

Elizabeth Ayer's Early Impact on the Office of Edwin J. Ivey

Due to Elizabeth Ayer's status as the first woman to become a licensed architect in the state of Washington, some within the historic preservation community, and elsewhere, have attempted to conflate her early role in the office of Edwin Ivey beyond what would normally be expected of the holder of a freshly minted Bachelor of Architecture degree. Still, Ayer did have a demonstrable impact on the direction that Ivey's architectural practice would take shortly after her arrival there. This paper will look at Ayer's role in the Ivey & Riley office as an "office boy" (Ayer's own description of her initial role in the firm), and how her presence led to Ivey's decision to jettison his partner, Howard H. Riley, and to embark upon an effort to become a designer of high-end custom homes for the wealthy and well-to-do. Within a few years of Ayer's entry into the office, Edwin J. Ivey had become the leading society architect based in Seattle with multiple homes designed and constructed in The Highlands north of Seattle, on the shores of American Lake south of Tacoma, and elsewhere in the Puget Sound region.

Elizabeth Ayer

Elizabeth Ayer was one of the first female students to study architecture at the University of Washington. This was an academic choice that was not well received at the time by many, including the *University of Washington Daily*, which, as Ayer recalled, published an article explaining why women should not pursue this course of study that coincided with her

first day of attendance in the program.¹ Whether the *Daily's* published protest was an intentional snub of Ayer or merely coincidental, she retained throughout her life the permission card, signed by I. M. Glenn, Dean of the College of Fine Arts, and A. S. Haggett, Dean of Women Students, that she had to obtain in order to change her major from Liberal Arts to Architecture.² The opposition that she incurred did little to dissuade her. In fact, it strengthened her resolve to succeed and she became one of the premier students in the program.

While in the architecture program, she was elected *Massier* of the *Atelier*, the primary architecture student organization on campus, during the 1918-19 academic year,³ when she was officially a junior in the university, but was unofficially a sophomore in the architecture program. In the following year she won her first known design competition award nationally in the form of a Mention from the Beaux-Art Institute of Design in New York City for her design of a private art museum in a park.⁴ Later in the year, she was awarded third prize in the annual Kellogg Prize in Architecture for the design of a fireplace.⁵ She also received a Second Mention in the department's internal competition for the design of the Sylvan Theater on campus.⁶

Her final year was even more superlative. She won a total of three Mentions in Beaux-Arts Institute of Design competitions, in one *analytique* competition and two *projet* competitions. The first was for a Class "B" –I *Analytique* entitled, "The Side Entrance to a Church," where Ayer and several other classmates won either a First Mention Placed or a Mention.⁷ The second was for a Class "B" –III *Projet*, entitled, "A State Dining Room," where Ayer, and classmates Wing Sam Chinn and Marshall W. Gill each received a Mention.⁸ The third was for a Class

"B" —IV *Projet*, entitled, "A Small Railroad Station," where Chinn also won a Mention.⁹ In the annual Kellogg Prize in Architecture she placed first overall.¹⁰

While a student, Ayer found employment in local architectural offices, which proved to be no easier a feat than gaining entry into the architecture program itself. Persuasive help from classmate Chinn was needed for her to obtain her first architectural job, with Andrew Willatsen most likely during the summer of 1918;¹¹ Chinn worked on occasions for Willatsen both before and after his graduation, and indicated to Ayer that Willatsen at one time had vowed never to hire a woman as part of his staff.¹² Entry in the office of Ivey & Riley roughly a year later may have occurred through the auspices of Katherine M. Ivey, who with other wives of architects occasionally assisted in organizing social events involving fine arts students on campus and townsfolk.¹³

Ivey & Riley

The firm of Ivey & Riley was composed of Edwin J. Ivey, Jr. (1883-1940) and Howard H. Riley (1890-1950), both of whom had attended the University of Pennsylvania; however, only Ivey had graduated. The program from which Ivey graduated in 1910 was a two-year Certificate of Proficiency rather than the more familiar baccalaureate degree program. Still, at a time when most practitioners learned their craft through apprenticeship, the two-year program was more formal training than the majority of architects in Seattle could claim prior to World War I.

Shortly after returning to Seattle in 1911, Ivey found work with Warren H. Milner (1864-1949) and within a year was a partner with Milner. This partnership did last not long. Before

the end of 1913, Ivey was attempting to support himself and his new wife, the former Katharine McMicken,¹⁴ as a sole practitioner. To this end, he supplemented his meager income from his practice by working part-time for Joseph Coté, where he gained a fine appreciation for American Colonial architecture. He also freelanced by providing design work for the Distinctive Home Company, a speculative house builder, which occasionally included custom-design services.

Perhaps the most effective aspect of Ivey's attempts to generate work was publication in *The Bungalow Magazine*. This first occurred with the April 1915 issue. His bungalow design for Eugene E. Harold was selected as the monthly supplement and was featured on the cover of the magazine, as well as with supplementary working drawings and a bill of materials.¹⁵ Over the following 33 months, Ivey's work would appear in *The Bungalow Magazine* some seven more times. The January 1918 issue included two articles that featured a total of seven houses by Ivey.¹⁶

In addition to the articles featuring his constructed houses, Ivey authored an article about the importance of cooler design in an age when electrical refrigeration was affordable by only the very wealthy.¹⁷ He also authored three articles that discussed house design in regards to architectural styles, which incorporated conceptual designs by him for houses called bungalows but utilized stylistic motifs that many today would consider non-bungalow, like the American Colonial Revival and even a half-timbered variant of the English Tudor.¹⁸ This was a departure from *The Bungalow Magazine's* usual practice of publishing constructed houses, but in line with Ivey's strategy of illustrating his abilities as an architect to potential clients.

Six months after the last two articles appeared in *The Bungalow Magazine*, Ivey's workload had increased sufficiently that he promoted his former employee, H. H. Riley, to partner. Illustrative of Ivey's increasing workload was the increase of four commissions for a total of ten buildings (mostly houses) for his office in 1917, while in 1918 the number of commissions increased six-fold and the number of individual structures increased five-fold, including work for the Puget Mill Company in their Westholme subdivision in Seattle and the Alderwood Manor development in present-day Lynnwood.¹⁹ The new partnership developed a broad practice that included residences, commercial buildings, schools, and industrial buildings. Although the amount of work for 1919 dropped to a mere thirty individual structures, this was perhaps to be expected with the abrupt end of the First World War on 11 November 1918. This was still enough work to suggest that the firm had become an established presence in the Seattle design community, as suggested with the inclusion of four projects by Ivey in the May 1918 issue of *The Architect* magazine, a special issue that focused on Seattle-based architects.²⁰ This also gave Ivey the confidence to design and building his own residence in West Seattle, and it gave him the confidence to hire Ayer, at a time when women were a rarity in the architecture profession.

Ayer in the Ivey office

In the first edition of *Shaping Seattle Architecture*, the essay on Elizabeth Ayer referred to her starting position as "office girl."²¹ Although the authors of that essay undoubtedly meant well and intended to acknowledge her early breakthrough as a female in entering the architectural profession at that time, Ayer herself always referred to her starting position in

Ivey's office as that of an "office boy." This distinction is critical in understanding Ayer's early role in Ivey's office. Had Ayer been an "office girl," she would have been working in the front office primarily serving as a receptionist, greeting clients and answering the telephone, or a stenographer in assisting with typing and filing of documents. As an "office boy," Ayer would have been working in the drafting room assisting the primary draftsmen and designers, in much the same way that underclassmen assisted upperclassmen in an *atelier* at school.

Although Ayer was working in the drafting room, the likelihood that she was immediately designing buildings as a designer or project architect for Ivey & Riley, or Ivey alone, was highly doubtful. Nonetheless, when a National Register of Historic Places nomination form that included the Jesse and Mary Bridges residence (1921-22) in Olympia, Ayer was described as the architect for the design of the house, while her employer was mentioned in passing as someone that she happened to work with, as opposed to her employer, for whom she worked, and the architect of record.²² This is of some importance as the house was ready for bids barely four months after her graduation²³ and was designed at a time when Ayer described her role in the office as that of a draftsman. The same situation was described for "Westhillsyde" (1921-22), designed originally for Bryan and Crissie Allen in Olympia. Even though this house was constructed roughly six months after the Bridges residence,²⁴ Ayer's role in Ivey's office had likely changed very little.

For "Westhillsyde," the account ledger of the Ivey (and later Ayer) office does indicate that Ayer and co-worker, Willard S. Kaufman (1895-1934), worked on the drawings for the house. Kaufman was an architecture student who studied at the University of Washington a few years after Ayer, and was enrolled as a student at the University during the time that

"Westhillsyde" was under design; however, Kaufman was also a son of William S. Kaufman (1849-1916) of Richmond City, Indiana, and had practiced for a brief time in Twin Falls, Idaho, after having completed two years of study at the University of Illinois and working in his father's firm. In this regard, Kaufman likely would have been considered as the more experienced draftsman or designer than Ayer. Even so, the architect of both houses was still Ivey. With the clients being from Olympia, they may have selected Ivey because of an awareness that Ayer was an employee of his, but Ivey had the greater experience in handling a house project from conception to occupancy for clients, and this would have been of importance for clients spending in excess of \$12,000 for a custom residence in 1921 and 1922.

The question still remains as to what role Ayer might have played in the Ivey office that resulted in her being the only individual who was in the Ivey office when he decided to establish a solo practice in 1921 and remained in the Ivey office until his untimely death in 1940, nearly two decades later. This was the longest tenure of anyone working with Ivey.

Shortly before hiring Ayer, Ivey had obtained a series of commissions from the Puget Mill Company that spanned several years. For Puget Mill's Westholme subdivision, Ivey's office designed several model houses to serve as exemplars of the quality of homes that the company wanted to see constructed by purchasers of individual lots. For the Alderwood Manor real estate development, Ivey's office provided designs for the entrance gate, a residence for the manager of the model farm, as well as residences for some of the purchasers of the small-farm tracts.

This work undoubtedly brought Ivey into contact with officers of the company and to the notice of local shareholders, as well as others within the lumber and real estate industries.

With the end of the First World War, Ivey undoubtedly anticipated a new wave of home construction by the rising generation of business leaders and was looking for a way to capture at least part of this market; however, this market was not one for which Ivey or his office were not well positioned to take advantage. Ivey's choice to pursue only a two-year Certificate of Proficiency at the University of Pennsylvania, as opposed to the four-year baccalaureate degree was likely indicative of a pragmatic approach to the practice of architecture. His choice of Howard H. Riley as a draftsman, and later partner, was a further reinforcement of this approach. Likewise, his willingness to work with real estate developers and speculative builders reflected a pragmatism regarding professional design services not shared by most early twentieth-century high-style architect. Even the design of his personal residence in West Seattle evinced few pretensions normally associated with custom-designed homes for the well-to-do. In addition, the pragmatic and unconventional design for the Old Boot Café (1919; unbuilt project) suggested an architect more concerned with addressing the client's needs and/or desires than an especial concern with how his architectural peers might view his design aesthetics.

In this regard, the hiring of Elizabeth Ayer, and more particularly, his mentorship of her was unconventional at the time and suggested a re-evaluation of his approach to architectural practice. Ayer's background was in many respects the antithesis of Ivey's approach to architecture. The baccalaureate program in architecture from which she graduated was immersed in the Beaux-Arts educational tradition that emphasized theory over practicality. Indeed, a student *projet* by Ayer, "A Design for a Bathroom," has been described as:

Design for a bathroom with classical elements. Included in the design drawing is a ceiling plan showing the ornate plaster ceiling, floor plan, and section drawing. Floor plan shows the round bathroom with areas for bathing, lavatory, closet, drinking fountain, and dental lavatory. Elevation shows the interior of the bathroom with classical entablature and columns, vitrolite glass windows, and couch for massage and sun treatment. Also included is a color chart, list of fixtures, and interior materials for the marble mosaic floor, vitrolite walls, and ceiling stucco.²⁵

It is difficult to imagine very many early twentieth-century homes in Seattle, where such a confection would have been welcomed, even by those locally who could have afforded to incorporate such a room into their home.

Still, not all of her student projects were this divorced from the realities of day-to-day Seattleites. Indeed, Ayer's award of Mention for the design of "A State Dining Room" may have prompted an epiphany by Ivey in regards to the future of his practice. The competition design *programme* described the intended room as:

This room is to be built in the Executive Mansion of the Governor of one of our large states to serve for official dinners. The decorations should be in keeping with the dignity and magnificence of the functions for which it is destined. A musicians' gallery is indispensable. The dimensions of the room are 40'-0" x 80'-0" with a ceiling height of 40'-0", forming a so-called double cube," of which there are certain well-known examples. The room is lighted by windows on one of the long sides and the entrance or entrances are on the opposite side.²⁶

The possibility of constructing an Executive Mansion as part of the group plan for the state capitol in Olympia was still within the realm of possibilities in 1921, and the state capitol group plan was certainly grandiose enough such that Ayer's design would have been a comfortable fit as part of a mansion that might have been designed by Wilder & White had a new executive mansion been built as intended as part of their state capitol group plan. It would not have been difficult for Ivey to view the State Dining Room design as an integral adjunct of a house designed for the rising generation of the wealthy and well-to-do in Seattle society.

Prior to the First World War, there had a small number of homes in the Puget Sound region where a dining room of the quality of Ayer's State Dining Room would have matched the quality and/or the scale of the house. These included "Thornewood" (1909-11; altered) by Cutter & Malmgren with the Olmsted Brothers for Chester and Anna Thorne and constructed on the shores of American Lake south of Tacoma. Another was the Leroy D. Lewis residence (1912-13; destroyed) by Willcox & Sayward in The Highlands north of Seattle. A third was the Julius Redelsheimer residence (1912-14; altered) by Julian F. Everett and constructed on the west shore of Lake Washington in Seattle. A fourth was "Norcliffe" (1913-14; altered), again by Cutter & Malmgren, and designed for Charles and Dorothy Stimson in The Highlands. A fifth was "Aldarra" (1912-15) for William E. Boeing, in The Highlands once more, designed by Charles H. Bebb of Bebb & Mendel and Bebb & Gould.

With the end of the First World War, signs of a new wave of house building by the were becoming evident. Construction of "Villa Carman" (1919-20) for John and Margaret Carman by Kirtland Cutter as the first Puget Sound region house by Cutter after the dissolution of his long-time partnership with Karl G. Malmgren was a promising sign in this direction. Perhaps even more significant were the feelers spread throughout the state's design community by David Whitcomb for the proposed design of "Westwold Manor" in Woodway between Seattle and Everett, with Cutter developing a design as early as 1918 and maintaining hopes of gaining the commission as late as 1920. Some two years later, Carl F. Gould of Bebb & Gould was attempting to land this plumb commission, before Harlan Thomas of Thomas, Grainger & Thomas captured the prize in 1924. More concretely, Bebb & Gould with the Olmsted Brothers began design work on "Sunnycrest" (1919-22) in The Highlands for John and Ethel Hoge.

If one recalls the general quality of Ivey's rendered drawings for *The Bungalow Magazine* in 1915, these were drawings unlikely to impress clients willing to spend \$60,000 or more for their personal home. Indeed, one cannot help but wonder at Jud Yoho's willingness to publish drawings of their quality in his magazine.

In regards to architectural drafting, Ivey's work was of equivalent quality to work being produced in other local offices. The working drawings produced for the Edward E. Harold cottage featured in the April 1915 issue of *The Bungalow Magazine* were professionally drafted and clear to understand, as can be seen with the First Floor Plan and Side Elevation drawings. When compared to the East Elevation drawing for the John T. Heffernan residence by Bebb & Mendel, the primary difference between the drawings was the size of the respective houses.

When one compares any of Ivey's rendered drawings with Elizabeth Ayer's rendered *projet* for a State Dining Room, the difference in artistic quality and presentation are obvious and undeniable. Indeed, they clearly show that the Certificate of Proficiency program at the University of Pennsylvania had little room to spare for artistic renderings in its two years of course work. There can be little doubt as to the importance that Ivey placed on Ayer's rendering skills—simultaneous with the announcement of the dissolution of the partnership with H. H. Riley was the announcement of the award of a design commission by an unidentified client for "a large home to be erected in The Highlands."²⁷ A year later, Archibald S. and Emma C. Downey moved into "Collinsdown," the first of many commissions by Ivey for a fabulous house in The Highlands.²⁸ A rendered perspective of "Collinsdown" was published in the May 1921 issue of *The Architect & Engineer* featuring projects that had been included in the biennial exhibition of the Washington State Chapter of the American Institute of Architects.²⁹

The quality of this rendered drawing was on a par with Ayer's award-winning Beaux-Arts *projet* drawings.

Prior to the commission to design "Collinsdown," Ivey had only limited experience in designing relatively expensive, large houses, and nothing on the scale of "Collinsdown." Up until 1918 Ivey or his office had not designed a house costing greater than \$5,000. In 1918, his office designed the Emil and Ida Peschau residence (1918-19; altered) in the Mount Baker district of Seattle, which cost some \$7,000. In the following year, Ivey & Riley designed the Claude and Lou Nicoulin residence (1919-20; altered) again in the Mount Baker district but costing more than twice as much at \$15,000. Again in 1919, Cornelius Osseward gave Ivey the design commission for "Viewlands" (1919-20; destroyed) in today's Broadview neighborhood in north Seattle, which had a construction cost of \$30,000 and was the first of Ivey's houses to be given a name by the client. Even at \$30,000 the cost of "Viewlands" was still considerably less than half of the \$75,000 cost of "Collinsdown."

Ivey's appreciation of Ayer's talents prompted him to encourage her to get direct experience with East Coast architects whose specialties included fabulous houses for the wealthy and their clubhouses. In 1922-1923, Ayer worked roughly a year in the offices of Cross & Cross (1907-1942) and Grosvenor Atterbury (1869-1956), both in New York City.³⁰ Cross & Cross had designed The Links Club (1916-17), a Georgian Revival clubhouse in Flemish-bond brick trimmed with travertine; the Lewis and Emily Morris residence (1922-23), a Federal Revival design in brick for the descendant of a signer of Declaration of Independence; and later the Dr. Ernest Stillman residence (1925), and the George and Martha Whitney residence (1929-30), another essay in the Georgian Revival in brick next door to Morris residence—all in

Manhattan,³¹ as well as the Edward S. Moore residence (1921-22) in Roslyn, New York.

Grosvenor Atterbury had designed the Frederick H. Betts residence (1897), the Julian and Sarah Robbins residence (1900-01), a Renaissance Revival manse for a niece of Cornelius Vanderbilt, and the Ernesto and Edith Fabbri residence (1914-16, with Egisto Fabbri), a limestone palazzo in the Italian manner for a granddaughter of William H. Vanderbilt and her husband,³² all in New York City, while also designing "Vedimar" (1920-24; partially destroyed) for Arthur Curtis James in Newport, Rhode Island.³³

After returning to Seattle and the Ivey office, she became an increasingly integral part of Ivey's practice, particularly as he continued to obtain commissions for mansions like "Belleterre" (1923-24) for David and Sarah Scott in Lakewood, "Brookwood" (1923-26; altered) for Charles and Clara Stimson in The Highlands, the Minor and Anna Meriwether residence (1923-24; altered) in Woodway, "Hollyhedge" (1927-28, 1929) for Paul and Beatrice Henry in The Highlands, "Schafer Castle" (1929-30, 1945, 1960-61) for Albert and Helen Schafer near Union, Washington, and the Anna H. Thorne residence (1938-39) in Tacoma. Ayer later became the first woman to become a licensed architect in the state of Washington. She also became a principal in the firm of Edwin J. Ivey, Inc., when Ivey incorporated his architectural practice in the mid-1930s. She also, in turn, mentored women who entered the architectural profession after World War II, like L. Jane Hastings.

Endnotes

¹ "No Feminine Touch on Gothic Arch," *University of Washington Daily*, 5 February 1917, page 1. This article was saved in Elizabeth Ayer Architectural Scrapbook, ca. 1917-1919, Pacific Northwest Scrapbook Collection, Special Collections Division, University of Washington Libraries.

² Note card saved in Elizabeth Ayer Architectural Scrapbook, ca. 1917-1919, Pacific Northwest Scrapbook Collection, Special Collections Division, University of Washington Libraries.

³ "The Atelier," *The 1919 Tyee* (Seattle, Wash.: The Associated Students of the University of Washington), 1919, Volume XX, page 328.

⁴ "U. of W. Girls Design Homes—Win Honors in Big Contest," *Seattle Times*, 11 January 1920, page 14; "Eleven Art Students Receive High Honors," *University of Washington Daily*, 12 January 1920, page 1. It should be noted that an award of "Mention" was indicative of some merit for the design in question; however, in some competitions there were more awards of Mention than designs that failed to achieve any notice of award: In a design competition for "A Circular Portico," 174 drawings were submitted, out of which there were 2 "First Mention Placed" awards, 7 "First Mention" awards, 86 "Mention" awards, and 79 designs that received no award; see "Beaux-Arts Institute of Design," *American Architect-Architectural Review*, volume CXX, number 2373 (3 August 1921), page 88.

⁵ "Marshall Gill Wins Prize in Art Contest," *University of Washington Daily*, 19 March 1920, page 8.

⁶ "Old Columns on Campus Will Frame Sylvan Theater Stage," *Seattle Post-Intelligencer*, 15 February 1920, page 8. Marshall Gill won First Mention, and his design formed the basis for the executed Sylvan Theater, after his unexpected early death at the end of his junior year; see David A. Rash, "Our back pages: The Man Behind the Columns," *COLUMNS: The University of Washington Alumni Magazine*, September 1998.

⁷ "Beaux-Arts Institute of Design," *American Architect-Architectural Review*, volume CXIX, number 2360 (16 March 1921), page 313. First Mention Placed was awarded to Rachel Carter and Hugh Richardson, and Mention was awarded to Victorio C. Edades, Verle L. Annis, Dwight T. Lopp, Hermann Schippmann, Jenness Bonnell, Ernest R. Duckering, A. Eugene Fulton, John C. Jordon, Elizabeth Ayer, Victor N. Jones, Walter W. Lund and Olive. W. Haas.

⁸ "Beaux-Arts Institute of Design," *American Architect-Architectural Review*, volume CXX, number 2373 (3 August 1921), pages 88-89. This design competition was listed as a "Program 'B'—III Projet," with the "III" designation simply indicating that this was the third such competition in the academic year, of which there would eventually be a total of four.

⁹ "Students Get Mention," *University of Washington Daily*, 12 January 1921, page 2; "Eleven 'U' Architects Receive Design Awards," *University of Washington Daily*, 11 May 1921, page 4; "Beaux-Arts Institute of Design," *American Architect-Architectural Review*, volume CXX, number 2380 (9 November 1921), pages 348-349.

¹⁰ "Winners of Prizes and Scholarships, 1920-1921," *Program of Exercises for the Forty-fifth Commencement* (Seattle, Wash.: University of Washington), 18-20 June 1921, no pagination. The program did not list the individual level of prizes, but the order of names, with Ayer listed first, was indicative of the respective, first, second and third prizes. In the previous year, she was listed third in order.

¹¹ Ayer's published resume in George S. Koyl, editor, *American Architects Directory* (New York: R. R. Bowker Company), 1956, page 19, does not mention her time with Willatzen, which is mentioned in Dale Douglas Mills, "State's First Lady of Architecture," *Pacific Northwest/Seattle Times*, 18 January 1981, page 45. The date of 1918 is derived from the date the resume indicates that she started working professionally, 1918, although this date is in reference to Edwin J. Ivey, Inc., a firm that did not exist until the mid-1930s.

¹² Dale Douglas Mills, "State's First Lady of Architecture," *Pacific Northwest/Seattle Times*, 18 January 1981, page 45.

¹³ "Tea Will Open Fine Arts Hall Annual Exhibit This Afternoon," *Seattle Times*, 28 March 1920, Social Section, page 1.

¹⁴ The marriage occurred on 22 March 1911 at the McMicken family home, see "McMicken-Ivey Wedding," *Seattle Times*, 26 March 1911, Society Section, page 2.

¹⁵ *Seattle Record*, 6 May 1913, page 1; Edwin J. Ivey, "This Home in the Woods Is Subject for the April Bungalow Supplement," *Bungalow Magazine*, vol. IV, no. 4 (April 1915), pages 201-209 and 257-264.

¹⁶ "The Return of the Colonial," *Bungalow Magazine*, vol. VII, no. 1 (January 1918), pages 7-9; "A Cottage for a Hillside Lot Submitted for the January Supplement," *Bungalow Magazine*, vol. VII, no. 1 (January 1918), pages 11-16 and 57-72; "Six Colonial Bungalows of Unusual Merit," *Bungalow Magazine*, vol. VII, no. 1 (January 1918), pages 19-38.

¹⁷ Edwin J. Ivey, "Kitchen Coolers to Preserve All Kinds of Perishable Foods Necessary for the Modern Bungalow," *Bungalow Magazine*, vol. V, no. 1 (January 1916), pages 43-45.

¹⁸ "Architect E. J. Ivey Sketches Elevation in Colonial Style for Five Room Bungalow," *Bungalow Magazine*, vol. IV, no. 7 (July 1915), pages 432-433; "Architect E. J. Ivey Sketches Design in Old English Style for a Modern Bungalow," *Bungalow Magazine*, vol. IV, no. 9 (September 1915), pages 569-570; "Another Ivey Design in Free Colonial Style Suitable for Five Room Bungalow," *Bungalow Magazine*, vol. IV, no. 10 (October 1915), pages 645-646. Technically, a bungalow is a building type; however, to many, the frequency of the use of Arts & Crafts motifs has transmuted the building type into a style; see Robert Winter, *American Bungalow Style* (New York, N. Y.: Simon & Schuster, Inc.), 1996, and Jane Powell and Linda Svendsen, *Bungalow: The Ultimate Arts & Crafts Home* (Salt Lake City, Utah: Gibbs Smith, Publisher), 2004.

¹⁹ David A. Rash, "The Model House for Selling Real Estate," presentation at the 2014 Annual Meeting of the Marion Dean Ross Chapter/Society of Architectural Historians, Seattle, Washington.

²⁰ Harlan Thomas, "Economic Depreciation," *The Architect*, vol. XV, no. 5 (May 1918), pages 285-289 and plates.

²¹ S. Sian Roberts and Mary Shaughnessy, "Elizabeth Ayer," in Jeffrey Karl Ochsner, ed., *Shaping Seattle Architecture: A Historical Guide to the Architects* (Seattle, Wash.: University of Washington Press in association with American Institute of Architects Seattle Chapter and Seattle Architectural Foundation), 1994, page 211.

²² Shanna Stevenson, "National Register of Historic Places Nomination Form," September 1998,, Section No. 8, page 5.

²³ "Wants Figures On Residence," *Seattle Journal of Commerce*, 19 October 1921, page 1; "Local Firm Gets Olympia Contract," *Seattle Journal of Commerce*, 21 December 1921, page 1.

²⁴ "Will Call Bids On New Home," *Seattle Journal of Commerce*, 13 December 1921, page 1; "Three Houses Planned, Will Be Begun Soon," *Seattle Journal of Commerce*, 20 June 1921, page 1; "Judge Macintosh Buys New Residence," *Seattle Journal of Commerce*, 11 August 1923, page 1.

²⁵ Catalog description for Ayer-1 drawing in "University of Washington Department of Architecture student drawings, 1919-1967," Collection No. PH0740, Special Collections, University of Washington Libraries.

²⁶ "Beaux-Arts Institute of Design," *American Architect-Architectural Review*, volume CXX, number 2373 (3 August 1921), pages 88-89.

²⁷ For the announcement of the end of the partnership, see "Architectural Firm Makes Announcement," *Seattle Journal of Commerce*, 25 May 1921, page 1. For the announcement of the design commission, see "Large Residence Is Planned At Highlands," *Seattle Journal of Commerce*, 25 May 1921, page 1.

²⁸ "Attractive Residence Recently Completed at the Highlands," *Seattle Journal of Commerce*, 22 October 1922, page 1.

²⁹ Carl F. Gould, "Biennial Exhibit of the Washington State Chapter of the American Institute of Architects," *Architect & Engineer*, vol. LXIX, no. 2 (May 1922), page 63.

³⁰ Although Roberts and Shaughnessy, "Elizabeth Ayer," in Ochsner, ed., *Shaping Seattle Architecture*, 1994, page 211, indicated that the Crosses and Atterbury were alumni of the University of Pennsylvania, John W. Cross attended Yale University and the *École des Beaux-Arts* in Paris and Eliot Cross attended Harvard University (Christopher Gray, "A White Shoe Firm Unbuttons," *New York Times*, 7 February 2014), while Atterbury apprenticed with the renowned firm of McKim, Mead & White (Christopher Gray, "Designing for High and Low," *New York Times*, 22 October 2009). It is possible that staff in either office were alumni of the University of Pennsylvania, but the principals were not.

³¹ Norval White and Elliot Willensky, *AIA Guide to New York City: The Classic Guide to New York's Architecture, Fourth Edition* (New York, N. Y.: Three Rivers Press), 2000, pages 386, 387 and 419.

³² White and Willensky, *AIA Guide to New York City*, 2000, pages 392, 432 and 425.

³³ William H. Jordy, *Buildings of Rhode Island* (New York, N. Y.: Oxford University Press), 2004, page 580.