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AS FACTS AND NOT AS SHADOWS: AMERICAN ARCHITECTS AND THEIR TRAVEL SKETCHES

By

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A Dissertation submitted to the

Graduate School-New Brunswick

Rutgers, The State University of New Jersey

in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

Graduate Program in Art History

written under the direction of

Carla Yanni, Ph.D.

and approved by

New Brunswick, New Jersey

May 2013

ABSTRACT OF THE DISSERTATION

As Facts and Not As Shadows: American

Architects and Their Travel Sketches

by HENRIETTA F. SABLOVE

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This dissertation examines American architectural and social history of the late nineteenth and early twentieth centuries through the material culture of study abroad. Focusing on sketchbooks, journals, drawings, correspondence, and photographs of three generations of architects, the study will explore attitudes toward European cultural hegemony, the perceived value of foreign travel, changes in architectural education in the United States, and the process of image-making in the age of photography. Although the idea of observing and drawing existing monuments is rooted in the tradition of the Grand Tour and the heritage of architectural theorists dating back to Vitruvius, this essay will argue that the practice took on new meaning during a period of expansion, urbanization, and industrialization in America, c. 1850 through the 1930s.

Using case studies of Frank Miles Day, Eleanor Manning, William Jarrett Hallowell Hough, and Louis Skidmore, I have investigated historical, social, and scientific epistemologies, including visual theory, of the period, and the ways in which they affected the education and professional status of American architects. My dissertation also asks why architects continued to draw after photography became

ii

commonplace, and why study abroad remained de rigueur even when the first schools of architecture were established in America. In the conclusion, I have discussed the role of hand-drawing in the modern architectural office, and how the use of computer technology is altering architectural practice.

ACKNOWLEDGEMENTS

Like architecture, dissertation writing is a collaborative effort, requiring the expertise, cooperation, and generosity of those whom I will never be able to repay. I thank them all, beginning with Carla Yanni, my dissertation advisor, who never doubted the worth of this subject nor my ability to do it justice. Her patience, good humor, and talent for finding sensible solutions to seemingly-insurmountable problems provided me with the strength I needed to persevere. As a scholar she never ceases to challenge me; as a human being, she never ceases to astound me. The members of my committee were stalwart supporters whose enthusiasm and feedback made this a much richer study than it would have otherwise been. Emily Cooperman, Tanya Sheehan, and Susan Sidlauskas, I am eternally grateful for your insights and your thoughtful suggestions.

I have been very fortunate to receive financial assistance from the Department of Art History at Rutgers University, as well as from the Mitnick-Jacobs and Mary Bartlet Cowdrey funds. I am also indebted to the Andrew W. Mellon Foundation for providing summer research funding. The department has been a second family over the past decade. Our administrators, Geralyn Colvil and Cathy Pizzi, were my lifesavers on more than one occasion. To say that these two women work magic on a daily basis is no exaggeration. I am very grateful to the faculty, including Tod Marder, who encouraged me to change my status from non-matriculating amateur to fully-fledged graduate student. He and all of those who welcomed me into their classes gave me far more than they will ever know:

Meredith Arms Bzdak, Bill Foulkes, Archer St. Clair Harvey, Mark Hewitt, John Kenfield, Joan Marter, Sarah Blake McHam, Elizabeth McLachlan, Catherine Puglisi, Alla Rosenfeld, Jane Sharp, and Xander van Eck enriched my knowledge base and my life beyond measure. Others offered a helping hand when I needed it most. Andres

Zervigón stepped in at the last minute to assist with my Master's thesis. Don Beetham, Angela Howard, and Penny Small were energetic cheerleaders. And early on in this long voyage, the Rutgers Camden Art History Department enabled me to turn my undistinguished college record into something more creditable. Thank you, Debra Miller, friend and mentor, for laying a sturdy foundation and launching my new life in academia, along with Ann Brownlee and Roberta Tarbell. Scholars outside of Rutgers have also been most kind, particularly Jeff Cohen, Mark Crinson, Marta Gutman, Margaret Kuntz, Michael J. Lewis, John Pinto, and Nancy Zerbe.

My fellow graduate students have provided bottomless reserves of advice and friendship, most notably Catherine Boland, Susannah Fisher, Francis Fletcher, Cynthia Jacob, Annemarie Voss Johnson, Deba Leach, Lisa West, Sarah Wilkins, and Fatima Younus. Friends from other walks of life were the best of allies, even when I was at my worst. Carolyn Bray, Tina Breslow, Ann Büki, Ray Costello, and Susan and Tom Hemphill occasionally rolled their eyes but never wavered in their support. Special thanks are due to Natalie Nageeb, Joan Toborowsky, and the physicians, nurses, and technicians of the University of Pennsylvania Healthcare System, as well as Jay Rimmer and Rocky Citro.

The research necessary to complete this dissertation would have been impossible without the legions of archivists and librarians who so freely shared their time, knowledge, and resources. My thanks to Sherry Birk of the American Institute of Architects and Octagon Museum; Elizabeth Terry Rose and Marilyn Ibach of the Library of Congress; Brian Wallace of the Bryn Mawr College Library; Bruce Laverty of the Athenaeum of Philadelphia; and the staff of the Library and Special Collections at the

Massachusetts Institute of Technology, the Rutgers University Art Library, the Paul Robeson Library, and the Fisher Fine Arts Library of the University of Pennsylvania. I offer heartfelt thanks for the hospitality of my home away from home during the past few years, the Architectural Archives of the University of Pennsylvania, its director, William Whitaker, and its extraordinary librarian, Nancy Thorn. For them, no box was too heavy, no question was too mundane, no request was too unreasonable.

Members of my family have always been a source of pride. My parents, the late Iole Castelli and Otto Zinnie, taught me to love art and music, and insisted that I receive the education that had been denied to them and to many women of my generation. As long as I can remember, my amazing brother, Frank Zinni, has inspired me to do better and to be better, to do more and to be more. He and his wonderful wife, Ellen, shored up my confidence and kept me laughing when things were looking their bleakest. The ongoing pep-talks of my in-laws, Pelley and Steve Brown and Barbara and David Cooper, provided the energy and courage I needed throughout this endeavor.

Finally, none of this could have happened without my husband and companion of nearly four decades, Herb Sablove, who nourished me with his love, selflessness, integrity, puns, extraordinary cooking, morning coffee, Sunday drives, silly dances, catspeak, and nearly-ridiculous optimism. He wouldn't give up, so I couldn't, either. To him – for all those reasons and for the many sacrifices that his own modesty would never allow me to enumerate – I offer my woefully-inadequate gratitude and dedicate this dissertation.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF FIGURES	ix
FOREWORD	1
INTRODUCTION	3
CHAPTER	
I. "INDUSTRIOUS AND SELECT SEEING": THE TRAVEL SKETCHES OF FRANK MILES DAY	41
A Whirlwind Tour in Pencil and Ink 1883-85	52
Practice	60
The Mature Architect Abroad, 1893-95	62
The Late Travels, 1910-13	66
Face to Face with Façades: Day as Educator	67
II. AT HOME WITH THE DOMESTIC: THE TRAVEL NOTES AND SKETCHES OF ELEANOR MANNING O'CONNOR	79
Education and Early Career	79
First Travels, 1912-1913	86
Back in Boston: Manning's Partnership with Lois Howe	98
Travels, 1930s	99
Career as an Educator.	100
III. A PHILADELPHIAN EMBEDDED IN THE WORLD: THE TRAVEL EXPERIENCES OF WILLIAM JARRETT HALLOWELL HOUGH	102
Biographical Sketch	103
Hough and His View of History	
First tour, 1911-13	
The American Academy in Rome and Sojourn in Florence	
IV. LOUIS SKIDMORE: FORGING CONNECTIONS THROUGH SPACE AND TIME	
Forly Life	120
Early LifeSkidmore Abroad	
Skidmore and the Chicago Expostion of 1933: A Turning Point	
The New York Fair of 1939	
THE THEW TOTAL OF 1/3/	1

CONCLUSION SEEING THE PAST AND THE FUTURE OF DRAWING	ř158
APPENDIX	
A. PARTIAL ITINERARIES	168
B. ELEANOR MANNING'S NOTES ON PORT SUNLIGHT	169
C. FIGURES	171
SELECTED BIBLIOGRAPHY	347

LIST OF FIGURES

Figure		Page
I1	Le Corbusier's Modulor, a system of building measurement based on the human body.	171
I2	The French artist Orlan uses her body to measure the colonnade at Piazza San Pietro as part of her performances of <i>MesuRAGES d'Institutions</i> (1974-1979)	172
1.1	Frank Miles Day.	
1.2	Frank Miles Day. Nuremburg	174
1.3	Basil Champneys.	175
1.4	Frank Miles Day, page from a travel sketchbook, featuring "a particularly fine door nail."	176
1.5	Frank Miles Day. Page from a travel sketchbook illustrating hardware from the German Museum, Nuremburg, 1885	177
1.6	Frank Miles Day. Page from student notebook depicting the use of ribbon motif in architecture	178
1.7	Frank Miles Day. Travel sketchbook, 1885	179
1.8	Frank Miles Day. Index of drawings in travel sketch book, 1883-85	180
1.9	Frank Miles Day. Page from sketchbook featuring ornamental detail from the church of St Denis, 1885	181
1.10	Frank Miles Day. Detail of page from travel sketchbook illustrating a nail in plan and section	182
1.11	Frank Miles Day, page of sketchbook illustrating the gable of the Fembohaus, Nuremberg, 1885	183
1.12	Fembohaus, Detail of gable shown in Figure 1.11	184
1.13	Frank Miles Day. Page from sketchbook illustrating the Maulthalle, a granary in Nuremberg, 1885	185
1.14	Frank Miles Day. Page from sketchbook illustrating the Pazzi Chapel, Florence, 1885	186
1.15	Frank Miles Day. Section drawings of column in church of St Cross, Winchester, 1885	187

1.16	Frank Miles Day. "Maison de Diane de Poitiers," Rouen, 1885	188
1.17	Detail of Figure 1.16.	189
1.18	Palais de Justice, Beauvais. Folio from travel sketchbook	190
1.19	Vintage postcard of the Palais de Justice, Beauvais.	191
1.20	Blois, Staircase of Chateau.	192
1.21	Giovanni Battista Piranesi, Drawbridge from Carceri d'Invenzione	193
1.22	Bologna, San Sepulcro.	194
1.23	Cappella Colleone, Bergamo	195
1.24	Glastonbury, Chapel of Joseph of Arimathea	196
1.25	Frank Miles Day. Travel sketch of Lady Chapel at Salisbury Cathedral, 1885	197
1.26	Salisbury Cathedral	198
1.27	Frank Miles Day, Caner Residence (left), Philadelphia, 1890.	199
1.28	Frank Miles Day. Double residence for Edward Wood, 1890	200
1.29	Frank Miles Day, double residences at Twelfth and Locust Streets, Philadelphia, 1892	201
1.30	Frank Miles Day, American Baptist Publications Building, Philadelphia, 1896.	202
1.31	Frank Miles Day, Cogslea, West Mount Airy, Philadelphia, 1902	203
1.32	Frank Miles Day, Wetherill Mansion, Philadelphia, 1906	204
1.33	Yarnall Residence, Philadelphia, 1908.	205
1.34	Frank Furness, Thomas Hockley House, Philadelphia, 1875	206
1.35	Venice, Frank Miles Day. A Capital at the Doge's Palace, elevation and plan, 1895	207
1.36	Venice, Doge's Palace	208
1.37	Frank Miles Day. Folio from travel sketchbook	209
1.38	Frank Miles Day. Detail of Fountain in the House of the Bear, Pompeii	210

1.39	Photograph of Fountain in the House of the Bear, Pompeii	211
1.40	Frank Miles Day. Pompeii, Street of Tombs	212
1.41	Frank Miles Day. Assisi from the train, ca. 1913	213
1.42	Frank Miles Day. Page from travel sketchbook, depicting Santa Maria degli Angeli, Rome, ca. 1912	214
2.1	Eleanor Manning.	215
2.2	Eleanor Manning, page from collection of travel sketches and notes, 1912	216
2.3	Eleanor Manning. Eagle & Child Inn, travel sketch, 1912	217
2.4	Eleanor Manning. Ye Old Black Bear Inn, travel sketch, 1912	218
2.5	Anonymous photograph of Ye Olde Black Bear Inn, ca. 1912	219
2.6	Eleanor Manning, Bear & Billet Inn, travel sketch, 1912	220
2.7	Photograph showing side elevation of the Bear & Billet Inn	221
2.8	Bear & Billet Inn, detail.	222
2.9	Eleanor Manning, House in White Friars, Chester	223
2.10	Contemporary photograph of houses in White Friars	224
2.11	Streetscape, Chester.	225
2.12	Eleanor Manning, Almshouses, Corsham	226
2.13	Rendering of Army/Navy Canteen, Boston, 1918	227
2.14	Lois Lilley Howe and Eleanor Manning	228
2.15	Houses at Port Sunlight, near Liverpool.	229
2.16	Eleanor Manning, Highnam Court, Gloucestershire, travel sketch, 1912	230
2.17	Eleanor Manning, Southam Delabere, 1912	231
2.18. I	Eleanor Manning, Old Stanley Place, measured drawing of a baluster	232
2.19	Eleanor Manning, Commandery House, doorway and ceiling details, 1912	233
2.20	Eleanor Manning, Musee Carnavalet, Paris, 1912	234
2.21	Eleanor Manning. Nôtre Dame de Chartres, clock tower, 1913	235

2.22	Chartres, aerial view of north flank of cathedral	236
2.23	Eleanor Manning, Chinon, street scene, 1913	237
2.24	Lois Lilley Howe and Eleanor Manning.	238
2.25	Johnson O'Connor and Eleanor Manning O'Connor.	239
2.26	Eleanor Manning O'Connor, travel sketch, 1930s	240
2.27	Eleanor Manning O'Connor, travel sketch, 1930s, watercolor	241
2.28	Eleanor Manning O'Connor. Travel sketch, 1930s	242
2.29	Arthur Wesley Dow. View in Ipswitch: Sailboat	243
3.1	William Jarrett Hallowell Hough, Yearbook Photo	244
3.2	Frank Lloyd Wright. Larkin Building, Buffalo, New York, 1906	245
3.3	Peter Behrens, AEG Turbine Building, Berlin, 1919	246
3.4	Paul Philippe Cret, Central Heating Plant, Washington, DC, 1933	247
3.5	William J. H. Hough, Detail from Library of Siena Cathedral, ca. 1912	248
3.6	William J. H. Hough, Detail of Ceiling from the Ducal Palace, Urbino, ca. 1912	249
3.7	William J. H. Hough, Self-portrait	250
3.8	St. Matthew, from Coronation Gospels, Vienna	251
3.9	William J. H. Hough, Bridge at Vienne	252
3.10	William J. H. Hough, chevet in Beauvais cathedral	253
3.11	William J. H. Hough, Rothenberg, streetscape	254
3.12	William J. H. Hough, St. Nicholas from the Castle, Ghent	255
3.13	William J. H. Hough, Donkey	256
3.14	William J. H. Hough, Spectators at Puppet Show	257
3.15	William J. H. Hough, Salamanca to Medina	258
3.16	William J. H. Hough, Legina to Madrid	259
3.17	William H. J. Hough, sketch of W. Hough and B. Register	260

3.18	William J. H. Hough. "Fweddy," a caricature	261
3.19	William J. H. Hough. Caricature	262
3.20	William J. H. Hough. Caricature	263
3.21	William J. H. Hough, "Je suis d'Afrique."	264
3.22	William J. H. Hough, travel sketch from letter to mother, ca. 1912	265
3.23	A British caricature of Kaiser Wilhelm.	266
3.24	William J. H. Hough, man in Tyrolean costume	267
3.25	William J. H. Hough, sketch of man in fez	268
3.26	William J. H. Hough, Arles	269
3.27	William J. H. Hough. Details of a bedroom in Pompeii, ca. 1915	270
3.28	William J. H. Hough, escutcheon on frontispiece of scrapbook featuring plans, snapshots of Italian villas, 1916	271
3.29	Frontispiece from <i>I Quattro Libri dell'Architettura</i> by Andrea Palladio, 1642	272
3.30	Frontispiece from I Sesto Libro di Sebastiano Serlio Bolognese, 1600	273
3.31	William J.H. Hough, photographs, plan and section drawings of Villa Marlia (Principessa)	274
3.32	William J. H. Hough, photograph of gardens at Villa Marlia	275
3.33	William J. H. Hough, photograph of gardens at Villa Marlia, Lucca	276
3.34	William J. H. Hough, photograph of paving material at Villa Collodi	277
3.35	William J. H. Hough, photograph of reflection on stairs at Villa Collodi	278
3.36	William J. H. Hough. Elevation drawing of Villa Gamberaia	279
3.37	William J. H. Hough. Villa Gamberaia, travel sketch, ca. 1915	280
3.38	Charles Clifford. Monastery of San Jeronimo, Juste.	281
3.39	Photograph of William J. H. Hough in "Kodak Memories" photo album	282
3.40	Figure of God as Architect of the World, Vienna Codex, Vienna	283

3.41	Bernard Picart, portrait of Andrea Palladio	284
3.42	Photographer unknown. Photograph of architectural student, presumably William J. H. Hough, climbing colonnade at Piazza San Pietro to measure and sketch sculptures.	285
3.43	William J. H. Hough, photograph of man and view of hilltown	286
3.44	William J. H. Hough, Fountain in the Piazza San Pietro	287
3.45	William J. H. Hough. Measured drawing for rendering of fountain in Piazza San Pietro	288
3.46	William J. H. Hough, <i>Impresa</i> of Pope Alexander VII, sketch for rendering of fountain and a section of the Piazza San Pietro, Vatican City, Rome (see figure 36)	289
3.47	William J. H. Hough. Sketches of sculptures for rendering of fountain and a section of the Piazza San Pietro	290
3.48	William J. H. Hough. Rendering of the Interior of the Pantheon	291
3.49	William J. H. Hough. Courtyard in the Palazzo Vecchio	292
3.50	Ponte Rotto, Rome (Ponte Senatorio)	293
3.51	William J. H. Hough. Drawing of fragments from the Villa Papa Giulio, Rome	294
3.52	William J. H. Hough. The Map Room, Palazzo Vecchio, Florence	295
3.53	Monogram of William J. H. Hough, on cover of sketchbook from 1918-19	296
3.54	William J. H. Hough, Taormina	297
4.1	Skidmore, Owings & Merrill, Gordon Bunshaft, Designer. Lever House, New York, 1951-52	298
4.2	Skidmore, Owings & Merrill, Trammel Crow Center, Dallas, 1985	299
4.3	Skidmore, Owings & Merrill. Wells Fargo Tower, Birmingham, Alabama, 1986	300
4.4	Skidmore, Owings & Merrill. King Abdullah Financial District Conference Center, Riyadh, Saudi Arabia, 2012	301
4.5	Freedom Tower/One World Trade Center, computer rendering	302
4.6	Louis Skidmore. A souk, Cairo. Travel sketch, drawing, 1928	303

4.7	Louis Skidmore. Athens. Travel sketch, watercolor. 1928	304
4.8	Le Corbusier, Maison Favre-Jacot, 1912.	305
4.9	Le Corbusier, Domino House, 1912.	306
4.10	Carrère & Hastings. New York Public Library, completed 1911	307
4.11	Irving Gill. Dodge House, West Hollywood, California, 1914-16	308
4.12	Louis Skidmore, Travel Sketch, Versailles	309
4.13	Louis Skidmore. Grammar Hall, Magdalen College, Oxford, ca. 1927	310
4.14	Louis Skidmore. Travel sketch (left) and photograph of a bracket mounted on paper, Versailles, ca. 1927	311
4.15	Louis Skidmore, L'escalier de la Reine Berthe, Chartres. Pencil and photographs mounted on paper, 1927	312
4.16	Louis Skidmore. Basin of Neptune, Versailles	313
4.17	Sculptures in the gardens at Versailles.	314
4.18	Louis Skidmore. Detail of original drawing for Samuel Chamberlain's <i>Tudor Homes of England</i> , still bearing his pencil marks on paper	315
4.19	Louis Skidmore (?). Photograph from Samuel Chamberlain's <i>Tudor Homes of England</i> , with photograph of the Reader's House in Ludlow	316
4.20	Louis Skidmore. Measured drawing of the gable details from the Reader's House, Ludlow	317
4.21	Louis Skidmore. Page from Samuel Chamberlain's <i>Tudor Homes of England</i> , showing details from the entrance of the Reader's House	318
4.22	Louis Skidmore. Page from Samuel Chamberlain's <i>Tudor Homes of England</i> show side elevation and details from a house in Stanton	319
4.23	Louis Skidmore. Page from Samuel Chamberlain's <i>Tudor Homes of England</i> with measured drawing of Lygon Arms, Broadway	320
4.24	Louis Skidmore (?). Page from Samuel Chamberlain's <i>Tudor Homes of England</i> , with photograph of The Lygon Arms	321
4.25	Louis Skidmore. "From the Train."	322
4.26	Louis Skidmore. San Gimignano	323

4.27	Giorgio de Chirico. Mystery and Melancholy of a Street	324
4.28	Louis Skidmore. Travel Sketch, Cairo	325
4.29	Louis Skidmore. Book Stalls, Paris	326
4.30	William Fraser, Night Scene, 1897	327
4.31	Louis Skidmore. Liverpool Cathedral	328
4.32	Louis Skidmore, Watseka Theater, Watseka, Illinois, 1931	329
4.33. I	Louis Skidmore. Travel sketch. Palais des Papes, Avignon	330
4.34	Skidmore, Owings & Merrill. Gas Building, New York World's Fair, 1939.	331
4.35	Louis Skidmore. Undated Christmas card with scene of interior of Seville Cathedral	332
4.36	Louis Skidmore. Travel sketches, Beirut	333
4.37	Louis Skidmore. Travel sketch, Azem Palace, Damascus	334
4.38	Louis Skidmore. Chateau Chenonceau	335
4.39	Louis Skidmore. Chateau de Chaumont	336
4.40	Louis Skidmore. Staircase at Blois	337
4.41	Postcard of Skidmore, Owings & Merrill's Wonder Bakery building, New York World's Fair, 1939.	338
4.42	The Long Island Duck, Flanders, New York, 1931	339
4.43	Postcard of Skidmore, Owings & Merrill's RCA building, New York World's Fair, 1939.	340
4.44	Postcard of Skidmore, Owings & Merrill	341
C1	Cass Gilbert. Monastery at Monreale	342
C2	Louis I. Kahn. Acropolis.	343
C3	Michael Graves. Temple of Janus.	344
C4	Whitney Warren. Window from the Grande Salle, Chateau de Blois	345
C5	Wilson Evre. Street Scene. Chester. 1894	346

FOREWORD

This dissertation examines the experiences of four young American architects who traveled abroad between the 1880s and the 1930s. By focusing on the drawings, correspondence, and photographs remaining from the voyages of Frank Miles Day, Eleanor Manning O'Connor, William Jarrett Hallowell Hough, and Louis Skidmore, I intend to provide information regarding their motives for study in Europe and the Middle East, as well as the social, cultural, and political climates of their respective generations during that fifty-year period. Viewing the material culture of their sojourns in light of visual theory, architectural education, the professionalization of the American architect, attitudes toward history, and the role of photography in the recording of monuments, I have touched upon issues of class, gender, and style as well.

Almost by definition, drawing plays a major part in this essay. While some studies of travel sketches have assumed that such drawings provide details and reference material for the architects' later work, I have attempted mainly to understand the ways in which the recording of existing monuments trained the architect's hand and eye. It is true that some of the subjects included in the following chapters borrowed extensively from the past and that the debt owed by American architecture to European models is considerable. One has only to compare the public and domestic buildings of any city or town in the United States to European prototypes to understand that. Imitation was certainly a common practice, and it was not unusual for architects to copy entire structures or selected details. In fact, the architect Wilson Eyre kept large scrapbooks for his own reference: two for houses of England, one for doors and entrances, one for churches, and one for details. Those not dedicated to England were organized

geographically, for example, from Flanders to Rangoon. Inside were drawings, commercial photographs, and magazine clippings, intended to serve as *aides-memoire*.

Literal quotations from the past are certainly abundant in American building; they can be found in the built work of many of those who traveled, and in the *oeuvre* of many of those who did not go abroad. However, as Brian M. Ambroziak has stated regarding the travels of the modern American architect Michael Graves:

While one might look for direct connections between an architect's drawings and his built work, these literal one-to-one associations tend to be forced. It is more often the case that Graves draws from a multitude of experiences and transforms and shapes them throughout his design process. When recalling these images, he claims he is not "treating or employing history, but rather participating in its continuities."

Furthermore, this dissertation will show that architects are, first and foremost, artists; their products on paper are equally worthy of consideration as their creations in brick and mortar.

^{1.} Brian M. Ambroziak, *Michael Graves: Images of a Grand Tour* (New York: Princeton Architectural Press, 2005), 3-5.

INTRODUCTION

The advent of the Grand Tour in the seventeenth century represented a refinement of travel, emerging from the desire of the well-heeled young gentleman or lady – mainly from England but also from France or Germany – to become a person of the world, not merely in geographical terms, but in a cultural sense as well. By its heyday in the 1700s, the sojourn abroad was a finishing school for members of a society steeped in the Enlightenment. For a few of these wayfarers, travel was an escape from academic failure or social scandal.² For others, travel abroad to Italy and elsewhere on the Continent was not so much a diversion for the rich or an exile for dissolute members of a privileged class as it was a method of serious study. Many also traveled in order to gain access to healthful climates or to "take the waters."

For the young American architectural students who would travel to Europe and the Middle East in the period from the 1850s through the 1930s, travel was much more: it would become a means of discovering a past to which they wished to claim an inheritance. By engaging with the great canonical monuments through on-site drawing and measuring, these students sought to gain knowledge about the cultures from which these structures arose, as well as to hone to skills that they would need as practicing architects once they returned home to a country still in the process of determining its visual identity.

^{2.} Jeremy Black, *The Grand Tour: The British Abroad in the Eighteenth Century* (Gloucestershire, Croom Helm, 1992), 63. Black writes of the indiscretions of such aristocratic women as Lady Craven and Margaret Rolle who found refuge in Paris and Bucharest, among other cities.

^{3.} For more on health tourism, see Micheline Nilsen, *Architecture in Nineteenth Century Photographs* (Surrey, UK: Ashgate, 2011), 172-175.

Growing out of several discrete but related traditions, the practice of architectural study abroad contains elements of all of them, plus unique features of its own. In addition to the Grand Tour, which had started during the late seventeenth century, these sojourns had roots in the architectural treatises of Alberti, Palladio, Scamozzi, and Serlio, among others, who sought to analyze, catalog, and codify architectural styles and building types. These artists and theorists had studied the past, and in some cases had re-created it. They studied and attempted to correct *The Ten Books on Architecture*, the work that Vitruvius had written in the first century CE. Their works were, in turn, studied by generations of architectural students. The books they wrote became travelers in their own right, disseminating information about classicism to countries outside of Italy. In fact, because these books were more likely to travel than most people were, they became extremely influential. Konrad Ottenheym has convincingly argued that the importation of Scamozzi's treatise, L'Idea della Archittetura Universale (published 1615) into the Netherlands was as important to the propagation of Palladio's ideas there as Inigo Jones's 1614 visit to Italy was in transporting the Palladian style to England. ⁴

The travel sketches of professional or student architects are also related to the tradition of *vedutismo*, the practice of view-painting that became popular in eighteenth-century Italy. Exemplified in the work of Canaletto and Giovanni Paolo Panini, these works, as the feminist art historian Giuliana Bruno describes them, "tended toward a

^{4.} Konrad Ottenheym, "A Bird's-Eye View of the Dissemination of Scamozzi's Treatise in Northern Europe," *Annali di Architettura* 18-19 (2006-2007): 187-198. Ottenheym acknowledges that Jones's travels to Italy and his purchase of Palladio drawings from the latter's student Scamozzi had a profound impact on the architecture of England, but that "Scamozzi's legacy in Europe, generally speaking, is based above all on his written magnum opus of 1615, *L'Idea della Archittetura Universale*" ... which, by the following year, made its way to Antwerp. (187). Learning from books remained an integral component of architectural training, but its value *vis-à-vis* on-site visits to canonical buildings will be examined in later chapters.

narrative dramatization of sites, characterized by a heightened and tactile texture of place." These works, according to Bruno:

... evolved from a veritable pandemic of urban imaging and *furor geographicus* that, from the fifteenth century onward, had taken the form of book illustrations, drawings, prints, and paintings. Illustrated topographical books, which included histories, travel reports, geographic surveys, and atlases, were instrumental in establishing a taste for viewing sites. The *veduta* itself is inseparable from the history of the grand tour.⁶

Bruno goes on to say that the "portrait of the city in Italian *vedutismo*, that is, view painting, tended toward a narrative of sites, characterized by a heightened and tactile sense of space." Furthermore, she quotes the fifteenth century writer Antonio Ivani regarding a partial view of Genoa that he sent to a friend in Florence. Ivani explained that the view "shows not the whole city, but only parts that meet the need of writers."

The *vedute*, then, acted as souvenirs as well as independent works of art, meant for consumption rather than reference. The architects cited in the following chapters, however, were more closely related to the tradition of such travelers as the Englishmen James Stuart and Nicholas Revett, who were perhaps the first visitors to take measurements of the monuments of Greece during 1751-54, and whose findings were published in *The Antiquities Of Athens*, as well as Julien-David LeRoy, who made his own measured drawings during 1755.

^{5.} Giuliana Bruno, *Atlas of Emotion: Journeys in Art, Architecture, and Film* (London: Verso, 2002), 174.

^{6.} Bruno, Atlas of Emotion, 174.

^{7.} Bruno, Atlas of Emotion, 174.

^{8.} Antonio Ivani, cited in Juergen Schulz, "Jacopo de'Barbari's [sic] View of Venice: Map Making, City Views, and Moralized Geography Before the Year 1500," *The Art Bulletin* 60, no. 3 (September, 1978): 458. Quoted in Bruno, *Atlas of Emotion*, 174.

While some of the travel sketches made by architects were eventually published or displayed⁹, they were generally not created as souvenirs or travel substitutes, but rather as personal observations, teaching tools, and reference materials. More importantly, the architects who studied abroad were not mere spectators, but active observers, nor were they simply Grand Tourists seeing the sights. As Joan Ockman defines the distinction:

The architect is also an expert. Unlike the 'everyday' or lay observer, who, relatively speaking, tend to experience the built environment in a distracted or absent-minded way, as Walter Benjamin suggests, architects by training and trade look with attention and knowledge, even on vacation.¹⁰

For architects as well as other traveling artists, going abroad was and is a means of understanding the past through the diligent examination and recording of its visual remains. Unlike the casual tourist, the artist was charged with the duty of analyzing the sights as well as enjoying them. Artists recorded their observations, primarily through drawing, an activity whose relevance for architects is a matter of debate in today's computerized environment. But for the architectural student of the nineteenth and early twentieth century, drawing played a number of important roles. In the pre-computer era, a drawing was an important tool for communication. The great American architect Cass Gilbert, who traveled abroad in the 1880s, wrote to Charles Follen McKim: "architecture depends on draftsmanship more than anything else, because it is in this way only that ideas may be expressed, and that he should give as much time as possible to the study of

^{9.} Notably, the travel sketches of Louis I. Kahn were the subject of the exhibition, *Drawn from the Source*, organized by Michael J. Lewis, and held at the Williams College Museum of Art, Williamstown, MA, The Jewish Museum, New York, and the Art Institute of Chicago between 1996 and 1999. Exhibitions of Kahn's travel sketches also took place at the Woodmere Art Museum (1994-1995) and the Pennsylvania Academy of Fine Arts (1978).

^{10.} Joan Ockman, "Bestride the World Like a Colossus" in *Architourism*, Ockman and Salomon Frausto, eds. (Munich: Prestel, 2005), 160.

freehand and mechanical drawing." One's adeptness at drawing was comparable to eloquence with language; the architect could best articulate his or her ideas to a client through visual means. Later, Gilbert wrote to Lawrence Kocher: "Sketch everything in sight. Sketch from pictures, from published designs, from monuments and buildings. No matter how badly you draw, continue to draw …" Gilbert alluded to the haptic nature of drawing when he wrote:

"Sketch mouldings and shapes of things by handling them as well as by looking at them, so that by feeling the contours of the mouldings with the fingers you can determine the shapes as well as by looking at it ... Keep the pencil active and the mind will keep pace with it.¹³

Honing one's drawing skills also sharpened the architect's talent for designing, according to the first American Beaux-Arts trained architect, Richard Morris Hunt. His protégé, Frank Furness, who would later become one of Philadelphia's most prominent designers, recalled that Hunt told the students in his atelier that the most important exercise of all was to:

Draw, draw, draw, sketch, sketch! If you can't find anything else, draw your boots; it doesn't matter, it will ultimately give you a certain control of your pencil so that that you can the more rapidly express on paper your thoughts in designing. The greater facility you have in expressing these thoughts the freer and better your design will be.¹⁴

^{11.} Cass Gilbert to Charles Follen McKim, September 18, 1901. Quoted in Mary Beth Betts, "From Sketch to Architecture," in Margaret Heilbrun, ed., *Cass Gilbert: Inventing the Skyline* (New York, 2000), 35.

^{12.} Cass Gilbert to A.Lawrence Kocher, December 30, 1921. Quoted in Betts, "From Sketch to Architecture," in Heilbrun, *Cass Gilbert*, 36.

^{13.} Cass Gilbert, letter to A.Lawrence Kocher, December 30, 1921. Quoted in Betts, "From Sketch to Architecture," in Heilbrun, *Cass Gilbert*, 36.

^{14.} Frank Furness, "A Few Personal Reminiscences of His Old Teacher by One of His Old Pupils," in George E. Thomas, Jeffrey A. Cohen, and Michael J. Lewis, *Frank Furness: The Complete Works* (New York: Princeton Architectural Press, 1996), 353.

Furness, who was an advocate of neither formal architectural education nor international travel, ¹⁵ was equally adamant about the necessity of drawing skills, particularly without the aid of tools:

To begin at the beginning. In the acquirement of the indispensable knowledge of drawing and facility with the pencil let the first work be that which is thought the most difficult of all kinds of drawing – the copying directly from life or Nature. Intelligent students are often cramped and hand-bound by a course of practice in what is termed "learning the use of the instruments." The unfortunate is made to rule straight lines with a square and describe curves with a compass until both mind and hand are so cramped that a lifetime hardly suffices to obliterate the miserable traces of habits engendered and confirmed in a few lessons.

Start with nothing but paper and pencil and a free hand: have no fear – the paper is not poison to the touch, nor are lead-pencils highly combustible and liable to explode and destroy the holder... Remember that the drawing you wish to make is for your own instruction, and not to elicit praise or applause from admiring friends."¹⁶

Drawing, to Furness, was personal and instructive, a means of training the hand and mind as one.

That license to make a freehand drawing or painting, as opposed to a measured drawing of an existing monument, also relates to the architect's identity as an artist. The growing divide between the architect and the builder during the mid to late nineteenth and early twentieth century underscored the importance of skill, of talent, and of the architect's identity as an artist and not merely an artisan or mechanic.

^{15.} Michael J. Lewis. Frank Furness: Architecture and the Violent Mind. (New York, Norton, 2001), 150. Lewis discusses Furness's indifference to academic training, and quotes a passage in the *Illustrated American*, to the effect that his friends "always besought him not to go abroad, for fear of losing his individuality under the influence of some foreign master." He did eventually travel, later in his life, but the sojourn is largely undocumented, a fact that seems to confirm his indifference or disregard for the practice of study abroad.

^{16.} Frank Furness, "Hints to Designers," in George E. Thomas, Jeffrey A. Cohen, and Michael J. Lewis, *Frank Furness: The Complete Works*. (New York: Princeton Architectural Press, 1996), 347-348.

Mary Woods has written of the often-ugly distinctions drawn between the two groups. While during the pre-Civil War years, there appeared to be an affinity between them, the rise of Irish immigration during the later decades of the century contributed to a class conflict and ethnic prejudice that fed the socially-upward aspirations of academically trained architects. Instead of the image of architect and builder who worked together as more-or-less equals, mechanics and builders were depicted in a particularly unflattering manner. The anti-Irish sentiment was manifested in cruel caricatures of the builder and 'practical architect.' Such examples reflect a growing tendency to create clear lines of division that had previously been less pronounced.

A trip abroad was also one of the few occasions on which an architectural student could assert his or her identity as a pure artist. A freehand drawing, as opposed to a measured drawing of a pre-existing building, allowed the student to realize a vision on paper, without regard to the practical realities related to construction, including client demands, zoning laws, site restrictions, and the necessary collaboration with builders and tradesmen. Mary Woods has discussed the phenomenon of "Roarkism," the Ayn Rand fantasy of the architect as I-built-it-myself loner; ¹⁸ here, in the privacy of a personal sketchbook, without the interference of clients or building codes, the architect has no need for revisions.

The act of drawing connected the architect with history, permitting the student to embody a monument through his or her hand. In 1929, the architect Edward Durell Stone,

^{17.} Mary N. Woods, From Craft to Profession: The Practice of Architecture in Nineteenth-Century America (Berkeley: University of California Press, 1999), 148-160.

^{18.} Woods, *From Craft to Profession*, 1. Howard Roark, the main character of Ayn Rand's novel, *The Fountainhead*, is a believer in the primacy of the individual.

who had wanted to see the new buildings then taking shape in Europe, also found himself interested in the more canonical monuments. He wrote, "With a historical background, one can trace the lines of inspiration of every building in our city's streets – a source of considerable pleasure. No one is damaged by a knowledge of the classics; even the pulp writer's ability... is not impaired by a familiarity with Shakespeare." And to be present was essential; in the words of Alberto Perez- Gomez:

Nothing can replace the meaning of experience of a building, regardless of how sophisticated the reduction of a building into other mediums may be. Phenomenological psychology teaches us that such embodied experience is the ground for all other perception of meaning. ²⁰

Drawing was a way of rebuilding the multi-dimensional image on a two-dimensional surface. While this was often achieved through the conventional architectural representations of plan, section and elevation, it was also attempted through the selection of vantage points and emphasis. In addition to movement by ship or carriage, student architects moved their bodies around the exteriors of the buildings they drew; they embodied travel itself as they moved those bodies and the pencils they held. Maurice Merleau-Ponty was conscious of this relationship between vision and motion:

It is by lending his body to the world that the artist changes the world into paintings. To understand these transubstantiations we must go back to the working, actual body – not the body as a chunk of space or a bundle of functions but that body which is an intertwining of vision and movement. I have only to see something to know how to reach it and deal with it, even if I do not know how this happens in the nervous system. My moving body makes a difference in the

^{19.} Edward Durell Stone, Evolution of an Architect (New York: Horizon Press, 1962), 25.

^{20.} Alberto Perez-Gomez, "Architecture as Drawing" *Journal of Architectural Education* 36, No. 2 (Winter, 1982): 3.

visible world, being a part of it; that is why I can steer through the visible. Moreover, it is also true that vision is attached to movement.²¹

This was an old tradition, but for American architectural students during the late nineteenth century, it was an exercise loaded with special significance. British, French, and German architects had long been viewing the works of Italian and Greek architecture, observing and recording monuments of the past and exporting the ideas they saw to their homelands. Their views of antiquity were interpreted as a matter of national identity. This held especially true for Americans. Their newly industrialized nation was becoming a major player on the world stage, but with a short history and few building precedents to speak of, the decision of style was not an easy one. Some critics advocated the copying of European types, an idea that was furthered by the increasing influence of the Beaux-Arts tradition in America. The Beaux-Arts alumnus Richard Morris Hunt went on to train several major architects in his atelier, thus spreading the principles of that institution. Hunt also worked to elevate the status of the American architect through his involvement with the American Institute of Architects. European influence in architectural design would hold sway throughout the nineteenth century, reaching a climax at the World's Columbian Exposition in Chicago in 1893. With its emphasis on classical architecture for the "Court of Honor" – the White City – the Exposition both glorified the American architects who were part of the event and perpetuated the hegemony of Europe in building design. This equation of American talent with European style did not entirely stifle innovation in architecture in this country any more than it did in Europe, but it

^{21.} Maurice Merleau-Ponty, "Eye and Mind," in *The Primacy of Perception and Other Essays by Maurice Merleau-Ponty*, James M. Edie, ed. (Evanston, Illinois: University of Chicago Press, 1964), 162.

underscored the importance that Americans continued to place on European models.

Travel was, for that reason, part of professional training, particularly before the first academic schools of architecture were established in the United States, and the recording of monuments, landscapes, and people became a way to become adept at past styles.

In August, 1852, a decade before the opening of the first American university architectural program at the Massachusetts Institute of Technology, the Vermont-born Hunt embarked on a year-long sojourn that would take him from Paris, where he had been living for nearly a decade, to other parts of the Continent and to the Middle East. As a Beaux-Arts-trained architect, Hunt was setting a new standard for his colleagues and successors in the United States, but he was also following centuries of architects who had visited foreign soil. Italy was the chief destination, and Jones, William Chambers, Lord Burlington, and Robert Adam had all visited that country, and were responsible, to a large degree, for the spread of classicism. But even for non-architects, such as the German poet Wolfgang von Goethe, study abroad was a way to understand larger cultural issues. As he wrote in the 1780s, "Now my attention is fixed on the architect, the sculptor and the painter and in them, too, I shall learn to find myself." 22

While Goethe's response to travel was emotional and intellectual in nature, travel was, and remains, a physical activity with physiological implications. For architects studying buildings abroad, the immersion into the culture of the other place was a means toward the embodiment of what they saw. By the time the artists examined in the following chapters took their voyages in the late nineteenth and early twentieth centuries, the carnal aspect of travel had already been acknowledged by artists and philosophers. In

^{22.} Johann Wolfgang von Goethe, *Italian Journey*. Translated by W. H. Auden and Elizabeth Mayer (London: Pantheon Books, 1992), 155.

the sixteenth century, Michel de Montaigne had written that the important task was "not merely to bring back knowledge of the measurements of the Santa Rotunda, or the richness of Signora Livia's drawers, or how much longer or wider Nero's face on some old ruin there than on some smaller medallion, but more importantly to bring back with us the moods and customs of these nations, and to rub and polish our brains by contact with those of others."²³ Here Montaigne inferred an idea that was truly remarkable: the act of seeing was not simply visual; that one's entire being was physically changed — rubbed and polished — by the process of viewing great works of art and distant cultures. Later, this emphasis on the body would reach new levels. As Jonathan Crary explains, the body "was becoming the site of both power and truth."²⁴

The act of measuring buildings is in itself a profoundly physical act, one highlighting both the need for accuracy and the physiological engagement of the architect's body with the objects being examined. The connection between vision and touch had long been studied by such philosophers as Rene Descartes²⁵ and George Berkeley, who suggested that "visual apprehension of materiality, distance, and spatial depth would not be possible at all without the cooperation of the haptic memory," thus suggesting a link between what the eye sees and what the hand feels. Furthermore, the

^{23.} Michel de Montaigne. *Essais*, A. Thibaudet and M. Rat, eds. (Paris: 1962), 153. Quoted in Wes Williams, "Sixteenth Century Travel Writing" in William Burgwinkle, Nicholas Hammond, and Emma Wilson, eds., *French Literature* (New York: Cambridge University Press, 2011), 239.

^{24.} Jonathan Crary. *Techniques of the Observer* (Cambridge, Massachusetts: MIT Press, 1993), 79.

^{25.} David Michael Levin. *Modernity and the Hegemony of Vision* (Berkeley: University of California Press, 1993), 1.

^{26.} Juhani Pallasmaa. *The Eyes of the Skin* (Chichester, UK, 2005), 41. See also George Berkeley, *An Essay Toward a New Theory of Vision* (Dublin, 1709), np.

relationship between the body and the building was a subject dating back at least as far as Vitruvius, ²⁷ who wrote of the anthropomorphic proportions of ideal building. It was famously reiterated by the Swiss architect Le Corbusier, with his creation of the Modulor (Figure Introduction.1), a system of measurement based on the human body. This connection was given a feminist interpretation by the French artist Orlan with her performances, MesuRages d'Institutions et des Rues, 1974-78, (Figure Introduction.2). By inventing her own unit of measurement, the Orlan-Corps, she used her body to determine a new standard of proportion. Physically placing herself on the ground, on sidewalks, and in doorways, she employed the Orlan-Corps to measure a number of highly visible sites, including St. Peter's Square, the Centre Pompidou in Paris, the cloisters of the St. Pierre Museum in Lyons, the GN Gallery in Gdansk, Poland, the Guggenheim Museum in New York, Le Corbusier's house in Firminy, the Rue Lamartine in Maçon, the Municipal Theatre in Nice, various streets in Avignon, the Ludwig Museum in Aix-la-Chapelle, and St. Lambert's Square in Liège. 28 Maria Jose Kerejeta describes this process:

Orlan confronts the urban space directly with her body providing her with a unit of measure: the Orlan Body. She exhibits the ideal ratio sought by many, from Vitrubio [sic] to LeCorbusier, between the human body and architecture. Likewise, she gives back a centrality to the body ... ²⁹

27. Vitruvius Pollio. *Vitruvius: The Ten Books on Architecture*. Translated by Morris Hicky Morgan (Cambridge, Massachusetts: Harvard University Press, 1914), 72.

^{28.} Maria Jose Kerejeta, *Orlan 1964-2001* (Salamanca: Ediciones Universidad de Salamanca, 2002), 208.

^{29.} Kerejeta, Orlan 1964-2001, 208.

More recently, the Finnish architect Juhani Pallasmaa spoke in his 1993 book, *The Eyes of the Skin*, of his intimate engagement with the places he has visited. Note the interaction of his eyes and the rest of his body:

I confront the city with my body; my legs measure the length of the arcade and the width of the square; my gaze unconsciously projects my body onto the façade of the cathedral, where it roams over the mouldings and contours, sensing the size of recesses and projections; my body weight meets the mass of the cathedral door ... 30

This idea of embodiment was also discussed by architect Tod Williams during an interview with Smilja Milovanoivic-Bertram, published in 2009. Williams described the physicality of his experience as a fellow of the American Academy in Rome:

Experiencing Rome was largely 'seeing it' through my feet. I deeply enjoy walking ... my work was replaced by my experience of the city ... I began to sense the city, the street, and the weight of Rome. The topography was measured intellectually and physically by my eyes and feet ... I would spend time with my subject and the paper, seeing how far into the subject and into the page I could get. It had as much to do with the piece of paper as with what I was drawing. In this way, I explored the density of the paper and the density of Rome simultaneously.³¹

Williams makes several interesting points in this passage. He connects the act of seeing with that of movement, thus asserting the significance of physical contact with the place being studied. Williams also makes a case for the relationship of all of the senses: the trudging of the sidewalk with his feet is related to his vision as well as to his intellect. He also engages in liaison of the haptic with the visual: he is "seeing" how far he can get into the subject and the page. He thereby also relates the image on the paper to the model. For those who draw, the act of translating a three-dimensional object onto a two-dimensional

^{30.} Pallasmaa. The Eyes of the Skin, 40.

^{31.} Tod Williams, in Smilja Milovanovic-Bertram, in "Learning from Rome." In Jilly Traganou and Miodrag Mitrasinovic, eds., *Travel, Space, Architecture* (Cambridge, Massachusetts: Ashgate, 2009), 127.

surface is indeed a physical act; even the small, portable sketchbook, with its built-in pen or pencil loop, is almost an item of clothing, an accessory, a private and personal recording device, and therefore, an extension of the body.

For another contemporary American architect, Robert Venturi, travel permitted a kind of cultural osmosis. In interview with Smilja Milovanovic-Bertram, he said: "In Rome, I did not make notes, and I did not take photographs, and I did not make sketches. My approach was that that would be distracting; I just wanted to absorb." Venturi wanted the city of Rome to enter his body through his eyes, and, just as importantly, through his skin.

Such comments attest to the importance of physical contact with existing works. For the American student of architecture in particular, this had enormous currency, especially during the late nineteenth and early twentieth centuries, when the young nation was in the process of tremendous economic and cultural growth. The need to establish an aesthetic identity was part of the country's coming of age, and architecture was one of its most visible – and tactile -- manifestations. It was everywhere to be seen, and physically associated with large segments of the population.

Travel and Identity Crisis

When Hunt made his first sketching tour in 1852, his own native country, not yet one-hundred years old, was growing exponentially: of its thirty-one states, fifteen had been admitted to the Union since 1800, nine of them since 1820 alone. The Civil War that would divide America was still a decade away. In the meantime, by mid-century, the increasingly industrialized nation was beginning to find its place as a global political and

^{32.} Robert Venturi, quoted in Smilja Milovanovic-Bertram, "Learning from Rome." In Traganou and Mitrasinovic, *Travel, Space, Architecture*, 133.

economic power, but unlike its Old World counterparts, America was still searching for a cultural identity in general, and an architectural one in particular. Some European visitors found little to commend American buildings and cities. Mrs. Francis Trollope, visiting Philadelphia in the 1830s, wrote, "There is no *Place Louis Quinze*, or Carrousel, no Regent Street, or Green Park, to make one exclaim, "how beautiful;" all is even, strait [sic] uniform and uninteresting."³³ During the next decade, Charles Dickens wrote of the same city's famous grid plan, "I would have given the world for a crooked street."³⁴ Americans could be equally critical. In 1851, shortly before Hunt's year-long trek, the young student Thomas Alexander Tefft wrote, "In our country we have as yet built but five public monuments of sterling worth."35 Lacking a long history, and given the heterogeneity of the population, the nation had found no consensus on a style that would reflect its emerging status. Classicism of one sort or another – whether archaeologically correct Greek or Roman, or of a variant filtered through Georgian or Federal styles - had been part of American building almost since the first Europeans arrived in the New World. By mid-century, however, a challenge to classical hegemony was presented by advocates of the Gothic and Romanesque revivals, and the debate was frequently bitter.

Adding to the fray were the voices of those who were opposed to historic precedents for the new country in general, and who sought new modes of cultural expression. The sculptor Horatio Greenough, who, incidentally, spent much of his career

^{33.} Quoted in Mireille Ayoub, "European Travelers: 19th Century Visitors to America Often Made Interesting and Acerbic Comments on Its Emerging Architecture" *Architectural Forum* 139, no. 2 (1973): 62.

^{34.} Quoted in Ayoub, "European Travelers: 19th Century Visitors to America often made interesting and acerbic comments on its emerging architecture," 63.

^{35.} Thomas Alexander Tefft, "The Cultivation of a True Taste," lecture presented in Portsmouth, Rhode Island, October 25, 1851.

in Italy, believed that Americans should avoid looking to the past and to foreign building types as they built such new structures as libraries and museums. In his letter to Washington Allston of 1831, he wrote:

As a column was in Greece organized to pose upon the earth and to support the entablature; so was the whole fabric constructed with an eye to its exposure the worship for which it was intended – if well adapted to that exposure and that worship how shall it be fitted for a climate and a service so different?³⁶

In this passage, Greenough argued for an architecture that would be organic, geographically suitable and appropriate for its purpose. Twelve years later, he was more strident in his criticism of historicism in architecture:

If we trace architecture from its perfection in the days of Pericles to its manifest decay in the reign of Constantine, we shall find that one of the surest symptoms of decline was the adoption of admired forms and models for purposes not contemplated in their invention. The forum became a temple; the tribune became a temple; the theatre was turned into a church; nay, the column, that organized member, that subordinate part, set up for itself, usurped unity, and was a monument.³⁷

Greenough here inferred that mixing styles and building types resulted in a bastardized architecture, which signaled not only a decline in the built environment, but in the culture as well. In order for America to prosper morally and economically, it needed an architecture that was pure.

At the same time, Ralph Waldo Emerson was touting the importance of developing a uniquely American style in his essay of 1841, "Self-Reliance": "Imitation is suicide," he wrote. In the same essay, he asked, "Why should we copy the Doric or the Greek model?" Not surprisingly, there existed a large gap between Emerson's call-to-

^{36.} Horatio Greenough to Washington Allston, October, 1831, in Natalia Wright, ed., *The Correspondence of Washington Allston* (Lexington, Kentucky: University Press of Kentucky, 1993), 304.

^{37.} Horatio Greenough, "American Architecture," in Harold A. Small, ed., *Horatio Greenough, Form and Function: Remarks on Art, Design, and Architecture* (Berkeley: University of California, 1947), 54.

arms for originality and the actual built work of mid-century architects. European models never went out of fashion in the United Stations. Taking the case of the museum, Alan Trachtenberg writes:

Organized by the urban elite, dominated by ladies of high society, staffed by the professionally trained, housing classic works of European art donated by wealthy private collectors, the museums subliminally associated art with wealth ... thus museums established as a physical fact that culture filtered down from a distant past, from overseas, from the sacred founts of wealth and private power. ³⁸

America was not alone in this period of cultural identity crisis during the nineteenth century. Debates on appropriate national styles were raging elsewhere throughout the period. In 1828, Heinrich Hubsch had ignited a war of words with his pamphlet, *In welchem Style sollen wir bauen?* (In What Style Should We Build?)., regarding the appropriate mode for German architecture. Germany was not alone. As Kathleen Curran has written, "Hubsch's ringing query also captured in six words the quandary of nineteenth-century historicism. In what style do you build when history offers you so many choices?"³⁹ Curran paraphrases Hubsch's position: "If Hubsch had provided a one-sentence definition of style, it would have been something like this: architectural style is the manner in which a nation at a particular period assembles its structural elements within structural framework. Local climate and building materials serve as crucial formative influences."⁴⁰

The debate in Germany continued into the 1840s when Rudolf Wiegmann wrote in his "Thoughts on the Development of a National Architectural Style for the Present":

^{38.} Alan Trachtenberg, *The Incorporation of America: Culture and Society in the Gilded Age* (New York: Hill and Wang, 2007), 144.

^{39.} Kathleen Curran, *The Romanesque Revival: Religion, Politics, and Transnational Exchange* (University Park, Pennsylvania: Pennsylvania State University Press, 2003), 1.

^{40.} Curran, The Romanesque Revival, 12.

What do we find as the basic character of our architecture? Apparently it is nothing more than abominable, inconsistent vacillation without a goal, sense, or depth. How motley and confusedly are our present building efforts: Greek, Roman, Byzantine, Gothic, and Italian, basilicas and Gothic cathedrals, Roman triumphal arches, Antonius columns, Parthenons, obelisks, and much more!⁴¹

While Wiegmann and Hubsch may have disagreed on the use of historic prototypes, both were concerned about the issue of the visual manifestation of national character through architecture. Similar discussions existed elsewhere.

In England, the debate was given a moral slant with A. W. N. Pugin's *Contrasts* (1836) and *True Principles of Pointed or Christian Architecture* (1841). In the former, the Catholic convert Pugin asserted that the move toward classicism represented the decline in culture brought about by the Reformation. In the latter, he attacked classicism in no uncertain terms, referring to "the clumsy vaults of St. Paul's" and to contemporary architecture as a "sort of bastard Greek, nondescript modern style [which] has ravaged many of the most interesting cities of Europe." His disapproval of Christopher Wren's domed edifice seems to have been based on the awkward replanting of a non-native species into England; his remarks reflect a similar attitude toward cities on the Continent and their betrayal of their own cultures in favor of Southern prototypes.

While Pugin admitted that the British could learn from other nations, he asserted that "We are not Italians, we are Englishmen. God in his wisdom has implanted a love of nation and country in every man," 44 adding that he feared "Europe would soon present

^{41.} Rudolf Wiegmann, "Thoughts on the Development of a Contemporary National Architectural Style for the Present," excerpt in Mallgrave, *Architectural Theory* (Oxford, 2006), 416.

^{42.} A. W. N. Pugin, True Principles of Pointed or Christian Architecture (London: 1841), 56.

^{43.} Pugin, 56.

^{44.} Pugin, 56.

such sameness as to be interesting."⁴⁵ Pugin's linking of the Gothic with Christianity also suggests that he believed in a moral superiority of Northern architecture over the classical, which was to say, "pagan," non-Christian models of Italy and Greece.

Given the confusion regarding appropriate building styles elsewhere, it is not surprising that the situation would have been a topic of controversy in America during the nineteenth century.

Educating a New Architectural Class

America's position in this international debate was unlike that of any European country because its short history provided scant models for new buildings. In addition, America had still another disadvantage: there were no universities providing professional architectural training, so that the standards of the profession were as yet undefined. The English-born Benjamin Latrobe (1764-1820), who trained at London's Royal Academy, is commonly considered the first professional architect in America, but as Mary N.

Woods has pointed out, his fiery temperament and his lack of business acumen made him a poor role model for his contemporaries and succeeding generations. ⁴⁶ Young architects of the antebellum period continued to receive their training through unofficial, if not haphazard, channels. Woods has sorted out the various paths taken by these neophytes. She asserts that an apprenticeship in the building crafts was one of these methods.

Another was the availability of builders' guides that had been popular since the eighteenth century. Asher Benjamin, the author of several such texts, wrote that his

^{45.} Pugin, 56.

^{46.} Woods. From Craft to Profession, 24-26.

reader could learn from them "without the aid of an instructor." This idea was echoed in guides for other craftsmen and artisans, including printers, dyers, and millers. Still other fledgling builders learned through mechanics' institutes. But the educational method that gained increased currency as the nineteenth century progressed was that of office training, in which aspiring architects attached themselves to experienced practitioners. Latrobe himself had taken Robert Mills and William Strickland as his pupils, and the practice continued throughout the century.

Richard Morris Hunt's French training provided him with the elements of the formal education previously unknown to his countrymen. Not only did he learn the rigors of the *projets* that were part of every student's training at the Ecole des Beaux-Arts, and their initial sketch and organizing plans, the *parti* and the *esquisse*; Hunt was also exposed to the conflict between the proponents of the Gothic and those of classicism, a battle that was every bit as contentious as those of England and Germany. No less advantageous was the proximity of the rest of the continent, England, and points farther east. Hunt traveled each summer during his student years, spending time all over France, and in England and the Channel Islands. Finally, on August 1, 1852, he and his brother, the artist William Morris Hunt, embarked on their longer journey. There is no question that Richard was, among other things, in search of cultural legitimacy for America. In a letter to his mother, he wrote, "Surely in architecture, as well as in painting and the other

^{47.} Asher Benjamin. *The Elements of Architecture*. 1843, reprint, New York, 1974, iii. Quoted in Woods, *From Craft to Profession*, 17.

^{48.} Woods. From Craft to Profession, 17.

^{49.} See Woods, From Craft to Profession, 60-66.

arts, the United States should rival or surpass Europe."⁵⁰ Americans had for generations looked abroad for architectural models: one only has to think of Thomas Jefferson's use of the Maison Carrée as the prototype for his Virginia State House as an outstanding example. But Hunt's position was unique for its time. He was not a dilettante or an amateur, even a talented one like Jefferson. He was a serious student for whom there was no suitable architecture program in his own country. His professional aspirations contributed to his desire for a more cosmopolitan experience, but there may have been other reasons. There were, after all, other options available in America; perhaps they were not the options that an ambitious young man such as Hunt wanted, given the cultural and economic changes that were taking place at home. It may have been a matter of class distinction, as the role of the architect evolved in the United States, a change that was manifested in architectural education.

Woods has delineated the many ways in which young American architects learned, including mechanics' institutes and office training – the latter of which Hunt would continue in his own New York practice, where he trained such future luminaries as WilliamR.Ware, George B. Post, and Frank Furness. ⁵¹ Ware would go on to found the first university architectural program in the United States at the Massachusetts Institute of Technology.

Jeffrey Cohen has studied the myriad attempts at the foundation of architectural schools in Philadelphia alone, prior to, contemporaneous with, and even after the opening

^{50.} Richard Morris Hunt to Jane Maria Hunt, March, 1855. Quoted in Paul R. Baker, *Richard Morris Hunt* (Cambridge, Massachusetts: MIT Press, 1986), 62.

^{51.} For more about the training of architects in America, see Mary N. Woods, *From Craft to Profession: the Practice of Architecture in Nineteenth-Century America* (Berkeley: University of California, 1999).

of the MIT program. ⁵² These were, however, primarily geared toward engineers and mechanics, and, as Cohen has noted, the distinction between the architect and the builder was becoming more pronounced during the mid-nineteenth century. As he states, "The two fields of endeavor had been separating more and more completely since 1800; preparation for a career as an architect increasingly followed a different path from that of a builder, especially after the Civil War." ⁵³ With the founding of the first programs in the 1860s, this trend accelerated, says Cohen:

The reach of a burgeoning number of university-trained architects extended farther from the monumental urban center, embracing more and more modest building tasks. The lines between architects and artisans were being drawn more firmly, and educational institutions responded. Technical drawing was soon more widely taught in public schools at an earlier age, with the future industrial worker or draftsman in mind. The future architect or engineer could use the kind of education offered at such an evening school only as preliminary to programs of professional training elsewhere. ⁵⁴

Furthermore, the profession of architecture was gaining prestige through other channels, including the foundation of the American Institute of Architects (AIA). Begun as The American Institution of Architects in 1836 but disbanded the following year due to a nationwide financial crisis, the organization was reconstituted as the American Institute of Architects in 1857. Woods has noted that the exclusivity of the organization elevated the status of the profession:

...early attempts to notify all architects of the Institute's existence were rebuffed. (Richard) Upjohn maintained that the present number of members was sufficient.

^{52.} Jeffrey Cohen, "Building a Discipline: Early Institutional Settings for Architectural Education in Philadelphia, 1804-1890" *Journal of the Society of Architectural Historians* 53 (June, 1994): 139-183.

^{53.} Cohen, "Building a Discipline," 168.

^{54.} Cohen, "Building a Discipline," 158.

Admission to the Institute was to be an honor extended to only a few ... its exclusivity reflected the growing specialization in building.⁵⁵

Such exclusivity would also limit the nonmembers' contact with the new industrial elite who would become the patrons of the new breed of gentleman architects. It may be no coincidence that the increased prestige of the architectural profession took place at the same time as the amassing of great fortunes. As the new wealthy class was seeking ways to distinguish itself from the middle class, architects were striving to create their own elite. Richard L. Bushman has claimed that by the mid-1800s, "In paintings, books, and poetry, artists sketched out the lives of American aristocrats, praising their virtues. The architectural books on rural culture included extravagant country villas intended for families of superior wealth and refinement" 56 and that "the democratic extremes of Jacksonian politics made the vestiges of the aristocracy all the more pleasurable."⁵⁷ Many in America, it seemed, wanted a return to their European roots. The notion of creating lavish townhouses and elaborate country estates would have made the idea of a more cosmopolitan architectural profession more desirable. America had its own prestigious training centers, but a wish for the trappings of aristocracy would have made it more important than ever to create a sophisticated class of architects who were men of the world, for whom rubbing and polishing their brains with those of the European masters would have been a necessary exercise. It would have also mandated an increased differentiation between artist and mere craftsman; certain social as well as manual skills were necessary, as was the training of a discerning eye. With the popularization of

^{55.} Mary N. Woods, "The First American Architectural Journals: the Profession's Voice" *Journal of the Society of Architectural Historians* 48, no. 2 (June, 1989): 123-124.

^{56.} Richard L. Bushman, *The Refinement of America*. (New York: Knopf, 1992), 416.

^{57.} Bushman, The Refinement of America, 416.

photography, certain rare talents believed to be embodied in the educated architect – the ability to think abstractly and the erudition and world-view that allowed him or her to draw upon history and art – may have been of great significance to the new class of patrons.

"A Means of Reproduction So Exact and So Rapid:" Drawing in the Era of Photography

Almost from photography's inception in the 1830s, its role and its status in the arts and sciences were complex and controversial. Even in the first decades following the experiments of Joseph Nicéphone Niépce and Louis Jacques Mandé Daguerre, critics were debating photography's ability to grasp truth, its potential as an artistic medium, its value as a vehicle for scientific inquiry, and its relative merits to painting and drawing, thus creating a sort of latter-day *paragone*.

This debate became more problematic as practitioners began to use the camera for self-conscious art making, thereby calling into question the value of such a mechanical process in the hands of the unskilled. At the same time, the camera's use for journalistic and scientific documentation raised the issue of deception, and its application in popular entertainment placed the new process in the company of popular culture and pornography.

For the most part, however, the development of one of the early types of photographic processes, the daguerreotype, was met with pleasure. Daguerre and Niépce's heir, Isidore Niépce, were given large sums of money by the French government for their work. In July, 1839, the French physicist François Arago, in an address before the Chamber of Deputies, and a month later, before the Academy of

Science, called the daguerreotype "a means of reproduction so exact and so rapid. 58 This new device fulfilled a long-held dream: to be able to fix the otherwise elusive images captured by the more primitive camera obscura and camera lucida, which had fallen short of the painter's desire to provide much more than a semblance of the object to be reproduced. Karen Burns recounts the frustration of the American landscape painter John Wollaston, who, in 1800, had "despaired of taking more than the outline of a landscape."⁵⁹ Burns goes on to say that Wollaston, like other travelers, "hampered by their lack of artistic prowess, imagined that somehow, rapidly and accurately produced images might be made without drawing skills."60 The act of using the camera and its resulting product were intertwined and it seemed difficult to discuss one without talking about the other. Niépce himself, by way of the process he termed "heliography," alluded to photography's use as an art form when he stated that his invention allowed the reproduction of "images obtained in a camera obscura," a device long used by artists to reproduce images in dark boxes in order to draw them in perspective. Implicit in Niépce's statement was the idea that in one way or another – either as a template for tracing or as a finished product – the heliograph could have aesthetic value. Before the end of the 1830s, Daguerre, who had become Niépce's successor in the field, wrote that "without any idea of drawing, without any knowledge of chemistry and physics, it will be possible to take

58. Francois Arago, Address to the Chamber of Deputies, reproduced in *American Journal of Photography* X, no. 12 (December, 1889): 243.

^{59.} Karen Burns, "Topographies in Tourism: 'Documentary' Photography and "The Stones of Venice" *Assemblage* 32 (April 1997): 27.

^{60.} Burns. "Topographies of Tourism," 27.

^{61.} Joseph Nicéphore Niépce, "Memoire on the Heliograph", written before 1833, in Alan Trachtenberg, ed., *Classic Essays on Photography* (New Haven, Connecticut: Leete's Island Books, 1980), 5.

in a few minutes the most detailed views, the most picturesque scenery ..."⁶² Here,

Daguerre reflected both the aesthetic and scientific significance of the invention: he had discovered the chemical means of producing images so that those without either the scientific background or the ability to draw could do something previously the province of the inventor or the artist. Such a claim must have affected the reception of photography among devotees and critics, and feelings about the medium ranged from praise to outright hostility. Edgar Allan Poe was an early enthusiast. In 1840, he wrote:

The Daguerreotype plate is infinitely (we use the term advisedly) *infinitely* more accurate in its representation than any painting by human hands. If we examine a work of ordinary art, by means of a powerful microscope, all traces of resemblance to nature will disappear – but the closest scrutiny of the photogenic drawing discloses only a more absolute truth, a more perfect identity of aspect with the thing represented. The variations of shade, and the gradations of both linear and aerial perspective are those of truth itself in the supremeness of its perfection. ⁶³

Michael Harvey has traced the evolution of Ruskin's attitudes toward the photograph, which ranged from wonder to a combination of derision and cautious resignation. Ruskin, a practiced traveler and keen observer, was at first delighted by photography. In 1845, he called daguerreotypes "glorious things" and hailed their invention "most blessed." Some 20 years later, however, he wrote:

Photographs have an inimitable mechanical refinement and their legal evidence is of great use if you know how to cross-examine them. They are popularly

^{62.} Louis Jacques Mandé Daguerre in Trachtenberg, Classic Essays on Photography, 12.

^{63.} Edgar Allan Poe, "The Daguerreotype," in Trachtenberg, Classic Essays on Photography, 38.

^{64.} John Ruskin, "The Art of Engraving," quoted in Michael Harvey, "Ruskin and Photography" *Oxford Art Journal* 7, no. 2 (1984): 25.

^{65.} Harvey, "Ruskin and Photography," 25.

supposed to be 'true' ... but this truth of mere transcript had nothing to do with Art, popularly so-called, and will never supersede it.⁶⁶

Still, Ruskin admitted that photography had its uses, including the recording of monuments that were in danger of destruction or decay.

Another critic of the photograph was Lady Elizabeth Eastlake, who, in 1857, analyzed its shortcomings, both as a means of accurate documentation and as an artistic medium:

It is obvious, therefore, that however successful photography may be in the closest imitation of light and shadow, it fails, and must fail, in the rendering of true chiaroscuro, or the true imitation of light and dark. And even if the world we inhabit, instead of being spread out with every variety of the palette, were constituted but of two colors – white and black and their intermediate grades – if every figure were seen in monochrome like those that visited the perturbed vision of the Berlin Nicolai – photography could still not copy them correctly. ⁶⁷

Lady Eastlake's criticism of the medium is based on its inability to capture the more subtle gradations of black and white as well as its color-blindness. Even if color process had been invented, she might have objected to the flatness of the image. Architects who studied abroad may have shared this opinion: their own drawings, if not able to capture three-dimensionality in its totality, would at least have allowed the architects' hands a visual progression and recession of solid and void, even if the resulting image did not enable to viewer to see the process that had created it. The act of drawing required the layering of images, which would have been invisible in the finished product.

Some of the harshest words on the subject came from Charles Baudelaire, who, like Ruskin, had mixed feelings about the new technology. Highly critical of its use as an art form, he viewed the medium as a pastime for the unschooled and unskilled:

^{66.} Harvey, "Ruskin and Photography," 25.

^{67.} Quoted in Trachtenberg, Classic Essays on Photography, 57.

By bringing together a group of male and female clowns, got up like butchers and laundry-maids in a carnival, and by begging these *heroes* to be so kind as to hold their camera grimaces for the time necessary for the performance, the operator flattered himself that he was reproducing tragic or elegant scenes from ancient history. Some democratic writer ought to have seen here a cheap elegant method of disseminating a loathing of history and for painting among the people, thus committing the double sacrilege of insulting at one and the same time the divine art of painting and the noble art of the actor. A little later a thousand hungry eyes were bending over the peepholes of the stereoscope, as though they were the atticwindows of the infinite. The love of pornography, which is no less deep-rooted in the natural heart of man than the love of himself, was not to let slip so fine an opportunity of self-satisfaction.⁶⁸

He went on to infer that curiosity about the pornography produced by these new processes caused the debasement of refined women. Photography was, therefore, not only a toy for the masses; it vulgarized whatever polished society it touched. Most germane to our study, however, was Baudelaire's assertion that talent was not required to create a photograph. This would become more of an issue with the rise of pictorialism in photography:

As the photographic industry was the refuge of every would-be painter, every painter too ill-endowed or too lazy to complete his studies, this universal infatuation bore not only the mark of blindness, an imbecility, but had also the air of vengeance ... If photography is allowed to supplement art in some of its functions, it will soon have supplanted or corrupted it altogether, thanks to the stupidity of the multitude which is its natural ally.⁷⁰

Here, Baudelaire insinuated that photography was an art form for the untalented. The camera could capture an image, but the photograph was little more than a documentation of the artist's inability to paint or draw. One was marked by the use of the medium.

^{68.} Charles Baudelaire, "The Salon of 1859" *Revue Française* (June 10-July 20, 1859). Quoted in Jonathan Mayne, ed. and trans., *Charles Baudelaire, The Mirror of Art.* London: Phaidon, 1955), 225.

^{69.} For a discussion of the stereoscope and pornography, see also Jonathan Crary. *Techniques of the Observer*, 127.

^{70.} Jonathan Mayne, Charles Baudelaire, The Mirror of Art, 230.

Baudelaire's fears were largely unfounded: artists continued to draw, paint, and sculpt. However, the claim of artistry among the untrained must have created some anxiety or even contempt among serious students of the more traditional arts. Although few people could draw, anyone in possession of photographic equipment – and, after 1900, anyone with a Kodak Brownie camera – could take a photograph. In Jonathan Crary's words, "As Marx said of money, photography is also a great leveler, a democratizer ... it is through the distinct but interpenetrating economics of money and photography that a whole social world is represented and constituted exclusively as signs."

This sense of artistic egalitarianism would have been fed by novel urban spaces and entertainments, including the arcade, the panorama, and the department store. Remy Saisselin wrote that the city in the late nineteenth century transformed the eye of the observer, who was "no longer a person of taste or contemplation before a picture or landscape ... [but a] *flâneur* in the modern city."⁷² In the words of Stéphane Mallarmé, there were by then so many distractions as to make discerning viewing nearly impossible. He wrote of a "delirious array of hybrid and historically eclectic products" and predicted that "the word authentic, which was for many years the sacramental term of antiquarians, will no longer have any meaning" due to the "distracted quality of this unintelligible contiguity of styles, cultures, and forms ..."⁷³

Photography developed its own professional uses, for documentation and pictorialism, as well as its own practitioners for each. From its earliest days, the process

^{71.} Jonathan Crary. Techniques of the Observer, 13.

^{72.} Remy G. Saisselin. *The Bourgeois and the Bibelot* (New Brunswick, New Jersey: Rutgers University Press, 1984), 21-23.

^{73.} Quoted in Jonathan Crary, *Suspensions of Perception* (Cambridge, Massachusetts: MIT Press, 1999), 122.

was closely related to architecture for several reasons, perhaps most notably the fact that unlike human or animal subjects, buildings did not move.⁷⁴

The growing popularity of travel also contributed to an increased demand for photographs of famous sites, which could serve either as mementoes of, or substitutes for, a Grand Tour. These photographs were far more portable, more easily reproduced, and less expensive than an original Canaletto. The rise in tourism may have also heightened the awareness of the deterioration of monuments; therefore, the documentation of disappearing sites gave rise to many careers. Furthermore, Micheline Nilsen has pointed out the use of photography to facilitate armchair travel. Even those who could not afford to take a voyage could enjoy a vicarious experience, thanks to commercial images.

But the rise of commercial photography, in a sense, led to the destruction of some of these careers. Nilsen has commented:

The first generation of photographers who achieved mastery of architectural photography before 1860 were driven out of business by commercial firms who provided mass distribution of less accomplished, smaller scale photographs for the consumer market of the tourist or middle-class collector.⁷⁷

She goes on to say:

Popular formats such as the stereoscope and the postcard penetrated most middleand some lower-class homes. As architecture was made more accessible to general audiences for the first time, the availability of photographic prints, and

^{74.} Robert A. Sobieszek, "This Edifice is Colossal": 19th-Century Architectural Photography (Rochester, New York: International Museum of Photography, 1987), 2.

^{75.} See Robert Elwall, *Building with Light: The International History of Architectural Photography* (London: Merrell, 2004), especially page 12.

^{76.} Micheline Nilsen, Architecture in Nineteenth-Century Photographs. (Surrey, UK: Ashgate), 168.

^{77.} Nilsen, 18.

later, lantern slides, transformed practice, study, and education for the disciplines of architecture and art history. ⁷⁸

Nilsen here has struck an interesting chord, one that reflects the ambivalence felt by many about photography. It is true that the profession of architecture underwent a major transformation during the latter part of the nineteenth century, one that enhanced the prestige of its practitioners. They may not have wished to be associated with the popular formats of which Nilsen writes, nor would they have considered themselves part of the middle and lower classes who collected photographs or enjoyed the stereoscope. However, it is clear that many architects were well aware of the advances in popular culture, and despite their desire to maintain a distance from the ordinary, they managed to use whatever was useful.

The conventional belief that the stereoscope was strictly a toy for the masses has been challenged by Richard Difford, who discusses the complex relationship between architecture and the stereoscope. Difford has pointed out that "one way in which the stereoscopic image might potentially have informed architectural practice was with the use of stereoscopic drawings." According to Difford, "the spatial organization enacted through the architecture finds a resonance in the spatial qualities of the stereoscopic views." One could add that the drawings made by traveling architects were, in some way, informed by the stereoscope, and represented an attempt to reconcile the transparency provided by that device with the flatness of a façade seen head-on.

^{78.} Nilsen, 18.

^{79.} Richard Difford, "In Defence of Pictorial Space: Stereoscopic Photography and Architecture in the Nineteenth Century," in Andrew Higgott and Timothy Wray, eds., *Camera Constructs: Photography, Architecture and the Modern City.* (Surrey, UK: Ashgate, 2012), 301.

^{80.} Difford, "In Defence of Pictorial Space," p. 308.

Some architectural photographs were informative, some were picturesque, others were both. The architects in this study had their own uses for photography, but they were supplements to drawing, not substitutes for it; interestingly enough, one reason is the very stillness of the building. The building itself was stationary, and so were the camera and its still product. But in reality, the building invites motion; it is cinematic and not fixed in its use. The connection between architecture and cinema would later be noted by the Russian movie director Sergei Eisenstein: "Film's undoubted ancestor ... is — architecture." According to Eisenstein:

Nowadays it is the imaginary path followed by the eye and the varying perceptions of an object that depend on how it appears to the eye. Nowadays it may also be the path followed by the mind across a multiplicity of phenomena, far apart in time and space, gathered in a certain sequence into a single meaningful concept; and these diverse impressions pass in front of an immobile spectator. In the past, however, the opposite was the case: the spectator moved between [a series of] carefully disposed phenomena that he absorbed sequentially with his visual sense. 82

In other words, the movie-goer sits and watches as the action unfolds on the screen; the audience discovers each scene with every movement of the actors and the camera. The eye is the surrogate body. In much the same way, users of a building move around and through it, discovering its spaces as they open doors with their hands, climb stairs with their feet, see its beauty or ugliness with their eyes, smell the wood and carpet, "feel" the textures of the wood or stone work as they move throughout. The plot thickens as the observer learns more about the character of the building.

It is precisely this idea of discovery through motion that makes the act of drawing different from the act of taking a photograph; it is at the heart of the act of making a

^{81.} Sergei Eisenstein. "Montage and Architecture," Assemblage (1989): 117.

^{82.} Eisenstein, 116.

travel sketch. The architect's hand moves up and down a sheet of paper, she turns her head, she cranes her neck, she shifts her eyes, she walks around a building. The drawing is an ongoing process, resulting from a palimpsest of impressions. She learns from her eyes and her hands in a way that is mediated by a pencil, but the pencil becomes an intimate appendage, an extra sense.

The act of drawing can also be seen as an act of conquest; if the photograph is an act of 'peaceful conquest', ⁸³ one that, as Robert Sobieszek described it, "implied superiority and control, especially over the 'other,' ⁸⁴ then drawing, too, is an act of conquest. In that case, the act is more aggressive, because it implies a prolonged and intimate exposure of the artist to the subject. The architect has the power to engage in a sort of hand-to-hand combat, to capture the likeness of the building without the intervention or aid of the camera.

Architects did take photographs, however. Brian M. Ambroziak recounts that Le Corbusier carried a camera during his travels to Rome in 1911, but that he "relied most heavily on the sketch to record the image." Ambroziak quotes the architect:

When one travels and works with visual things ... one uses one's eyes and draws, so as to fix deep down in one's experience what is seen ... All this means first to look, and then to observe, and finally to discover. Once the impression has been recorded by the pencil, it stays for good, entered, registered, inscribed.⁸⁶

^{83.} Nilsen, 168. Nilsen refers to nineteenth-century writers and their view of photography; she references Francis Wey, "Un Voyage héliographique à faire" *La Lumière*, 1, no.7 (March 23, 1851):26, cited in Robert Sobieszek, "Travel," in Mike Weaver, *The Art of Photography*, 1839-1989 (New Haven, 1989), 133.

^{84.} Sobieszek, "Travel," 133. Quoted in Nilsen, Architecture in Nineteenth-Century Photographs, 168.

^{85.} Abroziak. Michael Graves. 9.

^{86.} Le Corbusier, *Creation is a Patient Search*, trans. J. Palmes. New York, 1960, 37. Quoted in Ambroziak, 9.

The American architect Louis I. Kahn wrote of the highly subjective nature of drawing:

... the presence of our own individuality causes (the object) to appear differently than it would to others. . . . There is no value in trying to imitate exactly. Photographs will serve you best of all, if that is your aim. We should not imitate when our intention is to create—to improvise. . . . I try in all my sketching not to be entirely subservient to my subject, but I have respect for it, and regard it as something tangible—alive—from which to extract my feelings. I have learned to regard it as no physical impossibility to move mountains and trees, or change cupolas and towers to suit my taste. 87

Here, Kahn stressed the importance of the individual's unique perspective: for various physical reasons – one's height, vision, ability to move his or her body – no two people see the same object in an identical manner. In addition, Kahn touched on a matter of concern to the creative mind: the artist's ability to manipulate building features, or even Nature herself. The artist not only records and rebuilds on paper; he or she takes license with what actually exists in order to perfect it according to his or her own taste or vision.

Similarly, Michael Graves adds that drawing is a means of individual expression and an exercise in discernment. It is also, he says, a mnemonic device that provides the architect on a mental library of reference material:

I presume that most of us are by nature lazy, and when we see something that interests us in the natural or built landscape, we may deceive ourselves into thinking that we can remember it without drawing. However, if we do draw to remember, the chance that the particular image or set of images will stay with us is obviously increased ... In making such a record of our observation, we of course do so with a point of view. It is that very bias by which the natural phenomenon is interpreted, reseen, that allows the artist to identify with the image and causes it to have special meaning for him. It goes without saying that the

^{87.} Louis I. Kahn, "The Value and Aim In Sketching," in Alessandra Latour, ed., *Louis I. Kahn. Writings, Lectures, and Interviews* (New York: Rizzoli, 1991), 11.

artist or architect chooses to draw, using his sketchbook as a record of observation, revealing the examination of his artistic conscience.⁸⁸

For Pallasmaa, sketching also incorporates movement, which in itself becomes an aid to memory:

A sketch is in fact a temporal image, a piece of cinematic action recorded as a graphic image ... This multiple nature of the sketch, its layered exposure, as it were, makes me remember vividly each one of the hundreds of scenes I have sketched during fifty years of my travels around the world, whereas I can hardly recall any of the places that I have photographed as a result of the weaker embodied recording of taking a photograph. ⁸⁹

As Jonathan Crary has stated, one effect of the camera was to "decorporealize vision." To decorporealize vision, then, is to disarm the kinetic memory. Given the importance of drawing to the design process, the knowledge garnered from the embodied recording of monuments is an indispensable part of the architect's skills. The dual roles of drawing for representation and the development of ideas are inseparable. The Beaux-Arts method of the *esquisse* and the *parti* – the preliminary plans for a design project – presupposes the knowledge of what has already been built and observed.

The ways in which traveling architects record their impressions vary, depending on their individual styles, interests, and circumstances. The four architects to be examined in the following chapters – Frank Miles Day (1861-1918), Eleanor Manning O'Connor (1884-1973), William Jarrett Hallowell Hough (1888-1969), and Louis Skidmore (1897-1962) – provide interesting examples for study. These particular individuals were chosen for several reasons, not the least of which are the quality,

^{88.} Michael Graves, "The Necessity for Seeing." In Ambroziak, 236-237.

^{89.} Juhani Pallasmaa. The Thinking Hand (Chichester, UK: Wiley, 2009), 90.

^{90.} Crary. Techniques of the Observer. 39.

quantity, and accessibility of their materials. ⁹¹ Due to the relatively small size and private nature of these images, architectural travel sketches are much less visible than works by painters and sculptors. This is in sharp contrast to the highly public character of the architect's usual output. Artists' preliminary drawings and models for paintings and sculpture are frequently published and even exhibited. Indeed, architectural drawings and models for projected and completed buildings are occasionally displayed as well. Travel sketches, however, are held in archives and viewed mainly by specialists in the field. A few of the drawings examined here have in fact been displayed, but rarely so, and others deserve to be seen, studied, and appreciated as works of art. The high quality and the non-literal character of many of these sketches, watercolors, and photographs make them more than utilitarian tools of reference.

Other criteria made the choice of this group especially appropriate, including continuity: their travels took place in successive decades. Day went abroad as a student in the 1880s and again as an established architect in the 1890s. Manning visited England and the Continent on the eve of World War I. She would make another trip in the 1930s, when her sketches became more painterly and abstract. Hough was a fellow of the American Academy in Rome during the war. Louis Skidmore was abroad during the 1920s.

Each had other characteristics that made him or her a worthwhile subject. Day was a lifelong advocate of study abroad and was an early trustee of the American

^{91.} The travel sketches of Richard Morris Hunt, originally intended for inclusion here, have been unavailable to researchers for several years. Given Hunt's position as the first American to study at the Ecole des Beaux-Arts in Paris, his status as "The Dean of American Architects," and the role of his atelier in the training of many prominent American architects, a detailed study of Hunt's many travel sketchbooks and drawings, which include various media and subjects, will provide valuable avenues of study to future scholars.

Academy in Rome. His highly accomplished and detailed travel drawings and watercolors underscore the importance of visual acuity and diligence for the professional architect. Manning attended the Massachusetts Institute of Technology during a period when few schools of architecture accepted female students; gender politics will therefore come into play. Manning's emphasis on domestic buildings and company towns of England reflects her professional interests as a designer of New England houses and planned communities as well as her expectations as a woman. Hough, who at one point worked for Day, studied at the American Academy in Rome; he is the heir to Day's legacy of travel for education. In addition, the many letters he wrote to his family provide a view of the quotidian existence and the attitudes of American students abroad during and after the first World War. His position during this historic period included his work with the Red Cross and his bout with the Spanish influenza of 1918. Louis Skidmore, whose firm would later establish the architectural style for corporate America during the mid-twentieth century, made contacts abroad that would affect the course of his career.

Day, Manning, Hough, and Skidmore were among many young architects who went abroad during their respective generations. Their experiences are both similar to and different from one another's and from those of their contemporaries. Their own work was or was not influenced by the buildings they recorded; to find models was sometimes, but not always, an aim of their travels. The similarities and differences among these four are valuable for what they suggest about travel abroad for architectural study. For each, seeing – and the incorporation of seeing through the making of images by hand – were essential parts of a formative journey. By translating their visions onto paper and

transmitting them into their bodies, they made their journeys into something more permanent.

CHAPTER I

"INDUSTRIOUS AND SELECT SEEING": THE TRAVEL SKETCHES OF FRANK MILES DAY

To examine the travel sketches of Frank Miles Day (Figure 1.1) is to view the seeds of his career, his attitudes toward design, his view of history, his diligence as an architect, and his taste as a designer. The loose drawings and watercolors from his sojourns in Europe, his notebooks, and the more than one dozen sketchbooks containing impressions of his visits to England, the Continent, and the Middle East, comprise a portrait of a young American architect attempting to forge an identity both for himself and for his native country. In a drawing from his first tour of Europe, he reveals the trajectory of his architectural career (Figure 1.2). Visible in this drawing made in Nuremburg are indications of his taste and his manner of drawing. Day was attracted to traditional styles from various periods, especially the picturesque forms that punctuated the skyline, highlighted the materials used to build them, and underscored the talents of the craftsmen who would help to realize his visions. Day was, even as a young student abroad, fully conscious of the way in which individual buildings of myriad styles could coexist in a coherent cityscape. These two tendencies would prove to be very useful to an architect working in the large city of Philadelphia. Also apparent is the attention to detail, volumes, and massing, which would become the hallmarks of his work. It is also clear from this image that he drew extensively on historic models: the high tower is the model of his American Baptist Building in Philadelphia; the building to the right is a template for his Edward Wood House. History had set the standards to which he aspired.

When Day embarked on his first sketching trip abroad in 1883, the United States was a relatively young nation with an increasingly wealthy industrial elite. Fortunes had

been made during the Civil War, and the boom accelerated into the post-war era. The railroads, which had generated their own fortunes, became transcontinental in 1869, thus providing transport for materials and goods and expanding the possibilities for manufacture and markets. This was the so-called Gilded Age, when a country without royalty spawned an aristocracy of its own. During the decade before Day's sojourn abroad, John David Rockefeller had started the Standard Oil Company, Andrew Carnegie had opened his first steel mill, and J. P. Morgan had established a private bank.

Toward the end of the nineteenth century, a new commercial class was beginning to acquire the trappings of the Old World; even if the money had been made by selfreliant, Emersonian Americans, European taste was more and more an alluring means of self-identification. Some of the wealthy Americans even sought European titles. More than 100 young heiresses from the New World married impoverished members of the European nobility, thus allowing landed families abroad to retain their properties, and lending legitimacy to the Americans' claims to a higher rank among their own countrymen. Mary Leiter, daughter of Chicago retailer Levi Z. Leiter, married George Lord Curzon; Jennie Jerome, the daughter of a hotel magnate, married Randolph Churchill; Consuelo Vanderbilt, daughter of William Vanderbilt, married the Duke of Marlborough; Violet Twining, 22, who married the 80-year old Marquess of Donegal, was said to have bought her marriage for \$400,000 a year. Other conspicuous marriages included that of Virginia Bonynge to Lord Deerhurst; of Anna Gould to Count Boni de Castellane; Alice Thaw to the Earl of Yarmouth; and Alice Heine to the Prince of Monaco. Mary Goelet, daughter of a financier, married Henry Innes-Ker, Eighth Duke of Roxburghe. So fascinated were Americans by these inter-continental arrangements that

when Consuelo Vanderbilt's wedding gifts were publicly displayed on Fifth Avenue in New York, the lines of curious viewers extended halfway down the block. 92

Wealthy industrialists of the Gilded Age commissioned prominent architects to design their villas and townhouses, and the architects who built the castles for this class also became more socially prominent. When Richard Morris Hunt became the first American to study at France's esteemed Ecole des Beaux-Arts, he set new standards for the profession. As a "starchitect" avant la lettre, Hunt not only designed homes for the Vanderbilts and Goelets; he moved in their social circles. The American Institute of Architects, founded in 1857, helped to uphold this elevated status, elevating the prestige of the profession and differentiating its members from carpenters and other builders. The new professionalization of the architect coincided with the establishment of the first university architectural school in the country at MIT in 1861. That year also saw the birth of Frank Miles Day, an advocate for architects and for the continued hegemony of European taste in buildings.

Day's penchant for European traditions was evident in his travel sketches as well as in his work as an architect and teacher. Surprisingly little has been written about Day. Despite his manifold achievements, Day has received scant attention since Patricia Lawson Heintzelman Keebler's dissertation of 1980⁹³ and had been largely ignored by scholars up to that time. Yet he was highly successful during his lifetime, ranking in stature with the most notable members of his profession in Philadelphia, including Wilson Eyre and Cope and Stewardson. He received numerous commissions for private

^{92.} Daisy Goodwin, "Cash for Titles" Mail Online August 14, 2012.

^{93.} Patricia Lawson Heintzelman Keebler, "The Life and Work of Frank Miles Day." PhD dissertation, the University of Delaware, 1980.

houses and institutional buildings in his native city and elsewhere, and his academic designs can be found at the University of Pennsylvania, Yale, Cornell, and other institutions of higher learning throughout the country. He was active in organizations that promoted the status of the architect and of architectural education, including the American Institute of Architects and the American Academy in Rome. Day also lectured extensively and taught at the University of Pennsylvania, the Pennsylvania Academy of the Fine Arts, Pennsylvania Museum and School of Industrial Art, and Harvard University, so the extent of his influence must have been considerable.

The relative lack of attention paid to Day may be attributed to the conservative stylistic trends that prevailed in Philadelphia at the end of the nineteenth century, following the eclectic and exuberant era of Frank Furness. Furness's robust and idiosyncratic works were fashionable in the decades prior to Day's coming of age, and the literature on the older man still dominates the scholarly literature on Philadelphia architecture. Furness, however, fell out of favor during the end of the nineteenth and most of the twentieth century; indeed, many of his buildings were demolished during the first decades of the 1900s. During the 1960s, the rediscovery of Furness, and of High Victorianism in general, again highlighted this unique architect, whose vigorous designs and colorful personality made him a more popular subject of study than the more subdued Day. Pay's Eurocentric approach to design relates to his lifelong advocacy of travel for architectural study; indeed, he absorbed the architecture of England and the Continent on

^{94.} See Thomas, Cohen, and Lewis, *Frank Furness: The Complete Works*, especially the introduction, 7-12.

his trips abroad and his tenure with British architectural firms. Furness was not a traveler; it was his inner vision that guided his career rather than his assimilation of foreign styles.

On the other hand, Day's career is inextricably linked to his travels abroad, and the influence of his time in England, on the Continent, and in the Middle East permeates his work, his many lectures, and the causes to which he devoted his energies. Keebler has provided insights regarding the effects of travel on his own buildings, 95 but other issues related to his sojourns will be addressed in this chapter: the education Day had received before his journeys; the kinds of monuments he chose to record in his sketchbooks; the manner of his drawings; which details he seemed to find important; the reasons he recommended study abroad; and, not of the least importance, the cultural milieu of the United States at the time he set up his practice.

Day was born on April 5, 1861, the youngest child of Charles Day, a tailor from England, and his wife, Rebecca Miles, whom Charles had met after settling in Philadelphia in 1844. Frank's appreciation of travel was no doubt inspired by sojourns abroad with his father in particular. In fact, he took a number of trips with his parents from childhood until his teens. While Frank Miles Day's journeys of 1884 and 1893 will be the primary focus of this essay, his earliest experiences must have provided him with the world view, familiarity, and confidence he would later need to exercise his powers of observation.

^{95.} Keebler discusses several of Day's designs in light of his travels. These include the Philadelphia Art Club, which she says "has been called Venetian Gothic, Early French Renaissance, particularly the Chateau de Chambord and the Hotel de Ville in Beaugency, and an odd combination of Italian and Germanic elements," and she makes particular reference to models for interior features which Day saw in Bologna and Venice (p. 67-68). Keebler also refers to his Camden Safe Deposit and Trust Company building as "revealing his interest in English Baroque motifs." In addition to Keebler's observations, Alexis Gorby has drawn comparisons between Day's *oeuvre* and his sketches on her website, www.google.com/site/gorby/306proj2.

Educated mainly by his father, Day did receive some formal education as a child. He studied at the Rittenhouse Academy in Philadelphia, although he probably attended classes sporadically, due to his travels. 96 In the fall of 1879, Day enrolled in the newlyestablished Towne Scientific School of the University of Pennsylvania, the predecessor of the university's School of Engineering and Applied Science. By then, Day's father had returned to England, where he became gravely ill, and Day went to London to be with him. Day remained there for post-graduate study at the Kensington School of Art and the Royal Academy School, before going to work in the London atelier of Walter Millard, who himself had explored the continent with the help of the Royal Institute's traveling fellowship. Day then apprenticed with Basil Champneys, the designer of several buildings at Oxford and Cambridge, and best known for the Gothic-style John Rylands Library in Manchester (Figure 1.3). Both architects were eclectic in their tastes, and the buildings Day chose to record on his journeys reflect an equally catholic outlook. 97 This would have been useful training for a young architect, whose career would be based on building for a nation on the rise.

Like Hunt before him, Day was already living abroad when he began his first major sketching trip, an experience that surely reinforced his Eurocentric viewpoint and prepared him for his career as both architect and educator. In 1885, after spending time drawing in England, Day visited the Continent, traveling through France, Italy, and

^{96.} Keebler, 13-14. Keebler lists various excursions taken during the years immediately prior to Day's enrollment at the University of Pennsylvania, including a trip to Scotland and Yorkshire in 1874, seven months in Italy, Switzerland, France, and England during 1876, and summers spent in Canada and Maine.

^{97.} For more on Millard and Champneys, see Keebler, 14-19. Keebler also notes that Day seemed most interested in Gothic and early Renaissance architecture, and had little regard for later Italian Renaissance or Baroque buildings (20). Nonetheless, Day's sketches do reveal his interest in a wide range of styles, periods, and building types.

Germany before heading back to England. This was a particularly fruitful trip, resulting in 15 sketchbooks and 69 loose sketches. Day's sketches are for the most part remarkably detailed, revealing his desire to document the existing monuments with great diligence in order to understand them fully. As scrupulous with voids and shadows as he was with lines and curves, he took great pains to capture both the essential elements and the minutest features. What he could not draw, he sketched with words, but what he could not draw was precious little indeed. No detail was too small to escape his notice, not even a "particularly fine door nail" (Figure 1.4) or a lock on an old chest (Figure 1.5). Whether it was a cathedral or a casbah, a tomb or a mosaic pattern, a splendid house or a bit of hardware that may have seemed insignificant to the less observant, Day captured it with care and beauty, using the appropriate medium (usually pencil but occasionally watercolors or ink, or a combination) to convey color, texture, massing, and volume.

Photography was by then very common, and commercial photographs were readily available. Day's collection of photographs of European monuments and art is quite extensive: there are more than 1,000 pieces extant, along with two catalogs, both featuring notations in Day's hand, of photos he owned. The first catalog, a thumbindexed volume measuring approximately 8" x 7", bears an inscription on the first leaf: "Catalogue of Architectural Photographs in the Possession of Frank Miles Day, February 4, 1886." The thumb indices are organized as follows: Great Britain, the Low Countries, France, Germany, Italy, Sculpture, Switzerland, and List of Plates from Architectural Publications. Each page listed a building or work of art, alongside of which were three columns, marked A, B, and C. Each entry is numbered in one of the columns, but Day left no explanation of his system of organization. The large photographs, approximately 8

½" x 11" and now mounted on cardboard, appear to be purchased (many are self-captioned or inscribed with names of dealers). They are factual images rather than impressions, and were very likely used as reference materials. Here Day differed from William Hough, his soon-to-be employee; while Day used photographs as tools of reference, Hough dabbled in photography as an art form. (See Chapter 3.)

Drawing was Day's preferred form of recording buildings, and it seems that he employed the exercise as a means of learning how a building was constructed. In the words of Gabriela Goldschmidt, professor emeritus of architecture and town planning at Israel Institute of Technology, "Sketching is thinking," and Day sketched, and later designed from, a wide range of monuments. While some architects had a tendency to dwell on certain styles of buildings or details (for example, his fellow Philadelphian Wilson Eyre had an eye for the picturesque, and Eleanor Manning, another subject in this dissertation, concentrated on gabled buildings), Day's tastes were extensive if not all-embracing. Every place he visited seemed to be a source of inspiration, and every style was duly noted, whether it was a Renaissance chapel or the formations at Stonehenge, perhaps the former for its refinement of classical ideals, the latter for what he may have deemed its structural basis. In the event, he often focused on the structural rudiments that underpinned the decorative features.

One of the most notable characteristics of Day's drawing is his attention to detail.

Most of the architects in this study made measured drawings, plans, and sections, but

Day's were especially meticulous, perhaps because of his desire to learn from these

^{98.} Gabriela Goldschmidt, "The Dialectics of Sketching" *Creativity Research Journal* 4, no. 2 (1991): 130. Goldschmidt asserts that the frequency of sketching in the process of design is related to the architect's recollections of precedents; the old Italian word for sketches, "*pensieri*," indicates the connection between thought and drawing.

monuments. Clearly, the young traveler wanted to retain a record of his observations for future reference, either his own or that of posterity. He kept his museum tickets, his lecture notes, and his guidebooks. One particularly charming souvenir is a small folder, about the size of an old postage stamp book, containing views of Madrid. He may have found these interesting because he, too, recreated worlds in miniature. The portability of his sketchbooks, often small enough to fit into his pockets, speaks to the connections between himself and the buildings he drew.

His exacting nature extended to the manner as well as the content of his record keeping. Most of his sketchbooks are indexed, and the pages are often numbered. Even before he embarked on the first of his *wanderjahre*, he revealed this quality in his personal diaries and student sketchbooks. One the last page of one, a personal diary dated 1880, for example, Day provided a log of his letters, sent and received, including dates and the names of the correspondents. In the text, he documented the most quotidian events, even the nature of the time he spent at home.

A few of the entries do provide glimpses into current topics that would have been of interest to a student architect as well as the leisure activities that were suited to a young man of ambition. For example, on March 24, 1880, he wrote, "In in a. In e. went to lecture on Edison's electric light ("a" and "e" presumably meaning "afternoon" and "evening")." Here, Day indicated his interest in current technological developments, as well as their potential application in architecture.

On May 7, he noted, "In a. went for a row, with Roy, on Schuylkill." Sculling on the river was a popular athletic pastime among young men at the University of

^{99.} Frank Miles Day, diary entry, May 7, 1880. Frank Miles Day Collection, 059.33, Architectural Archives, University of Pennsylvania, Philadelphia.

Pennsylvania, as well as for other young men of a privileged class; Day was also preparing for a future as a builder for the city's elite. On June 11, he stated his enthusiasm for Madison Square Theater in New York: "The theatre is really a gem. Ornamented with the best of taste and the best of talent." The ornate décor, which included a curtain by Louis Comfort Tiffany, combined with such state-of-the-art amenities as an ice-based cooling system, must have convinced the young architect that traditional architecture was compatible with modern comforts as America asserted its claim to the legacy of European culture while moving toward the twentieth century.

Day's conscientious record-keeping is also evident in the notebooks he kept as a student at the University of Pennsylvania, which reveal that he was sensitive to the material and materiality of building. For a class with Professor Alexander Koenig, the noted mineralogist and metallurgist who taught at the university from 1872 to 1892, Day lavished three pages on the luster of minerals. Day knew that what he drew would one day be translated, via brick, mortar, and stone, into something tangible, and he believed it his duty to learn their particular characteristics.

Like most architectural students, Day studied the canon of treatises on his subject, and he provided an extensive bibliography for future generations of artists and historians. He drew details from Francis Penrose's *Antiquities of Attica*, Giorgio Angelo Canina's *Roma*, William Chambers's *Civic Architecture*, Stuart and Revett's *Antiquities of Athens*, Viollet-le-Duc, Colling's *Gothic Ornament*, and Sharpe's *Parallels*, and he copied from Piranesi, Street, Pugin, Ramée, Nicolas Marie-Joseph Chapuy, and other master

^{100.} Frank Miles Day, diary entry, June 11, 1880, Frank Miles Day Collection, 059.33, Architectural Archives, University of Pennsylvania, Philadelphia.

vedutisti. ¹⁰¹ He did not hesitate to offer opinions or criticisms, as, for example, when he compared the Ionic favorably to the Doric, stating that the former was more complete in itself. "More practical in the hands of the designers than the Doric, controlled by the ordinances of its triglyphs and the severity of its intercolumniations. This order probably was not usually applied to buildings of considerable magnitude. The temple of the Illussus and of the Erectheion ... are said to be the best examples." ¹⁰² On one of the many pages depicting ribbon motifs on classical buildings, he wrote, "Ribbon a good servant but a bad master – any more than necessary to tie branches together, etc., is a mistake." ¹⁰³ Still a student, Day was already honing his viewing habits and developing a sense of his own aesthetic preferences. He had already been to Europe, and had perhaps already begun to form his preferences by the time he was a young man, but his observations of these pictorial representations seem fresh and spontaneous; in the ribbon drawings, Day indicates the ways in which the ribbon would have been draped, thus revealing his visual acuity and analytical mind (Figure 1.6).

It was, however, his direct confrontation with the built environment that would most clearly demonstrate Day's powers of observation and his skills as a draftsman. This remainder of this chapter will examine selected sketches from trips to Europe during three periods in his life: the first from 1884 to 1887, the second in1894-85, and finally, those he made from 1910 to 1913. His most youthful sketches will be examined first. These are arranged thematically rather than chronologically.

^{101.} Frank Miles Day, Student Sketchbook, Frank Miles Day Collection, 059.36, Architectural Archives, University of Pennsylvania, Philadelphia.

^{102.} Frank Miles Day, Student Sketchbook, Frank Miles Day Collection, 059.35, Architectural Archives, University of Pennsylvania.

^{103.} Student Sketchbook, 059.35.

A Whirlwind Tour in Pencil and Ink 1883-85

Day's sketchbooks from this period range in size from 4" x 6 ½" to 7 ½" x 10 ½." The largest of the books are bound in black paper, while the smallest are covered in buff-colored linen. Many of these were equipped with loops to hold a pencil. On several of the smaller books, the contents are listed in ink on the cover (Figure 1.7). Inside, on the first page, an inscription reads, "Index next page," and on page 2, he divided the list into more detailed increments, with four columns including the dates, pages, places, and specifics. For example, in his entry for Salisbury, the far left column is marked for page 13. The next column reads "Salisbury," and directly next to it, he has specified "Lady Chapel." Below the ledger reads "15 ... Cloisters" and "16 ... Church House." (Figure 1.8) Day left nothing to chance, indicating both his thoroughness and his desire to use the sketchbooks for reference.

But it is less in the structure than in the drawings, in this and the other sketchbooks, that Day's exactitude shines through. Most sketches were made in pencil, which would have provided Day with the ability to make the detailed renderings he liked and the subtle gradations of light and shade at which he excelled, as well as the flexibility he needed to make changes. His pencil lines are fluid yet sharp; in the next chapter, we will see how William J.H. Hough used his pencil to make heavy, shadowy hatch marks that conveyed mood rather than clarity. But even when Day sketched lightly, the marks were crystalline, regardless of the subject; yet, he used a delicate touch even in his most self-assured drawings.

In England, Day visited both major cathedrals and smaller churches. In April, 1884, he visited the church of St. Mary's Redcliffs in Bristol, where he diagrammed the complex timber system of the roof, including measurements and descriptions. "Rafters

vary in size, about 11" apart, he noted, and he also inserted a measured section of a pier moulding. He was no less thorough in his observation of bosses, noting:

Bosses:

Lady chapel 46

N. aisles 208

S. aisles 320

Choir 150

Crossing 34

Tower 52

Porches 40____

 850^{104}

At the same church, Day drew the plan of Chatterton's porch, along with the note, "In this bay a window is shown. They occur on five sides but are not shown on plan. The plan elsewhere is taken 4 or 5 ft. above the floor. Aa. The passage above the arcade and doorways run in each case thru [sic] an opening like that show [sic] in one instance at aa." This focus on the minute indicates that Day may have intended his sketchbooks as a tool of reference.

On the Continent, Day continued drawing in the same vein, recording important details with admirable precision and seeking out small features that might have been ignored by less discerning eyes. At Saint-Denis near Paris, he sketched in pencil what he described as the "ornament of an angle shaft in central portal of west front" with fluidity and grace, placing the drawing itself at the upper left side of the page (Figure 1.9). This may not been enough of an *aide-mémoire*, however; he also drew a plan of the shaft, keyed "a," "b," and "c," noting that "leaves start at a and b and meet at c. The vein of

104. Sketchbook, 059.41, Frank Miles Day Collection, Architectural Archives of the University of Pennsylvania.

^{105.} Sketchbook, Frank Miles Day Collection, 059.41.

each div. of the leaf is formed by a row of minute uncut dogteeth." These observations of structure and nuance make Day different from William J. H. Hough, who usually sought to convey atmosphere rather than particulars. Day may well have expected to design a similar monument once he began his practice as an architect. Perhaps it would not have been enough for him to make a reasonable facsimile of the original; he would have to stay true to the source. Day would later criticize those architects who had he demanded no less of himself.

There is perhaps still another explanation for Day's methods. He was tracing the building in order to learn how the designer conceived the structure. Indeed, he recorded not only objects, but the way in which those objects were made. His near obsession with metal nails and hinges at the Germanic Museum in Nuremberg is one indication of this tendency. ¹⁰⁷ He drew nails in elevation and section (Figure 1.10). He also made many drawings that demonstrate the common devices that hold elements together. In a drawing made on June 19, 1884, he recorded "common rafters a put on purlin end thus." Another instance of Day's concern for structure is a drawing made at the Palazzo Pecci in Siena, where he noted sections of a door jamb, both above and below the bases. Sketched in black ink and shaded in soft, brownish-gray wash, these section drawings indicate Day's determination to understand the intricate structure beneath the overall form. Analysis through drawing was his objective. Although he was studying during a period of enhanced status for the architectural profession, Day was not above understanding the mechanics of building.

^{106.} Frank Miles Day, Travel Sketchbook, Frank Miles Day Collection, 059.42, Architectural Archives, University of Pennsylvania.

^{107.} Keebler has also made this observation. See especially page 24.

When viewing larger building elements, Day often broke them down into components that could be more precisely measured and comprehended. In one sketchbook, he drew the gables of what he called the "Bembus" house in Nuremberg (actually the Fembohaus, now the Fembohaus Stadtmuseum). On page 27 of the notebook, Day drew the upper stories of the building, articulating the volutes that comprise the picturesque roofline (Figure 1.11). On the following page, he drew the gables in greater detail, and added a section drawing of a corbel (Figure 1.12), which was illustrated on the next page. One could speculate the he was studying the building as a tourist might study the Ghent Altarpiece: first as an ensemble, and then in its component parts. If Day was especially attentive to detail, in these drawings his method is particularly evident: he allows a view into the process of seeing elements in a larger context.

Day also examined the visual effects of the micro within the macro at the Maulthalle (Figure 1.13), a sixteenth-century granary in Nuremberg. Here he emphasized the roof, with its plethora of dormers. He emphasized the intricate masonry patterns on the gabled end of the building, and its contrast with the flat ashlar of the lower stories. Day's selection of this particular edifice suggests that his proclivity for drawing details reflected his own taste for detailed structures.

While pencil was Day's medium of choice for the recording of complex features, he occasionally used color where necessary, as in his sketches of the Pazzi Chapel in Florence (Figure 1.14); here, the color and materials were part of the design and structure, and Day emphasized these qualities through the addition of watercolor and ink. His preference for watercolor over pastels could be explained by the latter's propensity to

bleed onto adjacent pages. At the same time, it is also possible that Day liked the way in which the wet paint was absorbed into the paper, becoming part of the page and lending the image a literal fluidity that was unique to the medium, but one which would retain its watery appearance even when dry. As a result, here Day has recorded the refined *Quattrocento* chapel and its characteristic materials through the application of the appropriate colors: the sky blue and deep green of the della Robbia terra cottas and *tondi* and the blue-gray of the *pietra serena* trim. The ribbed dome seems to dip toward the floor, carried precariously on the small pendentives formed by enormous arches. Beyond is a suggestion of more space to be explored. These details characterize this particular place, and Day represented them with considerable fidelity. Day could also use color for emphasis, as he did on a complex plan of columns in the church of St Cross in Winchester (Figure 1.15).

Day's awareness of space and texture can be seen in his drawing of the "Maison de Diane de Poitiers" in Rouen (Figure 1.16). Occupying the entire width and 2/3 of the length of the sketchbook in which it appears, this double-page image exemplifies Day's ability to indicate depth as well as a variety of materials. The 3 1/2 – story, gabled house is presented almost head-on, perhaps turned slightly to the left. No context is indicated except for a hint of a sidewalk in the lower right portion of the drawing, represented as a shadow formed by a series of diagonal lines, decreasing in size and distance from the house. The first story of the house rests on what appears to be stone. The second and third stories are railed with light-colored spindles. Day skillfully illustrates the details and textures with a few pencil strokes: the diamond-shaped leaded-glass window panes, carving on the horizontal and vertical members. It is also possible to peer inside the

house, where a door left ajar on the first story provides a tantalizing glimpse into the interior (Figure 1.17); we can almost imagine a coffered ceiling. As he did with the suggestion of space through an arch at the Pazzi Chapel, Day here suggests another dimension, this time through a window. He built on the surface of the paper, and also suggested building through it.

The fact that Day was exacting did not preclude selectivity. In fact, he was capable of emphasizing whatever facet he chose from a particular building, regardless of its size or objective importance, He could even take liberties with scale when it suited him. This is the case with the Palais de Justice in Beauvais (Figure 1.18), where the salient feature of the structure appears to be a three-story tower with a conical dome. In fact, that tower is lower than Day has indicated; in fact, it is considerably less prominent than the window next to it, which Day has shown as approximately the same height. Furthermore, a vintage postcard of the building (Figure 1.19) shows that the tower is more robust in form and volume than Day would have us believe. The architect also ignored the four other dormer windows, as well as the building's most notable feature, a cluster of turrets and turrets at the other end of the façade. Given Day's scrupulous recording methods, such curious inaccuracies are hard to explain. One can surmise that he found the massing of elements awkward, and we know from some of his travel notations that he had a critical eye. 108 Perhaps he was interested in adapting the towers for future designs, and was already revising them to suit his purposes and taste. In fact, such

^{108.} An example of Day's on-site critique includes this notation on a drawing of St Severin: "Intermediate ribs should be kept quite small. Would look well decorated. Vaulting surface blue with gold stars. Ribs with gold lines. Shafts have no caps. Bad." Travel Sketchbook, Frank Miles Day Collection, 059.42, Architectural Archives, University of Pennsylvania.

towers, so apparent in many of his sketches, became an important part of his later design vocabulary.

Day combined his talents for exactitude and artistry in his illustration of the staircase of Louis XII/ François I at the Chateau de Blois. In a small drawing dated October, 1885, Day revealed his ability to convey the rare mixture of detail, volume, and mood (Figure 1.20). One can surmise that it was more than merely the fame of this feature that attracted Day. Its complex vaulting system, its winding steps, and its soaring verticality gave the artist an opportunity to place himself, and ultimately, the viewer, in the unsteady shoes of anyone who dared to tread on this daunting assemblage of stonework. The masonry of the vaulting is beautifully articulated, with special care paid to each stone in order to indicate size and direction. The rosettes that punctuate the ribs have real weight and volume, suggested by means of a few fluid lines. The central shaft is ornamented with a motif of colonettes and niches; each of the latter is capped with a shell possessing apparent depth. As the shaft reaches the ceiling, it is crowned by a ring of fleurs-de-lis. The railing visible on one of the landings has a vegetal motif. A gargoyle projects from below it. Through an opening in the right side of the stairs, partially blocked from view, is a leaded glass window with an elaborate Gothic frame.

Through his masterful use of perspective, Day conveyed both materiality and mood. He selected a viewing point that expresses the imposing appearance of the staircase: he made this perilous ascent with his eyes, recreating the experience of being overwhelmed by the architecture of majesty. It seems that Day stood on a landing, looking up at the central shaft, a great intractable object that dominates the picture and blocks the view of the wall beyond. Planted dead center on the page, it thrusts upwards

until, at the ceiling, it bursts into fluted ribs. Perhaps a musical metaphor is apt here, as the shaft is transformed into a sort of trumpet that heralds the presence of the king. All around the shaft, the stairs wrap precariously, both inviting further approach and warning against it. Never knowing what might be around the next curve, the climber is at the mercy of fate. An aperture to the right side provides some sense of relief, but escape seems to be nearly impossible because of the difficult angle at which it is placed; the visitor must climb into it, slowly, carefully, while the ceiling threatens from above. The force of gravity will either crush us or send us tumbling into an infinite abyss. In the manner of Piranesi's Carceri (Figure 1.21), Day's rendition of the staircase at Blois is menacing, spatially ambiguous, vertiginous, an effect achieved through his physical engagement with the space. One can almost imagine that the young student is raising and lowering his eyes, fighting for his balance, touching the cold stone, hearing his footsteps on the stairs, sensing his own peril. Yet, despite its sense of foreboding, he gave the staircase a certain delicacy, a lacy quality that gives an impression of refinement; King Louis XII is a man of both might and culture. Day translated this dichotomy into an image of power and grace.

Such was Day's skill at recording minutiae that lacunae are particularly striking in these sketches. His reasons for empty passages may have varied from drawing to drawing, leaving the viewer to speculate about the architect's motives. Sometimes, the part represented the whole. This is evident in his illustration of San Sepolcro in Bologna (Figure 1.22). Using pen, watercolor, and a minimum of details, Day expressed the reddish color of the materials, the creative stonework, the herringbone pattern of the

brick, the column on which the corner seems to turn like a hinge, and the shadows lurking within the deeply-set windows.

Day achieved a similar effect in his drawing of the Cappella Colleone in Bergamo (Figure 1.23), where only half of the façade is complete. Since the building comprises an exhaustive number of details, it is possible that time did not permit further elaboration.

There are other instances in which what lies between the lines is significant for its absence. At Glastonbury Cathedral, Day drew the Chapel of Joseph of Arimathea with more lacunae than lines (Figure 1.24). He showed the arcades, the capitals of the columns that support them, the bundled vertical members that ascend to form the vaulting. This is a huge space, he seems to tell us, and we cannot see all of it at one glance. Not only is it complex in its form; it is brilliantly lighted by the sun coming through the windows, and here, Day uses the lacunae to good effect: while some details are dissolved by the powerful illumination, others are rendered more visible. It is conceivable that Day sought to capture the effect of light coming through the windows, thus transforming material reality into something more ephemeral, or even transcendent.

Day's lacunae could also reveal what he did not like, as in the exterior of the Lady Chapel at Salisbury Cathedral (Figure 1.25). There, he emphasized the ribbed horizontal members and ignored the elaborate patterning of the façade, which is evident in a modern photograph (Figure 1.26). In this case, massing and volume were of greater significance than surface details.

Practice

In 1887, Day was back in Philadelphia, where he started his own architectural practice. Five years later, he took on a partner, his brother, H. Kent Day, an accountant, and the brothers hired Charles Zeller Klauder as chief draftsman. In 1911, Klauder would

become a partner, and the firm was renamed Day Brothers & Klauder, until Kent Day retired, when the firm became Day & Klauder. The named was retained for nearly ten years after Frank's death.

The firm was extremely successful, designing many notable buildings in Philadelphia, including the Philadelphia Art Club (1889-1890 demolished 1976); the Caner residence (1890) (Figure 1.27); double residences for Edward Wood (1890) (Figure 1.28); double residences at Twelfth and Locust Streets (1892) (Figure 1.29); the American Baptist Publications Building (1896) (Figure 1.30); Cogslea, the home of his friend, the artist Violet Oakley (1902) (Figure 1.31); the second Franklin Field (1903; demolished 1922) and fieldhouse; the Wetherill mansion (1906) (Figure 1.32); and the Yarnall Residence (1908) (Figure 1.33), for which Oakley painted the interior murals. Day also distinguished himself with collegiate design, including buildings for Princeton University (1909-1922) and Pennsylvania State University (1913-1914), as well as a plan for the University of Delaware (1917). These structures reflect Day's knowledge of European models, as well as his skill in creating an understated eelecticism.

The refined, discreet elegance of Day's buildings represented a marked difference from the work of Frank Furness, who had built commercial, academic, and residential buildings in the previous decade. Furness's own version of Victorian eclecticism (Figure 1.34) was considerably more robust; Furness did not engage in the practice of European study, unlike many of the younger generation of architects in the city. Furness worked in the atelier of Richard Morris Hunt, one of the earliest and most conspicuous of nineteenth-century Americans to study in and learn from Europe and the Beaux-Arts tradition. National currents at home were changing the tastes in architecture, however.

Furthermore, despite Hunt's Eurocentrism, he and his students were, as Jeffrey Cohen explains, "confronted by a national self-consciousness that told them to cook something American. Hunt's students, and Furness in particular, seem to have felt this desire even more strongly than the master." Furthermore, "Hunt also instilled in them a freedom to choose and manipulate that allowed for more penetrating and progressive kinds of reinterpretation and transformation than was generally evident among the rest of the profession." One could add that the Beaux-Arts tradition was as much about the process of planning as it was about style. In the event, Furness's professional life and travel plans were preempted by his service in the Civil War; after the war, he married and returned to his native Philadelphia to practice instead of going abroad.

For Day, however, the Old World was, and continued to be until the end of his life, the source of all great building design. Whether it was in the Tudor style or in the manner of the French or Italian Renaissance, Day drew his inspiration not from nature or the American vernacular, but from the great builders of Europe's past.

The Mature Architect Abroad, 1893-95

Day did not merely view travel as a finishing school for the young; he was a lifelong believer in study abroad for architects at every stage in their career, and in 1893, when his practice was already well established, he made another journey to Europe, this time to Northern and Southern Italy, Sicily, Spain, and Tangier. The sketches he made during this sojourn are evidence that he had not lost any of his fastidiousness, nor his interest in materials.

^{109.} Jeffrey A. Cohen, "Styles and Motives in the Architecture of Frank Furness," in Thomas, Cohen, and Lewis, 102.

^{110.} Cohen, "Styles and Motives in the Architecture of Frank Furness," in Thomas, Cohen, and Lewis, 102.

At the Doge's Palace in Venice (Figure 1.35), Day drew one of the capitals, revealing once again his talent as a draftsman. Using a wide variety of shadings from very light gray to black, Day picked out each acanthus frond, the shallow, dark void behind it, and the half figures that rise from it and stretch themselves over the band above. The weathered texture of the member is suggested by Day's use of heavy black points, which are placed at the outer edges of the leaves and dotted more delicately within the filigree of the necking. The shaft is shaded to indicate the volume of the column; the shading extends even further into the center from the right side, lending the impression that the light is coming from the left side, or the southwest.

Below this drawing is a plan, indicating the octagonal abacus framing the foliated capital. Day has supplied a note that indicates both the position of the column as well as his diligence: "Venice 7/9/95. Doge's Palace. 9th cap of lower arcade (Piazzetta Front) counting from the angle near the lion [sic]." Day's sketch is somewhat different from the model (Figure 1.36), which is squatter and somewhat more exuberant. Given Day's meticulousness, it is reasonable to ask whether he may have been attempting to create a more ideal form of the capital.

At the Casa Ciampoli in Taormina, he recorded the section of a string course, outlined in black ink and shaded with soft brown wash. A detail from the sketch shows his documentation of the outline and its measurements in Day's cursive hand. He also notes other details: the flat sections are marked, "band of black lava." To the right of the drawing, he wrote, "All the rest of the stone is a very warm yellow." It is interesting to note that, despite his indication of interest in material and color, he did not use the yellow in the drawing itself.

At the Alhambra in Spain (Figure 1.37), Day illustrated wainscoting in a bath. At the top of the page, he made a pencil and watercolor drawing featuring a diagonal pattern, with each section colored in to emphasize both the chromatic and tectonic aspects of the design. Below are two other tile patterns, but instead of using paint to indicate color, he placed small Arabic numerals, 1, 2, or 3, each one referring to a different color. Each square is framed by a rectangular element with hexadecagonal tiles in their corners. Next to this drawing, to the right of a double-headed arrow, is a larger rendering of the 16-sided star, marked "all these dark green." Below is another inscription, from which an arrow points to one of the rectangular framing members. It reads, "all these are 1 ½ x 4 ¼ and greenish white." Directly beneath is an inscription that refers to the colors of the square tiles in the drawing, keyed by numbers:

4 ¹/₄" sq. arranged in zig zag as shown. Am not sure that the colors 1-2& 3 are as given but their position and arrangement is [sic] correct.

- 1. bluish black
- 2. dark green
- 3. light blue

Paint swatches in the margins indicate the Day was attempting to find the exact shades of blue.

Color was also a significant part of the fountain in the House of the Bear in Pompeii (Figure 1.38), and Day used watercolor and ink to stress both its textural and chromatic vitality. Day chose to portray only a small part of the fountain: a corner of the lower half of the outer, mosaic-covered wall, characterized by a mask set within a diamond-shaped device. The black tessarae are dabbed onto the paper in an irregular pattern in some areas, suggesting roughness of texture, and in a more haphazard manner in others, as if to indicate the action of light on the iridescent surface. The sea shells that

frame the sides of the fountain, perhaps a reference to the motif of the god Neptune in a lunette that is not shown in Day's sketch, are presented as round and protruding. In typical Day fashion, the architect left little to the imagination: although he focused on only one side of the fountain, he drew the entire piece, a pedimented aedicule, to the side of the main illustration, as if to indicate the whole from which the part was extracted. A photograph (Figure 1.39) describes the actual placement of these details, as well as the image of Neptune. Because the temple form was simple and familiar, Day may not have felt the need for a more articulated rendering: the overall shape was sufficient. It does, however, seem to suggest that Day was even more interested in color and material than before.

During the same visit to Pompeii, Day executed a watercolor of the Street of Tombs (Figure 1.40). Here, Day illustrated a pedimented aedicule, framed by stacked pilasters and flanked by ruined walls. The aedicule is shown at an angle, lending it greater dimension and drama, as though the viewer were approaching it from the end of the street. Its overhanging cornice is colored in faded red, as is a small pedimented window within the larger pediment. Through an arched opening, a niche is visible, its lower walls painted red; the wall above is pale violet, darkening above to a much deeper shade to designate the vaulted ceiling. The street surface is brown, touched with green, not so much suggesting grass as the moss that accompanies neglect. The sky is blue – cloudless, even cheerful – an ironic reminder of Nature's resilience in the face of her own bad temper, further underscoring the damage she had wrought almost two millennia earlier. And yet, in this drawing, even in the presence of decay, much of the man-made is intact. The building retains its overall form, despite the crumbling walls around it. The

interior colors are vivid. One single medallion on the soffit is intact. The pediments are gracefully fluted, and the capitals retain their graceful ornament. To the right, there is a sarcophagus with well-preserved arabesques and well-articulated bands. It seems that Day selectively recorded those elements he believed to be important in this scene. The classical details are the major components. The articulated pilasters, the voluptuous medallion, the delicate patterning, and the interior colors, suggest the perennial appeal of ancient design. For an architect who studied the past and based his own work on historic precedents, this idea may have had some currency.

The Late Travels, 1910-13

From April, 1910 through September, 1913, Day once again went abroad, perhaps to rejuvenate his eye and restore his enthusiasm for his profession. A small sketchbook of this period contains his views of Portugal, Gibraltar, Ravello, San Gimignano, Assisi, Rome, Naples, Rosslyn, Lindisfarne, Oxford, and Cambridge. While he remained ever conscientious in his measuring, Day was somewhat freer in both his selection of monuments and in his recording. Here, he allowed himself to enjoy more of the natural scenery, including the Rock of Gibraltar. He drew a view of Assisi from a train (Figure 1.41). These two sketches were about the act of travel itself, recording the wayfarer's experience of seeing while moving from place to place. He even copied a house from a painting, in the manner of a young art student. And in Rome, where he drew an elevation and section of Santa Maria degli Angeli (Figure 1.42), he took pains to note: "Dimensions taken on the spot but sketched largely from memory."

Day took extensive notes, recording his observations about materials. Having worked at Princeton, he made these comments on the masonry used at comparable academic sites in England. He was still interested in European models:

The stones at Cambridge, Ely, Lincoln, etc., seemed a little larger than at Oxford, but I saw none as large or as thick as those we use at Princeton... note: try to fine [sic] stone for this rather than a slate.¹¹¹

Day also noted the effects of light at the National Gallery in London:

I doubt whether any scheme of skylight & curtain under or above it can prevent glass reflections... one of the large galleries axis N. & S. c. 42' x 108'. The barrel vault has one row of panels (about 6' wide) at each end and four ribs about 3' wide, giving 10 skylights. Reflections as bad as Tate but better than Wallace. 112

The above entry, made in 1913, just five years before Day's untimely death, indicates his continued determination to learn by seeing; the tiny drawings inserted into the notes reflect his ongoing belief in the importance of drawing on site.

Face to Face with Façades: Day as Educator

Even in Philadelphia, Day was ever the European traveler, and he sometimes made voyages from a podium. In his role as educator, he stressed the importance of direct observation of the monuments of the past, and he believed that the best of those were in Europe. By 1887, when Day opened his office in Philadelphia, America had its own university programs in architecture, an advantage that had not been available to his predecessors, such as Richard Morris Hunt, whose protégés learned the Beaux-Arts style in his atelier. Yet, to Day, architectural training in the best of schools was not complete without visiting the canonical buildings. Day relished his opportunities to teach and lecture, and he involved himself with institutions that would allow him to share his expertise and his enthusiasm for study abroad. Day was a member of and frequent lecturer at the T-Square Club, a Philadelphia organization that had been founded by Wilson Eyre, Walter Smedley, and other architects, in order to foster "a conversation"

^{111.} Frank Miles Day, Sketchbook, 059.5, Architectural Archives, University of Pennsylvania.

^{112.} Frank Miles Day, Sketchbook, 059.53, Frank Miles Day Collection, Architectural Archives of the University of Pennsylvania.

about architecture, giving parameters to the changing and professionalizing field of architectural design."¹¹³ Day also taught at the University of Pennsylvania, the Pennsylvania Academy of the Fine Arts, the Pennsylvania Museum and School of Industrial Arts, and Harvard University, where he was a visiting lecturer. In many of his lectures, he communicated his belief about travel as well as knowledge gleaned from his own voyages. The subjects of these talks included Greek and Roman Architecture (Association Hall, 1891); Sicilian Villages and Temples (Science and Art Club of Germantown, 1895); The Art of the Mosaic (T-Square Club, at the School of Industrial Arts in Philadelphia, 1895); and Greek Architecture (Free Library of Philadelphia, Spring, 1899). In these lectures, he used the language of a traveler, one who moves through space, who has direct and repeated contact with a monument:

Passing between two buildings and then looking westward, we see the poor fragments of the Erectheion, the most exquisitely refined and graceful structure of antiquity. It is futile to attempt to convey by means of words, or pictures, the indescribable charm which the building must have possessed ... it is only after one has spent days and weeks on the Acropolis, going back time and again, seeing with increasing wonder the grace of its proportions ... that one comes to realizing what it must have been like at its best time. ¹¹⁴

Perhaps the most significant of his lectures was entitled "Traveling for Architectural Education," given before the annual meeting of the American Institute of Architects in 1894. Such a lecture, given at such a prestigious gathering at this moment in history, reflects the significance of Day's commitment to historic architecture and his

^{113.} David Brody, "The Functionalist's Agenda: George Howe, the T-Square Club Journal, and the Dissemination of Architectural Modernism" *American Periodicals* 20, no. 2: 24.

^{114.} Frank Miles Day, notes from lecture on Greek architecture, presented at the Free Library, Philadelphia, in 1899. Frank Miles Day Collection, 059.71., Architectural Archives, University of Pennsylvania.

^{115.} Day was active in the American Institute of Architects, and Keebler has pointed out that he became its president in 1902. For more on Day's role in the AIA, see Keebler, pages 37-45.

belief in its appropriateness for America. At that time, Daniel Burnham was president of the organization. Burnham had been one of the driving forces behind the World's Columbian Exposition of 1893, an event that had emphasized the hegemony of classical architecture in its Court of Honor, the section of the fair devoted to commerce and industry. At the same event, exhibitions of native villages and popular entertainment were relegated to the more visually eclectic Midway. ¹¹⁶ The prevailing attitude of the AIA at that time would have been well suited to Day's conservative tastes in design.

To Day, all that could be learned about architecture was evident in what had already been built by those whose worth and taste had already become an accepted part of the canon. And it was not enough to read about their work or to see their pictures; one had to have direct contact with these building in order to understand them. Even the architectural student's requisite copying of drawings by Palladio and Serlio was a mere preparation for on-site observation. As Day stated in his 1894 lecture:

You must of course know the book thoroughly but you may know every plate in Letarouilly and not even suspect the majesty that rests in the cornice of the Farnese and you may have read Willis's treatises on vaulting and all of Violet-leduc [sic] and yet have but a scant notion of how fairy-like and seemingly impossible a thing is the roof of Henry the Seventh's chapel. If this be true of form alone how much truer is it where color is joined to form for neither the canvass [sic] of a Turner nor the glowing words of Ruskin can make us realize the splendor of the Capella Palatina dark and mysterious, even while the bright Sicilian sun pours into the courtyard by its side. 117

^{116.} For further reading on the racial and cultural implications of the 1893 fair, see Robert W. Rydell, *All the World's a Fair* (Chicago: University of Chicago Press, 1987), 38-71. Rydell asserts that "on the Midway at the World's Columbian Exposition, evolution, ethnology, and popular amusements interlocked as active agents and bulwarks of hegemonic assertion of ruling class authority." (41).

^{117.} Frank Miles Day, "Travel for Architectural Study," lecture to the annual meeting of the American Institute of Architects, New York, October, 1894, Frank Miles Day Collection, 059.68, Architectural Archives of the University of Pennsylvania.

This particular lecture serves as a litany of Day's beliefs regarding the superiority of European architecture, the importance of travel, and the need to experience buildings in their materiality.

Day left extensive, although incomplete, notes for the 1894 talk. He began with a brief outline of the topic:

I will divide (the lecture) into several parts ...

- 1. Why it is well to go abroad to study
- 2. Whether it is better to settle down to study in one place and to spend most of ones [sic] time there, or whether it is better to travel in many countries
- 3. If it is well to settle down ... what place, and why?
- 4. If where to go, what to see
- 5. What kinds of drawings to make

How to study face to face with buildings. 118

Although Day left no specific notes for some of these topics, those that are extant prove his commitment to the practice of travel. Day first addressed the issue of why a student should go to Europe, insisting that only travel abroad could satisfy the requirement for "industrious and select seeing," a paraphrase of John Milton's admonition to writers to engage in "industrious and select reading." The industrious and select seeing to which Day referred, this "face to face" contact with buildings, is evidence of his belief that the architect had the need, to as great an extent as possible, to eradicate all boundaries between himself and the built environment, and, perhaps, between himself and the original builder. It was his connection with history.

It was not enough, said Day, for a student of architecture to be surrounded by books, drawings, and photographs. Those were "merely shadows cast by outward

^{118.} Day, "Travel for Architectural Study."

^{119.} Day, "Travel for Architectural Study."

^{120.} John Milton, The Reason of Church-Government, Book Two, 1641.

things."¹²¹ Furthermore, one had to visit Europe, because "the great monuments are there and ... the most important school of architecture is there ..."¹²² He emphasized this point with the admonition that "If we are to achieve great things we must know them as great things and grasp them as facts and not as shadows."¹²³

For Day, this grasp of facts was a material process, one which could not be accomplished without experiencing a building in its material form. He stated, "It is not enough for us to know the outside of buildings, we must know them through and through." Such a lesson could not be learned by looking at a set of plans, sections, and elevations, nor could it be understood by examining a photograph. For the architect, seeing was a physical process that required physical presence and sensory participation in the company of his or her ultimate media – bricks, stones, and mortar – through the intermediary media of paper and pencil. On occasion, Day used a method of imagemaking that linked a monument to the paper in an even more direct fashion: he made rubbings of lettering directly from original inscriptions. The important thing, however, was to be in the presence of the masterworks. As he stated:

Thus when we get face to face with great buildings they are made real to us and we learn a lot of things. We learn the first and most fundamental thing in architectural design is mass; and that with mass proportion is inseparably connected; and by seeing buildings, with exquisite detail and bad proportions we soon realize how futile the effort to put on the right path that which started out on the wrong path. 125

121. Day, "Travel for Architectural Study."

^{122.} Day, "Travel for Architectural Study."

^{123.} Day, "Travel for Architectural Study."

^{124.} Day, "Travel for Architectural Study."

^{125.} Day, "Travel for Architectural Study."

Day went on to discuss the value of travel to the understanding of regional differences that could affect the selection of materials appropriate to specific geographic conditions.

Only through the movement of the eyes and body through space could this understanding be achieved:

We learn too the proper use of materials. This is more easily learned traveling – as when you go from Tuscany to Lombardy and realize the change of form from the use of stone to brick ... so he who travels comes to realize very fully that it is in working within limits that the master comes out. 126

Day did not, however, believe that visiting Europe should be the first step in the educational process. Explaining that it takes "ten years to put a man in a position to undertake work of even moderate size," he asserted that an architect should spend four years in college, "then a year or two in an office, then 3 years abroad." He also warned of going too soon:

Let us consider the average student. If he goes at all, he goes too soon ... He should have all three of them (i.e., college, office training, then study abroad) or at least the school training followed by time spent in an office with frequent trials of strength in sketch club competitions before going abroad.¹²⁸

Day believed that a reasonable amount of seasoning would prepare the student to make the most of his exposure to Europe. Of his own early travels, he claimed that the experience "left a vague, general impression on him, but he was scarcely better able to solve his problems after it than before it." He also believed that the immature traveler, unused to his or her new-found independence from home, would waste time engaging in undisciplined behavior. Thus, a student, while young, had to be mature enough to make

^{126.} Day, "Travel for Architectural Study."

^{127.} Day, "Travel for Architectural Study."

^{128.} Day, "Travel for Architectural Study."

^{129.} Day, "Travel for Architectural Study."

full use of the opportunity. As for destinations, he stated that Paris was a good place for the young architect to begin:

If a student had 3 or 4 years at his disposal, I have no hesitation saying that his best plan is to spend the large part of it in Paris at the Ecole des Beaux-Arts. Without interfering with his studies he could find opportunity for a number of vacations.¹³⁰

Realizing that "not everyone gets to go abroad more than once, and not even then for many years," he admonished the student to be "thoroughly trained before going, and so, ready to make the most of what he sees." Furthermore, a seasoned practitioner of the art of architecture had to travel abroad throughout his career in order to refresh his visual memory, revitalize his enthusiasm, and strengthen his mental and creative faculties:

Under the stress of hard and continuous work, much of it which is done in other fields than that of design, architects do not always recognize that their powers of design become inflexible and that the mind too steadily taxed needs change and relaxation in order to have that freshness and elasticity without which they cannot hope to do any artistic work ... Architects ought to deliberately arrange their affairs to get abroad for the sake of study. 132

Although travel could not make up for a lack of talent, travel would be of value. He said, "whether we have (talent) or not, what we will find by such a search is a standard of excellence, a touchstone as it were with which to try our own performance …"¹³³

Around the time he gave the preceding lecture, Day became actively involved in the establishment and running of the American Academy in Rome. 134 Founded in 1894 as

^{130.} Day, "Travel for Architectural Study."

^{131.} Day, "Travel for Architectural Study."

^{132.} Day, "Travel for Architectural Study."

^{133.} Day, "Travel for Architectural Study."

^{134.} For more on Day's activities with the American Academy in Rome, see Keebler, 46-47.

the American School of Architecture in Rome, the Academy fulfilled the vision of Charles Follen McKim, who had previously established a traveling scholarship. The Academy was modeled on the French Academy in Rome, and was designed to provide American students of the arts with a sort of home base in Europe. There, a collegial environment, surrounded by some of the greatest monuments of antiquity and the other golden periods of art and architecture, would offer a chance to absorb the aesthetics that America both needed, and, as heir to European culture, deserved. Funded largely through subscriptions and through McKim's own largesse, the Academy was and continues to be one of the most prestigious organizations dedicated to study abroad.

For Day, Europe was a body of knowledge, indeed, a library of style, but Rome was its heart, representing the primary source of Western culture. The city was, he wrote, "not just the capital of a country, but of humanity." ¹³⁵ It was there that the rest of Europe had come to learn, and where America had to build an academy of its own, in order "that our own country might not be behind in this movement for the highest education in the arts ... ¹³⁶ Furthermore, "may we not as sharers in the heritage of Rome take some just pride in knowing that it is upon this greatest theatre of the world, teaching lessons eternal like the city itself, that American students may through unnumbered years come to look from upon that immemorial point of vantage, the summit of the *Mons Janiculum*. ¹³⁷

Residents at the Academy would study perspective, artistic anatomy, and painting the figure from life. After passing an examination, they would learn the history of art,

^{135.} Frank Miles Day, lecture notes, Frank Miles Day Collection, 059.202, Architectural Archives, University of Pennsylvania.

^{136.} Day, notes for talk on the American Academy in Rome.

^{137.} Day, notes for talk on the American Academy in Rome.

freehand drawing from some of the major classical and renaissance ornaments, and then freehand drawing, from memory, of the orders, as well as elementary French and Italian. Students would spend a total of 24 months abroad, 16 of them in Rome. The Academy, said Day, would also be a place for the instruction of high school and college teachers, and it would provide hospitality to visiting scholars and artists in various disciplines. He declared that "the eternal city is a city of eternal youth ... America, Germany, and Russia are three young men." ¹³⁸

As a trustee and a firm believer in architectural travel, Day may have been somewhat disillusioned with the Academy by 1910, when after a visit he wrote that the fellows "had not attained altogether a clear conception of the reasons for the founding of the Academy, or perhaps just what it stood for." Still, he continued to advocate for the institution, speaking on its importance during at least one address. One was "to be given" at the Pennsylvania Academy of the Fine Arts in Philadelphia, ca. 1911, the year before the American Academy in Rome was merged with the American School of Classical Studies. Day's notes are extant, as is an excerpt that was published in the *Quarterly Bulletin Containing the Index of Literature of the American Institute of Architects*, 1910:

The American Academy in Rome has reached a place of high importance in our system of education in the fine arts. The Academy was founded at the close of the Chicago Exposition by architects, painters, and sculptors, who had made memorable its buildings and decorations. Deeply impressed by the unity of their arts and by the failure of our education system to coordinate them, they determined to found in Rome where such unity finds its highest expression, an

^{138.} Day, notes from lecture on American Academy in Rome.

^{139.} Frank Miles Day, Report of visit to Rome, 20 March, 1910, *Annals of the American Academy in Rome*. Quoted in Irma B. Jaffe, *The Italian Presence in American Art, 1860-1920* (New York: Fordham University Press, 1992), 228 n. 6.

academy in which Americans might enjoy opportunities for advanced study equal to those of any other nation." ¹⁴⁰

In Day's notes on a lecture about the American Academy in Rome, possibly the same talk, given in 1911, he asserted, "Europe remains and will remain the world's treasury of art ... no substitute will do." Because it was the ultimate source, the culture of Europe was to be studied and copied. Day cited "The Duty of Imitation" by Brander Matthews, a professor of literature at Columbia University, who had quoted, among others, Charles Gounod regarding the need to learn from earlier composers: "You must imitate not one but all of them. You can become a master yourself only on condition that you are akin to the best." Similarly, Matthews had quoted Leonardo da Vinci: "He who forms his style on but one single master will be the nephew rather than the child of art." Europe, with its plethora of styles and its canon of highly-regarded monuments, would allow the student to relate to a wide range of visual experiences.

Day went on to state that the artist "must drink in many things before he can give out one and not the least important among the things that he must drink in is a knowledge of what other artists of his kind, indeed of all kinds, have done." ¹⁴⁴ Day continued in the same vein: those who did not imitate the masters would never know their own limits, unschooled originality was folly, and those who eschewed the practice of study abroad

^{140.} Day, lecture on the American Academy in Rome, quoted in *Quarterly Bulletin Containing an Index of Literature from the American Institute of Architects, April 1910.* Washington, DC, 1910, 258.

^{141.} Frank Miles Day, notes from lecture on the American Academy in Rome, Frank Miles Day Collection, 059.91, Architectural Archives, University of Pennsylvania.

^{142.} Day, notes from lecture on the American Academy in Rome.

^{143.} Day, notes from lecture on the American Academy in Rome.

^{144.} Day, notes from lecture on the American Academy in Rome.

were unfit to practice architecture. In a thinly-veiled reference to Frank Furness, the Philadelphia architect whose highly personal style had left its mark on the city in which Day came of age, Day's tone was particularly strident:

A prominent architectural charlatan, whose baneful influence has for twenty years kept a blight upon the architecture of his city, started with the proposition that travel for study was a fallacy, was indeed to be carefully avoided as hampering originality. So consistently has he followed such ideas that to-day, he is so much alone that no one, holding fast the things which are best, comes to him with any sympathy. ¹⁴⁵

As far as Day was concerned, Furness's chief sin was his failure to refine his skills through personal contact with European buildings. In Day's estimation, Furness had stunted his creative growth by depending too much on his own resources, and, perhaps, on the second-hand experience gained from his association with the well-traveled Richard Morris Hunt. Day had always believed in study abroad, but the Academy made the practice a more or less official part of an architect's training, providing a somewhat more structured framework for the American student's stay in the Eternal City.

The establishment of an American Academy, similar to institutions of other Europeans in Rome, also lent the United States a certain prestige and equality with its older counterparts. America was a new nation, and even more than Germany, France, and England, it was seeking an identity in the antiquity of Rome and a link to its artistic legacy. Day's dedication to the Academy, his insistence on the professionalism of the American architect, and his own buildings stand as the legacy of his lifelong belief in knowing buildings "as facts and not as shadows."

With Day's death in 1918 came accolades from many people who respected and admired him. One was a memorial from the American Academy in Rome, signed by

^{145.} Day, notes from lecture on the American Academy in Rome.

Charles Follen McKim. Another was a remembrance in the American Institute of Architects Journal. The latter disparaged the unnamed Furness ("the work of many [Philadelphia architects] was unhappily marred by an unrestrained individualism") but it praised the present lions of the profession, especially Day:

Each had the genuine sense of architecture and was possessed of rare artistic gifts and all had traveled abroad and gained that knowledge of the principles and masterpieces of their art which through its discipline and inspiration guides and stimulates the creative impulse of the true architect ... to this result Mr. Day's contribution was vital. The consistently high level maintained by the work of his office shows always the influence of his qualities: a fine enthusiasm and love of study, grasp of the essentials of a problem and insight into the essence of style and character; erudition combined with a facility for finding fresh and novel modes of treatment and, perhaps above all, the critical faculty guided by a supremely true taste. 146

^{146.} Andrew Fleming West, "Frank Miles Day: A Remembrance" *Journal of the American Institute of Architects* 6 (1918): 385. Quoted in the biography by Sandra Tatman, American Architects and Buildings database.

CHAPTER II

AT HOME WITH THE DOMESTIC: THE TRAVEL NOTES AND SKETCHES OF ELEANOR MANNING O'CONNOR

The travels and career of Eleanor Manning (Figure 2.1) reflect the complex and often contradictory status of female architects in the early decades of the twentieth century. On the one hand, Manning was undoubtedly part of an elite group, one to which few people, women or men, could aspire. On the other, her own aspirations must have been, to some degree, circumscribed by gender expectations. The emphasis on domestic buildings during her first trip abroad in 1912 indicates that either by inclination or expectation, she seemed destined to become a builder of houses and housing. By contrast, the watercolors made during the 1930s, when she was well established (and, perhaps significantly for the time, married) reveal a new artistic freedom not evident in her earlier sketches.

Education and Early Career

Born in 1884 and raised in Lynn, Massachusetts, Manning claimed she had always wanted to be an architect.¹⁴⁷ Her father was a successful contractor, so it is not surprising that she felt comfortable in the world of buildings and builders. Having grown up in a well-to-do family, she was well educated, and was admitted to the prestigious Massachusetts Institute of Technology, which boasted one of the few American architectural programs that admitted women at the time. Two years after graduating in 1906, she went to work in the Boston office of another MIT alumna, Lois Lilley Howe (1864-1964). In 1912, Manning left for Europe with her friend Eliza J. Newkirk, but

^{147.} Doris Cole and Karen Cord Taylor, *The Lady Architects: Lois Lilley Howe, Eleanor Manning and Mary Almy, 1893-1937* (New York: Midmarch Arts Press, 1996), 3.

returned early in 1913 when Howe offered her a partnership. A third partner, Mary Almy (1883-1953), entered the firm in 1926. Howe, Manning & Almy remained in business until Howe, the eldest of the group by two decades, retired in 1937. Howe, Manning & Almy was best known for its domestic architecture, and nearly 500 projects, mostly for family houses, came from their drawing boards.

This chapter focuses on Manning, although Howe was already enjoying a distinguished career before hiring the younger women, and Mary Almy was accomplished in her own right. Howe had graduated from MIT in 1890, and received her first commission for a house in 1894. By 1900, when she set up her own practice, she had taken second place in the competition for the Women's Building at the World's Columbian Exposition, losing out to her fellow MIT alumna, Sophia Hayden Bennett. Howe used her prize money to travel to Europe; Manning's own decision to travel may have been inspired by Howe's example. Howe was one of the first women elected to the American Institute of Architects and the Boston Society of Architects, and she was the first woman named a fellow of the AIA. Almy had handled the business affairs of the firm, and when the partnership was dissolved, she practiced for a time with the landscape architect Henrietta Pope before opening an office out of her home. She devoted most of her time, however, to civic affairs in the Boston area, working for the Red Cross and later serving as social secretary to the wife of the governor. 149

148. Cole and Taylor. The Lady Architects, 4.

^{149.} Mary Jane McCavitt, *Guide to the Records of Howe, Manning & Almy, Inc. and the Papers of Howe, Manning O'Connor, and Almy*, MC .009, MIT Institute Archives & Special Collections, Massachusetts Institute of Technology, Cambridge, MA.

Despite the achievements of her partners, however, Manning makes the most viable subject for this particular study. First, the quality and quantity of Manning's travel sketches – as well as the places she chose to visit – provide a clue to her own interests, and very likely, to those of Lois Lilley Howe, her one-time employer and future partner. In addition, Manning's copious travel notes reflect the interest in housing and planning that would become hallmarks of her career; this, too, may have been encouraged by Howe's own dedication to those concerns. Finally, the period between Manning's years at MIT and her death in 1973 corresponds to major developments in the education and status of women in architecture and society. These issues warrant an examination of the role of women in the United States during the early decades of the twentieth century.

The position of women at that time (the Nineteenth Amendment, guaranteeing women the right to vote in America, was not passed until 1929) may have been partially responsible for the dearth of major commissions won by female architects; their scant numbers made it even less likely that their work would receive equal consideration with that of their more numerous male counterparts. Manning surely would have faced ambivalent attitudes toward women architects: only a decade before she entered MIT, the *American Architect and Building News* had written a scathing critique of Sophia Hayden's Women's Building at the World's Columbian Exposition in Chicago, calling it "weak and commonplace," with a roof garden that was "a hen-coop for petticoated hens, young and old." ¹⁵⁰ Even a New York Times article, praising both the building and the woman-made handiwork which it contained, failed to mention Hayden's name. ¹⁵¹ Such

^{150.} American Architect and Building News XXXVIII, no. 883 (November 26, 1892): 134.

^{151. &}quot;What the Women Have Done: An Exhibition of Which the Sex May Well be Proud.." New York Times (1857-1922), April 30, 1893, http://www.proquest.com.proxy.libraries.rutgers.edu/. The author

disparaging attitudes were not uncommon, and Manning's career would almost certainly have been affected by the confluence of circumstances that would have both positive and negative effects on women in architecture.

The American Institute of Architects had been founded in 1857, providing the profession with a more elevated status. MIT, the first collegiate school of architecture in America, was founded less than a decade later, thus marking an important transition in the field, in the words of Mary Woods, "from craft to profession." However, Elizabeth Grossman and Lisa Reitzes have pointed out that although this atmosphere created more opportunities for women, it also served to limit them, mainly because of the AIA's increasing desire to differentiate architects from builders; the AIA redefined the architect as a "gentleman," with qualities that were peculiar to men. 153 In the event, there were, despite MIT's advanced position, very few women studying architecture; in 1906, the year of Manning's graduation, only six women enrolled at MIT, and very few jobs were open to them when they completed their education. As late as 2000, Elizabeth Birmingham pointed out that women are still underrepresented in the field. 154 They were certainly rare when Manning enrolled in MIT's program.

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listed various handcrafts and their makers, but omitted the name of the architect who had designed the building in which the objects were displayed.

^{152.} Woods, From Craft to Profession: The Practice of Architecture in Nineteenth-Century America. (Berkeley, California: University of California Press, 1999).

^{153.} Elizabeth G. Grossman and Lisa B. Reitzes, "Caught in the Crossfire: Women and Architectural Education, 1880-1910." In Ellen Perry Berkeley, ed., *Architecture: A Place for Women* (Washington, DC: Smithsonian Institution Press, 1989), 27-40. See in particular pages 28 and 29, in which the authors assert that the AIA had "constructed a circular definition (of an architect) that links career achievement with masculine attributes."

^{154.} Elizabeth Birmingham, "Policing the Architectural Canon." In Frederick J. Antczak, Cinda Coggins, and Geoffrey D. Klinger, eds., *Professing Rhetoric: Selected Papers from the 2000 Rhetoric Society of America Conference* (Mahwah, NJ, 2008),100. Birmingham stated that at the time, "Women are almost entirely absent from all areas of the discipline," comprising a small percentage of tenured faculty,

Yet those few women who were admitted to MIT had the opportunity to study with such distinguished professors as Constant-Désiré Despradelle, from whom they learned the Beaux-Arts tradition, and another Beaux-Arts graduate, Guy Lowell, architect of the Boston Museum of Fine Arts, proponent of landscape design, and author of *American Gardens* (1902), *Smaller Italian Villas and Farmhouses* (1916), and *More Small Italian Villas and Farmhouses* (1920). Lowell's presence at MIT during Manning's student years may be especially significant, although a connection between the professor and the student has not been fully explored. In 1902, Lowell founded MIT's school of landscape design, a venture that would last only nine years; this would overlap with Manning's tenure as a student, although it is uncertain whether, or to what extent, she participated. That program, recently studied by Eran Ben-Joseph, Holly Ben-Joseph, and Anne C. Dodge, was coeducational; but Lowell thought that the field of landscape design was ideal for women, and the school produced several notable female landscape architects, including Rose Standish Nichols, Marion C. Coffin, and Mabel K. Babcock.

Lowell's writings indicate that he believed in a woman's innate talent for the field, but his praise for this ability was tempered with a veiled criticism of her limitations:

A woman will fuss with a garden in a way that no man will ever have the patience to do. If necessary, she will sit on a camp stool and see every individual plant put into the ground. I have no hesitation in saying that where a relatively *small* garden is concerned, the average woman will do better than the average man." ¹⁵⁶

practitioners, and subjects of architectural history.

^{155.} The Lowthorpe School of Landscape Architecture, Gardening, and Horticulture in Groton, an institution designed exclusively for women, was founded a year later and lasted until 1942. For more information, see Thaisa Way, "Women as a Force in Landscape Architecture, 1893-1942," PhD dissertation, Cornell University, 2005.

^{156.} Manning did not become a landscape architect, per se, but she did observe gardens and garden cities in Europe, and she wrote about the importance of landscapes throughout her career.

Lowell, then, implies that although women have more patience and considerable diligence, landscaping is a lesser art, requiring less expertise in construction than architecture. And even then, small landscape projects were best for women. Manning may or may not have been a student of Lowell's landscape program; however, the fact that she maintained her interest in gardens and garden cities throughout her life suggests his influence. In 1939, at a lecture before the Department of Education, she spoke of French gardens, their connections with buildings, and the lessons to be learned from them. In her notes for the lecture, she wrote:

One may have any one of several points of view in looking at a garden. Mine is an architect's viewpoint. A. The house as architecture; B. the garden – extension of the house; C. the land as providing a place for outdoor living; D. Architectural form in the garden. French gardens primarily architectural... The relation of house and garden must be close – with easy access in harmony with house plan... the type of garden and the land must be sympathetic; its contours must be in harmony with the house design ... 157

Earlier, she had presented a lecture on the problems of housing at Simmons College, praising the European models of garden cities, and the foresight of those who created them:

The English began to realize this twenty years ago and started the first Garden City at Letchworth which has been a success sufficient to have had others started on the same basis. The Germans before the war were already at work on the question. 158

Even more pronounced than the promotion of landscape architecture as a feminine pursuit was the longstanding notion that women were well suited to designing houses. In 1876, the architect and landscape designer Calvert Vaux had remarked that,

^{157.} Eleanor Manning, notes for lecture presented at the Department of Education, 1939. Papers of Howe, Manning & Almy, MC9, Folder 880, MIT Institute Archives & Special Collections.

^{158.} Eleanor Manning, manuscript of a lecture given at Simmons College. Papers of Howe, Manning & Almy, MC9, Folder 882, MIT Institute Archives & Special Collections.

"There is no doubt that the study of domestic architecture is well-suited to a feminine taste and that it has, moreover, so many ramifications, that it affords frequent opportunities for turning good opportunities to profitable account." And as late as 1905, Manning's fellow Bostonian Josephine Wright Chapman, a successful designer of public buildings including the New England Building at the Buffalo Pan-American Exposition of 1901 despite her lack of formal training, switched to domestic architecture, claiming that "A woman's work is to design houses." 160

Catherine Zipf has also written of the role of women in the American Arts & Crafts movement, stating that it offered "alternative routes to the profession" of architecture. But while female architects enjoyed greater support and prestige in the Arts & Crafts movement, the projects on which they worked were smaller and tended to be domestic.

Surely, Manning was aware of such distrust of women's abilities, and this awareness may well have determined her path. It is likely that her attraction to public housing and planned communities may have been due to her own concern for the public good, and this interest may well have been encouraged early in her life. Whatever her motives, Manning must have known that she would face certain obstacles. Regardless of

^{159.} Calvert Vaux, *Villas and Cottages*. New York, 1857, 236. Quoted in Spiro Kostof, *Architecture: Chapters in the History of the Profession*. New York, 1987, 282.

^{160.} Spiro Kostof, *The Architect: Chapters in the History of the Profession* (New York: Oxford University Press 1977), 290. For more of the difficulties faced by women in the profession, see also Sarah Allaback, *The First American Women Architects* (Chicago: University of Illinois, 2008).

^{161.} Catherine Zipf, *Professional Pursuits: Women and theAmerican Arts and Crafts Movement* (Knoxville: University of Tennessee Press, 2007), 29.

the barriers, in 1908, the young Manning found employment with Howe, who was already building a reputation as a builder of houses.¹⁶²

First Travels, 1912-1913

After four years with Howe, Manning went abroad, visiting many of the usual spots along the Grand Tour. Like the others who had taken part in that tradition, Manning saw, drew, and wrote about the houses and churches of England, France, and Italy. She would make very different sketches during her European tour in the 1930s; these will be examined later in this chapter. But it was her early sketches that presaged her career as a designer of domestic spaces.

For American architects, these sojourns abroad were *de rigueur* and rigorous. To see was to know; to copy was to train one's eye and hand for future creation. And before the United States had its own academic programs in architecture, going to Europe was considered, by many, to be an important part of the architect's education.

The significance of travel was explained by Frank Miles Day, an architect who was still active when Manning went to England and the Continent for the first time (see Chapter 1). An early proponent and trustee of the American Academy in Rome, Day asserted that it was not enough for a student of architecture to be surrounded by books, drawings, and photographs; those were [quote] "merely shadows cast by outward things ... if we are to achieve great things we must know them as great things and grasp them as facts and not as shadows." Those great things were, Day insisted, all in Europe, and they had to be copied in order for the architect to learn. In fact, to copy was the first step in

^{162.} Sarah Allaback. *The First American Women Architects* (Chicago: University of Illinois Press, 2008), 204. Allenback recounts the story of Lois Lilley Howe's acceptance as a Fellow in the American Institute of Architects (204). It seemed that the architect C.H. Blackhall claimed that Howe's nomination was accepted because other members thought that Lois was a man's name. Howe championed the cause of other women in the field.

learning how to make any sort of art. To Day, as to the many who went and continue to go abroad, this understanding of human heritage required material presence, a sensory experience of actual brick, stone, and mortar. Drawing remained essential, even after photography became commonplace; a photograph did not require, or enhance, the skill that only came with eye-hand coordination. One trained her or his hand to design by measuring and drawing the canonical masterpieces. As the naturalist Louis Agassiz had stated, "the pencil is the best of eyes." The hand taught the eye to see, the eye taught the mind to remember, the mind taught the hand to design. Thus, young American architects and students filled copious notebooks with drawings and watercolors of buildings, townscapes, and figures in Europe and the Middle East. While Italy was the most popular destination, France, Germany, and England were also part of the usual tour. Great buildings and classical ruins were common subjects.

Like Frank Miles Day, Manning visited the Continent. But while many countries are well represented in Day's sketches, Manning concentrated on England, where her focus was on the vernacular, in particular the domestic structures of small towns and the countryside. In this, her tastes mirrored those of earlier British travelers in England, such as the late eighteenth-century proponent of the picturesque, William Gilpin. Her drawings reveal a penchant for the cottage, inn, and almshouse -- those charming, if often humble, structures, of which the Colonial and nineteenth-century houses of New England were the progeny. If Manning went to Europe in search of the past, she also found the

^{163.} Quoted in Lane Cooper, *Louis Agassiz as a Teacher: Illustrative Extracts on His Method of Instruction* (Ithaca, New York: Comstock Publishing, 1917), 43. According to a well-known story about Agassiz, he suggested that a student draw a fish as a means of observation. It was through the drawing that the student discovered that the fish had no eyelids.

^{164.} For more on the picturesque movement, see David Watkin, *The English Vision* (New York: Harper & Row, 1982).

source of the architecture that surrounded her at home. The preference for England was perhaps part of being a New Englander. Architectural historian Maureen Meister has pointed out that Herbert Langford Warren, founder of the neighboring architectural program at Harvard, considered the classical architecture of Italy, even that of Palladio and Vignola, to be inferior to that of Christopher Wren and Inigo Jones. Furthermore, according to Warren, classicism was inferior to the Gothic: Meister quotes Warren: "Give me a northern cathedral any day, with its cliff-like walls and its peaks rising high in the air." A similar Ruskinian bias is evident in Manning's drawings and notes.

Manning's pencil sketches, as well as copious and detailed notes on buildings and towns (Figure 2.2), were recorded on small loose leaf pages, approximately 8' x 5", not presently attached to bindings. In her drawings, she displayed her talent for drafting, as well as her preference for the homey, remote dwellings that Reginald Blomfield, in 1897, had celebrated as "buildings that represent the continuous building tradition of the country," i.e., those that represented the native style unaffected by foreign influences. ¹⁶⁶

Eleanor Manning's English sketches include a number of inns, possibly because they provided the picturesque appearance she valued, as well as a welcoming quality that would be useful in her own work. Having spent several years in Lois Howe's office, she was certainly aware of the kinds of commissions that she could count on. Only Manning's labels indicate that these buildings are places of lodging; she has not included the signs, which would have made them less obvious models for suburban houses.

^{165.} Maureen Meister. Architecture and the Arts and Crafts Movement in Boston: Harvard's H. Lanford Warren. Lebanon, New Hampshire: University Press of New England, 2003), 21.

^{166.} Reginald Blomfield, *A History of Renaissance Architecture in England, 1500-1800*, Volume 1 (London: George Bell & Sons, 1897), 2. Blomfield discusses the adaptation of Italian and German classicism by the British from the sixteenth century until the diminution of its influence and the persistence of the native Gothic style, especially in vernacular architecture of more remote areas of England.

On August 30, when Manning drew the Eagle & Child Inn in Alderley Edge, Cheshire (Figure 2.3), she selected a vantage point that enabled her to illustrate certain features she found interesting. Even her choice of this particular inn — with its irregular massing that reflected the multi-use plan of the structure as well as its various phases of construction — was significant: it probably seemed to be ideal for a modern American family engaged in multiple activities. The angle she chose permitted her to show this feature and her own creativity to great advantage. She emphasized, for example, the curvature of the sloping roof on either side of the entrance by means of a change in the patterning of the hatch marks between the left end and the central pavilion, and with a minute curved line at the point where the pavilion meets the projecting end of the building.

Manning's drawing of Ye Old Black Bear Inn (Figure 2.4) in Tewkesbury, Gloucestershire, again illustrates the architect's penchant for picturesque vernacular buildings. Here, Manning faithfully delineated the timbers, windows, and doors, but, as can be seen in an anonymous photograph roughly contemporary with the sketch (Figure 2.5), Manning took liberties with the perspective. The building sits on a corner and Manning shows the two façades equally; she even presents the house next to the short side of the inn in some detail, including the ivy that separates the stories. It is as if she unfolded the building for the viewer. In addition, she minimized the chimney on the long end. Here, one can see the advantage of drawing over photography: Manning was not restricted to one viewing point was free to walk around the building, depicting the massing and proportions at will.

Why Manning found the Bear & Billet Inn in Chester (Figure 2.6) so interesting is clear from her drawing. The entire surface of the otherwise simple, gabled façade is covered with patterning, both in glass and timber, and she renders them in exacting detail. Her notation on the building indicates that she believed the popular lore that it was originally a seventeenth-century dwelling ("Bear and Billet [see sketch and postal]. Date 1664 A.D. Built by Shrewsbury Family"), thereby making the connection between the idea of the comforting inn and the comfortable home. She drew only the front elevation, since the building was, and remains, flanked by other structures, and only part of the timbered elevation on the drawing's left side is visible from the street (Figure 2.7). That, in any event, appears rather summarily done, and the building as it stood by the time of Manning's visit may have been the work of an overzealous restorer. Still, the Bear & Billet is rich in the sort of detail that the Shrewsbury family's money could have afforded. Manning's drawing shows the half-timbered gable, topped by a finial and framed by patterned black wood. An elaborate frame outlines the entire façade. Beneath the gable is a row of twelve squares, each containing a cross pattern and separated by projecting brackets. Below are four bays of double-stacked windows, eight in each bay. The lights are leaded, and the windows are separated by heavy wood mullions. Each bay is punctuated by a mullion that projects downward to the next register, a sort of blind arcade resting atop a patterned timber course. Beneath is another row of double-stacked leaded glass windows, one of which is shown as open. The ground floor is relatively plain. Manning rendered this building accurately. According to a recent photograph (Figure 2.8), the chief difference between her drawing and the building as it now stands is the presence of six other windows within the gable.

Another of the many vernacular buildings that drew Manning's attention was a house in White Friars Street, Chester (Figure 2.9). In this image, dated August 23, 1912, Manning presented the double-gabled structure at an angle in order to illustrate the half-timbering on the side of the overhanging second story and to emphasize the building's predominance over its neighbors. The gable farther in the distance, actually the same size, appears smaller and seems to recede slightly, as it might appear to a pedestrian. Manning included the curving cobblestone street and the narrow sidewalk, as if capturing the experience of approach. A current photograph (Figure 2.10) indicates that the house stands out from its plainer neighbors. In fact, there is more half-timbering on the side than Manning has indicated here. She was, without depicting the rest of the buildings on the small street, communicating the prominence of those features she found interesting. While there is no shortage of such buildings in the town, the presence of this pair may have served as better models than a row of similar structures elsewhere in Chester (Figure 2.11).

The motif of adjacent gables also appears in Manning's drawing of the almshouses of Corsham (Figure 2.12), dated September 23, 1912. In this sketch, Manning illustrated a long building articulated by a trio of gabled dormers. This was evidently an attempt to lend a more domestic appearance to an institutional building by making it resemble a series of joined cottages rather than one massive structure. Manning's attention to this building is significant: she preferred the human scale to the monumental, and perhaps recognized the builder's creative handling of the mass. She certainly learned from this example, using front-facing gables at each end of an Army/Navy canteen she designed on the Boston Common in 1918 (Figure 2.13). Doris Cole and Karen Cord

Taylor have remarked about the canteen's "homey look." In 1929, Manning and Almy again employed this approach on the main façade of their houses at the planned community of Denny Place (Figure 2.14).

Manning's notes are indicative of her early interest in town planning as well as in individual buildings. Here, she described Chester:

The characteristic façade is usually gabled on the street with one or more gables and an overhang for each story – the timbering in most cases shows the construction and is mortised and pegged – the pegs left projected. The plaster is smooth and whitewashed and brought out flush with the face of the timber, which is painted to preserve it. .. In addition to the functional timbers some timbers were added for ornamentation. The barge board is usually heavy, sometimes with feet carving. Often with pierced design, seldom plain. In most cases there is an effect of "kick" at the eaves brought by thickening the tiles at the point. The barge board is straight in all cases. The horizontal members are usually thicker in the center of the gable – the upper line rises. ¹⁶⁸

This attention to planning is also evident in her notes on Cheshire: "Plan of city. Still bears distinctive features of Roman campo shown in oblong park surrounded by wall – two main streets at right angles (see Baedekers)." ¹⁶⁹

She was especially drawn to company towns and other philanthropic communities, such as Port Sunlight, the village built by Lever Brothers, the soap manufacturers, near Liverpool (Figure 2.15). The paternalistic attitude of the company toward its employees evidently did not faze Manning; in fact, given her later efforts and her lectures on public welfare and planned towns, it is likely that she viewed Lever Brothers's efforts as beneficent rather than intrusive. She took very extensive notes on

^{167.} Cole and Cord Taylor, 99.

^{168.} Notes and sketches from European trip, one of four. Papers of Howe, Manning & Almy, MC9, Box 16, Folder 730, MIT Institute Archives & Special Collections.

^{169.} Notes and sketches from European trip.

Port Sunlight, ¹⁷⁰ apparently in order to use it as a model for her own work. Manning found much to admire there. She remarked on the variety of chimneys and roofs, which would have lent a picturesque quality to the place. She remarked on the community's accessibility to public transportation, its value as a prosperity-sharing scheme, and the affordable prices of its dwellings. She also noted its site plan, complete with central public amenities, and a combination of private and shared gardens.

Similarly, Manning wrote of Hampstead Suburb, which housed residents with a range of incomes. She was particularly struck by the idea of variety within unity: "The houses show quite a range of styles and materials—but there is enough uniformity to make a harmonious whole." What Manning found admirable was the idea that a cohesive plan could unify different classes for the betterment of all.

While she emphasized the vernacular, Manning did not ignore England's great houses, especially those with the picturesque features she liked. On September 15, she visited Highnam Court in Gloucester (Figure 2.16). Although the façade is symmetrical, its central section is flanked by projecting, hip-roofed pavilions. It is significant that Manning drew this large dwelling in miniature, as though she envisioned it on a leafy street in Cambridge, Massachusetts. On the following day, Manning found herself at Southam Delabere (Figure 2.17), where she drew the estate's plethora of gables, crenellated towers, jumbled massing, leaded glass windows, and Gothic-style tracery.

Manning also observed interior features. On August 26, she made measured drawings of balusters at Old Stanley Palace in Chester, including a section of the rail

^{170.} See appendix B.

^{171.} Box 16, Folder 730, Papers of Howe, Manning & Almy, MC9, MIT Institute Archives & Special Collections.

(Figure 2.18). It is interesting to note that she did not draw the stairs; she listed their measurements on the same sheet: "Stairs: Tread 10"; Riser, 7", 8", 9". Lowest tread 16" Rail 4" wide 5" deep. Note: Against Newel is a half post [baluster]." A few weeks later, Manning sketched doorway and ceiling details in the Commandery House in Worcester (Figure 2.19). The top half of this leaf features a doorway with a heavily fluted frame; Manning dew the plan of the frame attached to its bottom instead of illustrating it separately; it appears that she wanted to recall the dimensionality of this particular element.

Late in 1912, Manning crossed the English Channel, and just as she seemed to recognize the origins of American architecture in the Motherland, she detected connections between the French and the American as well. ¹⁷³ As was the case with England, the vernacular was her focus in France, although she visited some of the more imposing *hôtels particuliers*. She also, despite her preference for the medieval, paid some attention to French classicism.

In Paris, Manning drew the Musée Carnavalet (Figure 2.20), one of the few public monuments to have caught her eye. This landmark, comprising two former private houses, appears on a folio dated December 12, 1912. The sheet is divided into two registers: the top illustrates the main pavilion of the garden façade; the lower half, the street façade. In these drawings, Manning underscored the robustness of the form and the delicacy of the details. Given her fondness for picturesque roof lines, she may have

^{172.} Papers of Howe, Manning and Almy, MC9, Box 16, Folder 731. Papers of Howe, Manning MIT Institute Archives & Special Collections.

^{173.} Maureen Meister has made a similar observation regarding H. Langford Warren's impressions of France and England. See Meister, 18-20.

recognized in the Mansard roofs an alternative to the gables she saw in England. The roof of the garden pavilion is almost double-hipped, due to the slight curvature at the top. The slopes curve inward as well. The individually-roofed pavilions of the street façade must have seemed attractive to her as well, which may explain the heavy outlines.

It is, however, her deftness at drawing, the gentle but firm touch of her pencil, that is most remarkable. In both elevations, Manning's style is delicate in a manner befitting the former home of Madame de Sévigné, one of the legendary epistolarians of seventeenth-century France, but with the confident strokes that reflect her facility as a draftsman. Manning drew the pavilion straight on, as though it were marching toward her. This is perhaps not the most salient feature of the façade, but clearly the one that caught Manning's notice. She did not include the balustraded arcades that actually flank the structure. Manning indicated the dimensionality of dormer in an almost Cubist manner: she illustrated the left side of the window by extending the volute so that it seems to be entirely visible from that angle. Similarly, she indicated the difference between the columns and the pillars on the right side of the ground level by providing the bases of the latter with a side view that betrays its angularity. The Doric order is carefully rendered, but the triglyphs and metopes are lightly drawn in comparison to the characteristically French roof, windows, and ornaments, as if to state Manning's realization that the French had subsumed classicism and not the other way around. This quality is evident in the street façade elevation, in which the prominent voussoirs are subservient to the fenestration and overall massing. In addition, it can be surmised that here, as in England, volume and mass were of greater interest to Manning than ornamental details.

A month later, Manning traveled to the Loire Valley, where she visited Azey-le-Rideau and Chenonceaux. Of the former, she wrote:

Exterior. Interesting in composition. Main feature of the east façade, the double doorway motive in center of entire composition but out of the wall ... central feature – a double motive with two round arched doorways on the ground level ... two stories of two three-centered arched windows above and a double dormer with round arches and an elaborate pediment. The most notable points of design in the composition are first: the gradation of the amount of relief in the friezes and the lowest relief nearest the eyes; second: the way in which the central feature is tied with the rest of the façade ... ¹⁷⁴

In January of 1913, Manning visited Chartres, but she did not dwell on the mighty west towers or the buttresses of the Cathedral of Nôtre Dame; what drew her notice was the sixteenth-century clock tower on the north flank (Figure 2.21) of the church. She described the tower in her notes:

Attached to the north side of the cathedral stands the Renaissance clock tower – a gem of this style of architecture. It is built of stone warm buff in tone – close joint. All the decoration is confined to the upper part. The first story being plain ... the color is charming – the spandrels around the clock have red background and the rim of the clock is also red – the letters and rays of the clock are gold and the moulding enclosing the spandrel was a dull green. Roof tiles are weathered a nice soft green. 175

Manning was attracted by the details and the polychromy of the tower. The "charming" explosion of colors against the *grisaille* façade of the church may have drawn her attention. Perhaps it was also the tower's structural incongruity that drew her attention, or the quirky, off-center placement of the dial. Most notably, despite its squat proportions and its location – too close to the north wall to punctuate the skyline – Manning cast the tower as a freestanding element. Even at the great church, Manning preferred intimate

^{174.} Papers of Howe, Manning and Almy, MC9, Box 16, Folder 732. MIT Institute Archives & Special Collections.

^{175.} Papers of Howe, Manning and Almy, MC9, Box 16, Folder 731, MIT Institute Archives & Special Collections.

scale over monumentality. In a recent photograph (Figure 2.22), the tower's roof is lost among the housetops of the town; one wonders whether Manning may have, at some point on her journey, observed it from a taller building, thus seeing it as part of the urban fabric rather than part of the church.

Manning also made notes on interior details of the cathedral at Chartres.

Surprisingly, she did not comment on the windows, but rather on the lacy choir screen.

On one of her small pages, she wrote:

Renaissance screen in ambulatory of Cathedral. By Jean Texier. 1514-1529 and finished two centuries later – (he also designed the North tower). It is made of stone of delicate renaissance and flamboyant gothic [sic] combined. The fine renaissance work forms a high dado with figures in the round under a flamboyant canopy. This base is composed of two parts, the upper divided into panels by mullion-like divisions This base is composed of two parts the upper divided into panels by million like divisions ... Pilasters of exquisite design and great delicacy of carving. ¹⁷⁶

Again, the lofty vaults and dazzling windows were of less interest to her than the details of a more human scale. Here, perhaps she felt closer to the hand of the stone cutter.

During the same month, Manning visited the medieval town of Chinon (Figure 2.23), which she presented as a narrow lane terminating in a turreted house. The drawing takes up only a little over one-half of the page: it is compressed into the center of the folio, as though Manning strove to emphasize the intimate, even claustrophobic, scale of the street. Only a house with a ground floor shop is rendered in any detail. The rest – the gabled house along the way, the tower in the distance – are merely hinted at with a few strokes of Manning's pencil. She populated this scene with figures. One, a woman in the middle of the road, has real presence and volume. She is stooped over by age and by the

^{176.} Papers of Howe, Manning and Almy, MC9, Box 16, Folder 732, MIT Institute Archives & Special Collections.

weight of the bundle she carries. This figure leads the viewer through the picture toward the elements that Manning wished to emphasize. The figure's posture suggests that this is not a smoothly-paved surface. The other figures, one sticklike and shadowy, animate the composition and suggest that this is not Madame de Sévigné's neighborhood. It was, however, worthy of Manning's attention, as an architect, as an artist, and as a future designer of towns.

Back in Boston: Manning's Partnership with Lois Howe

Once she returned to Boston, Eleanor Manning continued her work as a partner in Lois Howe's firm. While private houses comprised the majority of their commissions, the two architects received praise for their involvement with two innovative planned communities. In 1924, before Almy joined the office, the partnership of Howe and Manning was among a group of 26 architectural firms chosen to design dwellings for Denny Place in Mariemont, Ohio (Figure 2.24). Inspired by the English Garden cities that had made such an impression on Manning during her travels, Denny Place was a 420-acre planned town for moderate-income residents. Fifty acres were set aside for a park. Howe and Manning designed seven houses for the development. Denny Place reflected the ideals to which Manning was committed. In her notes for a lecture at a Boys Club Dinner, she wrote that the development at Mariemont "was planned as a vertical cross section of society. With thought for harmony of architecture, types of houses were set for different postions [sic] of the development ..." She encouraged Bostonians to learn from the example of the English projects she had seen: "even if grown-ups do not

^{177.} Eleanor Manning, "What is Architecture?" Lecture at Boys Club Dinner, Boston, n.d. Papers of Howe, Manning and Almy, MC9, Folder 879, MIT Institute Archives & Special Collections.

respond to improved housing the children do – for the sake of the youth of the city let us go ahead with the improved environment."¹⁷⁸

More than ten years after the commission for Denny Place, Manning would be one of the "Seventeen Associated Architects" to design Old Harbor Village in South Boston, possibly the first public housing in the city. 179 She wrote and lectured on the subject of public housing and garden cities throughout her career. Manning also began teaching at Simmons College, becoming part of the school's community for nearly half a century. The firm of Howe, Manning & Almy designed a few commercial buildings but continued to specialize in houses.

Travels, 1930s

In 1929, Eleanor Manning married Johnson O'Connor (Figure 2.25), and in the 1930's, the two embarked on another tour of Europe, primarily France. It was during this excursion that Manning seems to have made more than 30 extraordinary watercolors. 180 Most are of landscapes, in which the built environment took on an abstracted character. Forms are reduced to geometric patterns in the manner of Cézanne, with a fanciful, Fauve-like use of brilliant colors (Figures 2.26, 2.27, and 2.28). These undated images invite comparisons to the work of another New Englander, Arthur Wesley Dow (Figure 2.29). One can speculate about the difference between Manning's watercolors of the 1930s and the sketches she had made two decades earlier. By the time of the later trip, Manning was already an established architect, not the fledgling draftsman she was in

^{178.} Eleanor Manning, "What is Architecture?" Lecture at Boys Club Dinner, Boston, n.d. Papers of Howe, Manning and Almy, MC9, Folder 879, MIT Institute Archives & Special Collections.

^{179.} Cole and Cord Taylor, 107.

^{180.} In an online exhibition of the watercolors, it was suggested that the watercolors may have dated from Manning's earlier travels: http://libraries.mit.edu/archives/exhibits/oconnor/index.html.

1912. Now the firm with which she had built her reputation was about to close, and one can surmise that Manning was already beginning to adjust to her new life. She may no longer have felt the urgency to study the monuments from which she had drawn inspiration for her own work. Mimesis was not the object, perspective was not an issue. Like many artists of her own, and earlier, generations, she was free to interpret shapes and colors according to a sensibility unrelated to practicality. She was, perhaps, now free to be an artist.

Career as an Educator

After the partnership was dissolved in 1937, Manning remained active as a freelance architect and teacher, continuing to lecture on such topics as public housing and gardens. She also encouraged young women to enter her field. In the article "Architecture as a Profession for Women," she argued that women had all the requisite talents needed to excel in that arena; more importantly, she stated, "Women may make good salesmen," an ability that would serve any architect well in dealing with clients. Furthermore, she said, clerical aptitude is inherent in women more than men. Eleanor Manning was nothing if not practical.

Her ideas about architectural education reflect this quality. In an article in the Simmons Review, she discussed her use of actual designs and current projects in her classes, and stressed the importance of being realistic. As she said, "You can't learn all about architecture in one class but you can learn a most important fact – that everything must be a compromise between the exuberant ideas of the untrained and the actual working possibility." Perhaps she was letting her students know that while she may have smoothed the road for other women, they would nonetheless have to work harder than their male counterparts and make certain concessions in order to succeed.

In her later years, Eleanor Manning also extolled the virtues of foreign travel, as a way to "profit by first hand study of traditional European architecture." Like Frank Miles Day, she believed that the experience of travel was an integral – and physically integrated – facet of an architect's education. She also encouraged her colleagues and fellow citizens to learn from European models of social projects. Although she did not write or lecture extensively on travel *per se*, her travel notes, drawings, and lectures attest to her recognition of the debt, owed by her world, to the one her ancestors had created. And it was a world in which she made herself very much at home.

CHAPTER III

A PHILADELPHIAN EMBEDDED IN THE WORLD: THE TRAVEL EXPERIENCES OF WILLIAM JARRETT HALLOWELL HOUGH

The travel sketches, photographs, and letters of William Jarrett Hallowell Hough (Figure 3.1) vividly portray the realities – the discoveries, joys, hardships, and, occasionally, the tedium – of study abroad during the second decade of the twentieth century. As an ensemble, the material remains of Hough's study abroad, now in the Architectural Archives of the University of Pennsylvania, provide a comprehensive look into the life of a young architect in Europe during a formative period of his life and in his country's history. Taken individually, the pieces showcase various aspects of his interests and his character. Hough's sketchbooks and drawings reveal the breadth of his interests, his skill as a draftsman, his penchant for the atmospheric, his eye for the satirical, and his experience of direct contact with the built environment. As a photographer, he appeared to be more interested in the use of film as an artistic medium than as a means of recording factual details. As a prolific correspondent, he provided information about his itinerary, his attitudes toward travel, and his impressions of the people and places he saw. These not only facilitate the tracing of his journeys, but offer insight into his attitudes toward travel and his impressions of the places he visited. As an early fellow of the American Academy in Rome, he serves an example of the European study that Frank Miles Day (see Chapter II) had recommended. Hough also left a record of everyday life in that institution and of his experiences as a foreigner in Italy just before and during World War I. Moreover, he did become a successful architect, and he worked for one of Philadelphia's most notable practitioners before starting a partnership of his own. All of these factors make Hough an excellent subject for the study of architectural training

abroad. In this chapter, I intend to chronicle his itinerary in order to shed some light on the ways in which travel informed his vision of the built environment.

Biographical Sketch

Hough spent his youth in Ambler, Pennsylvania, a suburb of Philadelphia. Born on July 19, 1888, he was educated at the University of Pennsylvania, from which he received his B.S. in 1911 and his M.S. in 1913. During his years as an undergraduate, Hough was the drawing editor at the school's *Punchbowl* magazine, a position that must have made considerable use of this talent for caricature. While still a student, he also worked for Cope & Stewardson and Frank Miles Day, two of the city's most illustrious firms. Hough won the John Stewardson Memorial Traveling Fellowship, which enabled him to take his first trip from 1911 through 1912. When he returned to the United States, Hough worked for John T. Windrim until 1914, when he won the Rome Prize, which permitted him to study at the American Academy in Rome from 1914 to 1917. He remained in Italy until 1919, working for the Red Cross in Florence. Following the war, Hough spent a brief period with the firm of Zantzinger, Borie & Medary, then went to work for his former professor from the University of Pennsylvania, Paul Philippe Cret, becoming a partner in 1923.

Following Cret's death, Hough formed the successor firm, Harbeson, Hough, Livingston, & Larson (now H2L2), with his colleagues John F. Harbeson, William Livingston, and Roy Larson; he had traveled with Larson during his years at the American Academy in Rome. In addition, Hough taught at his alma mater, and served as chairman of the department of architecture. He died in 1969.

Hough and His View of History

William J. H. Hough visited many of the same places as his one-time employer, Frank Miles Day; however, because he was educated nearly 30 years after Day, Hough's experiences, and perhaps even his expectations, must have been quite different. When Hough arrived in Europe in 1911, America was a half-century past the Civil War and on the verge of entering World War I. The nation's position as a world power was firmly established, and its cultural identity was considerably more certain than it had been when Frank Miles Day came of age during the last decades of the nineteenth century. As part of a generation born on the eve of the 1900s, Hough did not encounter the same pressures faced by his predecessors to shape an image for an emerging American aristocracy. With the seeds of modernism already bearing fruit in Europe and America, the idea of emulating the past must have seemed less desirable than it had been 30 years earlier.

In fact, given the character of his travel sketches, it is reasonable to wonder about the extent of Hough's interest in the major monuments of the Old World. A number of his drawings are landscapes, genre scenes, and caricatures; relatively few are of buildings. And many of those sketches that depict buildings seem less about the architectural details and more about the atmospheric effects. These considerations differentiate him from Day, who also drew and painted many landscapes and figures, but whose primary interest was in architecture.

Architectural trends were changing by the time Hough took his first voyage. One has only to examine a few examples of the work being produced at the time to see the new directions being taken by architects world-wide. In 1904, Frank Lloyd Wright, an

American architect whose artistic ancestry could be traced to Richard Morris Hunt¹⁸¹ – and who was famously not interested in European prototypes – had revolutionized the office environment with his Larkin Building in Buffalo, New York (Figure 3.2). In 1910, Peter Behrens designed the turbine factory for the *Allegemeine Elektricitäts-Gesellschaft* (AEG) in Berlin (Figure 3.3). At that time, such influential architects as Walter Gropius, Ludwig Mies van der Rohe, and Adolf Meyer were working in Behrens's office; Le Corbusier would join the firm the following year.

Both of the aforementioned buildings were symbols of industrial power (a soap manufacturing company and an electrical utility, respectively); industrialists, once interested in enhancing their own status by engaging major architects to design their homes, now strove to communicate the power of the companies they owned through commercial buildings. Furthermore, the styles in which the Larkin and AEG buildings were designed were harbingers of the modernist mode of classicism that would be the hallmark of Hough's future employer, Paul-Philippe Cret (Figure 3.4).

No doubt, Cret valued Hough's skill as a draftsman – one who could effectively communicate ideas to clients – a talent that is evident in drawings he made as a student at the University of Pennsylvania and the American Academy in Rome. Like his fellow architectural students, he made his share of measured drawings and finished renderings. Photographs of him at work attest to the arduous character of the practice. But for the most part, his travel sketches lack the detail and precision of Day's, not for lack of ability, but more likely because of his particular talent for conveying atmosphere. More

^{181.} Earlier in his career, Wright worked for Louis Sullivan, who in turn had once been employed by Frank Furness. Furness, as discussed in the chapter on Frank Miles Day, had trained in the atelier of Richard Morris Hunt.

often than not, his drawings express a mood; he sometimes drew or photographed at night, and often, when he did not, he still suggested a nocturnal scene. As is indicated in his writings, he was sometimes struck more by the spirit of a place than by its particulars. What he chose to record also reflects his penchant for the narrative. He drew landscapes, caricatures, and his fellow passengers in transit, suggesting his desire to impart the experience of being a stranger. Even his architectural sketches, however, suggest a romantic vision, as though he sought to convey the surprise of encounter with the unfamiliar.

First tour, 1911-13

Hough's first trip abroad was a whirlwind tour, during which he visited England, France, Belgium, Holland, Germany, Switzerland, Italy, Spain, and Tangier between July, 1911, and January, 1913.

His first letter to his mother during this trip, addressed "Mary P.H. Hough, Ambler, Montgomery County, PA" and dated July 1, 1911, was sent from the German ship *Blücker*. The letter indicates that the voyage was comfortable, with excellent food and service. He landed in Plymouth in July, then went to London before making his way to France. On July 6, he wrote from Paris, stating that he had seen Notre Dame, the Palais de Justice, and the Madeleine, but those architectural treasures seemed to pale in comparison to the catacombs ("covered with bones and skulls of dead Parisians.") 183

^{182.} William J. H. Hough to his mother, July 1, 1911, William J. H. Hough Collection, 045.001, Architectural Archives, University of Pennsylvania, Philadelphia. Hough mentions that German ocean liners were reputed to be the best. This is an interesting contrast to his next voyage, in 1914, when he mentions in a letter (045.045) that his ship was stopped by a British cruiser looking for German spies outside of New York Harbor.

^{183.} Hough to Mary Hough, July 6, 1911, William J. H. Hough Collection, 045.002, Architectural Archives, University of Pennsylvania.

On July 9, Hough wrote to his family of the sights of the French provinces. It is interesting to note that he was more interested in overall impressions than in individual buildings. Of Mont St Michel, he wrote:

... the most wonderful Village on earth – I believe. It is built on a single mont – or valley – only about 150 houses, clinging to the sides of this rock, inside the wall – they are all on different levels – following a single narrow street which twists up the steep slope to the main point of interest on top of which is the old abbaye and church. The whole town is one compact mass – just like pointed rock with barnacles clinging to it. 184

He was especially fascinated by the feast of St. Michael. "Flags and lanterns were everywhere. Priests, monks and nuns of every description and dressed in all kinds of costumes and colors roamed about in every place." He continued:

You can't picture the wonderful spectacle we saw from below on the old wall some distance off. The abbey looking up like a huge black mass and topped by the more graceful spires of the church, which was silhouetted against the sky, formed a marvellous [sic] background for the many colored lights and fancy costumes, grouped at its base. It was really like a wonderland." ¹⁸⁶

It is noteworthy that Hough described the church and abbey in such general terms; it was rather the atmosphere, the ceremony, the interaction of people, light, and space that caught his attention. For him, observation was sometimes less about the tangible than about the atmospheric. This was often the case with his drawings as well.

He then wrote of his visits to Bayeux, Caen, Lisieux, Evreux, and finally, Rouen, where he first made serious observations about architecture in his correspondence. "The

^{184.} Hough to family, July 9, 1911, William J. H. Hough Collection, 045.003, Architectural Archives ,University of Pennsylvania.

^{185.} Hough to family, July 9, 1911, William J. H. Hough Collection, 045.003, Architectural Archives ,University of Pennsylvania.

^{186.} Hough to family, William J. H. Hough Collection, 045.003, Architectural Archives of the University of Pennsylvania.

cathedral and the Palais de Justice are two fine Gothic monuments," he wrote. Hough was surprised by the mixture of styles to be found in a single edifice, and spoke about the various interventions that had taken place over time at the church of St. Ouen:

The old interior and parts of the rear 14th century exterior are really marvellous [sic]. In 1824 they had to put a new façade on it. They did and they followed the old details of the rest of the building exactly and made the whole front perfectly symmetrical. To me the front is miserable – too cut and dried. I found that the olde [sic] ruined cathedral façade with one lower half as high as the other and entirely different – with practically no symmetry, were really more interesting. ¹⁸⁸

Here, Hough argued for authenticity, asserting the value of allowing a building to show its true age and the effects of time. Unlike Eugène Viollet-le-Duc, the theorist known for his controversial restorations of medieval monuments in Vézelay, Carcassonne, and Paris, Hough seemed to prefer the less intrusive approach to the preservation of monuments. Viollet famously stated that "To restore a building is not to preserve it, to repair, or rebuilt it; it is to reinstate it in a condition of completeness which could never have existed at any given time," 189 and he believed in a sort of retrospective analysis leading to a synthesis of styles. 190 Hough's opinion is closer to that of John Ruskin, who believed that such intrusions were "more fatal to the monuments they are intended to preserve, than fire, war, or revolution" 191 and that Rouen was "more beautiful

^{187.} Hough to family, William J. H. Hough Collection, 045.003, Architectural Archives, University of Pennsylvania.

^{188.} Hough to family, 045.003. William J. H. Hough Collection, Architectural Archives of the University of Pennsylvania.

^{189.} Eugène Emmanuel Viollet-le-Duc, *On Restoration*, Charles Wethered, ed. (London: Sampson, Low, Marston, Low and Searle, 1875), 9.

^{190.} Eugène Emmanuel Viollet-le-Duc, On Restoration, Wethered, 16.

^{191.} John Ruskin, "The Opening of the Crystal Palace," pamphlet, 1854, reproduced in *On the Old Road: A Collection of Miscellaneous Essays, Pamphlets, etc.* (Sunnyside, Kent: George Allen, 1885), 355.

in the partial, though not dangerous, decay which had touched its pinnacles with pensive coloring, and softened its severe lines with unexpected fractures, like sweet breaks in distant music ..."¹⁹²

Aside from his views of preservation and restoration, Hough provided insight into the less lofty realities of travel during 1911. "I have not discovered a single six-legged inhabitants [sic] waiting for me in the bed rooms as yet. I am told that France is paradise compared with Italy and Spain in these respects. Heaven protect our Wills if he gets that far." He seemed, however, in good enough spirits despite the hardships: "I got a beautiful case of sunburnitis – only local though, in the region of the rearibus necktorium..." 194

In September, Hough, along with his fellow students Bart Register and Grant Simon, ventured to Switzerland, where they climbed Monte Rosa. Of that experience, he wrote, "I'm supposed to be doing 'architectural research' – or a years [sic] study in Europe." However, he continued, "God's architecture is a damn sight better than man's." Here Hough claimed to prefer the wonders of the natural world to the built environment. He did, however, appreciate the Maison Carrée in Nîmes:

The Maison Caree [sic] an old Roman temple is the best preserved Roman building in existence. It is marvellous [sic] – its beauty, simplicity, and refinement

^{192.} Ruskin, "The Opening of the Crystal Palace," 360.

^{193.} Hough to family, 1911, William J. H. Hough Collection, 045.003, Architectural Archives, University of Pennsylvania.

^{194.} Hough to family,045.003, William J. H. Hough Collection, Architectural Archives, University of Pennsylvania.

^{195.} Hough to Mary Hough, September 25, 1911, William J. H. Hough Collection, 045.013, Architectural Archives, University of Pennsylvania.

far surpass my expectations – the modern buildings on the square all around it, look trashy, pulpy, and so trivial and weak-minded by comparison. ¹⁹⁶

That month, Hough found himself briefly in Italy, where he became embroiled in the xenophobia that was starting to develop in the years before that country entered the First World War. A clipping from the *Ambler Gazette*, dated September 17, 1911, tells of an uncomfortable episode for the young American as he boarded a train for Assino from Capua. The headline read, "Ex-U of P Man held as spy by Italians: Billy Hough made pictures as architectural studies and a cold cell followed." ¹⁹⁷ He spent several days in jail, but he did not seem discouraged from continuing his travels and his sketching. This was the first of two events in which Hough was mistaken for an enemy agent; he would again encounter suspicion during a later sojourn.

The remaining correspondence mentions relatively little about individual buildings; most of his letters are about his friends and their activities, such as a bullfight they witnessed in Carcassonne. He wrote not of the architecture, but of the people he saw and the natural beauty of the various places. His sense of humor was evident in these letters. In one, from Tangier, he wrote, "The Rock of Gibraltar is very impressive. I was a bit disappointed in some things – especially in not finding the Prudential Life Insurance advertisement painted on its face." ¹⁹⁸

The overall appearance of a city was as interesting to Hough as its discrete elements. As he wrote to his mother, "Pistoia has remarkable doors on the baptistery,

^{196.} Hough to Mary Hough, September 25, 1911.

^{197. &}quot;Ex U of P Man Held as Spy by Italians." *Ambler Gazette*, September 17, 1911. William J. H. Hough Collection, 045.157, Architectural Archives, University of Pennsylvania.

^{198.} Hough to Mary Hough, fall, 1911, William J. H. Hough Collection, 045.019, Architectural Archives, University of Pennsylvania.

Lucca has a number of interesting 10th century churches, Pisa has a tower that looks as much as the photographs show it, and Bologna is full of stunning brick work – possessing as well two towers that lean more than Pisas [sic]."¹⁹⁹ He went on to talk about Bologna: "a very up to date modern town – not a picturesque street in it – looks like Camden... Unless you keep your eyes open you will miss the good buildings. They build entirely of brick and terra cotta."²⁰⁰ Hough was perhaps not comfortable with extensive verbal descriptions. As he stated in the same missive, "N. Italy is the most remarkable place I've seen yet – but can't write a thing about it. Somehow or other it won't bear being causally [sic] described in a letter."²⁰¹

Hough did, however, make some revealing remarks about the educational aspects of his travels. On January 1, 1912, he wrote:

We have done the same thing every day all week – all day measuring some building till about 4 – then take time enough to get to the British Academy for life class ... 3x a week, we are taking lessons in language.²⁰²

Two weeks later, he described the practice of measuring monuments in more detail:

We've spent practically the whole week measuring details on buildings and now have started to draw them on paper. At first it seems foolish to spend your time measuring some famous old building for you can get plates and photographs of everything that is at all out of the ordinary – and possibly they will give the

^{199.} Hough to family, June, 1912, William J. H. Hough Collection, 045.043, Architectural Archives, University of Pennsylvania.

^{200.} Hough to family, June, 1912. "Camden" is Camden, New Jersey, a small but once-thriving city across the Delaware River from Philadelphia. Hough would ultimately be involved in the design of two bridges spanning that river, the Camden-Philadelphia Bridge (now the Benjamin Franklin Bridge) and the Walt Whitman.

^{201.} Hough to family, June, 1912, William J. H. Hough Collection, 045.043, Architectural Archives, University of Pennsylvania.

^{202.} Hough to family, January 1, 1912, William J. H. Hough Collection, 045.025, Architectural Archives, University of Pennsylvania.

character of the building much better than you can. It is very strange to go to some old palace or church to start to measure it and find little pencil marks all over it. Somebody has been here before you.²⁰³

He went on to express his fascination with the "traces of somebody's study." ²⁰⁴

While his personal preferences may have been for the intangible qualities of a place, he was well aware of the physical traces of other people, whose ranks he was now joining. It is as though he recognized his role in the continuing, if somewhat puzzling, tradition; he seemed to be justifying the worth of the experience when he wrote that a building with any history "has been measured up and drawn more times than the building itself has years" and continued, "So for that reason it appears foolish to only add another measurement to the host of others. But it is for your own good – so I am told – that we go to the building itself and examine it and no one can do that better than by taking a foot rule, measuring minutely each part and then put it down on paper." 206

By the twentieth century, the practice of taking measurements of existing buildings was almost two millennia old, and so perhaps it seemed a rather old fashioned exercise to the young Hough. The treatise writers who had so influenced generations of architects were concerned with the qualities and proportions that they admired in the ancients. From Vitruvius on, the ideal of proportions had made it essential to measure the man-made environment in order fully to understand it. For Vitruvius, it wasn't simply a matter of *firmitas*, or solidity of a building that made mathematical exactness an essential

^{203.} Hough to family, January 14, 1912, William J. H. Hough Collection, 045.027, Architectural Archives, University of Pennsylvania.

^{204.} Hough to family, January 14, 1912.

^{205.} Hough to family, January 14, 1912.

^{206.} Hough to family, January 14, 1912.

element in architecture; it was *venustas*, the use of proportions that were pleasing to the eyes, so that beauty was a matter of mathematics. Furthermore, the Vitruvian ideal of the human body as the measure of all things made it important for a young architect to use his or her own body to experience a building: Hough, like his predecessors, peers, and successors, would have to insinuate his body into a given space, hold a measuring device in his own hands, see the measurements with his own eyes, and record his findings with a pencil kept on his person. He may have found such activity redundant, because, as he stated, those measurements had been taken countless times. At best, this may have been little more to him than a ritual. But to his instructors, this rite of passage was also a means of literally incorporating the architectural canon in order to perpetuate the art of building.

Still, he apparently was ambivalent about the practice, and found it rather tedious.

On January 29, he wrote a letter from Rome in which he expresses his opinion on the subject, and also betrays his distaste for "others," as he did on several occasions:

It seems a blooming shame to make one waste time making careful scale drawings over here – when time is so limited and there's so much to see. Here I've put in a whole week drawing up a measly magnificent balcony which a dago built several centuries ago, when later on when time and money are beginning to peter out, I will be praying for just one week more to see something.²⁰⁷

Despite Hough's complaints, he made the requisite measurements, thus becoming part of the architectural tradition. Furthermore, the act of measurement connected him with the distant, mysterious, and idealized past, permitting him both to engage in and reconstruct it. His physical contact with a given building or monument – through the feet that climbed the ladders, the hands that held the tools, and the fingers that guided the

^{207.} Hough to family, January 29, 1912, William J. H. Hough Collection, 045.028, Architectural Archives, University of Pennsylvania.

pencil, leafed through the pages of the sketchbooks, and felt the coolness of travertine and brick – allowed him to embody his vision in a very material way.

Hough often referred to the act of seeing, and it appears that to him that art was as much a matter of internal vision as it was mimesis. In an undated letter of that year, he wrote of a conversation that took place in his pension in Rome. In a discussion with one Mr. Hall, Hough and Grant Simon revealed their opinions on that topic, and also had something to say about photography. Mr. Hall had stated his belief that art that perfectly imitates nature is a work of genius. Hough disagreed:

Following up these views, a photograph then would be the perfect art product – in other words, art would become a science which is fundamentally false. We maintained that realism is only a means to a higher end – as a writer has to use words and sentences (which are the common medium between him and his reader) to express his ideas, -- just so a painter has to employ conventional representations of the things we see… ²⁰⁸

Hough continued that a product might be lifelike, but "it may not be beautiful as a work of art."²⁰⁹ In other words, it seemed to Hough as if a genius does not "portray human life about him, so much as he exhibits the human thought within himself thru [sic] the medium of representations of human life about him."²¹⁰ The artist had to be more than a camera lens; he or she had to make decisions that were both aesthetic and intellectual.

Hough was indeed capable of imitation and exactitude in his work, a talent that was amply displayed in a group of watercolors, including those of details from the library of the Siena cathedral (Figure 3.5) – some of which were displayed at a 1913 exhibition at the T-Square Club in Philadelphia – and from the ceiling in Federico da Montefeltro's

^{208.} Hough to family, ca. January-April, 1912, William J. H. Hough Collection, 045.035, Architectural Archives, University of Pennsylvania.

^{209.} Hough to family, ca. January-April, 1912.

^{210.} Hough to family, ca. January-April, 1912.

studiolo in the ducal palace of Urbino (Figure 3.6). A number of meticulous, measured drawings also remain among his papers. But for the most part, his early sketchbooks indicate that he was not just recording reality, but interpreting it as well.

His first sketchbook, a small volume measuring approximately 4 x 10", begins with an homage to medieval manuscripts: an autoportrait d'apparat, in which Hough sits drawing at a desk (Figure 3.7), in a pose reminiscent of an evangelist portrait in a book of gospels (Figure 3.8); the presence of this image on the first page of the book suggests a desire by Hough to associate himself with the traditional presentation of a hand-drawn document. The pages following highlight his visit to France in 1911. The drawings include structures, including a bridge in Vienne (Figure 3.9). The span appears to be floating, anchored only by its reflection in the water; it is an impression not only of the bridge, but of its interaction with light. Similarly, his rendering of the chevet at Beauvais Cathedral dated July 11, 1911 (Figure 3.10), stresses the verticality of the church and the precarious layering of glass on top of glass, held in place by a skeleton of stone. The drawing fills almost the entire page of a sketchbook, thus asserting its visual power over the spectator; one almost feels swallowed by the concave image on the page. It appears that Hough has conveyed, not the dimensions of the structure nor the precise details, but rather the experience of being in this space.

This sense of discovery is evident in sketches made in Germany. In a small, buff-colored book (complete with a loop for holding a pencil), Hough drew a streetscape in Rothenberg (Figure 3.11). A popular site for artists and photographers, the picturesque Bavarian town was not an extraordinary choice for a subject. But on this first trip abroad, Hough must have wanted to fill his pages with as many impressions as he could; they

were not exact, but they reflect the traveler's sense of wonder at the new. In his bird'seye drawing of St. Nicholas of Ghent, "seen from the castle," made in August of 1911
(Figure 3.12), Hough consciously engaged in the selective seeing that Day had
advocated. Instead of focusing on the buildings close at hand, he emphasized the church
in the distance; the obvious buildings are reduced to blurred geometric shapes. He was
not the local resident pointing at his own house on the street below, but rather a
newcomer, concentrating on the important building in the background.

Hough's sketchbooks are, in fact, less filled with architectural details than with figural drawings and genre scenes; Hough is first and foremost an artist, who is sharing not just the objects he saw, but also the way he saw them, as a traveler. For example, one drawing gives us the passenger's eye view of a ride in a donkey-drawn carriage (Figure 3.13); he can see little more than the beast in front of him. Another allows us to look over the heads of fellow audience members toward a Punch-and-Judy show in the distance (Figure 3.14); we have just stumbled upon the performance, perhaps drawn to it by the sounds of the crowd and the performers.

The act of travel itself is the subject of many of Hough's sketches during 1911 and 1912; this is more evident with Hough than in the other subjects of this study. He drew his friends and other fellow passengers aboard trains, as he did in one sketch marked "Salamanca to Medina," in which a young American innocently sleeps while a cartoonishly-drawn local man remains vigilant, wide-eyed, and aware of his surroundings (Figure 3.15). In another, a man, apparently an American friend, sleeps on the train from Legina to Madrid (Figure 3.16). The conflict between the immobility of buildings and the

very peripatetic nature of travel is evident here; the architect's work has to do with motion, while his or her product is necessarily stable.

The observations of the traveler are also evident in his recording of costumes and customs. Whatever was related to the journey was fair game for his satirical pencil, even if it was at his own expense. In one sketch, tucked within the text of a letter to his mother, Hough contrasted his rumpled, travel-worn clothes with those of the natty Bart Register (Figure 3.17).

Just as often, Hough recorded the distinctive characters he saw along the way, thus contrasting the ever-changing social environment with the more stable (if occasionally crumbling) cityscape. Frequently, however, he simply enjoyed drawing people. Many, such as a drawing marked "Fweddy," (Figure 3.18), seem to be of his fellow students. This drawing exaggerates what was probably the young man's most prominent feature, namely, his very long legs and his almost medieval *déhanchement*. Another apparently shows a thuggish character from a play or cabaret skit (Figure 3.19). The figure's feet seem overly large, as if unrelated to the rest of his body, suggesting movement. One is nightmarish, a grotesque drawing of a man's threatening face and a trace of a woman's figure (Figure 3.20).

More dignified is a sketch marked "Je suis d'Afrique" (Figure 3.21) depicts a man of proud countenance, presumably another guest at the Hotel du Louvre. His response to the question, "where are you from?" is almost audible. The man's ethnic identity is not given. If he is a North African native, there is a tone of racial condescension in Hough's inscription; if the subject was a French Colonialist, the condescending tone was the sitter's.

A strain of bigotry ran through the young Quaker's correspondence. In a letter from Azay-le-Rideau, Hough told his mother about some friendly young women who had taken a fancy to him and his friends Bart Register and Charles Keyser. "By their names they appear to be Polish – by their noses, Hebrews – but I'll do them justice and say that they are Americans." He added that while he usually enjoyed meeting Americans in France, "that doesn't include Jew noses and a butt-in disposition." ²¹²

A few weeks later, he wrote from Antwerp to his sister about the other Americans he encountered, complaining about women who "look as if they came from Topeka, Kansas, or Little Rock, Arkansas or Troy, New York. Wouldn't know a Gothic building from a country store, or a Millet masterpiece from a colored advertising calendar. ²¹³ While in Spain, he wrote to his family that, while they were enjoying Thanksgiving dinner, they should "Think of yours truly, sitting down to a stale restaurant ... listening to some Papish mummery in an incense-reeking church – and watching a greasy priest mix a drink on the high altar – so-called mass." ²¹⁴

But more often, his attitudes toward "others" were manifested in his caricatures. Hough illustrated the German fondness for drinking beer with a sketch showing a local native engaged in that activity (Figure 3.22). Such drawings mirror the satirical postcards and cartoons that would proliferate during World War I (Figure 3.23). The anti-German

^{211.} Hough to Mary Hough, July 30, 1911, William J. H. Hough Collection, 045.006, Architectural Archives, University of Pennsylvania.

^{212.} Hough to Mary Hough, July 30, 1911.

^{213.} Letter to Tacy Hough, August 21, 1911. William J. H. Hough Collection, 045.008, Architectural Archives, the University of Pennsylvania.

^{214.} Hough to Family, William J. H. Hough Collection, 045.020, Architectural Archives, University of Pennsylvania.

sentiment that fed these images must have been similar to Hough's views as an American abroad, amused or horrified by the unfamiliar.

In another letter, he sketched a man on the street in the Tyrol, reflecting not only Hough's prejudices but also his observation of changes in attire from place to place (Figure 3.24); the same can be said of a sketch of a man in a fez in Algiers (Figure 3.25). Much gentler was a genre scene, featuring a group of old men sitting in a park at Arles (Figure 3.26). All reflect Hough's fascination with costume and ethnicity.

Such caricatures are less numerous, even nonexistent, in the sketchbooks of Frank Miles Day, Eleanor Manning O'Connor, and Louis Skidmore, whose travels are also chronicled elsewhere in this dissertation. Given Hough's tendency to capture the atmospheric even in his architectural sketches (although he was capable of recording with great exactitude), an interest in caricature seems a natural inclination. This first sojourn abroad during 1911-1912 provided Hough with an overview of the Continent and the Middle East, and laid the groundwork for his longer visit two years after his return to America.

The American Academy in Rome and Sojourn in Florence

In 1914, Hough again sailed for Europe, this time as a Fellow of the American Academy in Rome. His letters to his mother describe his early impressions of the villa on the Janiculum Hill:

It is a wonderful place – this new academy. It is a young palace – not lavish or extravagant but all in good taste ... typically American. When you get inside, it is not the least like a school – nor like a wealthy man's house – but a good club ... of course we have no professors or courses, etc. Nothing at all like that. We are to treat the building itself as a club we live in, containing studios for work ... it's up to the man, under advise of course, to go get it.²¹⁵

^{215.} Hough to Mary Hough, November, 1914, William J. H. Hough Collection, 045.045,

Later that fall, he described his fellow Fellows as "nice chaps" and praised the food at the Academy. Although by this point World War I was already in progress elsewhere, Italy had not yet become officially involved. As Hough told his mother in January, 1915, "I don't realize that war is going on as much here as at home."

By January of 1916, the academic year was in full swing, and Hough was busy on a new project. He described what may have been a typical day during this period of his stay at the Academy. The schedule was busy and predictable, and a certain amount of boredom had crept in:

I do my little work every day, climbing up the Palatine Hill to measure. I am restoring the Palace of the Caesars. Sometimes I take lunch with me – more often I climb down again to a quaint little 'trattoria' a restaurant nearby. At 4:30 they (i.e., the guards where the ruins are) close up and again I climb down and plod my merry way up the Janiculum Hill to the Academy. You are ever going up or down hill here. ²¹⁸

He went on to say that he would read upon returning to his room ("the rooms are beastly"), play pool until 8 p.m., when dinner was served and the students engaged in gossip.²¹⁹

Hough traveled outside of the city, and in April, 1915, he returned to Pompeii for the first time since his Stewardson fellowship three years earlier. Due to his increased

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Architectural Archives, University of Pennsylvania.

^{216.} Hough to Mary Hough, fall, 1914, William J. H. Hough Collection 045.046, Architectural Archives, University of Pennsylvania.

^{217.} Hough to Mary Hough, fall, 1914, William J. H. Hough Collection, 045.047, Architectural Archives, University of Pennsylvania.

^{218.} Hough to Mary Hough, January, 1915, William J. H. Hough Collection, 045.047, Architectural Archives of the University of Pennsylvania.

^{219.} Hough to Mary Hough, January, 1915.

maturity and sophistication, this second sojourn was, he wrote, of considerably more value than the first:

I am three years older, with a little more experience, and you can't realize how differently the same things look...Three years ago I walked by ruins and fragments and called them junk. Now I am just beginning to look at things with my head as well as my eyes...²²⁰

The discerning young architect was in search of details that had been obscured or erased in Rome by the twentieth century. At Pompeii, however, the preserved buildings and paintings enabled him to speculate about the details that might have also been common in Rome during the same time as the eruption of Vesuvius. The fact that the town was practically deserted (he wrote that he and his friends were the only guests in the hotel) must have contributed to the tranquility he needed for introspection:

I am here to make more studies of the wall decorations, which I hope will help me in my restoration of Caesar's palace. The remains of interior decorations are scarse [sic] outside Pompeii, so only here can I get a clue of how the Romans must have decorated their buildings. My palace in Rome was built probably 100 years after the destruction of Pompeii, but the scanty remains in Rome indicate a development out of the last period as found in Pompeii. ²²¹

In a subsequent letter, he further explained:

Pompeii is, outside of the classic literature our only real connection with the ancients. Other buried cities have been excavated, but they have all been changed by succeeding generations. Rome is full of fragments, better than Pompeii, but they are the battered remains of Mediaeval Rome. Architectural fragments, a wall fresco, a vase, a knife found in Rome, has come down to our age because by chance the destructive hands of Mediaeval, Renaissance, and modern ages failed to destroy it. But in Pompeii what they dig up has never seen the light since the first century after Christ... we know that Roman cooks hung their saucepans on nails as they do, because in Pompeii one still hangs on the peg ..."²²²

^{220.} Hough to Mary Hough, April, 1915, William J. H. Hough Collection, 045.050, Architectural Archives, University of Pennsylvania.

^{221.} Hough to Mary Hough, April 15, 1915.

^{222.} Hough to Mary Hough, April 15, 1915.

A drawing of details from a bedroom in Pompeii suggests his interest in the artifacts to be explored among the ruins (Figure 3.27). The scale drawing illustrates sections of the bed, as well as the decoration used: he indicates First Style painting in the rendering of the alcove, and the patterning of the mosaic floor.

By July, Italy had entered the war, and Hough was becoming weary of the routine of quotidian activity at the Academy. Many of his letters mention the tedium of his life and his wish to return home. In a postcard, he wrote, "My life here is so stupid and monotonous that I haven't anything to make me keep track of the time."²²³

In the spring of 1916, Hough, along with landscape architects of his acquaintance, including his future business partner Roy Larson, made a pilgrimage to Italian villas, from Florence north to Milan. The book begins with an escutcheon on the opening page (figure 3.28), in the manner of the frontispieces found in the treatises of Andrea Palladio and Sebastiano Serlio (Figures 3.29 and 3.30). Decorated with a winged angel flanked by female allegorical figures, the page is marked *Italian Villas*. *Being a collection of snapshots and sketch* [sic]. This emulation of the canonical books studied by young architects suggests Hough's desire to be associated with his predecessors, whose books and drawings were instrumental in spreading ideas across Europe. In a new era, Hough was taking part in that tradition. The gesture could be interpreted as arrogant, but at the same time, it displays a degree of youthful, self-deprecating humor.

^{223.} Hough to Mary Hough, July 12, 1915, William J. H. Hough Collection, 045.051, Architectural Archives, University of Pennsylvania.

Hough visited nearly thirty villas²²⁴; for most of these, he provided plans of the gardens supplemented with photographs, evidently his own, with a few commercial images included. 225 While drawings of villas he made for the Academy generally reveal his visual acuity and scrupulous drafting, the photographs he included in this album treated the actual houses summarily, offering very little by way of documentation; few details are visible. The photographs feature the gardens and hints of the sculpture they contained, but Hough did not attempt to recreate their actual appearance with the camera. Indeed, there is scant information about the kinds of plantings. The photographs are atmospheric, painterly, and moody. They tend to be dark, with dissolving outlines and ambiguous details. Despite his earlier claim that photography was a science and not an art, Hough appears to have consciously explored the artistic possibilities of that medium. For example, his pages on the Villa Marlia (Figure 3.31) present the plan of the garden and a section drawing of the pool. The casino is represented only by a simple rectangle. The small photographs on the main page and those following demonstrate Hough's almost surrealist view of the site. In one nocturnal picture, a phosphorescent wall fountain appears to emerge from the darkness (Figure 3.32). In another, a space defined by a wall of sculpted trees is punctuated with a small staircase that, from the angle Hough has chosen, seems to go nowhere (Figure 3.33). More intriguing still is the ghostly

224. Hough documented visits to the Villa Fabbricoli in Florence; Villa Corsi-Salviati in Sesto; the Principessa (Villa Marlia); Villa Bernardino in Lucca; Villa Petralia in Florence; Villa Torrigiani in Lucca; Villa Medici in Fiesole; Villa Vescovo in Lucca; Villa Colazzi near Florence; Villa Costello near Florence; Villa Corsini; Villa Vicobello in Siena; Villa Celsa in Siena; Villa Collodi in Pescia; Villa Gamberaino in Settignao; Villa Gori in Siena; Villa Medicea; Villa Campi; La Pietra; Villa Saliati; Villa Belripaso; Villa Mausi; Palazzo Giovo in Como; Villa Taverna in Como; Palazzo Doria in Genoa; and Villa Serbelloni at Lake Como. For the first few villas, Hough drew plans supplemented with small photographs. Toward the end of the book, the plans were smaller and the photographs were fewer.

^{225.} By the end of his album on villas, presumably also at the end of this particular jaunt, Hough inserted more commercial photographs as well as commercial plans. He continued, however, to take photographs of his own.

sculpture of a woman on the right side of the photograph, which appears to be more of a phantom than a work of art.

There are other photographs in this album worth mentioning. As an architect, Hough was no doubt looking at building materials, including paving, as can be seen in his snapshots from the Villa Collodi (Figure 3.34). At the same locale, Hough photographed the shadow of a hand railing on steps (Figure 3.35); clearly his intent was the visual effect rather than the design of the staircase. The impression of the shadow on the textured paving must have also had its appeal to Hough. Hough certainly owed a debt to the pictorialist photographers of the late-nineteenth century, whose use of the medium mimicked other arts; ²²⁶ here, Hough returns the favor.

Hough's use of film was quite different from that of Louis Skidmore, who would later juxtapose some of his drawings with photographs of building details and contextual information. Skidmore's photographs were supplemental to the drawings; Hough's were interpretive. Skidmore was using photographs as a designer; Hough, as an artist with a camera. His dual talents for precise rendering and painterly drawing are well represented by two drawings made of the Villa Gamberaia; these were not included in the album.

One, a drawing of the façade (Figure 3.36), is beautifully finished, resembling a presentation drawing. Another, however, a pen and ink drawing of the *niccione* and pedestal in the villa's garden (Figure 3.37), is painterly, atmospheric, and emotive. Hough did his due diligence for the Academy, but elsewhere he allowed himself considerable freedom as an artist. The agitated lines, stark contrasts, and moss-like foliage make the structures appear more akin to romantic ruins than to the elegant

^{226.} Peter C. Bunnell, *A Photographic Vision: Pictorial Photography, 1889-1923* (Salt Lake City: P. Smith, 1983), 1.

Renaissance structures they really were. This work seems to have drawn inspiration from the pictorial tradition of photography: it has much in common with Charles Clifford's photograph of ruins of the Monastery of San Jeronimo, dating from the 1850s, with its arcade and overgrown foliage (Figure 3.38).

Several of Hough's tendencies – satire, allusions to history, and the pictorial – are at play in the two photograph albums in the Hough collection at the Architectural Archives of the University of Pennsylvania. Bound in dark green linen and embossed with the words, "Kodak Souvenirs," they feature small photos of Hough and his friends during his years at the Academy. ²²⁷ These tiny images are preserved in the kinds of books owned by any tourist for the preservation of travel memories, but some of the pictures within are different from those of a typical traveler. One album begins with an image of Hough at work, holding the architect's traditional attribute of the compass (Figure 3.39), exemplified by both the image of God as architect of the universe (Figure 3.40) from the Vienna Codex (Vienna, Austrian National Library, Cod. Vindob. 2554, Paris, 1220-1230) and the engraved portrait of Andrea Palladio (Figure 3.41) by Bernard Picart, which was used in an eighteenth-century publication of Palladio's works. This suggests his identification with art historical and architectural traditions; perhaps it also reflects his eye for caricature.

The album contains other images of the young architect at work; at the Pantheon, at the Piazza San Pietro, and other Roman monuments, the difficulties and hazards of the measuring process can be seen vividly (Figure 3.42); the recording of the monuments is,

^{227.} Hough did not specify which camera he used, but there were several Kodak instruments available at the time of his travels, including the Brownie, the No. 1 Folding Pocket "Automatic," the IA, and the No. 2 Autograph.

in turn, being recorded as well. Such images provide a vivid glimpse, not only into the world of the traveler, but the manner in which he may have been perceived by local people and other tourists. Furthermore, they document Hough's participation in the time-honored architectural tradition of measuring monuments.

The social life of the students is also on display in these albums, which document the off-duty activities of Hough and his friends. In one photograph, a friend is dressed as an African warrior, complete with blackened skin, exaggerated features, and stereotypical affect. Once again, the privileged white American's conceit of superiority over other races is on display.

Hough also demonstrated his use of the camera for artistic effects in many of the images. These photographs, barely 4" x 3", do not record building details, but rather, offer fleeting glimpses that caught Hough's eye. In one, the silhouette of a man sits within a dark space that frames a hilly vista (Figure 3.43). Here Hough tells a travel narrative: the viewer (in this case the photographer) watches another person enjoying the view. For the photographer, the image is one of both the observation of a place and the recording of his own experience, with the figure in the picture acting as both subject and surrogate. It is also a self-conscious composition that is an end in itself; there is no intent to describe any of the buildings in sight of either man. Rather, it is about two kinds of seeing: viewing something seen before, and the arrival at a place for the first time. The photographic process interested him. In 1916, he wrote, "I have been fooling around on a little idea for an improvement of the finder of the Kodak." Unfortunately, he added nothing to that statement, but does leave open the possibility that he was looking for new

 $^{228.\} Hough$ to Mary Hough, 1916, William J. H. Hough Collection, 045.073, Architectural Archives, University of Pennsylvania.

ways to use the medium of photography. Photography, then, was of great interest to Hough, both in terms of process and effect. The improved finder he hoped to design may have allowed Hough to create larger or clearer images than those in his albums; those photographs tend to be visually interesting but not technically proficient.

At the same time, Hough continued to develop his drafting skills, as is evident in his measured drawings and and finished renderings. His image illustrating a fountain and a segment of Bernini's colonnade at Piazza San Pietro in Rome (Figure 3.44) appears to be the result of a set of preliminary scale drawings of the fountain (Figure 3.45), sketches of the *impresa* of Pope Alexander VII (Figure 3.46), and the sculptures above the colonnade (Figure 3.47).

These individual fragments, made on sheets of translucent paper that were folded and placed between the leaves of one of Hough's sketchbooks, offer some insight into the artist's creative process: Hough was extremely diligent about the details that mattered, and he worked through his drawings to understand them thoroughly. Yet he was very selective about which of them he inserted into his finished drawing; not every carefully-observed, meticulously-recorded line would be part of the presentation piece.

An example of this editing can be found in Hough's scale drawing of the fountain. Here are visible the minutiae that are absent from the finished product: the fencing around the fountain, the patterning on its lip, the details on the base, the intricacy of the volutes. Hough examined them closely, but the finished drawing only indicates the view that would have been apparent to a nighttime passer-by. Similarly, the sculptures above the colonnade are carefully observed in the preliminary drawings: the facial expressions are highly individual. However, they retain only their overall form in the finished piece.

Subjects from this period also include the interior of the Pantheon (Figure 3.48); a fountain and arcade in the courtyard of the Palazzo Vecchio in Florence (Figure 3.49); and the Ponte Senatorio in Rome (Figure 3.50). In all of these works, Hough combined precision with a painterly touch. His drawing of the Pantheon reveals Hough's eye for detail, his skill at rendering, and his view of history. Hough drew this portion of the monument as though it were entirely flat, indicating the coffers of the great dome not in perspective, but as pulled taut, rather like a map of the earth. The inscription, which identifies the space as "The Interior of the Pantheon Rome Showing the Existing Marbles and a Restoration According to Piranesi of the Demolished Parts," also lists the various materials used: "A. PAVONOZETTO, B. GIALLO ANTICO", etc. The lettering is in the antique style, using all capitals, in the manner of the Romans. Once again, Hough was inserting himself in a continuum of the architectural, artistic, and historical canons. His drawing of Etruscan fragments from the Villa Papa Giulio (Figure 3.51) is labeled all'antica as well. In a drawing of the Map Room of the Palazzo Vecchio (Figure 3.52), he inserted a figure dressed in Renaissance-style costume, thus approximately indicating both the date of the maps and their scale.

Hough's experiences during his years at the Academy were somewhat harrowing. Despite his civilian status, Hough was a foreigner during a war, and with his blond hair, he may have looked like a German; he was, on at least two occasions, suspected of being a spy. Taking photographs in Anzio, he was arrested for the second time, and taken to a nearby police station. He was freed but his film was confiscated. Indications of the wartime conditions are also evident in several of the letters he wrote during this period. In these, large areas of the text were blacked out by censors. In the following months, he

found other, more pressing matters to think about. The war, as well as the death of Dr. Jesse B. Carter, the director, was beginning to take its toll on the Academy. Equally devastating was the outbreak of the Spanish influenza, a pandemic that killed an estimated 20 to 100 million people worldwide. Hough wrote that the Academy was sinking lower, its population dwindling as the disease and the war affected more students. By the time the term ended in August, 1917, he was thinking about joining the ambulance corps, but he ultimately went to Florence to work for the Red Cross, arriving in December. It was at that time that he wrote to Mary Hough, "The Academy in Rome, I hear, is about on its last leg." In January, he wrote, "... I am still here in Florence, doing a little work but having a dull time. My three years in Rome were eventless – but not to be compared to the few months here." His days were spent mostly counting bales and dealing with railroad and military red tape. He would write that he respected the Red Cross's efforts to alleviate the suffering of poor people in Sicily. In the meantime, he complained of not receiving letters from his friends.

Returning to the Academy was not a possibility at this time. In April, he wrote, "The man from the Academy tells me that the institution is slowly disintegrating ... even

229. Statistics of the National Center for Biotechnology, the National Institutes of Health.

^{230.} Hough to Mary Hough, December 30, 1917, William J. H. Hough Collection, 045.100, Architectural Archives, University of Pennsylvania.

^{231.} Hough to Mary Hough, January 20, 1918, William J. H. Hough Collection, 045.102, Architectural Archives, University of Pennsylvania.

^{232.} Hough to Family. William J. H. Hough Collection, 045.108. Architectural Archives, University of Pennsylvania.

^{233.} Hough to Family. William J. H. Hough Collection, 045.129, Architectural Archives, University of Pennsylvania.

^{234.} Hough to Family, February 25, 1918, William J. H. Hough Collection, 045.106, Architectural Archives, University of Pennsylvania.

at its best, the place had an undecided, characterless, depressing air ..."²³⁵ The last statement is a reminder that however coveted a fellowship at the American Academy in Rome may have been and still is, the realities of the hard work required, the repetition of everyday life, the dangers wrought by an unprecedented world war, and the threat of a horrendous epidemic were taking their toll on Hough. And no one was safe from the influenza. Despite Hough's apparently enviable position at the Academy, he and his colleagues were very much in harm's way.

The disease was slowly making its way toward Hough. On September 2, he wrote, "Still in my usual good health." But on November 2, he told his mother, "You see, I have been laid up with this blooming influenza which has been so much the fashion lately." William Hough was able to travel briefly to Rome to retrieve most of his belongings; a highlight of the visit was seeing President Woodrow Wilson in the Pantheon. "It was a case of seeing the first man in the world in the finest building in the world," he told Mary Hough in a letter dated January 6. The statement indicates Hough's approval of the Democratic president's war policy, as well as his respect for one of the best preserved monuments of antiquity.

He returned to Florence before heading for Taormina for a period of rest and recuperation. The cover of a large sketchbook from this trip (approximately 7" x 10 ½"),

^{235.} Hough to family, April 3, 1918, William J. H. Hough Collection, 045.110, Architectural Archives, University of Pennsylvania.

^{236.} Hough to family, September 3, 1918, William J. H. Hough Collection, 045.112, Architectural Archives, University of Pennsylvania.

^{237.} Hough to family, November 2, 1918, William J. H. Hough Collection, 045.122, Architectural Archives, University of Pennsylvania.

^{238.} Hough to Mary Hough, January 6, 1919, William J. H. Hough Collection, 045.128, Architectural Archives, University of Pennsylvania.

purchased from Cartiere Pietro Milani of Fabriano, bears the distinctive monogram that now appears more frequently on his drawings (Figure 3.53), a sign, perhaps, that he was finding his own identity as an artist. The first drawing in the book shows a tower, behind a *cartellino* on which is written the word, "Taormina." The page is signed "Taormina=1-12-19—W-J-H-H" (Figure 3.54). Peering from a loggia at a figure playing a guitar are two men in American-style caps, perhaps representing Hough and one of his colleagues. Again, Hough is making reference to travel: the sketch has the appearance of a postcard; furthermore, the two men, watching from a tower, are in the act of observing the city below them. The presence of the *cartellino* also connects the drawing to the history of Italian painting.

William J. H. Hough's travels to Europe yielded much to assist any scholar interested in the process of seeing, the education of the architect, and the experience of exploration. Hough's letters reveal the tumultuous period in which he lived, the expectations of a student on the brink of professional self-realization, and the attitudes of a young American abroad. His drawings demonstrate a talent for both the exact rendering required of builder and the creative vision of an artist. His use of photography evinces a need to investigate the ways in which the eye sees without the involvement of the hand. Most of all, his sketchbooks and photo albums provide proof that for the artist – even one whose final product exists in brick and mortar – the work in progress is also a work of art.

CHAPTER IV

LOUIS SKIDMORE: FORGING CONNECTIONS THROUGH SPACE AND TIME

When Louis Skidmore traveled abroad during the late 1920s, he forged relationships that were of utmost importance to his personal life and to his career. The social connections he made with other Americans in Europe underscored his talent for being at the right place at the right time. The links between his travel sketches and his built *oeuvre* are, perhaps, a bit more subtle. Like his predecessors, he duly examined, measured, and recorded historic buildings. Unlike Frank Miles Day, however, Skidmore incorporated few historic details into his own work. Unlike Eleanor Manning, he did not focus on any particular style of building, nor did he seem to find inspiration in the garden cities and company towns of England. Yet it is inaccurate to assert that the monuments he saw during his travels were not instrumental in the formation of his own taste; instead of attracting him with stylistic elements, they seem rather to have influenced him in ways that related to the more fundamental characteristics of architecture, such as volume, mass, and verticality. In addition, the times in which he lived were vastly different from those of Day and Hough. As Hough had done before him, Skidmore studied at the American Academy in Rome, but Skidmore's peacetime experiences in Europe were less fraught with peril and disease than Hough's had been. Furthermore, Skidmore's career path was to be very different from those of the three other architects examined in this dissertation, largely because a post-World War I building boom and the rise of modernism allowed American architecture to take a new, less historically-based direction.

Skidmore is best known as the founder of the firm Skidmore, Owings & Merrill (SOM), which, beginning in the mid-twentieth century, produced sleek glass boxes that

exemplified the architecture of corporate America. Established in 1937 by Skidmore and Nathaniel Owings, SOM took on its present name with the hiring of the engineer John Merrill in 1939, and its distinguished roster of associates has included Gordon Bunshaft, Natalie de Blois, Bruce Graham, and David Childs, all of whom contributed to the renown of the office. Today, the very mention of the initials SOM evokes images of such iconic Modernist structures as Lever House of 1952 in New York (Figure 4.1) and the John Hancock (1969) and Sears (1973) Towers in Chicago. During the 1980s, SOM experimented in the Post-Modernist aesthetic with the Trammell Center in Dallas (Figure 4.2) and the Wells Fargo building in Birmingham, Alabama (Figure 4.3). In more recent years, the firm has remained in the forefront of design with such projects as the King Abdullah Financial District Conference Center in Riyadh, Saudi Arabia (Figure 4.4) and One World Trade Center in New York (Figure 4.5).

In the decade before the firm was established, Skidmore traveled to Europe and the Middle East, participating in the longstanding tradition of drawing the kinds of buildings, towns, and landscapes that had captivated generations of American architects before him. A cursory examination of Skidmore's travel images might suggest little about his role in the development of twentieth-century American commercial buildings: his sketchbooks contain the street markets of Cairo with their hodgepodge of vernacular structures (Figure 4.6), the Byzantine churches of Greece with their tiled roofs and picturesque massing (Figure 4.7), Gothic cathedrals with their emphasis on verticality, and the enigmatic passageways of medieval Tuscan hill towns. Like Day, Hough, and Manning, Skidmore viewed some of the newer structures of Europe as well, but he seemed to have little interest in the more avant-garde architecture of the time. A high

regard for the Bauhaus, de Stijl, and other significant schools of early twentieth-century design is not evident in his travel sketches, and when his built work is examined, it does not appear that he used European models for reference. In fact, the use of collecting prototypes for their own designs was only one of many reasons for this architect's sketching tour. Drawing was still an important skill for the profession, and one's agility with the pencil was believed to be a tool for creation.

Nonetheless, the buildings Skidmore drew during his time abroad may well have affected his outlook. In fact, there are a number of parallels between some of his travel sketches and SOM's built work. Certain essential qualities of older European architecture apparently allowed Skidmore to record stylistic links through the ages. Furthermore, it appears that his travels had results that were just as important as any influence that the buildings he observed may have had upon his work.

It is fair to say that Skidmore's travels took place during an era in which mere copying was no longer the primary objective of an education abroad. America had fought and won a World War, and was thus by this time an undisputed political and economic power. In addition, an exchange of ideas between Europe and America, exemplified by the 1910 publication of the Wasmuth Portfolio in Germany, lent new authority and credibility to American architecture.

This compendium of 100 lithographs, featuring the work of the American architect Frank Lloyd Wright, was a new take on an old tradition: whereas in the late 1800s, Frank Miles Day had studied treatises by such theorists as Palladio, just a few

decades later, trends had shifted considerably. Europeans were now examining the ideas of an architect from the United States. ²³⁹

The shift was not entirely unexpected; Arnold Lewis and Dmitri Tselos are among those who have traced the European fascination with American architecture back to the late nineteenth century. Lewis pointed out the interest in American building that began during the 1860s, and which accelerated during 1893:

... when scores of architects and critics crossed the Atlantic to visit the Columbian Exposition in Chicago. During this initial period, European interest in the architecture of the United States cannot be proven by locating buildings indebted to American models, because such examples are too few and too exotic. Rather it is to be seen in the increasing volume of plans and elevations, descriptions, and analyses published in the professional and popular journals of Great Britain, France, and Germany, and to a lesser extent Austria. A surprising amount of this material was taken from addresses and debates held at the major architectural societies in these countries. This first stage of serious European inquiry was marked by spirited talk, not imported forms ... ²⁴⁰

Lewis adds that the more informed professionals were the most enthusiastic supporters of American design, while less experienced and non-professional critics were the most strident in their comments.²⁴¹

Tselos, on the other hand, sees a more direct influence by an American architect on European buildings. Tselos argues that H. H. Richardson's work was widely imitated

^{239.} For a different view of Wright's complicated relationship with Europe, see Anthony Alofsin, *Frank Lloyd Wright: The Lost Years*, 1910-1922 (Chicago: University of Chicago Press, 1998). Wright's self-imposed exile in Europe is of a different type from that of the architects and students who traveled to learn from the past. Wright arrived in Europe during what Alofsin calls a "frenzy of modernism." Furthermore, Alofsin believes that despite the conventional belief about the influence of the Wasmuth Portfolio, Europe "had a greater impact on Wright than he had on European architecture" (1). However, the fact remains that while Wright found kindred spirits among early twentieth-century European modernists, he seems to have seen no reason to sketch European monuments of the distant past.

^{240.} Arnold Lewis, "A European Profile of American Architecture" *Journal of the Society of Architectural Historians* 37, No. 4 (December 1978): 265.

^{241.} Arnold Lewis, "A European Profile of American Architecture," 265.

in Europe, particularly in Germany.²⁴² Europeans, sometimes grudgingly, gave American designers their due, particularly in their publications.

So while Skidmore sought out, studied, and sketched the architecture of the past, he would have had no practical need to mimic their details in his practice. Whether he was conscious of the fact at the time of his travels is unknown. He drew and painted European and Middle Eastern buildings as though they mattered to him, with diligence and care. However, a connection between what he drew abroad and what would later be constructed in America is far more subtle than a matter of turrets and swags: he seems to have been on a quest for essential elements that transcended geographical and temporal boundaries.

Furthermore, the social aspects of travel were to affect him profoundly: he was making important personal connections that would affect both his private and professional lives and perhaps even determine his later success as an architect in a corporate firm, building for corporate clients.

Skidmore reached young adulthood during a transitional period in American architecture. While many architects on both sides of the Atlantic were still referencing historical styles in their buildings during the first decades of the twentieth century, others were exploring new ideas. Some architects were looking at history while others peered into the future. Some did both, and many different currents existed simultaneously in Europe and America. By the time Skidmore went abroad in 1926, Adolf Loos's Steiner House was 16 years old, and the Austrian architect had already written his famous "Ornament and Crime," in which he claimed: "the evolution of culture marches with the

^{242.} Dimitri Tselos, "Richardson's Influence on European Architecture" *Journal of the Society of Architectural Historians* 29, no. 2 (May, 1970): 156-162.

elimination of ornament from useful objects."²⁴³ Only four years after the completion of Steiner House, Le Corbusier – who would later declare a home to be a machine for living in – built his Maison Favre-Jacot in Switzerland (Figure 4.8), which, as William J. R. Curtis, put it, "fulfilled many of the agendas of National Romanticism." ²⁴⁴ It was a far cry from his Maison Domino (Figure 4.9) concept of the same year. In America, projects as diverse as Carrère and Hasting's Beaux-Arts-style New York Public Library, completed in 1911 (Figure 4.10) and Irving Gill's modernist Dodge House in Hollywood (Figure 4.11) had been built within a mere four years of each other. Classicism, whether manifested in the modern, pared-down buildings of Paul Cret, or the dignified, stately Lincoln Memorial of Henry Bacon, was, and remains, a staple for architects, especially for public edifices. Skidmore had access to a wide range of equally viable styles, including the Gothic Revival of Ralph Adams Cram, one of his first employers. Another general influence on architects of Skidmore's generation was "Modern Architecture – An International Exhibition," curated by Philip Johnson and Henry-Russell Hitchcock in 1932. This show, featuring contemporary structures noteworthy for the absence of historical references and applied ornament, would also affect the style of future buildings, especially the commercial commissions that would be the staples of SOM's early practice. ²⁴⁵ The title of Le Corbusier's 1923 publication, Vers une Architecture, is also indicative of a desire on the part of many artists to create a style that would pare building design to a universal character, emphasizing common volumes instead of national types.

^{243.} Adolf Loos, "Ornament and Crime," 1908. Reprinted in Reyner Banham, *Theory and Design in the First Machine Age*" (Cambridge, Massachusetts: MIT Press, 1980), 94.

^{244.} William J. R. Curtis, Modern Architecture Since 1900 (London: Phaidon Press, 1996), 143.

^{245.} For a reconstruction of this exhibition, see Terence Riley and Stephen Perrella, *The International Style: Exhibition 15 and the Museum of Modern Art* (New York: Rizzoli, 1992).

So while Skidmore's travel sketches did not necessarily influence the style of his *oeuvre*, his trip to Europe was to have a major influence on him; certainly the friends he made abroad helped to determine his future.

Early Life

Born in Lawrenceburg, Indiana, on April 8, 1897, Skidmore served in the United States Air Corps in England during World War I. Stationed in Liverpool, he saw the Gothic-style cathedral of Liverpool by Giles Gilbert Scott, which was under construction at the time. 246 Upon his return to the United States, he studied at the Ohio Mechanics Institute in Cincinnati and worked for Kruckemeyer & Strong, a prominent firm in that city. That experience would have afforded Skidmore a broad education, because the office designed buildings in a variety of styles. He later studied engineering at Bradley Polytechnic Institute (now Bradley University) in Peoria, Illinois, and then went to work for the firm of Cram and Adams in Boston. At the same time, Skidmore took part in competitions at the Boston Architectural Club. One of these resulted in an opportunity for him to attend the Massachusetts Institute of Technology, where he studied under William Emerson. Emerson, the dean of MIT's school of architecture, was a proponent of the Shingle Style, but in his position as an educator, he took a more pragmatic approacha, instituting courses that would prepare students for modern practice. Skidmore's own sense of practicality may have been encouraged by his teacher. MIT also provided another opportunity for Skidmore to go abroad.

^{246.} Nicholas Adams, Skidmore, Owings & Merrill (New York: Phaidon, 2007), 19.

Skidmore Abroad

With the help of the Rotch Traveling Scholarship – an award that still provides one recipient each year with the means to study architecture abroad – Skidmore journeyed to Europe from 1926 through 1929, visiting England, the Continent, and the Middle East. He spent a year at the American Academy in Rome, and also collaborated with Samuel Chamberlain, another MIT alumnus, on the book *Tudor Homes of England*. Chamberlain, the author and illustrator of *Sketches of Northern Spanish Architecture*, *Domestic Architecture in Rural France, Through France with a Sketch Book*, and *French Provincial Houses*, was responsible for the more painterly sketches in *The Tudor Homes*; Skidmore made its thirty full-page, measured drawings.

Skidmore's travel sketches reveal his extraordinary talent as a draftsman, as well as his eye for drama. Like Frank Miles Day, he was meticulous in his observations, and like William Hough and Eleanor Manning, he had an artist's flair for the atmospheric. Even his measured renderings reflect his creativity: he often found surprising and playful ways to communicate ideas about line and dimension. The subjects of his drawings were varied. Like Day, he was interested in wrought iron details. Like Manning, he recorded modest structures as well as great ones. No single period monopolized his interest, as the sketches include images he made of ancient, medieval, and eighteenth-century buildings. His use of media was perhaps even more wide-ranging than Day's, Hough's, or Manning's, encompassing pencil, red chalk, watercolor, photography, and lithography, and his archives comprise examples of work in all of these media; some drawings are loose, while others are in sketchbooks.

Among his sketchbooks is one measuring approximately 9 x 11", marked "Louis Skidmore – Europe on Rotch." Inside are images of buildings throughout England,

France, and Spain, signed with Skidmore's distinctive "LS" monogram. In one drawing, marked "Versailles 1927" (Figure 4.12), one sees the rigorous requirements of the architect's art. This large page, stapled into the sketchbook, features two section drawings of an unnamed monument, positioned vertically, side by side. On the left side is the base of a building, whose materials and dimensions are duly noted. But it is the intricate section of the cornice that must have tested both the skill and diligence of the young architect.

In the same book are several examples of the ways in which Skidmore used photography. One leaf, signed "LS 1926," features an elevation drawing of Grammar Hall at Magdalen College, Oxford (Figure 4.13). At the bottom left of the page, Skidmore indicated the approximate scale of 1/8" to 1 foot, above which he made a detailed measured drawing of a façade of the Tudor-style building. One can surmise that Skidmore chose this particular view because it allowed him to record some of the many component parts of the edifice. From this angle, he could suggest other views not visible to the naked eye or the camera's lens. What is most interesting about this particular page, however, is the fact that Skidmore pasted three small photographs to the right of the drawing, each for a different purpose. The top photograph shows a detail of the gabled roofline and the tension between it and the window to its left side. The middle photograph presents the tower as seen from a distance, emphasizing its vertical thrust. At the bottom, the third photograph illustrates the ground level of the tower in relation to parts of the building not visible in the drawing. It is as though Skidmore wanted to suggest the presence of the rest of Grammar Hall in his drawing, and use the photographs as a further explanation of its structure.

Similarly, on another page, Skidmore juxtaposed a measured drawing of a carved wood bracket from an unidentified structure in Chartres with a small photograph of the same detail (Figure 4.14). The drawing allows the viewer to see the intricate vegetal carving, while the photograph shows its placement and its well-weathered, shadowy appearance. Skidmore may have used photography as a tool for documentation, or perhaps as a means of displaying his skill at rendering. The *paragone* – the Renaissance competition between two art forms for supremacy in their representational ability – continued into the early twentieth century.

Skidmore also placed two photographs of the so-called Escalier de la Reine Berthe in Chartres, side-by-side with a drawing of the same house (Figure 4.15), from the same approach. The two photographs are placed to the right of the drawing, and depict the building from a similar angle. The top photograph features a close-up shot of the upper stories of the house; the bottom photograph indicates the approach to the building from the street, as does Skidmore's drawing. The upper photograph indicates the most salient feature of the building, the apex of the turreted staircase. The lower image shows the entire façade; it is closer in appearance to the drawing, from which Skidmore chose to omit the trees that frame the tower. Skidmore was unable to capture certain details with his camera; for example, the heavy patterning of the carved timbers (note that Skidmore did not delineate the intricate sculptures of the timbers; he merely indicated that they were carved, and did so rather summarily). The drawing also permitted Skidmore to represent the street level, including the underside of the spiral staircase, which is represented with measurements. He also included a section drawing of one of the balusters. It is probable that Skidmore chose to use both photographs as well as the

drawing because, although they all portray the house from the same angle, each presented its own qualities. In the top photograph, the turret appears to be shallow, a result of its protrusion over the street, increasing in relief from the bottom story upward. From a distance, the turret is highly noticeable; this, however, is an optical illusion. In the lower photograph, Skidmore described the street as it was, including the trees. However, in the drawing, Skidmore concentrated on those features he considered the most relevant: the turret, its carved timbers, the entrance to the building, the arched portal that stands at an oblique angle, and the surrounding buildings.

In all of these examples, however, it seems that Skidmore wanted to trace the buildings with his eyes, his pencil, and his fingers. And while he could easily have purchased high-quality commercial photographs or postcards, and perhaps did so, he chose to use his own camera. In the photographs, he is a casual tourist, discovering his surroundings as he moves through them. He was seeing but not yet fully understanding. In the drawing, he was the more diligent viewer, using not just his eyes but his entire body to record his observations. The photographs here are akin to modern snapshots, not requiring any particular artistic talent or scholarly diligence.

However, Skidmore often used the camera with skill and artistry. His flair for the theatrical, his penchant for the pictorial, and his acute powers of observation are especially evident in his photograph of the Basin of Neptune at the Palace of Versailles (Figure 4.16). Taken in 1927, the photograph certainly indicates that the young architect was adept at conveying the sense of hydraulic movement and at discovering areas of spectacular contrast. However, the photograph is most remarkable for its allusion to features that exist outside of the frame: the garden façade of Louis le Vau's palace and

the row of statuary that lines the garden's allées. The main floor of palace façade is one long arcade, with three colonnaded porticos that cast dramatic plays of light and shadow on the building. One of the most interesting features of the photograph is Skidmore's view of the water as solid form. The contrast of the brilliantly lighted sprays against the shadowy trees suggests the colonnades, while the arching waters in the foreground hint at the superimposed arcades of the façade. Similarly, Skidmore intimates the presence of the white sculptures against the trees that line the *allées* of the gardens (Figure 4.17).

Skidmore's drawings for Samuel Chamberlain's *Tudor Homes of England* represent him at his most disciplined. While Chamberlain was responsible for the more atmospheric scenes, Skidmore drew the more exact renderings. Precise, efficient, and comprehensive, Skidmore's measured drawings reflect the rigor and control that belie the picturesque character of their subjects, and underscore the streamlined ethic of the modernist architect. Only the pencil marks, still visible in his original renderings (Figure 4.18), betray the presence of a human hand; the rest is almost mechanical in its correctness.

Although Chamberlain did not precisely credit Skidmore with the photographs (in the introduction to *Tudor Homes of England*, he stated that Skidmore took "many" of the photographs in the book. He did not, however, mention which specific images Skidmore may have taken), it seems likely that Skidmore was responsible for the photograph of the Reader's House in Ludlow (Figure 4.19). The image shows the protruding pavilion in the context of the rest of the house, with its unadorned façade. Focusing entirely on one feature, Skidmore's drawing of the gable of the Reader's House (Figure 4.20) provides a glimpse not only into the architect's scrupulous attention to details, but also into his

ability to convey a great deal of information in a concise manner. Skidmore delineated the gable's elevation with considerable fidelity, describing its zigzagging outline, the vegetal patterning, the fantastic carving, the strict geometrics of the half-timbering, the grainy texture of the stucco behind it, and the diamond-patterned leading of the windows. He also provided the reader with two separate scales, one for the gable itself, and one for the moldings, thus making comparisons easy and efficient. Skidmore added section drawings of all the details, even the window leading. He indicated sections through superimposed lines elsewhere, in order to save space. Skidmore's rendering of the doorway of the Reader's House (Figure 4.21) is striking for both its completeness and conciseness. The oak door is meticulously detailed, with its hinges, nails, and panels painstakingly defined. The decorative frame is neatly indicated.

All of Skidmore's illustrations in *Tudor Homes* indicate his sensitivity to the limitations of the page. The book is folio-sized, but considering the large number of houses included, Skidmore demonstrated a remarkable ability to present a plethora of details in an efficient manner. His page illustrating a house in Stanton, Gloucestershire (Figure 4.22), contains a well-observed, carefully-defined side elevation. In this drawing, Skidmore charted every stone, every irregularly-placed course, and the uneven grading of the site. Below are the few details not evident in the large elevation drawing: the wrought iron hardware on the casements, the horizontal members between and below each bay, and the leading of the windows are indicated in both elevation and section. Again, separate scales are included.

Skidmore drew the Lygon Arms cottage at Broadway in the Cotswolds (Figure 4.23) with great exactitude (see the photograph, Figure 4.24). The caption indicates his

focus on the many leaded windows, and he delineates them with care. The contrasts between the large and small lights, the rectangular and diamond-shaped panes, and the trefoil patterns evident on two of the upper windows are clearly articulated. While the dormer windows are open in the photograph, Skidmore drew them as if closed. And although the windows are, arguably, the most notable features of the house, he gave equal attention to the masonry, roof shingles, and flashings. Skidmore also showed the house in better condition than it appears to be in the photograph. But that is one of the few liberties Skidmore took with reality.

Although traditional buildings predominate in Skidmore's sketches, indications of a future Modernist are visible in several of them, in which he celebrated the beauty of simple geometric form. One sketchbook page, labeled "From the Train" (Figure 4.25), features two images: above, a study of hemispheres and cubes; below, only the enigmatic domes of an unidentified mosque are visible over the blank wall, hinting at the splendor beyond. The multitude of domes may have prompted Skidmore's thinking about modular buildings.²⁴⁷

Skidmore's drawing of San Gimignano (Figure 4.26) does not stress the town's characteristic towers. Surprisingly, the architect, whose later practice would be based on verticality, chose a different view: a vista in which a tower is truncated and relegated to the background. Skidmore's emphasis is on a path whose arcades, dashing figures, and stark, shadowy aspect recall Giorgio de Chirico's *Mystery and Melancholy of a Street* (1914) (Figure 4.27). De Chirico was in Paris during Skidmore's visit to Europe, and it is possible that Skidmore saw the painting in a gallery while he was there. In any case, the

^{247.} Carla Yanni suggested this connection. Considering the modularity of Le Corbusier's designs, and the modernist use of modules for buildings, the connection is a very plausible one.

similarity between the drawing and the painting suggests that, as an artist and an architect, Skidmore was exploring a new way of studying a cityscape. This was also, perhaps, another harbinger of things to come: De Chirico was exploring classicism through a modernist's eyes. Skidmore may not have dwelt on the modernist structures of Europe, but the modernist vision nonetheless was making its way into his design aesthetic.

Skidmore's selection of media was often evocative of the subject. His drawing of a street in Cairo in 1928 (Figure 4.28) is especially atmospheric and is indicative of an Orientalist perspective. The red chalk used here conveys the heat of the crowded market in the foreground. Skidmore drew the densely-arranged people, stalls, and small dwellings with dark shading and close, heavily-applied hatch marks. In the background, the sense of *horror vacui* gives way to airiness. In this clearing, Skidmore applied a more delicate touch, allowing the white of the paper to show through, and lending the distant tower a lightness of color and grandeur of scale. Such an emphasis on a skyline was to become an important facet of Skidmore's career.

Skidmore also experimented with media, and in Paris he made a black and white lithograph of the book stalls along the Seine (Figure 4.29), with the misty but imposing specter of Nôtre Dame looming across the river. As was the case with his photograph of the Basin of Neptune, this print intimates Skidmore's acquaintance with the pictorialist tradition in photography (Figure 4.30). While his photographs in Chamberlain's book are somewhat literal, this one is comparable to the atmospheric examples in William Hough's Kodak albums.

Despite his catholic tastes, there is no evidence of interest in any of the European modernist monuments among Skidmore's travel sketches. This is not to suggest, however, that the volumes and shapes sketched by Skidmore did not, in some form or another, make their way into SOM's buildings; in fact, his experience abroad informed his work in terms of scale. Give the fact that the firm he founded would be one of the nation's preeminent suppliers of skyscrapers, however, Skidmore's penchant for height seems somewhat prescient. His sketch of the Liverpool Cathedral for example (Figure 4.31), foreshadows the monumentality of the skyscrapers for which SOM would become famous. The sketch also prefigures his 1931 theater in Watseka, Illinois (Figure 4.32); it is as though Skidmore translated the Gothic-style church into an Art Deco movie palace. In the same vein, Skidmore's watercolor of the *Palais des Papes* in Avignon (Figure 4.33) indicates an appreciation of the vertical, which would certainly play a role in Skidmore's practice. In this particular sketch, Skidmore eschewed the more usual views of the complex, with its picturesque conical towers and crenellation. Instead, he focused on a colossal arcade, whose loftiness could be seen as a portent of SOM's Gas Exhibits Building for the New York World's Fair of 1939 (Figure 4.34).

Skidmore used his drawing of the interior at the Cathedral of Seville (Figure 4.35) as the illustration for an undated Christmas card. Here again, his focus was on the pronounced height of the columns and arches. Such an observation was not unexpected, considering that this is a church in the Gothic style. Skidmore also exaggerated the extreme contrasts of light and dark found within this building. The scene is actually not a Christmas observance, but rather a Holy Week procession; however, the diagonals of the cross and banner serve to underscore the loftiness of the space. Skidmore unified the

visual and structural connection between the bundled shafts and the vaulting, minimizing extraneous details, and thus producing an image with the solidity of the Brooklyn Bridge. One can speculate that Skidmore noticed a connection between the Gothic-style Spanish church and Washington Roebling's famous span across the East River. If Skidmore did not find the buildings of Europe especially useful to his practice, he certainly appreciated their underlying forms.

Two watercolors made during 1928 and matted as a pair (Figure 4.36), perhaps for display, similarly reduce forms to strict geometrics. On the top half of the matte are the Tombs of Beni-Hasan in Beirut. In this painting, Skidmore showed the tombs' grotto setting as dapples of ochre, pink, and grey. Against this, the sun-washed white of the columns and lintel appears even more dazzling and more abstract. Skidmore painted them as monoliths, despite their actual construction, thus stressing their height and their tectonic severity. The lower image is of a house on the way from Beirut to Syria, a fanciful representation in shades of green, pink, and yellow. The cedars in the background, composed of graduated tones of dark green, are cut off at the top, indicating an even greater projection into the sky; this echoes his illustration of the towers of San Gimingnano: the vertical elements are suggested, rather than described. The sky, a crystalline blue, contrasts sharply with the indigo of the Mediterranean, whose movement is illustrated by means of deep shadows and pink highlights. The result is the transformation of the sky into a rectangle, sliced by the trees. The emphasis on altitude stands in stark relief to Skidmore's sketch of the loggia of the Azem Palace in Damascus (Figure 4.37), which seems to melt into a sun-drenched haze of color. The vegetation surrounding the building dissolves completely.

In France, Skidmore traveled to the Loire Valley, where he made atmospheric drawings of several major chateaux. His sketch of the Chateau Chenonceau (Figure 4.38), made in 1927, again suggests his interest in vertical elements over the horizontal. Skidmore omits the castle's lateral section of bridges, and concentrates on the relatively small cluster of turrets and attenuated windows. In a similar vein, at Chaumont (Figure 4.39), Skidmore drew the chateau's most salient feature, its turrets. But their heroic proportions have been somewhat minimized in favor of a more delicate profile.

Just as Frank Miles Day had done some forty years earlier, Skidmore sketched the famous staircase at the Chateau de Blois (Figure 4.40). However, while Day had drawn its interior, Skidmore illustrated its appearance on the building's façade. The differences are striking in other ways as well. While both artists attempted to convey a sense of awe, each took a different approach in the interpretation of that quality. Day's drawing is detailed and exact. The lines are steady and sure, but the angle from which he viewed it leaves one with a sense of instability. Skidmore, on the other hand, drew the exterior of the staircase from the vantage point of a tourist approaching the site. There is nothing exaggerated about its proportions or height. Yet, the fact that Skidmore chose to show this particular feature – arguably the most famous part of the chateau – and not the rest of the garden façade, indicates his estimation of its significance, as do the summarily-rendered figures approaching it. In addition, the nervous energy and the restless, inchoate nature of Skidmore's drawing convey their own atmosphere of anxiety.

Toward the end of Skidmore's stay abroad, he met two Americans, Eloise Owings and Raymond Hood, who helped to determine the course of his career. Ultimately, Owings and Skidmore would become engaged; back in the United States, Owings

introduced Skidmore to her brother, and the two men launched the legendary firm that bears their names.

Hood's acquaintance with Skidmore would be equally crucial to the younger man's future. Hood was, by the time Skidmore was traveling in Europe, an extremely successful architect, who had been awarded the coveted commission for the Chicago Tribune Tower a few years earlier. The two met, and Hood became instrumental in the advancement of Skidmore's reputation through an association with the Century of Progress Exposition of 1933 in Chicago. Hood was then actively involved with the planning of this event, and encouraged Skidmore and his traveling companion, Carl Landefeld, to return to Chicago to take advantage of the opportunities available for architects. During a 1989 interview, Gordon Bunshaft, the Pritzker Prize-winning architect whose own style became one of the hallmarks of SOM from the 1950s through the 1980s, told his colorful version of the story:

While (Skidmore) was in Europe sitting on his butt in the Deux Magots café, Raymond Hood was over there. It must have been round 1930. They got acquainted and Hood told Skid that when he came back he should see Hood, who was in charge of the Chicago World's Fair (the Century of Progress Exposition of 1933). When it first started, there was a man named General (Rufus) Dawes who was the administrator of it all. He hired only New York architects. The Board of Design of the Chicago World's Fair were all New York architects. I don't know why. Hood was the head man. So Skidmore came back and went out to Chicago and got a job. He was the design draftsman or junior designer for this board. Shortly after that, Mr. Dawes fired the whole damned New York group, and there was no architectural board. This little guy, Skidmore, reviewed all the designs that were presented by the various companies.

^{248.} Detlef Mertins, ed., and Betty Blum, interview with Gordon Bunshaft, April 4-7, 1989, New York City. www.SOM.com/content.cfm/gordon_bunshaft_interview. First published in SOM Journal 3, 2000.

According Nicholas Adams, Hood was traveling in Italy when he met Skidmore's friend Landefeld, telling him, "Landy, get the hell up to Paris and get Skid ... and start some sketches for the Chicago World's Fair." ²⁴⁹

Adams went on to say that Hood, who was busy with Rockefeller Center, stepped down from the Chicago job and took Landefeld with him. Thus Louis Skidmore became the accidental head of design for the fair. He invited Nat Owings, by this time his brother-in-law, to join him.

Skidmore and the Chicago Expostion of 1933: A Turning Point

The Chicago Exposition of 1933, called "the Century of Progress," was pivotal to the careers of Skidmore and Owings in several ways. For one thing, it provided income for the young architects during the Great Depression, when there was little work available. For another, it introduced them to corporate contacts and gave them exposure in the national press. Skidmore's position allowed him to supervise a team of accomplished architects, including Paul Cret, Ely Jacques Kahn, Albert Kahn, George Keck, and the firms of Holabird & Root and Graham, Anderson, Probst, and White. Skidmore, the untried young man, was given prominence and visibility that changed his life. "This little guy," as Bunshaft would later call Skidmore, was then planting seeds that would bear fruit during the 1950s: he was building a reputation as a specialist in corporate edifices, with their emphasis on progress and economic practicality, thus establishing him as an experienced practitioner for the boom times of the post-World War II era.

^{249.} Nicholas Adams. *Skidmore, Owings & Merrill: SOM Since 1936* (New York: Phaidon, 2007), 19.

The Chicago experience also led to Skidmore and Owings's work at the New York World's Fair of 1939. And, although the role of the Chicago Fair in the promotion of modern architecture is problematic, it did advance the cause of new materials and building methods, as well as generate interest in non-traditional building styles. Unlike the World's Columbian Exposition of 1893 – the "White City" with its emphasis on classical buildings by Beaux-Arts trained architects – the Century of Progress was meant to look toward the future by emphasizing scientific, technological, and industrial developments. Because the fair's theme was "the betterment of mankind through advances in scientific technology," a more forward approach to design seemed to be called for. As Cheryl Ganz suggests in her book about the fair:

Louis Skidmore, assistant to the director of exhibits in charge of design, later concluded that the exposition architecture – modern in style and featuring new and synthetic construction materials, prefabricated construction, brightly painted windowless walls, and neon lighting – had been a successful testing ground for new materials and new design approaches. It was also demonstrated that a balance could be achieved with high-quality effects at an acceptable cost.²⁵¹

Skidmore himself promoted this idea in the national press when he stressed that world's fairs were traditional harbingers of architectural trends, and that this fair in particular was conducive to the development of new methods of commercial design and construction. The Fair was, according to Skidmore, to be a reflection of all that was new, beginning with technology. Technology, he contended, would, in turn, affect design to some extent:

The 1933 World's Fair will represent in one form or another the aspirations of the generation that is building it. It may not be completely revolutionary to those who

^{250.} Lisa D. Schrenk makes this point in *Building a Century of Progress* (Minneapolis: University of Minnesota Press, 2007), 212.

^{251.} Cheryl Ganz, *The 1933 World's Fair: A Century of Progress* (Urbana and Chicago: University of Illinois Press, 2008), 64.

have followed the trend of architecture in recent years. But to most laymen, it will be new and different and revealing of the fact that architecture is making a great effort to keep abreast of science.²⁵²

Skidmore, who had drawn the timeless structures of the Old World, posited the view that modern materials, systems, and needs would determine the sort of buildings his prospective clients would want. His tone was that of a man who knew that his audience comprised a population that valued the practical, the financially feasible, and the economically efficient:

The structures of the 1933 World's Fair buildings offer a definite hope that a building practice will be designed that will produce commercial structures that will be designed to last no longer than their mechanical equipment and will permit of economical demolition. By this means a marked savings in building cost would result which would bring the cost of production in the construction industry more in line with production costs in other industries.²⁵³

In the same article, Skidmore asserted that builders had "emerged from the classicism of the past generation and are developing a logical architecture, and we hope a beautiful one, the complete results of which are not yet apparent."²⁵⁴ He added:

No prediction can be made as to the effects of this exposition on pure design of the future, that is, whether it will be all glass and steel; vertical or horizontal; or a combination of both. It is highly probable, however, that the exposition will have an important effect on the economics of commercial building in the future.²⁵⁵

Skidmore was, however, emphatic that the architecture of the future would be streamlined and free of ornamental excess or historical references, in the spirit of the International Style:

254. Skidmore, 78.

^{252.} Louis Skidmore, "Expositions Have Always Influenced Architecture" *American Architect* 141, no. 2607 (May, 1932): 80.

^{253.} Skidmore, 80.

^{255.} Skidmore, 80.

The architecture of A Century of Progress Exhibition – Chicago's 1933 World's Fair is an expression of this trend to cast adrift from the past ... It depends for its character and effectiveness on planes and surfaces – the results of architectural requirements. Rather than produce an exuberance of plaster, ornament, and decoration, making a complete show or picture before the gates are open, the architects of the 1933 World's Fair have considered in their design the added pattern of large crowds of people moving against this background on varying levels as part of the decorative scheme. ²⁵⁶

The above pronouncement reads as a description of the modern metropolis, whose appearance would be significantly determined by SOM. Skidmore added that disposable buildings would "have an important effect on the economics of commercial buildings in the future."

Skidmore may or may not have believed that buildings should be discarded; surely his travel drawings indicate that he placed a value on older structures. Nor did he necessarily believe that references to older styles would disappear as a result of new technology, although his buildings at the Chicago Fair and those later designed by SOM were hardly retardataire. Yet SOM's buildings do project an image of stability. Thus, it is more likely that Skidmore was a shrewd businessman, hoping to make the best of the serendipitous position in which he found himself, by persuading prospective clients, such as those who commissioned exhibits at the Chicago fair, that he understood their demands and would be sensitive to their budgetary concerns. Just a few generations after the American Institute of Architects had struggled to differentiate its members from ordinary builders, Skidmore was communicating a similar message to his elite clientele: I am one of you.

256. Skidmore, 78.

^{257.} Skidmore, quoted in Schrenk, 14.

The New York Fair of 1939

After the Chicago Fair, Skidmore and Owings maintained their partnership, and in January, 1936, they opened their office at 104 South Michigan Avenue in Chicago. Their commissions were small, due to the state of the economy. Nevertheless, Skidmore was too busy to accept an offer to head the Armour Institute (now the Illinois Institute of Technology). Once again, Raymond Hood exerted an influence on the younger Skidmore, convincing him to open an office in New York. Skidmore was now to become a mentor, hiring young talent such as Gordon Bunshaft. Skidmore met Robert Moses, the powerful New York City planner, who appointed him resident architect on the Long Island State Park Commission. Following the Second World War, he would be responsible for the "Secret City" of Oak Ridge, Tennessee, and for the Abraham Lincoln Houses in Harlem.

In the meantime, however, shortly after the New York office opened, Skidmore, Owings & Merrill, as it was now called with the hiring of John Merrill, was assigned the design of the New York State Pavilion for yet another World's Fair, this one to be held in New York in 1939. According to Robert Rydell, this marked the fulfillment of the promise of the Chicago exposition six years before: "The full implications of architectural designs for the 1933 Chicago World's Fair came to light in several Skidmore, Owings & Merrill-designed buildings at the New York World's Fair." The theme of the New York event, "The World of Tomorrow," was a call to action for

^{258.} Adams, Skidmore, Owings & Merrill: SOM 1936-2007, 21.

^{259.} Robert Rydell, *A World of Fairs: the Century of Progress Exposition* (Chicago: University of Chicago Press, 1993), 246.

participants to create buildings that would reflect progress through machine-influenced design. A report from the Committee on Theme declared:

For the first time in American history, New York will present to the world a vivid and integrated expression of the expanding American social scene, and by virtue of that expression alone will the World's fair of 1939 achieve true expression.²⁶⁰

The New York fair of 1939 furthered Skidmore's career and enhanced the reputation of SOM through association with such distinguished names as Oscar Niemeyer, Shreve, Lamb & Harmon, Morris Lapidus, Ely Jacques Kahn, Alvar and Aino Aalto, and Albert Kahn, as well as the industrial designers Russell Wright, Raymond Loewy, and, perhaps most notably, Norman Bel Geddes. SOM's buildings for the fair provided a foretaste of the direction that American commercial architecture would take. The firm designed structures for corporate and industrial clients, including the Gas Works pavilion, which, appropriately, projected power.

SOM's Wonder Baking Company building (Figure 4.41) comprised a glass-walled tower, along with a white triangular mass resembling rising dough, and sprinkled with the company's signature red, blue, and yellow circles. It is interesting to note that the building was designed in the spirit of *architecture parlante*, "talking architecture," whose use is reflected in its form, and, in this case, its familiar decoration. The term had been used to describe the work of the Claude Nicolas Ledoux in the mid-nineteenth century. It is also an appropriate appellation for the Long Island Duck (Figure 4.42), a large store in Flanders, New York, selling duck meat and eggs, and constructed in the shape of a duck some nine years before the fair. Like the Long Island Duck, the Wonder

^{260.} NYWF AL. 13. Committee on Theme Board Design "Report of the Committee on Theme of the Fair to the Board of Design" 7/7/36, quoted in Joseph Philip Custer, "The World of Tomorrow: the 1939 New York World's Fair." PhD dissertation, Rutgers University, New Brunswick, New Jersey, 1990, 33-34.

building was designed as an advertising vehicle; several decades later, the architects Robert Venturi and Denise Scott Brown would refer to such structures as "ducks." ²⁶¹ Less obvious but no less commercial in their intent, The RCA (Figure 4.43) and Westinghouse (Figure 4.44) pavilions conveyed the efficiency of modern technology. The buildings all, however, emphasized volume, mass, and monumentality; this was even the case with the most ornamented of the group, the Wonder Baking building. These were qualities that were among the most salient observed by Skidmore during his travels, and they would most characterize SOM's buildings in the future.

While the lasting influence of any world's fair is questionable, there is no doubt that Skidmore's role in the events of 1933 and 1939 were instrumental to his success as an architect and businessman. It is also true, however, that the experience of travel abroad was equally formative, even if it did not lead to slavish copies of Old World monuments. It was during his time in Europe and the Middle East that Skidmore actually saw the world that was to be represented —and, arguably, transformed – at the expositions. He observed it with great diligence, measured and documented it, and trained his hand and eye in the manner of those who had designed, built, and recorded it before him. He may have seen differences between the old world and the new, but he managed to find common ground. Furthermore, it was abroad, away from the familiar, that Skidmore forged the connections between centuries of building traditions, the links that transcend trends and taste. It was also abroad that he attracted the notice of those who saw something in him as well.

^{261.} Robert Venturi, Denise Scott Brown, and Steven Izenour, *Learning from Las Vegas* (Cambridge, Massachusetts: MIT Press, 1996), 87.

CONCLUSION

SEEING THE PAST AND THE FUTURE OF DRAWING

The purpose of this dissertation was to highlight and discuss a number of subjects related to the practice of architectural study abroad and its resultant images. Those subjects, including social and cultural context, nationalism, visual theory, artistic intent, architectural education, and, indeed, the very nature of art, could each be analyzed separately; such in-depth studies were beyond the scope of my research. However, those issues overlapped with, and informed the analysis of, the travel sketches. It is my hope that this essay will stimulate further discussion and enrichment of both the overall topic and its component issues.

Travel sketches made by architects invite comparisons to sketches, drawing, paintings, or photographs made by other artists. Despite the fame of the sweeping architectural views of Canaletto, Caspar van Wittel (Gaspare Vanvitelli), and others, the personal travel sketches by architects have, almost by definition, received little attention, and yet they are, nonetheless, works of art It is tempting to dismiss architects' travel sketches as little more than preparatory exercises for brilliant careers. It is easy to understand why this attitude prevails. For one thing, study abroad was, for the American student of architecture, a part of the training process, both before and after academic centers offered an education in that discipline. Studying abroad permitted the student to learn about the history of architecture, how to see, how to become comfortable with drawing, and how to trace the actions of their predecessors.

There are other reasons for the short shrift generally allocated to travel sketches.

Because of their extreme youth, most of the sojourners in this dissertation (as well as many other young architectural students who went abroad) had not designed any

buildings that had actually been constructed at the time of their first sketching tours. That fact puts them in a very different category from other artists: a painter's travel impressions might be considered finished products, while those of a fledgling architect are rarely published or exhibited. Architects' buildings are usually considered their finished ultimate products, but not every idea on paper is realized on a building site. As I have stated elsewhere, for an architect, a drawing is one of the few independent products possible. As architectural theorist Garry Stevens wrote, "Nothing reveals more the supreme importance of the symbolic aspect of architecture than the fact that drawings of buildings are at least as important as the objects they depict ... Drawings are the only products over which the architect has complete control." ²⁶²

In addition, drawing has long been an integral part of the architectural design process rather than a product. In the Beaux-Arts tradition, the initial ideas and planning concepts, the *esquisse* and the *parti*, are manifested by hand, on paper. The presentation drawing, however beautiful, is not considered the finished product. The construction drawing, exactly measured and painstakingly rendered, has a utilitarian purpose and not an artistic one.

Often, travel provided the architectural student with a catalog of styles and details from which to borrow for his or her own designs. It was part of the training process to go abroad. Travel was, then, something that had to be done, a duty, however pleasurable it might have been, and the sketches were by-products of the exercise. It is likely that crossing borders was occasionally *pro forma*. William Hough's complaints about the

^{262.} Garry Stevens, *The Favored Circle* (Cambridge and London), 1998, p. 7. In Peter Schneider, "Disegno: on drawing out the archi-texts" *Journal of Architectural Education* 61, no. 1 (September, 2007): 19.

banality of his life in Rome and Florence make one feel that the young student would rather have been at home.

Yet, the practice of study abroad for architectural training was widespread, and it continues during this age of globalization. In the rare cases in which American architects' travel sketches have been discussed, it has become evident that they are worthy of examination, as both artifacts and as works of art. In their travel impressions, Cass Gilbert (Figure Concl.1), Louis I. Kahn (Figure Concl.2), and Michael Graves (Figure Concl.3) showed themselves to be outstanding draftsmen as well as imaginative colorists.

263 The drawings made abroad by Whitney Warren (Figure Concl. 4) and Wilson Eyre (Figure Concl. 5), too, call out for closer inspection. The atmospheric landscapes, as well as the architectural sketches made abroad by Richard Morris Hunt will, I hope, be available to researchers in the near future. All of them show their creators as masters of many media.

As this dissertation has demonstrated, architects are artists: their profession requires extraordinary visual acuity as well the ability to understand the laws of physics and the nature of materials. To view the thousands of drawings contained within the travel notebooks of the four architects studied in the previous chapters is not just to examine the times in which they lived, but also their rare talents for drawing, painting, photography, and verbal descriptions. Frank Miles Day was a master draftsman with unsurpassed skill at rendering, as well as an eye for detail and an insatiable desire to understand the way things worked. Eleanor Manning sought the picturesque and recorded

^{263.} For more travel sketches by these artists, see Paul Clifford Larson. Cass Gilbert Abroad: The Young Architect's European Tour (Afton, Minnesota, 2002); Brian M. Ambroziak, Michael Graves: Images of a Grand Tour (New York, 2005); and Eugene J. Johnson, Michael J. Lewis, and Ralph Lieberman, Drawn from the Source: The Travel Sketches of Louis I. Kahn (New York, 1996).

examples using form and color. William J. H. Hough looked beyond the material and captured the emotive qualities of the environment. Louis Skidmore used various media to find forms that recurred throughout time. I took great pleasure in viewing these images, and hope that this study will bring them to a wider audience.

The ways in which these architects employed the photograph were varied and often unexpected. For them, photography, where it was used at all, supplemented, rather than supplanted, drawing, so it is drawing that truly dominates the story of architectural study abroad during the five decades covered here. Drawing with a pencil or pen is the most direct way to capture an image; to use a camera requires a less immediate, less intimate engagement with the subject: a machine is placed between the viewer's body and the subject, a second lens supersedes the viewer's eye, and that lens often records what the viewer has not noticed. Arguably, all vision is mediated, but the camera relegates the artist's hand, as well as his eye, to a secondary position. Today, with the advent of Photoshop and other digital tools, the photographic process takes an even longer period of gestation, harkening back to the longer exposure times of early nineteenth-century photography, and the artist is more in control of the finished, if not the initial, product. The role of drawing in the digital era, both as a design tool and as a means of representation, remains an open question, worthy of further study.

Drawing Lives: The Digital vs. the Manual

The genesis of the computer age has radically altered the way in which architects work. The use of CAD and other, similar programs, has created a sea change in the methods of the creative process, a development that has caused concern among modern architects. In 1986, Norman A. Crowe and Steven W. Hurtt, architects and professors of architecture at the University of Notre Dame, published an article that may, at the time,

have seemed somewhat premature. In "Visual Notes and the Acquisition of Architectural Knowledge," they made a convincing argument for the practice of drawing by hand, anticipating a crisis in the role of drawing. Their comments seem to be applicable to both representational and design drawing:

Since our purpose here is to discuss the ways one comes to understand architecture, and consequently to design, it is appropriate to begin with certain premises regarding the relationship between architectural experience, memory and design. These premises are as follows:

- 1. A person's understanding of a building is enhanced by the act of drawing it.
- 2. The ability to remember that understanding is enhanced by having made such drawings.
- 3. The ability to draw accurate facsimiles of exemplary works of architecture is proportional to one's efforts to do so.
- 4. Together, these remembered experiences and understandings constitute the architectural memory that we call upon in order to design. ²⁶⁴

Hurtt and Crowe here underscore two points that had been asserted almost 100 years before by Frank Miles Day, Richard Morris Hunt, and Cass Gilbert: that drawing is the key to understanding a building and that drawing important examples of buildings makes one a better designer. Hurtt and Crowe posit the view that the practice enhances the kinetic and mental memory needed to design a building on one's own. They cite the child's learning to write through the repetitious forming of letters on paper as comparable to an architect's attainment of building knowledge by way of drawing. Just as today's children less frequently learn cursive penmanship, Crowe and Hurtt fear that architectural education no longer stresses the tradition of copying existing monuments:

^{264.} Norman A. Crowe and Steven W. Hurtt, "Visual Notes and the Acquisition of Architectural Knowledge" *Journal of Architectural Education* 39, No. 3 (Spring, 1986): 7.

^{265.} Crowe and Hurtt, 7.

The theoretical position that began to guide practice and education tended to strip away the need to study existing architecture through any means, including the making of analytical drawings. Characterized as dead styles for ages long since past, existing architecture tended to be regarded as only of historic interest, not as a chalice of knowledge holding answers to everyday architectural problems.²⁶⁶

Worse, they claim, "The most devastating consequence of this pedagogical stance was that the typical student of architecture stopped studying architecture, and especially stopped *drawing* architecture as a means of acquiring architectural knowledge." ²⁶⁷

More recently, Harry Francis Mallgrave, an architect and professor at the Illinois Institute of Technology, has written on other effects of this phenomenon. While Mallgrave admits that the digital era has relieved the architect of some of the more mundane tasks of the profession, he has serious misgivings about the computer's ubiquity, from training through presentation:

Let me again stress that software applications have now become a vital part of the design professions, and therefore their mastery should be an important goal of architectural education. But should the training of design students take place solely through the use of the computer? I think few would argue this case, but the direction of our architectural curricula is suggesting otherwise. It is not possible in many schools to enter a graduate program with a degree in another field and have little or no design training than on the computer.²⁶⁸

Mallgrave stresses the potentially deleterious effects of modern training on the next generation of architects. He believes that the "computer, as the first tool of design, tends to have a leveling effect on presentational techniques and arguably, design originality." ²⁶⁹ Furthermore, the tool encourages abstractions "far removed from the world of human"

^{266.} Crowe and Hurtt, 10.

^{267.} Crowe and Hurtt, 10.

^{268.} Harry Francis Mallgrave. *The Architect's Brain* (Chichester, UK: Wiley-Blackwell, 2009), 214.

^{269.} Mallgrave, The Architect's Brain, 214.

sensory experience."²⁷⁰ Most importantly, he states that "computer design tends to underutilize the innate capacity of the human brain for creative thinking."²⁷¹ These three issues overlap, resulting in a sameness of scale, materials, and ideas, and, ultimately, in a cerebral shutdown.²⁷²

Anyone who doubted the existence of a crisis for architectural drawing in the age of computer-aided design may have found the Yale Symposium, "Is Drawing Dead," a revelation. Held February 9-11, 2012, in conjunction with the exhibition, "Massimo Scolari: The Representation of Architecture," this event drew much attention in the field. The allocation of so much time and energy to the topic, and the standing-room-only attendance, suggest that the use of computer-aided design has become a matter of grave concern. While a few participants are sanguine about computers as tools for drawing, others are less considerably less enthusiastic. Among the advocates is Casey Reas, who draws with computer code. Another is Julie Dorsey, who "demonstrated ... software that combines the ease of hand sketching with the visualization capabilities of computer modeling and rendering systems." On the other hand:

Michael Graves, who focused on the drawings he made in the early 1960s of Rome's historic monuments, advocated sketching from life as a form of note taking. "We never remember unless we draw it," he said. "It doesn't matter if the drawing is good, bad, or whatever." Finnish architect Juhani Pallasmaa made the case for hand-drawing as tactile tool for discovery. While drawing, an architect isn't focused on the individual lines he or she is creating, said Pallasmaa, but is instead "occupying that space as if touching all its

^{270.} Mallgrave, The Architect's Brain, 214.

^{271.} Mallgrave, The Architect's Brain, 214.

^{272.} Mallgrave, The Architect's Brain, 214.

^{273.} Joann Conchar, "Yale Symposium Explores Drawing in the Digital Age." *Architectural Record.* February 21, 2012. Online edition. Http://architecturalrecord.construction/news/2012/02/Yale-Symposium-Explores-Drawing.asp.

surfaces." Such a connection is "difficult, if not impossible to simulate with computers," he said. 274

The loss of drawing would be, by many calculations, a great misfortune for the architectural profession and those who depend upon it for shelter, safety, convenience, and aesthetic edification. Barbara Tversky, of the department of psychology at Stanford University, has studied the connection between sketching and thinking. She has written, "Sketches are a way of externalizing ideas, of turning internal thoughts public, of making fleeting thoughts more permanent." She explains:

Sketches are produced in many domains to communicate with self or others. They are a kind of external representation serving as a cognitive tool to augment memory and information processing by relieving the mind of some of those burdens. Sketches schematize. They do not portray reality; rather they convey conceptions of reality...As such, they reveal people's conceptions of domains.²⁷⁶

Tversky's comments are relevant to two kinds of sketches: the drawings made as part of the design process and those that refer to the artist's perception of a standing monument. I maintain that the two are closely related. Whether a sketch is used for one's own reference or for communication with others, it presupposes an analysis of space on the part of the artist and of the viewer. Because drawing has been a major tool for architects at least as far back as the Renaissance, to draw an existing building is not only to trace its lines and volumes, but also to analyze the conceptual sketches of its architect. Just as Frank Miles Day, a century ago, insisted that architectural students had an obligation to copy, that is, to draw buildings that stood before them – in both senses of the phrase – more recent scholars have reiterated the importance of drawing. In 1993,

^{274.} Conchar.

^{275.} Barbara Tversky, "What do Sketches Say about Thinking." In Technical Report SS-02-08, Association for the Advancement of Artificial Intelligence, np.

^{276.} Barbara Tversky, Abstract for "What do Sketches Say about Thinking." In Technical Report SS-02-08, Association for the Advancement of Artificial Intelligence, np.

Rudolf Arnheim wrote of the importance of the sketch made from a model rather than one made from memory:

Drawings done by artists from a model, whether or not they are intended as faithful copies, show accidental features that are typically observed, not invented. Drawings from mental images, on the other hand, rely on generalities, on the simplifications that remain in memory as abstractions from the multiplicity of individual experiences. Architects and designers, of course, rely on perceived models only in the more indirect sense of what they have seen of other people's work, historical or contemporary examples. But unless they actually copy such examples – a Renaissance villa or a chair exhibited in a furniture exhibition – they, too, rely on more or less dim recollections, extracts of what they have seen.²⁷⁷

In addition to his assertion that copying allows the architect and designer to understand the original work of art, Arnheim implied that copying is analytical, referential, and creative, suggesting that the analytical travel sketches made by architects are closely related to the kinds of preliminary drawings made during the design process. I would add that although architectural students made their share of mandatory measured drawings of historic monuments, many of the drawings and paintings made abroad are more loaded with significance than those made by other artists. They are analytical, they are referential, they could be used in the design of a new building, and yet they are complete products in themselves.

Similarly, Peter Schneider, architect and professor at the University of Colorado, has linked drawing with thinking. His statement that "drawing is a vehicle for keeping a record of ideas, offering mute testimony to a tradition that values the act of drawing over the actual construction of the imagined objects" lends credence to the idea that the

^{277.} Rudolf Arnheim, "Sketching and the Psychology of Design" *Design Issues* 9, No. 2 (Autumn, 1993): 16.

^{278.} Peter Schneider. "Disegno: On Drawing Out the Archi-Texts." *Journal of Architectural Education* 61, no. 1 (September, 2007): 20.

drawing of an existing object is a means toward the design process itself. It also reinforces the notion that the drawing, no matter what its state may be, is a finished product. I suggest that not only did some architects "draw" with words; some of them also saw the drawing as a text for study as well as a graphic representation. Schneider goes on to say: The drawing ... is the singular vehicle and signifier that carries the echoes of the architectural ideas and architectural theories that inhabit it... Drawing becomes the simultaneous mode for architecture's researches and also the site of those researches.

The act of making a sketch becomes, for the architect, a way to embody, to reinterpret, and transmit architectural knowledge. Drawing is the visual means for an architect to re-imagine the visual world. Seeing is the first step. As Mallgrave has suggested, seeing is a form of biological nourishment. In that case, the process of nurturing the eye begins with the architect's vision of an existing building, continues through to the enjoyment of those experiencing the architect's product – whether drawn or built – and, perhaps, persists through the vision of some other artist, who chooses to record and learn from that intermediate representation.

APPENDIX A

PARTIAL ITINERARIES

Day

Beauvais, Bergamo, Blois, Bologna, Cambridge, Canterbury, Charing, Glastonbury, Granada, London, Lucca, Lyon, Norwich, Paris, Pisa, Pompeii, Rochester, Rome, Salisbury, Sicily, Siena, Orvieto, Throrpe, Venice, Winchester

Manning

Chartres, Cheshire, Chester, Chinon, Corsham, Florence, Gloucestershire, Liverpool, Paris

Hough

Antwerp, Arles, Azay-le-Rideau, Beauvais, Bergamo, Bruges, Carcassonne, Florence,

Genoa, Ghent, Heidelberg, Lake Como, Lake Maggiore, London, Lucca, Lugano,

Madrid, Mainz, Medina, Mont St Michel, Nuremberg, Paris, Perugia, Plymouth, Pompeii,

Rome, Rothenberg, Rouen, Salamanca, Siena, Tangier, Taormina, Toledo, Urbino,

Vienne, Wallileau

Skidmore

Athens, Avignon, Beirut, Blois, Broadway, Cairo, Chartres, Chaumont, Chenonceaux, Damascus, Liverpool, Ludlow, Oxford, Paris, San Gimignano, Seville, Stanton, Versailles

APPENDIX B

ELEANOR MANNING'S NOTES ON PORT SUNLIGHT

Eleanor Manning sketched with words as well as lines and shadows. Of particular interest to her were planned communities and company towns, such as Port Sunlight, the Lever Brothers community located near Liverpool. Her notes on Port Sunlight indicate her observations on several important facets of planned cities: the general access to public transportation; the beneficent aspect of the town (as suggested by her comment that the community was created as a "prosperity sharing scheme;" the relative situation of public buildings and housing; and the general arrangement and design of houses and gardens. Manning's notice of these features suggests that domestic architecture and public housing were focal points of her study abroad.

Location.

On River Mersey. Can be reached in two ways

- a. underground train to Rock Ferry Railroad to Bebington Station near works
- b. Ferry from Pier Head to Birkenhead. Gray to New Ferry short walk beyond.

General description.

A model town built by Lever Bros (soap manufacturers) for their employees as a prosperity sharing scheme. Covers 135 acres. Between 700 and 800 houses of two types: cottage type provides three second floor bedrooms, living room, kitchen, scullery, bathroom and larder on 1st floor. Parlor cottages have additional bedroom on 2nd floor and parlor on street floor. Original cost of cottages £200, £350. In 1902, cost went up to £330-£550.

Plan of village.

In the center of the village are grouped the public buildings – the schools, church, hotel and hospital. A second smaller center has auditorium and schools and art museums situated in a park. The "diamond" or recreation area has bandstand, gymnasium, open air baths and tennis courts.

The houses are arranged in groups with grass plots and shrubs in front between them and the walks. They are built in blocks around a central space which is divided into allotment gardens – a sort of kitchen garden cultivated by the householders. Roads, 40'0" generally – 8 yards roadway and 8" on each side for sidewalks.

Houses.

There are a few single houses but most of them are semi-detached and are built in blocks of two to ten houses. Each group of homes is designed as a whole. a. Height.

All the houses are two stories – the attic being unlighted and not used for rooms. b. walls.

In majority of cases are half-timber. Some have half-timbered gables with first story of plaster – rough cast – or brick or stone (red limestone). In a few, the g gables are tiled like the roof. The timbers were apparently are apparently part of the construction and put together with wooden pegs. (no c?)

d. chimneys.

They vary considerably in design – some have ornate terra cotta tops. e. the character of roofs.

The roofs are both hipped and gabled – sometimes combined and sometimes single – and often there are hipped gables.

f. windows

The windows are almost universally casement and with leaded glass – square lights – some are wood muntins. And frames – the leaded casements have metal frames – only one of a group opening. As a rule the windows are grouped with this mullion framed and transoms occasionally on the first floor. There are many examples of bays – either square or with sides at all angles – some slightly projecting and supporting an overhang. Sometimes the bay extends for two stories.

g. doors

The doors were usually square-headed, sometimes a 4-centered arched top – they are battered. Usually – often glazed at the top with a single or double row of lights. 279

^{279.} Eleanor Manning, Notes on her visit to Port Sunlight, Collection of Howe, Manning and Almy, Box 16, Folder 730, Library and Special Collections.

APPENDIX C

FIGURES

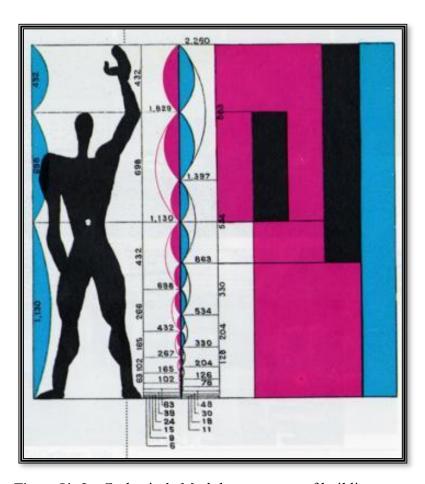


Figure I1. Le Corbusier's Modulor, a system of building measurement based on the human body.

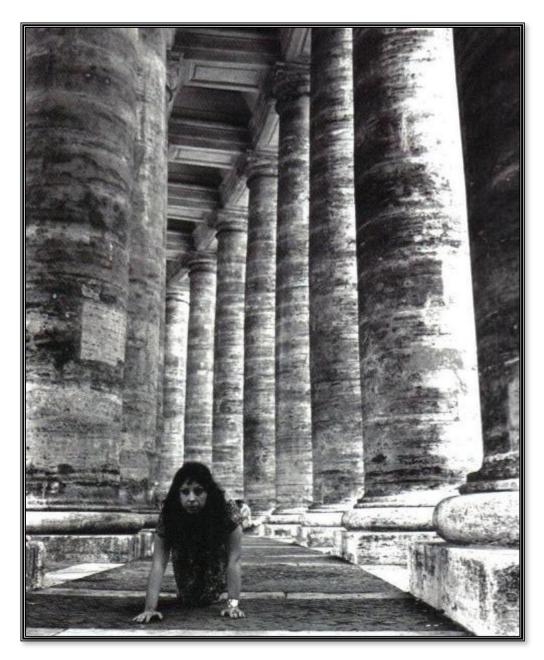


Figure I2. The French artist Orlan uses her body to measure the colonnade at Piazza San Pietro as part of her performances of *MesuRAGES d'Institutions* (1974-1979).



Figure 1.1. Frank Miles Day. Architectural Archives, University of Pennsylvania.



Figure 1.2. Frank Miles Day. Nuremburg. Travel sketch, 1885. Architectural Archives, University of Pennsylvania.

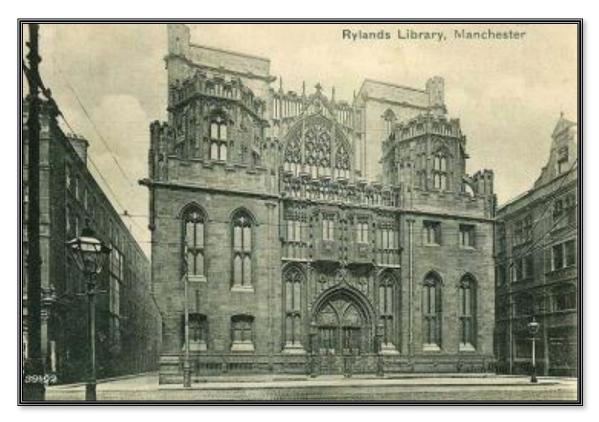


Figure 1.3. Basil Champneys, John Rylands Library, Manchester, 1889.

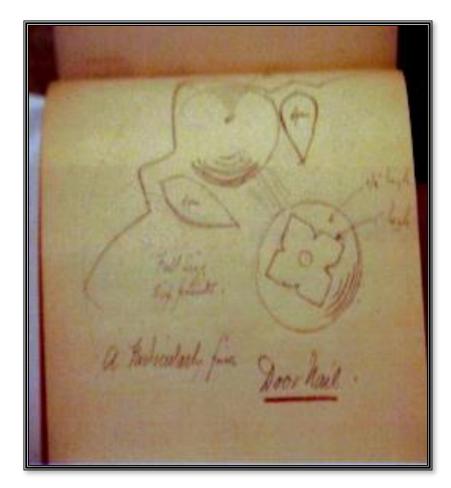


Figure 1.4. Frank Miles Day, page from a travel sketchbook, featuring "a particularly fine door nail." Day's fascination with hardware may have been due to his interest in materials and in the process of construction as well as its intrinsic beauty. Architectural Archives, University of Pennsylvania.

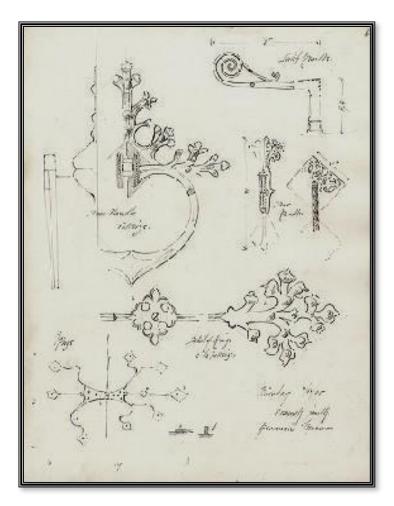


Figure 1.5. Frank Miles Day. Page from a travel sketchbook illustrating hardware from the German Museum, Nuremburg, 1885. Day's eye for detail was one of the marks of his drawings. Architectural Archives, University of Pennsylvania.

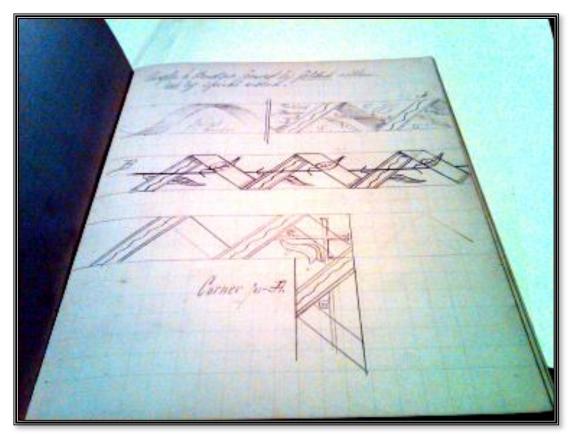


Figure 1.6. Frank Miles Day. Page from student notebook depicting the use of ribbon motif in architecture. Architectural Archives, University of Pennsylvania.

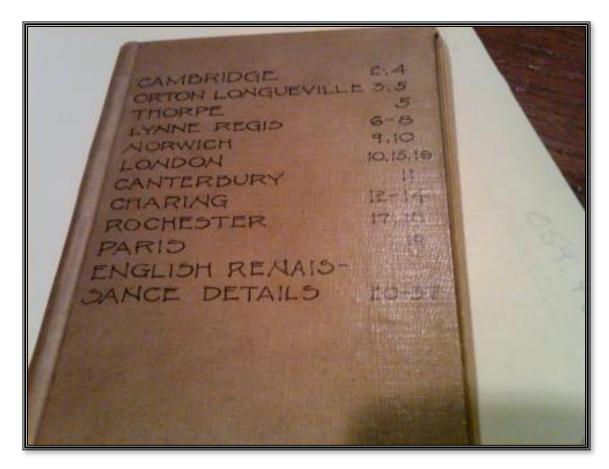


Figure 1.7. Frank Miles Day. Travel sketchbook, 1885. Architectural Archives, University of Pennsylvania.

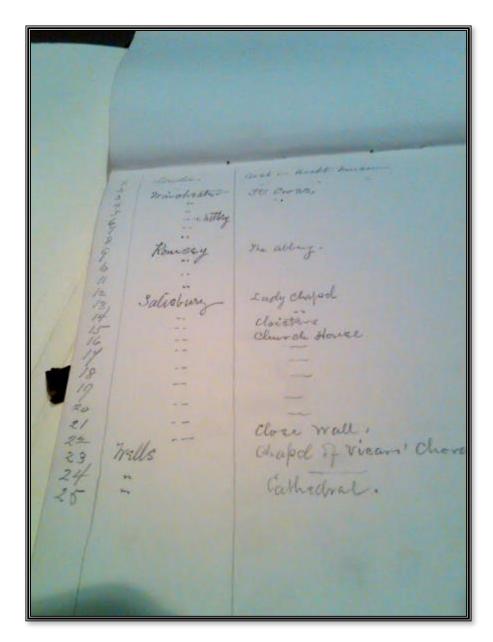


Figure 1.8. Frank Miles Day. Index of drawings in travel sketch book, 1883-85. Architectural Archives, University of Pennsylvania.

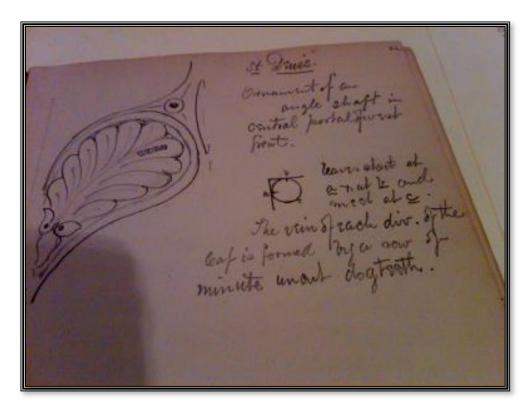


Figure 1.9. Frank Miles Day. Page from sketchbook featuring ornamental detail from the church of St Denis, 1885. Pencil on paper. Architectural Archives, University of Pennsylvania.

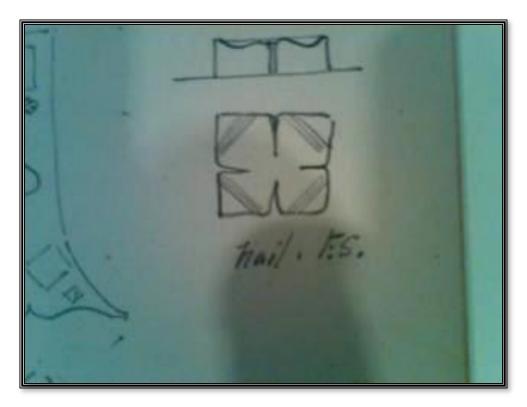


Figure 1.10. Frank Miles Day. Detail of page from travel sketchbook illustrating a nail in plan and section, "F.S." (full size?). No detail was too small to ignore. Architectural Archives, University of Pennsylvania.

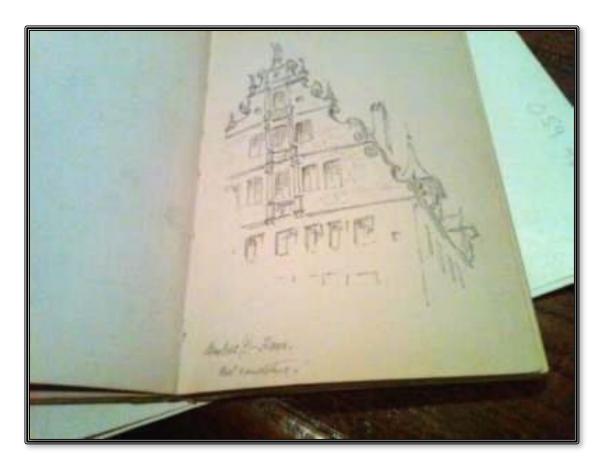


Figure 1.11. Frank Miles Day, page of sketchbook illustrating the gable of the Fembohaus, Nuremberg, 1885. Pencil on paper. Architectural Archives, University of Pennsylvania.

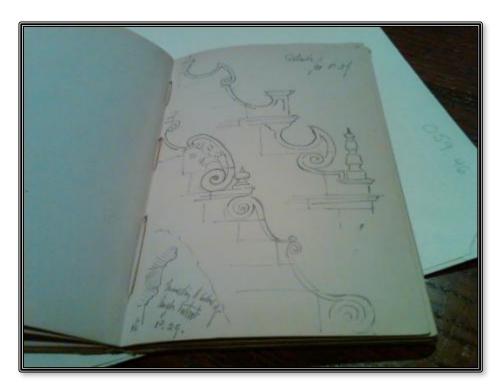


Figure 1.12. Fembohaus, Detail of gable shown in Figure 1.11. Architectural Archives, University of Pennsylvania.

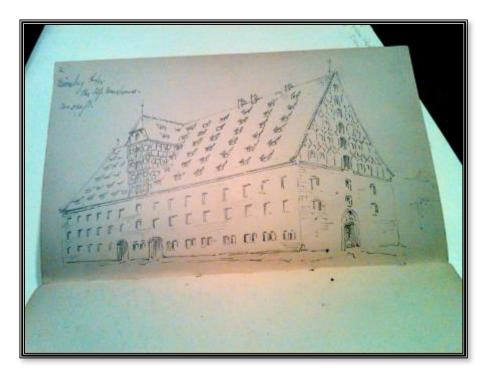


Figure 1.13. Frank Miles Day. Page from sketchbook illustrating the Maulthalle, a granary in Nuremberg, 1885. Pencil on paper. Architectural Archives, University of Pennsylvania.



Figure 1.14. Frank Miles Day. Page from sketchbook illustrating the Pazzi Chapel, Florence, 1885. Pencil, ink, and watercolor on paper. Day generally did not use color during this sojourn, but in this instance, the colors of the *pietra serena* and the della Robbia terra cotta *tondi* were indicative of the materials. Architectural Archives, University of Pennsylvania.

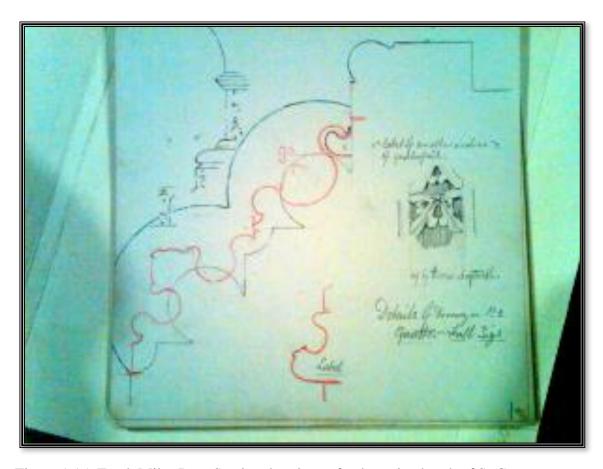


Figure 1.15. Frank Miles Day. Section drawings of column in church of St Cross, Winchester, 1885. Pencil and ink. Architectural Archives, University of Pennsylvania.



Figure 1.16. Frank Miles Day. "Maison de Diane de Poitiers," Rouen, 1885. Architectural Archives, University of Pennsylvania.



Figure 1.17. Detail of Figure 1.16.



Figure 1.18. Palais de Justice, Beauvais. Folio from travel sketchbook. Day chose to illustrate one of the shorter towers of the building. Architectural Archives, University of Pennsylvania.



Figure 1.19. Vintage postcard of the Palais de Justice, Beauvais. The portion of the building drawn by Day in Figure 1.18 is on the left side of the photograph.

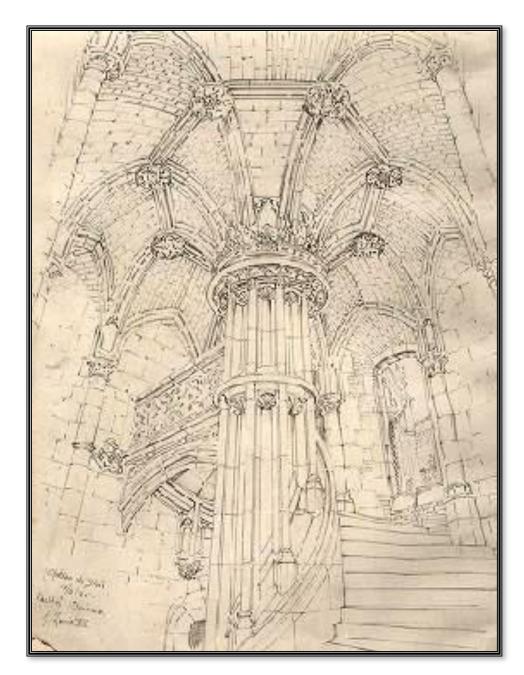


Figure 1.20. Blois, Staircase of Chateau. Travel sketch, pencil. 1885. The imposing verticality and spatial ambiguity recall the *Carceri* of Giovanni Battista Piranesi. (See Figure 1.21). Architectural Archives, University of Pennsylvania.



Figure 1.21. Giovanni Battista Piranesi, *Drawbridge* from *Carceri d'Invenzione*.



Figure 1.22. Bologna, San Sepulcro. Frank Miles Day, travel sketch. Pencil and ink wash. This drawing not only indicates Day's attention to detail, but also his interest in color, texture, and building material. Architectural Archives, University of Pennsylvania.



Figure 1.23. Cappella Colleone, Bergamo. Frank Miles Day, travel sketch. Pencil. 1885. Architectural Archives, University of Pennsylvania.



Figure 1.24. Glastonbury, Chapel of Joseph of Arimathea. Folio from travel sketchbook. Pencil. Day was selective in his use of pencil strokes to represent this interior, perhaps indicating the appearance of the space as washed in natural light. Architectural Archives, University of Pennsylvania.

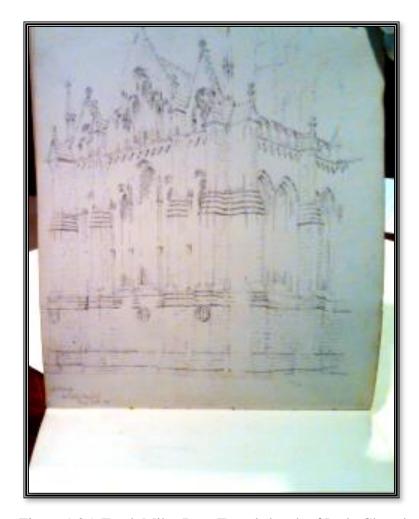


Figure 1.25. Frank Miles Day. Travel sketch of Lady Chapel at Salisbury Cathedral, 1885. Architectural Archives, University of Pennsylvania.



Figure 1.26. Salisbury Cathedral. In this photograph, one can see the heavily-patterned surface of the building. In Day's drawing (figure 1.25), Day's decision to concentrate on the horizontal members is evident.



Figure 1.27. Frank Miles Day, Caner Residence (left), Philadelphia, 1890.

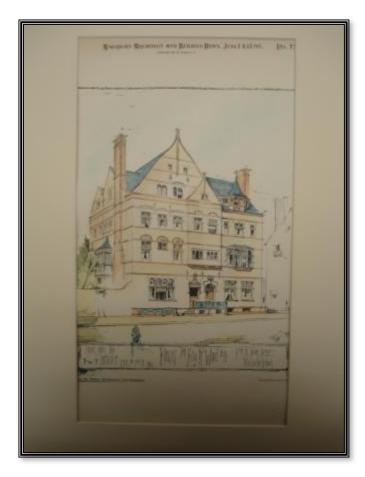


Figure 1.28. Frank Miles Day. Double residence for Edward Wood, 1890.

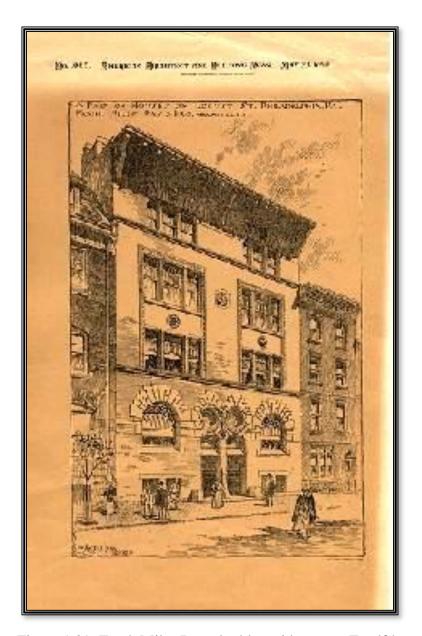


Figure 1.29. Frank Miles Day, double residences at Twelfth and Locust Streets, Philadelphia, 1892.

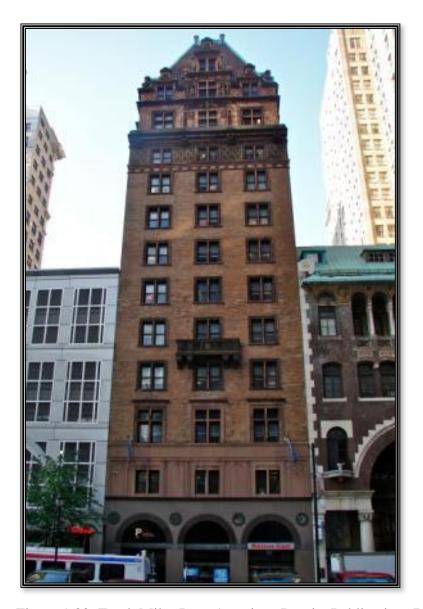


Figure 1.30. Frank Miles Day, American Baptist Publications Building, Philadelphia, 1896.

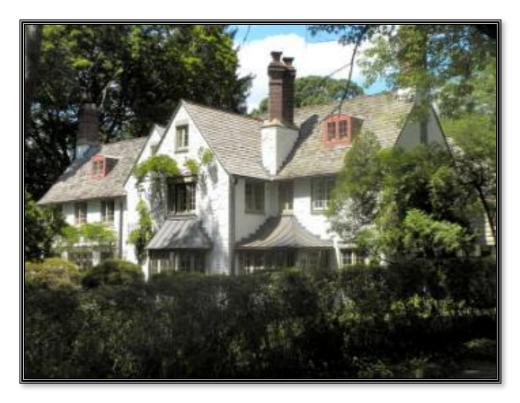


Figure 1.31. Frank Miles Day, Cogslea, West Mount Airy, Philadelphia, 1902. Day designed this house for his friend, the artist Violet Oakley.



Figure 1.32. Frank Miles Day, Wetherill Mansion, Philadelphia, 1906.



Figure 1.33. Yarnall Residence, Philadelphia, 1908. Violet Oakley painted the murals for the house. They have since been removed.

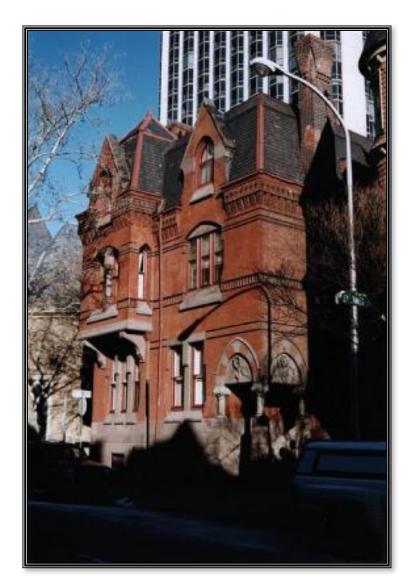


Figure 1.34. Frank Furness, Thomas Hockley House, Philadelphia, 1875. Furness's exuberant Victorian style stood in marked contrast to Day's restrained eclecticism of the following decades.

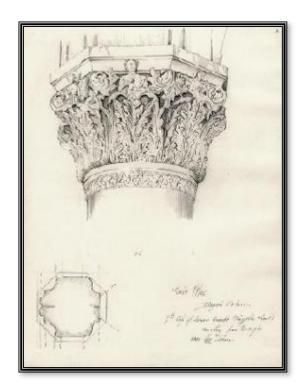


Figure 1.35. Venice, Frank Miles Day. A Capital at the Doge's Palace, elevation and plan, 1895. Architectural Archives, University of Pennsylvania.



Figure 1.36. Venice, Doge's Palace. Modern Photograph of Capital.

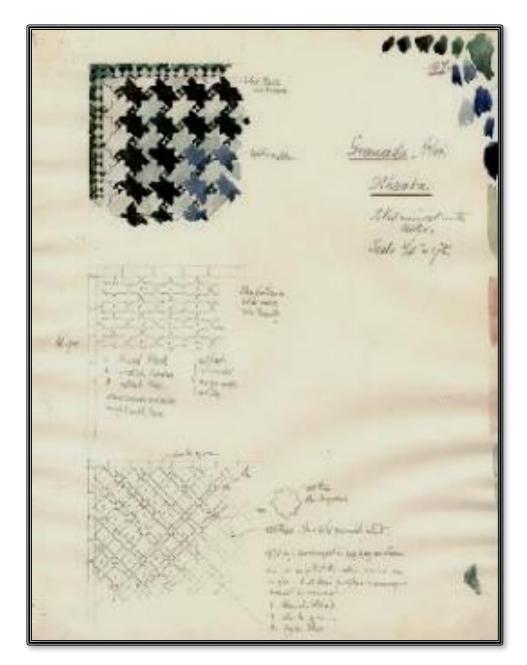


Figure 1.37. Frank Miles Day. Folio from travel sketchbook. Tiles at the Alhambra, Granada, 1894. Pencil and watercolor. Note that when Day did not draw in color, he color coded his pencil drawings. Architectural Archives, University of Pennsylvania.

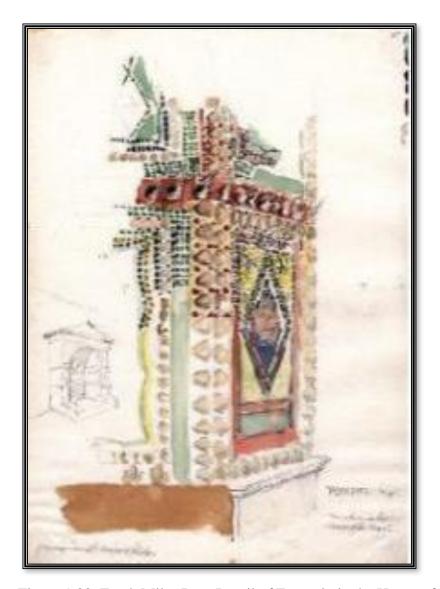


Figure 1.38. Frank Miles Day. Detail of Fountain in the House of the Bear, Pompeii. Travel sketch. Watercolor and pencil on paper, 1894. Day painted a richly textured detail of the fountain, with an inset of the entire structure in pencil. Architectural Archives, University of Pennsylvania.

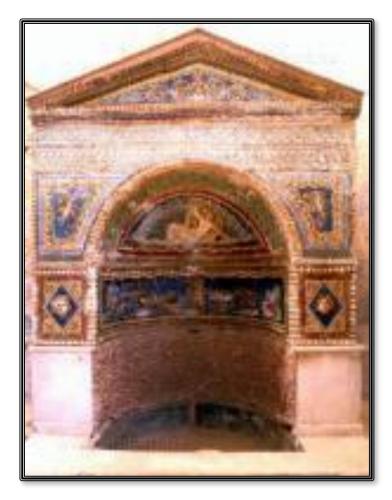


Figure 1.39. Photograph of Fountain in the House of the Bear, Pompeii.

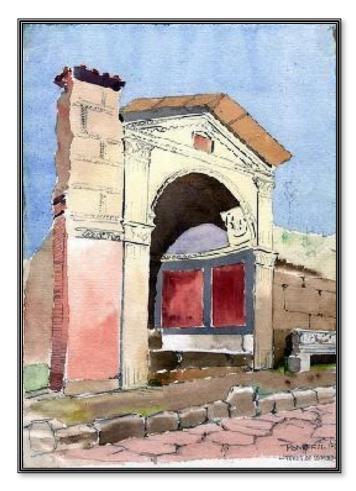


Figure 1.40. Frank Miles Day. Pompeii, Street of Tombs. Watercolor and ink on paper, 1894. Architectural Archives, University of Pennsylvania.

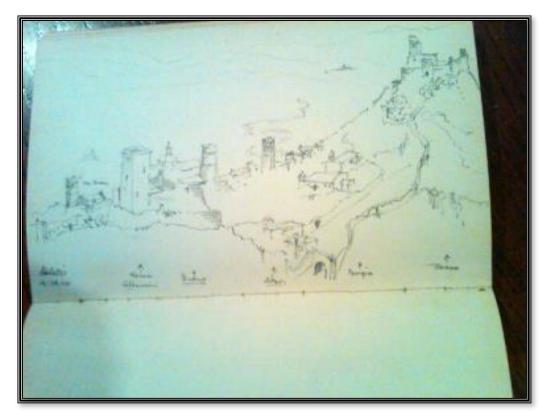


Figure 1.41. Frank Miles Day. Assisi from the train, ca. 1913. Pencil on paper. Architectural Archives, University of Pennsylvania.

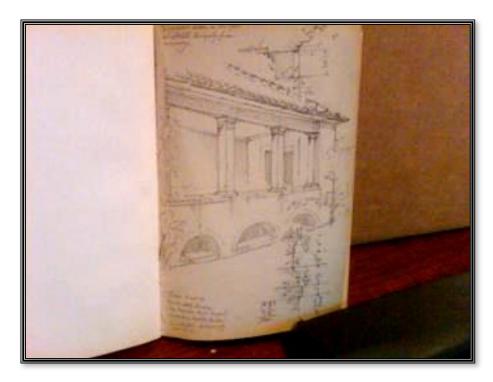


Figure 1.42. Frank Miles Day. Page from travel sketchbook, depicting Santa Maria degli Angeli, Rome, ca. 1912. Pencil on paper. Architectural Archives, University of Pennsylvania.



Figure 2.1. Eleanor Manning.

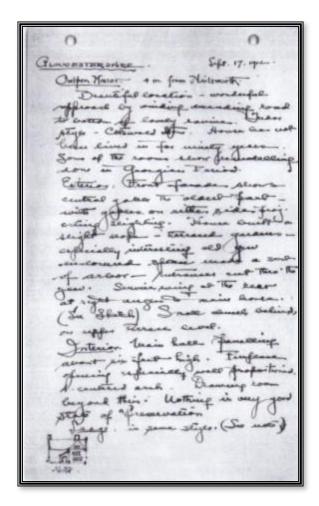


Figure 2.2. Eleanor Manning, page from collection of travel sketches and notes, 1912. Interspersed with her sketches were detailed notes of houses and towns in England. MIT Library and Special Collections.



Figure 2.3. Eleanor Manning. Eagle & Child Inn, travel sketch, 1912. Pencil on paper. MIT Library and Special Collections.



Figure 2.4. Eleanor Manning. Ye Old Black Bear Inn, travel sketch, 1912. Pencil on paper. MIT Library and Special Collections.



Figure 2.5. Anonymous photograph of Ye Olde Black Bear Inn, ca. 1912.

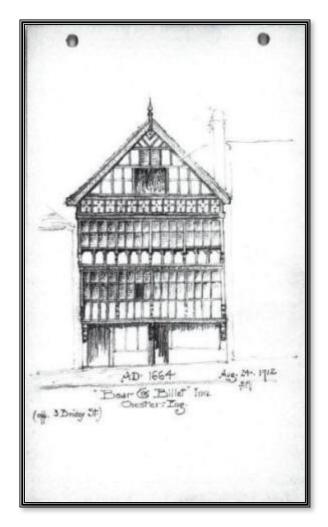


Figure 2.6. Eleanor Manning, Bear & Billet Inn, travel sketch, 1912.



Figure 2.7. Photograph showing side elevation of the Bear & Billet Inn.

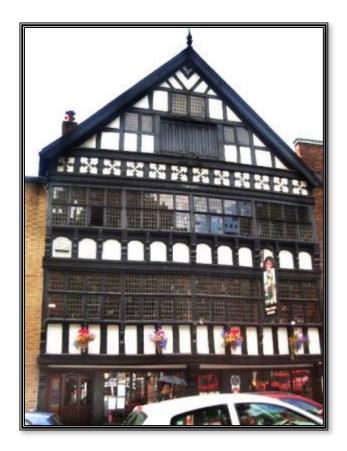


Figure 2.8. Bear & Billet Inn, detail.



Figure 2.9. Eleanor Manning, House in White Friars, Chester. Travel sketch, 1912, pencil on paper. MIT Library and Special Collections.



Figure 2.10. Contemporary photograph of houses in White Friars.



Figure 2.11. Streetscape, Chester.



Figure 2.12. Eleanor Manning, Almshouses, Corsham. Travel sketch, 1912. Pencil on paper. MIT Library and Special Collections.



Figure 2.13. Rendering of Army/Navy Canteen, Boston, 1918.

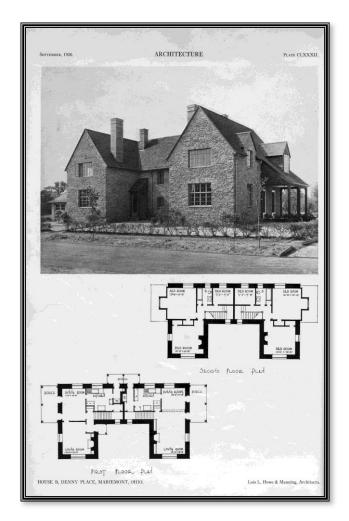


Figure 2.14. Lois Lilley Howe and Eleanor Manning. Houses at Denny Place, Mariemont, Ohio, 1929.



Figure 2.15. Houses at Port Sunlight, near Liverpool.

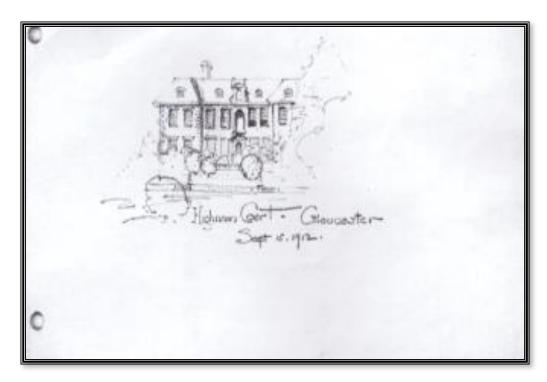


Figure 2.16. Eleanor Manning, Highnam Court, Gloucestershire, travel sketch, 1912. Pencil on paper. MIT Library and Special Collections.



Figure 2.17. Eleanor Manning, Southam Delabere, 1912. Travel sketch, pencil on paper. MIT Library and Special Collections.

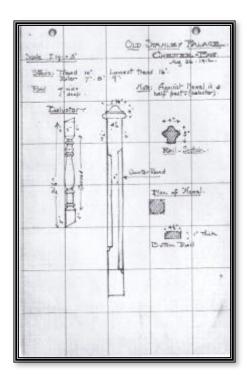


Figure 2.18. Eleanor Manning, Old Stanley Place, measured drawing of a baluster. Pencil on paper. MIT Library and Special Collections.

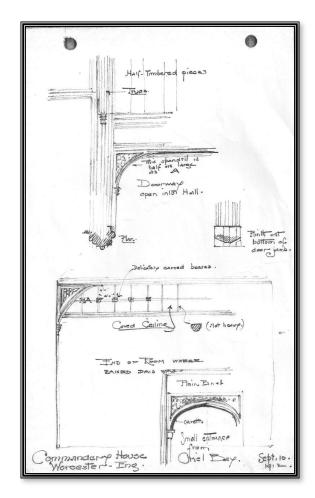


Figure 2.19. Eleanor Manning, Commandery House, doorway and ceiling details, 1912. Pencil on paper. MIT Library and Special Collections.

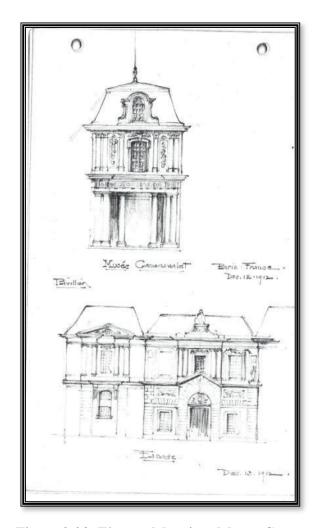


Figure 2.20. Eleanor Manning, Musee Carnavalet, Paris, 1912. Pencil on paper. MIT Library and Special Collections.



Figure 2.21. Eleanor Manning. Nôtre Dame de Chartres, clock tower, 1913. Pencil on paper. MIT Library and Special Collections.



Figure 2.22. Chartres, aerial view of north flank of cathedral. Yellow arrow indicates position of the tower.



Figure 2.23. Eleanor Manning, Chinon, street scene, 1913. Travel sketch, pencil on paper. MIT Library and Special Collections.

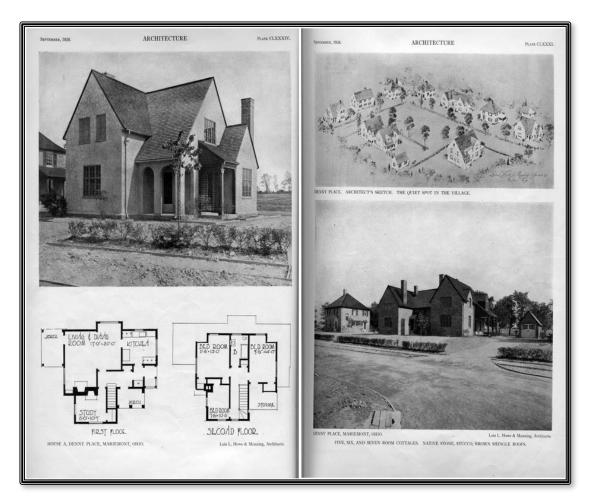


Figure 2.24. Lois Lilley Howe and Eleanor Manning, some of the 11 houses and a site rendering designed for Denny Place in Mariemont, Ohio, 1929.



Figure 2.25. Johnson O'Connor and Eleanor Manning O'Connor.

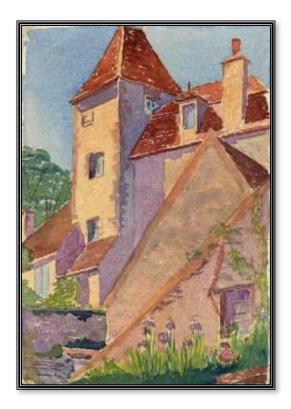


Figure 2.26. Eleanor Manning O'Connor, travel sketch, 1930s, watercolor. MIT Library and Special Collections.



Figure 2.27. Eleanor Manning O'Connor, travel sketch, 1930s, watercolor. MIT Library and Special Collections.



Figure 2.28. Eleanor Manning O'Connor. Travel sketch, 1930s. Watercolor. MIT Library and Special Collections.

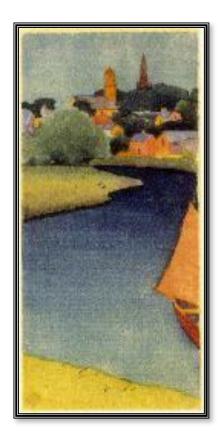


Figure 2.29. Arthur Wesley Dow. *View in Ipswitch: Sailboat*. Woodcut, 1893-95. Museum of Fine Arts, Boston.



Figure 3.1. William Jarrett Hallowell Hough, Yearbook Photo, University of Pennsylvania. Architectural Archives, University of Pennsylvania.



Figure 3.2. Frank Lloyd Wright. Larkin Building, Buffalo, New York, 1906.



Figure 3.3. Peter Behrens, AEG Turbine Building, Berlin, 1919



Figure 3.4. Paul Philippe Cret, Central Heating Plant, Washington, DC, 1933



Figure 3.5. William J. H. Hough, Detail from Library of Siena Cathedral, ca. 1912. Architectural Archives, University of Pennsylvania.

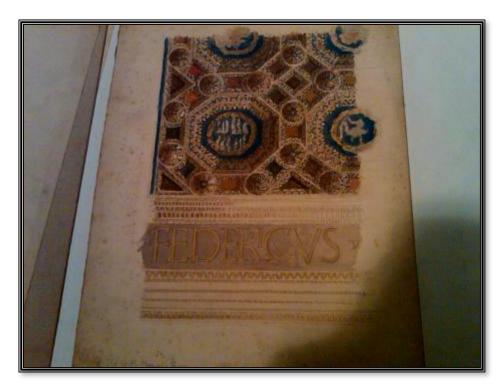


Figure 3.6. William J. H. Hough, Detail of Ceiling from the Ducal Palace, Urbino, ca. 1912. Architectural Archives, University of Pennsylvania.

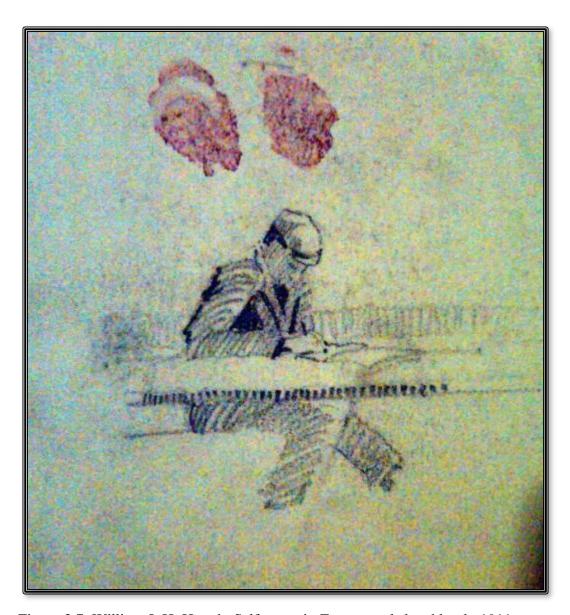


Figure 3.7. William J. H. Hough, Self-portrait. From travel sketchbook, 1911. Architectural Archives, University of Pennsylvania.

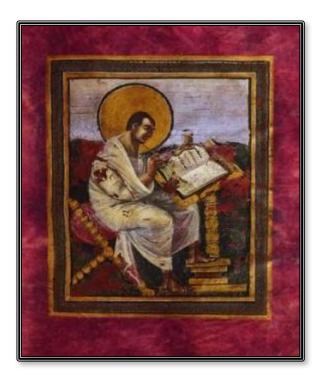


Figure 3.8. St. Matthew, from Coronation Gospels, Vienna, Kunsthistorisches Museum, Weltliche Schatzkammer, SchK XIII. 8.



Figure 3.9. William J. H. Hough, Bridge at Vienne, from travel sketchbook, September 22, 1911. Architectural Archives, University of Pennsylvania.

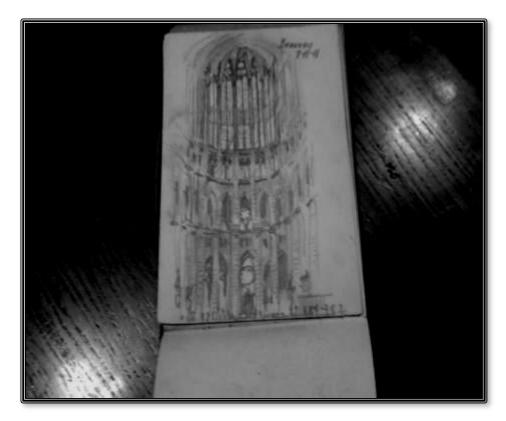


Figure 3.10. William J. H. Hough, chevet in Beauvais cathedral, from travel sketchbook, July 11, 1911. Architectural Archives, University of Pennsylvania.



Figure 3.11. William J. H. Hough, Rothenberg, streetscape from travel sketchbook, ca. 1911. Architectural Archives, University of Pennsylvania.

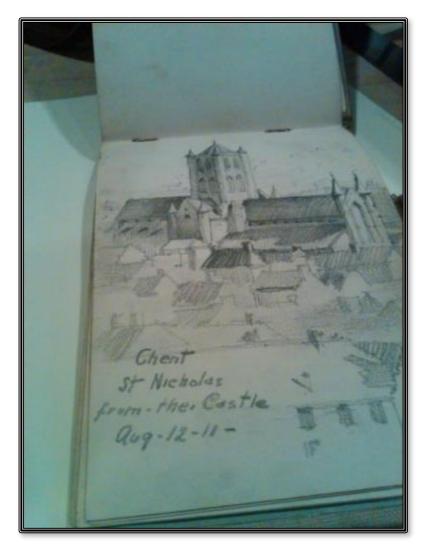


Figure 3.12. William J. H. Hough, St. Nicholas from the Castle, Ghent, from travel sketchbook, August 12, 1911. Architectural Archives, University of Pennsylvania.

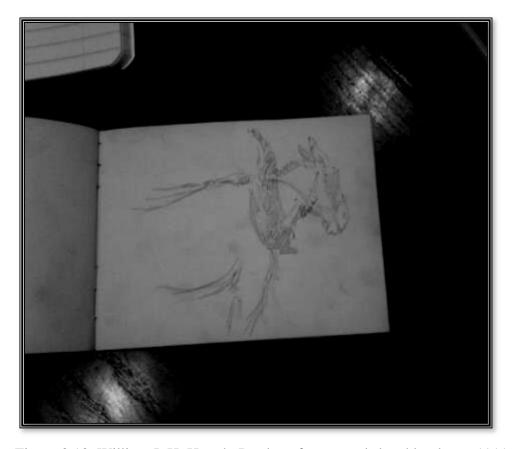


Figure 3.13. William J. H. Hough, Donkey, from travel sketchbook, ca. 1911. Architectural Archives, University of Pennsylvania.



Figure 3.14. William J. H. Hough, Spectators at Puppet Show, from travel sketchbook, ca. 1911. Architectural Archives, University of Pennsylvania.



Figure 3.15. William J. H. Hough, Salamanca to Medina, from travel sketchbook, ca. 1912. Architectural Archives, University of Pennsylvania.



Figure 3.16. William J. H. Hough, Legina to Madrid, from travel sketchbook, ca. 1912. Architectural Archives, University of Pennsylvania.

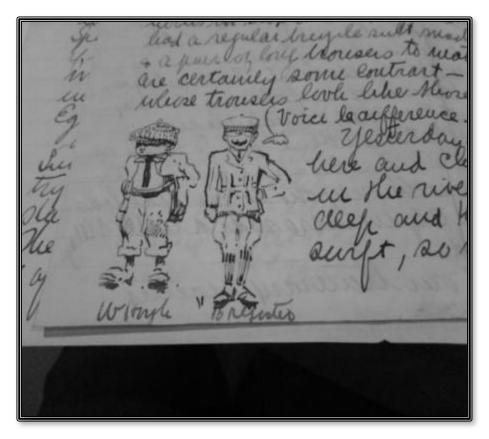


Figure 3.17. William H. J. Hough, sketch of W. Hough and B. Register, from letter to family, 1911. Architectural Archives, University of Pennsylvania.



Figure 3.18. William J. H. Hough. "Fweddy," a caricature. Architectural Archives, University of Pennsylvania.

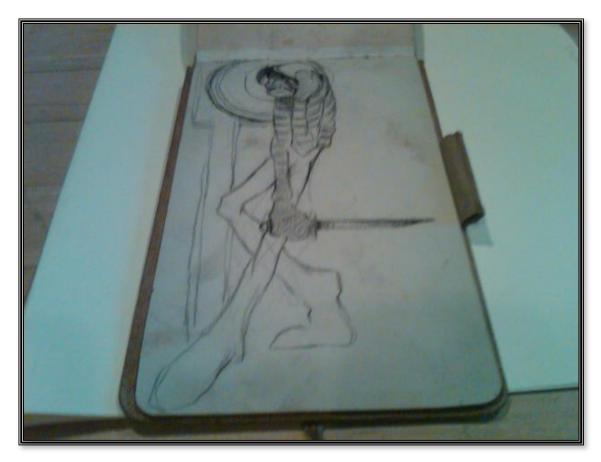


Figure 3.19. William J. H. Hough. Caricature. Architectural Archives, University of Pennsylvania.



Figure 3.20. William J. H. Hough. Caricature. Architectural Archives, University of Pennsylvania.

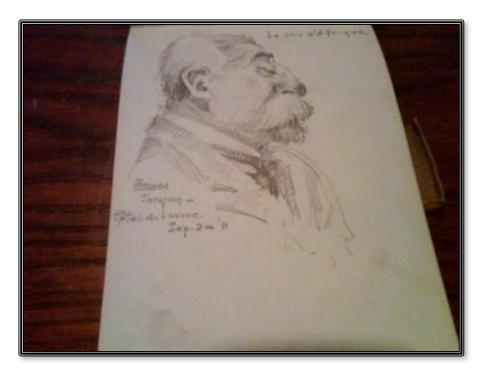


Figure 3.21. William J. H. Hough, "Je suis d'Afrique," from travel sketchbook, September 24, 1911. Architectural Archives, University of Pennsylvania.



Figure 3.22. William J. H. Hough, travel sketch from letter to mother, ca. 1912. Architectural Archives, University of Pennsylvania.

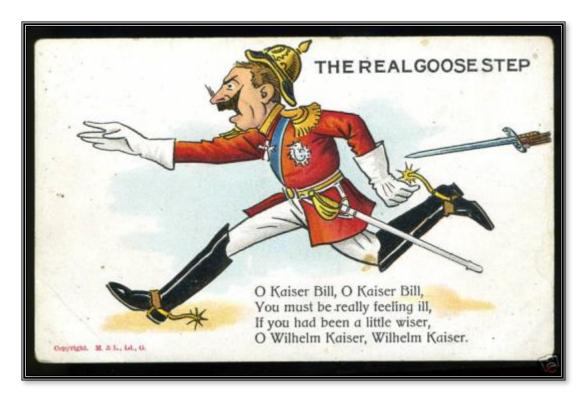


Figure 3.23. A British caricature of Kaiser Wilhelm.

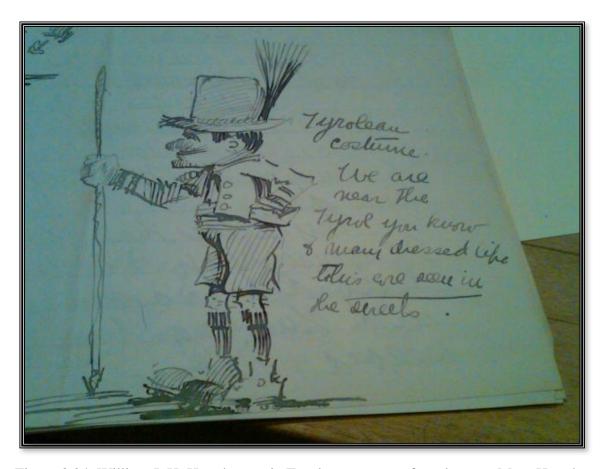


Figure 3.24. William J. H. Hough, man in Tyrolean costume, from letter to Mary Hough, ca. 1912. Architectural Archives, University of Pennsylvania.

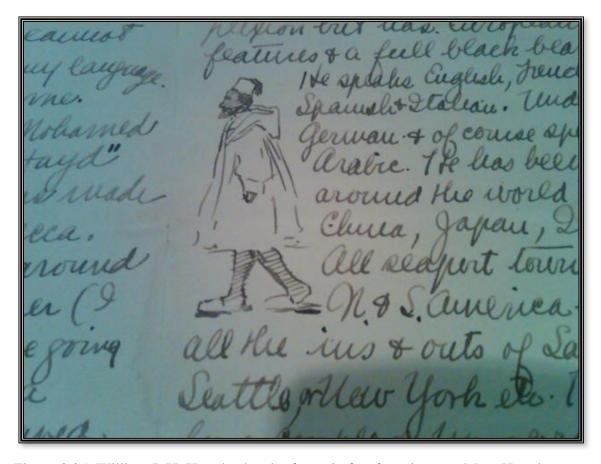


Figure 3.25. William J. H. Hough, sketch of man in fez, from letter to Mary Hough, ca. 1912. Architectural Archives, University of Pennsylvania.



Figure 3.26. William J. H. Hough, Arles, from travel sketchbook, September 29, 1912. Architectural Archives, University of Pennsylvania.

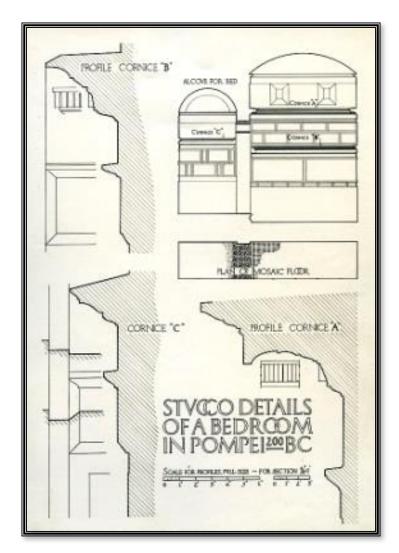


Figure 3.27. William J. H. Hough. Details of a bedroom in Pompeii, ca. 1915. American Academy in Rome.



Figure 3.28. William J. H. Hough, escutcheon on frontispiece of scrapbook featuring plans, snapshots of Italian villas, 1916. Architectural Archives, University of Pennsylvania.



Figure 3.29. Frontispiece from I Quattro Libri dell'Architettura by Andrea Palladio, 1642.



Figure 3.30. Frontispiece from I Sesto Libro di Sebastiano Serlio Bolognese, 1600.



Figure 3.31. William J.H. Hough, photographs, plan and section drawings of Villa Marlia (Principessa), from travel sketchbook of villas, 1916. Architectural Archives, University of Pennsylvania.



Figure 3.32. William J. H. Hough, photograph of gardens at Villa Marlia, from travel sketchbook of villas, 1916. Architectural Archives, University of Pennsylvania.



Figure 3.33. William J. H. Hough, photograph of gardens at Villa Marlia, Lucca, from travel sketchbook of villas, 1916. Architectural Archives, University of Pennsylvania.

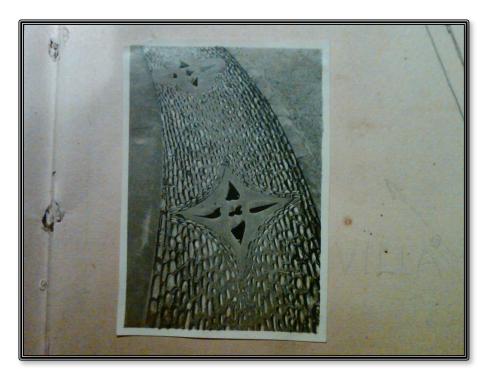


Figure 3.34. William J. H. Hough, photograph of paving material at Villa Collodi, from sketchbook of villas, 1916. Architectural Archives, University of Pennsylvania.

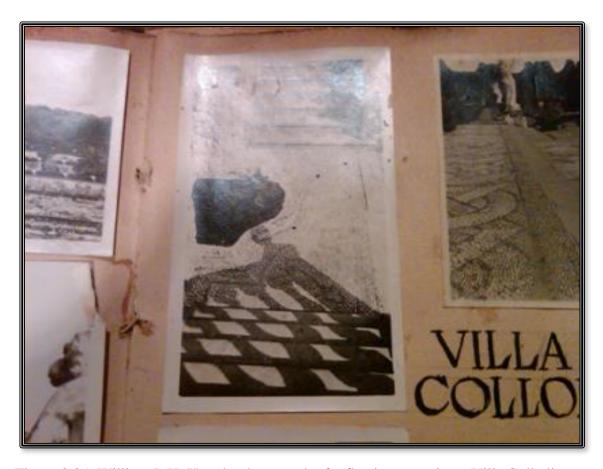


Figure 3.35. William J. H. Hough, photograph of reflection on stairs at Villa Collodi, from travel sketchbook of villas, 1916. Architectural Archives, University of Pennsylvania.



Figure 3.36. William J. H. Hough. Elevation drawing of Villa Gamberaia, made for the American Academy in Rome, ca. 1915. American Academy in Rome.



Figure 3.37. William J. H. Hough. Villa Gamberaia, travel sketch, ca. 1915. Architectural Archives, University of Pennsylvania.

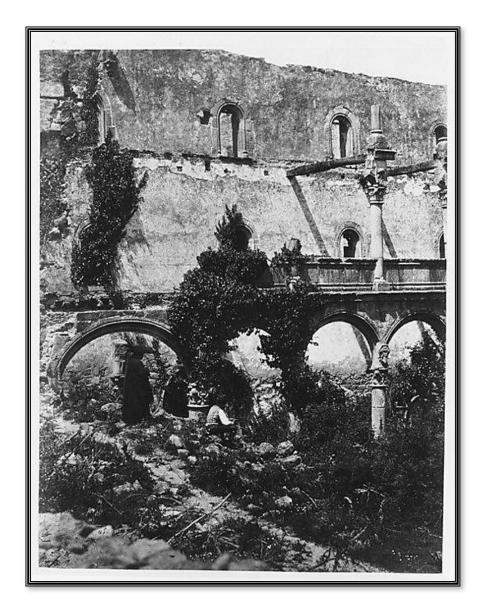


Figure 3.38. Charles Clifford. *Monastery of San Jeronimo, Juste*. Albumen silver print from glass negative, 1858.



Figure 3.39. Photograph of William J. H. Hough in "Kodak Memories" photo album. Architectural Archives, University of Pennsylvania.



Figure 3.40. Figure of God as Architect of the World, Vienna Codex, Vienna, Austrian Library, Cod. Vindob. 2554, ca. 1230.



Figure 3.41. Bernard Picart, portrait of Andrea Palladio, ca. 1716, engraving.



Figure 3.42. Photographer unknown. Photograph of architectural student, presumably William J. H. Hough, climbing colonnade at Piazza San Pietro to measure and sketch sculptures. From album "Kodak Memories," Architectural Archives, University of Pennsylvania.



Figure 3.43. William J. H. Hough, photograph of man and view of hilltown, ca. 1916. Architectural Archives, University of Pennsylvania.

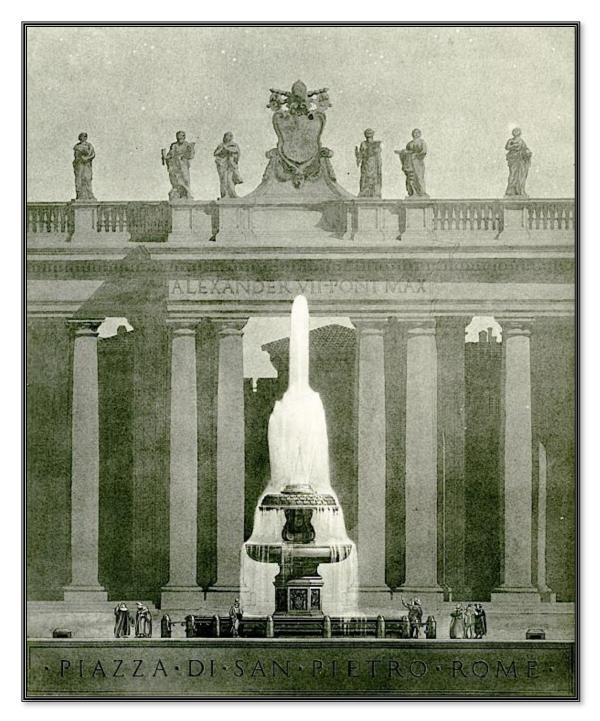


Figure 3.44. William J. H. Hough, Fountain in the Piazza San Pietro, Vatican City, Rome ca. 1916. Architectural Archives, University of Pennsylvania.

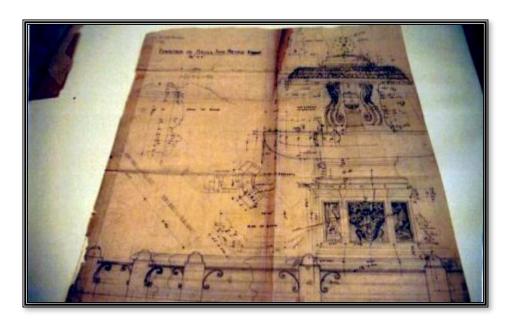


Figure 3.45. William J. H. Hough. Measured drawing for rendering of fountain in Piazza San Pietro, ca. 1916. Architectural Archives, University of Pennsylvania.

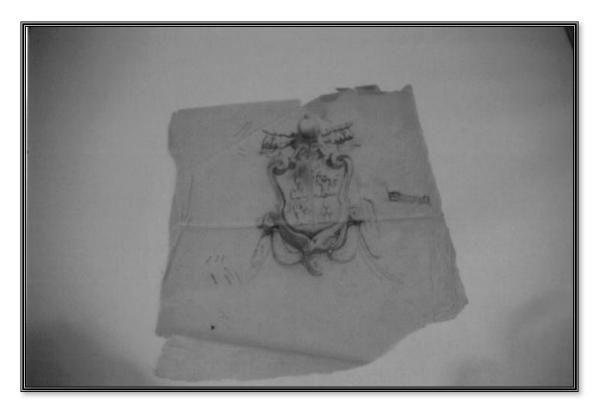


Figure 3.46. William J. H. Hough, *Impresa* of Pope Alexander VII, sketch for rendering of fountain and a section of the Piazza San Pietro, Vatican City, Rome (see figure 36). Architectural Archives, University of Pennsylvania.

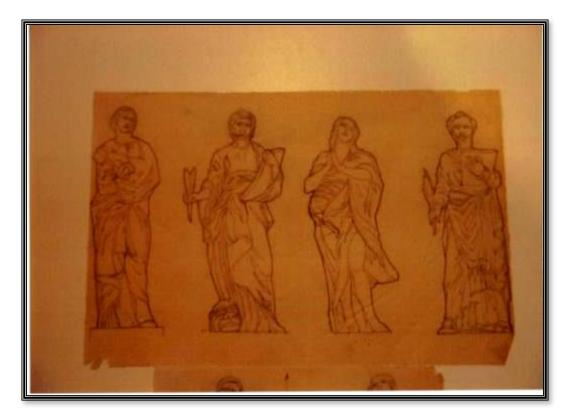


Figure 3.47. William J. H. Hough. Sketches of sculptures for rendering of fountain and a section of the Piazza San Pietro, Vatican City, Rome (see figure 36). Architectural Archives, University of Pennsylvania.



Figure 3.48. William J. H. Hough. Rendering of the Interior of the Pantheon. American Academy in Rome.

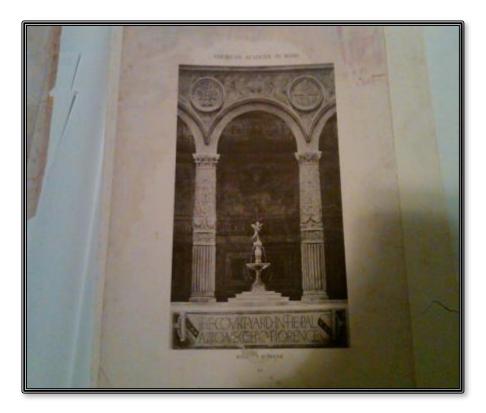


Figure 3.49. William J. H. Hough. Courtyard in the Palazzo Vecchio, Florence, ca. 1916. Architectural Archives, University of Pennsylvania.



Figure 3.50. Ponte Rotto, Rome (Ponte Senatorio), c. 1916. Architectural Archives, University of Pennsylvania.

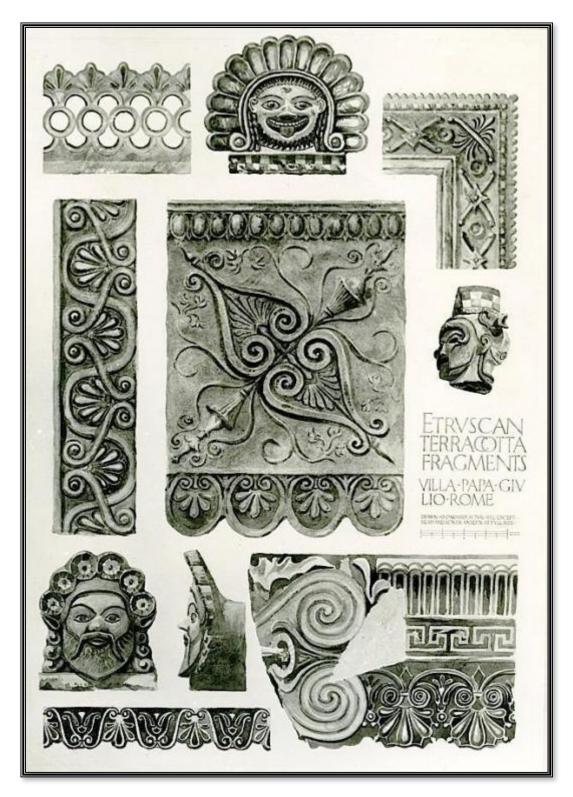


Figure 3.51. William J. H. Hough. Drawing of fragments from the Villa Papa Giulio, Rome, ca. 1915. American Academy in Rome.

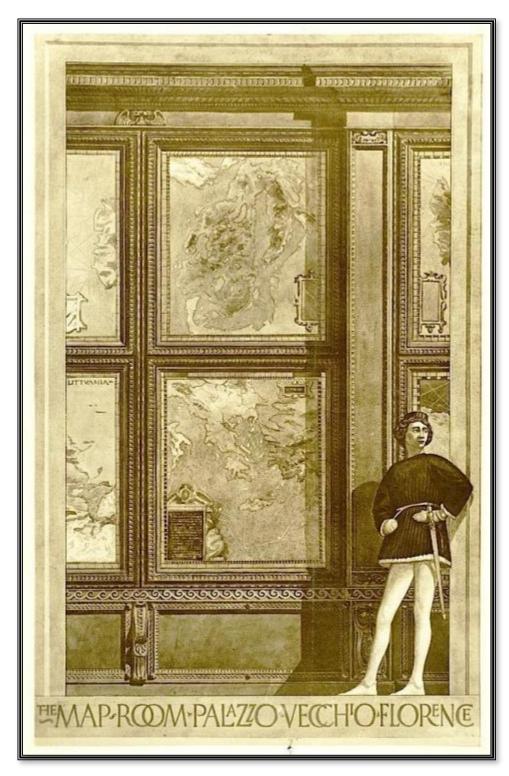


Figure 3.52. William J. H. Hough. The Map Room, Palazzo Vecchio, Florence, ca. 1916. American Academy in Rome.



Figure 3.53. Monogram of William J. H. Hough, on cover of sketchbook from 1918-19. Architectural Archives, University of Pennsylvania.



Figure 3.54. William J. H. Hough, Taormina, travel sketch, 1919. Architectural Archives, University of Pennsylvania.



Figure 4.1. Skidmore, Owings & Merrill, Gordon Bunshaft, Designer. Lever House, New York, 1951-52. Designed by Gordon Bunshaft, Lever House typified SOM's adaptation of the International Style for corporate clients.



Figure 4.2. Skidmore, Owings & Merrill, Trammel Crow Center, Dallas, 1985. Here SOM worked in the Postmodernist style, incorporating a stylized split pediment. A Palladian motif was accomplished through plays of light and shade with the windows of the building's shaft.



Figure 4.3. Skidmore, Owings & Merrill. Wells Fargo Tower, Birmingham, Alabama, 1986.

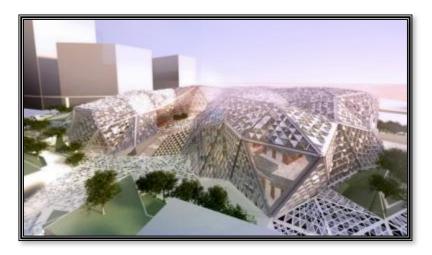


Figure 4.4. Skidmore, Owings & Merrill. King Abdullah Financial District Conference Center, Riyadh, Saudi Arabia, 2012.



Figure 4.5. Freedom Tower/One World Trade Center, computer rendering.



Figure 4.6. Louis Skidmore. A souk, Cairo. Travel sketch, drawing, 1928. Library of Congress.



Figure 4.7. Louis Skidmore. Athens. Travel sketch, watercolor. 1928. Library of Congress.



Figure 4.8. Le Corbusier, Maison Favre-Jacot, 1912. Built less than five years before Irving Gill's Dodge House, this early house by LeCorbusier demonstrates the persistence of classicism and romanticism in architectural design during the first decades of the twentieth century.

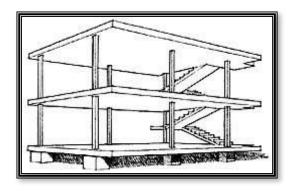


Figure 4.9. Le Corbusier, Domino House, 1912.



Figure 4.10. Carrère & Hastings. New York Public Library, completed 1911.



Figure 4.11. Irving Gill. Dodge House, West Hollywood, California, 1914-16.

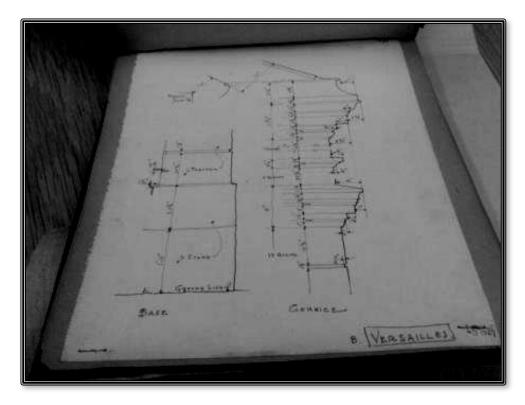


Figure 4.12. Louis Skidmore, Travel Sketch, Versailles. Pencil on paper, 1927. Library of Congress.



Figure 4.13. Louis Skidmore. Grammar Hall, Magdalen College, Oxford, ca. 1927. Elevation and alternate views. Pencil and photographs mounted on paper. Skidmore found use for both drawings and photographs during his travels. Library of Congress.

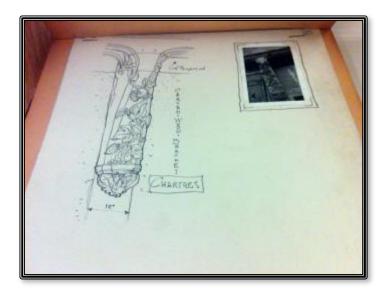


Figure 4.14. Louis Skidmore. Travel sketch (left) and photograph of a bracket mounted on paper, Versailles, ca. 1927. In the drawing, Skidmore is able to delineate the carving, which, in the photograph, is weathered and obscured. This demonstrates the ongoing *paragone* of drawing and photography and the superiority of the skilled architect's hand and eye over the camera's lens. Furthermore, the act of drawing the foliate details allowed Skidmore to "see" the bracket as it might have appeared to the original carver. Library of Congress.



Figure 4.15. Louis Skidmore, L'escalier de la Reine Berthe, Chartres. Pencil and photographs mounted on paper, 1927. Skidmore frequently juxtaposed his drawings of monuments abroad with photographs, apparently taken by him. This practice allowed him to show or focus on details that would be seen by both the diligent observer and the casual tourist. Library of Congress.



Figure 4.16. Louis Skidmore. Basin of Neptune, Versailles. Photograph. Skidmore's photograph suggests the fountains as a colonnade or a row of sculptures before a mass of shrubs.



Figure 4.17. Sculptures in the gardens at Versailles.

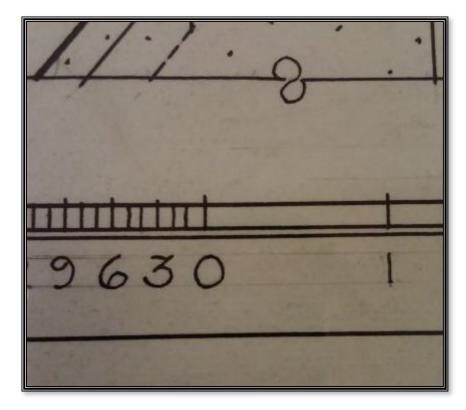


Figure 4.18. Louis Skidmore. Detail of original drawing for Samuel Chamberlain's *Tudor Homes of England*, still bearing his pencil marks on paper. Library of Congress.



Figure 4.19. Louis Skidmore (?). Photograph from Samuel Chamberlain's *Tudor Homes of England*, with photograph of the Reader's House in Ludlow.

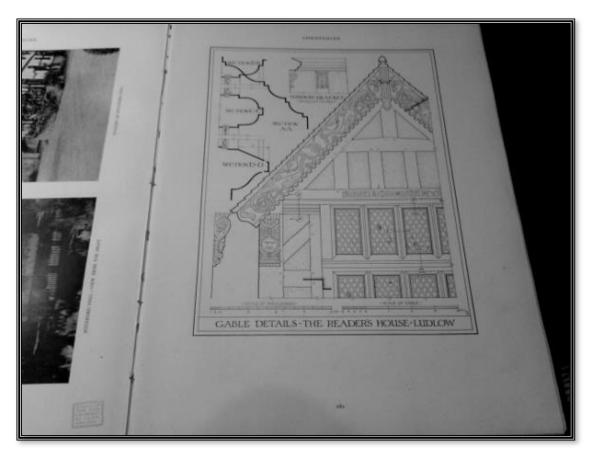


Figure 4.20. Louis Skidmore. Measured drawing of the gable details from the Reader's House, Ludlow. Page from Samuel Chamberlain's *Tudor Homes of England*.

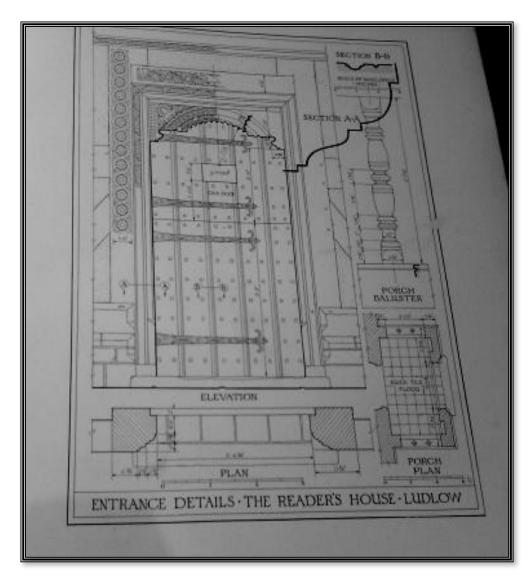


Figure 4.21. Louis Skidmore. Page from Samuel Chamberlain's *Tudor Homes of England*, showing details from the entrance of the Reader's House.

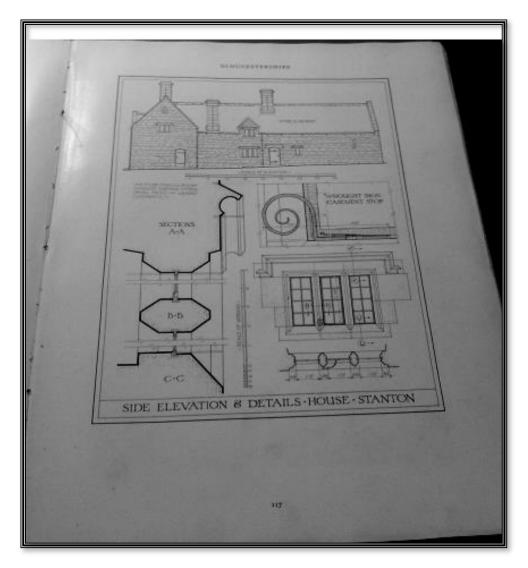


Figure 4.22. Louis Skidmore. Page from Samuel Chamberlain's *Tudor Homes of England* show side elevation and details from a house in Stanton.

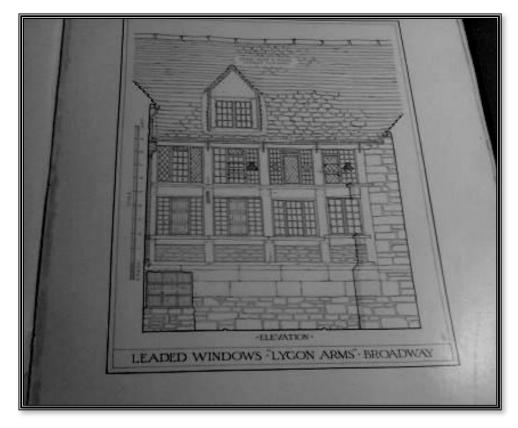


Figure 4.23. Louis Skidmore. Page from Samuel Chamberlain's *Tudor Homes of England* with measured drawing of Lygon Arms, Broadway.

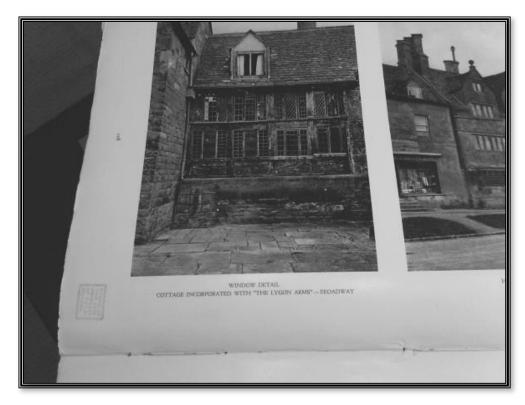


Figure 4.24. Louis Skidmore (?). Page from Samuel Chamberlain's *Tudor Homes of England*, with photograph of The Lygon Arms. (See Figure 4.23 for Skidmore's drawing.)

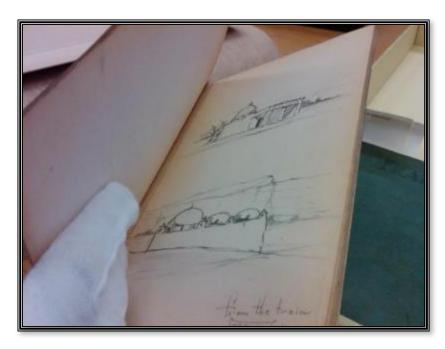


Figure 4.25. Louis Skidmore. "From the Train." Travel sketch. While the buildings are not identified, they are similar to the Sultan Bayezid I Camii Bursa Mosque in Turkey. Pencil on paper. Library of Congress.

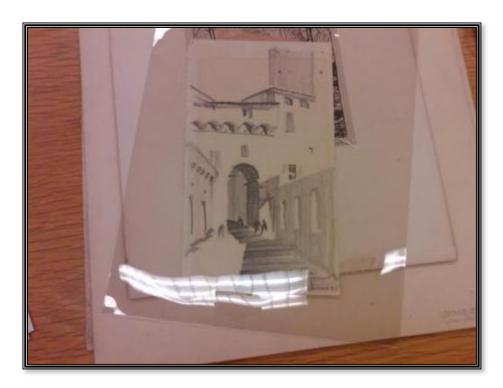


Figure 4.26. Louis Skidmore. San Gimignano. Travel sketch, pencil, 19. Instead of the town's characteristic towers, Skidmore drew a shadowy passage, reminiscent of Giorgio de Chirico's early paintings. De Chirico's work was included in a number of exhibitions in Europe during the 1920s, including two in Paris in 1926 and 1927, when Skidmore was in France. Library of Congress.

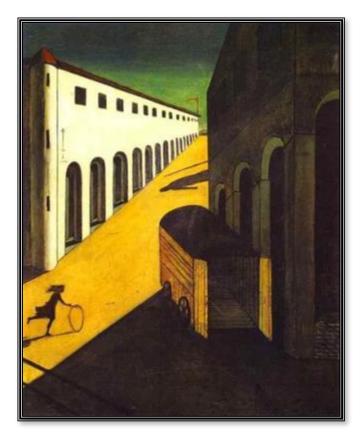


Figure 4.27. Giorgio de Chirico. *Mystery and Melancholy of a Street*. 1914. Like de Chirico, Skidmore interpreted tradition through a modernist's lens.



Figure 4.28. Louis Skidmore. Travel Sketch, Cairo. The intensity of the red chalk on the left side of the drawing suggests the intensity of the heat in the city, as well as a probable Orientalist view of Egypt. The tower, anticipating the verticality of the skyscrapers for which Skidmore, Owings & Merrill was best-known, dominates the picture. Library of Congress.



Figure 4.29. Louis Skidmore. Book Stalls, Paris. Lithograph. An example of Skidmore's interest in various media. Library of Congress.



Figure 4.30. William Fraser, Night Scene, 1897. An example of pictorialism in photography, a movement that apparently influenced Skidmore's drawings, prints, and photographs.



Figure 4.31. Louis Skidmore. Liverpool Cathedral. Watercolor, 1927. The cathedral was relatively new at the time, although not modern in style. Here, Skidmore stressed the vertical thrust that was characteristic of its Gothic-inspired form. Library of Congress.



Figure 4.32. Louis Skidmore, Watseka Theater, Watseka, Illinois, 1931. The theater resembles the Liverpool Cathedral as seen through an Art Deco lens.

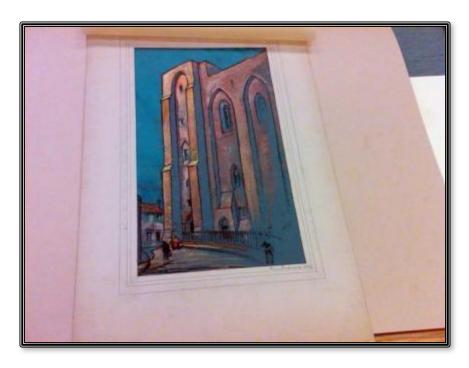


Figure 4.33. Louis Skidmore. Travel sketch. Palais des Papes, Avignon, watercolor, 1927. This sketch demonstrates Skidmore's talent as a colorist and his interest in dramatic vertical masses. Library of Congress.

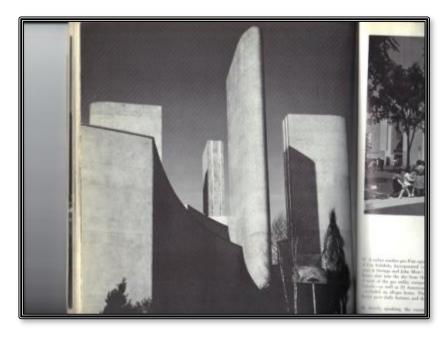


Figure 4.34. Skidmore, Owings & Merrill. Gas Building, New York World's Fair, 1939.



Figure 4.35. Louis Skidmore. Undated Christmas card with scene of interior of Seville Cathedral. Note the resemblance between the structure as depicted here by Skidmore with both the Brooklyn Bridge and the Gas Pavilion of the 1939 World's Fair, as well as his rendering of the Palais des Papes (Figure 4.33). Library of Congress.



Figure 4.36. Louis Skidmore. Travel sketches, Beirut. Watercolor, ca. 1928. Library of Congress.



Figure 4.37. Louis Skidmore. Travel sketch, Azem Palace, Damascus. Watercolor. Library of Congress.



Figure 4.38. Louis Skidmore. Chateau Chenonceau. Travel sketch, pencil on paper, 1927.

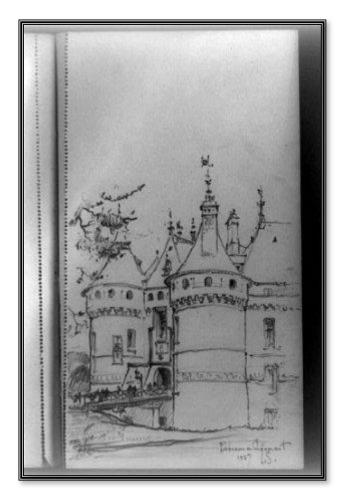


Figure 4.39. Louis Skidmore. Chateau de Chaumont. Travel sketch, 1927.



Figure 4.40. Louis Skidmore. Staircase at Blois. Travel sketch, pencil on paper, 1927.



Figure 4.41. Postcard of Skidmore, Owings & Merrill's Wonder Bakery building, New York World's Fair, 1939.

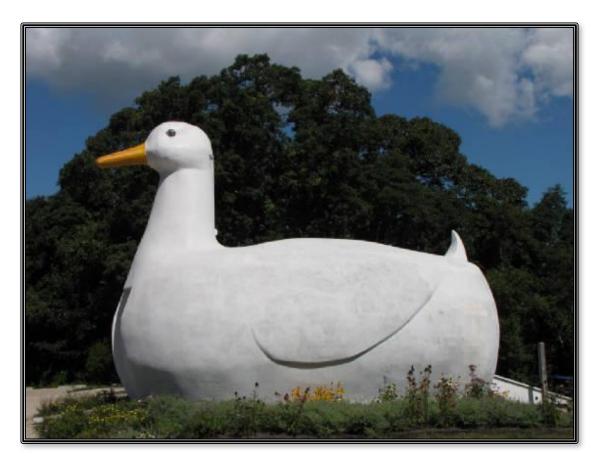


Figure 4.42. The Long Island Duck, Flanders, New York, 1931.



Figure 4.43. Postcard of Skidmore, Owings & Merrill's RCA building, New York World's Fair, 1939.



Figure 4.44. Postcard of Skidmore, Owings & Merrill. Westinghouse Electric building, New York World's Fair, 1939. The use of modern materials and construction methods proved to be as viable for commercial buildings as for temporary fair structures. Six years before, Skidmore had written that he believed in disposable buildings.

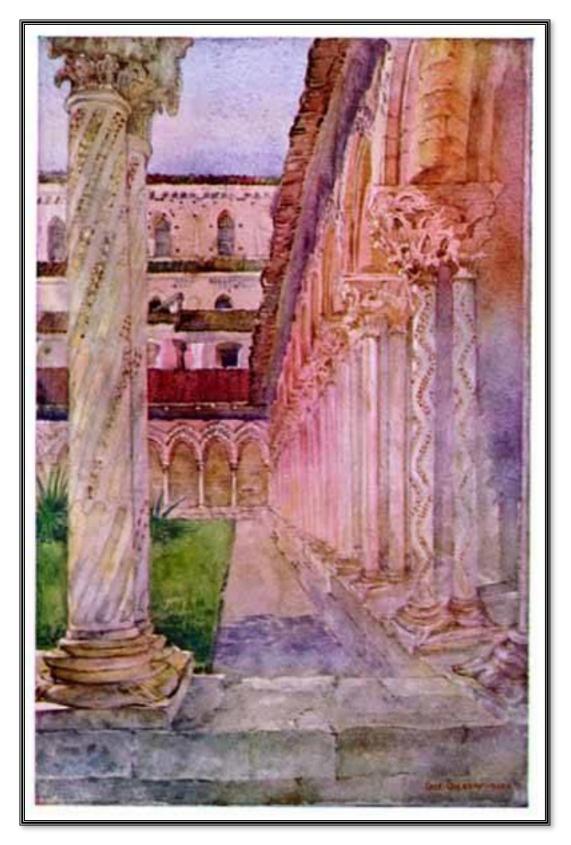


Figure C1 . Cass Gilbert. Monastery at Monreale. Watercolor.

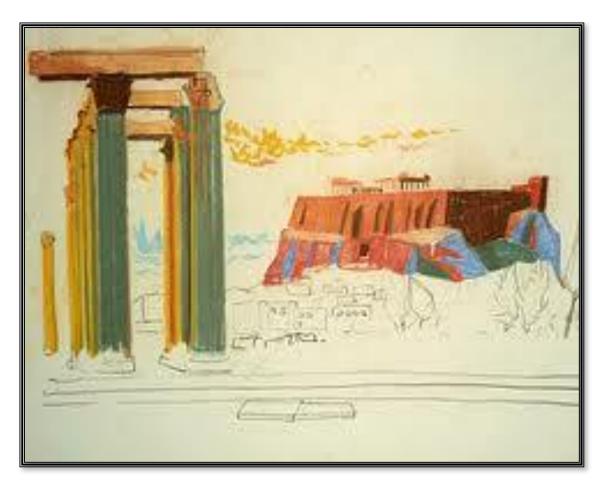


Figure C2. Louis I. Kahn. Acropolis. Watercolor and ink.

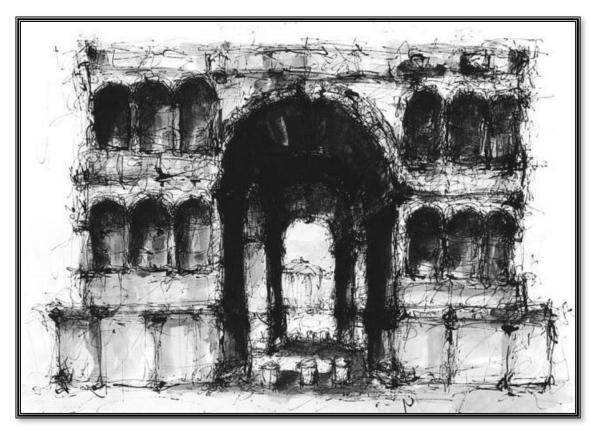


Figure C3. Michael Graves. Temple of Janus. Travel sketch, ca. 1960.



Figure C4. Whitney Warren. Window from the Grande Salle, Chateau de Blois. Watercolor, 1888. Smithsonian Institution.

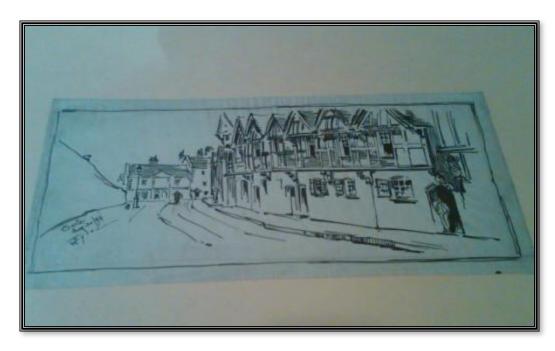


Figure C5. Wilson Eyre. Street Scene, Chester, 1894. Architectural Archives, University of Pennsylvania.

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