

Researching Canadian Buildings: Some Historical Sources

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As Harold Kalman pointed out in an article for the Society of Architectural Historians in 1972¹ very little was written before 1960 about building and architecture in Canada. The following decade, however, saw the emergence of a number of seminal works in the area, such as Alan Gowans' *Building Canada*, Thomas Ritchie's *Canada Builds*, and John Rempel's *Building with Wood*.² At the same time a rising concern about the quality of urban life and the rapid disappearance of much of the historic urban fabric stimulated books about Canadian cities, such as Eric Arthur's *Toronto, No Mean City* and Peter John Stokes' *Early Architecture of the Town and Township of Niagara*,³ both of which have a strong architectural emphasis. Partly in conjunction with the movement to save old buildings and restore them, there also appeared books about particular buildings like St. Lawrence Hall and Union Station in Toronto.⁴ The tide has now swelled. Both individuals and organizations across the country are publishing studies on a wide variety of architectural topics.⁵ In 1974 a

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¹ Harold KALMAN, "Recent Literature on the History of Canadian Architecture", *Journal of the Society of Architectural Historians*, Dec. 1972 (Vol. XXXI No. 4): 312-23.

² Alan GOWANS, *Building Canada: An Architectural History of Canadian Life* (Toronto, 1966); Thomas RITCHIE, *Canada Builds, 1867-1967* (Toronto, 1967), John I. REMPEL, *Building with Wood, and Other Aspects of Nineteenth Century Building in Ontario* (Toronto, 1967). See also Marion MACRAE and Anthony ADAMSON, *The Ancestral Roof: Domestic Architecture of Upper Canada, 1783-1867* (Toronto, 1963) and V.B. BLAKE and Ralph GREENHILL, *Rural Ontario* (Toronto, 1969).

³ Eric ARTHUR, *Toronto, No Mean City* (Toronto, 1964); Peter John STOKES, *Early Architecture of the Town and Township of Niagara* (Niagara, 1967); cf. HERITAGE TRUST OF NOVA SCOTIA, *Founded Upon a Rock: Historic Buildings of Halifax and the Vicinity Standing in 1967* (Halifax, 1967); A.J.H. RICHARDSON, "Guide to the architecturally and historically most significant buildings in the old city of Quebec with a biographical dictionary of architects and builders," *The Bulletin of the Association for Preservation Technology*, Vol. II, Nos. 3-4 (1970); Harold KALMAN, *Exploring Vancouver; ten walking tours of the city and its buildings* (Vancouver, 1974); Jean-Claude MARSAN, *Montréal en évolution: historique du développement de l'architecture et de l'environnement montréalais* (Montréal, 1974).

⁴ W.E. BARNETT et al, *St. Lawrence Hall* (Toronto, 1969); Richard BÉBOUT, ed., *The Open Gate: Toronto Union Station* (Toronto, 1972).

⁵ Amongst more recent major works are Pierre MAYRAND and John BLAND, *Trois siècles d'architecture au Canada/Three centuries of architecture in Canada* (Montreal, 1971). Ralph GREENHILL et al, *Ontario Towns* (Oberon Press, 1974); "The buildings of Canada," *Explore Canada* (Reader's Digest, 1974), pp. 409-21; Anthony ADAMSON and John WILLARD, *The Gaiety of Gables: Ontario Architectural Folk Art* (Toronto, 1974) and Mary BYERS, Jan KENNEDY, Margaret MCBURNEY, *Rural Roots. Pre-Confederation Buildings in the York District of Ontario* (Toronto, 1976). Provincial and municipal publications based upon historic buildings surveys include *City of Kingston Ontario, Buildings of Historic and Architectural Significance*, Vols. 1-3 (Kingston, 1971-); *Early Buildings of Manitoba* (Win-

Society for the Study of Architecture in Canada (SSAC) was formed to bring these interests together.

The research note offered here outlines some of the historical sources useful for studying buildings in Canada. Such materials may be expected to shed light on the historical associations of buildings, their role in the urban community, their architectural significance and their structural history. Availability and detail vary from city to city, but generally they increase over time.

No in-depth bibliography for architectural research in Canada has yet been published although such work has commenced.⁶ Likewise, no major study of the character and extent of foreign influence upon Canadian architecture has been undertaken to date. That the trends, technologies and artisans of Britain and the United States have dominated British North American building since the mid/18th century has not, however, been seriously questioned. In establishing the context of Canadian building, the architectural history of the Anglo-American community as well as period architectural works published abroad must therefore be considered.⁷ To pinpoint only a few of the most evident elements of influence, one might, for example, observe that in the late 18th and 19th centuries European copybooks and builders' handbooks — essentially instructional guides for artisans — made their way to North America where they were widely distributed, reprinted and pirated.⁸ Moreover, the majority of ar-

nipeg, 1973); Frederick H. ARMSTRONG and Daniel J. BROCK, *Reflections on London's Past* (London, 1974). Local heritage societies have also been active in publishing: see, for example, HERITAGE TRUST OF NOVA SCOTIA, *Seasoned Timbers*, Vol. 1, "A Sampling of Historic Buildings Unique to Western Nova Scotia", Vol. 2, "Some historic buildings from Nova Scotia's South Shore" (Halifax, 1972 & 1974); NEWFOUNDLAND HISTORIC TRUST, *A Gift of Heritage* (St. John's, 1975); HERITAGE OTTAWA, *Walking in New Edinburgh, Ottawa: Walking in Sandy Hill, Ottawa* (Ottawa, 1974?). Societies of architects have also produced local guides which focus upon architecture: *Exploring Toronto* (Toronto, 1972); *Exploring Montreal* (Toronto, 1974); *Exploring Halifax* (Toronto, 1976).

⁶ Patricia CRAWFORD et al., comps., *Architecture in Ontario. A Select Bibliography on Architectural Conservation and The History of Architecture with Special Reference to the Province of Ontario* (n.p., August 1976); Jill WADE, comp., "Manitoba Architecture to 1940", card file, University of Manitoba School of Architecture, 1973. The bi-monthly SSAC Newsletter regularly lists new works relating to period architecture and its preservation in Canada.

⁷ R.H. HUBBARD, "The European Backgrounds of Early Canadian Art," *Art Quarterly*, xxvii (1964): 297-323; John L. MANNION, *Irish Settlements in Eastern Canada: A Study of Cultural Transfer and Adaptation* (Toronto, 1974); John SUMMERSON, *Architecture in Britain 1530 to 1830* (Harmondsworth, Middlesex, 1963), 4th ed.; Nicholas PEVSNER and Judy NAIRN, eds., *The Buildings of England* (v.p., v.d.); J.M. FITCH, *American Building: 1: "The Historical Forces That Shaped It"* (Boston, 1966-72), 2: "The Environmental Forces That Shaped It"; Marcus WHIFFEN, *American Architecture Since 1870: A Guide to the Styles* (Cambridge, Mass., 1969); Henry Russell HITCHCOCK, *Architecture: Nineteenth and Twentieth Centuries* (Harmondsworth, Middlesex, 1963), 2nd ed.

⁸ Henry Russell HITCHCOCK, *American Architectural Books: A List of Books, Portfolios and Pamphlets on Architecture and Related Subjects Published in America Before 1895* (Minneapolis, Minn., 1962) For example, see Peter NICHOLSON, *The New Carpenters' Guide, being a complete book of lines for Carpentry, etc.* (London, 1792); *The New Practical Builder, and Workman's Companion* (London, 1823-25); *The Mechanic's Companion; or the elements and practice of carpentry, joinery, bricklaying, masonry...* (Oxford, 1825); *Carpentry; being a comprehensive guide book for carpentry and joinery* (London, 1849).

chitects and builders working in British North America in this period were trained in England and Scotland. After 1850, the popularity of such American works as A.J. Downing's *The Architecture of Country Houses* spread rapidly in the British provinces as well as in the United States. Later in the century, American manufacturers' catalogues were also distributed in Canada and the parts that they advertised were ordered by mail for local installation.⁹

The Canadian sources to which an historian usually turns first are not very productive for architectural research: standard histories and more specialised monographs in history rarely treat the development of Canadian architecture or the pattern of building in Canada, and even less consider the more specific features of any particular building.

Regional or local histories are, nevertheless, the usual point for beginning research.¹⁰ They establish the context in which a building was constructed, and sometimes provide very much more. They frequently elaborate upon the role of individuals who were locally prominent, and buildings chosen for inventories and for restoration tend to have been owned by such individuals and organizations, concerned with their status in the community and involved in its economic, political, social and religious life. A number of county histories are seminal works in the history of an area, written in the late 19th or very early 20th centuries. Amidst their lengthy narratives and mass of detail, some, like the works of T.B. Akins on Halifax and John Ross Robertson on Toronto,¹¹ consider property development and building as an integral part of local history. They therefore refer to buildings of both distinctive character and local prominence. They may mention the original owner or use, the architect or builder, and the accepted date of construction. Old and old-fashioned social histories which contain the memory of the social life of a community rather than an examination of the institutions of the society also contain information. Similarly, the papers of local historical societies may include items of interest to architectural research. Because architecture, like domestic life and the arts, was so long regarded as not really the proper subject of scholarly study, much of the information recorded by antiquarians is all that now exists.

⁹ A.J. DOWNING, *The Architecture of Country Houses; including designs for Cottages, and Farmhouses, and Villas, with remarks on Interiors, Furniture, and the best Modes of Warming and Ventilating* (New York, 1850; reprinted New York, 1969); Lawrence B. ROMAINE, *A Guide to American Trade Catalogues 1744-1900* (New York, 1960), esp. pp. 25-38.

¹⁰ W.F.E. MORLEY, *Canadian Local Histories to 1950: A Bibliography I. The Atlantic Provinces II. Québec* (Toronto, 1967, 1971); Barbara B. AITKEN, *Local Histories of Ontario Municipalities published in the years 1957-1972*, (Kingston, Ont., 1972), rev. ed.; Bruce B. PEEL, comp., *A Bibliography of the Prairie Provinces to 1953* (Toronto, 1956), *Supplement* (Toronto, 1963); *A Bibliography of British Columbia*: Barbara J. LOWTHER, *Laying the Foundations 1849-1899* (Victoria, 1968), Margaret H. EDWARDS, *Years of Growth 1900-1950* (Victoria, 1975).

¹¹ T.B. AKINS, "History of Halifax City," *Collections of the Nova Scotia Historical Society*, Vol. 8 (1892); John Ross ROBERTSON, *Landmarks of Toronto: A Collection of Historical Sketches of the Old Town of York from 1792 until 1833, and of Toronto from 1834 to 1914* (Toronto, 1894-), 6 Vols.

Contemporary travel accounts also refer to local buildings. Transatlantic or American visitors touring a region often mentioned in their journals or subsequent memoirs the prominent structures they saw, such as assembly buildings and governors' houses. As well, they sometimes noted major building in progress or commented upon the houses of local people they visited. More recent descriptive books such as Clara Dennis' and Will R. Bird's works on Nova Scotia¹² also contain local traditions about dating, earlier appearance, owners, and associations of buildings. If a building — or more often the saving of a building — has been controversial, current newspaper columns may likewise establish the traditional history of the structure.

To verify the traditional information obtained from such sources and to acquire further reliable documentation about a building, a wide variety of primary sources may prove useful.

Once the location of a building is known, city directories will provide a record of occupancy of the property. Montreal and Toronto have occasional directories dating from the 1830's, Halifax from the 1850's, and Winnipeg from the 1870's. The early directories usually provide only an alphabetical list of inhabitants plus an advertisers' list. By the 1870's, however, most eastern cities had annual directories which offered a street by street listing as well as the alphabetical list. Frequently there have been changes in both the numbers of individual buildings and the street names, but these are rarely insurmountable obstacles. Note that the directories yield a list of occupants; they may, or may not, be the owners.

Ownership of property is found in documents normally housed in the registry of deeds. These are usually collected at the municipal or county level and indexed as to both grantee and grantor. Primarily, deeds record the transfer of land ownership, but they may give as well details of buildings excluded from the transfer and the size or type of structures adjoining. Sometimes plans — either of features or of the property itself — accompany the deeds. Occasional legal agreements between property owners also afford information about such arrangements as joint fences.

In Quebec additional legal records relating to property are filed among the papers of notaries who practised in the province. These "marchés de construction" are legal agreements between an owner and a builder for the construction of a building. They usually specify the location, general size, materials and designer of the structure, and are often accompanied by specifications and sometimes by plans. As they are interfiled with all the documents created by a particular notary, and the notary with whom any particular urban owner or builder may have dealt can usually only be speculated upon, they are not easy to locate when a single building is being searched. Because of their detailed record, however, they

¹² William MATHEWS, comp., *Canadian Diaries and Autobiographies* (Berkeley, 1950) lists some of those available. Clara DENNIS, *Down in Nova Scotia, my own, my native land...* (Toronto, 1934); *More About Nova Scotia, my own, my native land* (Toronto, 1937); Will R. BIRD, *Historic Nova Scotia* (Halifax, n.d.); *This is Nova Scotia* (Toronto, 1950).

are most valuable to the architectural historian. A calendar of marchés for Quebec City and its environs has recently been published.¹³

Outside Quebec, however, formal building contracts were not required by law. Building plans and specifications of the 19th century, except for government and corporate structures, are therefore relatively rare. But occasionally extensive documentation regarding private buildings is found in the records of court cases, for example, between owner and builder.

Assessment records, while created for taxation purposes, reveal significant information about both patterns of building and the dating of particular structures. Early assessments in most cities simply enumerated owners and occupants by ward and street in an approximately geographical sequence. A sharp rise in the assessed value of the property normally indicated either new building or very substantial alterations to the existing structure; sometimes building in progress was noted. Later the system was made much more precise; each piece of property was assigned a lot, or cadastral, number. From the number still applied to the lot, it is a fairly easy matter to trace significant alterations to the site for the period for which the records exist. In Montreal records of this type date from 1847. While the records vary considerably from city to city, they may contain floor plans, notes regarding structural alterations, and periodic evaluations of the condition of the building. In Winnipeg, for example, they provide a fairly complete structural record except for single-family dwellings.

The census, another government record created for a purpose quite apart from records of building, provides not only a record of occupancy, but in some parts of Ontario in 1851 and 1861 gives the size of the building, its predominant material and its accepted date of construction.¹⁴

City Hall has other sources of interest for architectural research, especially in the engineering department. First among these are building permits — the licence authorizing the owner to erect or alter a structure. In some cases, only registers of permits exist. But where the permits themselves survive, the date, the estimated cost, the nature of the construction, the owner and sometimes the architect or builder are usually shown. Building permits in Toronto exist from 1882, in Vancouver from 1900. The engineering department also frequently has a collection of old maps and manuscript plans tucked away in cubbyholes or unused drawers. Reports by the City Engineer published annually with those of other departments provide specific information about his department's undertakings. As well as construction and repair of municipal buildings, these include the laying out and maintenance of streets, sewers and public areas. Because a building should be considered as part of its site rather

¹³ Geneviève G. BASTIEN et al., "Inventaire Des Marchés de Construction des Archives Civiles de Québec 1800-1870," *Histoire et Archéologie/History and Archaeology*, I, (Ottawa, 1975), 3 Vols.

¹⁴ W.E. WIGHTMAN has analysed some of this information in "Construction Materials in Colonial Ontario 1831-61," in F.H. ARMSTRONG et al, eds, *Aspects of Nineteenth Century Ontario Essays Presented to James J. Talman* (Toronto, 1974), pp. 114-34.

than as an isolated unit, the changing of grades on streets, various attempts to create traffic-resistant street surfaces, the laying out of sidewalks, and the placing and types of street-lamps should be included in research on buildings.

Fire constituted one of the most prevalent and most dreaded urban enemies of the 19th century. Its presence, moreover, frequently resulted in significant structural alterations to surviving buildings. Most cities during the 19th century suffered destruction of whole areas by fire — St. John's in 1817, 1846, and 1892; Halifax in 1857 and 1859; Charlottetown in 1866; Saint John in 1839 and 1877 to mention only the worst fires in the Atlantic provinces. A similar record exists for central Canadian and, later, western cities.

In addition to books published immediately after the great fires, the city fire department headquarters may have registers of fires reported. Those for Halifax date from 1907, and each entry gives the date of the fire, the address and ownership of the property concerned, the amount of insurance carried, the extent of damage incurred, and the type of building where the fire occurred. From these, newspaper reports can easily be traced. Newspapers usually gave extensive coverage to fires, and although their reports concentrate upon the drama of fighting the blaze, they frequently offer incidental information as to the size and type of structure, the location of windows and doors, and the style of roof. If the circumstances surrounding a fire appeared suspicious, a magisterial investigation was ordered. A hearing upon a waterfront fire in Halifax in 1904 described in detail such features as types of structures, their interconnections, their surfaces, their apertures and their contents.¹⁵

Not only city documents but the records of provincial and federal government departments may be helpful in tracing structural history. Before towns were incorporated, much of the legislation which is now handled under city by-laws was passed under provincial acts. Saint John, New Brunswick was incorporated in 1785, two years after its founding, and has municipal records from that date; Halifax, 35 years older, was not incorporated until 1841 and even then some municipal legislation continued to be enacted by the provincial legislature. Provincial acts therefore provided for the erection of municipal as well as provincial buildings, and the sessional or assembly papers contain reports, sometimes in detail, of the construction contracts. From the assembly journals and sessional papers, it is relatively easy to find debates which occurred upon the acceptance in principle, the contract, the progress of construction, and the completion of the building. In the absence of a municipal government, the province was also responsible for the maintenance of public buildings.

Similarly, there are provincial acts regulating building standards, usually restricting construction in the fire-prone core of the city to brick

¹⁵ See, for example, Russell H. CONWELL, *History of the Great Fire in Saint John, June 20 and 21, 1877* (Boston, 1877); George STEWART, *The Story of the Great Fire in St. John, N.B., June 20th, 1877* (Toronto, 1877). Public Archives of Nova Scotia, Pickford & Black Papers, "Fire Investigation before Stipendary Magistrate George H. Fielding", 1904.

and stone. Such an act, passed in Halifax in 1822, was repealed a decade later, however, because its terms were found "extremely injurious to the interests of a large proportion of His Majesty's subjects within the Town of Halifax."¹⁶ It cannot therefore be assumed that the existence of a brick law necessarily meant that a building erected within the defined district was constructed of brick or stone. Evasions of the law remained common in most cities throughout the 19th century.

Among federal government records those of the Department of Public Works are most likely to prove of assistance to the architectural researcher. The department's annual reports upon buildings constructed, owned and rented by the government were published in the sessional papers; the manuscript records in the Public Archives of Canada contain sections on the construction and maintenance of public buildings, mainly in Ontario and Quebec, but some throughout the country.¹⁷ Many privately owned buildings were used in the 19th century for governmental purposes; of these some records as to facilities, repairs or alterations, and rent may remain in the records of the departments concerned.

British government records relating to the British North American colonies also contain substantial information about buildings. The Corps of Royal Engineers, who were responsible for all British military building in the colonies, were required to submit to the Inspector General of Fortifications in London detailed plans, elevations and estimates for virtually all structures they intended to erect. Their correspondence, in the Ordnance department papers,¹⁸ contains a wealth of information about building. In addition to records of buildings they constructed, their papers include references to nearby private buildings rented for storage, attempts by local entrepreneurs to sell convenient buildings to the Ordnance department, and town plans locating military buildings in relation to privately owned structures. As well, the documents assess construction failures, differences between British and colonial building practices, and the adaptation of British building techniques to suit local climate and materials. There are also rich data concerning the availability and prices of building materials. Details relating to other British government buildings in the colonies may be found in the Colonial Office and Admiralty papers.

Documentation about buildings erected for religious purposes — whether churches, convents or schools — is rarely extensive in public documents. Church architecture has, however, received considerably more attention in print than other types of Canadian building. As well as such general studies as Ramsay Traquair's of church architecture in Que-

¹⁶ Nova Scotia Statutes, "An Act for the Greater Security of the Town of Halifax against Fire, and the preventing of the Erection of Wooden Buildings, beyond a certain height, within the same" (3 Geo. IV c. 29); "An Act to repeal an Act passed in the Third Year of the Reign of His late Majesty King George the Fourth, entitled, An Act for the Greater Security of the Town of Halifax against Fire, and the preventing the Erection of Wooden Buildings, beyond a certain height, within the same" (1 Wm. IV c. 18).

¹⁷ Public Archives of Canada (hereafter PAC), RG11.

¹⁸ Public Record Office, London, War Office 44 and 55, microfilm copies PAC; see also PAC, RG8 "C" series.

bec and Marion MacRae and Anthony Adamson's *Hallowed Walls Church Architecture in Upper Canada*¹⁹, many old churches have published pamphlet histories of their congregation and building on their 100th or 150th anniversaries. These were usually prepared by a senior member of the congregation with a penchant for local history, who had been given access to many of the old church records. In addition, several denominations have well developed archives, such as the United Church offices in Toronto and the Baptist Archives at McMaster and Acadia universities. There are, however, many church records still held by individual dioceses, presbyteries and local churches. As well, some early churches can be dated and studied from the records of the English religious societies like the Anglican Society for the Propagation of the Gospel in Foreign Parts and the Wesleyan Methodist Missionary Society.²⁰

Private buildings are more difficult to document than public ones because their construction required less documentation at the outset and involved less widespread accountability. The papers of individuals or families occasionally, however, contain extensive records about building, usually in ledgers.²¹ Autobiographies and diaries may also provide some detail regarding construction of domestic buildings and local public buildings, such as schools and churches, in which the author was involved. They sometimes give sources of building materials as well as what materials were used, sketches of layouts, and references to problems and decisions regarding the building.

For commercial buildings, business publications of the late 19th and early 20th centuries to promote the business interests of various cities contain succinct accounts of principal local companies. Such works as *St. John and Its Business* and *Our Dominion*²² refer to the previous history of the firm and its premises as well as to the main fields of its activity. A number of companies have formed company archives to house their early records while others are increasingly being collected in public repositories as a result of the recent spurt of interest in Canadian business history. These records include items like bills, invoices, cash books and bills of lading which provide an estimate of where, with whom and upon what scale a firm was doing business. The bills of important companies as well frequently bore a sketch of their premises as letterhead. Letterbooks and daily journals may contain old photographs of a firm's premises as well as references to its business activities.

¹⁹ Ramsay TRAQUAIR, *The Old Architecture of Quebec* (Toronto, 1947); Marion MACRAE and Anthony ADAMSON, *Hallowed Walls: Church Architecture of Upper Canada* (Toronto, 1975).

²⁰ PAC, MG17 B1 Series C and MG17 C1, microfilm copies.

²¹ Norman R. Ball of Ottawa, for example, has a full list, copied from a family ledger, of the expenditure of \$2492.05 for building William Stafford's residence in Southwold Township, Elgin County, Ontario in 1864-66.

²² See, for example, *Saint John and Its Business* (St. John, 1875); *Halifax and Its Business* (Halifax, 1876); *Our Dominion. Historical Sketches of the mercantile and manufacturing interest of Fredericton, Marysville, Woodstock, Moncton, New Brunswick, Yarmouth, N.S., etc.* (Toronto, 1889).

Records not only of firms themselves but of those with whom they did business may provide material of structural importance. Holding and mortgage companies or construction and engineering firms with which the owners of buildings dealt may still have records of their transactions. While most insurance companies do not normally retain detailed information regarding a building more than three years after the expiry of a policy upon it, at least one Philadelphia firm has extensive old records.²³

Newspapers are a rich source for the architectural researcher and particularly in the early 19th century may provide the only information available about the early history of a building. While editorials occasionally comment upon the extent or character of local building, it is the advertisements which are the richest source of information about buildings. When a building was sold, it was sometimes described in some detail; when it was for rent, its facilities were often mentioned. Advertisements by owners for the supply of building materials, for the auctioning off of old materials, and for contracts can date the construction of a building, as can advertisements referring to new offices or recently constructed houses. Later in the century, when newspapers carried more local information, comments were sometimes made in general gossip columns upon the award of a contract for building, building in progress, or a building just completed. Many archives have partial card files of newspaper references to a variety of subjects including buildings.

Once trade journals began to appear late in the 19th century, references to new or remodelled premises of firms occur in them. The most important trade journals for architectural research are, however, those of the architectural, engineering and building industries.²⁴ They contain important articles on significant late 19th and early 20th century buildings. They are particularly relevant for the western Canadian cities because their introduction coincided with periods there of rapid growth and substantial construction. The Architectural Conservancy of Ontario has prepared an index of these and other materials relating to buildings in the province which is housed in the Metropolitan Toronto Central Library under the title "Archedont".

Iconographic sources — that is visual rather than verbal documents — are essential in architectural research.

Maps and plans depict a property at various periods of its history. Early maps may show the original layout of a town, indicating its divisions and lots. Such plans can be used in conjunction with grants and deeds to identify a piece of property. Maps also represent a property in

²³ Reg REYNOLDS and M.E. RUSSELL, "Fire Insurance Records: A Versatile Resource", *American Archivist*, Vol. 38, No. 1 (1975), pp. 15-21.

²⁴ See, for example, *Canadian Architect and Builder: A Journal of Modern Construction Methods* (1888-1908); *Canadian Contract Record: A Weekly Journal of Public Works, Tenders, Advance Information, and Municipal Progress* (1890-1908); *Contract Record* (1908-1911); *Contract Record and Engineering Review* (1912-1936); *Construction: A Journal for the Architectural, Engineering and Contracting Interests of Canada* (1907-1934). The latter has recently been microfilmed by McLaren Micropublishing of Toronto.

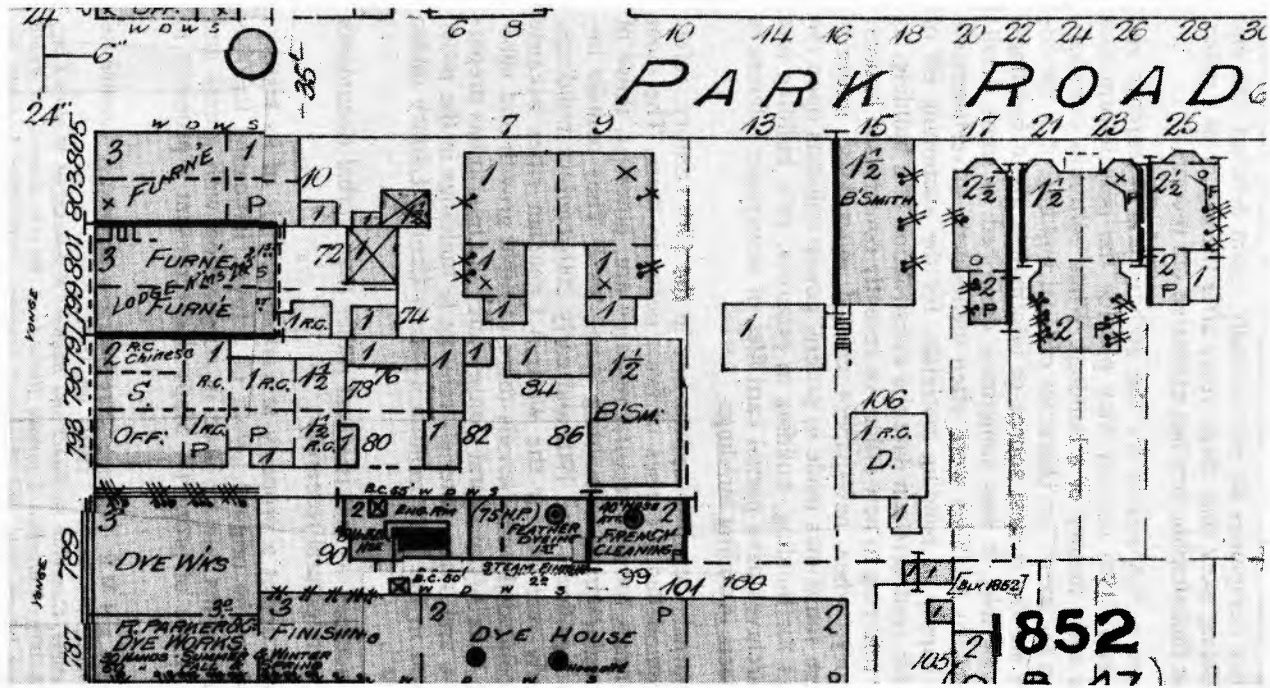


Fig. 1 A section from Goad's plan of Toronto of 1890, updated by overpasting to 1904 (Public Archives of Canada, National Map Collection, AT/440 — Toronto — 1904 (1890), vol. 5, p. 395). With the aid of the standard Goad key (Fig. 2), it is possible to interpret the myriad details of such a block as this facing Yonge Street. The dimensions and proportions of buildings, their construction and roofing materials, and their interrelationships are immediately evident. Where use was a factor of potential fire hazard, it is clearly shown, as are such means taken to protect against the spread of fire as solid firewalls and private hydrants. The extensive information regarding window prevalence and patterns, cornices and partitions reflects the high fire risk character of the area. This wealth of detail marks a rich find for the architectural historian, the restoration architect and the industrial archaeologist.

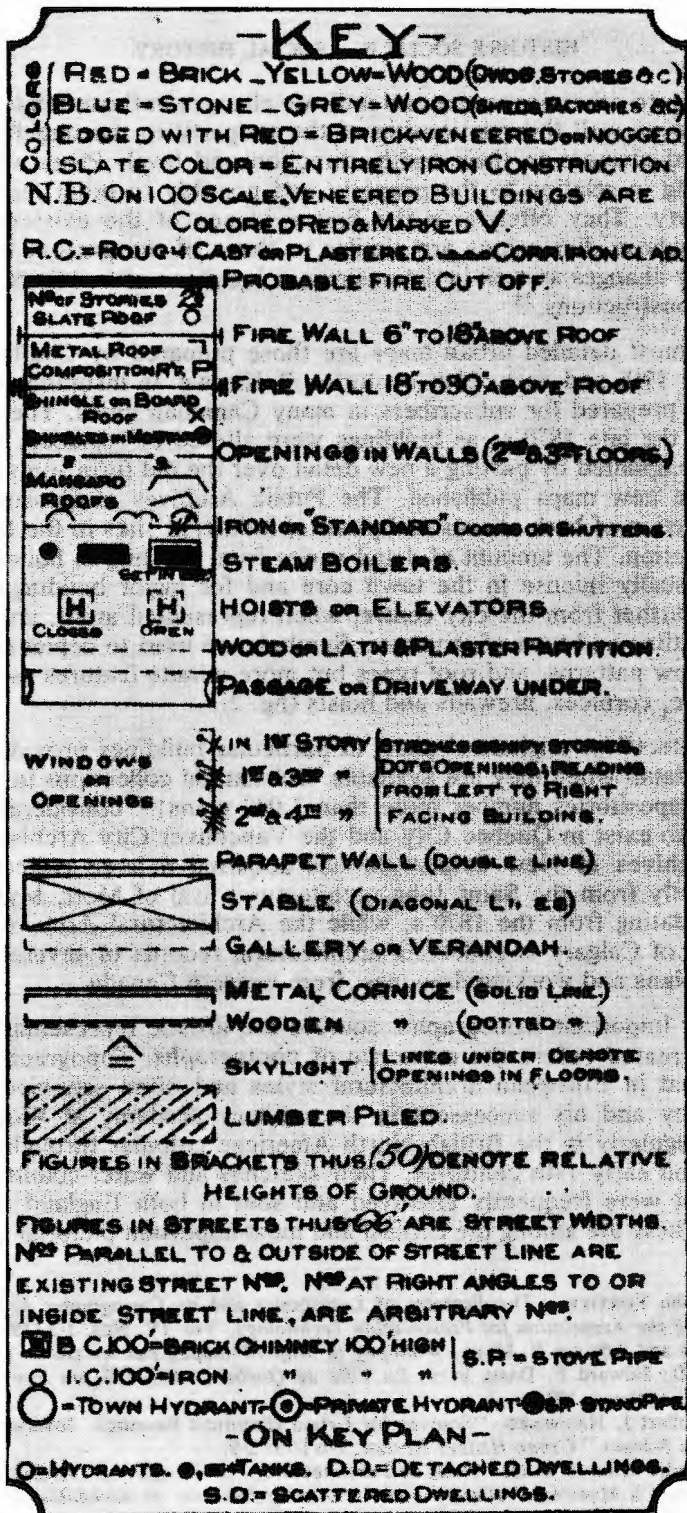


Fig. 2 Key to a Goad plan, noting the symbols used to depict structural detail (Public Archives of Canada, National Map Collection, 240 — Centreville — 1911)

relationship to other properties and indicate changes in those relationships. They show as well the relationship of the property to thoroughfares and may record changes in their width, direction and level. Plans will show the building in relation to the property and possibly to other features of the property. They often give the first evidence of the existence of a structure whose dimensions are similar to those of the present building. They show changes as well in dimensions or locations of buildings indicating new constructions.²⁵

The most detailed urban maps are those prepared by Charles Goad in the late 19th and early 20th centuries.²⁶ Known as insurance atlases, they were prepared for subscribers in many Canadian cities. The earliest date from the late 1870's; as buildings were altered or replaced, existing plans were updated by pasting a new detail over the old form; only periodically were new maps published. The Public Archives of Canada has a large collection of both atlases and plans of industrial sites in the National Map Collection. The amount of detail varies from building to building (fig. 1); it is usually intense in the town core and for major buildings, while buildings further from the city centre, when represented at all, are shown only by outline and type of structure. Symbols are used to depict not only size, window patterns, and roof types but more minute features as well — for instance, cornices, firewalls and hoists (fig. 2).

Architects' or engineers' plans of particular buildings provide a rich source of detail when they are available. Substantial collections in various Montreal repositories number more than 2,000 plans;²⁷ considerable collections also exist in Quebec City and the Vancouver City Archives. The Public Archives of New Brunswick has acquired a large collection of plans directly from the Saint John architectural firm of Mott, Myles and Chapman dating from the 1870's, while the Architectural Archive of the University of Calgary is collecting architectural records of several types, including plans and working drawings, from western Canada.

Other important iconographic sources are artistic representations of buildings created before the existence of photographs. Topographical artists, trained in European architectural styles and often schooled under Paul Sandby and his successors in the military academy at Woolwich, travelled regularly in the British North American colonies throughout the late 18th and early 19th centuries. Their sketches and water-colours made on the spot were frequently engraved and sold in both England and the colonies. These are among the earliest and most important pictorial sources

²⁵ John FORTIER, "The Fortress of Louisbourg and its Cartographic Evidence," *The Bulletin of the Association for Preservation Technology*, Vol. IV, Nos. 1-2 (1972); Alan F.J. ARTIBISE and Edward F. DAHL, *Winnipeg in Maps/Winnipeg par les cartes 1816-1972* (Ottawa, 1972); Edward F. DAHL et al, *La Ville de Québec, 1800-1850: un inventaire de cartes et plans* (Ottawa, 1975).

²⁶ Robert J. HAYWARD, "Sources for Urban Historical Research: Insurance Plans and Land Use Atlases," *Urban History Review*, No 1-73: 2-9.

²⁷ André GIROUX et al, "Plans de l'architecture... inventoriés aux Archives Nationales du Québec à Montréal," *History and Archaeology/Histoire et Archéologie*, IV, (Ottawa, 1975), 3 Vols.

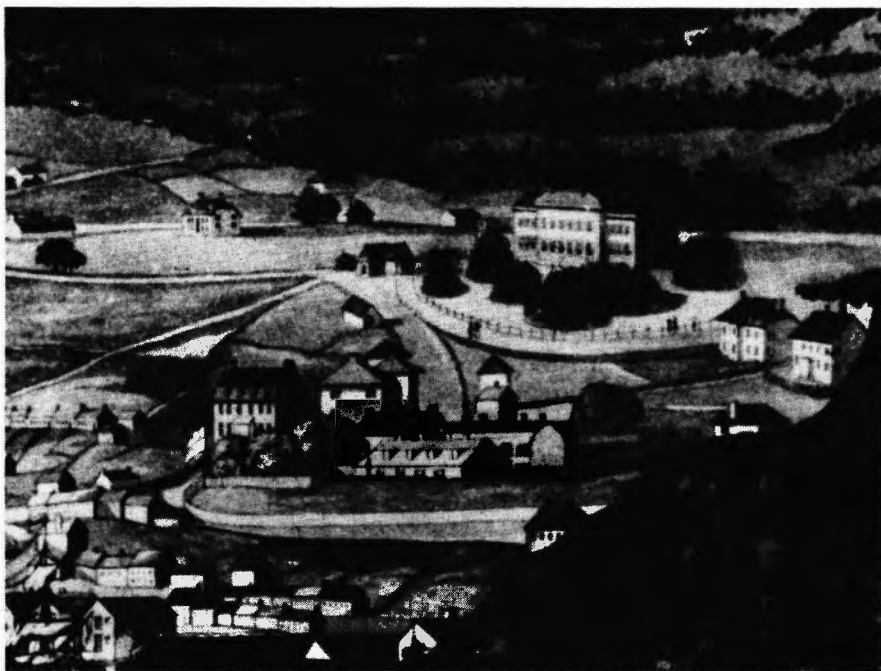


Fig. 3 William Eagar, "Town and Harbour of St John's" taken from Signal Hill, June 1st 1831 (Public Archives of Canada, C3371)

for architectural history in Canada. While their artistry may sometimes be limited by the rigidity of their perspectives, many of them appear to have recorded buildings quite accurately. Overviews of towns, like Thomas Davies' view of Montreal from St. Helen's Island,²⁸ give a concrete impression of the appearance of towns, although the detail of individual buildings is largely indiscernible. Other artists paid close attention to buildings. William Eagar's view of St. John's, Newfoundland in 1831 (fig. 3), for example, clearly shows (from right to left) the houses of the Collector of Customs, the Commissariat Officer, and the Governor. The main features of all three buildings are depicted, and the sense of detail communicated is disarming. On the central house (the Commissariat) are shown two bays on the east side, three dormers, and a chimney rising from the middle of the east hip. Another view of the three buildings, dated to the same year and drawn by a military engineer at St. John's (fig. 4), shows, however, three bays, four dormers, and the chimney rising from the rear of the pitch. A current photograph of the building, as well as architectural investigation of the building, confirms the accuracy of the second drawing. The richness of artistic representations as a source

²⁸ R.H. HUBBARD, ed., *Thomas Davies in Early Canada* (Oberon Press, 1972); F. St. George SPENDLOVE, *The Face of Early Canada. Pictures of Canada which have helped to make history* (Toronto, 1958).



Fig. 4 Lt. Col. John Oldfield, "Government House — St John's, Newfoundland 1831" (City of St John's)

for architectural history is evident in the illustrations of J. Russell Harper's *Painting in Canada* and Michael Bell's *Painters in a New Land*.²⁹

In addition to artistic representations of buildings, line drawings were used in two important sets of pictorial recordings in the late 19th century. Panoramic or bird's eye views of many Canadian cities were published in the late 1870's. These give the impression of assiduous attention to architectural detail and on the whole are amazingly accurate depictions for the scale of recording they attempt. On specific points, however, they must be used with caution. The series of county atlases, published mainly between 1875 and 1880 and recently reprinted, contain not only township maps and brief town histories, but most strikingly feature drawings of the major buildings of the county.³⁰ Artistic licence was sometimes taken with a line drawing, however, to give a building a more modern appearance than it possessed. Comparing a line drawing with a later photograph, which confirms an earlier style feature still in place, illustrates this practice (figs. 5 and 6). The line drawing is impressively accurate. Only in a few details does it fail to conform to the data of the photograph. The lintels, although plain, are a decoration added by the artist. Likewise, the fashionable two-over-two sashes on the west front are not confirmed

²⁹ J. Russell HARPER, *Painting in Canada: A History* (Toronto, 1966); Michael BELL, *From Annapolis to the Klondike: Painters in a New Land* (Toronto, 1973).

³⁰ Betty MAY et al, *County Atlases of Canada: A Descriptive Catalogue* (Ottawa, 1970).

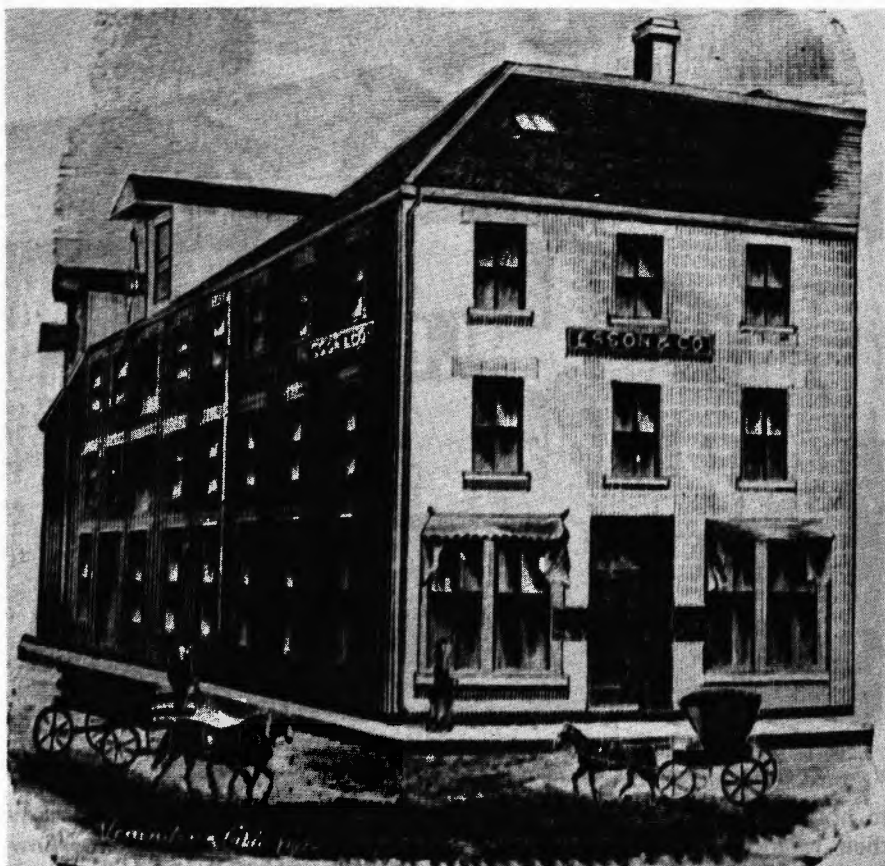


Fig. 5 A sketch of a waterfront store and warehouse, Halifax, built for merchant William Clark in 1854, ca. 1887 (*Our Dominion. Mercantile and Manufacturing Interests Historical and Commercial Sketches of Halifax and Environs* [Toronto, 1887], p. 102)

by the photograph; except on the ground floor where substantial remodeling was done in the late 1870s, the older six-over-six sashes remain in place. The circular-headed double door of the photograph was probably a replacement of the three-panel, single leaf door of the sketch.

For architectural purposes, the most important single documents relating to buildings are photographs (fig. 7).³¹ They show a wealth of details that no commentator, no financial record, and no letter are likely

³¹ See, for example, Ralph GREENHILL, *Early Photography in Canada* (Toronto, 1965); Russell HARPER and Stanley TRIGGS, *Portrait of a Period: A Collection of Notman Photographs 1856-1915* (Montréal, 1967); Rogers' *Photographic Advertising Album* reprinted by the Heritage Trust of Nova Scotia as *A Century Ago Halifax 1871* (Halifax, 1970); *Fredricton: The Early Years*, a catalogue of "An exhibition of photographs from the Provincial Archives of New Brunswick opened April 2, 1974"; Edith PATERSON, comp., *Winnipeg 100* (Winnipeg, 1973); GLENBOW-ALBERTA INSTITUTE, *Lomen Brothers' Photographic Collection Nome, Alaska 1900-1935* (Calgary, Glenbow Archives Series No. 3, 1968).

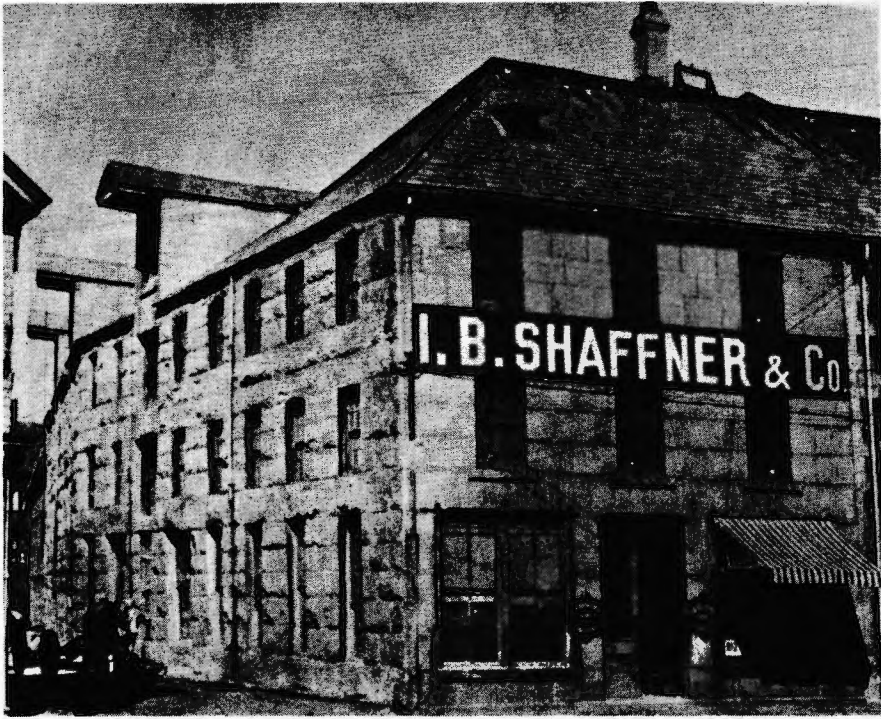


Fig. 6 The same building in a photograph, ca. 1909 (*The City of Halifax, The Capital of Nova Scotia, Canada. Its Advantages and Facilities* [Halifax, 1909], p. 85.

to note. They locate details to which documentation may refer and show their relationship to other features. Sections can be blown up to show, for example, the detail of the pediment, the dormer, or the window frame. As well, comparison of an old photograph with a current one or a series of photographs may reveal changes made to a building over time.

Two problems with using photographs in architectural research are: first, dating them. Where they contain buildings and landscape only, it is often not possible to date photographs precisely. Where identification marks such as clothing styles, documented information, or a sequence of photographs are available, circumstantial dating may be fairly precise. For example, checking the shop signs against the listings in the city directories narrowed the date of a photograph of the Market Square, Saint John to within a year or so of 1900. The second problem relates to locating photographs. There are well known, major collections in the McCord Museum in Montreal, in the Public Archives of Canada, in the Toronto Public Library, and at the Glenbow-Alberta Institute in Calgary. Most provincial archives also have collections of varying extent. Many photographs, however, remain in private and family collections, and numerous 20th century photographs turn up in old records of which they form part.

Aerial photographs are also of great use to the architectural researcher because they provide a perspective on the site quite different from a



Fig. 7 A photograph of Bellevue House, Halifax, built ca. 1800 as the residence of the senior military officer commanding in Nova Scotia, ca. 1867 (Public Archives of Canada, C564)

ground view, at any angle. There is a very extensive collection in the Air Photo Library in the Department of Energy, Mines and Resources (Ottawa) dating from the 1920's to the present. They were created during detailed and carefully organized recording of the country at various heights and are fully geographically indexed. Such photographs can provide the overview of an area, the context of a site and roof detail.

Documentary and iconographic materials are not, of course, the only sources of information for architectural research. Architectural investigation and as-found recording can tell a vast number of things about a building. They may, for example, reveal details of the method of construction, structural weaknesses, alterations and repairs. They can likewise clarify such problems as the originality of architectural features, original paint colours, and unusual use of materials and techniques. Examination of the building and site itself is obviously of the utmost importance.

Since its establishment in 1970, the Canadian Inventory of Historic Building (CIHB), a program of the Department of Indian and Northern Affairs, has recorded the exteriors of approximately 180,000 buildings built in Canada before 1914. The information has subsequently been computerized so that it is now possible to retrieve data upon the prevalence of various architectural styles and features across the country. As a second phase of CIHB, a small number (to date about 2,000) of the buildings recorded will be examined in detail by photo-recording interior features and coding them for computerization. Historical data about the age, design, use and ownership of the structure are also being collected.

In addition to informed and comparative study of the site, the memories of people of sharp perception and long association with a building can afford unrecorded information. Although a careful assessment of individuals and a recognition of their areas of knowledge are necessary, there is frequently no alternative source which can either offer or confirm the information that they are able to provide.

Primary resources for the study of building and architecture in Canada are extensive and still largely untapped. Recent widespread interest in historic buildings has led to the identification of much of Canada's architectural heritage. Concern to save some of these buildings has resulted in the accumulation of historical data and resources to interpret architecture in Canada. Sensitive and skilled analysis is yet needed to study the numerous unexplored aspects of Canada's built environment. Beyond the study of architecture as a field in itself, architectural research has implications for the study of urban and rural living, the evolution of socio-economic character and the transmission of cultural patterns.