Obsolete Architecture: Revitalization Along a Spectrum of Utility

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Obsolete Architecture.
An issue that exists within the world of architecture is that, today, a gradually increasing portion of the built environment is becoming obsolete. A quote that perfectly frames this issue is, “Everything that is static is condemned to death; nothing that lives can exist without transformation...” On the one hand, with the mentioning of death, there is an implication of permanence – that nothing can be done. On the other hand, with the mention of transformation, there is an insinuation of the potential for revival. [Something of which acts as a driving force for this project – revitalizing obsolete architecture].
“Everything that is static is condemned to death\(^1\); nothing that lives can exist without transformation\(^2\)...”

Lars Spuybroek & Maurice Nio

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1. Death implies permanence, that nothing can be done.
2. Transformation insinuates the potential for revival.
With these views in mind, my thesis originally focused on understanding the potential contemporary significance of currently obsolete infrastructures in architecture specifically through strategies developed or put forth by Jason Payne - nullification, adaptation, indifference, and ambivalence [along with the subsets that accompany these terms]. While these strategies are still very important in regards to understanding how to approach obsolete architecture, I have shifted my focus...
*Jason Payne, "Projekti Bunkerizimit: The Strange Case of The Albanian Bunker"
I am still focusing on the potential contemporary significance of currently obsolete infrastructures in architecture, but I am positioning obsolete architecture along a spectrum – a spectrum of utility where obsolescence exists within a middle ground between usefulness and uselessness [which I will elaborate on further in a little bit].
Before continuing, I feel it is important to clarify the obsolescence that I’ve repetitively mentioned. For me the term obsolete is not only something that is no longer produced or used, but also vestigial: a small remnant of something that was once much larger. When we look at examples of obsolete architecture, we can see that the ‘much larger’ part is the realm of architecture itself, and the remnants represent a range of different types – cultural obsolescence, civic obsolescence, and infrastructural obsolescence.
CULTURAL

Fig. 1

CIVIC

Fig. 4

INFRASTRUCTURAL

Fig. 7

Fig. 2

Fig. 5

Fig. 8

Fig. 3

Fig. 6

Fig. 9
I am particularly interested in this third category (infrastructural obsolescence) because of the temporality associated with it. Unlike the other two categories, infrastructural obsolescence is representational of something that was commissioned in the heat of the moment – such as a defensive mechanism during a war – but as soon as the war ended, the infrastructure became a ghost within the built environment. An example of this, and my focus, is the naval fortification (specifically those found along the coast of the Northeastern United States).
**fortress**  | ˈfôrtrəs |
noun

1. a military stronghold, esp. a strongly fortified town fit for a large garrison.

2. a heavily protected and impenetrable building.

3. figurative - a person or thing not susceptible to outside influence or disturbance.

Before delving into how I intend to approach intervening with naval fortifications, I want to step back and explain my position in regards to and in comparison with other academics and practitioners. An issue that I originally struggled with was separating myself from my resources, and establishing my own identity. To help make this more clear (both for myself and for the sake of grounding the project) I have come up with a template to better understand my resources and ultimately grow and divert myself from relying too heavily on them. Put simply, this method acknowledges an architectural designer or theorist but distills their work into area of interest, methodology, and relevance to the discipline.
NAME

RELEVANCE

METHODOLOGY

AREA OF INTEREST
Some examples of this template include Aldo Rossi (who I am intrigued by his methodology of pathological vs. propelling agents), Carlo Scarpa (who I am intrigued by his methodology of interruptions and incisions, as well as his contribution of holding historical significance in high esteem), Paul Virilio (who I am intrigued by his area of interest, defensive architecture), and of course Jason Payne (who I am intrigued by his four strategies and his focus on obsolete architecture).
CARLO SCARPA

Incisions and Interruptions

Design as a reflection of Historical Significance

Close attention to Detail and Materiality

ALDO ROSSI

Pathological Vs. Propelling Agents

Acute understanding of Purpose and Context

Typology

PAUL VIRILIO

Categorizing/Cataloging defunct forms of architecture (Bunkers)

Environment as mediated by warfare

Defensive Architecture

JASON PAYNE

Nullification, Adaptation, Indifference, Ambivalence

Obsolete Architecture (Bunkers)

Creating Commentary & Critique
Using this template or format allowed me to make a clearer contention as to where I position myself. My area of interest is understanding and revitalizing obsolete architecture (specifically naval fortifications), my methodology will be an implementation of extremes - physically and organizationally making alterations that emphasize usefulness and uselessness, and my relevance to the discipline will be exploiting an architectural spectrum of utility with the consideration of temporal character (historical significance).
Implementation of Extremes (physical alterations to emphasize useful and useless)

Exploiting an architectural Spectrum of Utility (with consideration of temporal character)

Revitalizing Obsolete Architecture (Specifically Naval Fortifications)

Payne

Rossi

Scarpa

Virilio
In addition to establishing and understanding what my identity is, some of the driving forces that have resultantly arisen are radicality and use.
RADICALITY

USE
My pursuit for radicality developed from my desire to understand the nuances of my new spectrum. Put simply, radicality involves pushing the extremes so that you can understand the obsolete architecture – draw attention to its ambiguity, its muteness or neutrality between useful and useless. To help understand what radicality could mean or represent, I started looking into several types of radical design such as the paper architecture put forth by Boullée, SuperStudio, and OMA. From this I gathered that each focused in some way on the issue of scale, as well as experience, a level of invasiveness, and perception.
RADICALITY: DESIGN

Boullée
- SCALE
- EXPERIENCE

SuperStudio
- SCALE
- INVASIVE

OMA
- SCALE
- PERCEPTION
Also, if we return to some of Jason Payne’s previously mentioned strategies, you can recognize radicality as being a reflection of adaptation and transformation – using shells of older buildings to project alternative programmatic function.
RADICALITY: DESIGN

Fig. 20

Fig. 21

Fig. 22

ADAPTATION | TRANSFORMATION
You can also recognize radicality in Rachel Whiteread’s work which focuses on ambivalence and interpretation where everyday objects are self-reflectively analyzed to understand their innate qualities and to create a commentary from them.
RADICALITY: DESIGN

Fig. 23

Fig. 24

AMBIVALENCE | INTERPRETATION
In terms of my other driving force, use, I initially began by considering the concept in the simplest of terms. If I am investigating a spectrum with uselessness on one side and usefulness on the other, what does use mean? In one scenario, use could represent visual cues. For instance, the number of lights being on in a building could allude to how used the building is.
USE: VISUAL CUES
In another scenario, use could represent physical occupation. In this case, the number of people that exist within a space ultimately determines how used it is.
USE: OCCUPATION
With my newly crafted identity, and these two driving forces established, I want to summarize my project’s revised focus. With my interest in obsolete architecture, I am claiming that architecture exists along a spectrum of utility. It is insinuated that obsolete architecture (naval fortifications) is subjugated to one side of the spectrum (uselessness), however, it is not yet [completely] dead. It instead exists in a middle ground between usefulness and uselessness. I am contending to exploit the extremes, and in doing so, draw attention to the ambiguity of obsolescence in an effort to generate modern functionality.
Original ‘Focus’: I am interested in understanding the potential contemporary significance of currently obsolete infrastructures in architecture and through strategies of nullification, adaptation, indifference, and ambivalence determine how they can be brought into a modern relevance.

Revised ‘Focus’: I am interested in understanding the potential contemporary significance of currently obsolete infrastructures in architecture, and I believe it is reasonable to contend that there is a spectrum on which a work of architecture exists - a spectrum based on utility. If an obsolete architecture is currently subjugated to one side of the spectrum (uselessness), then forcing it to the other side (radical or extreme use) could instigate balance and generate modern functionality.

Further Revised ‘Focus’: I am interested in understanding the potential contemporary significance of currently obsolete infrastructures in architecture. I am also claiming that architecture exists along a spectrum of utility. It is insinuated that obsolete architecture (naval fortifications) is subjugated to one side of the spectrum (uselessness), however, it is not yet [completely] dead. It instead exists in a middle ground between useless and useful. I am contending to exploit the extremes, and in doing so, draw attention to the ambiguity of the obsolete architecture at hand in an effort to generate modern functionality.
A diagram to help understand the spectrum, or at least in terms of how I perceive it and how I intend to move forward, shows that obsolete architecture is a neutral player, but it has functional potential [as would be expected of something with such a vibrant past]. I am advocating that, in order to revitalize the obsolete architecture, in order to act on it and generate modern relevance, you have to push it towards the ends of the spectrum. In order to make obsolete architecture useless, you have to act on it; in order to make obsolete architecture useful, you have to act on it.
OBSOLETE
ARCHITECTURE

USELESS

USEFUL

PUSH

PUSH
One draw back to exploring usage is providing enough clarity in regards to the intentions behind use. For the time being, a simple descriptor or definition for useful will be the development of a product or service, while the opposite will represent useless.
THE ISSUE OF **USELESS** VS. **USEFUL**

**USELESS:** The lack of development of a product or a service

ALSO the insinuation of [low] occupancy

**USEFUL:** The development of a **product** or a **service**

ALSO the insinuation of [high] occupancy
When you apply these diagrams and terms to the naval fortification, especially when they are applied to my chosen sites [as will be seen momentarily], pushing the obsolescence toward uselessness results in the potential for something fantastical and awe-inspiring (for instance a monument or art piece), and pushing the obsolescence toward usefulness results in the potential for something sensible and practical (such as a museum focusing on and exploiting historical, cultural, and even militaristic issues). An interesting result from exploring both sides of the spectrum is that one side will ultimately inform the other’s presence as well as experience.
OBSOLETE ARCHITECTURE

NAVAL FORTIFICATIONS

USELESS

MONUMENT “ART PIECE”

FANTASTICAL | AWE-INSPIRING

USEFUL

HISTORICAL, CULTURAL, MILITARISTIC “MUSEUM”

SENSIBLE | PRACTICAL
Originally, I investigated six different case study forts along New England’s coast. Each provided their own distinct characteristics, as well as potential parameters for further exploration.
FORT GORGES

Fig. 25

FORT POPHAM

Fig. 26

FORT SCAMMEL

Fig. 27

FORT KNOX

Fig. 28

FORT INDEPENDENCE

Fig. 29

FORT WARREN

Fig. 30
However, from here on out I will be focusing on two forts – Fort Gorges and Fort Scammel, both in Portland Harbor along the coast of Maine.
FORT GORGES

FORT SCAMMEL

FORT INDEPENDENCE

FORT POPHAM

FORT KNOX

FORT WARREN
As a quick [re]introduction, Fort Gorges, which I deemed the ‘iceberg,’ is recognized by its autonomous quality – it looks like an isolated, floating volume.
FORT GORGES

The ‘ICEBERG’

Qualities:

- **Floating volume (autonomous)**
- Hexagonal in shape
- Rusticated, granite masonry
- Two levels
- Barreled roof casemates
- Parapet level overgrown
My original speculation focused on ambivalence and interpretation by extending the fort below the surface of the water to literally create an iceberg.
Fort Scammel, which I deemed the 'mound of earth,' is recognized for being, in large part, embedded in the earth.
FORT SCAMMEL

The ‘MOUND OF EARTH’

Qualities:

- **Embedded in the earth**
- Two pentagonal bastions
- Rusticated, granite masonry
- East bastion, two levels
- West bastion, one level
- Subterranean, linked magazines
My original speculation focused on indifference and appreciation through careful excavation to expose its subterranean components.
The real reason why I chose these two forts, however, is because of their proximity to one another; they are only a mile apart. In addition to their closeness, they coexist in an active harbor (Portland Harbor) which lends itself to good visibility as well as the potential for better accessibility. Above all, though, since I am dealing with a spectrum with two opposing sides, it makes sense to operate on two adjacent sites to play out that binary.
Speaking of accessibility and elaborating on this binary, I’ve started to consider how the forts could interact with one another – how they could be linked. Pushing that even further, I’ve also taken into consideration opportunities of engaging with the immediate context, so not only link the forts, but also link them to the ‘users.’
CONNECTION 1: Opportunity to erect an infrastructure that physically links and alludes to a binary (the spectrum)

CONNECTION 2: Opportunity to erect an infrastructure that engages with the immediate urban context
A new speculation that I’ve put together alludes to a sequential experience. Initiating at a section on Portland’s wharf, an infrastructure would be erected allowing accessibility to Fort Scammel.
This fort would be pushed toward ‘usefulness’ by reinterpreting it sensibly and practically as (for now) a museum. While I’m not currently certain of its inner workings, breathing life into the fort could involve subterranean exposure (through an extrusion of the hidden structure beyond the undulating ground plane).
From here another infrastructure would be erected allowing accessibility to Fort Gorges. This fort would be pushed toward ‘uselessness’ by reinterpreting it as fantastical and awe-inspiring, as an ‘art piece.’
This could involve the excavation of the interior of the fort, which would go unnoticed from afar (so the fort would still be regarded as an untouched, isolated volume), but as soon as one would arrive (from below via a path that seemingly disappears and dips below the surface of the water), it would be realized that the fort was transformed to exploit a heightened uselessness.
Like myself, these two forts will begin to take on new identities. Their internal workings will begin to reflect their opposing positions along the spectrum with Fort Gorges' minimal program alluding to the useless, and Fort Scammel's substantial program alluding to the useful.
FORT GORGES - Total [Used] Area: 32,000 sq. ft.

Viewing Platform: 29,500 sq. ft.
Bathrooms/Services/Misc.: 2,500 sq. ft.

FORT SCAMMEL - Total [Used] Area: 60,000 sq. ft.

Gallery Space: 27,000 sq. ft.
   Fort History: 4,500 sq. ft.
   Local History: 4,500 sq. ft.
   Naval History: 4,500 sq. ft.
   Defensive Arch. History: 4,500 sq. ft.
   Cultural Preservation History: 4,500 sq. ft.
   Radicality (Art, Photography, Design): 4,500 sq. ft.
Featured Exhibitions: 3,500 sq. ft.
Auditorium: 8,000 sq. ft.
Café [Kitchen/Dining]: 5,000 sq. ft.
Multipurpose Space: 4,000 sq. ft.
Offices: 2,000 sq. ft.
Lobby Space: 1,500 sq. ft.
Bathrooms/Services/Misc.: 4,000 sq. ft.
Sectionally, Fort Gorges’ internal workings will become exaggerated and distorted, accentuating the fort’s isolated quality (especially for the occupant as they stand looking up from below). And similarly, Fort Scammel will gradually become unearthed, exposing what would otherwise go unnoticed.
CROSS SECTIONS THROUGH FORT INTERVENTIONS
In closing, this project is adamantly targeting the issue of obsolescence, and by accepting the earlier definition of what obsolete architecture might be, my claim is that this type of obsolete architecture, the fort, is not yet dead. It may be nearing death, but it can still be transformed - it simply needs to be given more attention, and exploiting the extremes of usefulness and uselessness will allow it to avoid extinction.
**Claim:** This project will present obsolete architecture as it exists along a spectrum of utility, however, beyond that it will present the architecture as it is being pushed toward either end of that spectrum. This action is in service of drawing attention to obsolete architecture. This project has two trajectories - one of *useful* exploitation and one of *useless* exploitation. Implementing extremes in proximity to one another will ultimately enable obsolete architecture, specifically the chosen naval fortifications, to be seen in a new light (beyond ghosts in the built environment) with modern functionality.
BIBLIOGRAPHY

-A brief history on the Albanian bunker, why they were implemented and how they have become an obsolete architecture. The article also includes a set of rules/strategies that can be used to approach and alter the [defunct] bunkers: nullification, adaptation, indifference, and ambivalence.

-Discourse on typological investigation as an architectural design method and mode of analysis. The dissertation also includes an explanation of the theory of permanence, a mentioning of pathological and propelling agents and how the city acts as a man-made object that is either subsumed by its context or maintains its original identity.

-A commentary on militaristic/defensive architecture - how it operates/operated and what it represents now that it isn’t in use. A general description of the fortification typology (specifically World War I & II bunkers).

REFERENCE IMAGES


Fig. 7. Chernobyl. Web. 3 Nov. 2014. http://cdni.wired.co.uk/620x413/a_c/chernobyl.png.

Fig. 8. Hashima Island. Web. 3 Nov. 2014. http://res.moviezine.se.s3-external--3.amazonaws.com/1aa95/1aa95b7361ff802cb8a627dcd1e9f870/strea_l.jpg.


