

Inventing new modes of dissemination: applied preservation and cultural heritage pedagogy in interdisciplinary studios

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ABSTRACT: When we shift the word *practice* from noun to verb, *practice* turns into testing, experimenting with what is at hand. If we then apply this performative approach to the practice of teaching preservation and cultural heritage in a design studio setting, what would be the consequences? What would happen if we consider teaching as a practice of research and, consequently, of research as experimentation in a field that inherently resists innovation of practice?

Two professors, one from architecture, the other from interior design, offer preliminary answers to these questions while also laying out a model for a new critical pedagogy built on an interdisciplinary practice of teaching in which students from architecture, interior design, and landscape architecture have to address their own position within the context of a new studio while confronting a new language, i.e. that of the other discipline.

In this study we analyze two interdisciplinary studios we co-taught in 2017 and 2018 as case studies for applied history and the production of culture through our collaboration with the US Department of State's Overseas Building Operations office in Cultural Heritage. In these research-based, interdisciplinary design studios we were tasked by the State Department to develop new methodologies of documenting and disseminating via websites information about two historic properties abroad, the Winfield House (London) and the Villa Petschek (Prague), both historically significant American Ambassadors' Residences.

Our work resulted in a body of research that emerged out of applied onsite field work combined with analytic methods, archival investigations, and interdisciplinary communication to create a holistic understanding of the role historic properties abroad can play in the production of culture within an academic environment that is linked through current technology to society at large.

KEYWORDS: Diplomacy, US Department of State, Interdisciplinary Studio Pedagogy, Architecture, Interior Design

INTRODUCTION

Ideas about applied theory, history, and culture have permeated the architectural discourse at least since the renaissance when Leon Battista Alberti (1404-1472) and Andrea Palladio (1508-1580) published texts in which they disseminated expert knowledge about building methods while using their own projects as idealized case studies. By the 1800s their building-centered approach to architectural theory and practice were to be transformed by writers like Friedrich Schlegel (1772-1829) and Wilhelm von Humboldt (1767-1835) into philosophical structures that would have a long-lasting influence on education in central Europe and beyond. A well-balanced humanist education stood at the center of someone like Schlegel who wrote in his *Fragmente* that the

French Revolution, Fichte's epistemology and Goethe's Wilhelm Meisters Lehrjahre [Wilhelm Meister's Apprenticeship] are the most important tendencies of the age. (Schlegel [1798] 1904, 157).

By comparing the French revolution with Goethe's coming-of-age novel [Bildungsroman] Schlegel articulated the importance of a holistic education for a burgeoning bourgeoisie.

Humboldt had taken on the project to transform the Prussian education system six years earlier when he wrote that the

true purpose of man...is the highest and proportional formation of his energy toward a whole."ⁱ (Humboldt [1792] 1851, 9)

Humboldt's approach was influenced by political and social events in the early 1800s, such as Prussia's defeat by Napoleon in 1808 (which highlighted the failure of relying on blind obedience in decision making) and yet his earlier project had to wait until he was assigned to the Department of Culture and Public Education [Kultus und öffentlicher Unterricht] in the Interior Ministry of Prussia. (Orzessek 2017). By situating his ideas about education in the larger context of creating an independent (and independently thinking) and comparatively emancipated populace, Humboldt laid the foundation for a transformative educational system that still exists today in Germany. The core of his approach to education embraces the ideas that schooling is no longer dependent on the student belonging to a certain social class and that the state's task is larger than the education of specialists.

We want to make the argument that today, with a push for specialized education focusing mainly on STEM disciplines at the expense of the humanities, it may be time to take to heart Humboldt's perspective of a broader education that can borrow from *both* the sciences and the arts. Preservation education is well positioned to take on this challenge since recent developments in technology connect it squarely to the advanced sciences while its other leg relies on humanist disciplines such as history, archaeology, and the traditional design disciplines, including architecture, interior design, and landscape architecture.

In our studio work we have extended this hybrid mode of working across the arts and the sciences into our two studios as we combine traditional means (IRB-approved questionnaires, archival research, material cultural analysis, historic structures reports, interviews) and digital technologies (LIDAR scanning and processing, videography, panoramic and conventional photography) to research and analyze significant historical properties abroad, and to create web and virtual experiences that would allow the American public—which effectively owns the diplomatic sites abroad—and anyone else with a network connection to access and learn about the buildings' complex history without physically visiting them, since, unlike museums and other institutions, the State Department properties are not physically accessible by the public.

1.0 ANALYTIC METHODS

In this paper we used three types of qualitative research methods. The first consists of case studies through which we analyze a series of student-generated representations of significant properties owned by the US Department of State abroad (the wide range of research is detailed in the Pedagogy section below). The second method involves phenomenological analysis using interviews of staff we recorded on site in London and Prague to understand the staff's personal perspectives on working for the US federal government. The third method involves narratives generated by students using raw video from the interviews with staff that were then edited and intercut with animated photographs taken onsite of the buildings (interior, structure, and exterior), the furniture, and the art work.ⁱⁱ

2.0 INTERDISCIPLINARY STUDIOS

The two interdisciplinary studios we have taught so far in the College of Design at Iowa State University are part of a larger effort to prepare students for interdisciplinary collaboration which they will have to be familiar with when then enter the professional field of preservation as informed citizens. We consider our pedagogy to be the vanguard of a new type of cross-disciplinary case studies that has the potential to transform narrowly discipline-specific approaches. The first studio, *DSN S 546 Preservation & Cultural Heritage England, International Perspectives and Design Issues*, came about as part of a concerted effort to create a new historic preservation program that would draw faculty in a collaborative non-hierarchical structure of equals from four programs within our College of Design which include the departments of Architecture, Community & Regional Planning, Interior Design, and Landscape Architecture. For the near future we plan to expand this roster and start to collaborate on interdisciplinary projects with faculty from other departments both within our

College of Design (Graphic Design, Industrial Design, Arts & Visual Culture) and across the university, such as History, Anthropology, and Archaeology. The interdisciplinary studio, initiated by professor NameOfProfessor2—who has fifteen years of experience with large-scale preservation projects in addition to a Ph.D. in Design History—is our test case for pedagogical research and a potential prototype for other departments in the university to emulate. Now in its third iteration we have continuously attracted a larger number of students (18 for London in 2017, 28 for Prague in 2018, 35 for Tangier in 2019) and a larger percentage of students from different countries. Currently our international students come from Syria, Lebanon, Oman, Indonesia, China, and India. We articulate in the Pedagogy section below the impact of this diverse student body on teaching and learning.

2.1. Pedagogy

The pedagogy of preservation and cultural-heritage studios works against the grain of conventional design studios by emphasizing research and writing over generative drawing and three-dimensional modelling, which are still the mainstay of most architecture and interior design studios. Most of the teaching at the oldest US Historic Preservation program—at Columbia University—is weighted toward non-studio courses, and where those courses *are* studios, they involve a substantial travel component for onsite work that reinforces the importance of research in pedagogy (Dolkart 2018). Focusing on research in a design studio is still a hard sell for students who are used primarily to a production- or making-oriented environment that they know from their earlier years in an undergraduate program. This is one reason why we emphasize up front that our studio relies heavily on students choosing to engage in, and frame the scope of, their learning, i.e. the design process, which will then culminate in the final iteration of their project to be shared with our US Department of State liaison. We also stress that we expect every participant in the studio to bring their best knowledge and experience to the table and simultaneously expand his/her horizon by stretching and learning new ways of working both individually and in teams. To that end we take brief surveys at the beginning of the semester to evaluate what students know already, what they would like to know more about, and then we adjust how we match students in small teams to maximize their learning experience.

Having students in class from many different cultures makes our teaching task more difficult but also more rewarding. Students from similar cultural backgrounds tend to gravitate toward each other in class but that defeats the purpose of an interdisciplinary studio. Consequently we make sure to create small groups of two or three students for short studio projects where we have students with different nationalities, cultures, genders, and races work together. Having to collaborate with those different from oneself confronts the easy rejection of otherness head on. Iterative collaborative work on short projects helps to overcome the initial awkwardness of difference, and over the span of a four-month-long semester it creates a certain level of comfort with diversity. The resulting openness towards difference, which results in a curiosity about other countries and their customs, has so far been encouraging.

We should also acknowledge that, as instructors, we consider each new studio as an elaborate experiment where both teachers and students learn how to adjust to a fluid mode of working that frames the studio as an intersection of theory and practice. In this case the subject matter happens to be preservation and cultural heritage but the fundamental exploratory and experimental nature of how an upper-level studio works, remains the same. To that end we also believe the most effective way to learn involves a shuttling between theory and practice, between ideas and their application within both a philosophical (the minds of the students) and material construct (the studio space and its productions). The foundation of our studio can therefore be understood as an interplay between instruction and its translation into something unknown but determined to some degree by circumstance, imagination, curiosity, existing knowledge, and a readiness to learn on both sides. Travel and onsite field work is a large part of our interdisciplinary studio. So far we have travelled with students to London and Prague as part of the two implementations of our studio during the Spring semesters of 2017 and 2018. Both times we researched not only the respective US Ambassador's residences (Winfield

House and Villa Petschek) but also toured significant historic sites in both cities, and took excursions into the region (Windsor Castle in 2017, Dresden Royal Palace in 2018), and we just completed travel abroad in February 2019 to document the American Legation in Tangier, Morocco.

2.2 Archival investigations

The first two buildings contained archives of the former owners that allowed students to examine firsthand sources in the original surroundings. In the Winfield House students studied original drawings that documented the changes of the property over the last century, and in the Villa Petschek students researched a number of Otto Petschek's reference books he relied on for inspiration during the design phase of the building.ⁱⁱⁱ In the American Legation the building complex contains a substantial collection of art donated by American expats who settled in Morocco. In each case, after returning with their data to the US, students began to incorporate their analyses of the buildings into a Historic Structures Report and other deliverables for the studio.

2.3 Interdisciplinary Pedagogy and Production of Culture

Since the pedagogy of a design studio already relies on the foundation of applied theory, we were only adding another layer by emphasizing the interdisciplinary focus of our studios. The above mentioned diversity of the student body does create tension but also has the potential for a transformative learning experience. Choosing small groups of two to three students with a range of characteristics means that students can't hide, and they need to rely on each other to get the work done. In our experience this generative tension is more of a motivator than a hindrance in class. Students generated presentations throughout the semester, which helps both their research and presentation skills while making the interdisciplinary nature of those relationships a second, yet important component. We chose individuals in each group based on difference in gender, ethnicity, language skill(s), and discipline (architecture, interior design, or landscape architecture).

Based on our experience of having taught the studio now twice, we learned to structure the semester tightly, even though the participants are all fourth- or fifth-year and graduate students. During the first two weeks we introduced the students to preservation methods by assigning readings from the Secretary of the Interior website, and by having them research one of the historic State Department properties abroad. We consider this research as much a reproduction of knowledge as a production of culture, in the sense that the students grapple with new ideas about how to do research while applying skills they learned earlier in their career as designers. The pressures of a real client (the US Department of State) raise the expectations in the students about maintaining a high level of work while also encouraging them to see their contribution as part of a production of culture for anyone who can access the designed interactive websites that document their work.

2.4 Case studies of student work

Three examples of self-directed student work will demonstrate our pedagogy in the studio. The first two examples are based on initiatives by two individual students who took hold of a research topic that evolved out of each student's interest in making the project their own. The third example is a collaboration between two students from China and one student from India. One American student who assisted in the analysis of this latter project also used it to develop his own research into one of the details depicted in the final drawing.

2.5 Case study 1

Interior Design student Joseph Danielson, who had previous training in historical preservation with professor NameOfProfessor2, studied the garden room, a premier space in the Winfield house. The garden room interior had been changed several times since the house was built in 1936, and Danielson thought that tracing the genealogy of the room to its current appearance would be helpful to future researchers and virtual visitors of the building. Through historical analysis and archival research he uncovered three major periods of change, from the 1936 boisserie-paneled interior (sold in 1952) via its existence as the Blue Drawing Room under the

Eisenhower administration (1953-1961) and the rather plain Drawing Room from 1964—during the Johnston administration—to its rebirth as the principal Garden Room with its hand-painted, recycled Chinese wallpaper, and the hand-carved pine English Rococo broken pediments over the doors (Figure 1) and matching chimney piece, all assembled by interior designer William Haines (1900-1973) who, with his partner James Shields, worked early on for such movie stars as Joan Crawford, Gloria Swanson, Carole Lombard, Marion Davies, and George Cukor. Danielson created a Revit model of the Garden Room in its three incarnations and then designed a hybrid poster for our studio's final review in which he combined all three stages of the room in one drawing. This allows viewers to understand the transformation of the space from its Rococo beginnings through the sparse post-war years into the stunning Garden Room of the Winfield House which was used to host President Obama in 2015, among many other visiting dignitaries.

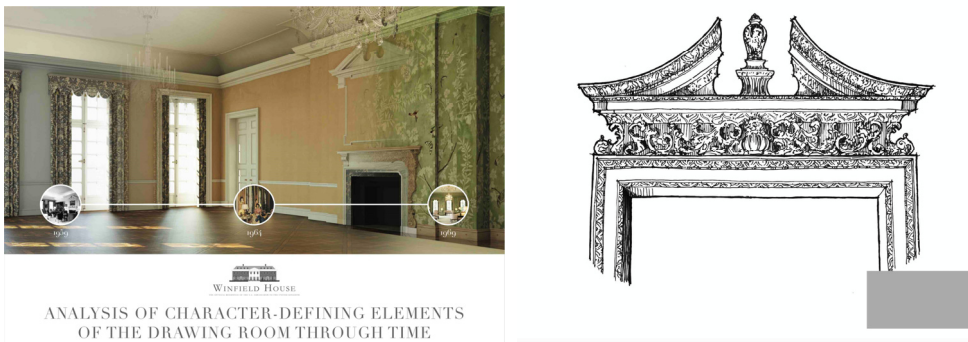


Figure 1: Digital and analog skill development: (left image) StudentName1, analysis of character-defining elements of the Drawing Room/Garden Room from 1959-1969. Reconstruction and rendering of digital hybrid model in Revit, and (Right image) StudentName1, hand-carved pine English Rococo broken pediment above doors in the Garden Room. Hand drawing in ink.

2.6 Case study 2

Architecture student StudentName2's visual interpretation of preservation is based on her research during the London field trip in 2017. She developed three posters that interpreted the existing historical sites in the city and their perception by locals and tourists. In her first constructed analysis, Historic London (Figure 2, left image), she maps out the historic sites in the city based on data she gathered from Historic England Heritage lists, realizing that 99.3% of the city's residents live less than a mile from a listed heritage asset. In her second poster, titled Historical Observation (Figure 2, right image), she speculates why humans have been actively kept from engaging with significant cultural properties, and, if they are permitted to visit, why visitors' knowledge about historic properties is usually limited to touring and sightseeing rather than the more in-depth knowledge gained by academic and professional researchers. In her third poster (Figure 3) StudentName2 reflects on potential future preservation methodologies where preservation efforts and documents are made easily available to educate people and to celebrate heritage properties incorporating current preservation technologies such as digital illustrations and virtual reality combined with traditional research methods. She ends her Methodology Report, written as part of the studio assignments, with the forecast that these new methodologies of preservation might turn out to be the key to social, economic, and cultural changes when considered from a global perspective.

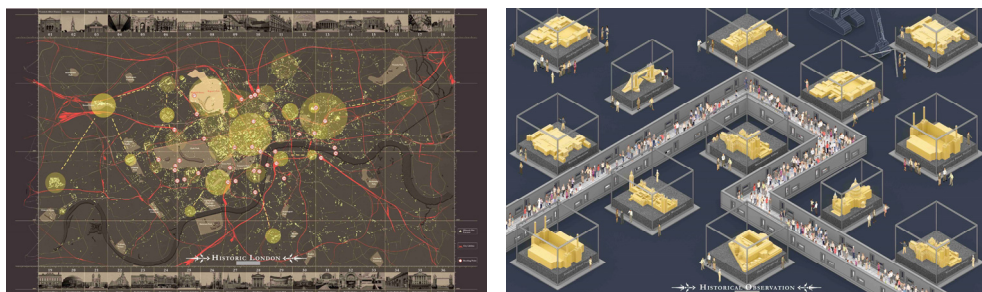


Figure 2: (left image) *Historic London* analysis of historic properties and their distance to Londoners, and (right image) StudentName2, *Historic Observation* of limited relationship between visitors and historic sites.



Figure 3: *Methodology Narrative* illustrating recording and representational tools used in the class to construct proposed virtual visits to sites in London.

2.7 Case study 3

Three students, StudentName3, StudentNam4, and StudentNam5 decided to analyze the garden façade of the Villa Petschek as part of their contribution to our Historic Structures Report. Based on existing two-dimensional CAD drawings (plans) provided by the State Department, and a series of measurements and photographs they took onsite in Prague, they developed through a series of iterations an annotated drawing of the building's garden façade (Figure 4). One other student, StudentName6, realized that one of the façade's main details reminded him initially of a classical swag of foliage, but upon further research he proposed that it might be a depiction of the ancient Greek myth of Hercules and the Nemean Lion that symbolically guards the central balcony door on the piano nobile above the winter garden on the ground floor (Figure 5, left image and right image).

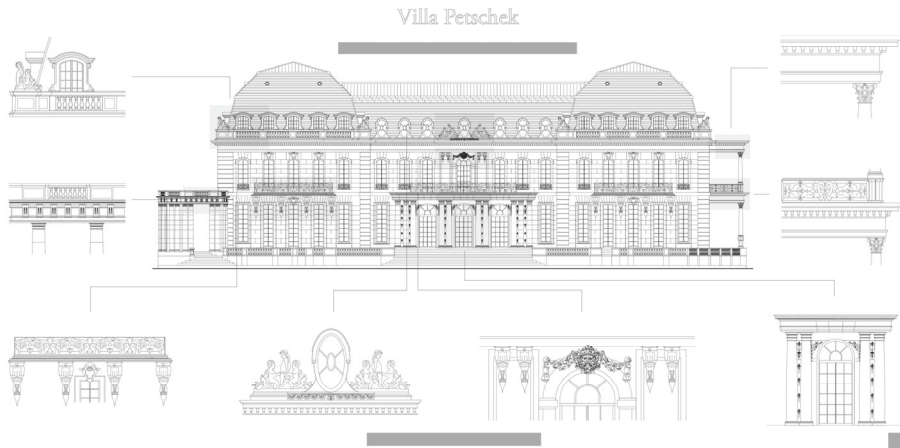


Figure 4: annotated Garden Façade of Villa Petschek with detail callouts.



Figure 5: detail of annotated Garden Façade of Villa Petschek showing the Hercules with Nemean Lion detail (left image) on the Garden Façade detail of the Villa Petschek (right image).

2.8 The role of technology

Martin Heidegger, in his 1953 text *Die Frage nach der Technik* [The Question Concerning Technology] articulates the potential dangers of understanding technology only as a neutral extension of human work and notes that technology brings with it a completely unique legitimacy that requires careful consideration from the human perspective (Heidegger [1953] 2002). Technology's energy independence from humans (what drives current machines are not humans but energy generated by natural resources) can also lead to a sense of inevitability that allows those who control the advance of technology to stake out control of those who depend on it, whether voluntarily or not. More recently Shoshana Zuboff's book on surveillance capitalism, while articulating the essentially colonial approach to commerce in such companies as Google and Facebook, also offers solutions to the dilemma of our dependence on both technology and the companies that apparently serve our needs but draw power from the information they gain in the process, which makes the behavior of humans more and more predictable (Zuboff 2019). Within the scope of this reality, teaching students about preservation technology requires a critical stance that acknowledges the changes that have occurred since the middle of the last century while questioning the affordances new technologies offer. Since then, technology in preservation studies has expanded from hand-measured and hand-drawn representations of existing structures and proposed changes to now include digital recording and design that has the potential to transform both the academy teaching future preservation professionals and the profession itself. Part of this critical perspective means that we teach students to learn and apply a wide range of methods to record existing structures onsite, including manual drawing and measuring in addition to digital recording using two lidar scanners (a Faro M70 and a Leica BLK360) and a Panono 360 camera. Students then use the collected data to develop three-dimensional analog and digital models as well as façade

drawings and speculative hybrid representations that emerge out of an iterative shuttling between analog and digital modes of working (Figure 4).

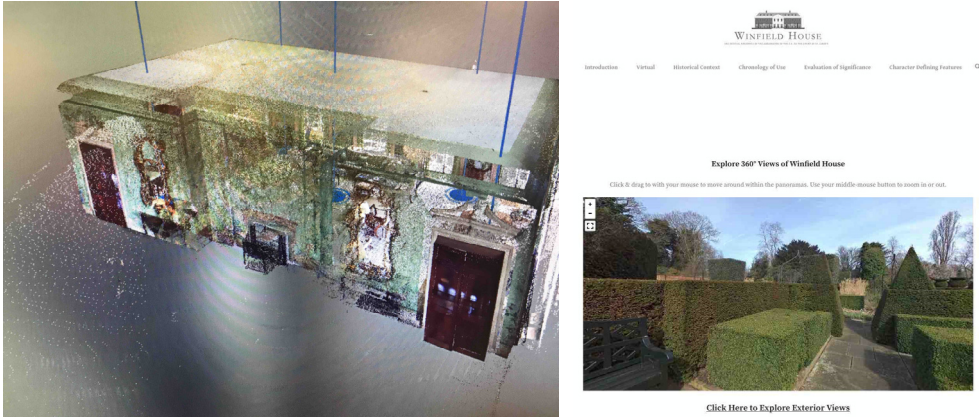


Figure 4: (left image) Lidar scan of Garden Room as viewed in VR desktop interface, (right image) screenshot of Winfield House website showing interactive panoramic views.

Since our final deliverable for the State Department consists of a series of website prototypes, students need to translate all of their investigations and research into another mode of representation that is virtually accessible to the world. In this process of translation students become aware of how their designs are potentially viewed by representatives from a wide range of cultures around the world, and their previous collaborative work in the studio has prepared them for this challenge. The catalog of pieces that the students design during the second half of the semester, after the data-gathering and analysis period, consists of a detailed Historic Structures Report, research on historical context, chronology of use, evaluation of significance, and character-defining elements, a timeline that demonstrates the significant events related to the site, detailed façade analyses of interior and exterior structures, individual student research projects (see Figures 1-3), and at least three website prototypes with protected access until the State Department decides, after review, which one of the sites they would like to make public.

CONCLUSION

In conclusion we can summarize the scope of our work through another series of challenging statements and questions for which we continue to search for answers: how we communicate history (a kind of memory) and forgetting (a kind of amnesia) intersects in our studios with questions of power (important historic properties) and the absence of power (those who do not hold important positions in the hierarchy of a state or a nation—such as the support staff at the Ambassador's Residences—yet are crucial to the everyday function of an official building representing the United States abroad). *Fluidity*, *impermanence*, and *transition* are the keywords that stand against what we conventionally think of as enduring. In response we encourage our students to design *everything* (including what we conventionally think of as representation, i.e. to do graphic design), acknowledging the awkward and the refined, the introvert and the extrovert drives in us *and* in the designed and built environment. Fundamentally we ask in our preservation studios: how do we *conserve* or *preserve* something for future generations? What is the difference between a real historic structure and its representation? How do we extend the temporal existence of what is designed? The first premise of the studio was that we have to *care*, to value what we want to preserve. Quality matters, and the *process* matters as much as what we end up with in the temporal realm, be it physical or digital models, an image feed, or a well designed interactive website.

'Practice of Research' suggests asking uncomfortable questions about one's own approaches to design that acknowledge a contingent stance towards studio pedagogy. Allowing students to accept their own discomfort in the face of a diverse studio environment is a start, and

insisting on interdisciplinary collaboration in small groups allows students to embrace opportunities they didn't even know existed. Emphasising the word *practice* as a verb encourages our students to experiment without overtly worrying about future results. This returns us to Wilhelm von Humboldt's approach to education that embraces not only science-based curricula but also the indeterminate meandering processes of humanist disciplines. Considering the studio as a space of non-judgemental experimentation makes this approach feasible.

In our two previous preservation studios we explored fundamental questions that ask how we communicate preservation and cultural heritage at a time when technology appears to drive much of the discourse. While we employ current tools, we also questioned what role technology plays in the recording and dissemination of preservation and cultural heritage. Given the physical and metaphysical distance between us and the objects of study (Winfield House in London, Villa Petschek in Prague, and currently the American Legation in Tangier), how we engage technology *critically* was and continues to be a vital part of the studio pedagogy.

Our work has resulted in a body of research that emerged out of applied onsite field work combined with analytic methods, archival investigations, and interdisciplinary communication to create a holistic understanding of the role historic properties abroad can play in the production of culture within an academic environment that is linked through current technology to society at large.

REFERENCES

- Dolkart, A., Kavenagh, C., and Yao, K. 2018. *Arch A 4510 Studio 1 Historic Preservation Syllabus*. New York: Columbia University.
- Günther, KH. 1988. Profiles of Educators: Wilhelm von Humboldt (1767-1835). *Prospects* 18, 127-128. Accessible online at <https://doi.org/10.1007/BF02192965>. Accessed January 20, 2019.
- Heidegger, M. [1953] 2002. *Die Frage nach der Technik*. Stuttgart: Klett-Cotta.
- Humboldt, W. v. 1851. *Ideen zu einem Versuch, die Gränzen der Wirksamkeit des Staats zu bestimmen*. Breslau: Trewendt.
- Loeffler, J.C. 2011. *Architecture of Diplomacy: Building America's Embassies*. New York: Princeton Architectural Press.
- Loeffler, J. C. 2016. The State Department and the Politics of Preservation: Why Few U.S. Embassies Are Landmarks. *Future Anterior* 13 (1), 98-123. University of Minnesota Press. Retrieved January 20, 2019, from Project MUSE database.
- Orzessek, A. 2017. *Wilhelm von Humboldts Bildungsideal: Vom Menschenkind zum Menschen*. Accessible online at <https://www.deutschlandfunkkultur.de/>. Accessed January 20, 2019.
- Schlegel, F. [1798] 1904. *Fragmente*. Jena und Leipzig: Diederichs.
- U.S. Secretary of State, 2010. *The Secretary of State's Register of Culturally Significant Property*. Washington D.C.: Bureau of Overseas Buildings Operations.
- Zuboff, S. 2019. *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. New York: PublicAffairs.

ENDNOTES

ⁱ "Der wahre Zweck des Menschen...ist die höchste und proportionirlichste Bildung seiner Kräfte zu einem Ganzen." (Humboldt [1792] 1851, 9)

ⁱⁱ This work is accessible via a student-designed interactive website at <http://HistoricBuildingWebsite1> which will be demonstrated as part of this presentation.

ⁱⁱⁱ The books continue to be stored in the zinc room, which had been used during the Petschek's family relatively short stay in the house from 1930 to 1934 to store fur coats in the building.