

From William Hay to Burke, Horwood & White: A Case History in Canadian Architectural Draughting Style

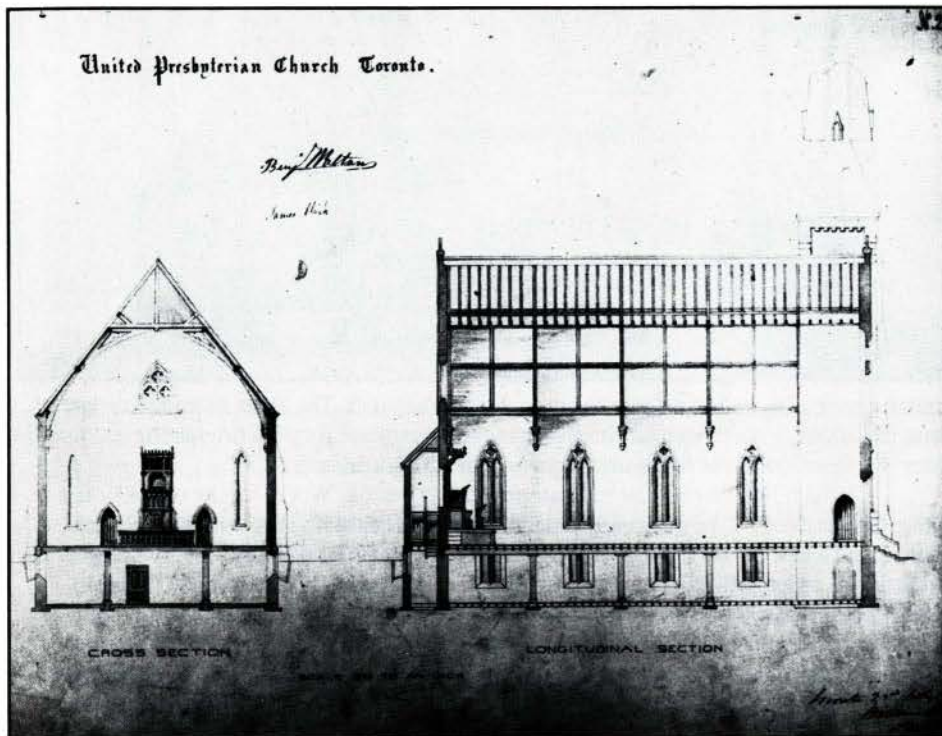


Figure 1. William Hay, Gould Street United Presbyterian Church (later Catholic Apostolic Church, now demolished), Toronto. Transverse and longitudinal sections, 23 July 1855. Pen and wash on paper. (Metropolitan Toronto Reference Library, Baldwin Room, Langley Collection 126)

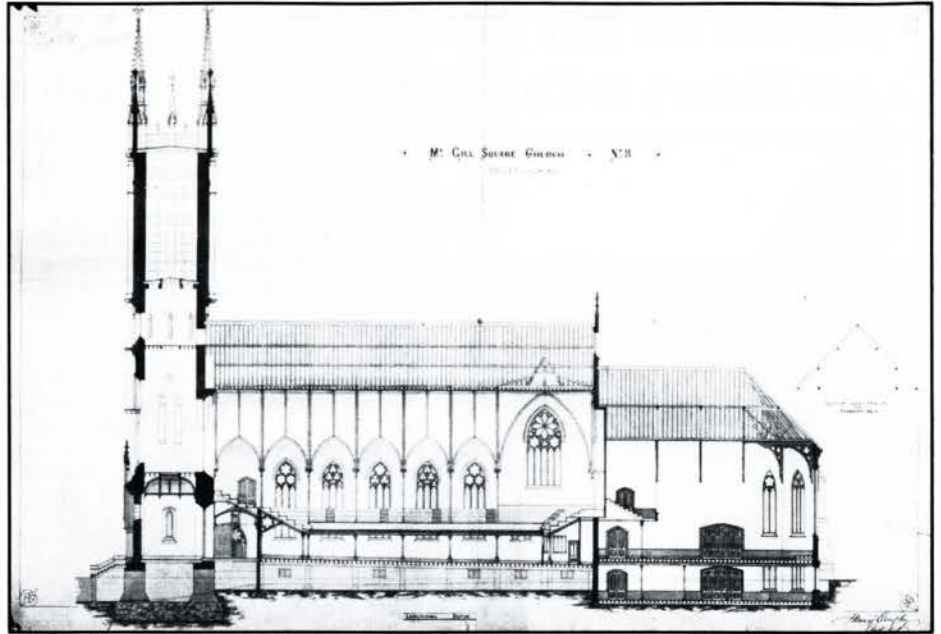
When William Hay founded his architectural firm in Toronto in 1852 he could not have known that its successors would continue in practice for well over a century (see Appendix). Drawings from all phases of this development are represented in the Langley Collection at the Metropolitan Toronto Reference Library and the Horwood Collection in the Archives of Ontario. For the purposes of this paper, examples have been chosen from 1855 through 1913, and include works by various individuals who articulated with Hay or with his student Henry Langley.¹ These works offer an opportunity to study stylistic changes in the second half of the 19th and early part of the 20th centuries in circumstances where the apprenticeship system might have been expected to engender a certain amount of continuity.²

Any discussion of style in the context of architectural draughtsmanship necessarily involves consideration of three interrelated factors: individual artistic expression; general period trends; and uniformity in office practice. Personal style is usually an articulation of training, skill, and temperament,³ whereas period style can be linked to any number of issues, such as contemporary watercolour technique, publication methods, and general critical trends aimed at defining acceptable methods of representation.⁴ Both in turn are constrained by office style, which circumscribes format and appearance according to a consistent set of criteria established by the design partner.⁵ Variations in a firm's architectural draughtsmanship offer insights into office procedure, revealing the relative rigidity of office style versus allowable latitudes in individual expression. Furthermore, educational opportunities and period trends in draughtsmanship play a significant role in altering the parameters established by office practice and the apprenticeship system.

Discussion in this paper will be limited to presentation and contract drawings, the last two stages of the design process.⁶ Included in the former category are perspectives, which offer a tangible representation of the building prior to construction for the benefit of a client

By Angela Carr

Figure 2. Henry Langley, McGill Square Church (Metropolitan Methodist Church, now Metropolitan United Church), Toronto. Longitudinal section, c.1870. Pen and wash on paper. (Metropolitan Toronto Reference Library, Baldwin Room, Langley Collection 67)



or competition jury, and often bear the draughtsman's initials. The latter category consists of plans, elevations, and sections executed in orthogonal projection by the draughting room staff under the signature of the firm rather than an individual delineator.⁷

William Hay came to North America as Clerk of the Works for the noted British architect Gilbert Scott.⁸ Like most early practitioners he brought his skills with him, and implanted the Gothic revival fashions of Augustus Welby Pugin in his wake.⁹ Henry Langley joined him as an articulated student about 1855. Seven years later English-trained Thomas Gundry became Hay's partner.¹⁰ When Hay returned to his native Scotland later in 1862 Gundry took over the business and offered a partnership to Langley. The quality of Langley's training is attested by the fact that the junior partner assumed responsibility for draughting and design, while the senior man specialized in valuation and estimates.¹¹ Their association ended with Gundry's death in 1869, and for a time Langley continued as a sole practitioner.

A mid-century benchmark is provided by one of Hay's contract drawings (figure 1). Sections for the Gould Street United Presbyterian Church in Toronto, dated 23 July 1855, are executed under the architect's signature without delineator's initials.¹² One of the firm's finer surviving examples, the work is probably autograph.¹³ It uses the standard technique for a construction document, namely geometric projection, but includes shading, a by-then outdated method of defining differences in plane.¹⁴ Carried out on wove paper in pen with coloured wash, separate sheets record plans, elevations, and sections — a format typical of the 1850s.¹⁵ In addition, the draughtsman followed the convention of designating building materials by colour: brick in pink, stone in grey, and wood in yellow, a schema formalized and elaborated by Phené Spiers in 1887.¹⁶ Similar examples from the mid-1850s were also executed by firms like Hopkins, Lawford & Nelson and Cumberland & Storm.¹⁷

By contrast, the sections for Toronto's Metropolitan Methodist Church prepared by Henry Langley's firm in 1870 are framed with a black border, and defined by thicker and bolder pen lines with vivid unshaded washes (figure 2).¹⁸ Again the architect's signature appears without delineator's initials, and colour-coding identifies the materials. The "old English" script in black and red is more restrained than some of Langley's lettering, which often sports eye-catching blue and scarlet.¹⁹ Recalling Blomfield's description of English draughtsmanship of the 1860s and 1870s as replete with "wiry insensitive line" and "acid colouring," the former is a response to the medievalizing linearism of British architect William Burges, the latter a desire for clarity in communication with the contractor.²⁰ Such variants appeared in the works of the Hay firm in the late 1850s, but this type of draughtsmanship became standard after Langley entered practice on his own in 1869.²¹ Despite his apprenticeship with Hay, who immigrated in the 1850s before the linear style had become popular in the United Kingdom, Langley's technique parallels contemporary British trends.²²

The linear style is also characteristic of the presentation drawings for Metropolitan Methodist, but the bright washes are not (figure 3). For the competition jury, the lettering was dressed up in a suitably ecclesiastical gold, and brick sections were marked in somber brown instead of bright red. Only the working sections exhibited the so-called acid tones, a

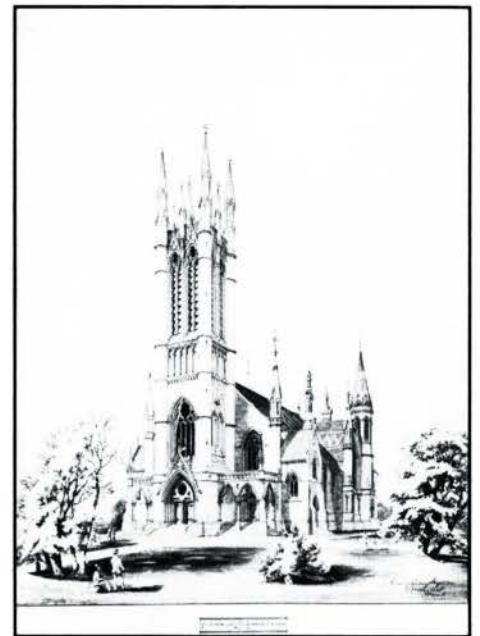
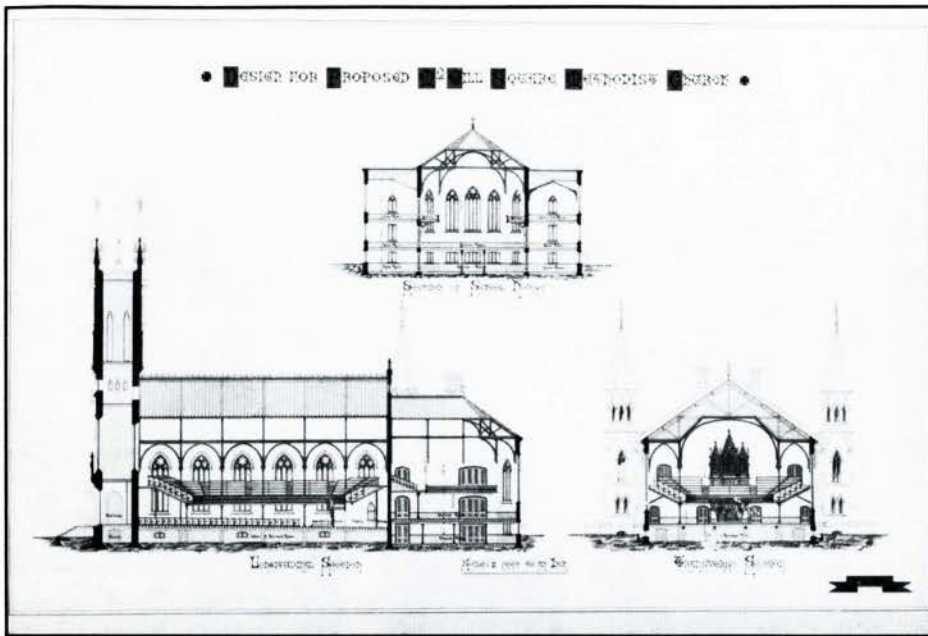


Figure 3 (above left). "York" (pseudo. for Henry Langley), McGill Square Methodist Church (Metropolitan Methodist Church, now Metropolitan United Church), Toronto. Miscellaneous sections, c.1870. Pen and wash on paper. (Metropolitan Toronto Reference Library, Baldwin Room, Langley Collection 56)

Figure 4 (above). Henry Langley, Metropolitan Methodist Church (now Metropolitan United Church), Toronto. Perspective initialled "F.D.," c.1870. Pen and wash on paper. (National Gallery of Canada, Royal Academy of Arts diploma work, deposited by the architect, Toronto, 1880)

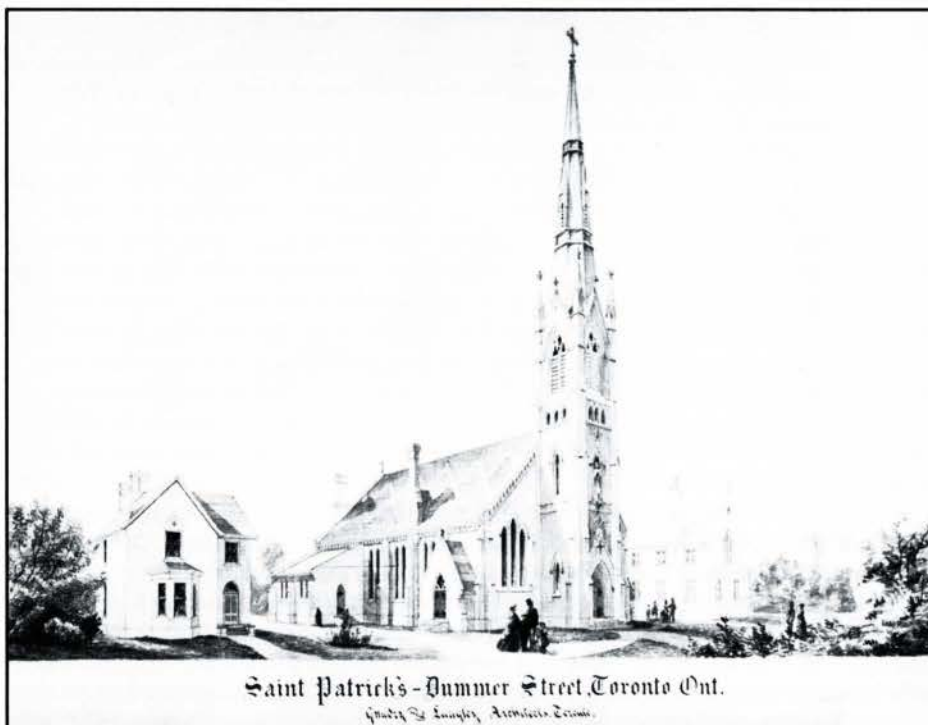


Figure 5 (left). Gundry & Langley, St. Patrick's Dummer Street (now Our Lady of Mount Carmel), Toronto. Perspective signed E. Burke, c.1869. Pen and wash on paper. (Archives of Ontario, Horwood Collection 451)

confirmation that the intense colouration was intended for the benefit of the contractor.²³

Turning to the Langley perspectives, these too were stylistically consistent with the firm's contemporary contract drawings. Henry Langley's diploma piece depicting Metropolitan Methodist Church was deposited with the Royal Canadian Academy in 1880 (figure 4).²⁴ A powerful image in pen and wash on paper, it manifests the characteristic linearity noted above, and discloses a high level of technical expertise. The building appears in outline against the blank page with the setting sketched in at the base, a technique described by Goodhart-Rendel as "architectural drawing with pictorial accompaniments."²⁵ Along with Langley's signature, the drawing bears the initials "F.D." in the centre foreground, indicating it was substantially if not entirely the work of Frank Darling, a Langley student from 1866 to 1870.²⁶ The latter adopts the "office" style of his principal, who was the directing mind behind the design.²⁷

In 1870 Darling left the Langley firm to study in England with Sir Arthur Blomfield and George Edmund Street.²⁸ Street was known for his active opposition to the medievalizing linearity of Burges, and his publicly expressed view that "every artist who was fit to be called an artist, drew in his own way, and it would be absurd to ask him to draw like anyone else."²⁹

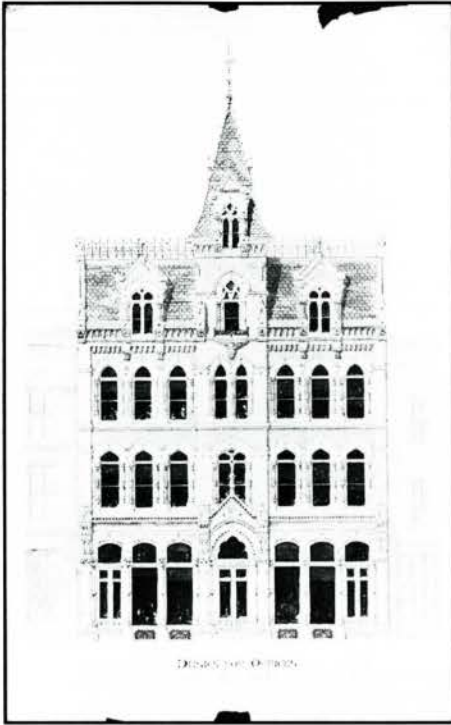
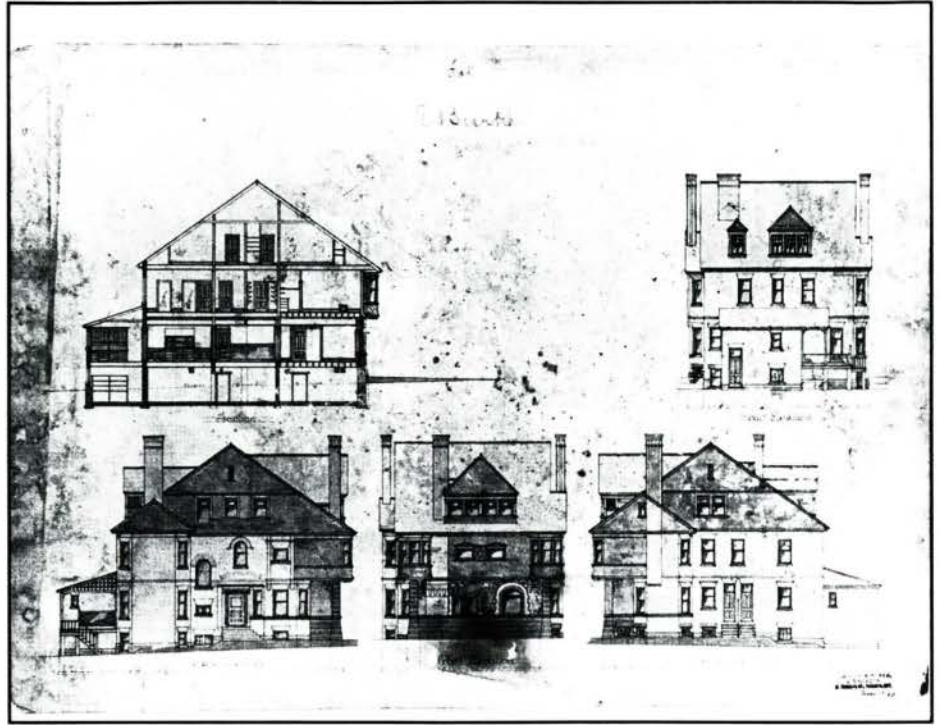


Figure 6 (above). Langley, Langley & Burke, *Design for Offices* (executed as *Union Loan and Savings, Toronto*). Elevation initialled "E.B.," exhibited Ontario Society of Artists in 1879. Pen and wash on paper. (Archives of Ontario, Horwood Collection 623(1))

Figure 7 (above right). Langley & Burke, unidentified residence. Miscellaneous elevations and section marked "Fo. E. Burke," 17 March 1890. Pen and wash on paper. (Archives of Ontario, Horwood Collection 537a)



It is scarcely surprising, therefore, that upon his return to Toronto Darling's mature style shows no evidence of the office manner he so ably emulated while in Langley's employ.³⁰

The apprenticeship system and the constraints of office style were by no means uniform in their effect. An early perspective by another Gundry & Langley student, Edmund Burke, depicts St. Patrick's Dummer Street in Toronto (figure 5).³¹ Executed in pen and wash on Whatman paper, the lines are clear and firm, if somewhat finer than in the diploma piece. Here, the scene fills the lunette-shaped sheet to the perimeter, the cloudy sky and fully-rendered landscape resembling watercolour composition where architectural subject matter shares equal value with the setting. Yet the effect, like that of the diploma piece, is rather too clinical to pass for fine art. At this stage Burke was 19 or 20, and his artistic education must have been dominated by his observation of Langley's work. Yet the familiarity with watercolour technique suggests additional training from an outside source, perhaps someone like Richard Baigent, drawing master at Upper Canada College and an occasional instructor at the Mechanics' Institute.³²

Burke was Langley's nephew, and a contemporary of Frank Darling. He began his articles in 1865 after two years of secondary school education at Upper Canada College, and was obliged to supplement his training by evening classes at the Mechanics' Institute.³³ During his twenty-year tenure with the firm, Burke developed the expertise required to assume supervision of the Langley draughting room.³⁴ By then it offered one of the most proficient apprenticeship systems in the city: the subsequent success of its student draughtsmen as members of the architectural profession stands as testament to its thoroughness.³⁵

By June of 1874 Burke was sufficiently accomplished to display a rendering of the *Chapel etc. of the Toronto Necropolis* at the second annual Ontario Society of Artists exhibition.³⁶ Langley & Co. obviously encouraged such undertakings.³⁷ The firm also sent a chromolithograph of an architectural design to the 1876 Centennial Exhibition in Philadelphia, where it received a bronze medal.³⁸ Subsequently in 1879 a *Design for Offices*, possibly the one illustrated here (figure 6), appeared under the name of Langley, Langley & Burke at the seventh annual Ontario Society of Artists exhibition.³⁹ Burke was the delineator of this geometric projection, which employs the conventions of perspective rendering, using shadows to separate the planes of the facade and emphasize the voids. Neighbouring buildings are faintly indicated — one bay on either side to give a sense of relative scale, style, and general context. There is no other description of natural setting, however, the sky being represented by bare paper. Stylistically, the finer lines and pale watercolour washes indicate a departure from the canons the Langley era, and provide evidence perhaps that Burke had seen the merit of each artist "finding his own line."⁴⁰

The style of draughtsmanship in Langley's large projects remains consistent throughout the 1870s, but in the 1880s some of the firm's contract drawings for smaller

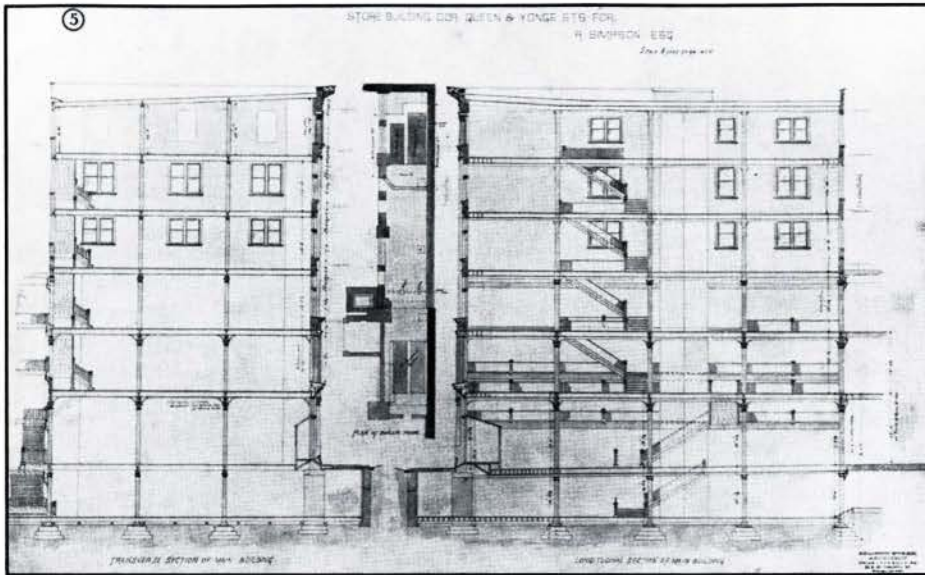


Figure 8. Edmund Burke, Robert Simpson Department Store, Toronto. Transverse and longitudinal sections, 2 May 1894. Pen and wash on paper. (Archives of Ontario, Horwood Collection 26(5))



Figure 9. Burke & Horwood, Sketch of a House for a Fifty Foot Lot. Elevations initialled "JCBH," 3 October 1898. Watercolour on cardboard. (Archives of Ontario, Horwood Collection 804a)

residential works begin to exhibit characteristics similar to Burke's *Design for Offices*. In one drawing of an unidentified residence the heavy black outlines are eliminated, as is the border found in the earlier Langley works (figure 7).⁴¹ Likewise, lettering is less conspicuous, and washes much paler. Typical, too, is the fine line, as well as the inclusion of plan, section, and elevation on a single sheet, all indicative of the growing influence of the Arts and Crafts movement.⁴² Such a shift may be attributed to the fact that younger members of the firm slowly assumed a more prominent role in design, encouraged by their supervisor Burke. When he left to found his own practice in 1892 the style moved with him, and became characteristic of contract drawings produced in his own office (figure 8). Just as Langley's style departed from that of Hay, Burke's responded to current trends. His 27 years with Langley did not preclude the acceptance of a new approach, which supplanted to some degree the office style established within the Langley firm.

Contract drawings, with their intrinsic artistic value, continued to be important well into the 20th century, but their value gradually declined, hastened by the invention of the coarser blueprinting process.⁴³ Meanwhile, the apprenticeship system and office style controlled the consistency of production in the draughting room throughout this period. One item from the Burke firm, dated 1912, bears a notation: "I think this drawing was made by Makepeace — after a scheme of Blackstone in Chicago." Horwood's reply "Looks like Shepard's printing, JCBH June 11, 1918" indicates that the partners still relied on printing style rather than drawing technique as a method of assigning attribution.⁴⁴ In contrast, perspective renderings became more sophisticated and stylistically diverse — at least those produced by the Burke firm. Surviving examples allow us to assess patterns of stylistic transmission, and to examine the impact of formal educational programmes upon the new generation.

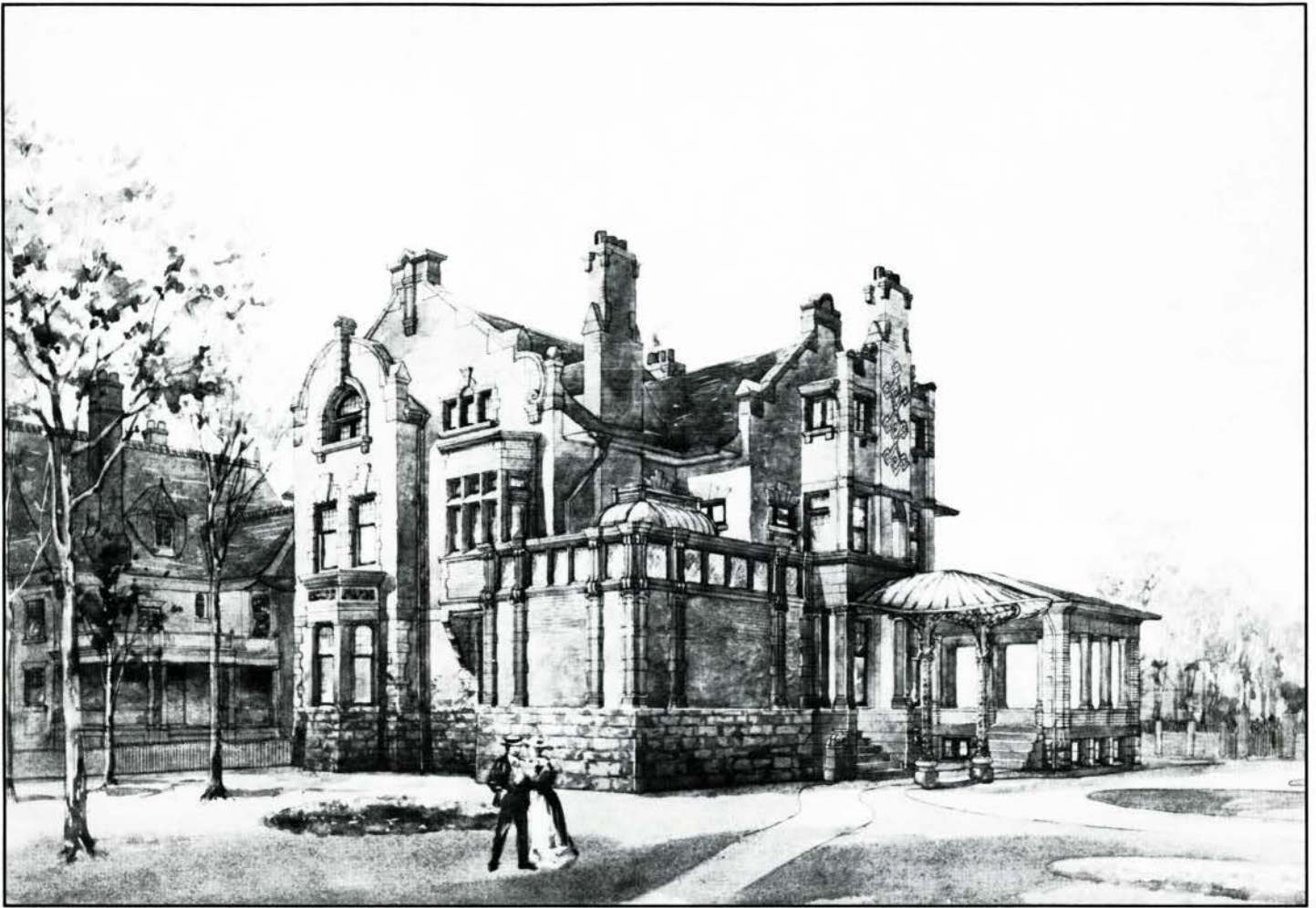
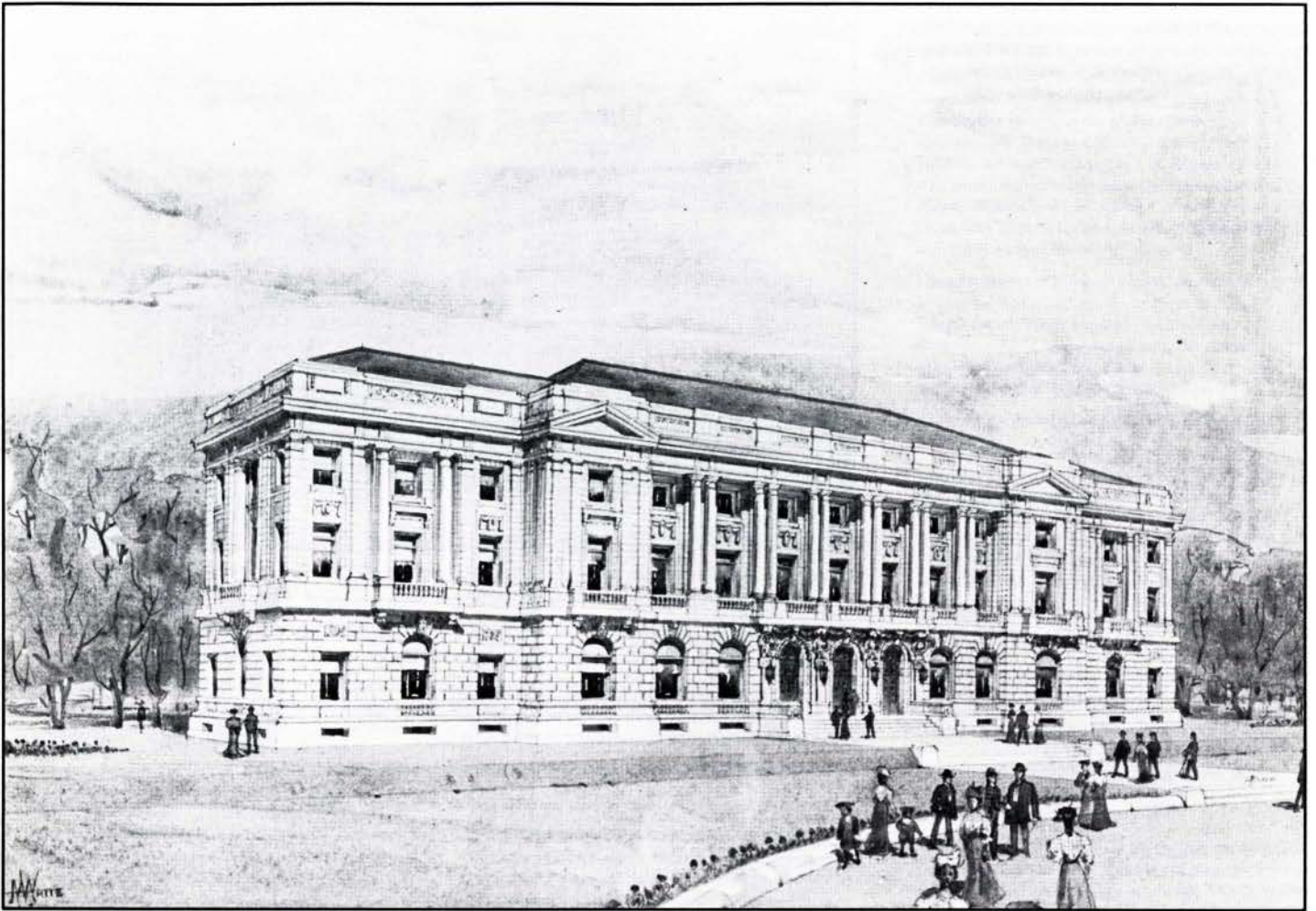


Figure 10. Burke & Horwood, Fudger residence, Toronto. Perspective delineated by W. F. Sparling, c.1902. Watercolour on paper. (Archives of Ontario, Horwood Collection)

Burke left his uncle's office in 1892, and two years later formed a partnership with Newfoundlander John Charles Batstone Horwood. Horwood had articulated with Langley & Burke from 1882 to 1889, after attending Ryerson's School and Jarvis Collegiate Institute.⁴⁵ With the establishment of the Ontario School of Art in 1876 facilities for artistic training in the city were expanding rapidly, and this catalyst may have stimulated Horwood's innate talent.⁴⁶ His style matured quickly, and he soon became a significant asset to the Langley draughting room.⁴⁷ Then, like so many other Canadians who sought further training, he moved to New York, where he worked as a draughtsman and studied at the Brooklyn Institute of Arts and Sciences.⁴⁸ Four years later he returned to Toronto to take up a partnership in the Burke firm, his lively freehand technique undoubtedly a welcome addition to Burke's growing practice.

Horwood's *Sketch of a House for a Fifty Foot Lot* dated 1898 is typical of his painterly panache, with sky and landscape dotted in behind a picturesque half-timbered residence (figure 9). Presented as a scenic watercolour, the buildings are entirely at one with the setting. The loose, casual quality of the brushwork, the colour-sense, and the compact format are thoroughly characteristic of Horwood's approach, and no doubt reflect a comprehensive artistic training far beyond the necessities of architectural practice. The work embodies the pictorial qualities one normally associates with British topographical painting, the subject matter and technique reminiscent of the sketchbooks compiled by the architects of the Arts and Crafts during their weekend rambles in the countryside.⁴⁹

Horwood's talents made him a natural choice to take charge of the Burke & Horwood draughting room. This followed a pattern established in the days of Gundry & Langley, when the junior partner first assumed the design role. Burke fulfilled the same function in his uncle's office, but readily took on business responsibilities in the new partnership. Horwood's influence upon the draughting room is clear in a perspective depicting the Fudger residence, Toronto, from about 1902 (figure 10). Executed by William F. Sparling during his apprenticeship with Burke & Horwood, it displays the same saturated washes and jewel-like technique characteristic of Horwood's work.⁵⁰ Other renderings from the same project also



demonstrate the impact of Horwood's Arts-and-Crafts technique.⁵¹

Nothing could be more different than the style Murray Alexander White brought back with him from Chicago. Son of a Woodstock architect, White studied with the Langley firm from 1887 to 1892, then spent fourteen years in the American Midwest with Holabird & Roche.⁵² The rage for the Beaux-Arts was at its peak. Universities across the United States set up their programmes according to the principles of the *École*, and American architects educated in France established ateliers for their own pupils.⁵³ The conventions of sciagraphy, symmetrical planning, and Classical or Renaissance ornamentation became standard conditions precedent to the design of monumental public works.

One drawing for a proposed Music Academy is signed in the lower left by Murray White, who is said to have offered this piece as evidence of his architectural skills upon his return from Chicago in 1907 (figure 11).⁵⁴ The work also bears the name of the renderer, "H. D. Jenkins." Unlike conventional Beaux-Arts competition drawings, which consisted of plan, elevation, and section, the building is drawn in perspective.⁵⁵ A low viewing angle emphasizes the monumentality of the structure.⁵⁶ Not only does the facade speak to the eclectic traditions of the Beaux-Arts, but the draughtsmanship is also derived from this source. The outline of the building is lightly framed-in, possibly traced to avoid erasures, and carefully graded washes are applied to create the illusion of modeling in the round, just as John Harbeson later described.⁵⁷ The effect is controlled and serene, especially by comparison with Horwood's florid ornamentation.

White's influence guided much of the firm's perspective work in the first decades of the 20th century. A rendering of the Hudson's Bay Store, Calgary, displayed at the Canadian National Exhibition in 1913, is one of a series of perspectives depicting various Hudson's Bay commissions across Canada (figure 12).⁵⁸ The design is based on the Beaux-Arts precedent of Selfridge's in London, and the draughting technique follows the same closely-controlled formula noted above.⁵⁹ In this instance, however, the work is of significantly larger dimensions — about four feet by six — truly a *pièce de résistance*. These large and attractive renderings, finished by expert draughtsmen, were intended for public exhibition, and undoubtedly

Figure 11. M. A. White, Music Academy project. Perspective rendered by "H. D. Jenkins," c.1907. Watercolour on paper. (Archives of Ontario, Horwood Collection)

Figure 12. Burke, Horwood & White, Hudson's Bay Store, Calgary. Perspective initialled "L.R.," exhibited at the Canadian National Exhibition in 1913. Watercolour on paper. (Archives of Ontario, Horwood Collection)



served as an eloquent advertisement for the firm's skills.

Burke's partners, Horwood and White, between them, represented the two most important trends in late 19th- and early 20th-century Canadian architecture — Arts and Crafts and the Beaux-Arts — the synthesis of which was expected to develop the country's architecture "along lines which recognize our country and its traditions and associations."⁶⁰ Graphic skills and hopes for a national style went by the board in later decades, but these particular drawings preserve both a legacy of superlative draughtsmanship and a sense of the system that promoted it. How alien seem the words of another 19th-century architect, who complained that

we have to do all our work for ourselves, for there is little we can trust entirely to our clerks and draughtsmen in the matter either of construction or design, and it is often far easier to do all the work oneself, than correct the errors of the clerks.⁶¹

The successors of William Hay instilled a higher regard for all that was art in architecture.

APPENDIX

Selected Genealogy of Architects and Draughtsmen:

1852-1862	WILLIAM HAY in practice in Toronto c.1855-62 Henry Langley articles with Hay 1859 Thomas Gundry in practice in Toronto 1862 Thomas Gundry in partnership with Hay
1862-1869	GUNDRY & LANGLEY in partnership 1865-72 Edmund Burke articles with G&L 1866-70 Frank Darling articles with G&L
1869-1872	HENRY LANGLEY sole practitioner
1872-1883	LANGLEY, LANGLEY & BURKE partnership with brother Edward Langley and nephew Edmund Burke 1882-89 John C.B. Horwood articles with LL&B
1883-1892	LANGLEY & BURKE after retirement of Edward Langley 1887-92 Murray Alexander White articles with L&B
1892-1894	EDMUND BURKE a sole practitioner taking over the practice of William George Storm (1826-92)
1892-1907	LANGLEY & LANGLEY partnership with son Charles Edward Langley, continued after death of Henry Langley as LANGLEY & HOWLAND with Charles in partnership with William Ford Howland, a former Langley student
1895-1907	BURKE & HORWOOD in partnership 1901-1906 William F. Sparling articles with B&H
1907-1919	BURKE, HORWOOD & WHITE
1919-1969	HORWOOD & WHITE ends with retirement of Eric Horwood

- 1 This is work in progress for a University of Toronto doctoral dissertation on the career of Canadian architect Edmund Burke (1850-1919). The project was funded in part by the Social Sciences and Humanities Research Council.
- 2 Canadian architectural drawings have appeared in various exhibition catalogues: Maija Bismanis, *Early Domestic Architecture in Regina: Presentation Drawing and Plans* (Regina: Norman Mackenzie Gallery/University of Regina, 1982); Luc Noppen and Marc Grignon, *L'Art de l'Architecte: Three Centuries of Architectural Drawing in Quebec City* (Québec: Université Laval/Musée de Québec, 1983); and Jean Weir, *The Lost Craft of Ornamented Architecture: Canadian Architectural Drawings, 1850-1930* (Halifax: Dalhousie Art Gallery, 1983). Recent historical monographs dealing with specific firms include Nancy Tausky and Lynne DiStefano, *Victorian Architecture in London and Southwestern Ontario: Symbols of Aspiration* (Toronto: University of Toronto Press, 1986); and Christina Cameron, *Charles Baillargé: Architect and Engineer* (Montréal: McGill-Queen's University Press, 1989).
- 3 Percy Nobbs, "Drawing and Architecture," *The Canadian Architect and Builder* (hereafter *CAB*) 16 (October 1903): 168-70, takes the view that "the draughtsman can easily be made if he is not born," but does concede that some "who have a peculiar talent for art ... get on almost without teaching."
- 4 Gavin Stamp, *The Great Perspectivists* (New York: Rizzoli, 1980), discusses the impact of topographical watercolour technique upon the architectural perspective. Eileen Michels, "Late Nineteenth-Century American Perspective Drawing," *Journal of the Society of Architectural Historians* 31 (1972): 291-308, describes how pen drawing was influenced by photolithographic reproduction. She also observes the later integration of building and landscape, and links between built style and drawing technique.
- 5 Andrew Saint, *Richard Norman Shaw* (New Haven: Yale University Press, 1976), pp. 187-88, notes "the first things an articulated pupil naturally had to be able to do were to learn to measure up buildings, and to draw plans acceptably and in the 'office' style — a concept not fully worked out until the days of Bloomsbury Square."
- 6 Sir Reginald Blomfield, *Architectural Drawing and Draughtsmen* (London: Cassell & Company, 1912), p. 5, was the first to distinguish the different "intentions" with which the architectural drawing was conceived: perspectives were considered "subjective" because they represented the concept of the building before it was constructed; contract drawings being "objective" because they communicated the architect's instructions to the builder. Deborah Nevins and Robert A. M. Stern, *The Architect's Eye: American Architectural Drawings from 1799-1978* (New York: Pantheon Books, 1979), p. 11, use the terms "conceptual" and "perceptual." James F. O'Gorman, *H. H. Richardson and His Office, Selected Drawings: A Centennial of His Move to Boston 1874* (Boston: Harvard College Library and David R. Godine, 1974), p. 18, classifies works according to the design process as sketch, presentation drawing, and construction document. Also James F. O'Gorman, Jeffrey A. Cohen, and George E. Thomas, *Drawing Toward Building: Philadelphia Architectural Graphics 1732-1986* (Philadelphia: Pennsylvania Academy of Fine Arts and University of Pennsylvania Press, 1986).
- 7 David Gebhard and Deborah Nevins, *200 Years of American Architectural Drawing* (New York: Whitney Library of Design, 1977), pp. 22-35, approach the study of architectural drawing from a methodological point of view, considering the historical development from orthogonal projection to perspective and isometric.
- 8 Mathilde Brosseau, *Gothic Revival in Canadian Architecture* (Ottawa: Minister of Supply and Services Canada, 1980), no. 31, indicates Hay (1818-1888) served as Clerk of Works for Gilbert Scott (1811-1878) on St. John the Baptist Anglican Cathedral, St. John's, Newfoundland. See also "The Late Mr. Wm. Hay," *CAB* 1 (July 1888): 11; and C. H. Acton Bond, "Notes from St. Johns, N.F. [sic]," *CAB* 7 (January 1894): 9, regarding the Cathedral's destruction by fire.
- 9 For Hay's training in Edinburgh with John Henderson (1804-1862), see John Gifford, Colin McWilliams, and David Walker, *Edinburgh* (Harmondsworth: Penguin Books, 1984). Henderson's son, George, later became Hay's partner following the latter's return to Scotland. See also Frederick H. Armstrong, *City in the Making: Progress, People and Perils in Victorian Toronto* (Toronto: Dundurn Press, 1988), pp. 212-26; and Stephen Beszedits, *Eminent Toronto Architects of the Past: Their Lives and Works* (Toronto: B&L Information Services, 1983), pp. 33-38. For William George Storm (1826-1892) and William Tutin Thomas (1829-1892), who were among the few trained in Canada at this period, see Eric Arthur, *Toronto: No Mean City*, 3rd ed. by Stephen Otto (Toronto: University of Toronto Press, 1986), pp. 250 and 260-61. Also William Hay, "The Late Mr. Pugin and the Revival of Christian Architecture," *The Anglo-American Magazine* 2 (January-July 1853): 70-71, regarding Pugin (1812-1852).
- 10 For Gundry (1830-1869): Beszedits, *Eminent Toronto Architects*, pp. 65-67; and Arthur/Otto, *Toronto*, pp. 249 and 254-55.
- 11 "The Late Mr. Henry Langley," *CAB* 20 (January 1907): 14. The fact that Langley (1836-1907) was able to assume responsibility for design in the new partnership testifies to the emphasis Hay placed on this aspect of training. For comparative accounts of the British system, see Saint, *Richard Norman Shaw*, p. 17, regarding Street's office, where students were only allowed to ink drawings made by the architect, and pp. 187-88, for Shaw's graded system of responsibility, culminating in independent commissions. Also George Gilbert Scott, *Personal and Professional Recollections* (London: Sampson Low, Marston, Searle & Rivington, 1879), pp. 56-60; and Frank Jenkins, *Architect and Patron* (London: Oxford University Press, 1961), pp. 160-75.
- 12 G. P. Ure (attrib.), *The Hand-Book of Toronto* (Toronto: Lovell & Gibson, 1858), p. 258, states the church was white brick with freestone dressings, and opened on 11 January 1857. Conceived in late first-pointed English style (13th century) by William Hay, its total cost was £3754. Later purchased by the Catholic Apostolic Church, the structure has since been demolished.
- 13 Henry Langley worked for Hay from about 1855, but the level of expertise suggests an experienced hand; see Beszedits, *Eminent Toronto Architects*, p. 65. Hay's training gave priority to draughting skills, but these took time to perfect.
- 14 Jill Lever and Margaret Richardson, *The Architect as Artist* (New York: Rizzoli, 1984), pp. 11 and 18, regarding the coloured and shaded sections introduced by Sir William Chambers in 1759. Blomfield, *Architectural Drawing*, pp. 5-8, observes that contract drawings must be accurate and clear, in simple geometric terms without shading. Accounts of errors, which resulted when shadows were misread in working drawings, are noted in H. S. Goodhart-Rendel, "Architectural Draughtsmanship of the Past," *Royal Institute of British Architects Journal* (hereafter *RIBA Journal*) 58 (February 1951): 127-37; and R. Phené Spiers, "Architectural Drawing," *Building News* (hereafter *BN*) 26 (24 April 1874): 443-45, who warns "against employing the system of shadows, otherwise you may find some intelligent workman executing them."
- 15 Drawings executed at the same time for the same commission bear the countermark "J. Whatman/Turkey Mill," but the date is illegible; see Metropolitan Toronto Reference Library (MTRL), Baldwin Room (BR), Langley 128. Regarding Whatman papers and countermarks, see Thomas Balston, *William Balston — Paper Maker* (London: Methuen, 1954), and Thomas Balston, *James Whatman, Father and Son* (London: Methuen, 1957).
- 16 Contract drawings followed various conventions of colour-coding throughout the century. R. Phené Spiers, *Architectural Drawing* (London: Cassell & Company, 1887), attempted to unify the system. For additional comments, see Phené Spiers, "Architectural Drawing," p. 444, and *BN* 26 (1 May 1874): 470.
- 17 Archives of Ontario (hereafter AO), Horwood 102 and 453.
- 18 For details of commission, see Judith St. John, *Firm Foundations: A Chronicle of Toronto's Metropolitan United Church and Her Methodist Origins, 1795-1984* (Toronto: Metropolitan United Church, 1988), pp. 41-44; Arthur/Otto, *Toronto*, p. 221; and Mary Louise Mallory, "Three Henry Langley Churches: Victorian Gothic Architecture and the Diversity of Sects in Ontario" (M.A. thesis, University of Toronto, 1979).
- 19 Stephen Otto first drew my attention to the blue and red lettering on works by the Langley firm.
- 20 Blomfield, *Architectural Draughting*, p. 3. The first public discussion of linear style took place in England in 1860; see William Burges (1827-1881), "Architectural Drawing," *Royal Institute of British Architects Transactions* (1860-61): 14-28.
- 21 MTRL, BR, Langley 169, for the earliest example of bright blue and red script in the caption on Hay's plan of St. Michael's College (undated). The stylistic divergence between Hay and Langley is first apparent in two elevations for Hay's Yorkville Town Hall (1859-60), one a presentation piece, the other a contract drawing (MTRL, BR, Langley 187 and 188).
- 22 Langley was educated at the Toronto Academy; see Toronto Board of Trade, *A Souvenir: A History of the Growth of the Queen City and Its Board of Trade with Biographical Sketches of the Principal Members Thereof* (Toronto: Sabiston Lithographic & Publishing, 1893), p. 241. J. Armstrong, ed., *Rowell's City of Toronto and County of York Directory for 1850-51*, (Toronto: Henry Rowell, 1850), vol. 1, p. lxi, notes that the Toronto Academy was established 1846 on the premises of Knox College, and offered English, Classical, and Commercial studies. E. C. Bull was the drawing master. See also Presbyterian Church in Canada Archives, Knox College, Toronto, Toronto Academy Minute Book, 1846-52, File 110/00007, for prospectus of the Academy.
- 23 Phené Spiers, "Architectural Drawing," p. 444, advised that colours should be applied "unmixed, because it is difficult to obtain the same gradation of tone in subsequent mixtures."
- 24 The Langley diploma piece is noted in *Catalogue of Paintings and Drawings* (Ottawa: October 1880), no. 16, and illustrated in Joan Murray, *Ontario Society of Artists, 1872-1972* (Toronto: Art Gallery of Ontario, 1972), no. 75.
- 25 Goodhart-Rendel, "Architectural Draughtsmanship," p. 132, on the drawings of Richard Norman Shaw. The example in this case is much earlier, but the term is equally appropriate.
- 26 For Darling (1850-1923): Beszedits, *Eminent Toronto Architects*, pp. 77-83; and Arthur/Otto,

- Toronto, p. 244. Darling's departure for England establishes the *terminus ante quem* for the drawing, and indicates it was executed prior to the building's construction.
- 27 W. A. Langton, "On the Architect's Part in His Work, As Exemplified in the Methods of H. H. Richardson," *CAB* 13 (February 1900): 28-29, describes how legal counsel traditionally confounded the architect's suit for fees by adducing evidence that "the drawings [had] not been made by the architect at all but by a draughtsman." Langton was pointing out that the architect's creative worth lies in the concept of the building, not in the drawing of it. Leland M. Roth, *McKim, Mead & White, Architects* (New York: Harper & Row, 1983), p. 59, describes how McKim never executed drawings himself, but stood over his draughtsmen, instructing them in the placement of every line. *BN* 32 (29 June 1877): 643, reports one of the annual examinees was disqualified "from the fact that his drawings, though executed by himself, are signed by his father as joint executor of the buildings thereon delineated." "Designers and Draughtsmen," *BN* 33 (2 Nov. 1877): 428-29, deplors the practice of employing specialist draughtsmen to execute the presentation drawings.
- 28 Beszedits, *Eminent Toronto Architects*, pp. 77-83, and Arthur/Otto, *Toronto*, p. 244, for Darling's training with Blomfield (1829-1899) and Street (1824-1881).
- 29 Burges, "Architectural Drawing," p. 26, for Street's comments.
- 30 Weir, *Lost Art of Ornamental Architecture*, no. 59, for an example of Darling's later draughtsmanship. After his return to Canada, Frank Darling was elected to the Ontario Society of Artists (OSA) eleven months before his former mentor Henry Langley: AO, OSA Papers, MU 2254, OSA Minutes (June 1872-May 1874), 13 January 1873 and 23 December 1873.
- 31 The church is now known as Our Lady of Mount Carmel, St. Patrick's Street, Toronto. Burke's drawing appeared in an exhibition by Douglas Richardson, "The Glory of Toronto," Justina M. Barnick Gallery, Hart House, University of Toronto, 1984, no. 17. It cannot be earlier than 1868, nor later than 1869, because the countermark reads "1868," and it is inscribed with the firm name of Gundry & Langley, which terminated with Gundry's death in 1869. For further details of the building, see John Ross Robertson, *Robertson's Landmarks of Toronto*, 6 vols. (Toronto: 1904) 4:335-37.
- 32 There is no evidence to connect the two directly, but Baigent (1830-1890) could have offered such training as could architect James Avon Smith (1832-1918) of Smith & Gemmill. *The Mail* (Toronto) 20 July 1874, p. 2, col. 6, gives some idea of Baigent's skills, commenting that the artist's "Merganser Ducks in Toronto Bay, No. 24, lacks life and spirit, there is a great look of 'cast in the same mold about them', and a general harshness of outline which unfortunately pervades this gentleman's pictures." The same reviewer went on, "of Mr. Baigent's 76 and 81 scenes in our neighbourhood, we cannot say much. They seem labels on nature." Two works attributed to Baigent (MTRL, BR, John Ross Robertson Collection) are *Bloor's Brewery, York* (1865), a small but competent watercolour, and *Scene of Mr. Hogan/Murder/Don Bridge* (1861), which is high-lighted with gouache, and exhibits the harsh linearity criticized by the *Mail*. According to MTRL records, Baigent arrived in Toronto in 1862 and taught at Upper Canada College and Jarvis Collegiate until his death in 1890. The work of James Avon Smith is also on record; see Murray, *Ontario Society of Artists*, pl. 110, for Smith's *Design for St. James' Presbyterian Church, Toronto* (1881).
- 33 For Burke (1850-1919): Beszedits, *Eminent Toronto Architects*, pp. 72-76; and Arthur/Otto, *Toronto*, pp. 242-43. University of Toronto Archives, Toronto, Register of Pupils 1838-70, Upper Canada College Papers, 1824-1936, File A74-0018/96, records Burke's standing near the top of his class in forms IA and IIA. George Dickson and G. Mercer Adam, eds., *A History of Upper Canada College 1829-92* (Toronto: Rowse & Hutchinson, 1893), pp. 113-26, describe the curriculum. *Thirty-Sixth Annual Report of the Mechanics' Institute* (Toronto: Leader & Patriot Steam Press, 1867), notes E. Burke as the recipient of a second prize in Arithmetic and Mathematics. There were also classes in Architectural and Mechanical Drawing and Ornamental, Figure, and Landscape Drawing beginning in 1862. The former was taught by architect James Avon Smith, the latter by Richard Baigent. Henry Langley was on the Board of Directors at the time. Few educational resources were available anywhere in North America. The first architectural school on the continent only opened in 1866 at the Massachusetts Institute of Technology; see Spiro Kostof, ed., *The Architect: Chapters in the History of the Profession* (New York: Oxford University Press, 1977), p. 209.
- 34 "Architectural Offices," *CAB* 3 (November 1890): 123, for the plan of the Langley & Burke office when Burke supervised the draughting room.
- 35 Langley's students included Frank Darling, John Horwood, H. B. Gordon, A. A. Post, R. J. Edwards, Wesley Peters, Charles E. and Fred Langley, C. H. Acton Bond, J. H. Marling, Fred Kelley, Murray Alexander White, Melville P. White, Ernest Wilby, and William Ford Howland; see "The Late Mr. Henry Langley," *CAB* 20 (January 1907): 14.
- 36 OSA, *Catalogue of Paintings and Drawings for the Second Annual Exhibition* (Toronto: July 1874), no. 193. The work does not appear to have survived. In its review the *Daily Globe* (Toronto) 22 June 1874, p. 3, col. 2, notes only that the architectural drawings "will possess a degree of interest for any visiting the exhibition."
- 37 In addition to the *Chapel etc. Toronto Necropolis* in 1874, the firm sent two renderings of the *Offices of the Building & Loan Association* and a *Design for Offices*, probably Horwood 312a and 623(1), to the OSA exhibition of 1879. In 1882 there was also the *Baptist College, Bloor Street*, possibly Horwood 622(1), followed by *Residence on Bloor Street* and *Study of a Gable* in 1884. Finally, in 1886 *Design for Sherbourne Street Methodist Church* and *Design for Suburban Residence*, the latter probably Horwood 543(4), appeared: AO, OSA Papers, MU 3380 and Ms 418(1), OSA Catalogues 1873-1967; and Art Gallery of Ontario, E. P. Taylor Reference Library, OSA Catalogues. A brief survey of the newspaper reviews of these exhibitions has disclosed relatively little comment upon the contributions of the architectural profession. Growing involvement with the Toronto Architectural Guild (1887) and the Ontario Association of Architects (1889) may account for the fact that Langley & Burke ceased to be listed as OSA members in 1891.
- 38 *Report of the Canadian Commission at the International Exhibition of Philadelphia, 1876* (Ottawa: 1877), App. 4, p. 2.
- 39 OSA, *Catalogue of Prints and Drawings: Seventh Annual Exhibition* (Toronto, 1879), p. 15.
- 40 Art classes in Toronto are described by an unidentified author, "A History of the Progress of Art in Ontario," and by Robert Gagen, "Ontario Art Chronicle," AO, OSA Papers, MU 2252. Gagen notes the establishment of the Ontario School of Art in October of 1876. Burke had been a partner for four years by this time, and it seems unlikely he was still taking classes. But he could have picked up new ideas from the works of others like Frank Darling, who had recently returned from Britain.
- 41 The drawing of an unidentified residence has been chosen because it bears the stamp of "Langley & Burke" as well as a hand-written reference to "Fol. E. Burke." The latter is not in Burke's handwriting, but the project must have been among those he supervised, and carried with him at his departure from the Langley firm.
- 42 Margaret Richardson, *The Architects of the Arts and Crafts Movement* (London: Trefoil Books, 1983), p. 17, observes that Philip Webb's working drawings combined "different details drawn to different scales ... on the same sheet, often *recto* and *verso*, showing his complete knowledge of craftwork." She also notes at p. 32 the sepia pen- and-wash technique of Sir Ernest George, and at p. 60 Sir Edwin Lutyens' dislike of framing lines, evident when he drew a quizzical figure peering around a border with the caption, "What does the builder do with this?"
- 43 *Architectural Record* 71 (1932): 335, indicates the blueprinting process was invented in 1879; *CAB* 13 (May 1900): 101-2, records its growing popularity; and *CAB* 19 (September 1906): 132, sets out a coding methodology for different materials.
- 44 AO, Horwood 1101. *Might's Toronto City Directory, 1913* (Toronto, 1913), pp. 1004 and 1052, lists Stanley Makepeace of McConnell & Makepeace, architects, at 156 Yonge Street; and p. 1291, Ralph K. Shepard, architect, employed by Burke, Horwood & White. Information on Stanley Makepeace, local architect for the Elgin-Winter Garden theatre, Toronto, courtesy of Hilary Russell, Historical Research Division, Canadian Parks Service.
- 45 Regarding Horwood (1864-1934): Beszedits, *Eminent Toronto Architects*, p. 74. According to *Might's Toronto Directory for 1877* (Toronto, 1877), p. 490, Richard Baigent was also drawing master at Jarvis Collegiate Institute at this time.
- 46 The commitment to art in the school system began in 1857 with Ryerson's Educational Museum of Upper Canada; see F. Henry Johnson, "A Colonial Canadian in Search of a Museum," *Queen's Quarterly* (1970): 217-230; and Linda Kirkpatrick, "The Promotion of Art in Toronto: 1830-1870," (M.A. thesis, University of Toronto, 1979). See also *100 Years: Evolution of the Ontario College of Art* (Toronto: Art Gallery of Ontario, 1976).
- 47 Horwood's skills were outstanding, even before his sojourn in New York. Witness the sophistication of his *Design for a Suburban Residence* (1886): AO, Horwood 543(4).
- 48 Stephen Otto, "Press Kit for Horwood Collection," (1979), notes that Horwood won a scholarship in draughting from the Brooklyn Institute of Arts and Sciences, which allowed him to tour Europe before returning to Toronto in 1894. The institution has no student records, but *The Third Yearbook of the Brooklyn Institute, 1890-91* (Brooklyn: Eagle Book Printing Department, 1891), p. 19, lists Advanced Instruction for Draughtsmen from 1891. The Brooklyn Museum Archives, Brooklyn, also confirms a J. C. Horwood listed among the faculty in the *Catalogue of the Third Annual Exhibition of the Department of Architecture of the Brooklyn Institute of Arts and Sciences* (Brooklyn: Brooklyn Institute of Arts and Sciences, 1894). Regarding the benefits for Canadian students who sought instruction outside Canada, see Kelly Crossman, *Architecture in Transition: From Art to Practice, 1885-1906* (Kingston: McGill-Queen's University Press, 1987), chap. 4.
- 49 Stamp, *Great Perspectivists*, pp. 12-15; Richardson, *Architects of the Arts and Crafts*, p. 11.
- 50 *RAIC Journal* 17 (June 1940): 108, for obituary of Sparling.

- 51 AO, Horwood, Billiard Room, exhibited at the Toronto Architectural Eighteen Club, *Fourth Annual Exhibition* (Toronto: 1905), no. 31, depicts a series of interiors as colourful cartouches against a dark background. The format resembles the elevations for the Nathan Stein summer house (1897-99), Ontario Beach, New York, by Bragdon and Hillman, illustrated in Wendy Kaplan, *The Art that is Life: The Arts and Crafts Movement in America, 1875-1920* (Boston: Museum of Fine Arts, 1987), pl. 195, pp. 374-75.
- 52 The schooling of White (1870-1935) is not recorded, but his obituaries confirm his stay in Chicago. See the *Telegram* (Toronto) 5 November 1935, p. 13; *Mail & Empire* (Toronto) 4 November 1935, p. 3; *Globe* (Toronto) 4 November 1935, p. 14.
- 53 Paul Cret, "The École des Beaux-Arts and Architectural Education," *RIBA Journal* 18 (April 1941): 3-15; and Kostof, *Architect*, chaps. 8 and 11.
- 54 For a captioned illustration, see *Construction* 3 (September 1910): 57. Other details of the work's purpose courtesy of Douglas Richardson, "Glory of Toronto," no. 41.
- 55 Donald Drew Egbert, *The Beaux-Arts Tradition in French Architecture: Illustrated by the Grands Prix de Rome* (Princeton: Princeton University Press, 1980), p. 12, indicates that *concours* drawings almost always consisted of plan, elevation, and section. John Harbeson, *The Study of Architectural Design with Special Reference to the Program of the Beaux-Arts Institute of Design* (New York: The Pencil Points Press, 1926), pp. 157 and 281-87, describes Beaux-Arts design in the United States in the 1920s, including perspective drawings for archaeological and study purposes, as well as for competition.
- 56 Beaux-Arts perspectives often made use of the bird's-eye view to show off the site plan or city planning aspects of the more monumental projects; see works by Jules Guérin for Daniel Burnham and Edward Bennett, reproduced by the Art Institute of Chicago, John Zukowsky, ed., *Chicago Architecture, 1872-1922*, (Munich: Prestel-Verlag, 1988).
- 57 Harbeson, *Architectural Design*, chaps. 7 and 20.
- 58 The rendering of the Calgary store was also shown at the Toronto Society of Architects (formerly the Toronto Architectural Eighteen Club), *Sixth Exhibition Catalogue* (Toronto: May 1912), no. 40, and bears the initials "L.R.," a free-lance renderer responsible for many other Beaux-Arts perspectives exhibited by the Toronto Architectural Eighteen Club between 1903 and 1912. A full signature, unreadable apart from the initials "L.B.R.," appears on a rendering of the *Proposed New Building for the Central Canada Loan and Savings Company, Toronto*, by Sproatt & Rolph, published in *CAB* 17 (July 1904): suppl. ill. Additional information regarding an "L.R." work for Darling & Pearson courtesy of Howard Schubert, Canadian Centre for Architecture, Montreal. Perspectives of the Hudson's Bay stores in Vancouver and Victoria and a photograph of the latter exhibited at the CNE in 1915 are included in AO, Horwood Collection. A second perspective of planned additions to the Vancouver store, exhibited by the Toronto Chapter of the Ontario Association of Architects, *Exhibition of Architecture and Allied Arts* (Toronto: Art Gallery of Ontario, 1927), no. 1309a, is now in the City of Vancouver Archives, Vancouver. It bears the initials of S. H. Maw (1880-1952), known for his work with George & Moorhouse on the Toronto Stock Exchange of 1937. Maw was a fine perspective artist and etcher; see *RAIC Journal* 29 (November 1952): 343.
- 59 Alistair Service, *Edwardian Architecture* (London: Thames and Hudson, 1977), p. 168, illustrates Selfridge's department store, Oxford Street, London (1907-09, and 1928), conceived by well-known Chicago architect Daniel Burnham (1846-1912), and executed by Francis Swales, Frank Atkinson, and J. J. Burnet.
- 60 See W. S. Maxwell's admiration for the Beaux-Arts method in "Architectural Education," *CAB* 22 (January 1908): 21-25. Contrast Percy Nobbs preference for British traditions; see "The Delineation of Architecture," *CAB* 17 (February 1904): 37-42. The issues are elaborated in Crossman, *Architecture in Transition*, chap. 4. Horwood's son Eric (b. 1900) was trained at Toronto's School of Practical Science and at the École des Beaux-Arts in Paris; see Stephen Otto, "Press Kit."
- 61 R. W. Gambier-Bousfield, "Architectural Education in Canada," *CAB* 4 (April 1891): 46.

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