Approaching The Smokestack and Wall

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Abstract

The re-use of any architecture site, whether it is empty or still holding a presence in remaining elements, creates a connection with the past. Formed by a retaining wall and smokestack, an outdoor room is the destination from which two paths direct the inhabitant. This room divides the site and is surrounded by two buildings designed as a library.

Through the use of additional architectural elements, frame and column, the inhabitant is guided along the two paths through visual and physical markers. The inhabitant can either move through the building and find framed views of the smokestack and outdoor room, or move around the building, descending the site towards the outdoor room. This project uses a series of perspective drawings to show the designated paths from the street to the outdoor room.
Dedication

This thesis is in memory of my mother, Diane Stein. Her creativity as an interior designer is what brought me to architecture.
Acknowledgments

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Pittsburgh, Pennsylvania, the former steel manufacturer turned technology and healthcare conglomerate, holds remnants of its former self throughout the city. Signs of old industrial parks and warehouse districts can still be found surrounded by bustling neighborhoods and newly developed businesses. An example of this exists in the East End neighborhood of Squirrel Hill, where at the five-way intersection at Forward and Murray Avenues, a massive, 95’ smokestack stands tall.

The site held the Amoco Corporation during the late 19th century, and the smoke stack was used in powering the neighborhood block. After the Amoco Corporation moved, the site became home to the Italian restaurant Poli’s starting in 1921 as well as additional small business. The Poli’s building was built directly against the smokestack trapping it between the building and a retaining wall. The stack sat idle for much of the 20th century and remains so today. After a great fire in 2015, the building was demolished leaving the smoke stack and unveiling the retaining wall to the street.

With Pittsburgh’s many hills, quick elevation changes are a common city trait to its citizens. The retaining wall sits just behind the stack, holding a street twenty feet above the base of the smokestack. Rather than altering the retaining wall and demolishing the smokestack, the project questions how the stack and wall could relate to a building.
Research on smokestacks showed there is an opening at which a steam tunnel would connect approximately fifteen to twenty feet below grade. This opening formed the opportunity to occupy the smokestack. Rather than a courtyard at grade, the outdoor room is designed twenty feet below grade, revealing the opening of the smokestack. The user must descend the site around or through the building to arrive at the smokestack.

As the outdoor room began to develop, further exploration on how an inhabitant moves from the street to the room became critical. Through a series of perspective drawings, specific views are framed to guide the user along paths both within and around the building. Each view uses the site elements and additional building elements such as frame and column to lead the user further into the site in order to eventually confront and inhabit the smokestack.
The two buildings are separated to maintain a reveal of the retaining wall and smokestack to the street. The second floor extension and corner column draws the user towards the alley.
Perspective View
18" x 24" Ink on Drawing Paper
The alley between the library and neighboring building begins the descent towards the outdoor room with a slight change in grade. A partial view of the retaining wall attracts the user to move further into the site.
The frame placed along the exterior of the building extends towards the retaining wall without engaging it. The user follows the frame, moving parallel to the retaining wall, towards the exterior stair.
The user descends the stair parallel to the retaining wall and then turns to continue descending away from the wall. At the landing, the user loses sight of the stack in order for a reveal to occur.
After completing the staircase and fully descending twenty feet below grade, the user enters the outdoor room and is confronted by both the stack and wall, in addition to the larger frame and glass facade.
Approaching the building from the corner of the site provides a glimpse of the smokestack and the separation of the two buildings. By entering the building at the main entrance, the user begins their path to the outdoor room.
Once inside the building, the inhabitant turns within the lobby and views the corridor to the main study area. The large glass facade surrounding the outdoor room can be seen, inviting the user to get a closer look.
Along the glass wall, the inhabitant has views to the smokestack, retaining wall, the street, and the outdoor room. With this visual marker, the user is invited to either move upstairs for further views or to move downstairs to enter the outdoor room.
From the second floor balcony, an opening within the balcony’s edge invites the user to experience a framed view of the smokestack. Although the intended path invites the user to the outdoor room and to the stack, there are other opportunities to interact with it from within the building.
Perspective View
18” x 24” Ink on Drawing Paper
After moving through the library and to the basement, the user enters the outdoor room, and is confronted by the exterior frame, the stack, and the wall. The user is aligned with the alternative entrance to the room as another path to exit.
Appendix: Explorations and Discoveries

Circle and Line Screen Print
18” x 24” Ink on Card Stock

Stack and Wall Graphic
18” x 24” Charcoal on Newsprint
Early explorations of the smokestack’s use led to a primary focus of placing someone within it. In order to maintain the form of the stack, the design formed a basement condition leading to the smokestack. As iterations of the building form began, there was difficulty maintaining a continuous building around the smokestack. Rather than moving users into the darkness twenty feet below grade, the design of the outdoor room began, opening up the space as a welcoming destination.
Study Model Photograph

Preliminary Studies
18” x 24” Graphite on Newsprint
Street Elevation
24" x 36" Graphite on Tag Board
Outdoor Room Section Graphic
18" x 24" Graphite on Bristol
Perspective View
18” x 24” Graphite on Drawing Paper
Sources

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All drawings and photos were made by the author unless noted otherwise