UNIVERSITY OF PENNSYLVANIA STUART WEITZMAN SCHOOL OF DESIGN GRADUATE PROGRAM IN HISTORIC PRESERVATION



# STUDENT INTERNSHIPS SUMMER 2019



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## Joe Bacci

Center for Architectural Conservation (CAC) Fort Union Nation Monument (FOUN), New Mexico, 2019 Pecos National Historic Park, New Mexico, 2019





Photo documentation and survey of the Pecos Convento ruins, 2019

Recording the remains of an adobe wall with a profile gauge at Fort Union, 2019

Over the summer of 2019, two students and I interned at the Center for Architectural Conservation (CAC) under the supervision of Frank Matero and John Hinchman. Our work encompassed the study and documentation of two historic national parks within New Mexico: Fort Union National Monument, a 19<sup>th</sup> century adobe brick military fort located along the Santa Fe trail; and Pecos National Historic Park, containing the ruins of a 17<sup>th</sup> and a 18<sup>th</sup> century church and convento built by the Puebloan people under Spanish rule, both of which are located atop the archaeological remains of a major Puebloan settlement and trade hub.

Our time at Fort Union was spent continuing assessments of adobe wall conditions for the NPS through the CAC and University of Pennsylvania. This consisted mainly of profilometric recording of the site's ruins through profile gauges. Thereby helping to establish levels of priority to site features for ongoing triage conservation and maintenance by the park's staff.

At Pecos, our team first established working elevations and plans for field use by extrapolating historic data and 3D scans provided by the park. Once on site, we set out to photo document the church's ruins in pursuit of creating accurate, measurable, three-dimensionally rectified photographs to use for future condition assessments—our efforts yielded excellent results. As well, we successfully photo documented the adjoining convento ruins. By adapting and greatly improving on the park's previous system for collecting data, our team helped to create and amend methodologies for the park's staff for present and future conditions assessments. The whole experience was not only a great opportunity to work on interesting historic sites within the NPS, but it provided valuable insight into the milieu of historic preservation and site management at the Federal level.

## Héctor J. Berdecía-Hernández

Quinn Evans Architects Washington, D.C., 2019



Revising construction documents for Old Richmond City Hall Restoration Project, 2019



Site Visit to Bird House Renovation Project at the Smithsonian's National Zoo, 2019

This Summer I interned at Quinn Evans Architects in Washington, D.C., an architecture and historic preservation firm. I had the opportunity to assist design teams on over seven projects within the Heritage Conservation Studio. I assisted in developing construction specifications, surveys, and preservation documents for University Club in Washington, D.C. and the Netherlands Carillon Historic Monument in the National Mall. I also developed physical models and assisted the design team for restoration and renovation project of the Marine S. Eccles and 1951 Buildings of the Federal Reserve System built in the 1930s in Washington, D.C. Task within the Federal Reserve buildings included historic doors and windows schedules and documentation. Also, I had the opportunity to develop renderings for Constitution Hall of the Daughters of the American Revolution restoration project. Lastly, I worked on revising final construction documents for Old Richmond City Hall renovation and restoration project. As part of the overall experience we made several site visits to some ongoing heritage conservation project. As the Bird House at the Smithsonian's National Zoo and the Smithsonian's National Air & Space Museum Renovation project.

As an additional educational experience, I was selected to attend to Georgetown University for one month to attend a joint conservation science course between the Department of Chemistry and the University of Florence in Italy titled Science for Conservation: Application and Fundamentals. The course was given by renowned conservation scientist Dr. Emiliano Carretti. It was an excellent opportunity to acquire new knowledge such as the use of nanotechnologies for consolidation and innovative cleaning methods for cultural heritage. Other topics included cleaning of stone-made artifacts, structure,

chemical composition and properties of easel paintings. It was a nice experience meeting with colleagues from different

branches of the conservation world. As a prospective architectural conservator and licensed architect, these experiences were valuable for my professional development.



Science for Conservation class with Dr. Richard Weiss, Director of the Chemistry Department at Georgetown University, 2019



Marinner S. Eccles Building, Federal Reserve System built in 1937, 2019



Preservation issues within the Smithsonian Air and Space Museum (built-in 1976) including the whole stone panel replacement from the facades, 2019

# Kathie Brill

New York City Landmarks Preservation Commission New York, NY, 2019



On a site visit to a fire damaged row house in the Bed-Stuy historic district, 2019



The Windermere, an individual landmark saved from demolition by neglect has been undergoing restoration since 2009, 2019

The New York City Landmarks Preservation Commission is the largest municipal preservation agency in the United States. It manages over 36,000 landmarked properties including 144 historic districts as well as individual, interior and scenic landmarks. Over the past twenty years the LPC has noticed an increase in demolition by neglect cases in New York City and is strengthening their efforts to combat the problem. As the Project Fellow, I worked alongside Deputy Counsel, John Weiss, in attempt to further improve demolition by neglect policy and enforcement methods at the LPC. I was given the opportunity to conduct my own investigation in which I was assigned to research and interview preservation agencies around the country to learn about how they are confronting this persistent issue.

The scope of the investigation encompassed eleven major cities across the United States including Chicago, Los Angeles, San Francisco, Philadelphia, Boston, New Orleans, Washington D.C., Austin, Pittsburgh, Cincinnati, and San Antonio. I gathered information through the process of preliminary research followed by phone or email interviews with the respective leaders of each Historic Preservation Office (or equivalent). The research framework consisted of four primary topics surrounding demolition by neglect policy or lack thereof, including the current scope of the problem, interagency cooperation, enforcement processes, and monetary incentives for preservation (tax exemptions and grants). Using the research results, I created a final report which consists of a comparative analysis and subsequent recommendations for the LPC on how to improve their demolition by neglect enforcement efforts and policies. I sent the report to all the interviewees who participated in the study upon their request so that they may glean methods to improve their own systems. This project was both an eye-opening and rewarding experience. It gave me the opportunity to potentially impact Historic Preservation Offices around the country and proactively contribute to ongoing policy improvement.

Throughout the summer I was invited to various meetings and site visits all over the city regarding potential or outstanding demolition by neglect cases and other preservation work of interest. My team visited a vacant and neglected row house in Crown Heights that is facing severe deterioration as well as the South Bushwick Reformed Church where the steeple is leaning due to poor joint construction in the

original design. I also attended two court hearings regarding a landmarked property that has been facing ongoing violations for almost twenty years. Each meeting and visit demonstrated different parts of the enforcement process and multiple modes of support for the owners of distressed buildings.

LPC is also in the process of completing a new edition of their Permit Application Guide. My secondary project was to assist staff preservationists in the creation and revision of graphics used in the guide. Using illustrator and AutoCAD, I edited images to enhance visual clarity and modified technical drawings to reflect both historic and modern preservation and construction methods. I also photographed examples of successful preservation work completed on landmarks around the city.

My time at LPC highlighted the nuances of historic preservation at the municipal level, not only in New York City but in other parts of the country as well. Working with the preservation staff and attending weekly hearings exposed the benefits of preservation policy in conjunction with a level of flexibility and compromise needed for successful landmarks jurisdiction. This exposure enhanced my desire to pursue a career in preservation policy and historic resource management.

# Sung Di City of Detroit, Planning and Development Department Detroit, MI, 2019

Mongol Ecology Center Hatgal and Ulaanbaatar, Mongolia, 2019



In the PDD meeting room with previous event posters. Detroit, 2019



On the Hovsgol lakeshore with MEC team. Hatgal, 2019

This summer I spent some time in Detroit's Planning and Development Department (PDD) in June to July and flew across the world to work with Mongol Ecology Center in August.

The post in Detroit was granted the program and PDD's collaboration funded by the Knight Foundation. Detroit's PDD is comprised with several divisions, East, Central, West, Historic, Strategic, Innovative, Transportation and Outreach. Through Professor Randall Manson, I was working with Jaqueline Taylor, the historian under the Historic Preservation Division. The project jointly conducted by PennDesign and PDD is Tactical Preservation, and in 2019 summer, we are at the stage of developing a design scheme for one specific project among those previously investigated by the Class of 2019. I was mostly involved in developing that project with some more down-to-earth ideas and providing a dossier for conceptual design phase. I used my skills previously learned in Architecture school, such as using Adobe graphic design programs and CAD programs; I did some research on the properties on Sanborn Maps and City Directory, which I gained experience in HSPV600. I enjoyed my time in Detroit as it is one-of-akind city representing American industrial rise and fall in an urban scale. And I was able to evaluate my own perspective on Detroit through working in PDD, which I greatly appreciate it.

After my time in Detroit, I flew to Ulaanbaatar, to work with a local Non-Government Organization, Mongol Ecology Center (MEC). Invited by MEC, I worked with former National Park Service Director Robert McIntosh and Philadelphia architect Michael Kihn. We were there on-site in Hovsgol National Park in the Northwest Mongolia, working on an early-phase conceptual design for a Conservancy Research and Education Center. In this design proposal, we managed to honor the environmental condition as well as the historic cultural landscape. This town on the lake was a prominent port during Communist era trade with the USSR. I learn to quickly absorb local conditions and traditions on buildings and construction, and responded as fast as I can with an appropriate answer.

I am deeply grateful in both my internships during the summer and hoping to develop the projects deeper and further.

# Abbey Dolan

Greater Portland Landmarks Portland, Maine, 2019



Inputting Data in the Office, 2019



Surveying Historic Pavers, 2019

During this summer I worked for the preservation advocacy group known as Greater Portland Landmarks, which looks into historic issues for the area in and around Portland Maine. The organization is a long standing part of the community and has done a lot of work in preventing important historical landmarks from being lost or neglected. They successfully managed to save two houses from the early years of the city and which now belong to the Portland Museum of Art as part of their property. They also have a yearly updated to a list of properties they call Places in Peril, which brings public awareness to the neglected historic resources in an attempt to get them noticed and sometimes funded for repairs. They also manage to provide informative walking tours and publications available to the public for small donations that are tied to historical resources of the area.

This summer I worked with several other interns mostly on a specific survey cataloguing the historic resources that might be lost to climate change and coastal erosion. I and my partner in crime, Sarah Knauer, worked on photographing a historic neighborhood in South Portland called Ferry Village. We then input relevant data related to each resource into the Cultural and Architectural Resource Management Archive database known as CARMA as well as a newly organized climate change survey that was beginning to look at potential hazards on buildings in the case of extreme weather. In addition to all the data entry for each property, a final report was compiled with a history of the area and a matrix that identified whether a building was eligible for historic register nomination.

Small things around the office were also up to us. Each intern was asked to write a small blog post that would be posted on the organization's website in the future. We also each did research pertaining to two of the Places in Peril nomination which we then presented to the board for their consideration as final entries to the list that is publicly distributed.

## Gabe Harper

Historic Brattonsville – Culture and Heritage Museums of York County York County, South Carolina, 2019



Clenching nails on a replacement board for the door, 2019



Dairy front elevation following restoration work, 2019

This summer I had the incredible opportunity to participate in the restoration of an early 19<sup>th</sup> century dairy building on the former Bratton Plantation, located in southern York County, South Carolina. The nearly 800-acre site interprets the architectural and cultural history of the South Carolina Piedmont and has been under the care of York County Culture and Heritage Museums since 1998, following early local restoration efforts in the 1960s and a successful nomination to the National Register of Historic Places in 1971. The site includes more than 30 historic structures, many of which were salvaged from other parts of the county and moved to the Brattonsville site in an effort to further assist visitors in their understanding of life in rural South Carolina in both the 18<sup>th</sup> and 19<sup>th</sup> centuries.

Through the use of the Bratton Family narrative, the site's mission is centered on offering the most wellrounded and socially inclusive educational experience as possible to its visitors. As is the case throughout much of the American Southeast, early interpretations of plantation landscapes often neglect to include the narrative of the slave. The restoration of dependency structures such as the Bratton dairy serves to further illuminate the working landscape of the enslaved and likewise bring dignity and long-deserved validity to a story which was once left to crumble and be forgotten.

As the majority of the restoration of the dairy structure's brickwork had been completed the summer before, I was tasked with assisting in the restoration of the building's woodwork. This included the consolidation and patching of all three sets of the building's original 19<sup>th</sup> century window frames, along with the creation of a new header, and the replacement of all three window sills with appropriately sloped ones. All replacement wood pieces came from lumber which was milled onsite, and worked with planers and chisels, similar to how they would have been worked historically. All joint work was completed using mortise and tenons and the final window frames were eventually pulled together using hand made wooden pegs through said joints. After fitting the newly painted frames back into their respective openings on the building, we then proceeded to build new shiplap window shutters with chamfered batons to cover them. These were hung on both original and newly forged (where necessary) pintles, complete with all newly forged hinge hardware held on by clinched cut nails. I also assisted in the hanging of all new gable boards on the structure, as well as the replacement of rotted soffit and facia boards on the northern and southern elevations.

Finally, we focused our attention on the door, the majority of which consisted of original (1830s) tongue and groove floorboards held together in part by large batons on the interior face. The restoration of the door included the removal of all traces of the past restoration campaign (cir. 1970s) and the replacement of an old board with a newly planed one along with several dutchman repairs.

Sarah J. Knauer Greater Portland Landmarks Portland, Maine 2019



Documenting utilities and house features for survey in Ferry Village, South Portland, 2019



Ferry Village, South Portland House, shows alteration to house and climate change issues, 2019

#### Survey Work

A survey was conducted in South Portland's Ferry Village covering 470 houses with their detached garages/ outbuildings historic features and house components that would be affected by climate change. Photographs were taken by Abbey Dolan and Surveying data was done by Sarah Knauer (me). Surveying was conducted over a few days, but integrating the data took weeks.

The Cultural & Architectural Resource Management Archive (CARMA) is the Maine Historic Records database which collects data about houses and their outbuildings. Take for example the above image on the right. Information that would be inputted would be things like the siding and foundation material, location of the porch and chimney, house and roof style, and identification of the roof addition. This information will be used to create a permanent record of these historic features as of 2019. Ferry Village has never been surveyed prior (may be one of the only surveys of the area while the location is still intact).

The second aspect of the survey was to complete the Climate Survey which documented components of a house that would be at risk in reoccurring floods and heavy storms. Take the above image on the right again, the porch and fence would be noted (could detached in heavy winds). Also noted was basement windows in the foundation and previous evidence of flooding on the property. Additionally, objects that can fall into a property such as utility poles and trees, and the location of utilities and other openings in the foundation in relation to flood waters. This climate change survey was the first ever completed in Maine (funded by the state) and will help the city understand what steps need to be taken to get homes and storm mitigation techniques in place.

#### Historic Street Paver Inventory

In addition to the survey work, I undertook the project to create the first inventory of cobble stone streets in Portland Maine based off the *Philadelphia 1999 Inventory* and the *2014 Thematic Survey*. This involved finding the location and condition of twenty-two historic roads/ segments. Each identified historic road was given a Map and Identification number, as well as being paired with its Google map images, parcel map location, nearest address, field images, condition survey, and relation to historic districts. The proposed second phase of this project is to utilize this information to follow the *2014 Philadelphia Survey* which utilizes engineers to create a cost analysis for the upkeep of their historic roads.

# Kimberly La Porte

Brooklyn Navy Yard Development Corporation | Higgins Quasebarth & Partners New York, 2019



View of the Brooklyn Navy Yard towards Manhattan from Building 77, 2019



Documenting finishes in Manhattan, 2019

During summer 2019, I worked with two New York-based organizations entrenched in the challenges of interpreting and managing change within the urban built environment: the Brooklyn Navy Yard Development Corporation, a nonprofit group responsible for developing and managing the waterfront manufacturing zone of the Brooklyn Navy Yard on behalf of the City of New York, and Higgins Quasebarth & Partners, a preservation consulting firm with a robust portfolio and broad range of expertise.

At the Brooklyn Navy Yard, I was granted the first iteration of the newly established Graduate Research Fellowship, based out of the BNYDC office of Exhibits & Programs. In this position, I assessed the impact of the current narrative of the history of the Yard illustrated through the display "Brooklyn Navy Yard: Past, Present, and Future." Then, through archival investigation, I proposed alternative interpretation methodologies that could more effectively convey the legacy of development and reuse within the Yard as well as strengthen its connections with surrounding communities.

My experience at Higgins Quasebarth & Partners, under the incredibly generous mentorship of all levels of staff, allowed me to contribute to the planning and execution of projects focused on historic properties in consultation to private clients, real estate developers, architects, and contractors. The work I was tasked with facilitated a deep engagement with preservation procedures as I participated on site visits, conducted research at the New York City Municipal Archives, attended Landmarks and Preservation Commission meetings, and surveyed historic districts to understand design precedents, amongst many other opportunities. Working at both the Brooklyn Navy Yard Development Corporation and Higgins Quasebarth & Partners provided me with a dynamic understanding of the varied ways preservation tools and policies structure and permeate the evolving fabric of New York. I am grateful for the support of these organizations and I look forward to integrating what I have learned through each into my future practice as an emerging preservation professional and beyond.

#### Sarah Lerner

The Lower East Side Tenement Museum New York City, 2019



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At my desk researching the construction history of 97 Orchard Street, 2019

A comparison of two condition reports that illustrates how the museums has monitored the change in physical fabric over time, 2019

This summer I had the privilege of working as the curatorial intern at the Lower East Side Tenement Museum. The museum shares stories of the immigrant and migrant experience through immersive guided tours, educational content and programs, and thoughtful leadership, with one important goal to advance the understanding of immigration and to highlight its role in the ongoing creation of our nation.<sup>1</sup> The main artifact in the museum's collection is the tenement building on 97 Orchard Street, a structure once home to 7,000 individuals and hundreds of commercial enterprises. Historic house museums, such as 97 Orchard Street of the Lower East Side Tenement Museum, foster the public's comprehension of the past. The significance of 97 Orchard Street resides in the public having access to and learning from the site; yet, the reality is that visitors have a damaging impact on the building and its historic fabric. The damage is cumulative and ultimately affects the integrity and preservation of the historic site. Over the past few years, the museum staff has carefully monitored the building's conditions and implemented preventative conservation methods to mitigate deterioration. With visitation numbers increasing, the museum has decided to forgo an extensive preservation project in summer of 2020. This project will aim to reinforce the structural system, thus increasing the physical capabilities of the structure. In addition to the longevity of the building, it is imperative that the safety and health of the visitor be of concern as well. One of the most pressing health concerns is the extreme interior temperatures of 97 Orchard Street. For decades the museum has interpreted these temperatures as part of the authentic historic experience, however, due to the changing climate and ethical standards of living, the museum has made the decision to install an upgraded HVAC system.

<sup>1</sup> Suka Creative, "Sharing Stories of the Immigrant Experience," Tenement Museum, accessed August 08, 2019, https://www.tenement.org/.

I was hired as an intern to spearhead the research for public programming that interprets this preservation project. In addition to familiarizing myself with the scope of the project, I have also created content that connects the elements of the project (i.e. historic preservation, building structures, building materials, building trades, and environmental studies) to the museum's mission and preservation theory. Throughout the summer I have utilized skills that I had begun to develop last year in HSPV 534, HSPV 541, HSPV 572, HSPV 600, and HSPV 601. By the end of the ten weeks I had compiled an extensive bibliography of primary and secondary sources, created a digital resource archive, and completed a four part draft of programing content for a tour or exhibit about the 2020 *97 Orchard Street Preservation Project*. In addition to research and writing I was able to attend tours and other experiences at the museum. These activities built upon my understanding of the many ways the built environment can be interpreted through public history.

Xue Fei Lin City of Detroit Planning and Development Department/ PennPraxis Detroit, 2019



Visits to buildings under consideration for tactical preservation, 2019

Rendering developed for potential historic building reuse, 2019

During the summer of 2019 I worked as a historic preservation intern at the City of Detroit Planning and Development Department as part of the Detroit-Philadelphia Preservation Exchange Urban Heritage Project. I was primarily involved with the tactical preservation project in the department. During the internship, I participated in visits to various buildings that were selected for consideration for the tactical preservation program and assisted with documenting building conditions. I was asked to research adaptive reuse ordinances in various other U.S. cities that are potentially applicable to Detroit. I also researched adaptive reuse projects, focusing on those that utilized part of the building, similar to the tactical preservation idea, and compiled them into a book that the department can use as a reference.

I got the opportunity to participate in two monthly Tactical Preservation Work Group meetings. The Work Group included people from various preservation-related fields, including developers, architects, building and safety and fire departments from the City. Through the meeting discussions, I was able to hear the different aspects and concerns presented from diverse perspectives. The discussions narrowed down the few selected buildings to three final buildings of three different scales that the department would proceed to prepare a package to attract developers and potential buyers to put the buildings back in use. For each of these three final buildings, I created a rendering that imagines how each building can be potentially reused.

I also had the opportunity to assist with the exhibition design for the Planning and Development Department's participation in the 2019 Chicago Architecture Biennial, where the recent works, including preservation efforts, will be displayed and showcased to the public.

Through this internship, I got to learn more about Detroit, which presents many different social, cultural, and economic problems pertaining to preservation because of the City's history and recent struggle. By engaging in the Tactical Preservation Work Group meetings, I was able to learn about the practical aspects concerning building reuses.

# Renata Lisowski Fort LeBoeuf Historical Society Waterford, PA, 2019



The Amos Judson House Museum in Waterford, PA, 2019

Renata Lisowski dressed for tours during Heritage Days, 2019

The Fort LeBoeuf Historical Society is a non-profit organization in the town of Waterford, Erie County, Pennsylvania, which manages an historic campus including the Fort LeBoeuf Museum, Amos Judson House, Eagle Hotel, and Washington Park. The Eagle Hotel and the Waterford Borough Historic District are on the National Register of Historic Places (the Amos Judson House is a contributing feature.) FLBHS was established in 1975 to save the Eagle Hotel from demolition, and in the following decades received its other historic properties from the Pennsylvania Historical and Museum Commission. Every location on the historic campus is free, open to the public, and run entirely by volunteers.

For my summer internship I worked for FLBHS at the Amos Judson House location. The house was built in 1810 (Greek Revival addition in 1820) by Amos Judson, the first white settler in Waterford. He built his house on the location of the former French fortification Fort de la Rivière au Bœuf. Judson was a merchant and entrepreneur who used his home and fortune to help his extended family establish themselves on the frontier in Waterford. The Amos Judson House operates as a museum of 19<sup>th</sup> century American life, and it also serves as a research facility for local history and genealogy.

At the Judson House, my duties included giving tours of the museum, completing research requests, and data entry into PastPerfect collection management software. Additionally, I assisted during the Heritage Days Festival and was present for a paranormal investigation of the house. Through these experiences, I got to see the wide range of operations at FLBHS and was able to meet a variety of citizens whose passion for history and selfless volunteerism make it all possible.

The history and culture of rural America is important to me, and I am grateful to have used the knowledge and skills gained at Penn to give back to my community.

#### Zhen Ni

The Center for Architectural Conservation Fort Union & Pecos National Historical Park, 2019



Profilometry work at Fort Union, 2019



Photo recording of Pecos convento ruins, 2019

This summer, I worked as an architectural conservator intern at the CAC, where I took part in two projects in the west: Fort Union National Monument and Pecos National Historical Park. Both sites are in the state of New Mexico. Pecos is now ruin of a 17<sup>th</sup> century Spanish mission church and a 18<sup>th</sup> century church built by the Pueblo people, a convento is located right next to the church. We (Chongke, Joe and I) started some preliminary work at the CAC office, and then spent a month out in the field, before returning to the office for some post-field work.

Our work was mainly on Pecos because the CAC was trying to carry out a new set of methodology for the NPS office there. In the pre-field phase, we created the very first set of CAD drawings for the 18<sup>th</sup> century church based on the 3D scan done in 2013. This set of drawing, containing: one plan, four elevations, and four sections, not only gave the NPS a better understanding of the site, but also became the basic data of our work later on. During our field work at Pecos, we mainly accomplished three things. First, we took thousands of photos of all the church walls so that we can use Agisoft to create rectified photos for every church wall in detail level. Second, we took more eight hundred photos of the whole convento area, with the aim to compare with the photos taken years ago by the NPS. Hopefully the comparison may tell us how the convento has changed during that time. Finally, we updated and completed the unfinished vulnerability survey of the convento walls. The purpose behind this was that the NPS can rely on the final ranking of each wall sector to decide which walls to treat first because the budget and manpower were always the main concern. After we came back, we created photo elevations and sections based on the rectified photos made in Agisoft. Then we merged these with the preliminary CAD drawings, and created a set of informative PDFs showing both the contour and the photo level

detail of the whole church. Additionally, we organized the construction history of the church from 1930s to now.

This internship taught me a lot. As a Chinese student, this is my first time taking part in a conservation project from the beginning. Methodology varies, that's what I learned and experienced. You don't know what to do at first, and that's totally fine. Just try different ways and you will gradually know and find what you might want. Finally, it was really a great experience working in the in American Southwest.

# Mónica P. Ortiz-Cortés

Historic American Building Survey, Latino Heritage Internship Program Washington, DC, 2019



Adding measurements to Fieldnote, 2019



Row House documented, 2019

This summer I worked as a summer Architect for the Historic American Buildings Survey, sponsored by the Latino Heritage Internship Program (LHIP). The Historic American Buildings Survey or HABS is one of the oldest federal preservation programs; It is administered by the Heritage Documentation Program that also houses Historic American Engineering Record (HAER) and Historic American Landscape Survey (HALS).

I worked in a team of 3 including: Robert Arzola (HABS Architect), Jocelyn Johnson (HBCUI) and myself to document a historic Rowhouse in the neighborhood of Woodley Park in Washington, DC. From our first site visit we started making hand sketches and taking hand measurements that we later used to draw the plans, elevation and section in AutoCAD. We also used laser scanning to draw the elevation of the house and learned how to use two software's to process the laser scanning data. We were also exposed to the process of large format photography.

At the end of the internship we produced a six-sheet set of documentation including door, frame, and window details. I had several networking opportunities where I met National Trust Interns and other LHIP interns from around the country at the annual LHIP workshop. At the end I had the opportunity to attend the meeting and present my work to the AIA Historic American Buildings Survey Steering Committee where I met architects, historians and Librarians from the Athenaeum of Philadelphia and the Library of Congress.

This experience opened my eyes to the growing need of documentation education and how HABS documentation should be known by more students and professionals. It exposed me to new software's and skills for laser scanning and panoramic images. It also exposed me to future employers and connections. Even though I only worked on documenting I gained experience by working on a team and evaluating my teammates work and putting everything together in one cohesive document.

# **Elizabeth Sexton**

Page & Turnbull, Los Angeles Office Los Angeles, CA, 2019





Field Survey at NASA JPL, 2019

At NASA JPL with Page & Turnbull LA Team, 2019

This summer I had the opportunity to intern at Page & Turnbull's downtown Los Angeles office. Page & Turnbull is an architecture, design, planning, and preservation firm with offices in San Francisco, Sacramento, and Los Angeles. My internship was mainly focused on assisting the firm's Cultural Resources Studio in conducting historical research and drafting findings in reports for clients. The first project I worked on concerned the history of a Los Angeles movie theater which was being considered for redevelopment. In order for the firm to make appropriate recommendations to the client for the reuse of the space, I was tasked with pulling historic records (permits, plans, alterations records, etc.), news clippings, and photographs and collating that information into a report. This involved accessing records at the Los Angeles Building Department and conducting research through the Los Angeles Public Library and other applicable research platforms. My next project assignment consisted of a similar pulling of information and report composition, but this time for UCLA's Young Research Library, designed by A. Quincy Jones and Frederick Emmons.

The majority of my internship though focused on a project for NASA JPL located in Pasadena, which would determine recommendations and guidelines for the site's historic district relating to JPL's early space exploration period (1958-1975). The project, carried out by a team of four including myself, aimed to assess roughly 30 buildings by means of historic research, surveying, and a final written report. I assisted with early preparation for the project and field survey, which involved conducting preliminary research, attending meetings with NASA JPL staff, and requesting and organizing additional research materials from JPL's facilities and environmental affairs departments. We next divided the buildings between our team so that more in depth research on each building could be conducted. I was assigned 12 buildings for which I did photographic research, assembled a building chronology by sifting through previous building records and plans, and began to identify character defining features. We then spent three days on site at JPL, documenting the interior and exteriors of the assigned buildings through photography and assessing historic and current floor plans in the field to identify alterations and material types. Post site visit involved pulling together the client report with the information we had

found through research and confirmed on site. I helped draft the introductory matter for the report and wrote building profile chapters for each of my assigned buildings, which included a significance statement and diagrams to accompany the character defining features list.

Lastly, and aside from assisting the Cultural Resources Studio, I helped the project managers / designers with several smaller tasks. This included research into particular ASTM standards, creating submittal logs, and submitting drawings to the building department.

Through this internship, I was able to briefly experience a career working in the private sector as an architectural historian. Furthermore, I was able to gain better understanding as to how a role in project management could further be obtained through materials knowledge. I also was able to somewhat familiarize myself with the preservation structure in Los Angeles and the various consultant groups involved.

# Maggie Sollmann

Wiss, Janney, Elstner Associates New York City, 2019



Prep work for water testing, 2019



Taking readings with moisture monitor, 2019

This summer, I interned in New York City with Wiss, Janney, Elstner Associates—a national architecture, engineering, and material science firm that specializes in building diagnostics for historic and contemporary structures. My assignments varied drastically as I helped multiple project managers with tasks from developing drawing sets to completing fieldwork. This in turn gave me the opportunity to attend meetings and site visits with clients and contractors to understand the dynamics at play within the industry, both in preservation and new construction.

The primary takeaway WJE provided me with was insight into the more technical workings behind preservation, focusing less on the restoration of the aesthetics and more so on the minute details involving the mechanical and structural integrity that can make or break a building. This included shadowing discussions held between architects and contractors on developing details to correct building failures, aiding in water testing masonry and limestone to detect points of water infiltration, and using non-invasive building investigation such as taking readings with a moisture monitor or documenting with an infrared camera.

Other tasks this summer involved developing drawings of the elevations and existing conditions (provided by a drone survey) of a terra cotta skyscraper that would be used by the Difficult Access Team while they scaled the building to sound test locations of failure; creating and updating drawing sets of sidewalk details to meet NYC DOT standards and be approved by the NYC DOB, LPC, and MTA; and writing drafts for meeting minutes and field reports along with other miscellaneous construction administration work.

While my past academic and work experience has focused heavily on preservation architecture, my interests at Penn have gravitated towards planning and policy in Historic Preservation. My time with WJE this summer, however, enhanced by understanding of the various government agencies and

private/public groups that are involved with a single project, which will help inform my approach to policy and planning as a trained junior architect.

# Adrian Trevisan

Philadelphia City Planning Commission Philadelphia, PA 2019







Upper Northwest District Plan 2018

This summer I interned with the Philadelphia City Planning Commission (PCPC) preparing the nomination for a historic district in Northwest Philadelphia. This work was very similar to that of the first semester class *HSPV 600: Documentation: Research, Recording, and Interpretation,* while also providing insight into city government and context for historic preservation. The PCPC's need for this internship grew from a recent major city planning exercise.

The city of Philadelphia rewrote its zoning code in 2010. The code was written in 1933 and revised in 1960, and had undergone many minor modification in ensuing years, leaving it with almost as many exceptions as it had rules. The city had also changed radically since 1960 and a new code was needed to reflect those changes. The city is divided into 18 regions, and after the overall code was written, the PCPC team responsible for each region wrote a strategic plan for the region and began revising the region's zoning map. Each plan was organized around three forward-looking themes (Thrive, Connect, Renew), nine plan elements, 25 topics, and 73 objectives. One of the elements is historic preservation.

One of the major insights of the plan is that mixed-use buildings in walkable neighborhoods that are well-connect to the rest of the city by public transportation are a key element to achieving success. HSPV students will immediate note that this sounds a lot like cities from the 1860s to 1910s (minus the pollution caused by horses and coal-fired factories and heating plants). The strategic plan for the Northwest region, which contains Germantown, endeavors to revitalize major corridors such as Germantown Avenue by, among other things, encouraging the rehabilitation and use of mixed-use buildings. These streets boast a large number of historic low to mid-rise buildings, with commercial space on the ground floor and residential space above, and trolley or bus lines running along their length. They have also seen recent activity from property developers demolishing historic buildings in order to replace them with new buildings lacking both the historic character that define the neighborhood and the quality of material and workmanship that define the buildings. This goal of this internship was to research and write a nomination for a portion of Germantown Avenue containing about 50 buildings in order to have it placed on the Philadelphia Register of Historic Places. This would protect it from uncontrolled development and encourage thoughtful adaptive reuse.

As in HSPV 600, I spent a lot of time doing online research. I began by searching for each address, and then as I discovered businesses or individuals associated with an address I searched by those terms as well. I also visited the Historical Society of Pennsylvania and the Germantown Historical Society to search the parts of their collections that are not online. Unlike the individual building nomination form, the district nomination form contains an "Inventory" section. This is an Access database form containing basic administrative information (e.g. address, OPA number, whether already individually listed), historic information (e.g. year built, architect, original owner), physical description, photographs, and classification as Significant, Contributing, or Non-Contributing. Completing this required a trip to the district to photograph each building.

Similar to the individual nomination, the district nomination also requires also requires a Statement of Significance describing the history of the district within that of the city, and explaining why it deserves to be designated. Some of this information was available online, while bigger picture information about Philadelphia history required several visits to Van Pelt Library. In addition to this, I worked with the planners to determine the boundary of the district, describe it, and draw a map of it using the city's GIS system.

Several years ago a city government reorganization brought the Planning and Historical Commissions under the same leadership and located them side-by-side. This allowed me to ask the Historic Commission staffer responsible for reviewing the nomination questions about format and content. She also gave me access the Historical Commission's paper files covering buildings in the proposed district, which was very helpful.

Lastly, I attended a number of Planning Commission and Historical Commission meetings, which gave me a lot of insight into what the objectives of the two bodies are and how they make decisions. While City government may seem monolithic and opaque, I found it these two parts of it to be made up of thoughtful, caring people who are trying to make the city a better place of everybody to live in. The internship was very rewarding.

# Chongke Wu

The Center for Architectural Conservation, Penn Fort Union National Monument, Pecos National Historical Park, 2019



Site continues survey in Fort Union National Monument, 2019



Site photography in Pecos National Historic Park, 2019

This summer I worked with the CAC (Center for Architectural Conservation, formerly the ACL) on two separate projects in New Mexico: Fort Union National Monument and Pecos National Historical Park. I was in a team of five people, three of us from the Graduate Program in Historic Preservation. The other two teammates were: Evan Oskierko-Jeznacki, an environmental design PHD candidate, and John Hinchman, the CAC project manager.

Both of the projects are adobe architecture, so some basic adobe material knowledge is helpful and useful. We spent the first two weeks working in the CAC office with the CAD drawing of the PECOS mission church, the largest 17<sup>th</sup> century church in this region. The National Park Service offered us a set of 3D scanning files on the church. Using these, we finished a set of architecture drawings, which were important for our following site analysis.

In the first two weeks after we arrived in New Mexico, we worked in Fort Union National Monument. FOUN is a military fort from 1851-1891 which is comprised of territorial-style adobe ruins. Honestly, this precious heritage was in danger although the NPS kept the regular maintenance for a long time. The adobe wall collapses have threatened the site's ability to maintain its physical integrity. Our work was helping Evan finish the vulnerability wall assessment survey. We assessed a number of walls, analyzed the main risk and leveled them. All this information will be used to determine which wall requires treatment and what future treatment the NPS should give.

The next stop was Pecos National Historical Park, which is similar to FOUN with its adobe ruins but differs completely in the original use. Compared with the FOUN project, this PECOS project we're still in the starting stage. What we need to do is document the church's current condition and try to find the existing dangerous problems. This work is essential for the CAC future work on the PECOS monument.

Overall, I enjoyed my internship with the CAC so much and it is a very impressive and meaningful experience for me. This position allowed me to travel southwest America for the first time and experienced a local American life. Besides, I learned a lot from other summer interns and John. FOUN and PECOS made me more interested in adobe architecture. Definitely, working with CAC was the best internship choice for me.

# Noah Yoder

Materials Conservation Collaborative Philadelphia, PA, 2019



Noah Yoder standing by a fence he helped repair at the Old Pine Church burial ground, 2019



Some composite fills in the cracks of a large stone that had been cleaved in half by a nearby tree root, 2019

A longstanding interest in Philadelphia history led me to spend my summer interning with the local conservation firm *Materials Conservation Collaborative* (MC). While MC works on a variety of projects, I was tasked largely with masonry repairs in several Philadelphia area cemeteries including headstone repairs at Christ Church burial ground and extensive fence repairs at Old Pine Presbyterian church.

The Old Pine Presbyterian church was founded in 1768. Many of the church's congregants fought in the Revolutionary War, and approximately 200 soldiers are buried in the adjacent cemetery. The church was remodeled in the Greek Revival style the 19<sup>th</sup> Century, at which point a cast iron fence was installed atop a marble retaining wall around the burial ground. Much of my summer was spent repairing this wall which had been badly damaged by nearby trees and centuries of weathering. Parts of the fence were slanting dramatically over the sidewalk, the cast iron was corroded and broken, and the marble slabs of the retaining wall had split and spalled extensively.

First, we cleaned the wall with a mild biocide to remove discoloration of the stone, and then dismantled the cast iron fence for repair off site. Each segment of the retaining wall was individually removed, and when necessary glued back together with epoxy or metal pins. The stones were then placed back into place over a level foundation that had been cleared of irregularities including tree roots, which had been the primary cause of the retaining wall's breaking and displacement. Once the stones were in place, we mixed a lime-based mortar to tuck-point the joints between stones, and also prepared a color-matched masonry composite to fill unsightly cracks and spalls. Later, additional painting out of these repairs was preformed to further camouflage the treatment.

My internship with MC provided a great opportunity to try my hand at a variety of masonry related treatments and skills. My Coworkers were great, and the job was engaging from start to finish.

Yujia Zhang NYC PARKS NEW YORK, 2019



Repainting the sculpture, 2019

Power washing the Washington Arch, 2019

My summer internship was working in the Monuments Conservation Program at NYC Parks. This internship involved preserving the Monuments in NYC Parks, which are located all around New York. During this job, I spent my summer exploring Manhattan, Brooklyn, Bronx, Queens, and Stanten Island, which like to explore New York. This program led us to maintain and conserve the public arts in NYC Parks. Most monuments that I worked with are bronze sculptures which are famous in American history, other sculptures and arches were made of marble.

There are some steps we usually do for the monuments. The first step is clean it, if it's a sculpture made by bronze we use the power wash gun and Orvus (a neutral pH synthetic detergent with excellent detergency, emulsifying and dispersing properties<sup>i</sup>) to wash it quickly because we don't want to lose the color layer. The second step is to check the bronze condition, and if the state of bronze is right, we used the brush to cover the entire sculpture with cold wax. If the bronze sculpture shows some oxidation , we will use the hot wax, which uses the Roof torch to heat the bronze until the bronze is hot enough to melt the sculpture wax. We let the liquid wax cover the whole sculpture to keep it in excellent condition. And if we find the bronze color layer lose, we will lacquer it again.

If the sculpture is made by stone, we will use Vulpex (a liquid soap based on potassium methyl cyclohexyl oleate. It is an excellent cleaning agent for masonry, textiles, leather, precious metals, ivory, paintings, and armor.<sup>ii</sup>) for more durable stone such as Marble Travertine, Limestone, Granite, and tougher stains. After the wash, we will be spray the Revive (an acid replacement technology cleaner

designed to etch grout, remove grout and mortar smears, mineral deposits and rust stains<sup>iii</sup>) to clean the traces of pollution.

In the end, most work we did was trying to protect the sculpture in the present state. We didn't change them dramatically, our aim was to prevent water and pollution from creating further damage.

<sup>i</sup> Conservation Support Systems - Orvus WA Paste, conservationsupportsystems.com/product/show/orvus-wa-paste/detergents-soaps.

<sup>ii</sup> "Home Order Catalog Main Next Page Previous Page Contact Us About Us Technical Info." Vulpex Spirit Soap, www.conservationresources.com/Main/section\_31/section31\_21.htm.

<sup>iii</sup> "Revive - Acid Replacement Cleaner (Gallon)." Tile Tools HQ, https://www.tiletoolshq.com/find-products-bymanufacturer/modern-stone/revive-acid-replacement-cleaner-gallon/.