

## PROCEEDINGS OF THE PERFORMING SPACE 2023 CONFERENCE

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### Exploring the Spectator / Performer Interface: Architecture as a Catalyst for Interactive Theatre

*Edward Nilsson, AIA*

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# Exploring the Spectator / Performer Interface: Architecture as a Catalyst for Interactive Theatre

**Edward Nilsson, AIA**  
Architect and Independent Researcher

### Abstract

Using the archetype of the ancient theatre as a springboard, this paper explores whether contemporary theatre architecture can retain that traditional form yet intensify the relationship between spectators and performers. It proposes an alternative approach through a case study of a particular site: Grecian Garden in Yonkers, NY, chosen for its classical motif and symbolic representation of the birthplace of the ancient theatre. Adapting a theatre program to a classical garden overlooking the Hudson River offers an example of how the spectator/performer boundaries of the theatre space can be blurred to reach the goal of a more interactive and energized performance. For the spectators this can occur by entering and exiting the space across the stage, and for the performers by extending the acting area from the stage into the seating area to minimize the traditional fixed line between the two. In addition, by varying the steepness of the seating, or rake angle, the proposed geometry offers a subtle change in floor elevation between adjacent seats that individualizes each seat, and further loosens the uniformity and rigidity of flat rows. The case study example will be compared to a larger site, using the same geometry, to see if the increased scale of performance area can maintain proximity and interaction between spectators and performers.

*Keywords:* Architecture, interactive performance, spiral theatre.

## Exploring the Spectator / Performer Interface

This study explores a reinterpretation of the classical Greek and Roman theatre forms that allows for new kinds of interactions where the audience is no longer a passive observer, but active participants in the unfolding narrative. Physical space can be made an active component of the theatrical experience, and the design of the theatre — its entrance and exit, stage configuration, and seating arrangement — not only frames the visual experience but also shapes the emotional and physical engagement between performers and viewers.

### Figure 1

*Grecian Garden, Yonkers NY. Source: Creative Commons Attribution-ShareAlike 4.0.*



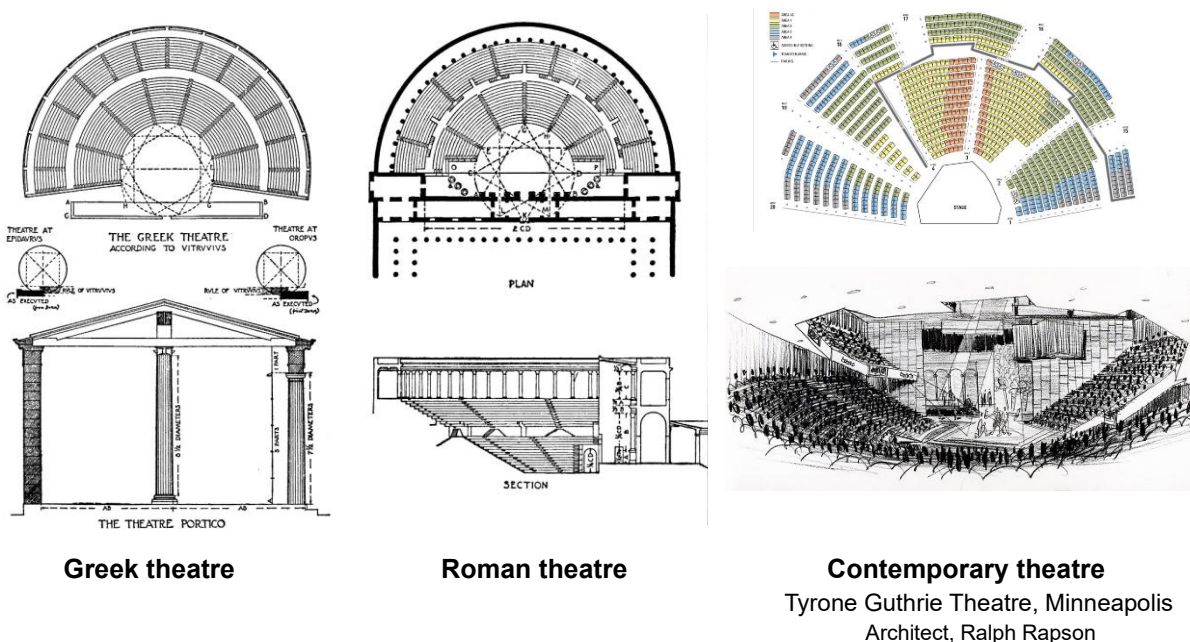
In rethinking the classical model, the Greek and Roman theatre form has a traditional fixed line separating actors and audience, a division of seating into equal pie-shaped sections, and uniform rake angle (steepness of seating rows). This has evolved in the mid-20th century with horizontal and vertical fragmentation of these elements for increased blurring of the line between actors and audience. In both classical and contemporary instances, the seating is typically arranged in a semi-circle around the stage to maximise proximity. This has ensured

that the audience could hear the voices and see the facial expression of the actors, thereby feeling connected to the performance, and which emphasises the communal aspect of theatre.

Theatre architecture of today has continued to reinterpret these traditions as it reflects contemporary culture. For example, the 1963 Tyrone Guthrie Theatre in Minneapolis, Minnesota, designed by architect Rapson, offers more than one rake angle, asymmetric single tier and double-tiered (balcony) seating, and seating areas of varying shapes (Figure 2). Director Guthrie saw in Rapson's balcony design how breaking down rigid symmetries and traditional spatial relationships could enliven the house, while preserving good sight lines, enhancing acoustics, and facilitating actors' aisle entrance and exit (Rapson, Hession & Wright, 1999, p. 148). Guthrie's focus on reinterpretation of the classics found a parallel in reinterpreting the theatre space itself. Using a case study of a particular site, Grecian Garden in Yonkers, New York, (Figure 3) a hypothetical theatre design explores how the architecture itself can influence one's experience of the performance.

## Figure 2

*The Greek theatre and Roman theatre. Source: 'Vitruvius: The Ten Books on Architecture,' The Contemporary Theatre. Sources: Top; theatre seating plan, Guthrie Theatre; bottom; sketch permission by Toby Rapson.*

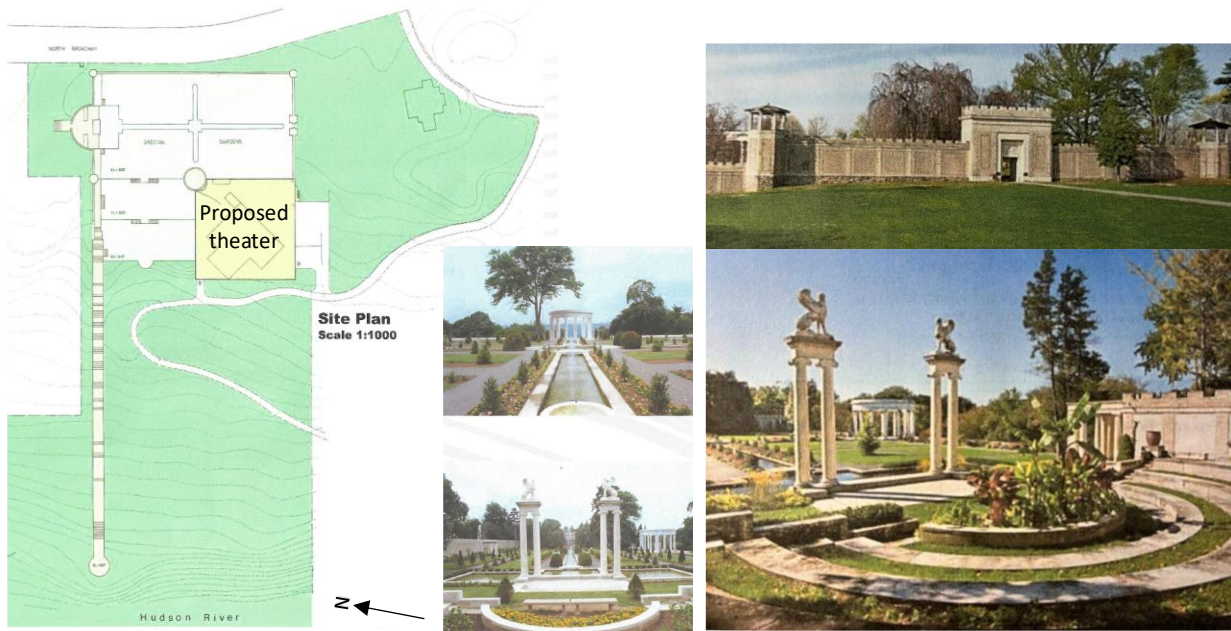


Grecian Garden was constructed between 1916 and 1940 in Yonkers, New York, at the estate of Samuel Untermyer, a prominent American lawyer and civic leader. Designed by architect and landscape designer William Bosworth as a classically themed site, it offers a particularly

favourable setting for adapting a theatre building to explore how the boundaries of the spectator/performer space can be blurred to reach the goal of a more interactive performance.

**Figure 3.**

*Grecian Garden site plan and photos. Sources: left plan by Edward Nilsson; 2 right photos by Jonathan Wallen; 2 left inset photos from Creative Commons Attribution-ShareAlike 4.0.*



Grecian Garden, as a segment of the overall Untermyer Park, was regularly opened to the public, hosted performances of noted dancers, actors, and musicians, and was considered to be one of the finest gardens in the United States. The Vista is a long descending staircase which runs from the loggia of the terrace down toward the Hudson River where it culminates in the Overlook of the river and the Palisades cliffs beyond (Figure 4).

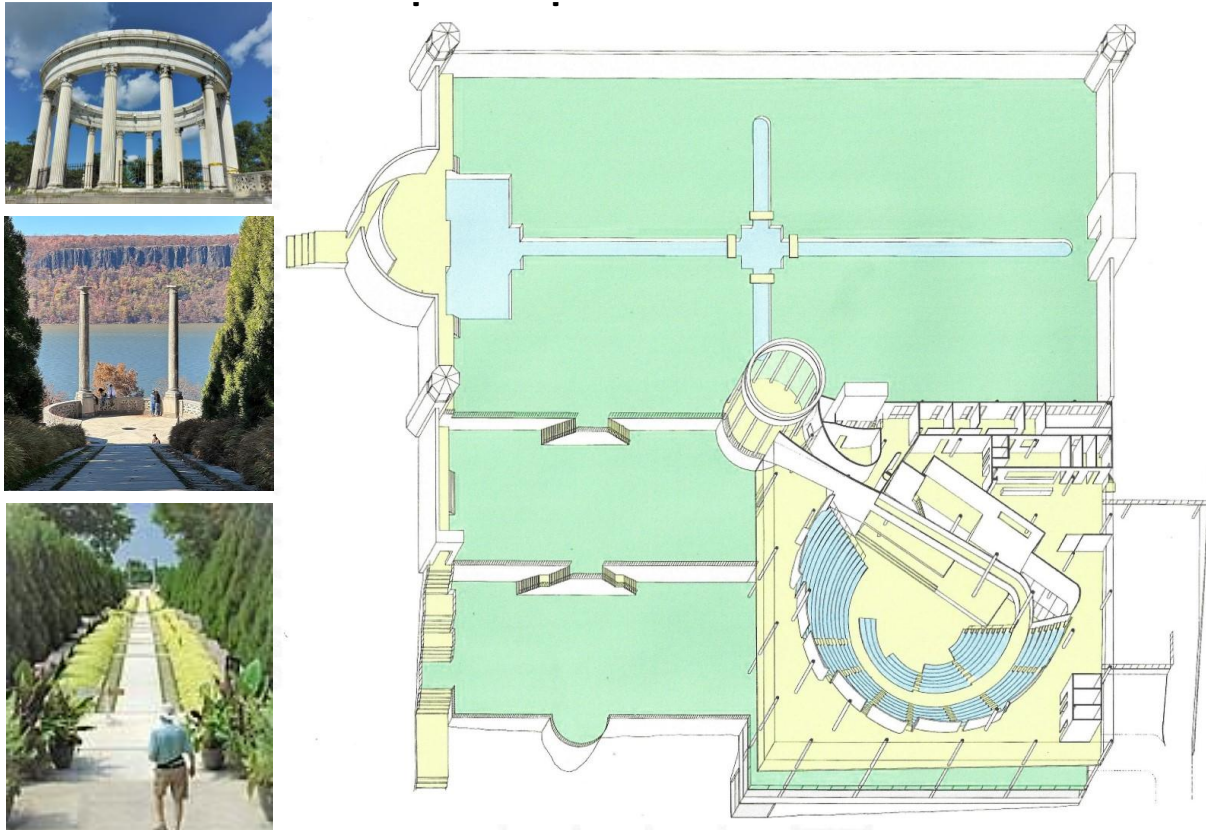
The walled-in garden is approached through a main gate based on Mycenaean motifs, over which is a carving of Artemis, Greek goddess of the hunt, welcoming all who visit. The garden is divided into four quadrants by a canal and fountain system, with the north-south canal axis terminating at a small open-air amphitheatre, and the east-west canal terminating at the “Temple of the Sky,” a tempietto made up of a crown of Corinthian columns topped by an entablature. Its intricate mosaic floor features the head of Medusa, the winged demon in Greek mythology. The circular colonnade draws one towards it revealing the main entrance portal to the theatre.

Upon entering through the circular colonnade and lobby, spectators approach the performance space by means of a ramp descending across the open stagehouse, then curving down through the seating area before merging with the orchestra/stage floor below. Similarly, the performers in the orchestra can extend the acting area from the stage up the curved ramp

into the seating area and upper stagehouse to signify a shared theatre space with the audience. As the entrance ramp spirals down two levels, the intermission gallery behind the seating echoes the ramp in descending along the window-wall to the outdoor terrace below (Figure 4).

#### Figure 4

*Proposed spiral theatre axonometric drawing by Edward Nilsson with 3-photos (from top left) 'Temple of the Sky' by Lionel Martinez, 'Lookout' by Magpieturtle, and 'Vista' by Beyond My Ken, Source: Creative Commons Attribution-ShareAlike 4.0.*

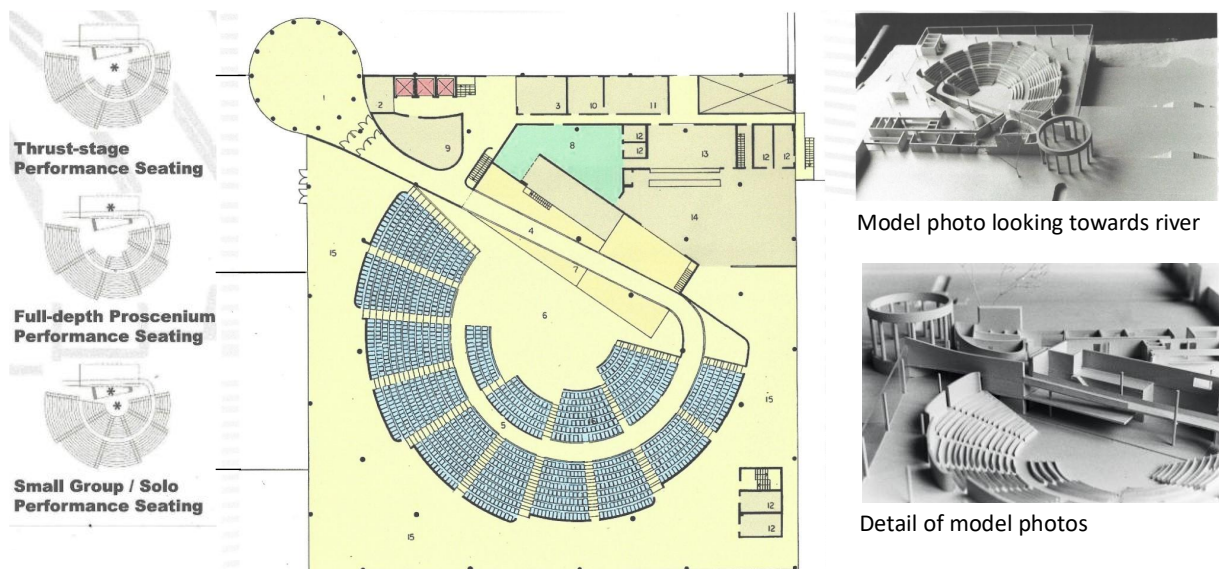


Each of the five pie-shaped seating sections fan out by several rows along their common edge, creating a stepped pattern along the perimeter of the main performance area (see Figures 4 and 5). This shifting suggests movement of the seating sections by opening the lower corners of each section to additional angular sightlines. The resulting stepped pattern diffuses the traditional fixed line, or “fourth wall”, between the performer and the spectator. While the U-shaped forms of both the ancient and contemporary theatres are broadly similar, a further variation in the contemporary theatres is in modifying the rake angle of its seating sections. This feature, found also at the Guthrie Theatre mentioned above, offers shallower or steeper sightlines as the spectator might prefer, and modestly increases the asymmetry of the interior space.

The parallel curved rows of seating all focus downward toward the orchestra/stage area where the principal action takes place. When the rake angle of seating is gradually increased across the theatre, the floor of each row slopes gently sideways as well. In such arrangement, every seat is differentiated vertically from neighbouring seats — on right and left side, and in front and back row.

**Figure 5**

*Types of performances (left), floor plan, and model photos. Source: Edward Nilsson.*



For a thrust-stage format, the stagehouse opposite the seating area may be screened off, as needed, for the duration of the performance (Figure 5). Alternatively, as a proscenium space the stagehouse can function with a traditional curtain, or even left exposed in its realistic setting. Smaller group or solo performances can adjust the scale and closeness of the audience to the performance area by additional seating in the orchestra area.

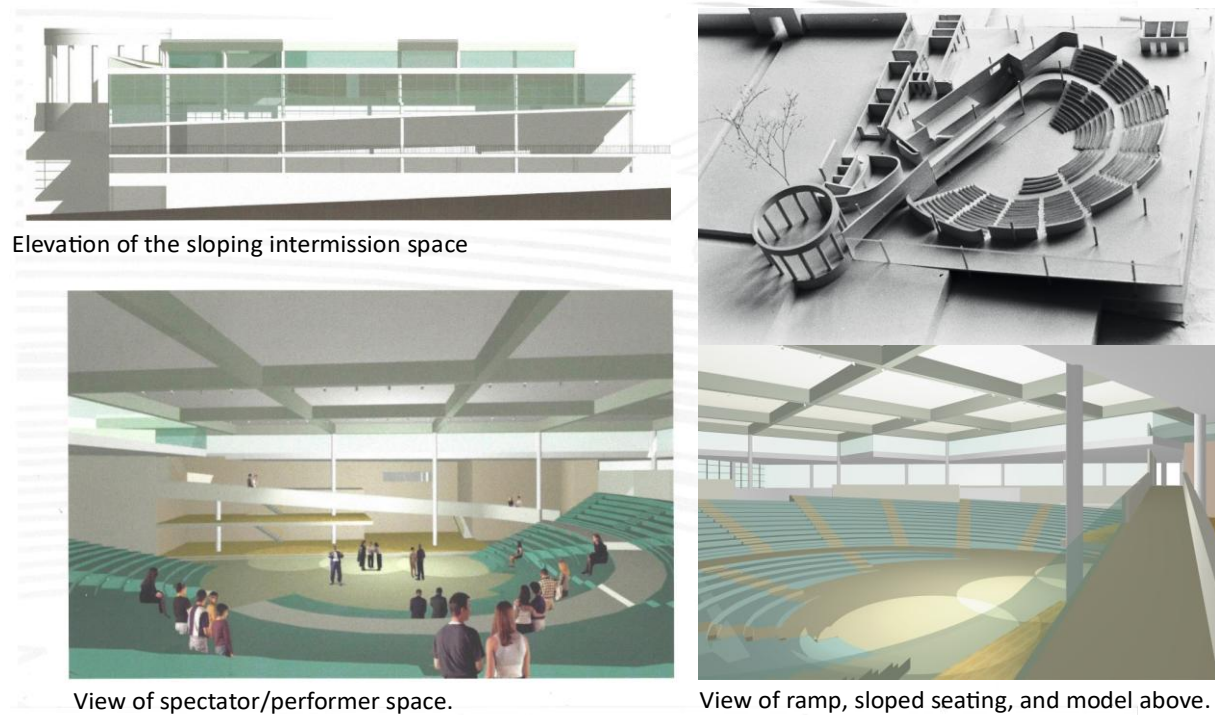
Using movement as a theatrical device, the ramp entrance offers an overview of the entire seating area, allowing the spectators, when seated, to imagine themselves where they were a moment ago as part of the backdrop to the stage. Both the ramp, coiling through the seating area, and the intermission gallery curving gently down to the outdoor terrace, enhance the perception of spiral movement as an activator of space in creating theatrical meaning (Figure 6).

Applying the spiral theatre concept to an open-air venue is a 2003 proposal for the World Trade Center (WTC) Memorial Park in New York City. The Grecian Garden theatre's seating capacity of 1,440 is doubled in the Memorial Park theatre's nearly 3,000 seats, however it also doubles the maximum sight line distance to the centre of the thrust stage from 58 feet to

approximately 120 feet. At such distance, it would likely compromise the visual intimacy of a play without video or audio enhancements, such would be found in large venue musical performances.

### Figure 6

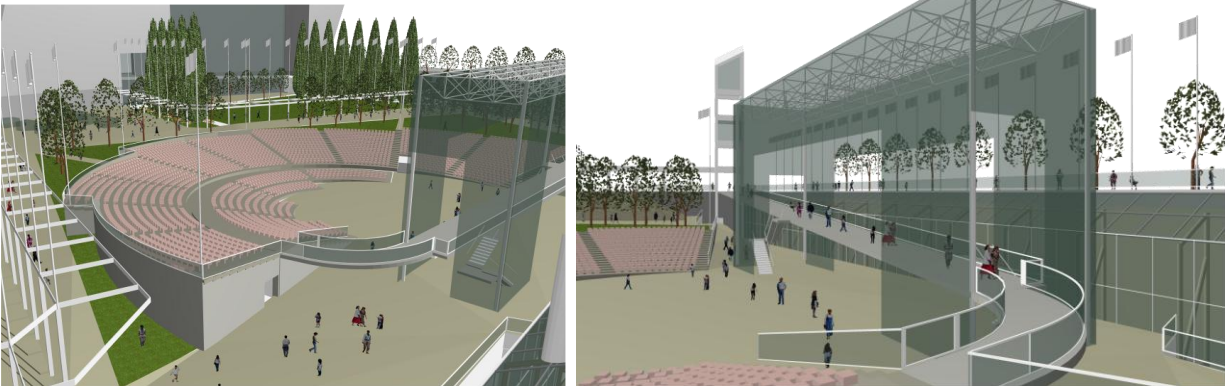
*Exterior elevation, interior views of theatre, and model photo. Source: Edward Nilsson.*



Similar to the Grecian Garden, access to the Memorial Park theatre is via a ramp through a symbolic stagehouse down to the seating and orchestra/stage area and a backdrop view of the 300-foot surviving WTC foundation wall that held back the pressure of the nearby Hudson River (Figure 7). Each seat of the theatre would be differentiated further with a name of a person who died in the 9/11 attack. As noted below in one of the commentaries after 9/11, theatre architecture can add meaning to the event:

Among the very highest honors awarded to an (ancient) Athenian citizen was the right to have his or her name inscribed upon a seat in the city's theatre. Politicians, generals, and others of distinction were granted the privilege by which generations that followed could read and remember the names of those who had contributed so mightily to their community. Let those who perished communally...be honored through a never-ending chorus of the living. A theatre filled with exhilarated and inspired, entertained and contemplative Americans encircled in one of the oldest architectural forms given to us by those who invented democracy itself. (Connelly, 2002).

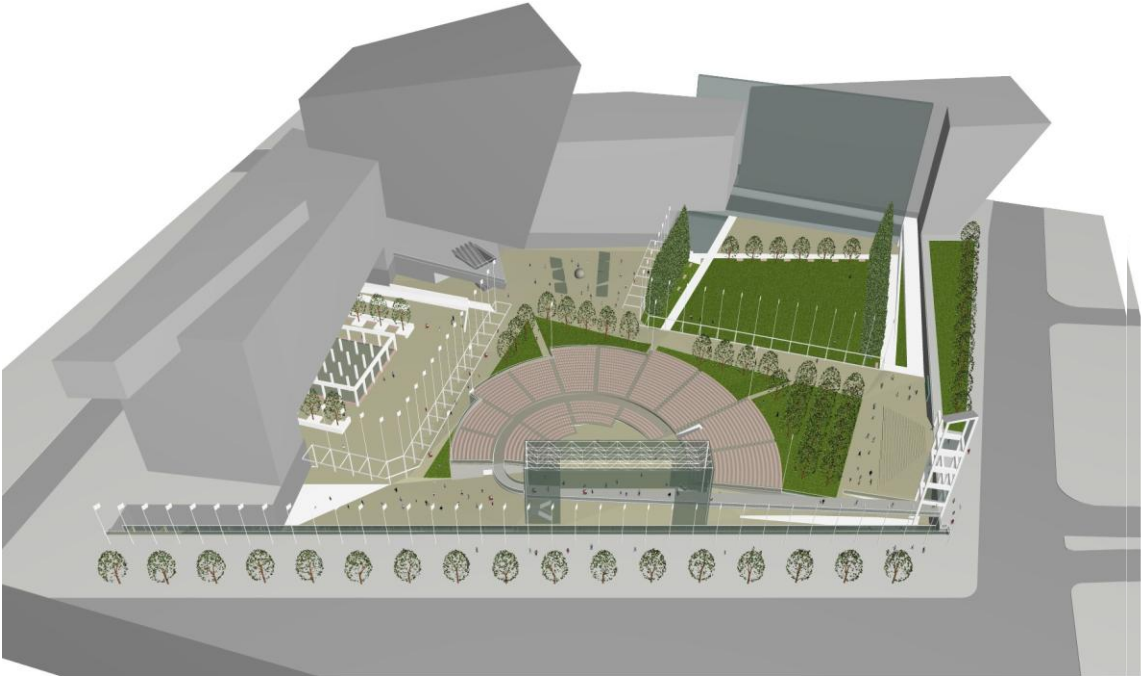
**Figure 7**  
*Proposal for World Trade Center Memorial Park, Source: Edward Nilsson.*



Ramp entrance through stagehouse to seating area

Proscenium and stagehouse

**Figure 8**  
*Proposal for World Trade Center Memorial Park, Source: Edwa Nilsson.*



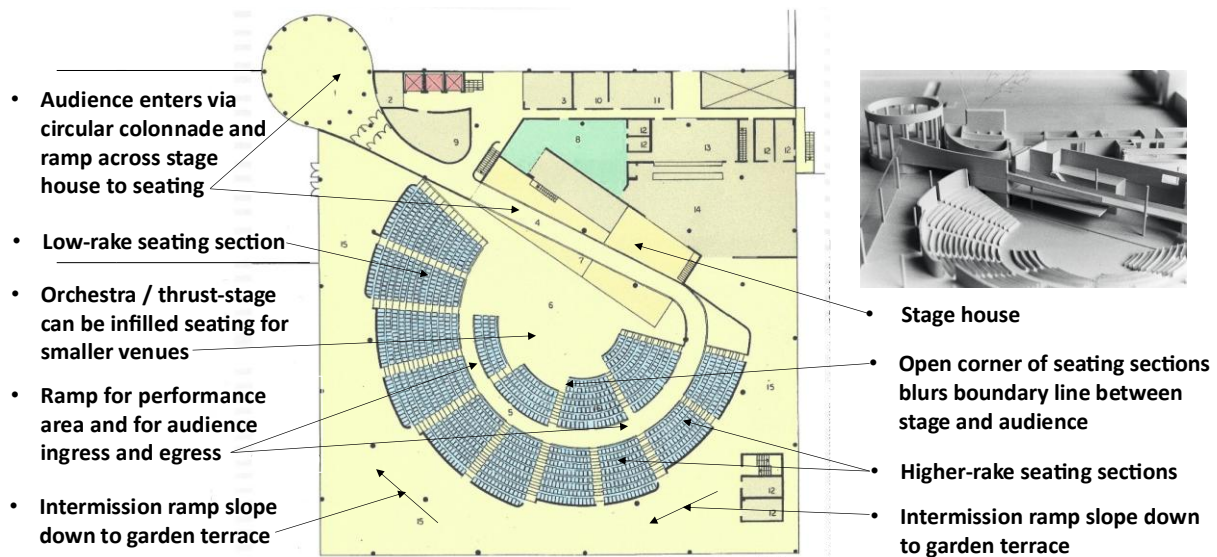
## Summary

The architectural features in the Grecian Garden and World Trade Center Memorial Park proposals aim at intensifying the relationship between spectators and performers through use of the following elements:

- Spectators enter and exit the theatre via ramp through the stagehouse enroute to their seat.
- Extension of the acting space into the audience area via spiral ramp.
- Open corner of the seating sections to blur the fixed boundary line, or ‘fourth wall.’
- Individualised seating through multi-directional sloping of floor.
- Varied rake-angle of the seating sections to differentiate sightlines and connectedness to the performance area.

**Figure 9**

*Architectural elements to encourage interactive performance. Source: Edward Nilsson.*



The proposed project exemplifies implied movement of people and architectural elements to provide a more dynamic setting for performances. Theatre is not just a performance but also a spatial experience. By rethinking classical forms and adapting them to contemporary architectural languages it is possible to create theatres that do more than house performances — they become part of the performance itself. The proposed Spiral Theatre at the Grecian Garden exemplifies how architecture can act as a catalyst for interactive theatre, activate space, and engage audience as active co-creators of the theatre experience. Ultimately, these proposals demonstrate that in retaining the recognizable form of theatre architecture, subtle manipulations of geometry and circulation can transform the spectator into an active participant in performance.

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