



Preservation as Provocation: Rethinking Castle Pinckney

Acknowledging Typology

The competition brief for *Preservation as Provocation: Rethinking Castle Pinckney for the 21st Century*, asked us to create a destination of an historical site, which currently goes un-recognized. As all architecture arguably “creates a destination” a clearly defined typology for the ambiguous outline wasn’t self-evident. Our design approach was research based; understanding the city of Charleston; it’s history, the culture, the people and the role the castle played. The goal was to get people to the island while preserving its natural beauty and fragility. We achieved this by creating an entertainment destination, an area for the countless events that currently take place in and around the city. The design was a response to the issues of site strategy and our research.

*“The works of the past always influence us, whether or not we care to admit it, or to structure an understanding of how that influence occurs. The past is not just that which we know, it is that which we use, in a variety of ways, in the making of new work.... The typology argument today asserts that despite the diversity of our culture there are still roots of this kind which allow us to speak of the idea of a library, a museum, a city hall or a house...”*¹ After reading Hancock’s quote it became clear that I was being challenged to examine our design for the competition of Castle Pinckney for elements of established cultural typologies. Upon re-examination of our design, the typologies that appear in our work are the typologies that have taken root in our culture around our love of leisure and entertainment.



Renders of the design showing leisure and a platform from which to watch regattas and light shows and the harbour.

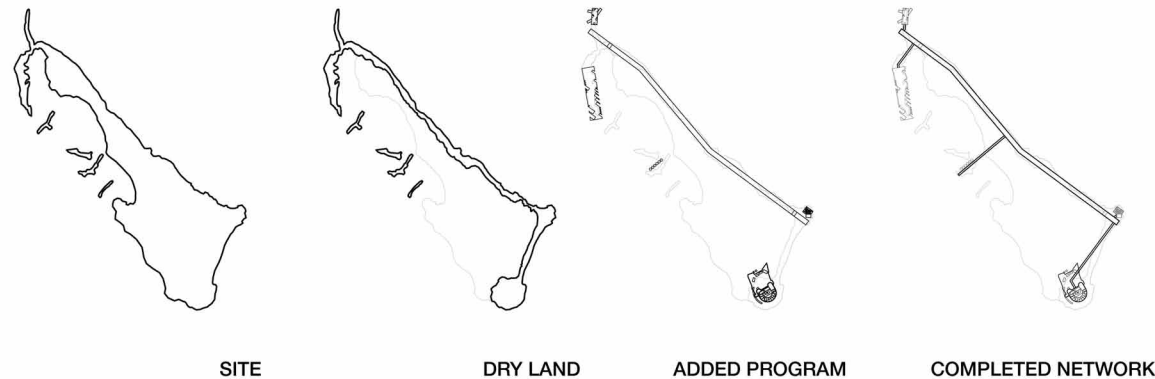
*“The continuity of these ideas of type, such as they are, and the esteemed examples which have established their identity and assured their continued cultural resonance, constitute an established line of inquiry in which new work may be effectively grounded.”*² To “effectively

ground” new work, such as our design for the competition, an understanding of typology and a connection to “esteemed examples” will reveal an, originally unconscious, influence of the typologies of the stadium and the park.

A typology is an idealized concept and form accepted and defined by culture, which is used to describe architecture. There are generally fundamental elements in a particular combination, which make up an understood typology. For example, a stadium will have mass accommodation for transportation vehicles, multiple controlled entrances, seating from which to view a platform and a platform which host’s entertainment; it is typically round in nature for maximum occupancy and is an adaptable structure. A park is generally free of defined programs and is a space to stroll, relax and enjoy being within nature. While our design process did not include a conscious search for and application of a typology, on re-examination and reflection, it is clear that we have incorporated typology elements of both the park and the stadium.

Understanding Context

Castle Pinckney, located on Shutes Folly Island, was built as a defense system for the city of Charleston in 1809, but having seen no significant action during its service as a battle fort, it’s historical presence has been forgotten. There were various existing obstacles that required recognition in the design process of the island. Physically, the Castle is the only built structure on the site, with no infrastructure to support a permanent population and only accessible by private boat. However, its infrequently visited shores have made it an ideal habitat for many bird and fish populations. The island’s topology is low lying and marshy with high tide occurring twice a day. The area of Charleston is hurricane prone, requiring the construction of a durable structure. Programmatically, the presence of Fort Sumter, only a mile away, is the major historical civil war attraction, leaving Castle Pinckney’s most evident function as an historical site redundant. Since the castle does not independently inspire enough interest as an historical site, to economically justify it’s preservation, an additional primary program must be implemented that will attract the general public to it’s shores. Our research showed that the residents of Charleston come together for many art, sport and cultural events throughout the year. Re-imagining the castle and the island as an extension space for these events would bring people to the island. We will see that, to convert the island into an entertainment destination, we, all unconsciously, used commonly accepted elements of a stadium. We also needed to preserve the natural elements of the site for the leisurely enjoyment of the visiting public. This park-like setting was achieved through the implementation of sustainable infrastructure effected through the use of modular construction. To interpret the concept within the context of typologies, the elements of the design must be broken down.



Elements of the design.

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Method: Modularity

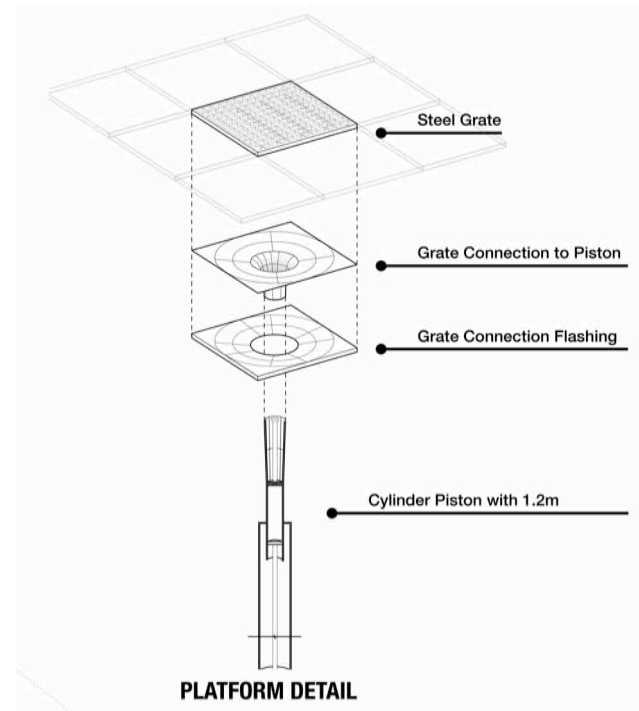
Adaptable architecture on the city scale is in constant study; “adaptive urban meta-system that can serve as a platform for providing the citizens with a framework (interface), within which they can declare their own activity-oriented combinations, thus creating customized spatial alternatives.”³ This is what we aimed to create on a smaller scale; an adaptable framework that anticipates a continuous fast transformation of space to support the introduced activities to the island.

The idea is a basic flexible ‘spine’ which can accommodate any event supported by sustainable low-impact systems. The main structure is a raised pedestrian platform that sits on a continuous span of dry land, it extends from the north end to the south end of the island and is referred to as the Super Bar. The Super Bar is a generic core; everything connects to and is supported by this main infrastructure. The 2012 MoMA PS1 installation, Wendy, most reminds me of an architecture which is supported by an infrastructure. The idea of ‘scaffolding’, as a structure used to support the circulation around a building for the purposes of accessing, building, repairing etc. was discussed as a goal for the design. Scaffolding is light, and relatively transparent. The design aims to be a structure, which is modular in nature and efficient in structure. Wendy uses a “simple, inexpensive construction system: the scaffold is deployed efficiently to create a 70’ x 70’ x 45’ volume to form the largest surface area possible.”⁴ The structure supports different functions; “Spiky arms made of the nylon fabric will reach out with micro-programs like blasts of cool air, music, water cannons and mists to create social zones throughout the courtyard.”⁵



MoMA Ps1 Wendy. Scaffolding is an efficient structure which supports different functions.

The Super Bar is designed to be able to adjust to whatever event it is accommodating. Its structure is split into three main strips; the eastern strip of the platform stores a series of floating docks which can be spun out over the water to dock smaller boats that may need to access different parts of the platform. The middle strip is the service shaft, which provides potable water and electricity along the Super Bar. The western strip is an adjustable grid that can be raised from floor height to seat height and table height (0m to 1.5m), which provides a customizable area for regular use.



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Typology: Stadium

Due to the intended program, the island will become an entertainment destination; it will provide a vantage point for events happening in the harbor and will be a platform from which to hold events. The typology represents a stadium, a structure that provides for the gathering of patrons who will be seated and entertained by spectacular shows put on in a space convenient for viewing. The Bird's Nest in Beijing by Herzog & de Meuron is the most relevant stadium to our design because the structure allows an architectural integration that was aimed for in the Castle Pinckney design. "Façade and structure are identical. The structural elements mutually support each other and converge into a spatial grid-like formation, in which façades, stairs, bowl structure and roof are integrated."⁶ Spatial extensions are attached to the Super Bar on the residual dry land to meet essential program requirements, similar to the Bird's Nest. "Since all of the facilities – restaurants, suites, shops and restrooms – are self-contained units, it is largely possible to do without a solid, enclosed façade."⁷ The extensions; a main dock for ferries and larger boats, water treatment for potable water, solar power for electricity, a viewing deck and the castle; complete the network. Two pavilions at each end are the thresholds of the Super Bar. They are the only permanent enclosures on the island, which also contain the restroom facilities. In between the thresholds is the Super Bar, an adaptable core that accommodates seating for patrons to view regattas, firework displays and light shows that take place in the harbor which acts as the performance area.

Visitors will step off the ferryboat on to the main dock, which leads them through the entrance pavilion. As visitors walk into the entrance pavilion their view is directed towards Castle Pinckney. Framing the historical feature of the island in this way will initiate a curiosity of the castle. As they make their way to the castle along the Super Bar, people can opt to view a performance taking place in the harbor or continue on their leisurely way to the castle. Although the extensions are contained units, which support the platform, much like a stadium would have support, they also have characteristics that would support the typology of a park.



Herzog & de Meuron National Stadium is formally a typical stadium yet its structure and program elements are integrated.

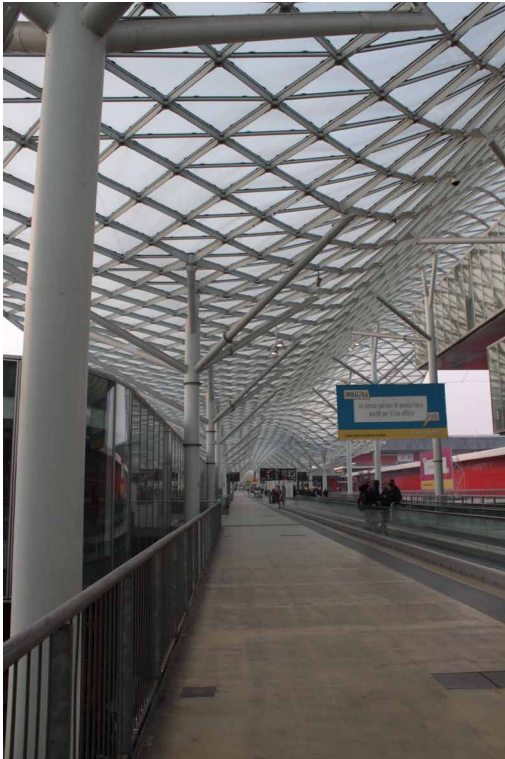
Typology: Park

When considering the ideal landscape area, "The site's character was to be revealed through design. That editing - through amplification, subtraction, distillation or compression-brought the found site's latent qualities and phenomena into clearer focus."⁸ The design aimed to harmonize the site, the castle and the added program. The design functions and has the elements of a public building with program and a supporting core but exists without the walls and enclosures of a traditional building. This allows the structure to integrate with the island in an unobtrusive way. The low lying platform will be virtually invisible when observing the island from a distance; it will appear as if no alterations have been made, which means an undisrupted view of the island. However, the discrete structure will allow the island to be transformed, as needed which means a new image for the island. It also allows people to access the island much as they would walk through a park while maintaining the pristine nature of the island.

As an extension of the spine, the castle becomes a program that attaches to the Super Bar. The removal of the existing earth would most likely compromise the structure of the castle. Its deteriorating condition would mean an expensive excavation. Instead of revealing the castle below a grid is overlaid with the same flexibility as the Super Bar. The entrance would be dug out to its former level, restoring the experience of the original arched entrance to the castle. To minimize the disruption of the ruins, the platform immediately raises to the top of the castle. At this height, visitors will share a similar experience to the soldiers who would have been scouting the waters. As a historical reference the raised platform will have overlaid outlines of the various modifications to the castles layout through time. The outlines will produce extensions to the platform as past

forms are referenced which no longer exist. These extensions create additional viewing platforms or fishing decks. The relationship between new and existing structures aims to create programmatic relationships and architectural experiences, which previously did not exist. The glass canopy intervention at The Milan Trade Fair by Massimiliano Fuksas, is an applicable example to our design because it is a re-imagined path that seamlessly harmonizes both existing and new architecture. It's form and program can be described as "The form of the veil is derived from constant altimetric variations just as they are found in the natural landscape such as 'craters', 'waves', 'dunes', 'hills'. As a natural landscape the shape is never repetitive, giving the visitor an animating, continuously varying perspective."⁹

The castle, then, together with the Super Bar, extensions and Pavilion have the typology elements of a park, in that they provide access, in a minimally invasive way, to a natural setting complete with facilities to encourage people to enjoy the area in a leisurely manner. Patrons may stroll through the site, explore the Pavilion and the castle and even stop for a picnic should the desire move them.



The Milan Trade Fair by Massimiliano Fuksas.

Summary

Although the precedents provided are a far stretch in program and form to the final design proposal for Castle Pinckney and its site, they address the issues most important to us in the design; preserving the natural site with minimal architecture, while providing a platform for which to support the desired population of the site. We feel that the introduction of an adaptable, low impact, structure for events in Charleston will engage the site in a successful and appropriate manner.

¹Hancock, John E. "Between History and Tradition: Notes Toward a Theory of Precedent." Harvard Architectural Review: Precedent & Invention 5 (1986)

² Hancock, John E. "Between History and Tradition: Notes Toward a Theory of Precedent." Harvard Architectural Review: Precedent & Invention 5 (1986)

³ "Adaptive Cities." T?F. <http://www.thewhyfactory.com/?page=thewhy>

⁴ "Wendy Opens at MoMA." Arch Daily. www.archdaily.com/249746/wendy-opens-at-moma-ps1hwkn/

⁵ "Wendy Opens at MoMA." Arch Daily. www.archdaily.com/249746/wendy-opens-at-moma-ps1hwkn/

⁶ "The National Stadium- Beijing." HERZOG & DE MEURON. <http://www.herzogdemeuron.com/index/projects/complete-works/226-250/226-national-stadium.html>

⁷ "The National Stadium- Beijing." HERZOG & DE MEURON. <http://www.herzogdemeuron.com/index/projects/complete-works/226-250/226-national-stadium.html>

⁸ Burns, Carol, and Andrea Kahn. "Site Citations: The Grounds of Modern Landscape Architecture." In Site matters: design concepts, histories, and strategies. New York: Routledge, 2005. 102.

⁹ "Massimiliano and Doriana Fuksas | Milan Trade Fair." Arthitectural.com. <http://www.arthitectural.com/massimiliano-and-doriana-fuksas-milan-trade-fair/> (accessed August 22, 2013).

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- "Wendy Opens at MoMA." Arch Daily. www.archdaily.com/249746/wendy-opens-at-moma-ps1hwkn/ (accessed August 22, 2013).

Image References

i. Castle Pinckney Competition Brief

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- ii. Aurelia Adams + Matthew Davis Castle Pinckney Render
 - iii. Aurelia Adams + Matthew Davis Castle Pinckney Render
 - iv. Aurelia Adams + Matthew Davis Castle Pinckney Mapping
 - v. Photo Credit: Matthew Davis
 - vi. "Wendy Opens at MoMA." Arch Daily. www.archdaily.com/249746/wendy-opens-at-moma-ps1hwkn/
 - vii. Aurelia Adams + Matthew Davis Castle Pinckney Detail
 - viii. "The National Stadium- Beijing." HERZOG & DE MEURON. <http://www.herzogdemeuron.com/index/projects/complete-works/226-250/226-national-stadium.html> (accessed August 22, 2013).
 - ix. "The National Stadium- Beijing." HERZOG & DE MEURON. <http://www.herzogdemeuron.com/index/projects/complete-works/226-250/226-national-stadium.html> (accessed August 22, 2013).
 - x. Photo Credit: Aurelia Adams
 - xi. Photo Credit: Aurelia Adams