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During the month of June 2021, I worked as a research fellow at the Florissant Fossil Beds National Monument through the Center for Architectural Conservation. Caitlin Livesey, UCLA graduate student Isabel Schneider, and I worked under Frank Matero with close supervision from Dr. Herbert Meyer (Park Paleontologist), Conni O'Connor (Museum Technician), and Jeff Wolin (Lead Interpreter). Our project focused on Stump P-47; a 34-million-year-old petrified tree stump of the *Sequoia Affinis* species. My team's primary goal was to test the feasibility of a large-scale stabilization treatment through survey, documentation and analysis of current material conditions, and implementation of the 2019 fragment reattachment protocol. My team utilized the division system developed in 2016 by UPenn Alumni Evan Oxland. Of the five created sections, I mainly addressed section P-1. Images taken by Oxland were annotated to identify incipient spalls, detachments, and losses of Stump P-47. Areas that were identified for reattachment were numbered and color-coded on the 2016 images, and color-coded stickers were numbered and placed on the fragment and its lacuna. For each piece that was loose or detached, I measured first, sometimes sketched, and then photographed. Dirt and vegetation were removed, and a light cleaning was performed with isopropyl alcohol before spot welds were marked with white chalk. Both the fragment and its corresponding area were scored using a Dremel to provide a better "grip" surface for the epoxy. The fragments and lacunas were then thoroughly cleaned with isopropyl alcohol, and the epoxy was applied to each scored area. Each fragment was given temporary supports and allowed to dry 24 hours. My team used epoxy Araldite 2015 which was successful when tested to resist damage caused



Carly (back), Isabel (center), and Caitlin (front) with Section P-1.

by UV radiation, participation, and temperature fluctuations.

Stump P-47, specifically, experiences multiple stressors of deterioration daily. Extreme weather and temperature ranges, exposure to direct sunlight and precipitation, interaction between flora and fauna, and over a century of fragment loss due to theft and natural erosion have contributed to the stump's poor condition. My team encountered several of these during our time there. The stump acts as an ecosystem which provides a unique habitat for various forms of plant and animal life. However, we were unwelcomed by insects, and much of the vegetation and animal life negatively affect the stump's stabilization. Additionally, weather conditions posed several issues. The last two weeks were a mix of rain, hail, and unpredictable temperature fluctuations. Most days began with high heat and ended with thunderstorms or hail. Heavy rains created muddy conditions in the pit, making the unexcavated material vulnerable, and leaving Stump P47 entirely damp and impossible to work on. The park provided us with an alternative workspace in the yurt which we took advantage of whenever possible.



Carly (left) and Isabel (right) with Section P-4.

Overall, my time in Colorado was successful. My team reattached a total of 141 fragments, and possibly spearheaded a large-scale conservation treatment at the Florissant Fossil Beds National Monument. I had the extraordinary opportunity to work on a 34-million-year-old fossil and explore its unique mineralogy. The skills I learned in HSPV 600 and HSPV 601 came naturally when documenting each fragment, and the hands-on experience will prove irreplaceable in the professional field.

Ali Cavicchio

Center for Architectural Conservation

Pecos, New Mexico; Spring Green, Wisconsin

H. Ro and A. Cavicchio applying mud capping on a convento wall, with the Pecos church in the background.



This summer, I worked as a Research Fellow for the Center for Architectural Conservation (CAC) at Pecos National Historical Park in New Mexico, and at Frank Lloyd Wright's Taliesin in Spring Green, Wisconsin.

During my time on site at Pecos, I worked on developing a methodology for monitoring the condition of the encapsulated historic adobe walls in the convento-church complex. Encapsulation is a method of protecting earthen architecture by creating a sacrificial veneer layer of new adobe bricks around the original adobe wall. The methodology for monitoring this type of wall system included creating rectified photos, conducting conditions assessments, and collecting and testing soil samples from the veneer of our pilot wall. The veneer of the pilot wall was then removed, after which we rectified photos and conducted conditions assessments of the exposed original wall. The goal of this work was to determine if there is a correlation between the conditions of the adobe veneers and the original walls. By monitoring veneer conditions through a rapid assessment survey, NPS will be able to better determine which encapsulated walls are most at risk and require a full conditions assessment. The methodology developed this summer will inform the Historic Preservation Guide for the park. Working with the NPS team at Pecos was an amazing opportunity to gain field experience and learn firsthand about the conservation of earthen archaeological sites.

At Taliesin, I worked on documentation and recording of the Midway Barn. Midway anchors Taliesin historically as a functional farm, and represents Wright's visions of holistic living, including as a part of the Taliesin Fellowship. This

was an incredible opportunity to experience Taliesin as Frank Lloyd Wright intended; fully immersed by living, working, and learning on site. I worked on terrestrial laser scanning of the interior and exterior of the barn ultimately used to create a three-dimensional model of the barn, HABS photography, and rectified photography to inform future conditions assessments. My favorite memory from Taliesin is climbing up into the iconic milk tower.

The techniques I learned and knowledge I gained during my first year of classes, including Building Pathology, Conservation Science (HSPV 555), Digital Media (HSPV 624), Documentation and Recording (HSPV 600-1), and Theories (HSPV 660), were critical for both of my internships. This summer was an invaluable experience: I had the chance to work alongside Frank Matero, FLLW Foundation, and NPS staff in the field. I learned how to conduct conditions assessments, and use software and

technology such as SketchUp, a total station, laser scanner, and a drone. I also honed my photography skills and strengthened my ability to create final products using Photoshop, AgiSoft, Recap, and AutoCAD. Thank you, CAC!

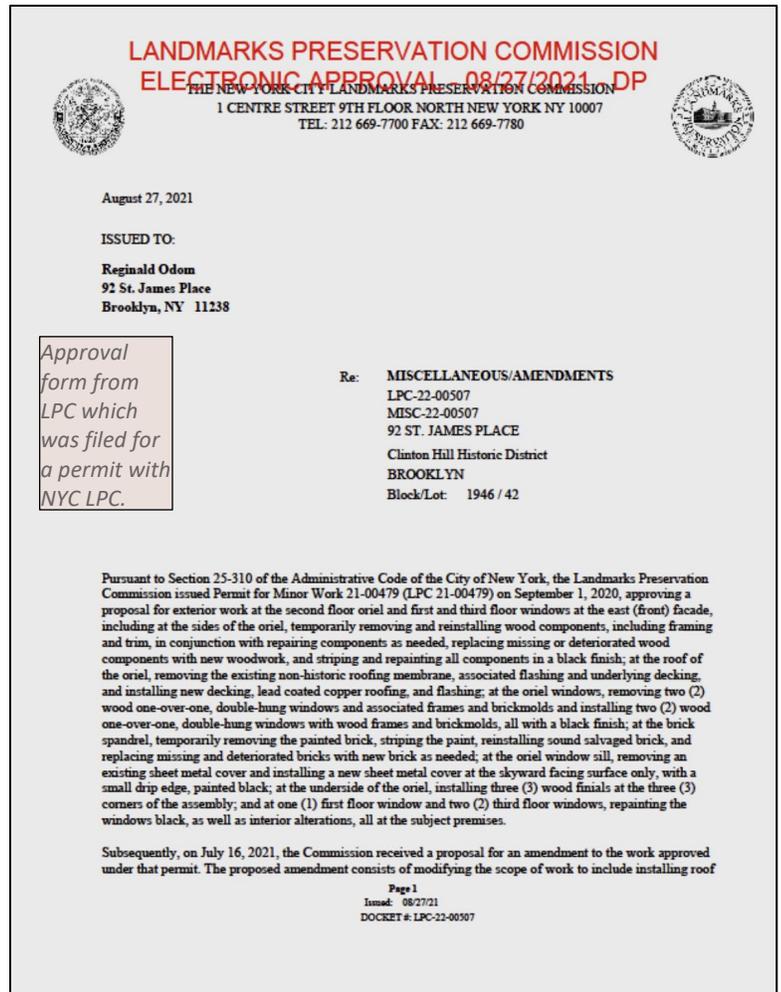
Adobe bricks drying and a view of the Pecos church-convento complex in the background.



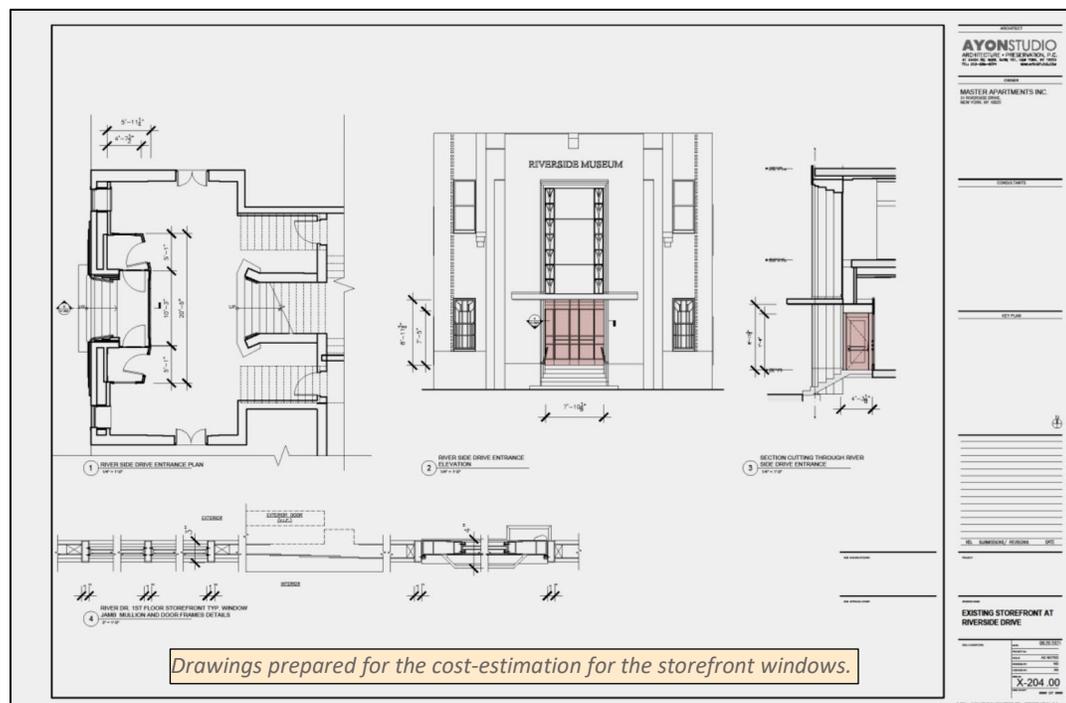
I was hired by AYON Studios as a Summer Intern as a part of their Internship programme. AYON Studios is a small-scaled firm with a total of 6 people including the Principal Architect, Angel Ayon. The major job role for me was to help in NYC LPC filing, preparing memorandums in response to LPC comments, preparing cost-estimates, drafting of necessary drawings with the help of AutoCAD, correspondence with the contractors by preparing submittals of approval on behalf of the firm and keeping up with the pace of the projects. A major part of the internship was curated remotely so the office consisted of my computer, the mouse, my desk and an ambient atmosphere in my room in Philadelphia.

Courses like Documentation II (HPSV 601) helped a lot in preparing the construction drawings needed for the easy communications on the site for construction. Courses like Conservation Science (HPSV 555) proved to be an integral part of my internship as it helped in understanding the materiality of each material in depth and then prepare a condition analysis document for some of the projects in Historic Districts. The understanding from Preservation Economics (HSPV 625) eased my way in order to carry out filing all sorts of permits with the Local Preservation Commission.

Being an International student, a major part of learning for my internship was to know more about the professional working conditions in Northern America. The internship didn't prove beneficiary just to teach the conservation aspect of a practice but how to manage, curate and up-keep a business. During the course of my internship, I met a bunch of like-minded people who



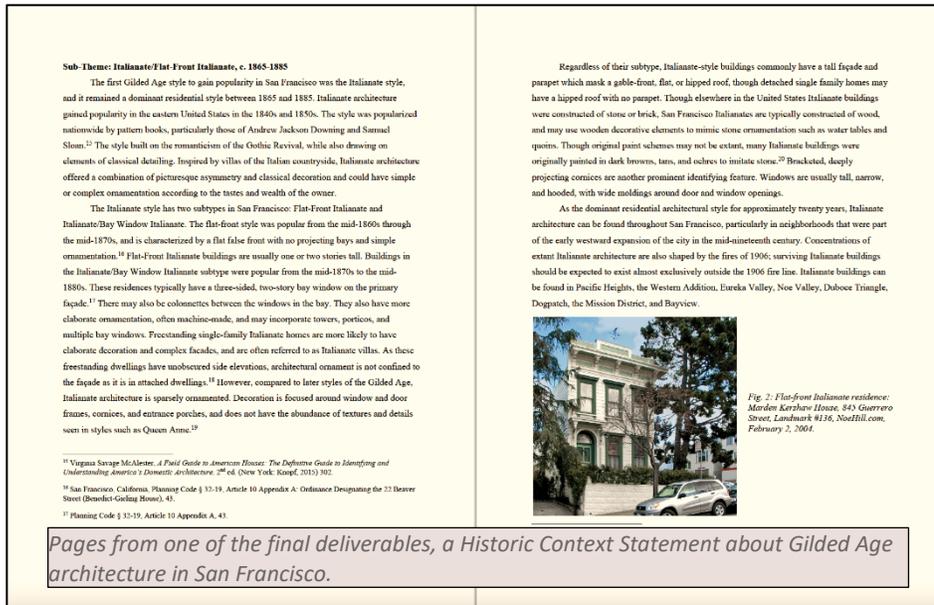
Approval form from LPC which was filed for a permit with NYC LPC.



thrive to preserve the cultural and architecturally historic aspects of New York City. That consisted of my colleagues who have been really helpful throughout my time at the office. The contractors with whom I have had correspondences related to an interior renovation project, taught me how to analyse a material which is suitable for that particular project. My Principal architect taught me how to manage time with numerous tasks on my hand without losing patience. I learned how to establish a clear line of communication with clients, contractors and with peers.

I spent this summer as a City Planning Intern working remotely with the Citywide Survey team at the San Francisco Planning Department. The survey team at SF Planning is currently undertaking a multi-year effort to create a cohesive, comprehensive historical narrative for the city as well as evaluative frameworks to guide significance determinations for buildings, structures, sites,

which made my remote research much easier. My experience with both in-person and remote research during my first year at Penn also prepared me for my work this summer! In particular, I drew extensively on the information and research skills that I honed in Documentation I (HSPV 600) and American Architecture (HSPV 521).



In addition to my day-to-day research and writing for the context statements, I also attended a variety of virtual meetings and intern workshops. Weekly meetings included team meetings for preservationists in the Planning Department, brainstorming sessions for the preservation interns, and individual meetings with my internship mentors, as well as City Planning Commission meetings and Historic Preservation Commission meetings. The department also organized weekly training sessions for the planning interns to engage with staff across the entire department, including Zoning & Compliance, Environmental Planning, and Citywide Planning. Training sessions ranged from informational presentations on topics such as design guidelines to discussions of

and objects. These two elements provide consistency for Planning Department staff as well as other planning and preservation professionals for future efforts to identify, interpret, evaluate, and protect the city's historic and cultural resources. To achieve these goals, the survey team is writing over 35 thematic, cultural, and architectural Historic Context Statements, as well as smaller theme studies within the context statements, to be compiled into one Citywide Context Statement.

the city's work to advance racial and social equity. This provided all of the planning interns the opportunity to network and engage with staff across the department, including the Planning Director.

My task this summer was to write two architectural historic context statements: one focused on Gilded Age (Victorian Era) architecture, and the other focused on Spanish and Mediterranean Revival architecture of the early twentieth century. I worked remotely for the entirety of the summer, as did most of the 35 City Planning interns, though some California-based interns were eventually able to work in the planning office part-time. Conducting research remotely presented a few challenges, primarily the inability to go out and survey neighborhoods in person to make note of concentrations of architectural styles within the city and flag potential resources for follow-up during the official citywide survey. In lieu of in-person survey, I spent a significant amount of time "walking" around the city on Google Street View! The Planning Department, local archives, and other San Francisco-based resources have digitized much of their information over the past few years,



I am so grateful to the SF Planning Department, especially my mentors, Frances McMillen and Susan Parks, for allowing me to have this opportunity to craft documents that will help shape the future of San Francisco's built environment.

This Summer I worked for the HSPV department 2021 Material Database at the Architectural Conservation Laboratory, in which I organized and relocated materials and samples, recognized and documented their information, took photos for their documentation, and entered information into the online database. This work is to organize not only what has been in the HSPV lab and Meyerson Hall, but also samples that will be added to the collection. Researchers, faculties and students will have more convenient access to the database through the internet and find the information needed by keyword-searching. It also creates more room for storage and activities in the preservation lab, which has but limited space.

Since many of the samples were neither labeled nor yet identified, this experience gave me opportunity to apply the knowledge I learned about rock, crystal, and metal from Conservation Science (HSPV 555) with help of my supervisors and colleagues.

Catherine Myers, our supervisor and faculty in preservation program, also instructed us on how to operate IsoMet, the microtome, which is used for cutting finishes microscopy samples. We also learned the significance of storing microscopy samples in appropriate manners, and the consequence of loss of information it may lead to if the samples are not stored properly.

Similar problems on labelling of other samples enabled me to recognize the importance of documentation of even the



Stone sample in Meyerson Hall.



Organizing finishes sample in HSPV lab, Fisher Fine Arts library.

tinest piece of material. Essentially, every sample should be stored in a container, on which the type of the material, the creator's name, the project, and the date of its creation should be written. It may sound impractical, but people tend to neglect the importance of recording necessary information on a reliable label that will not peel off or be washed off easily.

Furthermore, I learned that consistency in the database code is critical to an organized system. When samples from multiple systems are mixed and stored in the same place, confusion in numbering prevents one from searching for the sample effectively.

Heather Hendrickson

Maine Preservation; Bagala Window Works

Portland vicinity, Maine



Heather doing detailing work on a sash. This is the final clean up after glass installation and before the first coat of paint.

This summer I was a Patricia Anderson Fellow with Maine Preservation. This fellowship consisted of nine weeks work and was divided into two separate and distinct parts. I spent the first five weeks working in Westbrook, Maine for Bagala Window Works (BWW), a highly respected historic window and door restoration company. The remaining four weeks I spent working in Yarmouth, Maine for Maine Preservation (MP), a statewide non-profit historic preservation organization. There, I dove into researching and compiling Maine's Most Endangered Historic Places list, an annual list that promotes advocacy for substantially threatened historic places across the state.

BWW is the gold standard for historic window and door restoration in Maine. One reason that I specifically applied for this Fellowship was to get hands-on experience in the field working with building fabric. Being a student in the Preservation Planning concentration I was worried I would leave Penn without this privilege. For five weeks I was introduced to all things "sash." I was trained in Lead Paint Abatement, logging many hours in the containment room. I worked side by side with every member of the staff and was able to ask a lot of questions. The floor manager took me through each step of the process from when a battered, peeling, and lead paint-filled sash walked through the door until it left the shop, looking as glorious as it must have looked originally (minus the lead paint). I had my hands in glass removal, leaded glass removal, scraping, sanding, detailing, priming, painting first coat and the even trickier second coat after the glass had been reinstalled into the sash. The last three days I was able to go on site and help reinstall the finished sash for a project, including hanging and tying the weights in the window pockets! This part of my Fellowship

gave me a deeper understanding and appreciation of historic sash windows. The skills and knowledge I acquired were mostly new but built off information from American Architecture (HSPV 521), Documentation I (HSPV 600), and American Domestic Interiors (HSPV 531).

The second part of my Fellowship involved working with MP. I learned a great deal about the preservation field in Maine and was able to network with the MP Board of Directors and Greater Portland Landmarks. I participated in MP weekly meetings and meetings with the Board. I was able to get a glimpse inside the daily operations of a small historic preservation organization. MP releases an annual Maine's Most Endangered Historic Places list, and my job was to start compiling this list. I reviewed nominations from the public and created a summary citation for each

site. I also researched nominations from the staff. This work entailed contacting local stakeholders and organizations to see what the precise threat to these places is, what work has been done so far to preserve these at-risk sites, and what work still needs to be done that the greater public can assist with. I used the extensive skills I learned in Documentation I (HSPV 600) for in-depth research as well as knowledge from Public History of the Built Environment (HSPV 534) for place advocacy and organizational interaction. As a bonus I was able to participate in site visits with MP to easement and Protect & Sell properties, where I took photographs, a skill learned in Documentation II (HSPV 601).

The knowledge I acquired in the first year of our program helped me navigate this fellowship successfully. I also learned so many new skills, all while adventuring around the beautiful state of Maine.



Meeting between MP and Barba+Whelock Architects on site in Strathglass Park, Rumford, ME. Going over architectural restoration plans for MP's Protect & Sell program (Note: Liz Reynolds on the far right graduated our program in 2018, now working for Barba+Whelock Architects!)

José Hernández

Historic Building Architects

Trenton, New Jersey

This summer I interned at Historic Building Architects as a Preservation Designer. HBA is an award-winning historic preservation firm based in Trenton, New Jersey that specializes in conservation and adaptive reuse of historic buildings and places.

The team includes full-time preservation designers, a managing architect, and a materials conservator. The culture of the firm is centered on integrity, resiliency, and continuing learning. The firm cultivates a psychological safety net that enables everyone to ask questions, voice suggestions, and admit mistakes. The culture revolves around stretching and learning instead of proving and perfecting. The horizontal organizational structure meant that my work was supervised by a different professional per project. This style of organization enables everyone to practice leadership, communication, and adaptability skills.

I was amazed by the amount of energy the principal brings to the office every day. In addition to being the driving force of the firm, the principal models the values that she expects from others. The principal deeply cares for everyone's well-



The surveying team in front of the main entrance to the mansion from left to right: Kallie Kothman (HSPV '18), José Hernández (HSPV '22) and principal Annabelle Radcliff-Trenner.

being. In return, team members care about the firm's mission. Work-life balance is not only respected, but encouraged.

I applied my technical skills in AutoCAD/ InDesign/ Photoshop from John Hinchman's Digital Media class (HPSV 624) to write an exterior conditions assessment report for Castle Hill, an estate in Ipswich, Massachusetts. I applied research skills learned from Kecia Fong's & Aaron Wunsch's Documentation (HSPV 600) course to conduct archival research at Penn's own Architectural Archives and digital collections of the Art Institute of Chicago—these informed the preservation approach of light fixtures at Princeton University Chapel and conservation strategies for Castle Hill. I applied laboratory skills learned in Frank Matero's Conservation Science course (HSPV 555) to do a mortar analysis for Olson House – a Colonial farmhouse in Cushing, Maine. In addition, I applied the theory of classical moldings to design a pulpit soundboard for Princeton University Chapel and 3D modeling skills to visualize the structural framing of Olson House.

Travel to project sites was key: I learned to synthesize and translate information from the drawing board to the reality of brick-and-mortar. In Castle Hill, I learned the meta-cognition skill of being suspicious of my own biases in diagnosing pathologies. In Olson House, I learned how to prioritize the integrity of scientific measurement given a time constraint. In Princeton University Chapel, I learned the value of note-taking during meetings to help calibrate the remembering self with the experiencing self. In Carver Center, I learned the imperative of getting your work subject to multiple feedback loops. Overall, perhaps the biggest lesson was the primacy of clear and candid communication with all members of the organization.



Surveying the east facade of Castle Hill in Ipswich, Massachusetts.

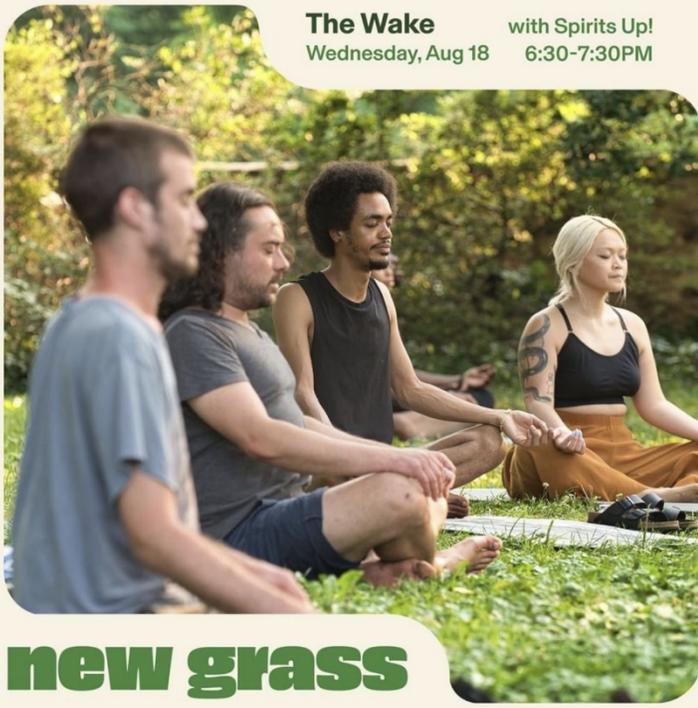
Blair Horton

The Woodlands

Philadelphia, Pennsylvania

This summer, I had the opportunity to work at the Woodlands Cemetery as a site management intern. As a 54 acre green space, the Woodlands serves as an oasis to its surrounding West Philadelphia community – particularly this past year during the pandemic. From a grave gardening program to music festivals, the Woodlands' creative site interpretation and programming provided the perfect learning environment.

In partnership with the music profit Ars Nova, the main event programming for the summer was New Grass. Within the New Grass series, performances and discussions took place regularly throughout the summer with the hopes of sharing space, history, and thoughtfulness. It was a great opportunity for me to watch a non-profit partnership process and engage in community building.

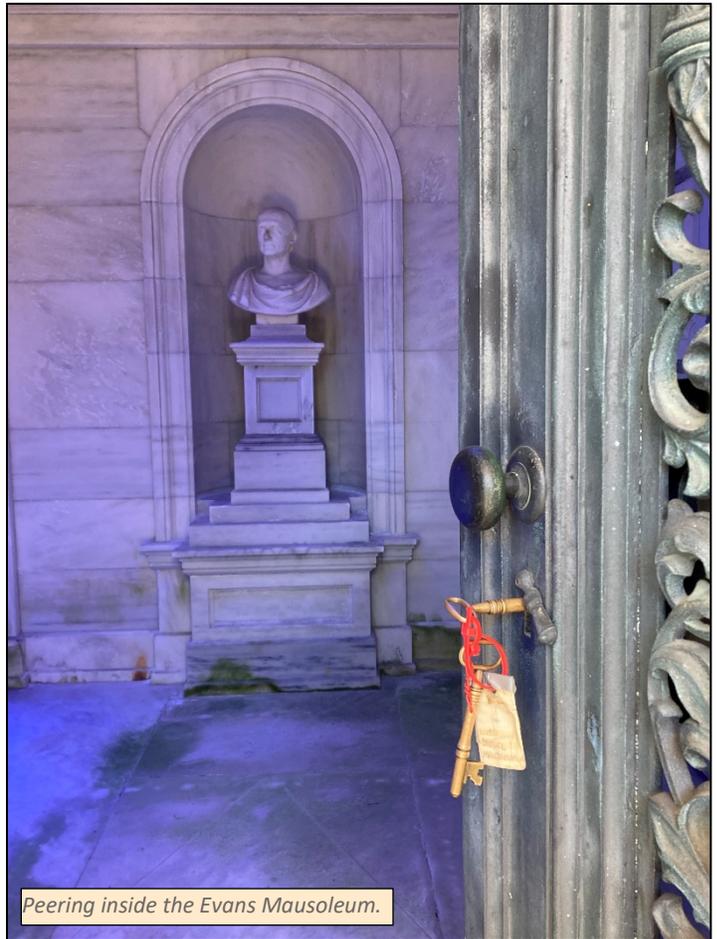


The Wake with Spirits Up!
Wednesday, Aug 18 6:30-7:30PM

new grass

Visitors gathered for The Wake, a mindfulness practice led by Spirits Up! every other Wednesday. (Source: The Woodlands Website)

My other main task was to complete a visitor study. Through visual documentation, I recorded visitors entering the Woodlands over several non-consecutive weekdays in order to provide a basic demographic profile of visitors and to develop a deeper understanding of the ways that visitors approach, circulate, and utilize the site. In order to contextualize the data, an additional comparison was made with previously gathered data. Despite variations in time



and weather, it became evident there was a stark increase in visitors over the past year. In response to such changes, we were able to craft a visitor survey and a plan for continual data gathering moving forward.

One of my favorite parts of the internship was creating educational programming. The Woodlands maintains an active blog and digital tour series which highlight the site's history, notable burials, and horticultural features. Using the research skills from Documentation I (HSPV 600), I was able to combine archival research from the Woodlands with census data, historic newspapers, and other primary sources in order to create a compelling narrative. One of the most interesting challenges I encountered was adapting research to speak to different audiences. While one day I may write an academic digital tour, the next day I could be organizing a brochure for a children-oriented event.

Overall, I was thrilled to work in a creative and dynamic workplace that allowed me to explore multiple facets of site management. I am so grateful to the team at the Woodlands for their continuous support, inspiration, and laughs.

During the summer of 2021, I interned as an architect assistant at Historic Building Preservation Design Institute of East China Architectural Design & Research Institute (ECADI) in Shanghai, China. Established as a rather new department since 2008, the institute undertakes a range of programs focusing on the protection and planning of historical regions, urban renewal, protection and sustainable design for historic buildings, renovation and renewal design of existing buildings (including industrial heritage), and new architectural design in historical contexts.

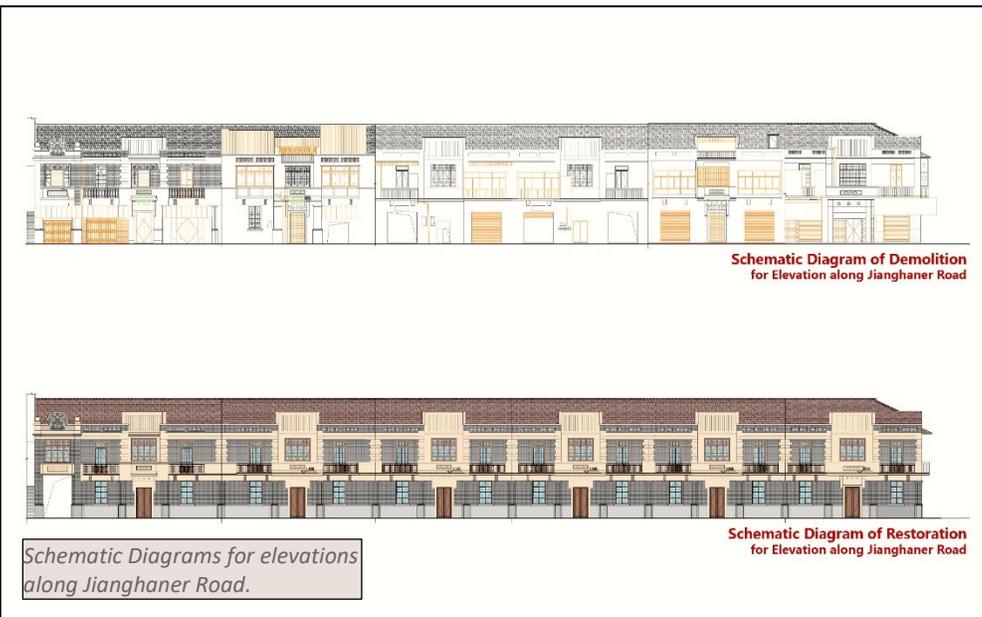
The project that I was fortunately able to take part in from its early stage is partly located in Bao-yuan Li of Wuhan, China. The neighborhood is consisted of over 40 units of Lifen Architecture that, similar to bystreets in Beijing and Shikumen/Longtang in Shanghai, is a typical type of traditional residential building type in Hankou, one of the three towns merged to become modern-day Wuhan city. Emerging out of the exchanges between eastern and western cultures during the period of WWII, Lifen is a great example of blending Chinese national style with the characteristics of western architecture as it combines western duplex townhouses with local traditional quadrangles. Bao-yuan Li, located at the intersection of Bao-hua Street and Huitong Road and built in 1911, is registered among the list of outstanding historic buildings in Wuhan and the goal of the project aims at a full range of preservation, restoration and rehabilitation works to revive the underused, and partly dilapidated neighborhood with a further developed mix use



Parapet detail of a building in Bao-Yuan Li.

of both residential and commercial purposes depending on the historic use and current conditions of the structures.

My responsibility was to produce a series of plan, elevation and section drawings from the earlier stage of demolition schemes that determine what to preserve and what to remove to the later stage of restoration schemes based on available historic documentation and personal, yet well-founded speculation formed through a comprehensive study of the neighborhood context. Renderings of important elevations along the major streets and sketch-up models of typical residential units were also made to better visualize our intended effect. After working on the final presentation of schematic design to our clients, I was able to continue working on the same site and buildings with more depth by producing further-developed drawings as the project moved on to the Design Development Phase after feedback from all stakeholders was collected. During the process, more cooperative and integrative teamwork with the engineering and technical departments was required to generate drawings of greater details and precision with specific strategies of reinforcement or dismantling. This opportunity of working with Historic Building Preservation Design Institute grants me a lot as it enables me to participate in a rather complete process of preservation design within a historic setting and to apply a full range of strategies and tools that I have learned until now.

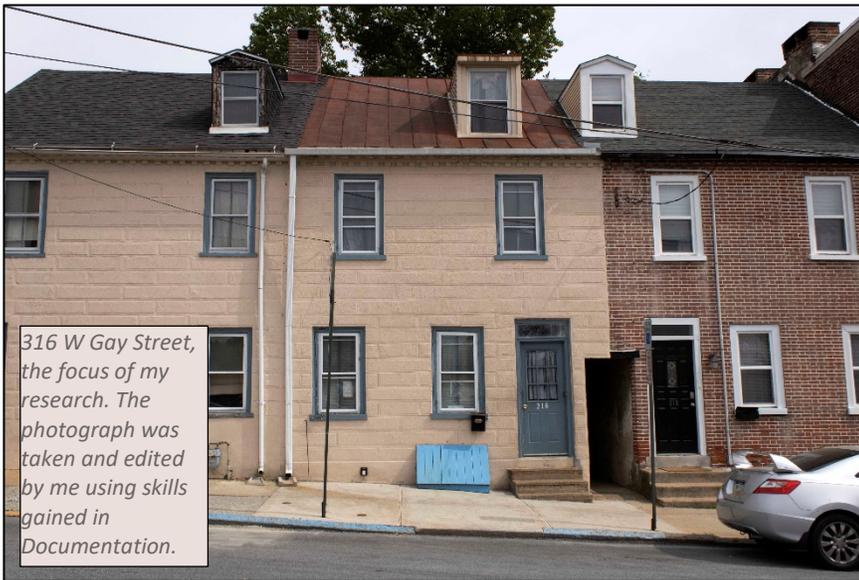


Schematic Diagrams for elevations along Jiangnaner Road.

Arden Jordan

Center for Preservation of Civil Rights Sites

West Chester & Philadelphia, Pennsylvania



316 W Gay Street, the focus of my research. The photograph was taken and edited by me using skills gained in Documentation.

This summer I worked for the Center for the Preservation of Civil Rights Sites as an Intern working on a nomination to the National Register of Historic Places.

The nomination was for one of the childhood homes of Civil Rights leader Bayard Rustin, located in West Chester, PA. Rustin was an organizer and leader of many social movements in the twentieth century, including the Civil Rights and peace movements. He was the primary organizer of the March on Washington and advised Martin Luther King Jr. on nonviolent protest methods. Rustin was raised by his maternal grandparents, Janifer and Julia Rustin, and lived at 316 W Gay Street during his teenage years.

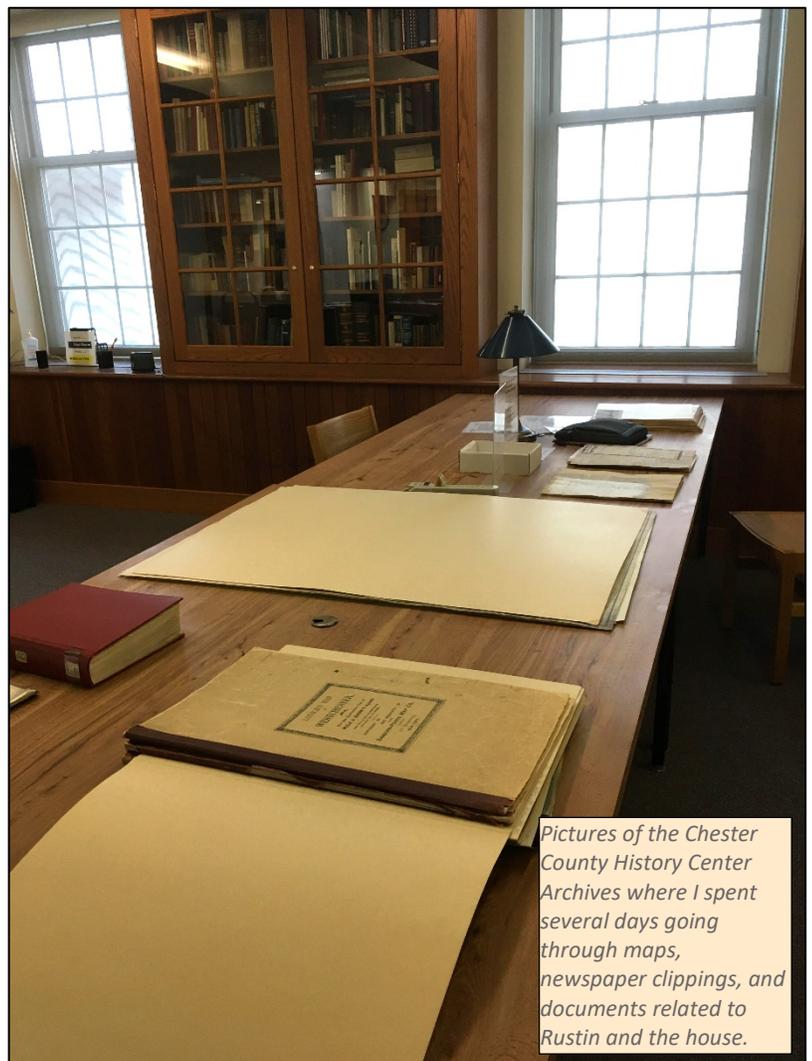
As this project was working on a nomination, I was primarily conducting research and using skills I gained in HSPV 600: Documentation and Research. This involved finding and reading books, articles, and other resources on Rustin's life and childhood. Additionally, I researched and documented the building itself, creating a chain of title for the building and doing archival research. This led me to have a research breakthrough on the history of house which had not been fully documented before.

Part of my internship was interviewing stakeholders, including Rustin's partner and family, as well as historians who had or were conducting research on Rustin or West Chester history. I learned the most from this internship from having these conversations; it was helpful to get experience drafting questions for stakeholders and leading productive conversations. Though the aim of the internship was to complete a National Register Nomination, these conversations

made me rethink the original aim of the project. There are limits to a National Register Nomination, and it is not always the only or best tool available to preservationists. In the future, I would love to see (and perhaps be part of!) more work within communities to collaborate and determine the most fitting form of memorialization for certain historic narratives.

Partway through the summer, I compiled my research to submit a Determination of Eligibility to the Pennsylvania State Historic Preservation Office to see whether they thought the house was eligible for nomination. At the end of the internship, we received notification that it was eligible. My research will be compiled and finished over the next few months and submitted to the National Register. If the Rustin's childhood home is placed on the National Register, it will be great to have a

successful National Register nomination on my resume for future positions.



Pictures of the Chester County History Center Archives where I spent several days going through maps, newspaper clippings, and documents related to Rustin and the house.

Caitlin Livesey

Center for Architectural Conservation; Materials Conservation Collaborative

Florissant, Colorado; Wilmington, Delaware [Respectively]

As a research fellow with the CAC, along with Carly Adler, I helped to conserve Stump P-47 at Florissant Fossil Beds National Monument in Florissant, Colorado. P-47 is a 34-million-year-old petrified sequoia stump that has been deteriorating since its excavation about 85 years ago. Spalling, cracking, and material loss are all prevalent forms of deterioration on the stump. Environmental factors such as freeze-thaw cycles, UV exposure, and precipitation all contribute to the stump's condition. It was also likely damaged by dynamite at the time of excavation. In order to preserve the overall form of the stump, we reattached loose or detached fragments of petrified wood to the stump using an epoxy, Araldite 2015. Our process began with photographic documentation of the stump and identification of loose, detached, and missing fragments. For each fragment in need of reattachment, we completed a thorough cleaning to ensure that it was clear of dirt and debris. We used a Dremel to create texture on the backside of the fragment, and we evaluated the geometry of each fragment and determined the proper shape and amount of epoxy application. We then reattached and secured the fragment to the stump for curing. This treatment will be monitored by the park and, if successful, may be applied to other stumps in the fossil park.

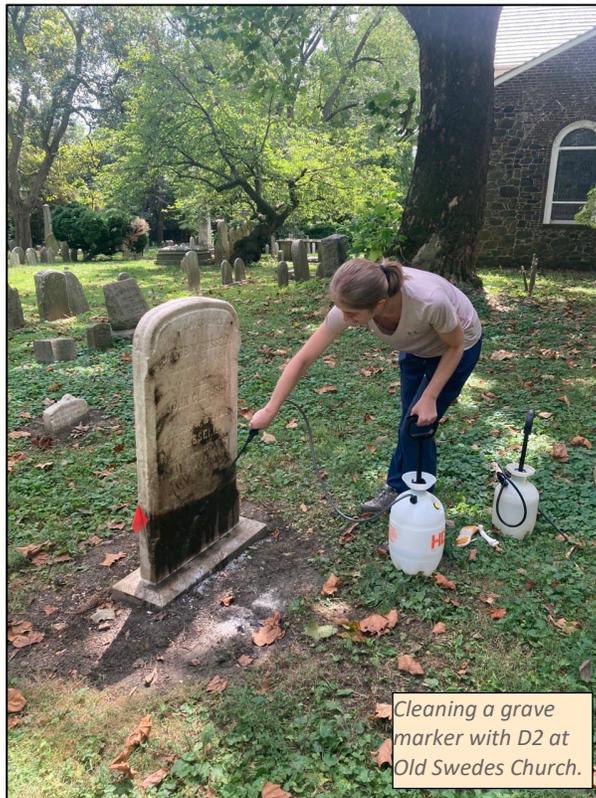
The knowledge that I acquired in Conservation Science (HSPV 555) was particularly useful on this project for the identification of deterioration conditions. I also drew on photography techniques learned in Documentation and Recording (HSPV 601). I gained hands-on experience working



On site at Florissant Fossil Beds National Monument.

with conservation tools such as Dremels and epoxy guns, and I learned about the development, collaboration, documentation, and submissions involved in the full completion of an on-site project. I was also able to interact with park visitors daily and discuss our project. I had the opportunity to work with esteemed archaeologist Dr. Herbert Meyer and meet many wonderful employees of the National Park Service, as well as a fellow conservation student from UCLA. I'm so grateful that this fellowship allowed me to work on such an exciting project and to gain practical experience in the conservation field.

As an intern with Materials Conservation, I had the opportunity to work at Old Swedes Church in Wilmington, Delaware, a historic property built in 1699. Various headstones at the site's cemetery had been marked for treatment for reasons such as cracking, loss, or misalignment.



Cleaning a grave marker with D2 at Old Swedes Church.

To assist with the treatments, I cleaned headstones using D2 Biological Solution and repointed cracks and joints using primarily Jahn mortar and Butter Joint mortar. I also used Jahn to fill large gaps from material loss in the stone. I learned about different treatments required for different stone types used as grave markers and about the application of various mortars. I gained hands-on experience cleaning and repairing masonry in the field, as well as learning about different projects from conservation professionals. I was fortunate to work under Kristin Cardi of Materials Conservation and learn from her years of experience, as well as meet a number of employees and learn about their roles at MCC.

Hillary Morales Robles

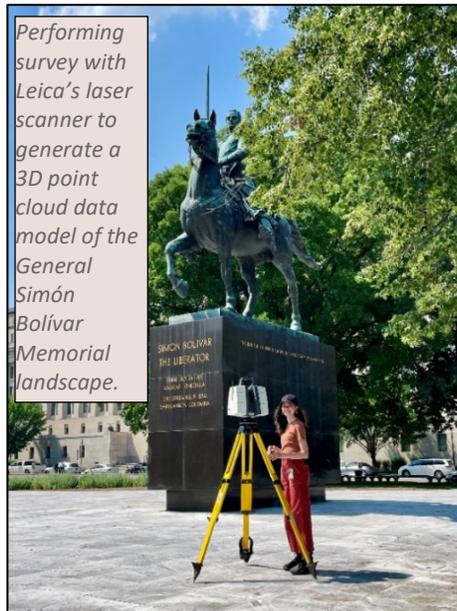
Historic American Buildings Survey; Latino Heritage Internship Program

Washington, D.C.

This summer, I was an architecture intern at the Historic American Buildings Survey (HABS) of the Heritage Documentation Programs (HABS/HAER/ HALS). The internship was sponsored by the Latino Heritage Internship Program from the National Park Service and the Environment of the Americas. I worked to document and record the General Simón Bolívar Memorial located at the park in front of the U.S. Department of the Interior in Washington DC. The goal was to comprehensively document with drawings, large-format photography, and a historical and descriptive data report to highlight the historic site's significance.

The General Simón Bolívar Memorial is bounded by Virginia Ave., C St., and 18th St. NW. In 1955, the U.S. Senate authorized the acceptance of the equestrian statue of the South American liberator Simón Bolívar, presented to the U.S. by Venezuela as a gesture of friendship. The sculpture, by Felix W. de Weldon, stands on an elevated plaza designed by the Venezuelan architect Luis Malaussena. The park is significant in the Modernist movement of Landscape Architecture, departing from traditional practices of public spaces design. The modernist park, located on Federal Reservation No. 383 of the National Mall and Memorial Parks, is one of 14 historic reservations along Virginia Ave. that contain public art and monuments commemorating Latin American national figures.

While surveying and documenting the historic site, I got trained in various survey equipment and software for data processing. This included: GPS, total station, laser scanning, photogrammetry, Agisoft Metashape software for photogrammetric processing, large format photography, panoramic photo alignment with PTGui, Leica's Cyclone for 3D point cloud data processing, field record notes, and others. Before this summer, I trained with similar equipment at the archaeological excavations in Aphrodisias and through HSPV 601 Documentation II. However, the training acquired at HABS was outstanding. It helped refine my skills and expand my knowledge with efficient methods, software, and advanced technology to achieve the highest quality of data collection and measured accuracy.



The data and measurements collected from the survey were used to produce a final set of digital drawings generated in AutoCAD. The drawing set consists of 4 sheets: cover sheet with the statement of significance; site plan of the park; top plan, four elevations; and detailed drawings of the monument. The goal was to produce accurate measured drawings as reliable and available sources for historians, researchers, and future conservation. The final set is available in digital and print formats at the HABS/HAER/ HALS Collection in the Library of Congress.

At the culmination of my internship, I was assigned one of the most exciting tasks for a former art and architecture history student: to develop a historical report. I learned about the different standards,

formats, and guidelines of each HDP division. Since General Simón Bolívar Memorial is a landscape project, I followed HALS standards and guidelines. Following HALS format, the report included a description of location, statement of significance, physical site description, history, sources, and supporting photographs.

Through the summer, I joined various meetings with HDP staff. I participated in a podcast episode produced for Latino Conservation Week by the Washington Office of Communications. The LHIP program exposed me to an extensive network of Latin American conservators throughout the NPS. I had the incredible opportunity to meet and share my work with Assistant Secretary for Fish and Wildlife and Parks, Shannon A. Estenoz. We discussed current landscape conditions and proposed suggestions for improvements. These included: implementation of a maintenance plan, landscape restoration following the intentions of the original design, and the addition of interpretative signage.

I want to share my deepest gratitude to the HDP and my mentors Robert Arzola and Paul Davidson, for taking their time to teach me everything about what HDP does and for trusting my work. Also, thanks to the Environment of the Americas and the NPS for hosting and providing opportunities to young Latin American professionals to become part of the next generation of conservation stewards.



I worked with PennPraxis Director Ellen Neises and two UPenn Landscape Architecture students on two projects for the Ramapough Lenape Nation Turtle Clan in northern New Jersey. We spent part of the summer developing a draft design for an interpretive trail based on traditional Lenape trail wayfinding and ceremonial design. The bulk of our summer was spent surveying an area near Newton, NJ of many stone formations with possible Lenape ceremonial and historic significance. The internship culminated in a three-day overnight trip to New Jersey with the team. Using annotated DSLR photography, drone photography, elevation drawings, GIS, and text description we sampled three clusters of stone formations and created a preliminary report on their significance for the Ramapough Lenape to use for advocacy and further research.

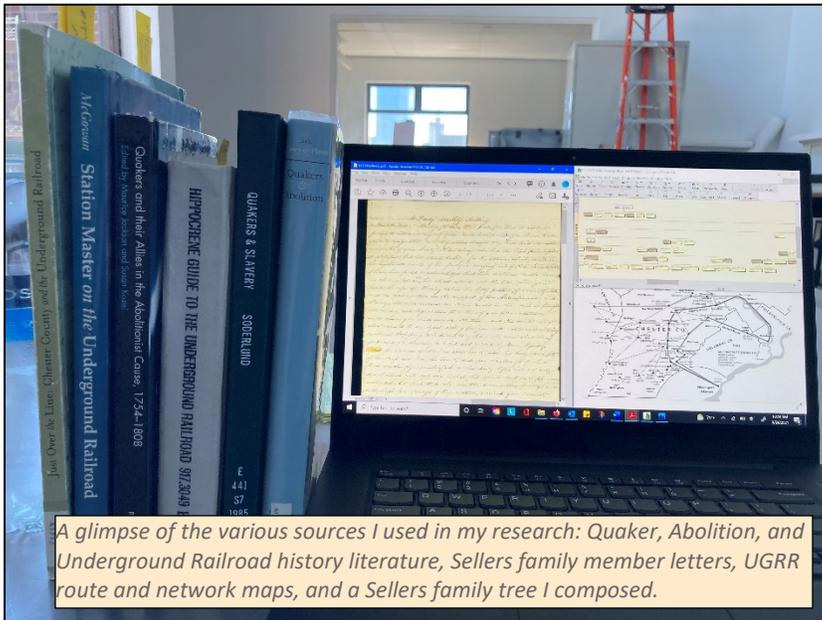
I drew heavily on recording techniques I learned in HSPV 601, especially the photography lessons and final deliverable design. I even contacted my professors in that



class for additional resources and guidance. Research techniques learned in HSPV 600 also guided some of my recommendations for the project, as well as photo management skills from Digital Media.

I learned about client relationships and project management and design, especially as applied to clients who we are learning from and building trust with as much as they are learning from our work. Working across disciplines with Landscape Architecture students was a fantastic learning experience and so gratifying to integrate our diverse skill sets. I became much more comfortable with my DSLR camera and post-production techniques. I improved my skills in Adobe Illustrator with help from my colleagues and got a taste of how to use GIS.

It was transformative to my professional practice to consult closely with Indigenous leaders. The project also gave me the opportunity to connect with various academics at UPenn and regionally who are working on similar subject matter.



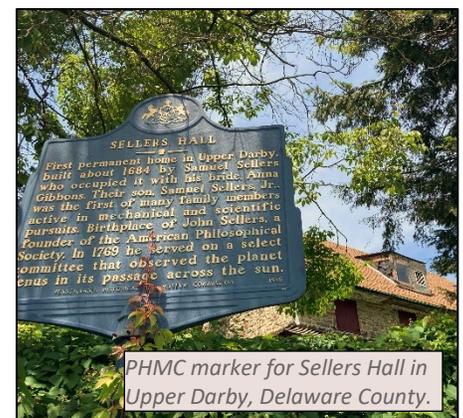
During the summer of 2021, I interned with the Center for Preservation of Civil Rights Sites (CPCRS) to compose a National Register nomination addendum for Sellers Hall. CPCRS is a part of the Weitzman School of Design and its mission addresses the recognition, preservation, and making publicly legible sites of civil rights heritage. Civil rights, as the Center describes, “refers to the Black experience in the US in the 19th and 20th centuries, not confined to the South nor to the critical period of 1954-1968.” The sites “include iconic places of struggle... as well as the everyday landscapes, laws, and traditions that represented and reproduced discrimination.” The Center’s first intern cohort this summer was tasked with research for a number of nominations for the National Register of Historic Places. My NRHP project was to write an addendum for the already-designated Sellers Hall.

Sellers Hall, a late-17th century White Quaker homestead in Upper Darby, Delaware County, was nominated in 2018 by Alanna Piser, an HSPV alum. The nomination documents nearly two centuries of the Sellers family residence at the homestead. It covers the family’s participation in development of Upper Darby farmland and mill properties, their legacy of engineering and manufacturing inventions, political activity, and architectural evolution of the Hall itself. What is mentioned of their 19th century activity includes a reference to assisting freedom seekers escaping enslavement via routes the Underground Railroad. My research was to draw out the narratives and networks of Underground Railroad, abolitionist, and antislavery activity at Sellers Hall and in the Sellers family.

To do so, I surveyed material ranging from literature on national and regional Underground Railroad networks, Quaker involvement in abolitionist movements, rural

landscapes between Wilmington and Philadelphia, to archival materials such as mapped UGRR routes, Sellers family letters, drawings, and diaries. I interviewed descendants of the family, visited documented Underground Railroad sites in Upper Darby, and spoke with a number of historians. I utilized historical research and narrative writing skills learned in Documentation I (HSPV 600), Public History of the Built Environment Theory & Practice (HSPV 534), American Domestic Interiors (HSPV 531), and Remembering Epidemics (HSPV 620). As with many historical inquiries, the routes and operation of the Underground Railroad are particularly host to research difficulties such as powerful (and occasionally misleading) myths, deliberate secrecy, and scarcity of evidence. With patient guidance from my supervisors, Sarah Lerner and Aaron Wunsch, I was able to appropriately proportion the types of information I had in order to ethically and accurately present my findings. Throughout the summer, the CPCRS internship team met regularly to discuss our weekly research progress, but also to reflect on the ways in which our research contributes to local and national narratives of civil rights movements and how to make legible the site-, time-, and race-, and participant-specificity in the form of the preservation and public history tools at our disposal.

The course, Preservation through Public Policy (HSPV 572), also assisted my ability to contextualize the role of NR nominations in local political and academic involvement with historic sites. Sellers Hall, no longer situated in a rural landscape of hundreds of acres of farmland, today sits within a church complex and is owned by the non-profit Friends of Sellers Hall. Upon the Pennsylvania Historical and Museum Commission’s acceptance of the National Register addendum for Sellers Hall, FOSH will be able to use the documentation I prepared for decision-making on the site’s future use and programming. At the summer’s end, I formally presented my findings to FOSH, and have been invited to share my research with Upper Darby’s and Delaware County’s historical societies. I am grateful for this challenging and enlightening internship, and look forward to a continuation of documenting and publicly sharing civil rights histories with all the methods available in the preservation field and beyond.

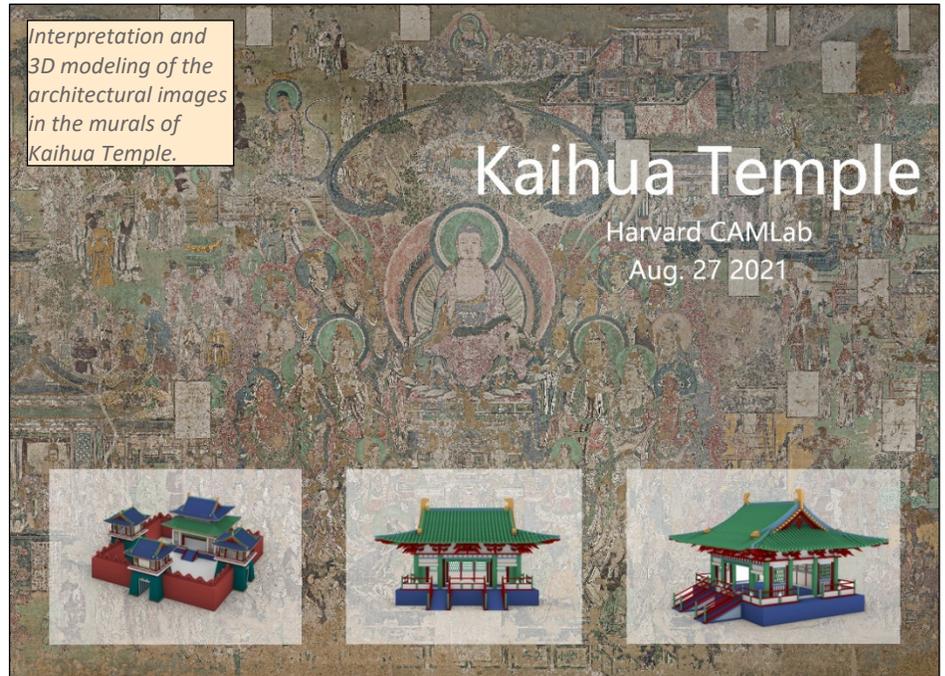


During the summer, I worked as a research intern at the Harvard CAMLab, which is a cutting-edge institute from the Faculty of Arts and Sciences of Harvard University, exploring innovative, interdisciplinary ways of showcasing Chinese art and culture. I participated in three different projects in CAMLab: including the Embodied Architecture-Liang Exhibition, the Kaihua Temple, and the Great Game.

For the Embodied Architecture, I explored the architectural features of the main hall in the Fengguo Temple, which was an important example of Liao architecture (1020 A.D.) being investigated by Liang and the Chinese Construction Institute. Then, a storyboard was developed to help design interactive exhibition of the building.

For the Kaihua project, I studied the murals in the main hall of the Kaihua Temple (1073 A.D.), especially the images of ancient buildings in the murals. Cooperating with another intern from MIT, I also built 3D modeling of the 2D images based on actual buildings of the same age. It was the preparation for future developing of exhibit videos to virtually restore the architectural space being presented in the murals.

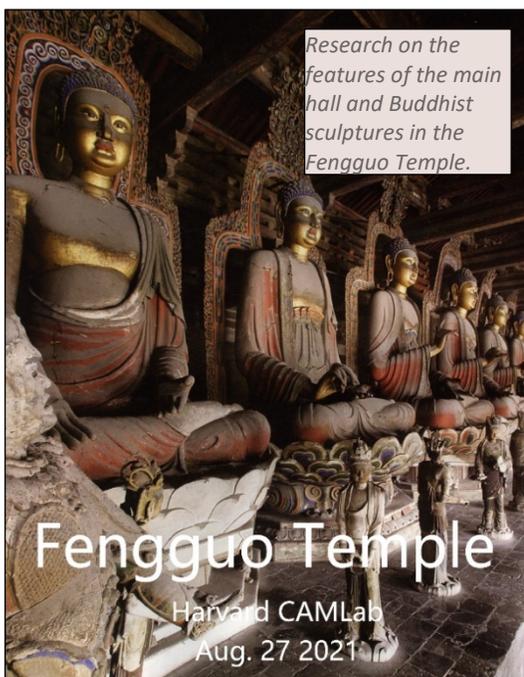
For the Great Game project, I conducted research on the expeditions of Paul Pelliot and some other expeditors to West China and Central Asia in the beginning of the 20th century, based on the photo archive provided by the



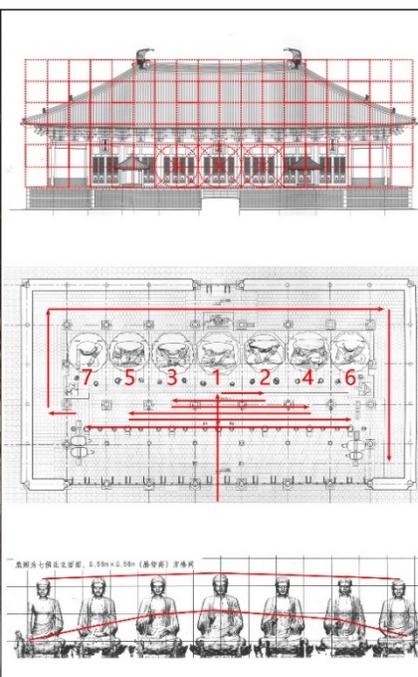
Interpretation and 3D modeling of the architectural images in the murals of Kaihua Temple.

CAMLab. I tried to feature out the routine of Pelliot's expedition according to his own diary and the photos, to feature out the exact location of the photos, and to compare between the photos and the current condition of the site, as many objects from the sites had been taken away by the western expeditions and building structures had been weathering a lot in the past century. Based on the research, our team had begun to build a interactive website to display Pelliot's expedition.

In this intern program, drawing and modeling skills from the Documentation course (HSPV 601) were adopted and practiced during this process. Typological and observing skills of buildings from the American Architecture course (HSPV 521) were also used to analyze the features and styles of ancient buildings in China. This internship not only trained my research abilities to develop research into actual or virtual exhibitions, but also improved my skills to cooperate with my partners efficiently. It was a good opportunity for me to meet more professionals and specialists in different areas outside conservation and architectural history. CAMLab operated projects starting from preliminary research to exhibition and storytelling, bringing the unprocessed research to broader audiences through intermedia methods. Working with artists, CG artists, designers, constructors, I found it a valuable experience for future career.



Research on the features of the main hall and Buddhist sculptures in the Fengguo Temple.





learnt from the course Digital Media (HSPV 624) helped me to manage my work. Furthermore, what I have to do is to figure out a way to renovate this area and to think about the question of bringing profits for the government and investors. And I learned that the development of these areas is different from the newly-built residential area on the general open space. It has its own particularity, complexity and comprehensive nature. Since the old settlements contain residential buildings, public facilities and the external environment of the settlements of a certain historical age, the complexity of their development lies not only in the need for in-depth investigation and analysis of the current physical environment of the redevelopment area, but also a large number of social, historical and policy issues are involved. It is necessary to fully consider the actual situation and comprehensively consider economic and social factors, such as, the relocation of residents, etc.

Over the summer, I worked at China Southwest Architectural Design and Research Institute corporation (CSWADI) which was founded in 1950 and is one of the earliest large-scale comprehensive Class A architectural design institutes in the industry in China. This company is located in Chengdu, China and I am in the Planning and Design department which is a core department of CSWADI and it includes all kinds of planning — master planning, detailed planning and related special planning, urban design, Concept planning, etc.

I joined several projects there. The first project was a planning project of the rural reconstruction project. I used the techniques that I learned in my GIS course (modeling geographic space) to analyze the site there, including its elevation, the water system and the shades of the mountains. I also learned a lot about how to conduct a planning project during this process and learned to use computer graphics to draw planning and design plans under the specific arrangements of the instructor of the planning department. We did not only need to do the design work, but also need to communicate with the investors, the residents in that area and the politicians of that city. Moreover, I learned to understand the laws, regulations, and standards related to urban planning.

Then, I joined an urban renewal project which is located in Chengdu, China. In this project, I am obliged to do some research about the site, including an analysis of the surrounding transportation, the conditions of the buildings and open spaces of that area. Also, I needed to make some graphs based on my analysis. The skills that I

In all, through the two-month internship experience, I mainly learned that no matter urban planner or preservationist, we not only need to think about the design plan of the site, but also need to learn to listen and communicate. In the preliminary research process, we need to communicate with people in different positions to obtain the accurate information needed for the project, and we also need to conduct field research and communicate with local people. In the design process, we need to take into account the requirements of various policies, and often consult the opinions of local government departments, taking into account the government departments' vision for regional development.

