Ephemeral Traces - A Conversation in Light with Borromini During a Travel Abroad Seminar

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A cosmopolitan architect can accept otherness and embrace it. In order to accept otherness, one needs to be exposed to it, and perhaps even immersed within it during their architectural education. Programs that are located 'abroad,' i.e. in an environment that is foreign to the students, immerse them deeply into another cultural setting that allows them to develop open-mindedness. Can we as architecture educators heighten the degree of immersion beyond a gaze? Can we temporarily interact and physically imbue the artifact with our insights? In this paper I would like to propose the potential of extreme and active immersion by using light installation as a medium to intervene within architecture while in a travel abroad program. I will explore how light is a medium that can heighten a sense of immersion in a site-specific context. The work that I will discuss are installation projects within a lighting seminar in a study abroad program in Rome. For their final project for the program, students were asked to create a thesis in light anchored within the history and context of the Falconieri Crypt by Francesco Borromini. Each installation was a temporary site specific intervention using different light strategies and exposed different parts of the building's past and memory.

INTRODUCTION

A cosmopolitan architect can accept otherness and embrace it. In order to accept otherness, one needs to be exposed to it, and perhaps immersed within it, during their architectural education. Travel abroad programs create such an immersion. While students are "abroad," they are, by definition, in an environment that is foreign to them, and immersed within another cultural context. This immersion allows them to develop open-mindedness but also reveal their own prejudices, in our case prejudices about death and the role of art in a cultural setting.

I would like to propose an extreme and active act of immersion: using light installation as a medium to intervene with architecture in the context of a travel abroad program. I will explore how light is a medium that can heighten a sense of immersion in a site-specific context.

As Dana Arnolds observes, architecture is a unique artifact of the past that can be entered, experienced and seen through our contemporary gaze. Can we as architecture educators heighten the degree of immersion beyond a gaze?

TRAVEL ABROAD

Contemporary travel abroad programs in architectural programs echo the tradition of a Grand Tour, where an elder initiates a young architect first-hand to the cultural splendors or architecture. When 'abroad,' students are immersed beyond their known local reference, exposed to cultural and urban otherness while surveying architectural mastery. Travel abroad components to architecture programs may play a vital role in broadening students' sense of belonging from a local reference to a global one.

Rensselaer Polytechnic institute (RPI) established a The Italian Studies Program in the School of Architecture in fall 1981 upon the return of Dean Patrick Quinn from the American Academy in Rome as a mid-career architecture fellow. The program was initially located in Rome and intended to enrich both students and faculty during a full semester living, exploring, studying, and working in Rome.³ Throughout the history of the program RPI has had different partners and locations in Rome and Italy. Beginning in fall 2009, the program partnered with the University of Arkansas Rome Center (UARC), located in Palazzo Taverna, Rome, Italy. I was privileged to lead a group of 16 students to Rome in fall 2017. In this program, students completed a four month semester in Italy, including a 5 credit studio course which I led, and a number of other 2-3 credit seminars. One of the seminars taught was a two credit seminar titled Projecting Light, which I will discuss in this paper.

PROJECTING LIGHT SEMINAR COURSE

Projecting Light is an immersive light seminar intended to teach architecture students to engage in an exploratory and precise study of spatial and material qualities of light. The course addresses different topics relating to light and testing those physical properties with light sources as well as different literary and philosophical texts that relate to them. Students explored the following topics in the seminar: the relationship between light and projection—existing since antiquity, Camera Obscura—overlaying



Figure 1. A full room camera obscura by seminar RPI students in Palazzo Orsini Taverna in Rome, Italy. Photo by author and Fabio Grassi of the University of Arkansas Rome Center, 2017.

inside and out, Shadow–establishing a drawing relationship with an object, Reflection–creating a double with new embedded information and Color–manipulating our visual perception. My paper "Constructing Mystery" explores the structure of the course in depth, unfolding the literary, poetic and philosophical aspects of each topic.⁴

Projecting light onto space is not a binary act, but rather a dialectic one where one perspective is superimposed on another to create something new. Similar to how a camera obscura blends the inside and out, any light installation is superimposed onto the architecture that serves as its screen. All the work included in this paper was created within the Projecting Light seminar during an RPI study abroad program in Rome in 2017. Working with light this way constructs a space between analysis and intervention, a conversation with a historical building that does not alter it; rather, it provides us a new way of to interface with architecture and momentarily affect how we perceive it, creating a spatial dialog.

SITE - FALCONIERI CRYPT, SAN GIOVANNI DEI FIORENTINI, ROME

In fall 2017, we were privileged to have access to the Falconieri Crypt, by Francesco Borromini, at the San Giovanni Dei Fiorentini Church. Located along the Tiber River at the beginning of Via Guilia, the papal road was established in 1508 to become the backbone of business in Rome. The Basilica of San Giovanni dei Fiorentini was erected as a multi-stage structure involving key architects in Rome. In 1508, Pope Julios the 2nd decided to demolish the small oratory of Sant'Orsola della Pietra to establish the church San Giovanni dei Fiorentini, entrusting its construction to Donatelo Bramanta. Construction was halted a number of times, and the church was completed within the time span of a century (by 1620) seeing architects such as Sansovino, Sangallo, Michelangelo, Giacomo della Porta and Carlo Maderno, involved in some way in the construction. The church was announced as completed only in 1734 with the construction of the facade by Alessandro Galilei.5

The Falconieri crypt, attributed to Francesco Borromini, is located under the main altar. Construction began in 1634 by Pietro de la Cortona and was completed by Francesco Borromini, who is interred in the church with Moderna under the Nave. The construction of the crypt began in 1650 and was completed after Borromini's death in 1667. The crypt is entered from the altar, through two symmetrical stairs flanking an oval central space. Oval apertures allow one to peer from the flanking stairs into the main space as one descends into the crypt. During Napoleon's conquest of Rome, the Crypt was desecrated and human remains were removed. The start of the control of the crypt was desecrated and human remains were removed.

I owe great thanks to the Church of San Giovanni Dei Fiorentini and Dr. Julia Vicioso the curator of the Archive of San Giovanni dei Fiorentini, The University of Arkansas Rome Center (UARC) and especially Consuelo Lollobrigida, Francesco Bedeschi, Emilio Del Gesso, Fabio Grassi and Davide Vitale for making the access to the crypt possible and magic to happen.

PROJECTING LIGHT FINAL PROJECT BRIEF

The series of four light installations were the final project in the Projecting Light seminar. The seminar was structured as a scaffolded course building on mini labs on different topics such as camera obscura, shadow, reflection and color to establish knowledge about light. These topical studies became a seed developed in the final project. The final project for the seminar took place in the space of the Falconieri Crypt. In the project brief, students were asked to create a thesis in light anchored within the history and context of the Falconieri Crypt. Each installation used different light strategies and exposed different parts of the building's past and memory.

PROJECTING LIGHT INSTALLATIONS

A light installation is a low impact art form, which uses minimal materials to create a significant palpable impact on the site. It



Figure 2. Final RPI student project "Distorted Memories" in Falconieri Crypt San Giovanni dei Fiorentini in Rome, Italy. By Haruka Liu, Lila Sferlazza, Ai Teng and Tian Yao. Photos by Author, 2017

is a temporary, full-scale installation that produces little waste when it is uninstalled. In the context of my class, different student groups could project their theses onto the wall of the Crypt, sequentially interacting with the space and immersing the visitors within their projected worlds.

As opposed to sketching or recording, this form of relating to site is unique as it does not create an external reading that serves as a mnemonic device that records the site; rather, it is a reading that fleetingly writes upon it. As light projects, it creates a temporary dialogue without leaving a lasting trace, operating as temporal graffiti. Each reading merges onto the walls of the space and imbues it with new meaning and a new way to experience it spatially.

Students worked in teams that negotiated differences and contradictions. The process was one of discussion and feedback. Students researched the site and studied historical drawings. We had access to the crypt multiple times, which allowed us to visit the site, measure its dimensions, and most importantly experiment and test with light, gaining an intimate understanding of the potentials and limits of space.

Students utilized choreography of procession, sequence and poetry to craft a viewer experience, build an argument and tell a story in light. Additionally, as opposed to other ways of individually experiencing and recording a site, these light installations were social and spatial acts which called upon our community to participate and explore our stories. Our community consisted of our students, the UARC community and linked faculty, Renssealer faculty and alumni. As each student team presented their work, the structure of the presentation and spatial experience transformed. Viewers were immersed in the students' readings, creating a shared spatial and experiential platform to discuss and engage in.

PROJECT 1 - DISTORTED MEMORIES

In the project Distorted Memories Haruka Liu, Lila Sferlazza, Ai Teng and Tian Yao were inspired by the convex and concave curvature geometries in Borromini's works and created a series of architectural spatial readings. The projections began with concrete spatial perspectives and morphed into generative ones that were projected as sequential individual frames telling an architectural tale in light and shadow (figure 2). Lui, Sferlazza, Teng and Yao constructed a projection machine that cast shadows and secondary abstract reflections unfolding throughout the crypt surfaces. As students passed from one slide to another, unplanned projections took place: Their actions were cast as shadows onto the crypt ceiling and walls, operating at a second scale that recalls a godly creation scene. The students took inspiration from lectures on shadow and reflection, recalling Plyni's myth on the origin of painting and quadrata artists. ¹⁰



Figure 3. Final RPI student project "Shifting Memory" in Falconieri Crypt San Giovanni dei Fiorentini in Rome, Italy by Daniel Adomilli, Sarah Cimino, Alexander Schneiderman and Mannion O'conner. Photos by Ai Teng, 2017



Figure 4. Final RPI student project "Light Transcends" in Falconieri Crypt San Giovanni dei Fiorentini in Rome, Italy by Kristen Anderson, Kayla Hernstadt, Margaret Graves and Shelley Warner. Photo by David J. Pacheco, AIA 2017

PROJECT 2 - SHIFTING MEMORY

In the project Shifting Memory, Daniel Adomilli, Sarah Cimino, Alexander Schneiderman and Mannion O'conner used color as a device to reveal and hide information relating to the Patrons of the Falconieri crypt (Figure 3). Under different colors of light, different facets of the lives of the Falconieri family come to the fore, fading in and out as the illumination shifts. Inspired by the works RGB by Carnovsky, ¹¹ Adomilli, Cimino, Schneiderman and O'conner researched the Falconieri brothers and tested and developed graphic ways to communicate their lives through information embedded into CKMY prints that reveal different information under different light.

PROJECT 3 - LIGHT TRANSCENDS

In the project Light Transcends, Kristen Anderson, Kayla Hernstadt, Margaret Graves, Shelley Warner used language and poetry together with light to reflect on existential questions of life, death and transience (Figure 4). Students constructed a poem that unfolded the sequence of life, and echoed the different phases with different lights. Anderson, Hernstadt, Graves and Warner constructed a metered poem that tried to capture the life cycle using light to echo and enhance their verbal structure.



Figure 5. Final RPI student project "Drawing Borromini through Borromini" in Falconieri Crypt San Giovanni dei Fiorentini in Rome, Italy by Lindsey Carpenter, Amanda March, Rob Nielson and Lindsey Wood. Photos by David J. Pacheco, AIA 2017

PROJECT 4 - DRAWING BORROMINI THROUGH BORROMINI

In the project Drawing Borromini through Borromini, Lindsey Carpenter, Amanda March, Rob Nielson and Lindsey Wood constructed a projection system so that the physical oval oculus becomes an aperture to shed light and shadow in tribute to Borromini. The students utilized different angles of projection to highlight different locations and events within the crypt. For example, they positioned a light to illuminate the crypt burial location in the floor for a period of time, and another light source to project forms inspired by Borromini onto the crypts ceiling for another period of time (Figure 5). Each projection redefined the space of the crypt through light, recalling Robin Evans insights on shadow drawings transforming the architecture they are projected on. ¹²

DISCUSSION

Storytelling is an act of unfolding a narrative through time. The act on light projection allows us to create a temporal reading that converses with architecture and allows a community to immerse within it. As cosmopolitan storytellers, this is a way to create different verbal and nonverbal stories that are shared with a

larger audience visceral as a multi sensorial experience. Light is a temporal projection, and as such is easy to transform, adjust and manipulate through time, unfolding a tale as it changes.

The setting of the project within a Crypt by Borromini was not culturally neutral. From my perspective as an educator, this was a unique opportunity to have a conversation in space with a substantial work of architecture. Some students, however, took a different stance. As a crypt, the site was linked to death, and was therefore not a simple site. Initially a couple of students rejected the crypt as a site for their final project. One student specifically said it was "disrespectful to play with light in a place like this." Their comment opened a conversation about the seriousness of the work we were undertaking, and required us as a class community to understand the situation from multiple perspectives, which created honest dialogue about our own cultural prejudices in contrast to the ones in Rome.

In a conversation on the matter with Francesco Bedeschi, a Roman architect and professor at the University of Arkansas Rome Center, he explained that Elton John plays the Colosseum, where thousands found their death, and every Catholic church contains both art and human remains. In Rome, death and art are linked, interwoven; ¹³ however, in the US, they are separated.

As a class, we discussed the role of art, death and memory in the different cultures students originated from. Through this discussion, our community emerged with new understandings that energized the projects with different modes of expression and an existential depth. This conversation made it evident that rather than 'playing with light', students had to imbue the work with meaning worthy of such an intervention.

CONCLUSION

This abroad experience was enriching and challenging to students and faculty alike; it demanded that we step beyond our known environments into a foreign territory and project our insights onto it. The project was a unique opportunity to deeply immerse in architectural mastery and converse with it. The experience also challenged our preconceptions and cultural prejudices, making this a significant instrument for learning, and extending our cultural frames of reference. We confronted issues of memory, life and death through light and architecture. The experience was fleeting. At the end of each installation, as the general lights came up, no evidence of our tracings remained.

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