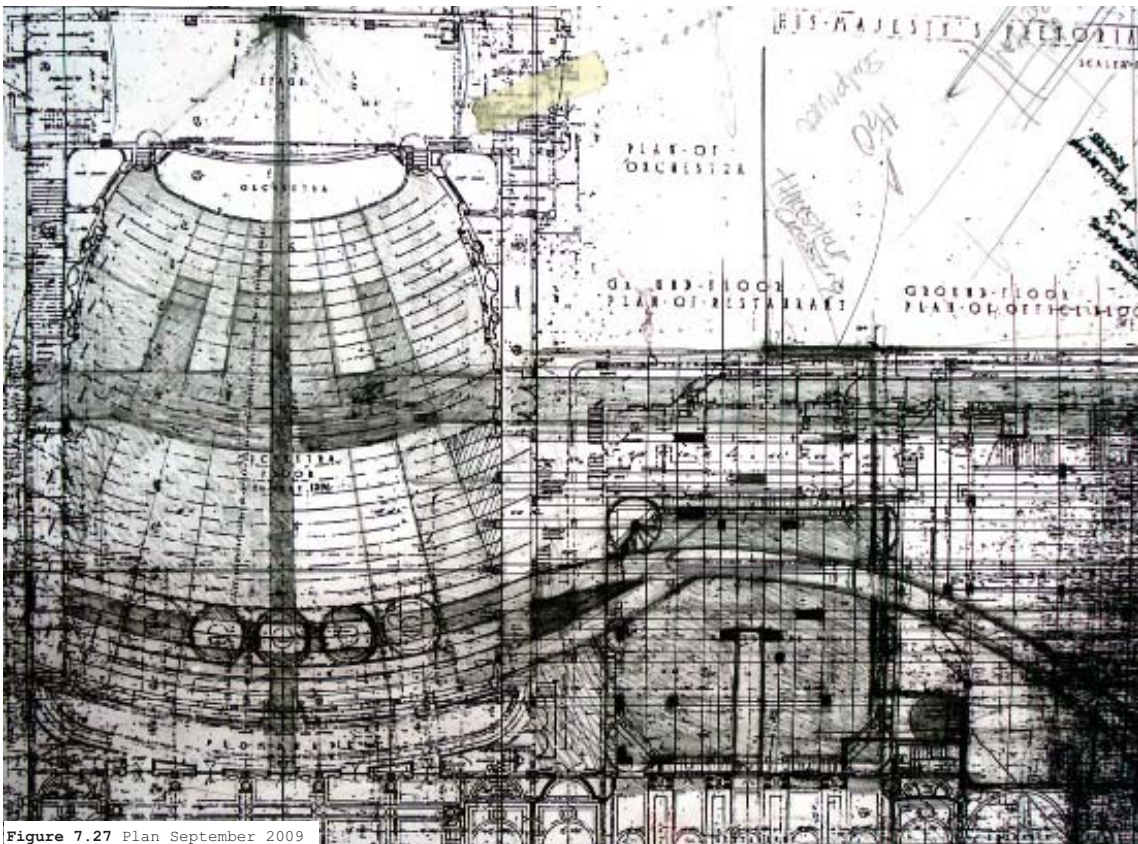


Figure 7.27 Plan September 2009
extending the skin

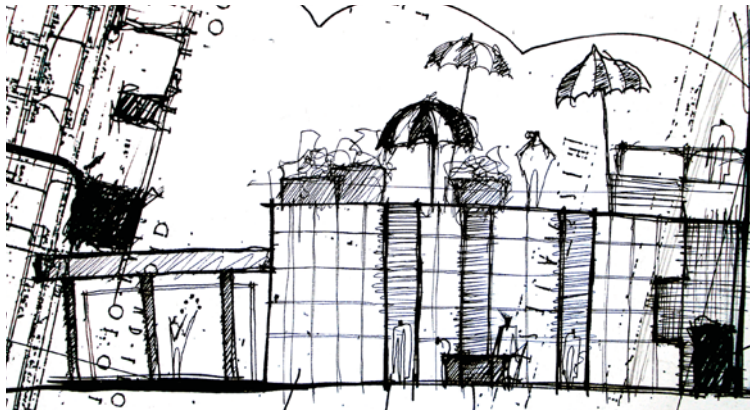


Figure 7.28 Northern elevation of Entrance Foyer overlooking exterior space September 2009

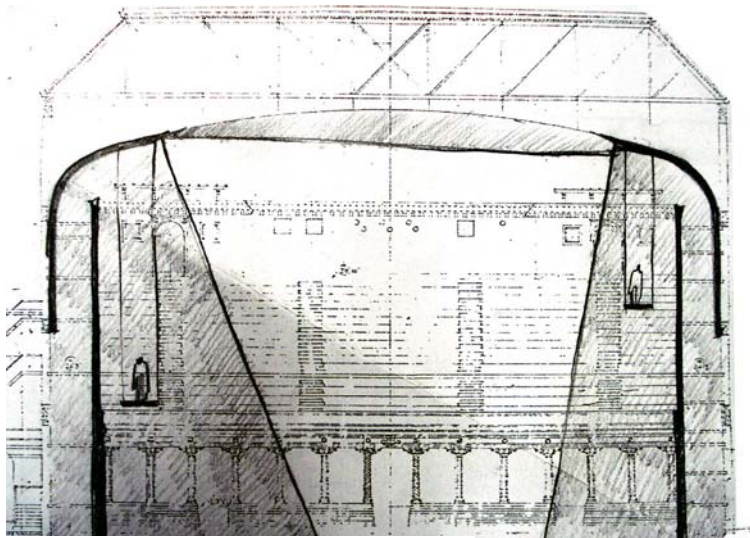


Figure 7.29 Section of Auditorium illustrating rib system and suspended skins July 2009

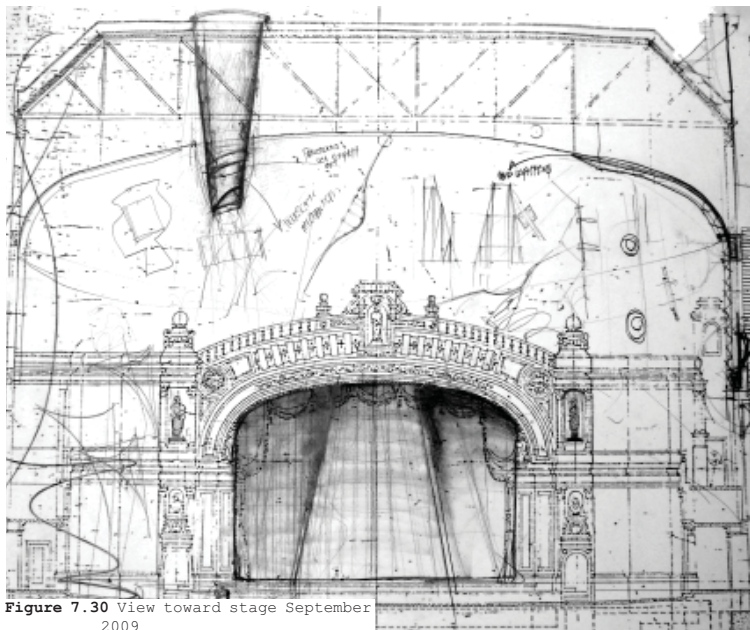


Figure 7.30 View toward stage September 2009

7.6 Exploration E

The introduction of a mobile floor system to the interior allows for a multitude of configurations for a host of performance possibilities. The system can be connected to the stage, extending it further, or even becoming a catwalk. Another possible configuration is a stage in the round, viewers seated on the stage and the periphery of the mobile floor. The rib system incorporated a mechanical winch system to hoist textiles and lightweight platforms on which to perform or gain access to a tight rope. The ribs are much like a fly-tower. On the exterior a large archway is located at the entrance to the auditorium to frame this point of entry. The floor of the interior is extruded to the exterior and manipulated according to the grid system. The vertical circulation on the exterior is replaced with hydraulic scissor elevators as well as a spiral staircase that wraps around one of the elevators giving access to the roof terrace.

