



**TOWARDS
TRANSLUCENCY**

THEATRICAL SPACE DESIGN

Peixuan Liu

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Peixuan Liu
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Examiner: Professor Ilmari Lahdelma

ABSTRACT

Modernism reduced architecture to measurable aspects and abandoned our basic contact with the world. To restore our connection, we should quest for the measurable, reevaluate the relationship between architecture and our reality and seek appropriate spatial language that reflects our comprehension. As a response to the problem, this thesis unfolds analytical processes from several directions but concerns mainly on theatrical space, the events and their connections.

This thesis contains four main chapters. The first one reviews the limitation of modernism and states the necessity to restore the intangible quality of architecture. The Second chapter explores the authentic nature of theatrical space, the formation and semiotics meaning of theatrical elements and the spatial influence on performance relationship. The third chapter proposes architectural translucency that refers to active, flexible architectural position and ambivalent spatial strategy, with an attempt to escape the limitations of modernism. The fourth and final chapter is an experiment, applying the prior research to the design of a site theatre.

Keywords:

architectural translucency, theatrical space, site theatre, unmeasurable, modernism architecture.

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INTRODUCTION

A wonder. This thesis is a long journey that originates from a primary wonder of what makes a good architectural design. A design, which could be the basis of training for students and a fundamental question to resolve for practicing architects.

Two questions. There are two questions in need of an answer when thinking of practice of a good design. One is 'what to' design, which has a direct bearing on how we understand the relationship between architecture and our world. Another is 'how to' design, refers to the finding of an appropriate spatial language that reflects our comprehension of the world.

The Crisis. The mainstream notion that conditions our present architectural education and practice -- abstract geometrical composition, form follows function, pragmatism, intellectual perception bypassing the body -- is an illusionary, a shadow cast by modernism with its roots in functionalism and rationalism. Ideas that were laid two centuries ago. Modernism tries to represent our world with absolute clarity, by means of purified, functional language with belief in objective reality. However, this attempt merely reduces our comprehensive world to abstracted, practical, partial reality. Modernism reduced architecture to measurable aspects and abandoned our basic contact with the world.

Revalue. Therefore, to restore our connection with the world in the lens of unmeasurable. To do so, firstly we should unveil the meaning of space through the search for the 'institution' -- the undistorted idea of what a place should be. Moreover, we should also examine the relationship between architecture and reality afresh, and reckon on the proper spatial language that reflects/express that relationship/position.

Chapter structure and contents. Departing from the above questions, the first three chapters unfold the research and

theoretical discourse from several directions concerning theatre and space. These analytical processes shed light on the final design chapter as the main idea and strategy.

Chapter one provides the groundwork to rethink the meaning of architecture. It briefly reviews the limitation of modernism and states the necessity to restore the intangible quality of architecture through the quest for unmeasurable.

To answer the question 'what to design', chapter two is set to 'rediscover' the nature of theatrical space. The subject is examined on the basis of its formation and the semiotic meaning. Additionally, the theatrical space is investigated for the influence on the performance relationship and dramatic events, and the nature and essential meaning of it.

As responds to the question of 'How to' design, chapter three proposes the concept of architectural translucency. This concept defines an active, flexible architectural position and ambivalent spatial strategy, with an attempt to escape the limitations of modernism.

Chapter four concludes the above research with an experimental design. The outcome is a response to the research and the analysis from the previous chapters. The final design is accompanied by a presentation that embodies the essential meaning of theatrical space, answering to the translucent architectural position and executed ambivalent spatial strategy.

Achievements. Design task of Site theatre was the fulcrum to the pursuit for good design practice. The findings of the research present insights into the meaning of theatrical space in the context of the intangible realm. Critical observations include the interwoven relationship of space and events, form and function. The pursuit eventually leads to the 'concept of translucency', suggesting a theoretical approach to the architectural position and spatial strategy aimed to escape the limitations of modernism.



figure.1: Marc-Antoine Laugier 'primitive hut'. Frontispiece of Marc-Antoine Laugier—*Essai sur l'architecture* (1755)

CHAPTER I

Departure from Umeasurable

1.1 The Roots of Modern Architecture on Functionalism

Today, shadows are black. But really, there is no such thing as white light, black shadow. I was brought up when light was yellow and shadow was blue. White light is a way of saying that even the sun is on trial, and certainly, all of our institutions are on trial. (Kahn, Cited in Lobell 2008)

Metaphorically, Kahn revealed the malady and absurdity side of modern architecture. It is a common-sense for us to process our world in an abstract way. The reality, undoubtedly, according to the modern aesthetic, is reduced to reason and represented by drawings. Nowadays, white light and black shadow speak for architecture on paper despite the fact that one is yellow and the other is blue in reality. White light and black shadow is a result of abstracted architectural drawing. This representation, which happens to be the laying foundation of modern architecture, however, is not transcendental and only transpired two centuries ago.

Perrault- the first turn to rationalism

Perrault took the first turn to architectural rationalism. As an Enlightenment rationalist, Perrault was a practitioner of scientific attitude. He rejected architectural proportion, which refers to “absolute beauty” in his term, but instead favoured “relative” beauty which can be acquired by taste through education. This opening to the possible cause of beauty grounded the premises for a later theoretical turn to functionalism because it weakened the

idea of beauty being achieved through fix rules. (De Zurko 1957)

In addition, Perrault adopted the Cartesian dualistic notion of a split of mind and body into the architectural realm, giving way to a passive space that prioritizes intellectual perception. Therefore, he is the one responsible for starting the still prevailing Cartesian dualism philosophy. Even today space ought to be represented by instrumental geometry, and could be comprehended intellectually through autonomous vision, a manner excludes body and organ.

Laugier - the initiators towards functionalism.

Following Cordemoy and Perrault, Abbé-Marc-Antoine Laugier, who applied rationalist attitudes and views on design, was the one initiating the nineteenth and twentieth-century debate about functionalism (Mallgrave 2005). Laugier initially formulated the idea that architecture originates as a “primitive hut” that protects human. Symbolizing a significant break with the previous tradition of Renaissance, the humble structure depicted a concept that rationalized elements and standards as the original and authentic architectural value.

Starting from Laugier, the architects of the Enlightenment era regarded the beginnings of shelter as the first type of habitat. Since the primitive hut proposes that truth of architecture lies in its structural logic, Laugier formulates a new definition of functionalism that conformed with usage - function comprehended in terms of use (Kruft, Hanno-Walter., Taylor, Ronald., Callander, Elsie., Wood, Antony., 1994). Moreover, ever since, “fitness”, “function”, “truth”,

“natural beauty”, and “primitive prototype” has become the common attribution of architecture we do not question.

Durand - The turn to a discipline of composition

He took the utilitarian side of “primitive hut” and developed it into functionalism. Utility, for Durand, was the “true principle of architecture” and therefore “fitness” and “economy” other than decoration and orders in architecture, is of prior significance. (De Zurko 1957)

Jean-Nicolas-Louis Durand pushed the starting point of architecture forward by reducing the drawings down to abstract symbols. The appearance of the perspective method liberated architects from manual construction and for the first time, elevated them to a mental worker. Perspective drawings diverged the profession from construction on site, which declared the detachment of architecture and substance. As a result, the main concerns of the discipline shifted from architectural substantiality to abstract geometric design. By the end of the Renaissance period, drawing conventions developed into a mature system. The three-dimensional display in perspective drawings turned into the two-dimensional design, the floor plan and section (Perez-Gomez 2016). This drawing convention, together with the perspective method, formed the foundation of the classical architecture curriculum.

After Durand, architecture divorced from construction substantiality and Renaissance volume, becoming a discipline of abstract geometrical composition.

When developing the new method of composition, Durand's first step was to categorized the buildings by their genres. He analyzed architecture typologically by comparing the plans and section. Then gradually, Durand detached the substantial influences on the drawing until an existential structure is represented by fine, precise lines for form and geometry. When applying the new approach, one begins with a study of elements of architecture

and learns ways to combine them in terms of general principles of composition. Categorized architecture introduced the cause-effect between the form and function, while simultaneously rejecting the past as a source.

Beaux-Arts school is based on these two sets of drawing techniques – two-dimensional graphics including plans, facades and sections, which are controlled and arranged generally by axis. Additional rendered perspective images display the three-dimensional perception of space. Durand's functionalism and hedonism “set forth the first architectural theory for humanity reduced to bare life” and “putting an end to all other speculations about beauty, meaning, or expression.” (Perez-Gomez 2016, p. 222)

Durand changed the starting point of architecture as a discipline by emphasizing the perspective renderings, and abstract drawings. This oriented architecture discipline to aesthetics, figurative, and fine art. Durand reformed the design process to one of analysis and comparative typology through compositional approaches. He the altered spatial language of architecture into instrumental, deductive geometry, where categorized types are stripped of tradition and orders, eclectic of styles. Space becomes instrumental and reductive, plain and simple geometry.

The crisis of representing an objective reality

As mentioned in previous, modern architecture's belief in rationalism and functionalism has reduced our understanding of world is reduced only measurable aspects.

Functionalism and rationalism, which attempts to represent our world with abstracted, functional language, with belief in objective reality, is facing crisis. The result of functionalism and reductive geometric space is the alienation of thought and feeling, material and mental as well as indifference to space and event relationship.

Modernism either deliriously banishes exclusive connections of tradition, which reduced architecture to floating abstract syntax -- "reduced architecture to a system of surface sign." (Tschumi 1998, p. 140)

Modernism abandoned the basic contact of the world

Modernism banished all tradition: "character", the "form-finding" in classical architecture, ornamentation, order, and this results in the alienation architecture from everyday life. With the replacing of imagination and perception by abstraction, architectural theory was reduced to a set of simple, fixed rules with the primary objective of making possible a more efficient and economic practice (Pérez-Gómez 1983).

Bernard Tschumi criticizes modern architecture "(borrowed from semiotics) reduced architecture to a system of surface signs at the expense of the reciprocal relationship of space and event." (Tschumi 1998, p. 140)

Designer is alienating from his fellow man and lacks true contact with society. Rational architecture prioritizes projective and descriptive geometry. "Thereby man is even alienated from his own nature, and becomes mere "human material". (Heidegger 2001, p. 154)

Reevaluate the relationship between architecture and reality

Modernism has reduced architecture to measurable aspects. We try to represent our world with absolute clarity, by means of abstract method of reducing. Yet it results in an indifferent relationship between reality and the architecture, between event, the everyday life, and space, our built environment.

Kahn referred to this situation as putting the sun on trial. To release the sun, we need to revalue the relationship between architecture and reality.

1.2 In the Quest for Unmeasurable

Architecture stands between ourselves and the world. If we define ourselves and the world as measurable, our architecture will be measurable and without spirit, but if we allow ourselves to be open to the meeting of the measurable and the unmeasurable, our architecture can become a celebration of that meeting and the abode of the Spirit. (Lobell 2008, p. 3)

We quantified and classified, we understand the man in terms of measurable aspect and the world as a multitude of quantified requirements. In the end, this reduced architecture to measurable aspects. Architecture is not merely shelter, not only abstract drawings on paper, nor a list of programmes, nor an objective container alienating society and sensing. The belief of rationalism (abstract aesthetic composition) and functionalism (form follows function) has been controversial.

"our access to the world is blocked." The world withdraws, and life becomes "meaningless". "Thereby man is even alienated from his own nature, and becomes mere 'human material'. (Heidegger 2001, p. 154)

Architecture belongs to art, is the critic on the language or cultural level, stand between human and reality.

We shall Revival architecture as an art. Architecture belongs to art, not because of the aesthetic philosophy, "but the ability of art reveals the nature of things", "the work of art" affect the opening-up of a world. (Heidegger)

It is the understanding of ourselves, and the world defines the potential we endow to architecture. Instead of confronted in "measurable aspects" such as program, spatial requirement, site condition, one should start from the unmeasurable, look for the primordial human desires.

The general result of our current approach is alienation from things and our fellow men. Our “understanding”g is reduced to quantification, our “state-of-mind” to sentimentality, and our “Being-with” to lack of true contact. A “split of thought and feeling” results and our access to the world is blocked.

According to Kahn, a great building begins to search for the beginning. This means to look for the institution in the realm of unmeasurable. Institutions, as intangible “form”, embodies collective consensus on the “authentic state of being” of the place. It meant a state of agreements about the most intuitive human desires, the undistorted idea of what a place should be, which sometimes we refer to “the spirit” of someplace.

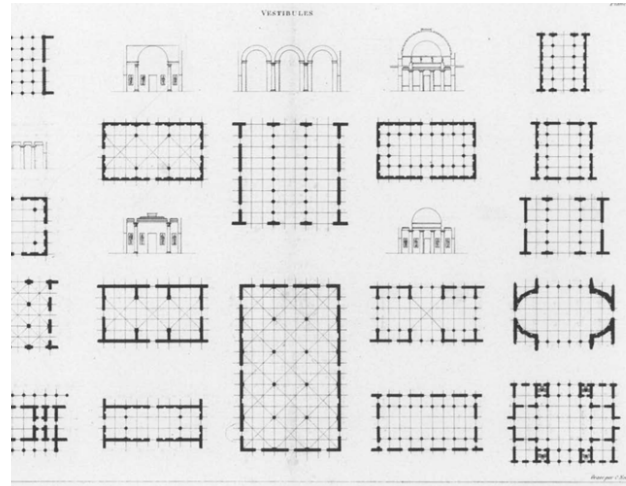


figure.2: Jean-Nicolas-Louis Durand – Précis des leçons d'Architecture (1802-5) vol 1 pt 2 plates 10-11

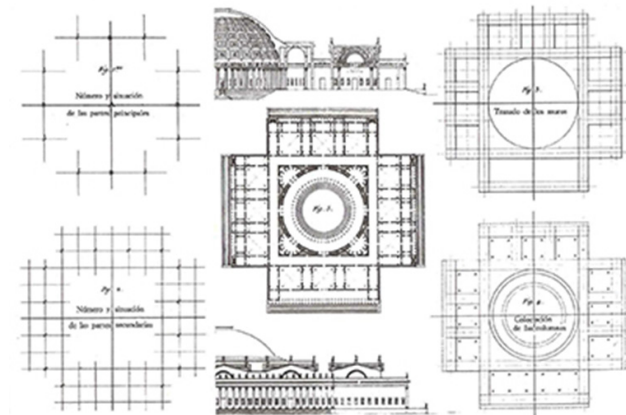


figure.3: J.-N.-L. Durand. Come comporre un edificio. Précis Vol I, Lam.21, 1819.

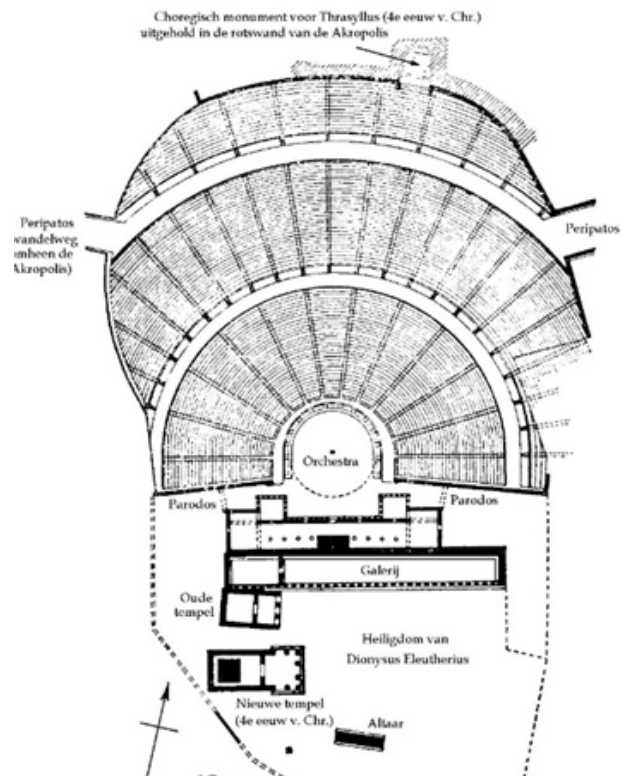


figure.4: Plan of Dionysus theater, Wikimedia Commons, <https://commons.wikimedia.org/wiki/File:Dionysus-theater.JPG>

CHAPTER II

Understanding Theatrical Space

2.1 The Defining Elements that Shape Theatre

2.1.1 Greek 'Skene' – Theatrical Directionality

The Dionysos theatre. Common arguments in theatre study support that western dramatic history could trace back to the ancient Greek ritual performances. This festive dithyramb singing and dancing, in honour of Dionysos, include around fifty chorus members and one to three actors and, attracted more than ten thousand citizens in their heyday.

The Round orchestra with Altar. The earliest form of Greek theatre merely consists of a round orchestra with an altar in the centre, with no hint for existence of any forms of background. One possible guess for the round shape derives from the old threshing floor in Greek, a commonplace where farmers separated wheat husk and danced as festive and leisure entertainment. (Nicoll 1958) The dithyramb performance in the theatre involves mainly lyrics-chanting and declamation, accompanied by the dancing movements, which does not require a specific viewing angle. The Greek usually arranged auditoriums around the panoramic stage on a hill-slope, providing unrestricted audience view from every direction.

Dressing room alters the focal point. Around the 6th to the 5th century B.C., a tent of booth appeared on one side of orchestra serving as the dressing room (Nicoll 1958). This little dressing tent, later called "skene" in Greek, assigns the theatrical performance a sense of direction. Later the stone skene, which appeared and replaced the temporary wooden one, remained to be a permanent

neutral background. The presence of the skene wall shifted the visual focus, from the orchestra centre to the front of the scenic house.

The Classical style, theatre of Dionysus. A representative of amphitheatre in classical Greek is the theatre of Dionysus in Athens in the 5th century B.C. (fig. 4). Notable features of theatre from the classical style are as such: Extended semi-circle auditorium rose upon the hill-slope; a circular orchestra (for chorus) with altar in the centre; the low skene, the stage is a place surrounded by "proskenion" (the long front wall of skene) and the "paraskenia" (side scene) of the scene building; theatre locate next to a temple. (Nicoll 1958)

The Hellenistic. Later in the Hellenistic period, the scene building was not only moved closer to the orchestra and the audience but also grew higher, expanding into two storeys. By the fourth century B.C., the front area of skene has risen and became a stage for actors to stand on and play their roles as an indication of god. Chorus was still the essence of the drama. Greek theatre values both visual and aural, led to the improvement of sightline by heightening the orchestra for a more unobstructed view. (Nicoll 1958)

Forming the vertical dimension in the stage. A clear vertical hierarchy was formed: Chorus perform at the lowest level, on the orchestra; actor on the roof of skene - the stage; and gods highest, on the second tiers of background. By now, the primitive circular orchestra on bare land has turned into a theatre place with the three-dimensional spatial setting.

Sum up. The appearance of the scenic building, evolving from a temporary booth into a permanent scenic construction, has triggered a series of transformations, in terms of stage configuration and dramatic conventions. It has produced is the denotation system in a vertical hierarchy. In addition to that, the presence of the scenic tent has redirected the focus point, from a centre of orchestra to scene front. This shift has assigned the performance a directional distinction between front and back, which is a common ground for the later frontal theatres. Only that such notions have been with us from the long-ago beginning and become part of theatre convention, so we do not interrogate them anymore. These notions have been with us from the beginning and become part of theatre convention, to the point that we do not question them anymore.

2.1.2. Roman Elaborated Background – Emphasis on Visuality

From the raised stage to the long low stage. Gradually, around the Fourth Century BC, skene building developed into two-storey constructions, and the top surface of the portico was included into the performing area, became a platform called “logeion”, the raised stage. It was connected with the round orchestra by steps and used for lifting actors into views. Moreover, the second floor of skene became richly decorated. (Cheney 1963) In Roman theatre, the Greek skene, initially a tent for dressing, developed into a long low stage called “Pulpitum”. The stage moved closer to the audience and contracted the initially round orchestra into a semi-circle. “Frons scaenae”, meaning stage - front, a tall immensely elaborated wall, can be noticed at this point behind the stage. This architectural facade, known as, was usually gorgeously decorated, broken only by three doors, served as a backdrop for performers.

Stage at the centre. In typical Roman theatre, the round orchestra in Greek style is contracted into a semi-circle (called “Cavea”). Typical roman in greek style? The long low stage “pulpitum”, being placed closer to and cut onto the diameter of a round orchestra, becoming the central focus of the performance. Even though steps are connecting the semi-circle orchestra, and the stage, the acting

area for Roman actors remain inside the stage. Actors, who used to serve as indicators of god or sky while chorus dances Dionysus, play a more and more critical role.

Meanwhile, the chorus is less concerned in Roman theatre, and the semi-orchestra is mostly occupied for premium seats. The audience seat is reduced to a semi-circle for better viewing. Different from the Greek theatre where the orchestra is the focus, the stage became the privileged centre gets the most spotlight. (Cheney 1963)

The elaborate background. One might account the elaborated Roman façade for the shift of performance area, as in Roman theatre, another significant difference from the Greek time, is the more solidified, massive, more decorative, displayful, gorgeously decorated stage-front (“Frons scaenae”). In tragedy, the stage-front presents temple or royal place, while in comedy it stands for a city street a neutral background that does not designate to a specific location.

To Sum up, “at any rate, the Roman theatre of the period was essentially a stage and a place for seeing, where the Greek had always been shaped primarily around a circle for dancing” (Nicoll 1958, p.87).

The preference on “a stage for seeing” over “a circle for dancing and singing” (Nicoll 1958), accounts for the shrunk in orchestra and priority on stage. This orientation witnesses the major turn of theatre from audio to visual emphasis. The massive decorative façade reinforced the concept of direction that Greek scenic background introduced.

The two significant modification in the spatial configuration in Roman theatres, compared to the Greek times, is the semi-circle orchestra contracted by the raised stage and the decorated scenic wall. These orientations conclude the visual emphasis in Roman aesthetics.

2.1.3 Perspective scenery – the start of division in stage

The perspective craze of Renaissance. The prosperous Renaissance art in the 15th century is grounded by the development of linear perspective. Ever since Filippo Brunelleschi rediscovered the methodology for representing perspective in art, Renaissance artists were dedicated to steering their works towards accuracy and realism. In 1508, at Ferrara, was the first record of this new method being introduced into the realm of Renaissance theatres. The subject, a scene of Mytilene from the performance of aristot's cassaria. (Nicoll 1958)

Serlio's perspective picture settings. Sebastiano Serlio's three basic permanent sets, including comedy, tragedy, and satyric plays, went far to establish the perspective composed of architecture and landscape as the approved setting for the theatres of Europe. Said configuration has had an immense influence on scene design everywhere. Traces of the Serlio's setting can still be found in Bibena's diagonal perspective, nineteenth-century melodrama and so forth.

In order to achieve a better sense of perspective illusion, Serlio created three layers in his stage setting: the front piece, the middle side wings, and the painted backdrop. Such combination of layering assigns the Scenic background, the planimetric façade, a quality of depth. Additionally, the background stage is raked with narrower grids to reinforced the perspective. All this combined attempt works together to create the illusion of city street, by displaying painted canvas in layers with painted buildings according to perspective rules. However, at the same time, this setting pushed actors to perform on the flat narrow stage. Keeping the distance from the painted scenery in the backdrop was paramount; otherwise, the illusion of depth was lost.

This reasoning with the subsequent spatial division of the stage has become a common notion and adopted as a theatrical convention.

Architectural perspective scene of Scamozzi

In the Olimpico theatre, the pursuit of perspective illusion surpassed the painted backdrop and became a spatial construction. Different from Serlian's layer of picture scenes, Scamozzi preferred scenery constructed by architectural structure. Following Vitruvius's study of Roman classical theatre, Scamozzi presented an ornamented architectural façade. He placed one sizeable open arch in the centre of the background and two lesser ones at each side, with perspective alleys located beyond. Together with the other two doorways on the sidewalls, seven structural vistas were piercing towards the stage. This guaranteed audience from every direction at least one clear sight of the scenic alleys. In such configuration, two actors were allowed to enter upon the stage simultaneously. However, there were some downsides. The actors will fail to see and hear each other as they are confined within the closer and larger end of vistas, a measure necessary to maintain an appropriate scale and an illusion of depth.

In case of a single point perspective scenery, actions onstage were limited within the proscenium-arch against the elonged vista space. At this point, the division of the front and backstage is reinforced further. (Nicoll 1958)

The Ancient Roman "scaenae frons" remains to be a planimetric and was considered a "neutral" background, without signifying any specific location. To the contrary, the scenery setting in Renaissance Olimpico appears to be far more representative. The stage with the end of the vista denotes the piazzas -- public squares in an Italian town and the perspective alleys, composed by building facades, signifies the city streets directly.

Full-stage vista

Scamozzi and other architects of the day were looking for ways to preserve the stage wall while expanding the perspective. The goal was to free up more space for acting. Efforts materialized as a plan for the theatre at Sabionetta. Theatre at Parma is a step further from the Indigo Jones theatre. The performance area here is known to have been pushed through the portal and curtained. The scenic

stage is expanded both in width as well as length, and has multiple parallel side wings. In the 18th -19th century, the full vista stage with horseshoe auditorium become standard for the eighteenth and nineteenth centuries.

2.1.4 Proscenium-arch – a moving picture

The first permanent Proscenium-arch theatre

According to the Oxford Companion to Theatre and Performance, proscenium means “an opening, framed by an arch, through which an audience views a play, or the arch itself” (John 2010). Early in the ancient Greek times, ‘proskenenion’ -- the proscenium in the Greek language, refers to ‘that in front of the skene’, meaning the low platform between the scenic background. Later, ‘proskenenion’ indicates the stage and often an array of columns in facing the skene, the stage and more frequently the row of pillars in front of the skene in Hellenistic period (Nicoll 1958). During the period of the Renaissance, the proscenium in Vicenza’s Olympic Theatre evolved into an ornamented architectural façade that encloses the side of the stage (“versurae”).

By now, Vicenza’s proscenium is only one step away from its influential descendent -- the first permanent proscenium arch in the Teatro Farnese at Parma. This is the one that has inspired modern theatre for three centuries, both in stage setting and auditorium arrangement.

In comparison, the proscenium in Farnese Theatre is a version where the original façade is attenuated in thickness and lessen in extent, the central doorways widen, and the whole is placed within a framework (Nicoll 1958). Farnese Theatre introduced an alternation of theatrical setting: an extended platform facing the audience with a masking frame for changing scenes. It was the first of its kind, having permanent proscenium arches take over from the elaborately decorated facade in the rear in earlier Olympic theatre, and deeper rear stage (Nicoll 1958). Proscenium-arch pushed the stage rigorously back behind the curtain line. The acting area is

moved within the proscenium-arch as follow.

Proscenium arch frame doors and box disappeared

The forestage and the proscenium shrank while the doors disappeared. For a long time, there was no attempt for theatre designers to maintain the effect of a confining frame in the proscenium-arch theatre. To the contrary, the relationship between stage and audience intentionally or accidentally remains interactive due to following: Firstly, there were entrance doors and stage boxes, meant to break up the effect of a frame, Additionally, the gap is constantly challenged by the jutting out forestage, where the acting takes place, in front of the arch. Lastly, the auditorium was brightly illuminated so that actors and the audience can see each other (Nicoll 1958).

Later, during 17th - 19th century, however, as the acting area moved to upstage, the apron and the proscenium-arch shrank, and the proscenium doors got removed (John 2010). This was when the Proscenium arch started to draw a physical line, cutting off the performer from the audience and initiating the era of the modern theatre.

a sharp line of physical demarcation, and cut the playoff from the audience, and we are on the threshold of the modern theatre (Nicoll 1958).

Proscenium arch in 19th and 20th century

19th the box and “the fourth wall”. In the 19th century, the “box set” replaced the sliding flaps with three interior walls. Instead of the Bibiena’s massive portrays of urban space, scenic setting that depicts daily life prevails in realistic theatre. “The fourth wall” or the proscenium opening, functions as an invisible barrier, alienating the characters on stage from the audience.

In the 19th century, the “Box set” has replaced the sliding flaps with three interior walls. Instead of the Bibiena’s massive portrays

of urban space, said novel setting emphasized realism and naturalism. The fourth wall, or the proscenium opening, functions as a barrier, alienating the characters on stage from the audience.

Scenic illusion, Representative Drama

The presence of Proscenium-arch, pushing the stage vigorously back behind the curtained line, and placing acting area within proscenium -arch, reinforces the emerging concept that theatre performance is a moving picture. Ever since the first permanent proscenium-arch in Farnese theatre, the majority of designers have devoted themselves to exploring the potential of proscenium perspective in achieving realistic spectacles. The Framing effect of proscenium-arch convinces the spectators that whatever happens on the illusive stage is part of reality. Theatre designers and audience's impulse towards the illusive setting and pictorial "effect" become stronger.

The proscenium arch is one of the most significant features in representative theatre. Pictorial illusion, realistic scenery, realistic spectacle, these have become dominant notions for the forthcoming theatre until the twentieth century, and have become part of the theatrical conventions. We relate them to theatre naturally nowadays.

As we can see in the previous section, however, the representative is not always preferred in scenery settings. The Ancient Greek theatre shows no attempt for illusive stage; the richly decorated background walls of the Roman times depicted general location instead of a specific one (therefore not representative, no realistic attempt); Serlian's classicalized Medieval multiple setting (combines the Medieval simultaneous scenes with classical imitation), does not indicate a specific location neither. Moreover, the illusive pictorial aesthetics does not apply to the dithyramb performance in the Greek theatre, where the performance was not yet about seeing nor frontal.

2.1.5 Audience Space – from distinct hierarchy to democratic integration

The spatial hierarchy of audience space has gone through significant transformations: from distinct division, culminated to strict segregation, and turn towards democratic integration.

I. The Centralized Priority

The Greek times. The audience space in the ancient Greek times was an extended semi-circle radiating on slopes surrounding the performance space. The most prestigious seats were those located closest to the central orchestra and were reserved to the honoured citizens for the best experience.

The Roman frontal narrow stage. Hierarchy in seating is starting to lean towards the frontality when the Romans moved the primary performance from orchestra onto the 'logeion' -- narrow raised stage, and divided the semi-circle auditorium zodiacally into threefold to seat people of different social status. Spectators that sat closest to the stage were the honoured guests, and they were not only granted better views but also received the most gazes from the lower rest of the audience. The Roman theatre functioned as the public space where individuals could express themselves and display their social identity. (Wiles 2003)

Later, when Sebastiano Serlio, following Vitruvius's descriptions, placed the Roman semi-circular auditorium into a rectangular indoor space and paired it with the narrow raised stage, he inherited the frontal spectatorship as well. However, the scenic effects of one-point perspective in Serlio's auditorium favoured frontal audience situated on the central axis.

The Proscenium-arch. The notion of a central privileged position was further reinforced by the proscenium-arch. This feature not only enhances the perspective effect but also removes the intimacy that exists in the thrust stage. Moreover, when paired with a central elevated viewing position -- the central Dias (a central raised

platform) -- the proscenium arch and the scenic background, form an exclusive viewing system that prioritizes particular group of spectators at the expense of the others (Carlson 1989). Similarly, attempts of Central Dias can be seen in Sabbionetta's theatre where the loggia -- an elevated gallery -- was reserved for the sponsoring prince.

Scamozzi perspective alleys – an equal view. One exception worth noticing is Scamozzi's perspective alleys in the Teatro Olimpico. The various angles of perspective streets guaranteed the audience equal views from every direction. However, the idea of prioritizing a centralized elevated spot gains popularity, and this has come to be the mainstream configuration.

II. Strict Social Segregation

The royal boxes. Royal boxes are separated seating compartments running three sides of the auditorium, positioned right around the pit at stage level. Usually, at least two of the onstage boxes are situated on the forestage within the proscenium arch (Carlson 1989). As descendants of the loggia, royal boxes generally replaced the central Dias. As a result, the singular privileged audience expanded into a larger group of the aristocracy.

A typical arrangement of the auditorium in most European theatres during the eighteenth century would be as follow. A Central box reserved for the ducal party, the first tier of boxes near the central boxes seat the lesser aristocracy and the pit for the general public, later claimed by the middle class (Carlson 1989). The marginal members were located at the remote galleries above the boxes.

The subject of spectatorship, in theatres of nineteenth and eighteenth centuries, was not merely about the play onstage. It was also concerned with various classes gathering together and impersonate their social roles in a shared space. The auditorium of the eighteenth-century was a public venue where the higher classes, supervised and observed the lower citizens sitting crowdedly underneath.

Social segregations. The social segregations are signalled not only in the separation of seating zones allocated according to different classes but strictly executed in the supportive areas outside the auditorium as well. This was the mainstream practice until the late 19th century.

Supportive space like lobbies, bars and refreshment were divided and varied in size, ornamentation and comfort, depending on the occupants' classes. Largest and most lavish decorated lobbies and stairways connected to the boxes, while exterior doors at either side of the central space gave access to much more modest rooms that lead to the pits. Side door opening upon narrow and winding staircase no lobby (Carlson 1989). Seemingly spectators of all classes share the same auditoria space, but actually, there is hardly any overlap.

III. Integrated Democratic

Common lobbies. The great Monumental theatre of the eighteenth and nineteenth century prefers a public place with little spatial segregation for new monied class. Supportive space as lobbies, galleries, vestibules, grand stairs is proliferated and occupied more space than the stage. The independent entrances were replaced by the common foyer and grand staircases where audience display themselves in the intermission (154, Carlson).

The precursor of reform in the audience space starts from the removal of the 'box, pit and gallery' in Wagner's democratic plan of seating in the late nineteenth century. Wagner revolutionary replaced the old format with the 'stall with balconies' in fan-shaped auditorium hall. This new concept of democratic seating meant that practically every spectator could have an unobstructed sightline. (Cheney 1963)

As a testimony of changed spatial code, the lobby of Most modern theatres has one extensive central foyer access to all parts of the house.

Darken auditorium. Auditorium of Baroque and Bourgeois theatres were better lit than the stage since theatregoing was more of a public demonstration of social stratifications. However, in a dimmed auditorium, an individual could escape their public role. Modern spectatorship is more often a private experience where an individual connects with the actor solely in the darkness, with no other member of the audience insight. As the social demonstration function gradually disappeared, modernist theatres of last century transformed into a purified container for dramatic art. The publicity of playhouse is nowadays more often emphasized in the supportive space outside the auditorium, for instance, the grand foyers, café and bars, and stairways, as compensation for the privatized theatrical experience.

To sum up, the hierarchy in the audience space, taking an overall look, has transformed dramatically throughout history. It went from distinct division, through strict segregation, and turned to democratic integration. The audience space of theatres, always conditioned by the ideology of a particular period, presents us with a map that depicts the evolution of social structure.

2.2 A semiotic reading of theatrical space

There is no object that escapes semiotization in human society. Roland Barthes stated this in his book *Elements of Semiology*. The signifying meaning is attached to the utilitarian ones once it is created. "as soon as there is a society, it converts every usage into a sign of that usage." (Barthes, Roland, Lavers, Annette, Smith, Colin, 1968, p. 44) Whilst an object "serves some purpose, it also serves to communicate information...(because) there is always a meaning which overflows the object's use". (Barthes, Roland 1988, p.182) This theory applies to theatrical space as well. Spatial elements, or their combination, incontestably serve the pragmatic function and the physical forms convert into a sign of that usage. Therefore the architectural elements inherently embody symbolic meanings. Theatrolgist Marvin Carlson (1989) observed the simultaneous presence of functional and symbolic meaning from the very beginning of theatres and offered semiotics anatomy on performance spaces in his book *Places of performance*.

Space of transition

The transitional spaces. Backstage, lobbies and foyers are considered the intermediate spaces where actors and the audience ready themselves for their different "roles" – a transition between the dramatic fiction and the everyday reality. (Carlson 1989)

Backstage – transitional space for actors. From the very beginning, the Greek scenic booth does not only serve as a utilitarian building for dressing, but also implies an invisible off-stage world of performers – the place of appearance and disappearance. The backstage signals a transition area where actors prepare themselves mentally and physically for the performance onstage.

lobbies and foyers – intermediate spaces for the audience. The Entrance foyers and lobbies in most modern theatres usually provide the audience with a room for socializing and an adjustment – a chance to remove themselves from everyday life generally.

Space that signifies confrontation

Space of confrontation refers to where dramatic fiction encounters reality in theatrical settings. There are three types of the confrontation (alienated, intimate and ambiguous) defined by different spatial expressions (frame, sunken orchestra, front stage) that vary mainly depending on the change of the dramatic aesthetics throughout the history. (See figure. 5 Diagrams on various types of confrontation)

Strong separation – distinctive, alienated two worlds

Strong spatial separation reflects an attitude of alienation between the dramatic world and reality. The audience views the performance in mental and physical distance. Actors were required to perform isolated onstage, and lose themselves entirely inside the fictive world of drama as if there is no audience present. In Bourgeois theatre, the thin and lavish proscenium frames with the onstage boxes removed, not only enhance the pictorial illusion, but also alienate the stage and auditorium physically and semiotically. As the descendant of the proscenium, the 'fourth wall' is an invisible wall to conceal the acting and interactions inside a box set, popular in naturalist and realistic theatre. Modern variations of the proscenium frame are merged with the architectural structure and equipped with a sunken orchestra. This produces the strongest physical boundary between the actors and the audience.

Ambiguous boundary – intersection zone of two worlds

The overlapping territory claimed by both the stage and the auditorium signifies an ambiguous spatial boundary of confrontation, which is an intersection area of the two worlds. A case in point is the proscenium arch with the onstage boxes, where its occupants are presented as both, the spectacle for the rest of audience and as spectators. As such, the space generates equivocal denotations between the drama and the reality. The front stage area of a proscenium theatre achieves similar semiotic

ambiguity. While the proscenium-arch conceal the dramatic world behind, the apron invades the realm of spectators by breaking through the enclosure of the framing.

Minimal physical separation – attempts to intimate

The physical distance is minimized, in an attempt to create intimate performance. A small scale thrust stage, or theatre-in-the-round, is a space with barely any physical separation between the stage and the seating. It is therefore considered to be more spatially connected in terms of the actor and the audience. Also, some of the environmental theatres, the 'Poor Theatre' by Jerzy Grotowski for instance, and the immersive venues where performance happens right among the masked audience, fall into this type of confrontation. Spectators, while in closer proximity, perceive the performance onstage with more detail of expression and more substantial impact of emotion. Usually such theatres with minimal actor-audience distinction attempt to eliminate the dualistic boundary between the dramatic world and the real one by employing the aesthetical value of direct bodily movements and organoleptic impacts. However, it is questionable whether such intimate statement of spatial form could construct a space of confrontation that signifies a consolidation between the dramatic world and the reality.

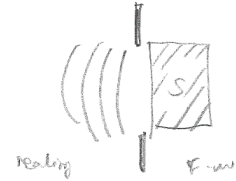
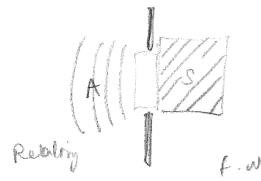
The Redefined denotations of elements in new context

Yet, according to Barthes, the pairing of signified and signifier are not fixed since the interpretation of the former relies heavily on the context. This means the long attached semiotics meanings of spatial components can be reproduced once given sufficient context. One case in point is the concert hall Casa da Musica (FIG) by Rem Koolhaas. In his design, the symbolic meaning of royal boxes from Baroque monarchic are resolved by the floating and random arrangement. Originally a box is open towards the stage and the pits, but Koolhaas opens the boxes to the street and thus

connects the outside world to the inside hall. The boxes' double function – the rehearsal room as well as a view box – contributes in freeing themselves from the semiotic meaning of strict hierarchy hierarchical order.

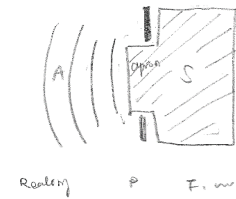
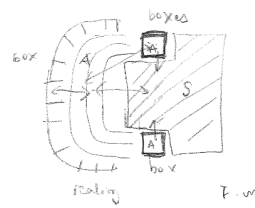
Strong separation

Formed by thin proscenium or sunken orchestra



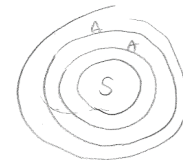
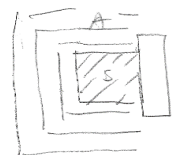
Ambiguous boundary

Presented by thick proscenium (with onstage boxes), or a front stage for acting



Minimal distinction

common in intimate thrust stage and theatre in-the-round



Minimal distinction

Often seen in multiple-setting stage, some environmental theatres, and modern immersive theatre

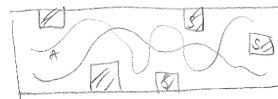


figure.5: Diagrams on various types of confrontation, by the author.



figure.6:concert hall Casa da Musica by Rem Koolhaas, <https://www.archdaily.com/619294/casa-da-musica-oma>

2.3 The Nature of Theatrical Space – Confrontation of Two Worlds

2.3.1 On the meanings of theatrical space

The dichotomy

A great number of the twentieth-century experimental theatres tend to eliminate the distinction between the performers and the audience, both physically and mentally, for the sake of a more engaging dramatic experience. The long-established stage-auditorium dichotomy is constantly under attack. (Carlson 1989)

Modernist theatre artists such as Rousseau, Adolphe Appia, Antonin Artaud, etc., all dreamt of the stage without separation. Antonin Artaud tried to bridge the gap between the actor and the audience by removing the Proscenium-arch. The director Jerzy Grotowski's took a step further in his experimental theatre. To achieve stronger immersion, he confronts spectators with the closeness of the living organism (Wiles 2003, p. 251) -- contorted body and voice, intense respiration and breathing within a small container-like space. When Grotowski (2002, p. 32) defined theatre as 'what takes place between spectator and actor', it is clear that his interests lay in intimacy. David Wiles concluded on Grotowski's philosophy that 'it was the relative relationship of embodied actor and embodied spectator that shaped the dramatic event.' (Wiles 2003, p. 244)

This belief sparks controversy about whether the proximity in the body eliminates the stage-auditorium dichotomy.

Anybody who has been a member of the audience, occupying virtually the same space as performers, can attest feeling the distinctive division between the actors and the viewers. It is a sensation that is hard to ignore. (Carlson 1989, pp.129-130) David Cole once mentioned such phenomena, "the actor remains an uncanny, disturbing "other", inhabiting a world with its own rules,

like a space traveller within a personal capsule, which the audience, however physically close, can never truly penetrate." (Cole Cited in Carlson 1989, p. 130)

This feeling of observation attests the everpresent cognitive gap between the actor and the audience. This division is even verified later by Grotowski himself, as he observes strong 'psychic curtain' falls between the spectators and the performers (Wiles 2003, p. 251).

However physically close, their recognition tells that they never belong to the same identity. Therefore, the dichotomy between the performers and the spectators can never be eliminated. 'As against the actor, we take on the collective character of the audience.' (Cole Cited in Carlson 1989, p. 129-130). It is not the intimacy of the living body, but the encounter of cognitive belongings of actors and members of the audience that defines theatre.

The confrontation

As the origin of 'theatre', the Greek word 'theatron', refers to 'viewing place' (William 2011). The term embodies within itself the dialectic nature of theatre. The etymological distinction between 'theatron' (referring to the seating) against the 'skene' (denoting the stage building) implies, from the very beginning, the dichotomy between stage and auditorium.

Many theorists and historians have underscored the dialectic of space - the stage and the auditorium - as the essential configuration of theatre nature. However, the theatregoing is eventually, activities involve human. Even though omitted 'to view' in the phrase, the person as the subject is implied within the activity itself.

Both actors and the audience, take on the representative role while encountering each other on the stage of human psychic. The performers represent the uncanny, dangerous and the fascinating space of *illus tempus*. The viewer, on the other hand, assumes the collective character, which is rather dull and safe, more akin to the

everyday reality (Cole 1975, Cited in Carlson 1989, p. 129.)

The mere existence of these two separate spaces does not simply result in theatre, not when the spectator and the spectacle are absent. It is the simultaneous presence and transaction between the collective character of the actor and the audience is what defines theatre.

It is not the mere existence of two separate spaces that result in theatre, nor the physical encounter of spectators and performers, but the simultaneous presence and communication of collective identities -- the cognitive domain of actor and audience. This paragraph and the one above say the same thing.

The essential meaning of theatrical events is medium where the art criticizes the culture. The world of fiction, formed by the dramatic character of the actor, houses the mental activities. The world of reality, presented as an ensemble of the audience, embodies the cultural behaviour. The nature of theatrical space lies in the confrontation of our 'human psyche' and everyday reality.

"theatre occurs in a mystic place created by the confrontation of two worlds." (Cole 1975, Cited in Carlson 1989, p. 129)

The worlds of 'human psyche' and reality

Different from the traditional views that emphasize the ritual roots of, Eli Rozik bases his understanding of the meaning of theatre on communication and significance theory. According to Rozik (2005), theatre is a specific medium where the mental image is imprinted to describe a fictional world that represents the thought of human psyche. "Human psyche (spontaneously) formulates thoughts in the shape of fictional world." (Rozik 2005, p. 346). In other words, the meaning of theatre lies in mediating between the fictional world, the imagistic representation of the human psyche and the presence of everyday reality.

Theatre experience is an arena where the unconscious confronts the conscious, a threshold where the suppressed, subversive drives, subdued nature are being challenged and legitimated into the accepted culture, a medium where the mental thinking, the collective human psyche being critiqued and communicated. the process where the audience encounter the actor on the stage is communication between the conscious and unconscious inner self. (Rozik 2005, p. 346)

2.3.2 Various stances towards on the encountering of two worlds

Theatres from various periods and cultures take different stands on the encountering of fiction and reality. While the Baroque drama strives to present audience a convincing illusion to dive into, others, like the epic theatre and the ancient Greek theatre for example, intentionally informs spectator of the presence of reality, keeping a distance from the dramatic fiction.

Audience Immersed in the illusion

'The basis of dramatic theatre was the demand that the spectators leave their everyday time to enter a segregated area of 'dream time', abandoning their own sphere of time to enter into another.' (Lehmann 2006, p. 155)

The traditional illusionary theatre prefers the audience to believe what they see. To reach the maximum power of conviction, we see the attempts in creating realistic onstage effects from "elaborate stage machine" etc. The biblical play in the Medieval, even though it employs multiple settings and viewers are mobile, as a religious play, has the ultimate purpose of make-believe. The same can be said for the realism and romanticism theatre in the nineteenth century. In Baroque playhouse, the audience lived the life and shared the emotions of the performers experiencing an immersive journey into the time-space created by the theatrical whole. In the illusion drama, the reality is briefly forgotten; the audience's self

and everyday time are left behind.

Audience distanced themselves from the fictional world

Some theatres prefer the spectators to stay inside reality, watching and observing the fictive world as they are receiving information from the other world. In the sacred theatre, for example, the Greek amphitheatre, audiences watch, obey, and worship as if the performers were the messengers of the gods.

Another philosophy, the confrontation, asks the audience to travel back and forth from reality to the fiction. The audience is not preferred to engage themselves entirely in the drama, but instead, they are set to examine and compare the situations to reality constantly. Simultaneously engaging in two worlds confront the audience with a question or wonder, and put the audience stand on the threshold between reality and the fictional world.

For example, Bertolt Brecht favours a theatre attitude of “distancing effect “. His epic theatre requires the audience to be detached observers who do not project themselves entirely into the fictional world, as they do in the illusive theatre, but lean back and smoke, alienated in ‘their own time’. (Lehmann 2006, p. 155) Spectators are expected to view the performance critically and travel back and forth between the fictive and the real world. Because in Brecht’s aesthetics, it is ‘enactment of reality’ rather than the reality itself is presented onstage. Repetition of words.

The audience perceives the fictional and reality at the same time

Contemporary experimental venue, like the site-specific and the environmental theatre, usually undertake the mission that Brings the viewers a level of awareness through a partial presence of reality.

Unlike the traditional playhouse, a site theatre usually takes places at a specially adapted location. In this case, the site, usually as

a background, would be present as a part of the spectacle. As such, the audience would be aware of the presence of reality in a fictional setting.

Different from the illusive orthodox theatre, where characters, rather than the performers are represented onstage, the Environmental theatre puts the focus on the actors. The artists on stage are present as themselves trained and guided by the character’s motives and actions. In the performance venue where the spectator is positioned on the stage, the audience becomes part of the spectacle. Therefore, the fictive and reality is also perceived at the same time.

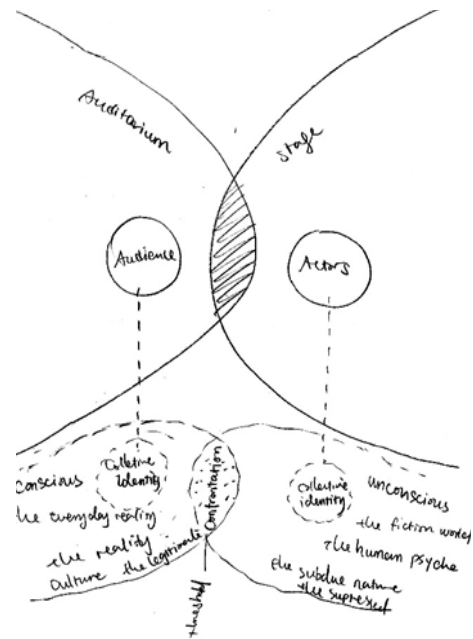


figure.7: confrontation of two worlds, drawn by author

2.4 theatrical space and the dramatic conception

'a given dramatic conception postulates a certain stage design and just as much or even more: a given stage architecture calls forth, demands and gives rise to a certain dramatic conception and style of presentation [so that] it is difficult to say which is responsible for the formation of a particular style, the form of the drama or the form of the theatre.' (Jacques Copeau, 1990)

The previous study concerning the defining elements of theatrical space unfolds a mutually determined process of formation between space, events and the notion of theatre. Architecture does not merely accommodate theatrical events by constructing performance relationship, but also re-defines dramatic conception. It contributes to reforming theatrical traditions and aesthetics, by conditioning the theatrical presentation and imagination throughout history.

2.4.1 theatrical space conditions dramatic conventions

The spatial infrastructures in theatres, as evinced in previous sections, have triggered reforms in dramatic norms and aesthetics throughout history:

Frontality in theatrical conventions can be traced back to the occurrence of the first scenic background in Greek times. This notion was emphasized when the Romans moved the main performance onto the stage from the central orchestra.

The appreciation of depth in stage settings was not a common idea before the invention of perspective scenery. The notion started from the layering of side wings and painted backdrops in the Renaissance stage. The concept later developed as the perspective scenery advanced towards the profound rear stage in the nineteenth century.

The darkened auditorium eliminated the interaction between the

audience and turned the theatre-going from an event of social display in the Baroque and Bourgeois theatres, into a private experience of pure art.

2.4.2 How space constructs dramatic events

Space controls transaction among the group of performers. It might be evident that the onstage space inevitably conditions the body movement, acting style, and the mobility of actors. Notable examples are the perspective alleys of the Teatro Olimpico. Here, performers entering from different ends in the perspective alleys could not hear nor see each other. Moreover, the actor had to pay attention to the stage to maintain the right proportion with the alley, which was progressively distorted towards Another example is the Raked stage, which helps with the perspective illusion, and improves view and sound for the audience. However, performers would feel confined and limited in their movement on such a sloping platform.

Space controls transaction among the members of the audience.

In the thrust stage and the in-the-round theatre, the audience is visible to each other. Their emotions and reactions synchronize as a collective consciousness, resulting in the behaviour of an ensemble. Therefore, the perception of others determines the engaging and immersive level of the audience. To the contrary, the spectators in a dimmed fan-shaped auditorium are facing forward, looking at each other's backs in pitch darkness, have barely any influence on one another.

Space controls transaction between performers and audiences.

The most common impression for the audience-actor connection involves the 'viewing' and 'being viewed' dualistic. Beyond the visual concern in perfecting the unobstructed sightlines, Mackintosh stressed the importance of invisible transactions between performers and spectators.

These communications could be understood in two aspects: one is the amount of energy projected to the audience; the other is the amount of response received by the actor. The 'energy' on stage should be able to project to even the most distant spectator, and the performer should be able to perceive the presence of the audience. This exchange is what constitutes successful theatrical performance.

This simultaneous transaction between actors and audience might take instant effect, leading to a series of reactions on the atmosphere, therefore altering the experience of performance entirely—spatial configuration in theatre present audience-actor.

On the horizontal relationship

There are five typologies of prevailing theatre layouts: the orthodox theatre, the thrust stage, the theatre-in-the-round, the environmental theatre, and the arena type, which is commonly adapted from a sports stadium. The five layouts can be further categorized into three genres in the sense of actor-audience relationships. (fig. 8 Diagrams showcase stages types and various relationship)

The frontal presentation. The orthodox theatre remains to be the mainstream configuration adopted most broadly across the world. This venue typically presents the spectacles and spectators with a frontal relationship. The viewing experience is similar to watching 'a moving picture' where actors and the audience face one specific direction, straight ahead. In this presentation, the performer would find it difficult to connect with the audience since the fan-shaped auditorium fails to form an ensemble. Whereas most frontal theatres paired with proscenium arch and a sunken orchestra alienates actors and the audiences, both physically and aesthetically.

Theatre of full/semi-enclosure. Audience in a thrust stage is placed equally on three sides. Both the ancient Greek amphitheatre and the Elizabethan playhouse apply such enclosing layouts. Theatre-in-the-round has actors encircled by the audience from every

direction (therefore, their movements onstage are prone to be bodily and choreographic. Compared to the orthodox venue, the same amount of spectators is distributed in a full-semi-enclosure configuration, placed closer to the stage. This helps the actor to projects the performance to the rear-most members of the audience.

The immersive/integrated. Environmental theatre confronts the audience with intimacy and intensive emotion. Unlike in traditional theatre where the actor is confined mainly on stage, performers of the environmental theatre are granted more mobility and simultaneity. More than one group of actions take place on separated spots at the same time. Actors could stay closed, immersive, with the audience or divide themselves into several groups among the audience.

The mixed. The sports arena adapted for concerts or galas might look comparable to the in the round stage for the sense of the enclosure, however the difference in scale tell them apart. The mixed venue, functions similarly to a frontal stage with a large pit in the front and steeply raked seats all around. The view from the sides is relatively poor, since most of the stage effects appear distorted and too remote, requiring binoculars to aid visibility. . The arena and the in the round stage boast a great difference in the relationship between the actor and the audience.

On the vertical relationship

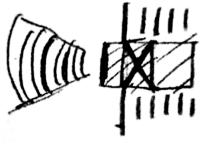
Apart from the horizontal arrangement, the vertical position is commonly overlooked when discussing the audience-actor relationship. Generally, the party that locates higher is in a more dominant position.

When the audience is located below the actor's eyesights, then the performers are in control (fig. 9). They are in the power of evoking responses from the spectators. On the other hand, if the audience

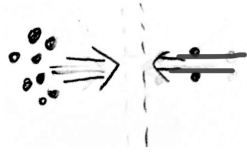
is seated above the actor's eye-line, the opposite is true. This puts the actors in a weak position, causing incredible frustration while trying to maintain the focus of the spectators. Moreover, the gesture of looking down entitles the viewers an inspecting attitude, as if they are the examiner to critique the performance.

In the case when half of the audience is located above the actors' eyesights, the actor would start to feel overwhelmed, as if they are acting in the bottom of a well (fig. 10). There is another counterpart of such case – the performer would adjust to a 'chin up acting' if they receive the response that comes mostly from above.

Moreover, when an auditorium is steeply raked, which is common in modern theatre, it would be difficult for actors to arouse the spectators emotionally. This is due to the centre of gravity of the audience being placed way above the performer's head so that actor loses the sense of control. The raked stage helps to magnify the actor's energy, allowing the performance to travel broader and further without being confined by the front edge. (fig. 11)



a common orthodox theatre



frontal relationship

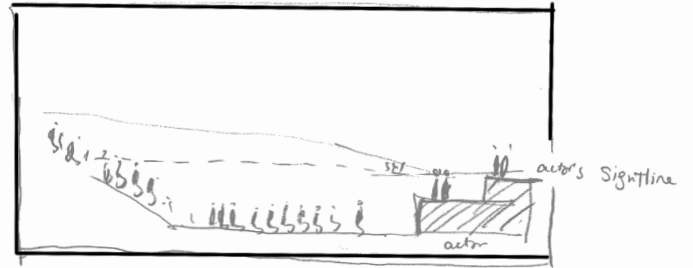
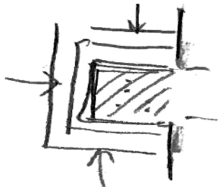
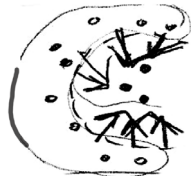


figure.8: Vertical relationship when the audience positions mainly below actor's sightline.



a common thrust stage



semi-enclosed relationship

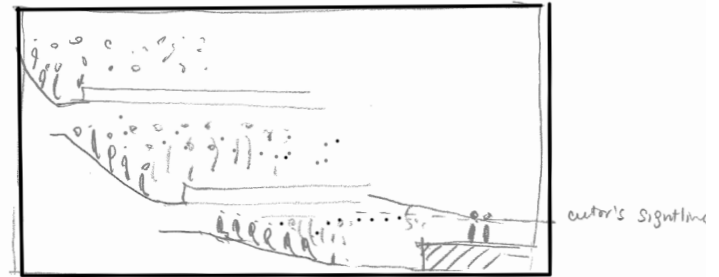
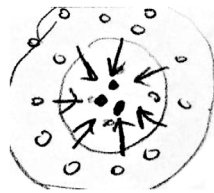


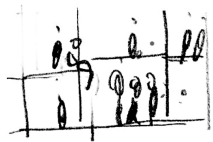
figure.9: Vertical relationship when audience locates mostly above actor's sightline



theatre in-the-round



fully en-closed relationship



enviromental theatre



immersive relationship

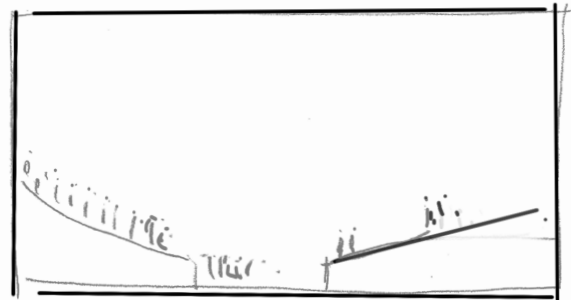


figure.10: vertical relationship when in a raked stage

figure.11: Diagrams showcase stage types and performance relationship, drawn by author



figure.12: mutual perception of the medium and object, Tony Tooth (2017).



figure.13: mutual perception of the medium and object. (Samm Bennett, 2013)

CHAPTER III

Experimenting Translucency

3.0 The Concept Definition of Translucency

"In the field of optics, transparency (also called pellucidity or diaphaneity) is the physical property of allowing light to pass through the material without being scattered" (Wikipedia)

Gyorgy Kepes, a painter and an art theorist, explores the phenomenon in his book *The Language of Vision* (1944). He describes transparency as the new optical quality resolving "the contradiction that two more overlapping figures claims for itself the common overlapped part, one must assume the presence", "The figures are endowed with transparency that is they are able to interpenetrate without an optical destruction of each other." (Kepes 1944, p.77)

Borrowing from both interpretations, the physical property of transparency can be understood as such: the character of being transparent is the ability to show a subject A through an overlapping object B. In other words, if we can get a vision, or a subject A is clearly seen through an object B, we assume the latter to embody the property of transparency.

The phenomenon is best explained with the help of a common painting technique. To portray the quality of transparency, one must generate the background first, adding the reflection only at the very end (Fig. 14). This is also true in the case of maximum clarity, where a simple contour line is enough to signify the presence of an object (Fig. 17).

Translucency, on the other hand, is a status in between the opposing

properties: transparency and opacity. This intermediate medium, compared to the maximum clarity of the transparent counterpart, does not attempt to portray one object by pursuing the invisibility of the other. Instead, translucency is a status of coexisting, or say, mutual visibility of the overlapping subjects. In other words, this ambiguous blend of opaque and transparent brings back the critical role of the medium itself. (Fig. 15, Fig. 16).

In the context of theatrical architecture, translucency refers to an in-between status of two opposing philosophies: For one, there is a common belief that architecture or space is a transparent medium. It is invisible, inactive, carrying a purpose of ultimate flexibility and adaptability. Architecture is here to serve a neutral, universal role. The opposing philosophy focuses on the architectural embodiment of an opaque medium. Space is no longer neutral, but one that subscribes to a rigid framework of utilitarian, fixed function typology.

These two philosophies have now come under scrutiny. The modernist way of treating architecture as functional, objective, dialectic, instrumentalised shelter is at stake from many fields and aspects. As the study in the previous chapter can attest, the relationship between conventions and events in theatrical space is a lot more complex.

therefore, I suggest an approach of "translucency". One can regard it as an incomplete state of transparency, or a transition away from opacity. The following take on the medium of theatre is one that stands for a space of activity, flexibility and ambivalence.



figure.14:classic oil painting with one glass, (author unkwn).

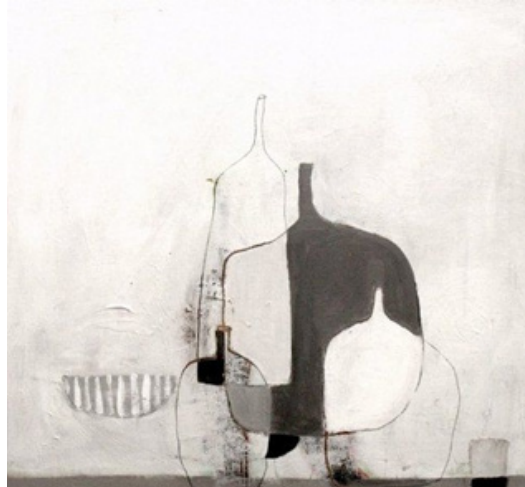


figure.17:abstract painting with overlapping vases, (author unkwn).



figure.15:example for translucent medium presenting both object and itself, (author unkwn).



figure.16:example for translucent medium, where both object (here scenery) and medium perceived at the same time, (author unkwn).

3.1 Active and Communicating Architectural Position

3.1.1 Several Embodiments of the Passive Role of Modern Architecture

A Pursuit for comfort

"I always nod off in a theatre." (Brook 1968) Theatre director and theorist, Peter Brook, in his statement above, criticizes the modern theatres' failure to engage audiences through his personal experience as a theatregoer. The culprit, it seems, is the obsession with the pursuit of perfect sightlines and maximum comfort, which has become an ineluctable dictum in the current design practice. Peter Brook attacks this hedonistic focus and blames it for devitalizing the experience.

"Nothing is so unimportant as comfort; comfort in fact often devitalize the experience, for example, you are all comfortably seated; if at this moment I want to say something in the hope of getting immediate reaction out of you, I'll have to speak very loudly and try to send a charge of energy through the person nearest to men and so on, All the way to the back of the room. Even if I were to succeed your reaction would be very slow, retarded by the gaps in between people imposed by the architects, no doubt to conform with regulation." (Brook 1968)

He then also contends that it is the indulgence in merely answering to the rational, functional requirements that reduce the modern theatre to a "tame, conventional, often cold hall". (Brook 1968, pp.78,79)

Abstract esthetics.

Bayreuth Festival Theatre is known as the prologue of the purified movement, the progenitor of the modern mainstream theatre. Contrasting to the lavish Baroque playhouses in the eighteenth

century, no magnificent foyer, staircase and auditorium could be seen in Wagner's cut-price temporary summer theatre. He eliminated all classical ornaments in the auditorium and replaced the delicately decorated, horseshoe hall with the unadorned fan-shaped seating, guaranteeing the unobstructed sightlines.

As one can see, the Bayreuth Festival theatre marks a radical reform for theatre design. It set the tone of a purified movement of abstract aesthetics. A trend so influential that it lingers on into the twentieth century and is still with us today.

The Preference of Darkness and blackness

Supposed to be the form that lends itself best to the complexity of aesthetic demands, the black box theatre became the quintessential "empty space". Its walls, generally painted black, were meant to be invisible. The stage, typically absent of a scene-setting, is only defined by the surrounding seating and the setup of the lighting. Full-on or just partially lit, space could make the audience visible or disappear into the darkness at the director's notice. This flexibility, this character neutrality has made the black box highly regarded as a venue, making it the standard for training and performing in a contemporary drama setting.

This neutrality of black box was at least the theory. As the time went on, it has however been made clear, by the practitioners and theorists alike, that the blackness is hardly neutral. In the book *Architecture, Actor and Audience*, Iain Mackintosh attacks the black box not only for its depressing atmosphere, but also the seemingly flexible seating configuration that actually "was somehow drearily the same.". He argued that "The topography of the space may have changed but the mood, by reason of its lack of character and its inability to distinguish formality and informality, remained unchanged" (Mackintosh 1993, p. 120)

Blackness, being a signifier for tragedy, and evil tends to have a

negative physiological effect. It has been shown to decrease the level of arousal among the audience and lower the tendency for laughter.

The darkened auditorium hall has spelt a significant change to the performing venue. It went from being a public assembly to a private appointment and altered the audience experience accordingly. In the light, your neighbours control you by their gaze, and as a part of the collective ensemble, you are likely to echo with the prevailing emotion. This is no longer the case in the dark. Now you are alone with the actor. You are just an individual, engulfed in the theatrical fictional world being subjected to the power of dramatist. Darkness inspires imagination but expels all other social connotations.

Mackintosh also criticized the modern purified theatres, which favour abstract interior and darkened auditorium, for the constant failure to engage the audience actively. Apart from his personal experience as a theatregoer who has been involved in the theatrical events frequently, an experiment on arousal rate of audience (Richard Kuller, 1977) might have proven that the modern architects' obsession in pure and minimal theatrical space, abstract and darkened auditorium is probably just a unilateral craze. The experiment revolved around testing the audiences' capacity for arousal. People, seated in a room, rich in colour and pattern, have been tested against a group in a dark, dull alternative. The result of the brain reading revealed that the testees placed in the festive space laughed and cried quicker.

The Architecture-centeredness

The Bayreuth Festival theatre shocks the theatre producers and theorist with the "architectural real". This marks the turn that it is the architecture itself playing a starring role over the theatrical events. In order to draw attention on the stage picture, Richard Wagner put up an architecturally structured proscenium arch accentuated with recessing sidewalls. These are supposed to replace the

decorated classical proscenium frame. The architects exhibit great concerns about the aesthetic of the architectural construction itself, for example, the elaborate stagecraft, the grand structure, the acoustic solutions, the avant-garde appearance, rather than how well space accommodate the theatrical activities. Modern architecture, starting from Durand, has been going too far in the path of self-centeredness. This creates the problem where the venue leaves no room for other subjects to coexist, nor offers the chance for the art that it houses to flourish.

Miesian space is often attacked for being "too insistent" and that it fails to encourage day-to-day activities. Some remarks are aimed at Mies' neutral style'. Despite being presented as neutral frames in which a man and the artworks can live their own lives, in actual reality, the spaces tend to impose severe restrictions on the way they might be used. A case in point is the Mies' National Gallery, Berlin. The predominant spatial uniformity offers no choices to the designer who has the task to arrange the exhibition. All alternatives are the same, resulting in the minimal dialogue between the building and its contents.

In reality, Miesian spaces are far from neutral but where "no activities coexist."

Le Corbusier's Tugendhat house is the stark opposite to Mies' meticulous approach. In comparison, it may even be perceived as being rather peasant-like. The owner of Tugendhat, Grete Tugendhat observed the house as such: "he felt the space, instead of precious, but rather as austere and grand,so much as one that liberates...every work of art speaks more strongly, so too the human occupants stands out. Even in Le Corbusier's houses, where all sorts of apparently heterogeneous objects can be brought in without suggesting that a sacrilege has been committed."

That being said, not all Mies' spaces are worthy of the same criticism. His brick country house, as pointed by Ingo Freed, leave

the occupants with options. The end result is something that is variable and of additive quality.

3.1.2 Architecture should serve as an active communicating media

The failure of abstraction and neutrality aesthetics in space

Modern theatrical spaces, as we have seen in the previous discourses, are grounded by the beliefs that abstract and neutral space is the transcendental answer to activities, art and even our reality, our social living. But neutrality and abstraction in architecture are controversial, for the adaptability in neutral and the universality in abstract aesthetic. In both cases, the spaces have come short in creating the atmosphere to engage users while also failing in housing the program by betraying the mediating role for artwork and society.

Puritanism, a modern movement, defined by pure, white international style, is tasked to transform society. It fails. The black box space, bound with the modernist beliefs of the same inclination, comes equipped with its neutral environments and adaptability. Contrary to the intention, the abstraction obliterates all social signals from its interior, and the blackness is condemned for introducing depressing atmosphere, due to semiotic ties to tragedy and sadness. As a result, abstraction is only a modernist obsession, which in reality cuts space off from any contact. Neutrality of space is merely an illusion that places theatrical performance together with the general art it houses, in the realm of aesthetic, further segregating it from the rest of social practice.

An active communicating architectural position

The passive positions of architecture, embodied in abstract, neutral aesthetics and with self-centred attitude, is a pragmatic result influenced unconsciously by Cartesian dualism -- space as an object, as a neutral container, as passive perception only via

intelligent information bypassing body. The Cartesian prioritized perception of space in the form of intelligent process of information, separation of object and subject, and placing architecture as an object. This later contributed to functionalist instrumentalized definition of space, which conducts to the notion that architecture is an object, an instrument, and therefore accounts for the presupposition that space takes a non-committal position towards reality (daily activities, cultural and social life).

Space is never neutral, not a passive object of contemplation. Space is neither objective nor non-committal towards our social and cultural life. "Space is simultaneously objective and subjective, material and metaphorical, a medium and outcome of social life; actively both an immediate milieu and an originating presupposition, empirical and theorizable, instrumental, strategic, essential." (Soja, Cited in Klaske Havik, p. 166)

Instead, space should take an active role to accommodate human activities and mediate reality. "Architecture ceases to be a backdrop for action, becoming the action itself." (Tschumi 1998, p. 141)

Therefore, I contend a narrating and communicating architectural position for interwoven, interrelated, interacted relationship between space and events. Space ought to mediate reality, confront events and take on the narrating role in action. Architecture is a result of translucent media that presents both the medium and contents, space and events. As Bernard Tschumi contends that architecture is mutually relevant to space and programme, "architecture becomes the discourse of events as much as the discourse of spaces." (Tschumi 1998, p. 149)

Translucent architecture in active communicating position mediates both measurable, unmeasurable and realm. It not only accommodates the everyday activities in reality but intermediates our "human psyche" in the mental realm.

3.1.3 A Case Study of Wangshu's Tiles Hill Guesthouse – A Demonstration of Narrating and Mediating Space

Wangshu's Tile Mountain demonstrates us how architecture, as an active narrating media, responds to both measurable and unmeasurable realm of reality. In his space, not only the day-to-day activities are housed in an active and inspiring manner, but also the Taoist literati's way of understanding of the world is integrated into spatial experience, and thus the mental realm of living is delivered in his space.

The "mounting viewing" philosophy. The mountains depicted in the traditional Chinese paintings are never realistic figures. Instead, they represent the literati's experience of "viewing mountain", and their understanding of the world, or to be more accurate, the being within mountains.

Wang Shu saw the structure of dialogue and narrative in Shan Shui paintings of the Song Dynasty. The paintings consist of a simultaneous representation of the substantial and the metaphysical. In such rhetorical narrative of Shan Shui painting, one might encounter at the same time the part and the whole, the distant view and the close shot, or the beginning and the end of stories. (fig 18. Riverbank by Dongyuan) This means that in order to showcase an experience (a story or a state of being), the space-time could be rearranged freely – juxtaposed, unfolded, interwoven etc. Simultaneously depicting realistic and imaginary, concurring detail and wholeness, letting living scenes and philosophical thinking to coexist, are the common narrative languages in Shan Shui painting of the Song Dynasty.

The spatial experience that employs "Mountain Viewing" method. According to Wangshu, the painting River Bank by Dong Yuan, can be understood in two-part. The lower part is about the realistic depiction of reality, a meditating man, while the upper part is a rhetorical presentation of philosophical contemplation. These two different scenarios, one on the reality level, the other

on philosophical coexists in one painting. A Typical Shanshui painting presents objective observations, but most importantly, has to include the contemplation, the mental world of the author. This "Mountain Viewing" method follows the Taoism understanding of the world as inseparable and non-dualism: one has to keep in mind the wholeness while focusing on the detail, and one needs to think of the big while painting the small.

Inspired by the liberated spatial and temporal narration in the Xie Shichen's paintings, the architect applied the "Mountain Viewing" philosophy into his space. In the paintings, one can observe a narrative structure while unfolding papers vertically or horizontally. Therefore, Wangshu employs an analogous structure into the spatial sequence in his building. The space is arranged following a narrative structure that unfolds during one's visiting. These structures provide visitors with an exceptional experience by the "Mountain Viewing" way of spatial settings and expect involvement in experience similar to the Taoist process of Mountain Viewing -- envisaging the inwards and outwards simultaneously, the overall image of the entire surroundings and the details of the view just in front, the linear marching sequence and the distraction through framings at the zig-zag turn. (fig 19. Wangshu's interpretation of "Three types of viewing" using Xie Shichen's paintings.)

The Narrative spatial experience. The Tiles Hill is a building without centre and uniform architectural formal language. It consists of diverse viewing sightlines and pathways. Yet there is no complaint and plights for being chaotic and overwhelming due to the coherent set of materials. Wang Shu uses distinctive combinations for a different scene, and he keeps the material coherency in the same scenarios for atmospheric continuum.

In the Tiles hill, Wang Shu created a space for several layers of meanings: "Four folds of viewing" and "three interpretative pathways" in the "Mountain of Tiles", and space for "metaphysical retrospect". Wang Shu attempts to deliver a way of being, a Taoist way of viewing and understanding our surroundings, an experience

of ancient literati's understanding of the world, and an inspiration for our state of beings.

The Tiles Hill is a case that demonstrates the power of active narrating space. By spatial manipulation, his building interacts with the surroundings other than standing enclosed and isolated as an object. It presents us engaging experiences through the spatial arrangement and sequence together with thematic sets of material. Not confined into a passive position, the Tiles Hill, to the contrary, engage with a confronting gesture. Here we see a space that answers to both day-to-day activities and mental realm, and space mediates both tangible reality and the intangible realm. An initiating architectural role I tried to evoke throughout this section.

Wangshu states “Three types of viewing” using Xie Shichen's paintings. In the Shichen's image: Viewing from the outside; Viewing inside (viewing the inside of mountain – take a close shot of the hill, and viewing from inside towards outside); the metaphysical gaze.



figure.18:Riverbank, Dongyuan, Five Dynasties Period (907–960), The Metropolitan Museum of Art, New York, <https://www.comuseum.com/painting/masters/dong-yuan/riverbank/>

形而上約遠意

山頂四望

山內觀山

遊山

《仿黃鶴山樵山水圖
明 謝時臣》

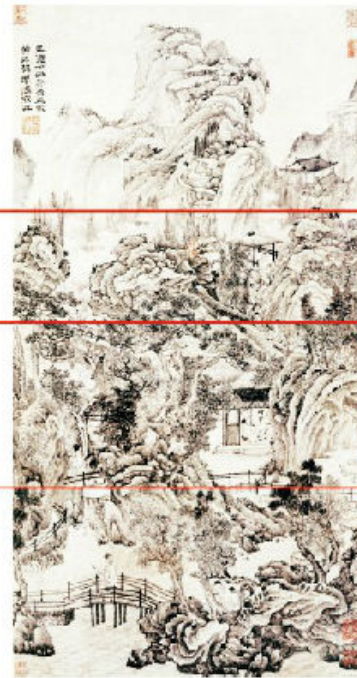


figure.19:Wangshu's interpretation of “Three types of viewing” using Xie Shichen's paintings, Wang Shu, Inquiring the Hills from Beyond the Bank - An Aggregation of Diversified Architectural Typology, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 42-47.



figure.20: Inquiring the building over the bank, Tiles Hill: Expert Reception Center in Xiaangshan Campus of China Academy of Art, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 30-41.

“Four folds of sightlines for viewing”: 1, Inquiring the Hill from beyond the bank (Figure 20); 2, Stay and observing the surroundings outside (Figure 21); 3, Penetrating from the south to the north (Figure 21); 4, passing through the eastern and the western sides (Figure 22).



figure.21: Observing the surroundings from inside, Tiles Hill: Expert Reception Center in Xiaangshan Campus of China Academy of Art, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 30-41.

The ‘Metaphysical gaze’ towards the ‘Tiles Mountain’, on top of the ‘tiles mountain’ -- the roof of Washan (Figure 23.) (Figure 24).



figure.23: 'The Metaphysical gaze' on top of the 'tiles mountain', Tiles Hill: Expert Reception Center in Xiaangshan Campus of China Academy of Art, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 30-41.



figure.22: a gap in the 'Tile Mountain', by Wang shu, 2013, Tiles Hill: Expert Reception Center in Xiaangshan Campus of China Academy of Art, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 30-41.



figure.24: 'The Metaphysical gaze' on top of the 'tiles mountain', Tiles Hill: Expert Reception Center in Xiaangshan Campus of China Academy of Art, ARCHITECTURAL JOURNAL, NO.545, 201401, pp. 30-41.

3.2 A Flexible Architectural Framework

There are two common types of theatre we encounter nowadays. On the simplistic side, there is the Black Box. A theatre, which is literally just a square room made of black walls, flexible seating in three or four sides and a flat empty space in the middle acting as the stage. On the elaborate side stands the modern proscenium theatre. This is usually a close variation of the 19th century purified theatre and the classical Opera house of baroque style. It is typically configured with a frontal stage, a proscenium-arch and a plain auditorium hall, steeply arranged in a fan or the shape of a horseshoe. There can also be a deep, elevated backstage boasting elaborate machinery equipment.

These types of theatre represent common issues in venue design, the obsession with excessive flexibility and the absolute focus on fulfilling the pragmatism requirements. These are the expressions of two mainstream architectural theories, the “universal space” and the “utilitarian” space. One believes in an empty box, the epitome of flexibility, as the almighty answer to the venue question, while the other is reduced to generating instrumental spaces, one for each specific purpose.

3.2.1 The Almighty Space --A Fantasy of Ultimate Adaptability

Multi-uses venues – unsatisfactory theatrical space

The challenge of the almighty and over adaptable theatre is that in most cases, to meet all needs means to compromise on every single need. A good example of this is the 2000 to 3000 seat all-purpose auditoriums in American campuses. In the 1950s and 1960s, these were designated to fulfil as diverse requirements as possible, ranging from lectures, musical shows, graduation ceremonies, or even opera performances. As a result of this multifaceted nature of the venue, it fails to provide the intimate atmosphere that is so necessary for the theatrical space.

Much like the cases in America, the British example of combining sports, entertainment and performing purpose in one venue was criticised by theatre designers for failing to provide adequate facilities as well as the suitable environment for serious theatrical performance. (Mackintosh, Iain 1993) “The Multi-Use Auditorium is one of the most serious mistakes in the history of theatre design. The notion that any single design can be used for all-purpose is nonsense.” -(Jo Mielziner, Cited in Mackintosh, Iain 1993)

Although it strikes for a most significant functional capacity, the “all-purpose” halls are ultimately proven inadequate to perform as successful theatre venues. Such an almighty space is usually incapable of providing the appropriate atmosphere as well as the necessary configuration of scale and stage to achieve engaging theatrical experience.

The “universal space” of Mies Van der Rohe

As one of the endorsers of all-purpose space among modernist architecture, Mies Van der Rohe believes that the “universal space” is the transcendental form which answers to the changing function.

Mies uses the Glenn Martin Aircraft Assembly building to represent his understanding of “universal space”. A photograph depicts the interior of the building. It is a background of a montage that contains a collective of free-standing planes meant as walls and ceilings, movable and able to suit evolving requirements. This image describes a space that can house a wide variety of functions, from industrial to transport, sports to leisure, the room can accommodate it all. The long-span, single-volume flexible enclosure, is Mies' idea of “universal”.

Mies attempts to house all the functions in one “universal space”, in practice, turns out to be a case of negative neutrality. It does not favour to the activities that are supposed to be accommodated. The Crown Hall in IIT, widely regarded as Mies' finest work, is one

notable “empty hall” example of the “universal space” principle. (FIG. crown hall)

The Crown Hall is a 120 foot-wide, 220 foot-long and 18 foot high box enclosed at all sides by the curtain wall of glass. The entire space is suspended by four flat arches of steel girders, traversing the building front-to-back, resulting in entirely open interior. Just like the space in the Glenn Martin Aircraft Assembly Building, here in the architectural department of IIT, Mies introduces the maximum emptiness and openness for the ultimate utility. For him, an open space that “almost nothing” work, is best, as the room can be divided and configured to suit the prevailing needs of classes and critiques.

This impressive 26,000 sq. ft. unobstructed interior is a significant departure from the traditional concept of the college building, populated with small, self-contained rooms. However elegant and delicate, this iconic open studio might be, it comes at the expense of sinking all the other auxiliary spaces in the semi-submerged basement level. This means that some essential facilities such as professors' offices, the library, lecture halls are only lit by clearstory window without outlook. Not exactly an approach of humanisation. Another sacrifice for formal and structural clarity in function is the removal of subsidiary vestibules and common foyers.

Large panes of glass envisage the expansive drawing hall with a panorama of the natural scenery and light in the massive twenty thousand feet interior. Absent of any obstructing masonry walls, this expansive studio is considered ideal for cooperative work and contemplation. Many observers credited the open-plan as referential for multiple benefits. Peter carter commented that by placing three hundred students into one single large room, it states an attitude of “the anti-ivory tower aspects of the curriculum” (Carter, 1974 (1999), 86). This also helps to bring students together, improving their academic performance, because “a student is not

isolated from others who may be further or less advanced” (Carter, 1974 (1999), p. 86)

Despite notable benefits of the open plan workspace, there have been numerous debates on the problems of such spaces. Most common complaints are those of distraction, both acoustic and visual, privacy concerns, and proxemics issues. Moreover, recent research by Bernstein and Turban's (Bernstein ES, Turban S. 2018) found out that modern open office configuration tends to replace face to face interaction with electronic communication.

In conclusion, “almost nothing”, is a Miesian remedy for creating venues of “universal space” architecture. In practice, empty means inadequacy of facilities, which translates to pure absent. The supposedly transcendental neutrality that Mies hopes to help his buildings endure the test of “constantly changing” use ends up failing to respond to day to day versatility.

3.2.2 The Rigid Architectural Framework

The purified layout -- the Bayreuth Festival Theatre

In Wagner's theatre, no other social functions, only measurable requirements were answered. The stagecraft was kept in Bayreuth for elaborate pictorial presentation. All other spaces with no direct concerns of performance are removed or pushed to the pragmatic limit. This can be clearly seen when the plans of Wagner's Festspielhaus are compared with the Paris Opera House. Two theatres in opposing aesthetics and contradicting styles, share an identical layout of the stage area, but that is where the similarities end. In the Bayreuth Festspielhaus case, some serious transformation was performed in the area used by the audience. The magnificent foyers, lavished entrance hall, the grand stair, the horseshoe auditorium, the conventional elements of classical Baroque theatres, were replaced by a tiny foyer, plain narrow staircase in the corner, fan-shaped auditorium of a single-tier and a few boxes. Merely tangible aspects are considered in

purified theatrical layout. It was merely 'the tangible design, so to speak, of what a theatrical structure should outwardly express.'" (In: Tidworth, Simon: Theatres: An Illustrated History. London 1973 p. 172 – 174)

Starting from the Bayreuth, such purified plan and utilitarian principles became the convention. A case in point and evidence of the Wagnerian layout influence is the New York Broad Way theatre from the 1920s. This popular venue is configured with a plain auditorium hall with comfortable seats of good sightlines, and a tiny lobby, only providing space for ticket sales inevitably resulting in the audience being pushed out into the street during the intermission.

Reduced drama to art composite, purified theatre layout

The purified movement has reduced the value of drama to a single effect. It is now an "artistic composite", a pure experience of "viewing" in ideal 'festival' conditions, excluding all social attributes. The movement also altered the spatial typology, which modern architects accept as a convention, to a utilitarian configuration that puts priority exclusively on the stage and the performance-related areas.

As a result, theatrical venues were reduced to a pragmatic building serving a single purpose only, viewing drama. This removal of other functions accounts for the modern convention that playhouses are no more than a space for dramatic spectacle. Features like a deep frontal stage, arched with thin proscenium frame, steeply and tightly arranges seats, became the modern standard of theatrical space.

This Wagnerian dictum, theatrical locus reduced to the action of dramatic viewing, has been taken on as common principles by the modernist successors. This is where the notion of the theatrical program was altered, from diverse social activity to an occasion of artistic appreciation. Consequently, the theatrical venues were

cast down from being the public space of gathering to a utilitarian container.

Moreover, this prioritising of spectating in drama legitimates the frontal stage arrangement and the pursuit of perfect sightlines. As a result, the audience would be guaranteed a frontal and unobstructed spectacle at the expense of being placed in the far distance. What is more, because theatrical performance is now an art of viewing, related technical problems, for instance, the ceiling acoustics and seat ergonomics, are of the highest interest in modern architectural design.

The Ritualized topology of theatre

The purification movement, derived from the Bayreuth Festival profoundly modified the notion of theatre, in both spatial configuration and value. This influence is still with us today and the purified dramatic typology, remains a conventional function for theatrical design.

Modern typology of theatrical space is a supposition that is built on another supposition, following rationalist's pragmatic and hedonist interpretation, grounded by the nineteenth-century purification value and industrialisation aesthetics. The current theatrical venue and value is only a residue of modern purification movement and functionalist's castrated version for budget control or play of style. Not only was the place for drama richer and more diverse, but the value of drama combined social element, culture, religion or entertainment, and involved a wider range of classes of people as well.

This is to say, our modern "institution" of theatre, is uninterrogated and therefore should be questioned and redefined.

The Rigid framework, the fixed typology-program relationship

The fixed typology-program represents a “frozen relationship” between the space and program. It usually results in a rigid architectural framework for the art it accommodates, because functionalist space accepts the conventional typology. Rigid framework prohibits the other possibility outside the planned activities.

In the case of theatre, all other functions were detached from the venues. This is emphasised by the comparison of classical and Bayreuth examples. The pragmatic program and space settings were frozen as default, and therefore, the current rigid architectural framework is formed. Not only is program unquestionable, but also the relations of space and content is standardised.

3.2.3 A Translucent Architectural Framework Stands Between the Two Extremes

A translucent architectural framework

A translucent architectural framework acknowledges the “independence” and “interdependence” of program and space. It suggests a Flexible and yet influential position.

A neutral framework refers to a space that does not influence the activities that are present, nor does it concern the program. The room is created neutral to fit every possible need. In this universal space, an effort to account for the maximum variety of use becomes a question of creating a form for transcendental neutrality. Therefore, the concern of a program is bypassed and turns to the interest in technique or style. Form follows form.

A rigid framework refers to a space produced to serve a single purpose. Usually found in utilitarianist buildings, it is a product of “form follows function”, an architecture-centred approach. Since the architectural form is generated as the problem-solving result of the conventional program, in the modern context, a purified typology of one purpose, it usually results in a rigid framework.

These frameworks exist under the principle that architecture was to grow from the objective problem, answer the absolute truth, or reflect a logical reality. None of them, however, answer to the independent yet interdependent relationship of space and event. The neutral framework thinks a transcendental form answers all the problems of a program for good, while the rigid framework follows the type-program set of rules.

Since neither the neutral nor the rigid framework is concerned with the relationship of space and the program, and therefore hold an indifferent attitude towards the event, I suggest a spatial form that provides a flexible but still influential attitude. I use the term “translucency” to describe such an architectural position and to respond to the interwoven, yet independent connections between space and events.

The translucent architectural framework provides a certain attitude towards the question of the program but is also flexible in its gesture. Mackintosh in theatre example defined a flexible framework as such: “that is a substantially of this or that form but in detail in such a way as to provide flexibility in its form as added bonus.”

The framework produces a space that leaves plenty of room for adjustment for ways to house the activities. In the theatrical context, this could mean different options for staging and alternatives for the atmosphere. Furthermore, extra possibilities for events, such as cross-programming, are embraced and encouraged. Lastly, the translucent space respects the autonomy of the show, admits the independence of institutions and give them freedom. A drama as an art form has its spirit and will. Architecture is merely the medium to house it, and not a competition.

Cases of Tompkin's theatre

A case in point, is Tompkins's theatrical buildings. The Young Vic Theatre and BAC demonstrates the flexible and yet influential

architecture framework I intended to describe.

A flexibility stage for different ways of staging, and various spectator-performer relationship. Space in Young Vic theatre provides the possibilities to shift between different types of stage settings and seat arrangements within an intimate scale: frontal stage, trust-stage with proscenium frame, in the round stage with several "sedes". The shift of the scenic atmosphere transforms the spectator-performer relationship and helps the audience get more involved in different dramatic experiences. (Fig. 25: in-the-round thrust stage in The BAC) (Fig. 26: The - transformation of the stage in Young Vic); (Fig. 27: the public outdoor courtyard in a disused light well in The Young Vic).

An influential yet workable architectural framework, for theatrical producer and designer to base on. In this context, "workable" means the right amount of dramatic attitude that set the main tone of atmosphere and provide adequate facilities while leaving room to adjust. The performance hall of Young Vic, which can accommodate 500 to 600 people, is considered a good theatre for its intimate audience-performer distance allowing the energy of the actor to reach even the back row easily. Moreover, the spectators are seated in a variety of heights: upper and middle-level gallery, as well as lower sinking benches, results in a balance of proxemic distribution. This allows an actor to receive simultaneous gazes from beneath and above the eye level, adding up to an inspiring environment for performers on stage.

A space for cross-programming for extra activities. A space house not only dramatic art, other social events in integrated as well. In the Young Vic, Tompkins has experimented in cross-programming. The result, a town hall and a theatre that allows for a range of actor-audience relationships that would be missed in most traditional auditoria. In this example, both the theatre production and the venue broke the constraints of conventional performance space, allowing the actors and the spectators come together

In the Battersea Arts Centre, an old butcher shop is transformed into a multi-functional bar and a foyer. The latter acts as an extension of the street and bridges all three performance venues. This gives the space a new lease of life, making it a public living room of sorts and earning a considerable popularity within the local community. It is worth noting, the foyer is also a mixing ground for actors, staff and the public alike, as all three groups are leaving the theatre in one procession. (Fig. 30: the public outdoor courtyard in a disused light well in the BAC), (Fig. 28, Fig. 29: the wall surface of the corridors in the BAC.)

Production space for theatre designers and producers. Since the theatre is not only about the moments on stage, but the creative and productive process as well, a workshop located in roof attic in Tompkins theatre responds to the need of artists.

To sum up. Therefore, a flexible, translucent architectural framework is suggested in this section. This flexible framework is a translucent architectural gesture because it contends non-opposing status. Translucent refers to an architectural position where the accommodator of art remains its active presence while still serving to mediate other forms of creation. It is a tricky position to stand due to the natural tendency to pick an opposing binary: the architecture self-centred building or the architecture opts for minimum/neutral architectural presence.

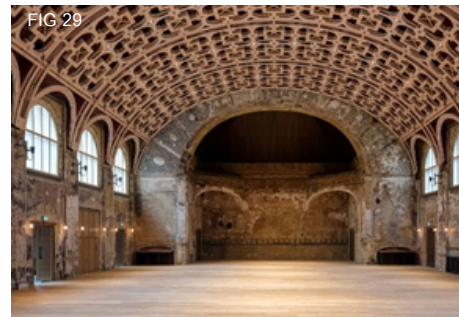
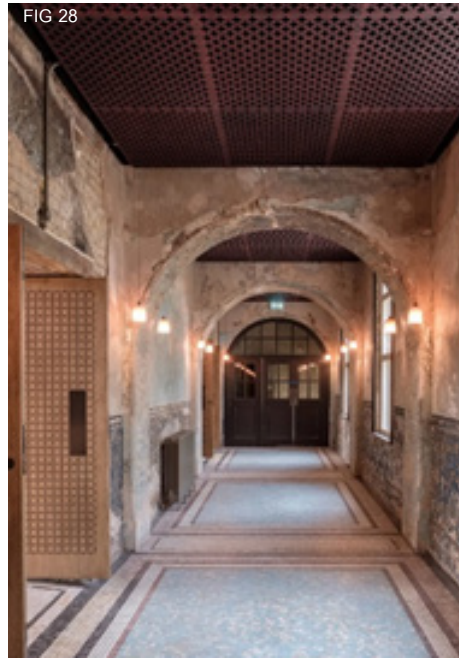


figure.25: in the round thrust stage in the young Vic, Haworth Tompkins, <https://www.haworthtompkins.com/work/young-vic>, <http://theatreprojects.com/en/project/view/165/young-vic>.

figure.26: the transformation of stage in the young, Vic, Philip Vile, <http://theatreprojects.com/en/project/view/165/young-vic>

figure.27: public outdoor courtyard in a disused light well in the BAC, Haworth Tompkins, <https://www.haworthtompkins.com/work/battersea-arts-centre>.

figure.28: the wall surface of the corridors in the BAC., Haworth Tompkins, <https://www.haworthtompkins.com/work/battersea-arts-centre>.

figure.29: the wall surface of the corridors in the BAC., Haworth Tompkins, <https://www.haworthtompkins.com/work/battersea-arts-centre>.

figure.30: the plastered walls surface of the hall in the BAC, Haworth Tompkins, <https://www.haworthtompkins.com/work/battersea-arts-centre>.

figure.31: stair combines café, cross-programming use of space in The BAC, Haworth Tompkins, <https://www.haworthtompkins.com/work/battersea-arts-centre>

3.3 Translucency as Ambivalent Spatial Strategy

3.3.1 Impossible to recollect the authentic authoritative meanings through written marks

Built space as “written marks”

Derrida’s definition of texts. Writing, or “arch-writing”, in Derrida’s term, inclusively indicates the marks with shapes. In Derridean terminology, writing does not merely refer to texts, but also extends to all forms of visual marks that oppose to the phoneme (symbols) Derrida’s writing refers to “texts, and documents, monuments and archives” (Dooley, Kavanagh 2014, p. 21).

Absence of addressee and author in literature. According to Derrida, writing is structured by absence in two ways. Firstly, absence of its author and secondly absence of its determinate addressee. This absence is with writing from the beginning, and it is what makes writing - writing.

Text is created with the notion of absence of author, not accidentally, but is bound to the original intention of presence. It is the purpose to exist without the presence of author. Or say, the author’s original intention of texts, lies in the absence, which means the present of writing is an incidental absent. “A written text must be able to function in the absence of its author.” (Dooley, Kavanagh 2014, p. 37)

Absence of users and architect in architectural space. The built space, which also embodied the absence in two ways: the absence of “author” – the architect while being used, and the absence of determinate “reader” – users is not present while space is designed, in most cases the characters of the users are not predictable.

These two types of marks, one displayed on paper another described in structure form, share the similarly mediating nature and structure of absence. Therefore, I suggest analogising the

architecture (built space) to the writing (written marks) on account of the correspondingly attributes.

The undecidable position of opposing binaries

The Writing-speech undecidable. Derrida uses Plato’s pharmacy to demonstrate the undecidability within a word, which always allows reading texts anew. Derrida displays the impossible nature of teleology by shifting his attention to the “pharmakon”. Derrida demonstrates this through the commentary reinterpretation of Plato’s Phaedrus. In the Phaedrus, we see a classic example of an attempt to construct a closed circular economy around and a teleology of complete and total recollection. In Plato’s Pharmacy, Derrida challenges Plato’s attempt to enclosed meaning in his writing, to fix and stabilise meaning in his texts.

Plato tries to claim writing a poison. However, the ancient Greek term “pharmakon”, which means “drug”, is not of a singular definition. “Pharmakon” paradoxically refers to poison and remedy as well. Plato’s attempt to banish writing as poison, through which expels writing from the enclosure of speech (and living memory) – has failed, according to Derrida’s discourse. It is Plato’s very own text that betrays his intention to distinct speech and writing oppositions. The speech-writing opposition is undecidable. Derrida utilises the undecidability of “pharmakon” to deconstruct Plato’s assertion and reinterpreted in a different way.

Plato cannot recollect the completeness of speech because the two terms, speech and writing blend into one and supplement each other. Writing is already inside speech and shatters its illusions of purity and plenitude. For Derrida, this undecidability in writing is not accidental, but the very mechanism in all forms of communication. Presence is already marked by absence. There is no “pure” presence, no such a concept which can escape the binary opposition.

"If the pharmakon is 'ambivalent', It is because it constitutes the medium in which opposites are opposed" (Derrida P25, D:127)

Presence is marked by absence, no origin of presence

Inside vs Outside. In ancient Athens, "pharmakos" was the name of a human scapegoat, usually a slave, a cripple or a criminal. A scapegoat was chosen from the community itself and kept in the inside of the city. But when the disaster (famine, invasion or plague) arrives, the scapegoat, for expiating and shutting out the evil, was ostracised out of the city in a sacrificial ritual. A member inside the community was converted to an "outsider".

From the same root, "pharmakon" derives another word, "pharmakos", which later became the term "pharmakeus", referring to druggist, poisoner, by extension, wizard, magician or sorcerer. Just like the "pharmakon", the "pharmakos" attributes to the lack of resolution between available interpretations.

Presence vs absence. Through the reinterpretation of Plato's pharmakon, Derrida attempts to attack the western metaphysical propensity of privileging presence over absence and considering absence as a substitute to presence. As previous stories shed light, speech is within writing, inside within outside, remedy within poison. It is simply impossible to maintain the distinction between those pairs of binaries because of their undecidable and supplementary nature. Absence is not a subordinate, not a substitute to presence, but it is within presence.

The logocentrism. Claiming that the only "natural bond" between signifier and signified can only be found in sound, Saussure aligned with Plato, considered phonetic sound, speech, is inherently superior to text. But since the connection between phoneme and its meaning, like other signifier and signified, is arbitrary, Derrida contends Saussure for living in the sham of the phono-centrism in his book *Of Grammatology*.

Structuralists, basing their thoughts on Ferdinand de Saussure's theory of difference, would naturally employ contrasting binaries to define the meaning of a word – for example, "cat" c-a-t is not k-a-t, but cat. The identity of cat is gained from the difference from "kat", not by the cat itself.

Derrida saw such structuralist method that defines a concept by privileging one and suppressing the other as the tyranny of logocentrism. These logocentric thoughts, according to Derrida, relies on an uninterrogated metaphysical supposition that is achieved as a more primal situation is concealed by metaphysics. Therefore, logocentrism, favouring the "logos" as the key tenet of philosophy, is a desire for an objective meaning, which could help makes sense of our place in the world.

Text is open to interpretation, so is the built space

As we have seen in his reading of Phaedrus, Derrida demonstrates us the fact that the potential of different interpretation is always included within the text itself. The identity of written word is marked by absence and loss, difference and deferral. This is to say the traditional notion that the task of reading and interpretation is merely to recollect an original intention of a book – a presupposed, single unifying interpretation-- is on trial.

Impossible to recollect the original intention of the author (the telo, the authoritarian). According to Derrida, "we can never recollect the original intention of an author, because there never was an original presence to begin with." (Dooley, Kavanagh 2014, p.37)

Like Derrida attuned his reading on *The Pharmakon*, where it is the text "pharmakon", which carries multiple interpretations, that resists Plato's attempts to fixed and stabilised meaning, the author's original intention can never be recollected from a book. For a start, the spectral undecidability of writing marks a cut to the circular economy of Plato's text. The potential of different interpretation is always embedded in the written word itself. According to Derrida,

all books contain within themselves certain structural undecidability and the possibility of being interpreted. Furthermore, all forms of communication are mediated by their contexts, and no context is ever entirely determinable. It is always multiple interpretations.

Meaning of words is an infinite referral

There is no viable centre; the meaning of the words is always non-present. Derrida rejects the existence of set and stable meanings. He criticises that it is modern western philosophy which places meaning at the centre of presence, meaning that “philosophy is driven by a desire for the certainty associated with the existence of absolute truth, or an objective meaning that makes sense of our place in the world. Derrida terms this desire “logocentrism”. “Logocentrism” places one particular term or concept prior to another with all efforts at theorising or interrogating meaning. This is how logocentrism assumes the existence of set and stable meanings that exist to be discovered, according to Derrida.

The origin is not the origin. All potentialities of original presence of meaning, like “the absolute present” or “Nature” in Derrida, “have always already escaped, have never existed” (Derrida, Jacques 1998, p. 159).

Metaphysics assumes an objective centre by withholding the more fundamental position. The central premise of Derridean differential theory is that there is “no viable centre”. The reality we are confronting, instead of an objective meaning or absolute truth, is of unintelligible and non-decidable nature. The illusion of what appears to be established and unchangeable is just a false comfort. (Mugerauer, Robert 1988)

As with meaning, it is not that there is no centre, core or foundation to any phenomenon, but that the core or ground relies on other conditions to establish itself as a ground. In other words, the absence of objective centre suggests “that the meaning of a particular object, or a particular word, is never stable, but always

in the process of change.” and their foundations are in fact, non-determinate phenomena that are always in flux and play.

Meaning of word is a differential play of trace, is an infinite referral chain. Meaning is never stable between signifier and signified. An analogous mechanism applies to space and events relationship. A built space, as a mark of shape, signifies implication for activities of space. The connotations lay in an unstable structure that the architect’s telos will never arrive. It is a structure with no intention for central purpose, a spatial language that admits the undecidable nature and aims at multiple interpretations with an open principle. One shall not expect stable and fixed meaning between built space and its spatial implication for activities.

3.3.1 Employ ambivalence as a spatial strategy

Since it is impossible to accurately recollect the authoritative meanings through written marks (including texts and space), ambivalence is suggested here as a spatial strategy, aiming to create a living space that opens for interpretation.

Definition of ambivalence

Nietzsche’s ambivalence. Derrida seems to appreciate the ambivalence of Nietzsche’s text. He follows along in the tracks of deconstructive tactics, the playful and intangible experiments in Nietzsche’s writings, which carries a language not governed by the metaphysical truths and the spoken word.

In Writing Derrida refers to Nietzsche, of someone who has substituted the metaphysical conditions of essence with the experience of play: “We doubtless would have to cite the Nietzschean critique of metaphysics, the critique of the concepts of Being and truth, for which were substituted the concept of play, interpretation, a sign (sign without present truth)” (Derrida, Jacques, Bass, Alan, 1978, p. 280)

Derrida considers Nietzsche's ambivalence a significant role in criticising traditional culture and metaphysics. Derrida considers that the heterogeneity, contradictory, variegated of Nietzsche's texts (rhetoric) and the variation of Nietzsche's types of woman, a sarcastic attack on Hegel's dialectics, which depends on a contradictory process between opposing sides. In the discourses of Dionysus and Women, Nietzsche refused to describe his matter in the case of "unity of opposites", nor attempted to achieve "sublate" (Aufhebung) through the "synthesis" of a "thesis" and "antithesis". Contrast with Hegel's aims for an absolute state on women of "inherent nature" or "unconditional attributes", Nietzsche instead, through his ambivalent discourses of women statements in varied forms, conveys us a manifold typology of women under various possible conditions.

Derrida saw potential in Nietzsche's heterogeneous text. Nietzsche's writings of various positions of woman managed to escape metaphysical unity of "unity of opposites". Instead of the discourse arriving at a final, complete, unconditioned concept of woman, which one might find it necessary according to the western metaphysics, Nietzsche presented us contradicting, changeable and perennially evolving expression of a woman.

According to Derrida, Nietzsche, to the contrary of a reduced, fixed meaning of absolute, which are the victims of a rigid process of "thesis", "antithesis" and "synthesis", consider "ambivalent rhetoric" works better for various attributes of woman. Because by means of ambivalent rhetoric, which refers to a repetition of differences, other than the platon repetition for a central meaning, avoid induction and reduction and therefore escape arriving at a fixed and identical meaning.

Ambivalence liberates creativity. On the one hand, the meaning of the signifier varies according to its context. This meaning is open to be contested and redefined with shifts in its discursive context. Thus, the signified is continuously subject to change. On the other

hand, the thoughts of the author are changeable and perennially evolving. As a result, the signifier and the signified, both are prone to continuous reinterpretation and rereading

Approaches to achieving ambivalence

Ambivalence strategy is to display and interpret the difference of signifiers in traces. For Derrida, to deconstruct results from an ambivalent process of texts and written marks.

Deconstruct the metaphysical hierarchy. While Saussure advocates photo-centrism, Derrida considers it an example of Western philosophy's logocentrism, with the underlying fallacy that only presence is seen, ignoring the access to presence. The tyranny of the logocentrism and phono-centrism, for Derrida, lies in the establishment of hierarchies in the process of assigning a prior position than its opposite. Derrida criticises logocentric thought for relying on an uninterrogated metaphysical assumption. This kind of assumption relies on the forced closure of structures, a closure which will produce a tendency towards positive truth values. That is to say, the logocentric project asserts the exteriority of the signifier to the signified and assigns the notion of "presence" to the very essence of the signified. The logocentric desire for the absolute truth, objective meaning, universal identity results in an enclosure of creative force.

Several approaches to deconstruct the metaphysical hierarchy: A. dismiss the systematicity. B. admit the legitimacy of two binaries, therefore deconstruct the primary-secondary distinction. Also, invert binaries, (overturn hierarchy, overturn the determinate and the subordinate,) allow access to the suppressed part. C. introduce/encourage two forces – one as a discipline, regulate, law; one as accident, violate.

Create De-centred, Disseminated structure. A de-centred, disseminated structure, which transforms traditional enclosed, isolated, and independent textual configurations, (for instance

words, sentences and paragraphs,) into heterogeneous structure open to multiple interpretations. That is to say, in the structure of undecidability and dissemination, mind and communication disseminate within the open and extensive realm of discursive, in the non-centred, undecidable spectrum of possibilities.

In a de-centred, disseminated structure of texts, there is the potential for “absent meaning” in writings, which extends and renew the fixed meaning of the text by virtue of the continually updating context and by means of the repetition of difference -- “differance”: differing and deferral.

3.3.3 Case of Herzog & de Meuron’s Serpentine Gallery Pavilion, -- a space of ambivalence and multiple interpretations

An excellent example to showcase the spatial ambivalence is Herzog & de Meuron and Ai Weiwei’s Serpentine Gallery Pavilion in Kensington Gardens, London. This project displays a space of successive superposition, a palimpsest of a mental chain of memories. The sewing pattern-like layout outlines the physical remains of the previous built Pavilions, employing a jumble of convoluted lines.

Inspired by the diversity of constructed realities that include telephone cables and former foundations, the architects used the traces of the past in combination with the topology to achieve a disruption in circulation. This eventually generates a layered layout (Fig.32).

It is precisely the preservation as well as the superposition of the past of the pavilion that grounds the ambivalence in structure and brings forth the heterogeneity in space. The employment of the remnants with diverse layers results in the dualistic hierarchy, a system of ambiguity and a disseminated structure that is open for multiple interpretations.

Instead of developing the design from a ritualized typology of program, the architects started from rethinking the building type

and its meaning and assigned the space an ambiguous position with multiple identities. The pavilion is a gathering venue as a roofed plaza, an open basement, an elevated platform, or a piece of landscape, a reflective pool that echoes the picturesque surroundings (Fig. 36, Fig. 33).

As “the perfect place to sit, stand, lie down or just look and be amazed” (Ai, Herzog and de Meuron) the building is mystery inviting visitors to explore. The natural slope of the site encloses one end of the pavilion but opens the other. (Fig. 33). The latter invites people to assemble inside (Fig 37), while the former encourages to keep on going, until a suitable corner to settle is discovered (Fig 35).



The traces



the landscape generated by footprints of topography and traces of the previous pavilion

figure.32: Plans, Herzog & de Meuron and Ai Weiwei, <<https://www.archdaily.com/232661/herzog-de-meuron-and-ai-weiwei-serpentine-gallery-pavilion-design-revealed>>

figure.33: The Gradient from open to enclosed. Photograph by Jim Stephenson, 2016, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>

figure.34: Space for multiple interpretations – explore, read, chat, or chillax. Photograph by Jim Stephenson, 2016, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>

figure.35: Space for various interpretations - found a spot to sit down. Photo by Jim Stephenson, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>

figure.36: The ambivalence in spatial identity, Both a pavilion for gathering, a pool as landscape. Photograph by Jim Stephenson. Photo by Jim Stephenson, 2016, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>

figure.37: A roofed plaza or an open basement for assembling, By Iwan Baan, 2016, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>

figure.38: The semi-sunken height roof likes a parapet that people can lean on or feel a certain amount of support. Photograph by Jim Stephenson, 2016, <<https://www.dezeen.com/2016/02/14/video-interview-serpentine-gallery-pavilion-2012-herzog-de-meuron-ai-weiwei-excavation-movie/>>



figure 33

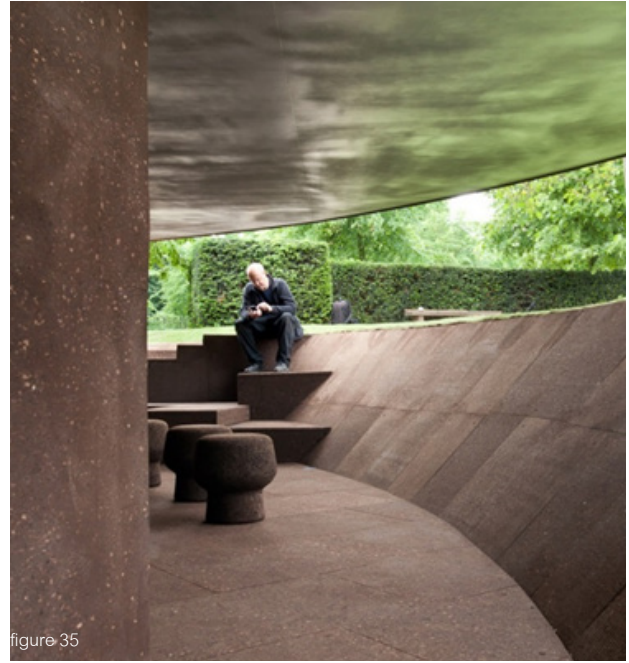


figure 35



figure 34



figure 38



figure 36



figure 37



Atmosphere of the site Peniche,.

figure.39:Bengt Nyman, 2015, Peniche Portugal February 2015, Wikipedia, <[https://sv.m.wikipedia.org/wiki/Fil:D810_4900_\(16626304231\).jpg](https://sv.m.wikipedia.org/wiki/Fil:D810_4900_(16626304231).jpg)>

CHAPTER IV

Experimenting Translucency

4.1 Reading the Site - Baleal

4.1.1 Location and Climate/ The (Atlantic) Ocean influences

Location. Located on the western coast of central Portugal, the east coast of the Atlantic Ocean, the Peniche region is the westernmost among European cities. It covers an area of 77,55 km². (Figure 3.1)

Climate. Located on the western coastline facing the Atlantic Ocean, the Peniche region experiences warm and temperate weather. Such an overall stable and pleasant atmosphere, according to the Koppen Climate Classification, is considered to be “dry-summer subtropical” climate. Due to the cold oceanic currents, summers in this region tend to be dry, stable and pleasantly warm. Winters, as a result of the warm water settling near land and forming clouds, can be relatively mild and rainy.

Rainfall. The annual precipitation amount in total is 634mm; August is the driest month, with an average of 3 mm rainfall; while December the highest. The mean amount of precipitation during this particular time reaches 110mm.

Sunny. Local habitats can typically expect 5-6 hours of sunshine per day. Notably, during summer times, people in Peniche can enjoy up to around 12 hours of sunshine. Even though winters in Peniche is relatively wet, but there are still as many as 29 dry days per month on average during the summer.

Humidity. Average Relative humidity is about 74%.

Temperature. Peniche average temperature for the year: 15.3°C; During the hottest month (August), the average temperature is 18.9°C; During the coldest month (January) the average temperature counts 11.4°C).

Wind. In Peniche region, prevailing winds are the north-northwest and the northwest wind. The strong gusts add up to more than 3500 hours, which is equivalently more than 145 days of a year. One can enjoy the pleasant condition of wind throughout the year. The Portugal/ Peniche region is dominated by moderate air currents generally. During summer times, the Peniche region receives refreshing sea breezes.

4.1.2 Geology collage: Nature traces – Rocks (fossil) and sand (tombolo), wind and water

Geological landscape collage. Ancient continental movement and oceanic erosion formed the unique geological landscape on the eastern coastline of Portugal. Along the mid of this coast, stretches the Lusitanian Basin, partly on land, partly off-shore. The Lusitanian Basin is a place rich in marine fossils of invertebrates and vertebrates. Dinosaur bones and tracks are commonly found on site.

The image collage of the coastline geology near Baleal: beach and cliffs with vertical texture; tombolo beach, bare cliffs in Baleal peninsula with stacked and inclined shape; bare cliffs in Peniche peninsula: rocks with horizontally stacked patterns, rocks in the shape of melted wholes; rocks of the Supertubos beach;

Geological Formation. The Atlantic coast of the Iberian Peninsula has been inundated over time. Its sea levels having risen from a minimum of 115-120 meters lower than today to its current level at 2000 BC. The coastal shelf produced by sedimentation during that time remains below the surface. At the 500 m isobaths, on edge, the Atlantic shelf drops off to one thousand meters.

Baleal peninsula belongs to the Berlengas archipelago. It includes three sets of islands: the Berlenga Grande associated with several islets, the Estelas, and the Farilhões-Forçadas. This archipelago is the remains of submerged ancient mountain ranges.

Until the twelve century, Baleal were still islands along the Portuguese coast, only accessible by boat. By the sixteenth century, a tombolo developed by the deposition of sand particles, forming a narrow strip land connecting the set of islands to the continent, Connecting the two islands to the mainland by a linear strip of land, Joining, bridging, etc.

Geological Present. The geomorphological specificity of Baleal and

Peniche is oscillating between the reality of islands and peninsulas. Baleal nowadays is formed by stacked and inclined bare rocks, telling a story sculpted by the sea with distinctive and exotic geological formations. The landmasses of Peniche and Baleal are made of distinct types of rock from the Berlengas archipelago, mainly limestone, except for a small section in Peniche which contains both granite and gneiss similar to the archipelago.

The inclination form of rocks in Baleal peninsula is a result of wind direction, and ocean movement

4.1.3 Relics of defence: Fortress history - traces of human defence

Plans of the small fortress on the Baleal island. A small fortress, built by French Napoleonic general Junot, intended to protect the hidden treasure on the island upfront. (when British troops, were on their way to Portugal, expected to arrive north of Peniche in August 1808.) This small fortress, on the edge of Baleal Island, oriented to the Ilha das Pombas, was built to protect the hidden treasure on this island.



figure 40



figure 41

The geography at the Almagreira beach.

figure.40:Almagreira beach, *Praia da Almagreira Beach*, <<https://www.playocean.net/en/portugal/peniche/praias/prai-da-almagreira-beach>>

figure.41:Baleal Coast, petar, 2017, flickr, <https://www.flickr.com/photos/time_one/32940572096/in/photostream/>



figure 43



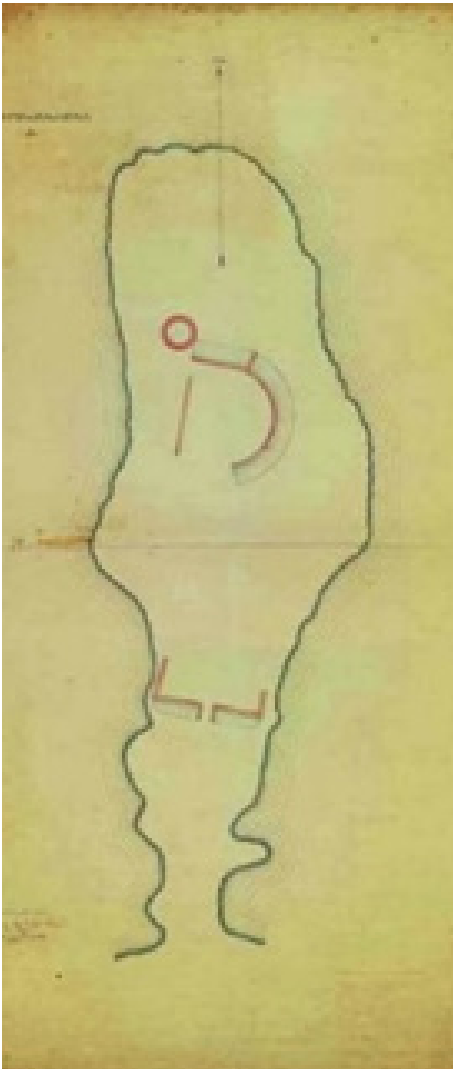
figure 42

Fig43 The bare cliffs with stacked and inclined shape

figure.43:JULIO CÉSAR FERNÁNDEZ, 2016, Baleal, flickr, <<https://www.flickr.com/photos/128552367@N05/29309331161/in/photostream/>>

Fig. 42 a single calcareous-debris-flow layer.

figure.42:Detail photo of a single calcareous-debris-flow layer, Rui Pena dos Reis & Nuno Pimentel, 2010, *Petroleum System Elements in the Lusitanian Basin - an introductory overview*, <http://meg.ipn.pt/wordpress/wp-content/uploads/2017/10/FIELD_TRIP_BL_GALP_2010.pdf>



Plans of the small fortress on the Baleal island. (fig. 47)

José Carlos Romão, 2013, pequeno guia do património esquecido e ostracizado #6 fortim do baleal, <<http://caldeiradapenicheira.blogspot.com/2013/11/pequeno-guia-do-patrimonio-esquecido-e.html>>

Plans of the small fortress on the Baleal island. A small fortress, built by French Napoleonic general Junot, intended to protect the hidden treasure on the island upfront. (when British troops, were on their way to Portugal, expected to arrive north of Peniche in August 1808.)

This small fortress, on the edge of Baleal Island, oriented to the Ilha das Pombas, was built to protect the hidden treasure on this island.



The Ancient Plan of the Peniche fortress.

2011, Plaza de guerra de Peniche , <<http://amodelcastillo.blogspot.com/2011/10/plaza-de-guerra-de-peniche.html>>



View of the Peniche Fortress

View of the Peniche Fortress , Osvaldo Gago, 2005, Peniche Fortress, Wikipedia, <<https://www.environmentalscience.org/careers>>



Interior view of the Peniche fortress

Interior view of the fortress , Antonio Periago Miñarro, 2009, Peniche Fortress, Wikipedia, <<https://www.environmentalscience.org/careers>>

4.2 Concept Design

4.2.1 Design Reasoning

This conceptual design is a destination that arrives from multiple directions: the authentic meaning of theatrical space, the translucent position (of space-event relationship), and last but not least, the understanding of the site and the demands of the project.

IN RESPONSE TO THE SITE AND PROJECT DEMANDS:

Analyse and Understand the site. The site is observed from the axial spatial profile, which shapes the site's nature. Transitional spatial experience -- the everyday life of Baleal peninsula, towards the horizon -- the inaccessible nature and the endless horizon of Atlantic. The ruins of fortress exist as a bygone reality. The traces of remnants reminds visitors of the past – the defending history.

IN RESPONSE TO THE MEANING OF THEATRICAL SPACE:

Three folds of confrontation. Inspired by the confrontation nature of theatrical space, the design proposes a Linear Theatrical Invention that conforms and enhances the original axial profile of the site. The concept creates a juxtaposition of two sides of nature and introduces a theatrical domain to the transitional spatial sequence. It adds up to form an encounter of 'three folds of the world: the theatre (fictional, psyche), the reality (the everyday life, the culture), and nature (the landscape of site).

IN RESPONSE TO THE TRANSLUCENT POSITION OF ARCHITECTURE:

The folding form. A connecting folding form, both linear and crossing, the arch opening and the walkway proceeding in a

north-south direction, follows the axis of the site. However, the gap and the path formed by the angular walls, are a violating force, that directs distractions, towards the stunning nature of two sides. The form of repetitive folding clips intervenes the axial site with dynamic potentials.

The Arch. The arches, in the lense of theatre semiotics, is known for the reputation of "restrictive", "conservative" and alienating effects. Here, however, they create passages and denote an opening. That being said, the framing character is not entirely forgotten. The adopted form not only outlines and accentuates the stunning nature but also hints to the theatrical atmosphere since it connotes the dramatic illusion.

The flexible framework and ambivalent identity. The Collage of several types of stage allows for a different combination of performance relationship and seating arrangement. Moreover, the positioning of the café next to the perspective venue encourages multi interpretation and cross-programming, giving the space a different identity. Besides the dramatic performance, this outdoor theatre was intended for scenery viewing and other cultural events as well. When in exhibition or display mode, the show starts from the courtyard stage continues on the linear 'runway' and arrives at the mainstage. The perspective terrace is also a suitable locale for exhibiting, thanks to immersion with nature.

Red concrete. Last but not least, the material is set to be red concrete. It was chosen to inherit the look from the unique features of the surrounding nature, the scarlet cliff and soil. The warm tone is meant to celebrate the sun and the passion on the site. On the other hand, the rough dark concrete of the walkways intends to bring in-depth and is a nod to fortress history.

Theatre-in-the-round

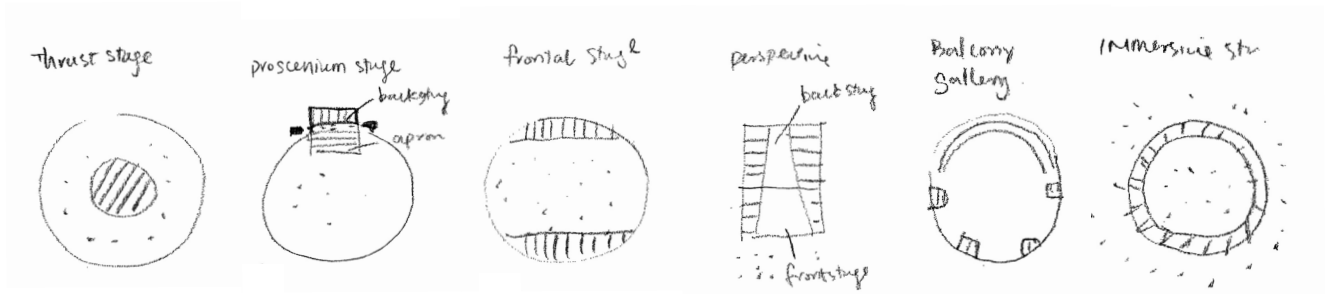
Proscenium staged

Frontal stage

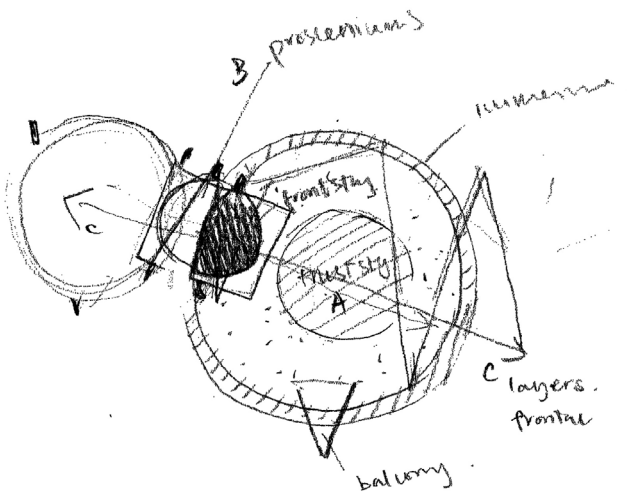
Perspective stage

Boxes and gallery

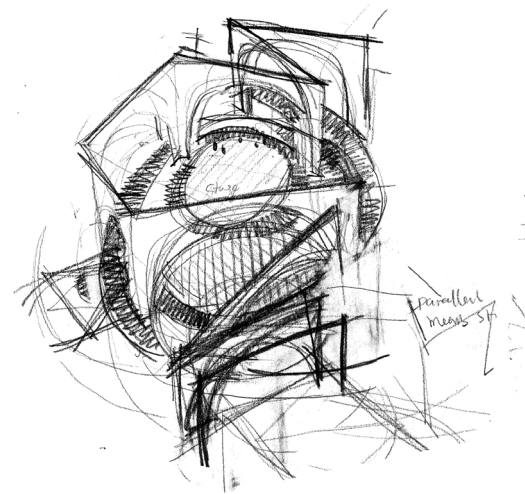
Immersive stage



Various stage types

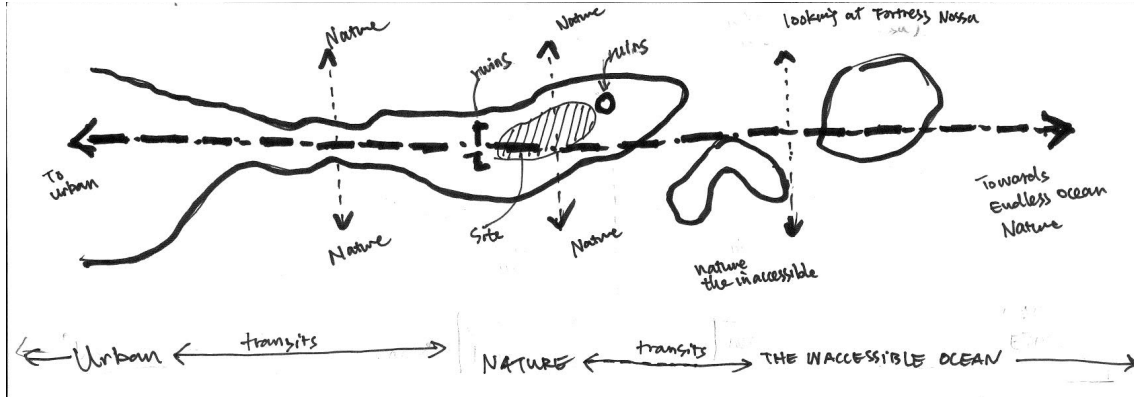


Design concept: collage of different stage types for multiple performance relationship.

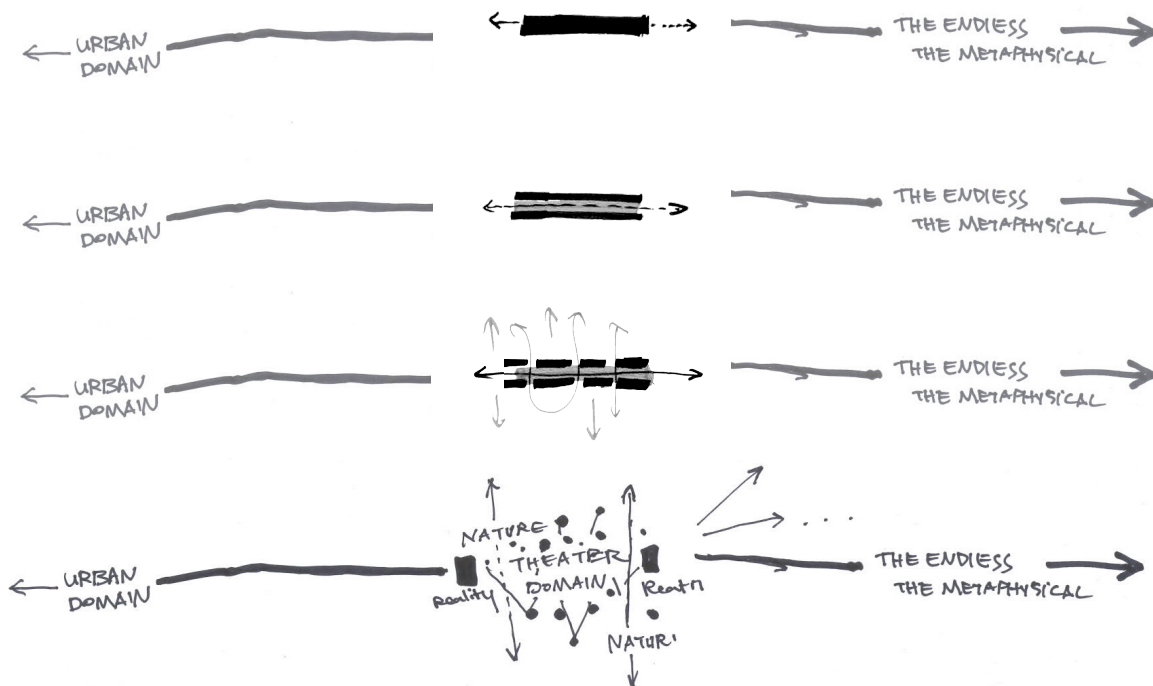


Design concept: a site theatre defined by folding form, arch opening, spiral pathway,

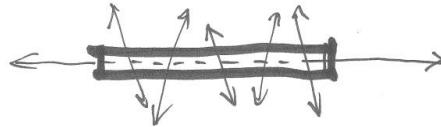
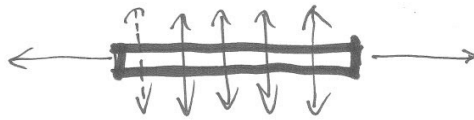
Site analyses: axial profile and transitional spatial sequence.



Design concept: a linear theatrical invention that responds to site, impose juxtaposition and introduces new confrontation.



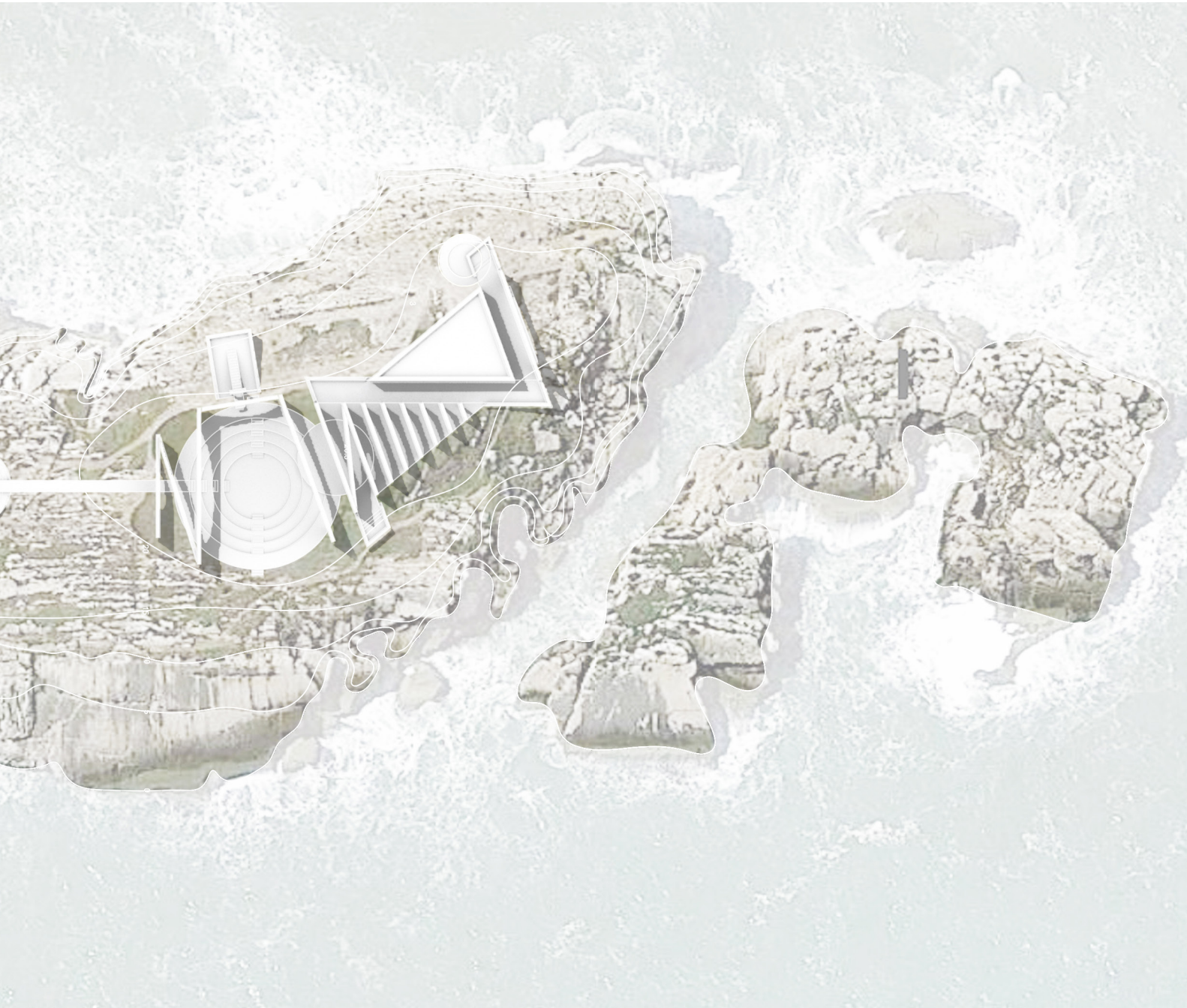
Design concept.



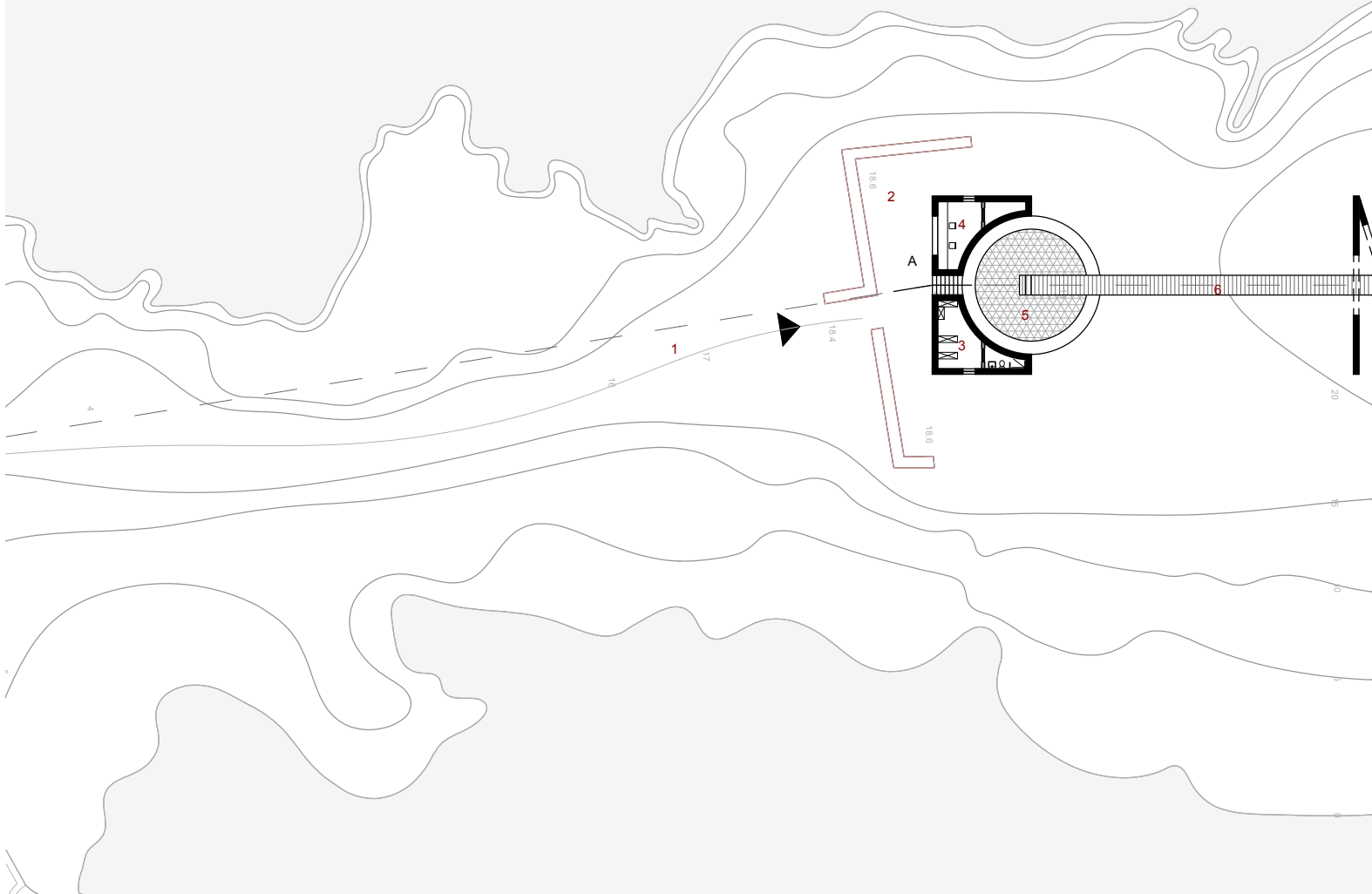
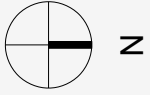
Ambivalent formation.

4.2.1 Design drawings

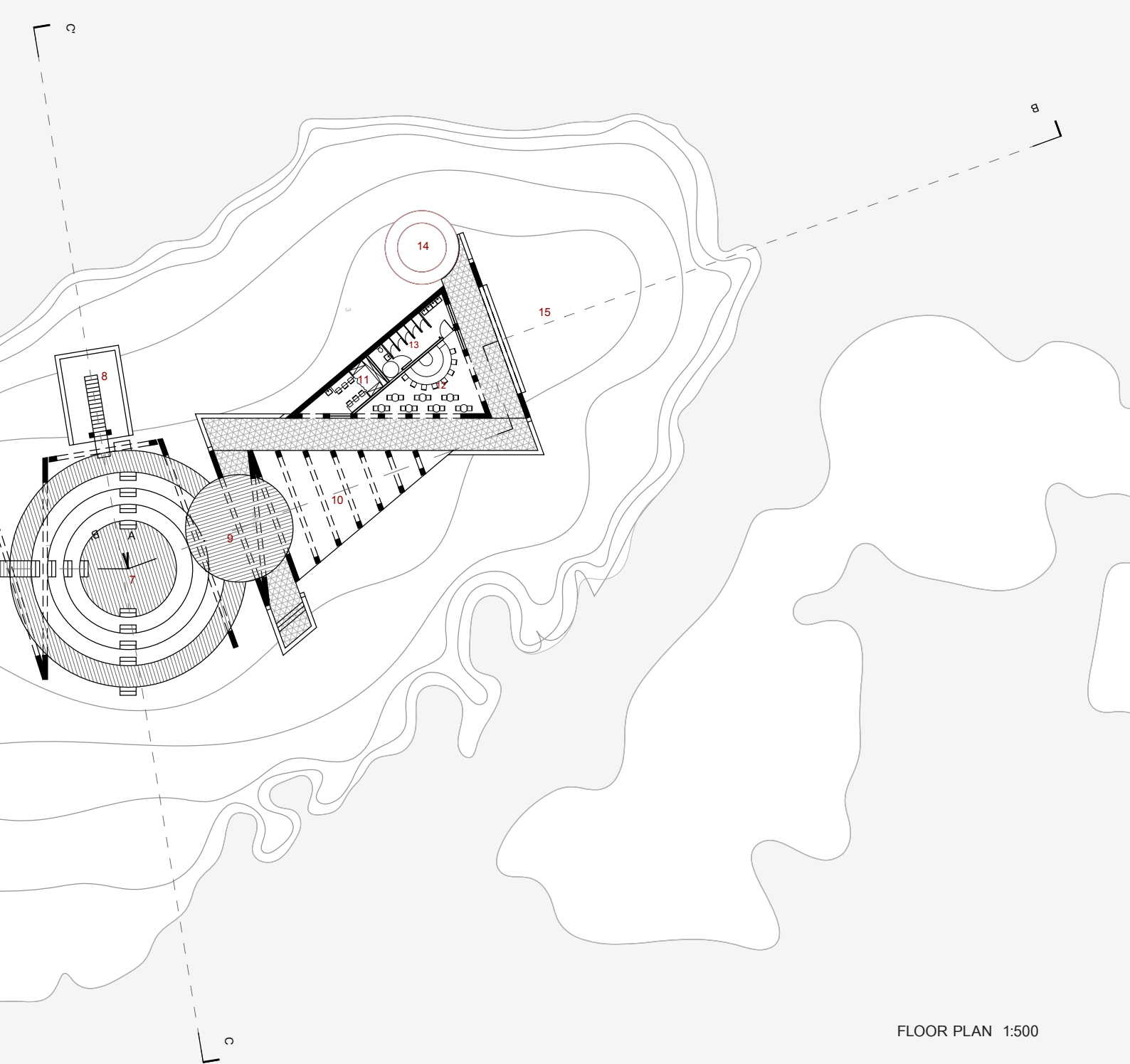




SITE PLAN 1:750



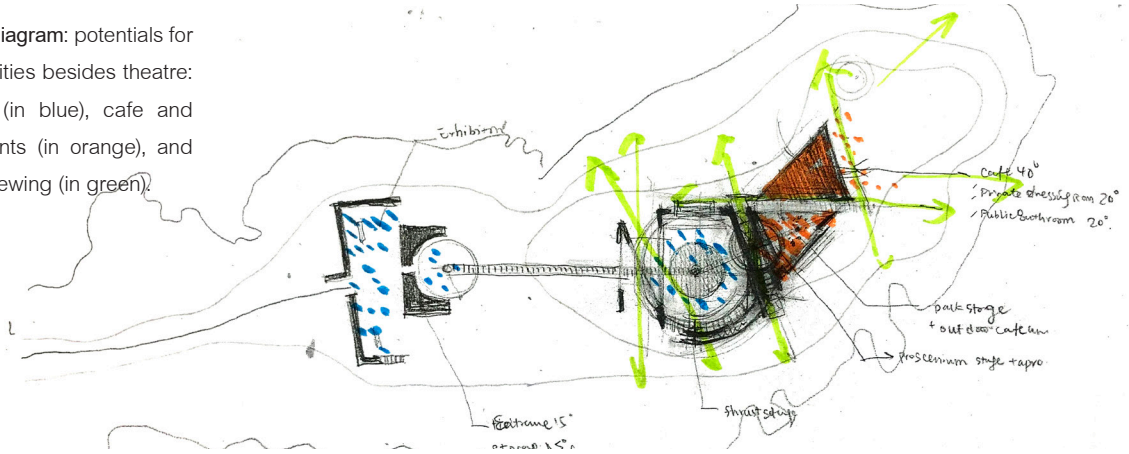
01. Site theatre Entrance
02. Fortress Foyer
03. Storage and staff restroom
04. Ticket office
05. Lobby Courtyard (preparation, transitioning)
06. Viewing pathway. can be used for exhibition and display.
07. Ambivalence stage: combining different types of stage. Centre stage/
thrust stage



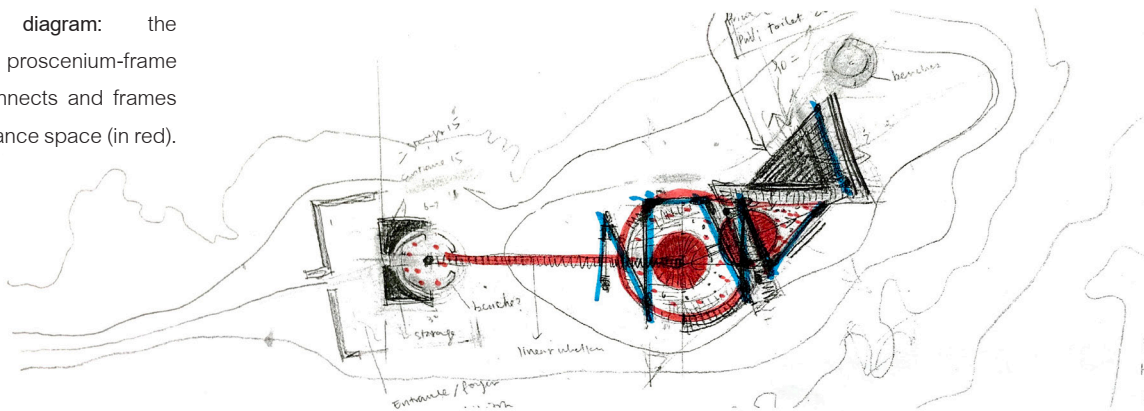
FLOOR PLAN 1:500

- 08. The high spot for stage scenery, also viewing locale
- 09. Proscenium-arched stage
- 10. Perspective arches stage/ cafe courtyard
- 11. Performers' dressing room
- 12. Cafe
- 13. Visitors' washroom
- 14. Fortress ruins
- 15. Site theatre backyard, heading the infinite nature.

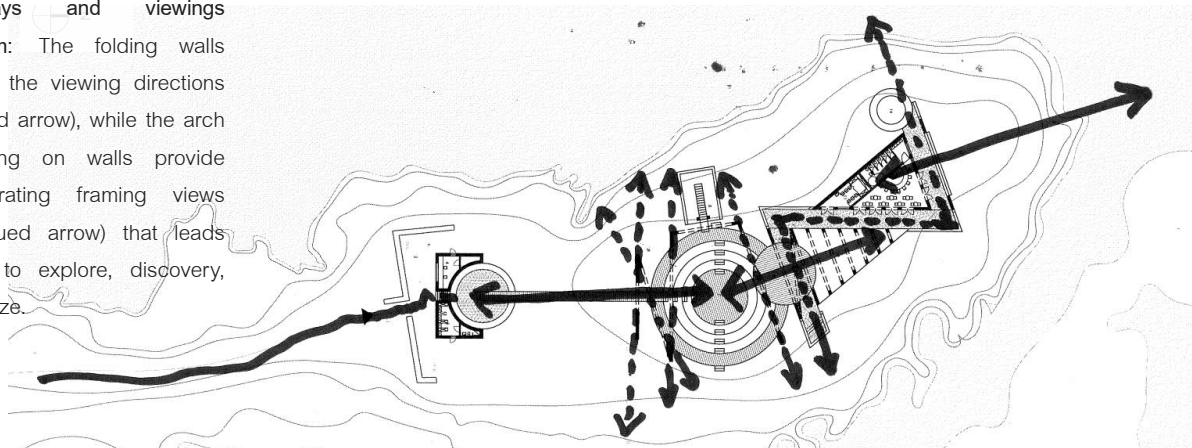
Activities diagram: potentials for other activities besides theatre: exhibition (in blue), cafe and social events (in orange), and scenery viewing (in green).



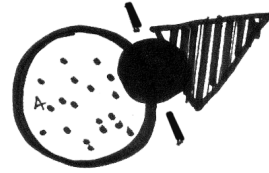
Activities diagram: the continuing proscenium-frame (in blue) connects and frames the performance space (in red).



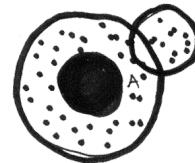
Pathways and viewings diagram: The folding walls guides the viewing directions (dashed arrow), while the arch opening on walls provide penetrating framing views (continued arrow) that leads visitor to explore, discovery, and gaze.



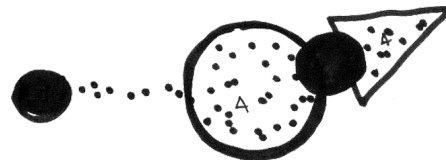
Scenario proscenium-arch setting:
a frontal stage setting with
proscenium frame and perspective
stage as rear stage.



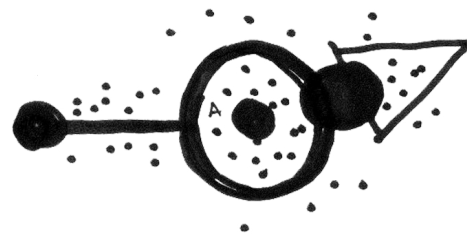
Scenario in-the-round setting:
central stage, with the audience
surrounded.

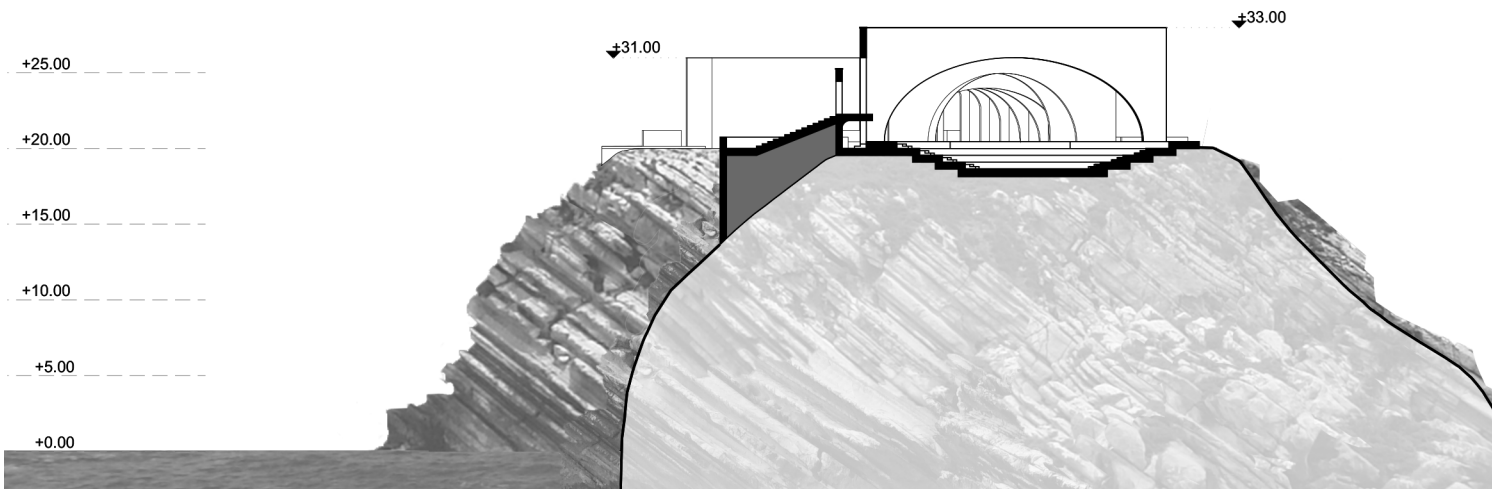


Scenario 'multiple settings': two
stages are sandwiching two
audience areas. It allows different
stage settings or performance on
the two other locations.

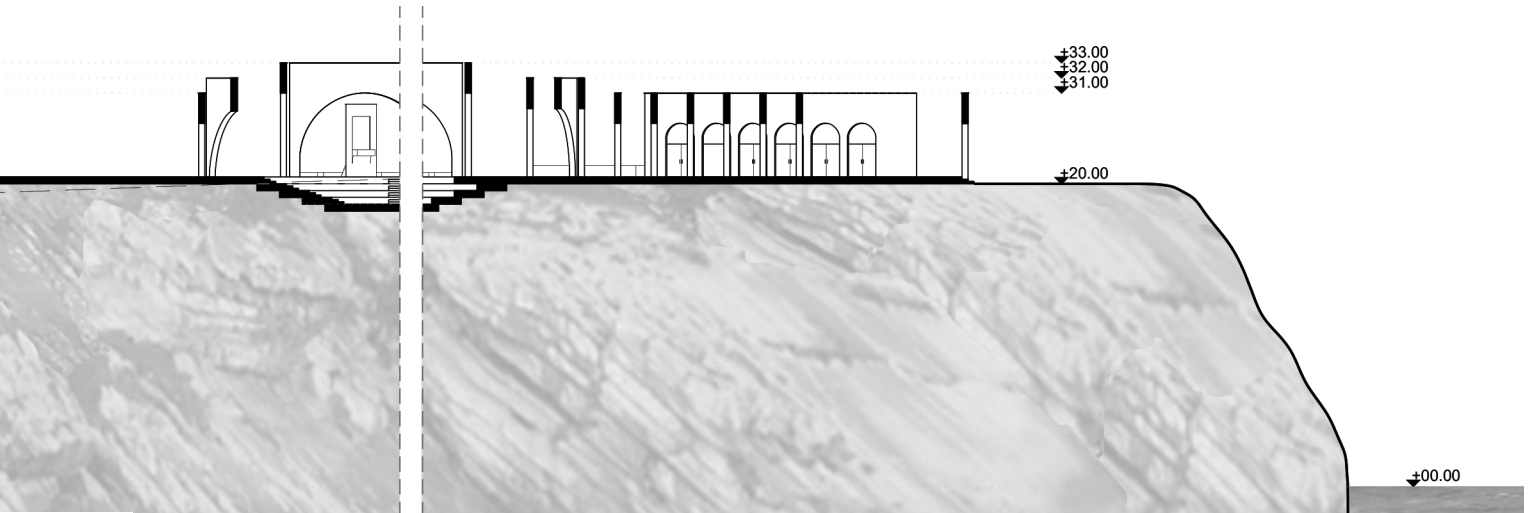


Scenario immersive settings: when
combined all stages, it becomes
an immersive/environment stage.
This configuration works for the
marching show and exhibition as
well.





SECTION CC 1:500



SECTION AA 1:500

SECTION BB 1:500



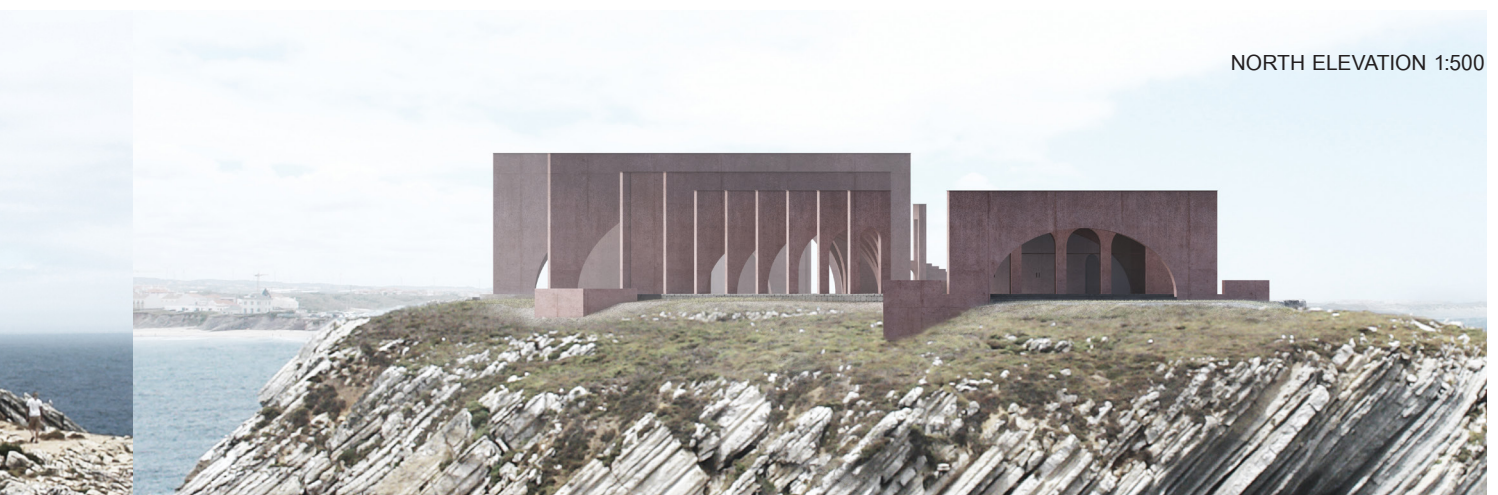
SOUTH ELEVATION 1:500



EAST ELEVATION 1:500



NORTH ELEVATION 1:500



WEST ELEVATION 1:500





Entrance



Approaching the main stage



Outdoor stage combined with multiple types of staging



Outdoor stage combined with multiple types of staging



Ambivalence space combining three types of staging, with the potential that answers to multiple spectating and performing position. A formation of round 'orchestra', proscenium-arched stage, and backing with rear stage, only the usual side wings for scenery changing and replaced the scenery of nature, framed by the arches, blending with the wind and waves.



Looking back at the beginning.
the retrospect to the urban reality through the gap.
linear path, connecting the entrance round yard and the main orchestra stage, can be used as a longitude
platform for walking and exhibiting.





Between cafe and arched perspective stage, a path that pointing at the performing stair, and behind our everyday life.



The perspective arches stage, and also a terrace for cafeteria and viewing. A venue for cross-programing, a locale that connects the cafe and serves as the rear stage at the same time. here the roles fluctuate among visitors observers, performers and spectators.



Gazing at the unreachable through the ending arch.
towards the noman island, to the endless water, nature.
escaping from reality, emerged in dramatic fiction, here is where the thinking takes place.
“the mountain viewing and thinking.”





CONCLUSION

This was a journey, a departure to explore the unmeasurable architectural aspects – the uncovered “institution” of theatre. The author performed a retrospect into the built cases of theatrical venues with the goal to reveal the “spirit”, the “essence” of theatrical space. In the multiple spatial forms from various periods, the author attempted to find out the essential meaning of dramatic locus.

In the process of retrospect, an interwoven relationship of theatrical events and spatial form has caught attention. Spatial elements, like Greek skene, Roman decorated background, Renaissance proscenium - frame and perspective background, Boxes and stalls and grand staircases in Bourgeois theatres, and the darkness in contemporary playhouse, all these conventional components that we took for granted in modern context, has played vital roles in modern theatrical space and has altered our understanding of theatrical practice. The appearance of such elements reforms the theatrical conventions instantly or gradually, directly or implicitly. These spatial modifications were decisions of the designer cast by specific ideological backgrounds, or tightly bound by the setting of the original accommodating locus. Theatrical space co-produces the event together with the actors and the audience. The sense of scale, the atmosphere and the spatial arrangement, all shape the relationship between the spectators and the performers, having great influence on the style of drama.

The author found out that the essence of dramatic events, not the embodiment of spatial elements itself, but the common spirit those theatrical venues attempt to convey, is the confrontation of two worlds – the encounter of reality and fiction, the communication of our everyday life and “human psyche”.

The purpose of a theatre varies, and the style and form of venues differ as well, both in size and in spatial arrangement. However, the notion that theatrical experience involves the fictional world consisting of the stage and the performers remains unchanged.

The fictive realm was displayed in many forms: from religious story conviction to demonstration of social codes, to emotional resonance and social or political reflections, etc. A theatre requires simultaneous presence of actor and audience, and it is the communication between the fictive realm that the actor represents and the reality that the audience lives in.

The retrospect in Performance history enables the author to look at the meaning of performance venues and the value of dramatic events afresh. Firstly, the past examples display an interwoven relationship, where the theatrical space defines the events. However, at the same time, the dramatic events also set the framework for spatial expression. Secondly, the “essence” of theatrical events lays in the confrontation of two worlds.

However, the interwoven relationship between theatrical space and events is hardly justified in modern venues the third chapter attempts to establish this connection the presence of the modernist context.

After the modern purification movement, the aesthetics and spatial configuration are widely altered, following the abstract philosophy and pragmatic principles, which are the common dictums of modern architecture.

This passive position, with the focus in abstraction and neutrality, aroused controversies on modernist architecture. Constant frustration and complaints could be heard from theatrical producers and theorist’s the architecture’s belief in abstract aesthetics and spatial neutrality typically translates space into the black box or white purified auditorium, and results in impassionate environment that accounts for passive dramatic experiences. This architectural position is not confined to the theatrical realm, it is also noticeable

in general terms of space. Moreover, the self-centred attitude in modern architecture deteriorates the indifferent attitude upon the events. Therefore, the author calls forth an active architectural position, which serve more than reflecting objects Architecture is narrating media that encourages not only everyday activities but also mediates the intangible mental realm.

For one hand, the obsession of all-mighty, universality in space tend to fail in providing the adequate atmosphere and necessary facilities for event flexibility and variety. For another, the conventional typology of theatre space – the modern purified proscenium theatre appears to be too restrictive for theatre producers to adjust the staging and too self-centred to respect the independence of drama. The author refers to the former, as a neutral framework that accounts for architecture attempts to achieve a non-committal mediating position towards events. However, the neutrality of space is just an illusion. The later, the rigid framework, describes venues that result from a typical scenario, where spatial formation follows a fixed typology-program relationship and functionalist principle. This scenario usually generates a pragmatic space in an elaborate form that aims solely for one specific purpose and the possibilities for unplanned events and the room for adjustment for users is eliminated. In both cases, a neutral framework or a rigid framework, seldom considers the program, nor explores the relationship between space and event. Therefore, the authors suggest a flexible architectural framework that advocates a spatial attitude corresponding to both the interdependence and the independence of space-event relationship.

The meaning of space is neither enclosed nor authoritative. The mechanism how built environment makes sense follows the undecidable nature of signifiers. Architect should not try to enclose the meaning of space, but instead, visitor completes the interpretation of the space while visiting. Therefore, the spatial ambivalence strategy is employed, by which the undecidable nature of built environment is admitted. Instead of trying to deliver an authoritative meaning, like what happens in space of rigid relationship, architecture ought to embrace the challenge of multiple

interpretations. By employing the Ambivalent spatial strategy, the author wants to create an open space for multiple interpretations. Structure, therefore encourages cross -programming and mix-use of space.

Finally, chapter four concludes and experiments with the findings from previous chapters. This conceptual design is a destination that arrives from multiple directions: the authentic meaning of theatrical space, the translucent position (of space-event relationship), and last but not least, the understanding of the site and the demands of the project.

Inspired by the confrontation nature of theatrical space, the design proposes a Linear Theatrical Invention that conforms and enhances the original axial profile of the site; at the same time, it creates a juxtaposition of two sides of nature. Moreover, it introduces a theatrical domain to the transitional spatial sequence, and adds up to form an encounter of 'three folds of worlds': the theatre (fictional, psyche), the reality (the everyday life, the culture), and nature (the landscape of site).

The architectural translucency is realized in the ambivalent spatial formation, a connecting folding form with arch opening and path proceeding and the ambivalent of identity and program. The collage of different types of spaces allow for a different combination of staging and seating arrangement. Moreover, the positioning of the café next to the perspective stage encourages the mixing and shift of function.

The concept of architectural translucency, maybe not argued thoroughly, merely embodies the author's observations and researches on the space-event relationship, and the spatial language that responds to the current context. The original intention of this thesis was not to establish theories, but to go on an analytical process that documents the thoughts and reasons during the design process.

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