Every new work of architecture intervenes in a specific historical situation. It is essential to the quality of the intervention that the new building should embrace qualities that can enter into a meaningful dialogue with an existing situation. For if the intervention is not meaningful it will not be possible to see what already exists in a new light.

Peter Zumthor

Illus. 1 | A ruin on the thesis site | Great Falls in Lewiston, Maine | Fall 2009 by: Sarah A. Mailhot
A Site Rediscovered  Sarah A. Mailhot

ABSTRACT

This is a site-driven project located in my hometown of Lewiston, Maine, a point along the Androscoggin River. Driving over the bridge as a child, I was intrigued by the waterfalls but it always seemed unattainable; the mills and abandoned buildings prevented access. When my dad told me the last mill burned down at Great Falls in 2009, I was saddened but knew this provided a new opportunity for the community.

This project is not about placing a building, but rather intervening and creating a conversation with the existing landscape by framing and experiencing its beauty.

This project is an exploration of redefining entry, thresholds and pathways, as well as interlocking public and private spaces. The design process was not linear; one question always led to another. The program evolved over time, as I became more acquainted with the water, climate and topography of the site. This project will add a chapter to the site story of Great Falls and inspire future development for the community.
I want to thank my committee for their wisdom in asking the right questions and their patience in waiting for the answers. Most importantly, for never losing sight in what I was trying to achieve, helping me to "whittle down over and over again."

Peter Zumthor

"The person standing in front of them is not someone who asks questions whose answers he already knows. Practicing architecture is asking profound questions, finding one’s own answers with the help of the teacher, whittling them, finding solutions. Over and over again."

Peter Zumthor
## TABLE OF CONTENTS

1. ISTANBUL, TURKEY observation
2. THE ANDROSCOGGIN RIVER
3. GREAT FALLS history
4. GREAT FALLS the fire
5. SITE VISIT + DOCUMENTATION
6. REALIZATIONS
7. SITE DECISION
8. THE LOCK
9. SITE ACCESS
10. BOAT ENTRANCE AND STORAGE
11. BATH, RESTAURANT AND GUEST ROOMS
12. SECTIONAL STUDIES
13. FINAL STUDY MODEL
14. FINAL DESIGN
In the summer of 2009, I traveled to Istanbul, Turkey for a three week WAAC “Visual-ist” summer program at the Bahcesehir University. Istanbul has a rich, multicultural history. I visited places such as Hagia Sophia, Blue Mosque, Palace on the Army Street and the Grand Bazaar. I documented what I observed: time, movement, layers, order, disorder, pathways, density, openness, in-between spaces, thresholds, materiality and street culture. These ideas were analyzed on an urban and building scale.

Often, I came across spaces where the outside was very chaotic, but the inside was still, as shown in the two photographs of the Blue Mosque on the left. I was intrigued by the dual characteristics as well as the physical layers between the old and new I found throughout the city.

This trip to Istanbul set a precedent for my thesis. The experience in Turkey influenced the qualities I was searching for in a thesis site. I was interested in creating a site-driven project, by first studying history’s remaining layers.
The Androscoggin River is one of Maine’s greatest assets. The water changes from season to season: calm in the fall, frozen in the winter, and during the spring, the ice melts and water gushes down the river. This change of season is a natural wonder enjoyed by the communities along the Androscoggin. The river is becoming a place of recreation rather than a symbol of the mills' financial success during the Industrial Era.

The Androscoggin is known to be very steep at parts; its terrain was ideal to power the mills. These conditions make it possible for a canoe to navigate the entire river without having to portage his or her canoe to get to the higher or lower water level.
During the 19th century, thousands of French Canadians were attracted to the mill towns of Maine. Half a million French Canadians arrived in New England between 1840 - 1940. My ancestors were part of this group. There were many mills along the Androscoggin River. Unfortunately, the industrial age used the river as a chemical dumping ground. The image below is of the Great Falls during the Industrial Period. Many have said it was unbearable to live in Lewiston at that time. “Jewelers nearly went berserk keeping their stocks of silverware saleable because the sulfite-laden air turned silver and other metals black overnight.” After the river was found to be depleted of oxygen, Walter Lawrence began working to clean up the river. He was appointed River Master from 1947 - 1977. Towards the end of his term, the Clean Water Act was passed in 1972.
Illus. 12 - 1914 Fire Insurance Map underlay reassembled and rendered by author

Figure 11 | Mills at Great Falls | 1960 | Gridley Barrows Slide Collection, Lewiston Public Library, Maine

photo used with permission of Lewiston Public Library
"But there has to be an interval of neglect, there has to be discontinuity… that is what I mean when I say the necessity of ruins; ruins provide the incentive for restoration, and for a return to origins. There has to be an interval of death or rejection before there can be renewal and reform. The old order has to die before there can be a born-again landscape."

- J.B. Jackson
The last mill at Great Falls burned down in the summer of 2009, the same time that I chose my thesis site. The site visit was the most crucial part in understanding what was existing and how I would approach the design. I needed to go to the site, see the ruins, water and topography as well as feel the air on my face. I spent 3 cold October days measuring the site, taking photographs and sketching. I needed to develop my own hierarchy of existing site elements and understand what was important. I knew that I could not address one part of the site without looking at the whole site. The biggest question was, ”How do I add to this strong sense of place and not detract from it?”

When I arrived, it was extremely overwhelming. There was not a clear sense of organization. Questions that were going through my mind were: "What is going to happen here? What does the community want? How does one enter?" The biggest question was, "How do I add to this strong sense of place and not detract from it?"
As I began to sketch and photograph, the site hierarchy became clear.

Firstly, the river. Over the course of time, the river was always the focal point, whether it was for hunting during pre-colonial times or financial success during the Industrial Period. Currently, the community is trying to use it for recreation. I knew that I needed to first respect the river.

Secondly, the ruins. There is history and familiarity in the stone walls. The walls give the Great Falls a sense of place. They retain existing earth as well as provide a wall of protection during the river’s turbulent floods. I knew that I needed to respect the ruins.

Thirdly, the topography. There are clear levels that I drew in the site section below. The first observation I made was that the ruins retained earth and created levels connecting the lower and upper river. The levels included: the lowest water level, the second level (Casson Mill foundation), the third level (Mill Road and Libby Mill foundations) and the highest water level (natural waterfall and man-made canal). I knew that I wanted to connect the lower and upper river through a proposed intervention.
sketching the ruins

sketches of existing ruins
Topography studies and lower river, upper river, and canal.
I studied the qualities of the water through the different seasons and times of day. It became apparent that the water can be calm or turbulent. The river has flooded in the past, so I knew that this would impact the design.
My dad and I measured the ruins on the entire site. This was extremely important to develop a sense of scale and feel the actual material that was to be incorporated in the project.
The third level was where Mill Road intersected the mills. Mill Road provided access for the main vehicular and pedestrian traffic. Part of the Cowan Mill and Libbey Mill were located on this level.
HIGHER RIVER the top of the waterfall and man-made canal

Illus. 28 | Top of Water Fall - highest level | Fall 2009 | Sarah A. Mailhot

Illus. 29 | Top of Water Fall - highest level @ Mill Pond | Fall 2009 | Sarah A. Mailhot
I had thoroughly documented the site and understood the existing conditions. I knew that I must respect the river, the ruins and the topography. At the beginning of the design process, I was trying to conclude what type of building should be on the site, but I could never come to a conclusion that made sense. This was the most difficult part of the project. I started to ask myself the right questions, the answers helped to develop the project. I realized that there cannot be one “program” here and it cannot be for one group of people. Everyone deserves to enjoy the waterfall and river. It became clear that I must orchestrate the private spaces around the public spaces, so different groups of people can simultaneously enjoy the river and waterfall. Anything else would be turning our back on the river and community.

Kayaking and canoeing are prominent activities on the Androscoggin River. Because of the natural waterfall and dams on the Great Falls site, one cannot get from the lower river to the higher river. I wanted to provide access through the site where someone in a boat can get from one level to the next without having to get out of their boat. This is the design decision that influenced the rest of the project. Developing accessibility to the site is a central part of the overall design development as well as being able to have simultaneous functions. I needed to think about how a pedestrian would enter as well as someone in a kayak or canoe.
These are some of the first diagrams that I did after the site visit in Maine. The first site decision was to reuse the existing Mill Conduit to connect the river at the bottom and top of the waterfall. Given the large size of the site, I needed to make a site decision to know where to focus my attention. It made sense to me to reuse the existing tunnel, but with a new purpose. The site + building program developed from this site decision. Reusing the existing tunnel created a datum of circulation for a boat and person to move through the site with the natural flow of the water.

SITE DECISION
lock study
The lock connects the lower and upper levels of the river through a journey of exploring the ruins. This would allow for a kayaker and canoeer to get from one body of water to the next without having to get out of their boat. The decision was the stepping stone for all other decisions. The lock is not only the primary function of the building but is a decision that organizes the master plan of the site.
I began to look at how one can access the site from the various site boundaries. It became clear to me early on that there is not one or two site orientations. The site has a body of water on 3 sides and the main street on the opposite side. People have to cross the street between the site and veteran's park. The site is also close to the pedestrian from the town. I organized the master plan where the steel portion of the site would be redone in the future. I would infiltrate entrances through the density to get to the waterfall. I started to carve away at the existing ruin walls to allow ramp access to the site by veteran's park.
These studies show the exploration of entry from the lower river to the lock. I also developed a floating platform that would allow for kayak and canoe storage. I would need to underpin the existing ruin wall (the wall at the back of the floating platform) and would have the boats stored along this wall. I carved the earth out between the two walls to create the platform and boat storage.
I developed the other spaces to support the lock system. I wanted the project to be a place of relaxation to overlook the waterfall. I needed to create multiple spaces for people to be able to enjoy the river and waterfall. I started with the lower river and worked my way up to the highest river. I developed the project by carving into the earth and building out of it.

Starting at the lower river, I created boat access to the lock and boat storage. I also carved away at an existing stone wall to create access to the water from the street. As one moves up the levels of the lock system, the function of the building changes. One level up are the underground baths. I wanted to have guest rooms for people to stay that overlooked the river as well as a restaurant. The underground baths were for people staying in the rooms or for people from the community.
This is my “breakthrough” study model because I began to see all of the programs taking form and see how they interact with the surrounding landscape. The idea of public and private spaces becomes apparent. The study model shows how one begins in the river and can make his way into the sky where the guest rooms are located, overlooking the river and waterfall.
section study

section study
Site Plan
The new public space will be paved with the old brick from the mills.
I feel fortunate to have been able to work on the project, on this site, with this faculty on my Committee. Spe-\nal thanks to Jaan Holt, Susan Piedmont-Palladino, Marita Fournier, Kent Adahman and Paul Simon for always saying the right thing and inspiring me to move forward. I would have not taken with more than I could handle, but this project is much better because of it. I shall be forever grateful for what I have learned from them. Especially on the job and with the kind help of my advisor, I wish to thank you for helping me answer to day questions. Thanks to Felicite Armore for your help during the last week. Thanks to my parents for their lifelong support and telling me to never give up on what I want. Thanks to my dad for reminding the site to me. Thank you to the people of Lewiston, Maine that took the time to meet with me and give me information about the site: Susan Beane, Gil Arsenault, Lincoln Jeffers, David Hediger, Jon Labonte, Neil Ward, Dr. Barry Rodrigue, Pamela Crane and Steve Myers.

THANK YOU.
Endnotes

2. Zumthor, 66.