The Parachute Pavilion: an Open Design Competition for Coney Island

Arch 384
Competition Elective
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The goal of the Parachute Pavilion competition is “to generate innovative
design proposals for a project that contributes to a 21st-century vision for Coney
Island”\(^1\). The dazzling dream-like quality of Coney Island in its original days to a
new concept for the Coney Island of today can be a juxtaposition of ideas that
when merged will come to create a new and dynamic environment for New
Yorkers and visitors alike. One of the goals of this competition is to be able to
provide an attraction to bring visitors to Coney Island year round while also
preserving and focusing on the Parachute Pavilion.

The history of the Parachute Pavilion and Coney Island has been
documented countless times. In the mid 1800’s Coney Island became accessible
to the urban population of New York. From its conception to the present it has
played a role in the lives and imaginations of New Yorkers and inventors. It
became a playground for the urban workers of Manhattan.

Coney island allowed for a break from the concrete jungle and was so
busy that they had to open the beach up at night to respond to the growing influx
of people. Steeplechase Park was the product of George Tilyou’s imagination
and the first, and longest lasting, amusement park on Coney Island.

\(^1\) Van Alen Institute website
\(^2\) Steeplechase1 Website
A fire consumed the park in 1907 and was rebuilt in 1908. The Parachute Jump and the Steeplechase Pier are the only pieces left of the Steeplechase Park. History helps shape the design of the new pavilion. The forms, materials and energy from the old Steeplechase Park and the rest of the amusement area influenced the design.

The program for the pavilion was to include a restaurant, a store, a multi-use exhibition space, and offices for local advocacy groups. This allows for the building to become a meeting hub for all areas surrounding the Coney Island boardwalk. With the possibility of bringing people onto the boardwalk during the colder months when the beach and the outdoor amusement parks become less of an attraction.

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3 Denson, p. 212
4 Steeplechase2 Website
I looked at many different examples of building and construction types when thinking of the design for the building. Circuses were a major element to provoke thought and exploration, as well as, other amusement parks, cultural buildings, and meeting hubs. Going back to the origins of entertainment for this area has an appealing quality. The tent like structures, the experimentation with concepts and materials, using the “over the top” as a means to pull in crowds of people all allowed for references to come as buildings and as other types of sources as well.

The first thing I looked at was the history of the site and the typology of amusement parks and circuses. There always seemed to be a gimmick of some type in order to get people to a specific attraction. The use of bright colors, big graphics, and interesting building materials and shapes come to define the different attractions. Even Luna Park added thousands of light bulbs to their building facades as a way to pull the crowds from the other amusement parks at night. People would flock to see the spectacular light displays. One of the ideas to bring people to Steeplechase was the building of the Parachute jump. The adrenaline rush and amazing panoramic views brought people to the park.

I wanted to integrate some of these ideas into the design of the pavilion. The main idea that jumped out at me was the circus tent. This idea evolved into that of a tensile structure. The goal was to have a building that blended in with current Coney Island and not detract from the landmark Parachute jump but yet was still a draw to people. At Expo 67 tensile structures dominated the park. Many architects became interested in the forms tensile structures could allow.

5 Van Alen Institute Website
Frei Otto’s German pavilion was one of these designs. He used lightweight materials that produced a unique and beautiful space, unlike the box buildings of the time. It was almost a modern step up for the idea of the circus tent. It was quick and easy to set up once all the development had happened. It also became an installation that was easy to set up in many different topographies allowing for mobility.

Frei Otto continued his work with tensile structures. Further adapting his ideas and trying to find a way to make it less expensive and just as beautiful. After looking at his work it became apparent that a tensile structure could become the intermediate between the old school circus tent and the new modern idea of a tent like structure.

This wasn’t the only example from Expo 67 that was a precedent to this project. Stated before Expo 67 was dominated by tensile structures. Buckminster Fuller’s geodesic dome was a dominant structure. It was the first of his domes that was a ¾ dome and not the usual half dome that he produced before. It also

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6 Expo 67 Website
became the most complicated of his domes with the use of retractable shading screens that were run by computers.

The Netherlands pavilion is also worth noting because of the architect's very rigid idea of space framing. It was also a very portable building since no welding or riveting was used. If the building needed to expand you could just add more pieces.

Falling back into a more organic style of tensile architecture. In looking for examples of curving structures I moved back towards the tensile structures of Frei Otto. The experimentation done with forms and materials started to express building forms in many different ways.

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7 Expo 67 Website
8 Expo 67 Website
His work in Expo 2000 for the Japan Pavilion began to really show off the beauty of his design from the interior perspective. The intricate framework allows for the structure to really become a part of the design of the space. Not only is the use of the space acting as a draw for people but the space itself also brings them in.

Another type of building looked at for this project had to do with it's use. The Congress Hall in Berlin is a building that's use has changed but the form is still the same. Once a Congress Hall it is now called the Haus der Kulturen der Welt, House of the Cultures of the World.

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9 Selected works of Frei Otto Website
10 Expo 2000 Website
11 Congress Hall, Berlin Website
This building has the ability to be set up for many types of exhibitions to show the different cultures though it was originally set up for congress. It was intended to serve as a symbol of freedom with the ability to be seen from East Berlin. Even the shape of its roof was a symbol. As architect Hugh Stubbins proclaimed, “the roof upheld the promise that there would be no restrictions on the freedom of intellectual work”.\textsuperscript{12}

The form and shape of the roof allows for an expanding interior. Projecting views not only out but up as well. With a project like the Parachute Pavilion the use of structure to from upward views is paramount when looking towards the Parachute Jump.

\textsuperscript{12} Haus der Kulturen der Welt Website
\textsuperscript{13} Congress Hall, Berlin Website
\textsuperscript{14} Congress Hall, Berlin Website
The typologies, architects, and buildings that form the precedents for the Parachute Pavilion competition are diverse. They show an idea, the circus and amusement parks, a structure, Frei Otto and his tensile structures, and a use, the House of Cultures of the World. Bringing these ideas together can hopefully be seen in the project presented. The history of the site has helped inform the project itself. With its turbulent life, Steeplechase Park is forever an area that was on the forefront of invention. Even with the proposal of this pavilion it brings Steeplechase and the Parachute Jump to the front again in trying to find a way to bring people back to Coney Island in summer and winter as well.

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