## CUMBERLAND & STORM AND MIES VAN DER ROHE

The Problem of the Banking Hall in Canadian Architecture

O ne of the problems associated with the design of banking halls has been the expression of this space on the exterior of bank buildings. The banking hall is the major public space in which business is transacted. In spite of the central importance of the banking hall as the heart and soul of the banking process, it has been the practice, historically, for the banking hall to be ensconced within the confines of a residential or commercial building. My topic then, is the physical and symbolic relationship of the banking hall to a larger encompassing structure. This will be seen through two designs of vastly different scale and separated by over one hundred years, which provide surprisingly similar solutions.

In 1855 the Toronto architectural firm of Frederic William Cumberland (1820-1881) & William George Storm (1826-1892), best known as the architects of University College (1856-59) and the centre block of Osgoode Hall (1856-61), both in Toronto, designed the first of a series of banks for the Bank of Upper Canada.¹ The bank of Windsor, Ontario of 1855 (which no longer stands), was a two-and-a-half-storey hip-roofed cottage in the British tradition (fig.1). Its covered veranda and projecting gabled entrance bay resembled the style and plan of contemporary American cottage design on the model of A.J. Downing and A.J. Davis.

With the exception of major urban centres it was the norm, in nineteenth-century Canada, to design banks in this manner. The bank was located on the ground floor while the manager and sometimes servants or bank staff inhabited upper floors. According to this arrangement the banking room received no expression on the exterior of the building. Indeed this function was subordinated to the building's other role as the manager's residence which took the form of a cottage, a manor house or a villa, depending on budget and/or pretensions.<sup>2</sup> The reason for this design rationale may be found in the evolution of the banking industry in Canada.<sup>3</sup>

Before the advent in 1818 of banking companies (or Chartered Banks as we know them today), wealthy merchants carried out the business of banking working out of offices on the ground floor of their own homes. These houses served as conspicuous evidence of the bankers' reliability; their grand scale, stone versus wood construction and "high" architectural details like a portico and pediment embodied those qualities of wealth and stability that were likely to encourage the trust of their clients. Writing of the early history of banking in

Canada, E.P. Neufeld notes that "It is obvious... that any bank that wished to become established would be successful only if it were able to supplant the 'merchant banker'." It was only natural then, that in taking over the functions of the 'merchant banker', the banking companies would also duplicate the architectural image of the merchant bankers' office/home when establishing their own operations. 5

Cumberland & Storm's design for the Bank of Upper Canada at Windsor departs significantly from this formula of ground floor banking offices surmounted by the manager's residence. The ground plan of the Windsor bank (fig.2) reveals that the architects conceived the bank and residence as separate entities. Even though these two components are physically connected, they are functionally independent, each with a distinct structural, aesthetic and symbolic expression. They share a party wall and a groundfloor passage, between the manager's office and the stairhall of his residence, connects them internally. Each component has its own entrance; the bank faces Pitt Street while the residence fronts Goyeau Street.

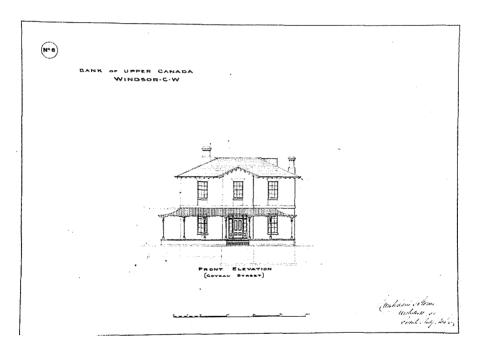


fig. 1 Cumberland & Storm, Bank of Upper Canada, Windsor, 1855, Goyeau Street elevation, Horwood Collection, Ontario Archives (99) 6. (Photo: Ontario Archives, Toronto)

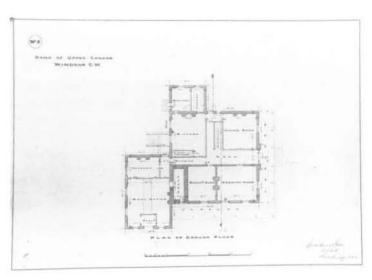


fig. 2 Cumberland & Storm, Bank of Upper Canada, Windsor, 1855, ground plan, Horwood Collection, Ontario Archives (99) 2. (Photo: Ontario Archives, Toronto)

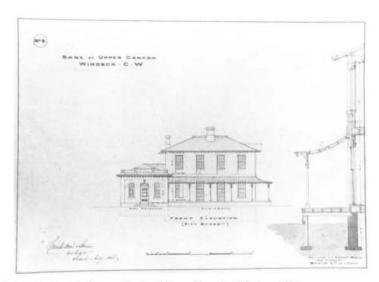


fig. 3 Cumberland & Storm, Bank of Upper Canada, Windsor, 1855, Pitt Street elevation and section detail, Horwood Collection, Ontario Archives (99) 5. (Photo: Ontario Archives, Toronto)

The bank is a one-storey structure that projects well beyond the Pitt Street side of the residence. A stepped parapet, containing a sign-board with the bank's name, augments its solid brick face (fig.3). The bank interior comprises a small vestibule or 'porch', the banking room with its counter down the centre, which divides the room into public and private space, and the manager's office at the back. The bank vault can be identified on the plan by its exceptionally thick walls. It is accessible from the banking room only, but is physically removed from this structure, probably for security reasons. The vault is contained within the residence, located directly below a second-floor bedroom thus permitting aural surveillance during non-banking hours.

The bank office of the Bank of Upper Canada at Windsor is remarkable as the first structure in British North America, so far as we know, designed for the sole purpose of housing banking services. Cumberland & Storm freed the banking room from the constraints of an external shell that had been unsympathetic to the internal requirements of a bank. The interior space of this modestly scaled banking room is free of obstructions and thus quickly comprehended by the customer. Such openness would have been impossible if the banking room had been located on the ground floor of a residence, because of the demands of other residential spaces: circulation needs to other rooms and floors, and the internal walls necessary to support upper storey rooms. The banking room would have been amply lit by its well-placed windows: two on the entrance front and three more along the flank. Once again, such an important aspect of bank design as lighting likely would have been compromised in the bank-within-residence arrangement where windows would have been organized according to the demands of a residential style.

While acknowledging the differences in functional requirements for banks and residences, Cumberland & Storm strove to link the bank office and residence stylistically. They accomplished this through a common proportional relationship of openings to wall, hip roofs slanted at similar angles and deep eaves with rhythmic detail provided by decorative rafter ends on brackets.

Within this unified program there are differences in the design of each component which, taken together, indicate the architects' desire to reflect the respective functions of bank and residence on the exterior. The blocky proportions of the bank, accentuated by the wide moulding that frames the entrance façade, contrast markedly with the general restraint of the house, notably the elegant bell curve of the veranda roof and the slender posts that support it. The segmental window-heads give the bank an Italianate appearance that is in keeping with abundant contemporary examples of commercial architecture in that style. (Cumberland & Storm's own Edinburgh Life Assurance Building, Toronto, 1858, is just one example.) By comparison, the larger rectangular windows of the residence are more suited to the domestic requirements of

openness and light. Even the design of entrance doors is revealing. The residential door, with its generous transom and sidelights, appears delicate, elegant and inviting, while the bank door is heavy, strong and secure.

It is difficult to determine what prompted Cumberland & Storm to produce this design, for they did not repeat it in subsequent projects.<sup>6</sup> The location of the site at the intersection of two streets certainly invited such a solution. Perhaps the local manager requested such a division of functions, having in mind the vernacular organization of contemporary doctors' and lawyers' residences which also featured a separate, although connected, business office. One thing at least seems certain, the design was not repeated for banks. In fact it was to be more than 100 years before a similar solution to the relationship of banking hall to bank building was attempted, this time with much greater significance.

Over the next 100 years of changing styles, rapidly increasing building heights, and new construction techniques and materials, the basic internal organization of bank buildings remained more or less the same, ground-floor banking hall topped by residential of commercial facilities. With the advent of the tall office building in the late nineteenth century came the retail and commercial bank tower. Here the problem facing the architect was how to express the importance of the banking hall while maintaining a unity of design for the entire building. Too often a superficial solution was achieved with applied signage or additional ornament at the banking level.

By the 1890's, Louis Sullivan's typical tripartite organization of the commercial skyscraper into two-storey base, unaccented shaft and richly treated attic (for example, the Wainwright Building at St. Louis, Missouri, 1890-91) was considered in North America to be the ideal aesthetic, philosophical and technical solution to the design of tall buildings in general. Many bank architects adopted his solution. Especially suitable for head office banks, Sullivan's scheme made possible a distinction on the exterior between ground-floor banking services and upper-storey office space, and also allowed for the expression of board rooms and directors' offices, which were usually contained in the top storey. But by the 1920's, as buildings grew in scale and complexity, this arrangement presented problems internally at ground level because of the conjunction of banking services with elevator bays and general circulation needs.

It was these problems of circulation, visibility and expression that Ludwig Mies van der Rohe (1886-1969) addressed in his project for the Toronto-Dominion Centre in Toronto of 1963-69. The design originally consisted of two black slabs: the fifty-six-storey Toronto-Dominion Bank tower, at the south end of the site and the forty-six-storey Royal Trust tower, at the north-west corner of the site. The towers framed a one-storey bank pavilion located between them

in the northeast corner (fig.4).<sup>7</sup> All of this is contained by the five-and-a-half-acre site of the open plaza. The three buildings are constructed of steel girders painted matte black enclosing sheets of bronze-grey tinted glass in a grid pattern based on a five foot module (fig.5). The basic format is familiar from Mies's paradigmatic essays in the high-rise building at 860 Lakeshore Drive in Chicago (1948-58) and the Seagram Building in New York (1954-58). The bank pavilion constitutes another characteristic Miesian form. Mies employed it as an independent structure at the New National Gallery in Berlin, 1962-68, and in combination with office towers at the Chicago Federal Centre, 1959-73. But the whole of Mies's composition is more significant than the sum of its parts.

Mies decided to place the banking hall in a separate structure because he believed "that the banking function would require a freer and more flexible type of space than could be provided by its incorporation in an office building — where both functions would be penalized." Mies clearly achieved his goal. The spacious quality of the interior is a direct result of the flexible plan (figs. 6, 7). Public space flows freely around the perimeter of the pavilion. The open yet protected centre is given over to the bank's staff where Mies provided for a vault, desks and private management offices, an accounts department and a typing pool. The escalators (top right and lower left of the plan, fig.6) offer access to and from the concourse level below. Because there are five other entrances to the concourse level from the plaza without, these internal escalators reserved for the convenience of bank patrons do not attract heavy traffic.

The bank pavilion serves only one purpose and is not burdened with the need to provide a major gathering place or passage to upper storeys. The organization of space is clear and quickly understood upon entering. The visibility of the interior is further enhanced because only two elements, the marble-clad mechanical shafts, reach to the ceiling. In spite of the large proportions of this 150 square foot interior, the tellers' counter is no more than twenty feet from any entrance. Such openness and direct, immediate access to function would not have been possible had the pavilion been incorporated as the ground floor of the office tower. Similar reasoning seemingly motivated Mies in his earlier decision to provide a separate one-storey pavilion for the Post Office Building at the Chicago Federal Centre, 1959-73.

The decision to create an independent structure for the banking hall must have equally been prompted by considerations of expression. Mies surely realized, and the commissioning bankers would only have concurred, that the stripped, modular style of his buildings allowed no possibility of expressing the banking function on the exterior. The presence of two nearly identical towers (and a projected third, now completed) further complicated matters. Had the banking hall been contained at the base of one of the towers, it would have been impossible for a first-time customer to know which tower housed the bank

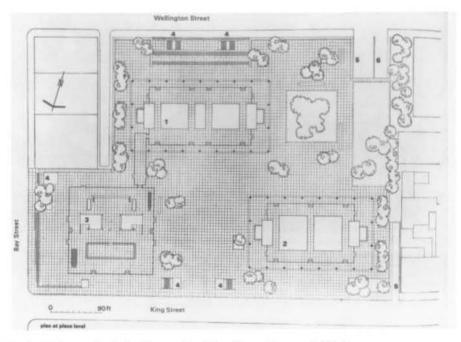


fig. 4 Ludwig Mies van der Rohe, Toronto-Dominion Centre, Toronto, 1963-69, plan at plaza level, Mies van der Rohe, The Architectural Review. (Photo: Centre Canadien d'Architecture / Canadian Centre for Architecture, Montréal)



fig. 5 Ludwig Mies van der Rohe, Toronto-Dominion Centre, Toronto, 1963-69, aerial view, Toronto-Dominion Bank Archives, 77-491-2. (Photo: Toronto-Dominion Bank Archives, Toronto)



fig. 6 Ludwig Mies van der Rohe, Toronto-Dominion Centre, Toronto, 1963-69, interior of bank pavilion, Toronto-Dominion Bank Archives. (Photo: Toronto-Dominion Bank Archives, Toronto)

before actually entering. Locating the banking services in a separate bank pavilion not only solved these problems, by isolating and thus identifying the banking function, but also glorified the banking process by acknowledging it with a unique space.

Ironically, the elevated status of the bank pavilion, achieved by its isolation, is meaningful only because it is flanked by the towers from which it has escaped. Without them the bank pavilion would be no more than a branch bank, albeit a large and unusually beautiful one. It is the bank pavilion's titular position as the premiere branch of the Toronto-Dominion Bank, with its physical association to the head-office tower, that differentiates it from ordinary branch banks.

The symbolic relationship of the bank pavilion to its parent structure is comparable to that in Viljo Rewell's project for Toronto City Hall of 1958-65 (fig.8). Rewell designed the council chamber of the City Hall as a two-storey structure on a podium, embraced protectively by the surrounding arms of the flanking administrative towers. By isolating the council chamber from other municipal functions, Rewell has created the symbolic embodiment of civic government, just as the Toronto-Dominion pavilion represents the essence of banking. The visual relationship of the council chamber to the flanking administrative towers intensifies the image of the council chamber and makes manifest the supporting function provided by the departmental offices housed in the towers. In like fashion Mies extracted the banking hall from its former home in the bank tower (one might say he slid it out from underneath) and set it up as a piece of sculpture in the plaza, against the backdrop of the two towers. The juxtaposition focuses the viewer's attention on the bank pavilion, which emerges as a concentrated expression of the banking process; this was the essence of what previous architects had tried to do with that space. 10 For 150 years bank architects had acknowledged the banking hall as the most significant bank space while simultaneously giving it little or no expression on the exterior. Mies resolved this apparent contradiction by setting the banking hall free and forcing us to reconsider this building type. Would bank buildings ever be the same again?

Canadian banking halls of head office banks have traditionally been lavish affairs. If the exteriors were sometimes likened to strong-boxes, the banking halls, so often bedecked in rich marbles and gilding, were their velvet lining. Mies did not turn his back on this tradition. His Toronto-Dominion Centre banking hall, one of the most beautiful bank interiors ever built, is clothed in typically Miesian, rich yet subtle materials: Tinos green marble for the counters, office walls of English brown oak, St. John's grey granite floors, and chrome and leather for the chairs (originally designed by Mies for his Brno House, 1928-30 and Barcelona Pavilion, 1929).

There is a further significance to this design which links Mies' bank pavilion to many Classically designed antecedents. The bank pavilion represents a structurally, spatially and decoratively reduced version of a Greek temple. The pavilion stands on a raised base, like a stylobate; and column-like I-beams support a horizontal beam or entablature in post-and-lintel fashion. The centre of the pavilion houses the bank's vault, the equivalent to the statue of the deity within the naos. Perhaps the most interesting aspect of this comparison is found in the interior. The bottom flanges of the criss-crossing I-beams within the ceiling grid increase in width from six inches at the edges to twelve inches at the middle. This was necessary structurally. The ceiling contained the mechanical equipment for the pavilion and this weight, which naturally produced a greater bending moment towards the centre of the ceiling farthest from the supporting posts of the exterior walls, was counteracted by the widened beams. But expressively and even visually this widening and tapering is analogous to the entasis employed by the builders of Greek temples; not in the sense of correcting an optical illusion, rather in the way that these beams expand in apparently muscular fashion to accept the weight upon them.

This temple of finance represents a unique achievement in the history of bank architecture in Canada and in the world; and one that has not been repeated. In Canada, bank architects have subsequently returned to placing the banking hall within the tower, expressing its significance spatially and through materials. The golden-sheathed head office of the Royal Bank in Toronto, 1973-79, by the Webb, Zeraffa, Menkes, Housden Partnership may stand as an example of later attempts to glorify the banking hall. Its eleven-storey rhomboidal atrium, which houses the banking hall, makes this the largest banking space ever built in Canada. But the concept of a banking hall expressed in terms of space is an old one. It does not move beyond the new understanding of bank architecture achieved through Mies's restructuring of the bank building. It is in fact a step backwards.

The novel relationship between banking hall and office tower created by Mies at the Toronto-Dominion Centre resulted in practical advantages internally and led to new expressive possibilities. Yet Mies's bank pavilion is distantly prefigured in Cumberland & Storm's Bank of Upper Canada at Windsor. In each case the architects resolved the problem of how to express the central importance of the banking hall on the exterior of their buildings by removing this significant space from its customary position, creating a separate structure of it and establishing a new dynamic relationship between the resulting components. Accessibility and visibility of the banking halls were markedly improved in the process. Cumberland & Storm and Mies related their new banking room or pavilion to its neighbouring home or tower; architecturally, through ornament, scale, materials, rhythm and proportion, and physically,



- customer circulation area
   information

- 3, tellers 4, credit officers
- 5, managers
- 6, vault

- 7, hydraulic lift 8, typing pool
- 9, accounts department
- 10, mechanical shaft
- 11, escalator from concourse
- escalators to safety deposit and other bank departments at concourse level

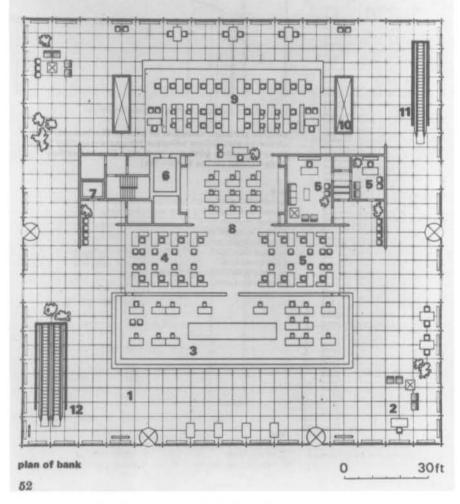


fig. 7 Ludwig Mies van der Rohe, Toronto-Dominion Centre, Toronto, 1963-69, plan of bank, Mies van der Rohe, The Architectural Review. (Photo: Centre Canadien d'Architecture / Canadian Centre for Architecture, Montréal)

by means of an interior corridor at the Windsor branch bank and via a covered passage at the Toronto head office.

In a broader sense, both projects are mixed-use developments that make an impact on the larger urban fabric. Cumberland & Storm achieved this at Windsor by addressing each of two streets with a different face, creating a residential-commercial corner. Mies, working on a larger scale, establishes a self-contained plaza like so many of his contemporaries working in the 1960's and 1970's. The plaza is open to the street at many points and the complex relates to the city equally through an underground pedestrian concourse that links the Toronto-Dominion Centre to the subway and to major neighbouring buildings including that of Union Station to the south.

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## Notes

A version of this paper, based on parts of my Phil. M. thesis "The Development of the Banking Hall in Canada" (University of Toronto, 1983), was originally presented at the Young Scholars Conference, Queen's University, Kingston (1983). Special thanks go to Barbara Shapiro who read the text in draft and who made valuable corrections and suggestions and to Geoffrey Simmins who shared his research on F.W. Cumberland.

- 1 Subsequent banks for the Bank of Upper Canada, designed by Cumberland & Storm, were constructed at Port Hope (1855-58), Sarnia (1857) and Lindsay (1857-58). Ten drawings for the Windsor bank survive in the Horwood Collection of the Ontario Archives.
- 2 In the cities, pretensions were greater and while the internal organization of city banks was identical to those in the country, their size and external expression were not. In the first half of the nineteenth century, banks in Canadian cities were most often Georgian in style after the model of English club houses. Their graceful and reposed exteriors, enhanced by a noble portico and a rusticated ground floor, suggested the pomp and circumstance that bankers wished to have associated with early banking practice, while the club house reference aptly characterized the exclusive nature of Canada's commercial élite at this date.
- On Canadian banking history see: W.T. EASTERBROOK and H.M. WATKINS, ed., Approaches to Canadian Economic History; A Selection of Essays (Toronto: McClelland and Stewart, 1967); Bray HAMMOND, Banks and Politics in America, From the Revolution to the Civil War (Princeton: Princeton University Press, 1957); Robin T. NAYLOR, The History of Canadian Business, 1867-1914, 2 vols. (Toronto: J. Lorimer, 1975); Edward P. NEUFELD, The Financial System of Canada; Its Growth and Development (Toronto: Macmillan of Canada, 1972); Edward P. NEUFELD, ed., Money and Banking in Canada (Toronto: McClelland and Stewart, 1964).
- 4 Edward P. NEUFELD, The Financial System of Canada, 72.
- 5 A further note relative to the external form of early banking houses concerns the two sources of influence on the early Canadian banking industry. Although Canada's political and social ties to

Great Britain were stronger in the early nineteenth century, economically Canada was more closely linked to the United States. In fact the earliest Canadian bank charters were copied almost verbatim from an American precedent — the charter of the First Bank of the United States, planned by Alexander Hamilton. The early Canadian bank building therefore reflects a compromise between these two sources. British influence is evident on the exterior where social custom dictated a familiar and appropriate face. But on the interior, where banking practice dictated the form, Canadian banks more closely resembled American examples. On the similarity of early Canadian bank charters to American examples see: W.T. EASTERBROOK and H.M. WATKINS, ed., *Approaches to Canadian Economic History*, 139-140.

- 6 Drawings do not survive for Port Hope or Lindsay but those for Sarnia (also in the Horwood Collection of Ontario Archives) show the architects striving to maintain the residential-commercial distinction while conflating these components under one roof.
- Mies was consulting architect on the project. John B. Parkin Associates and Bregman and Hamann were the local firms involved. A third tower, the Commercial Union Tower, was added in 1972-74.
- 8 Peter CARTER, Mies van der Rohe at Work (London: Pall Mall Press, 1974): 138.
- 9 By comparison, the banking hall added by McKim, Mead & White in 1901-04 to the Bank of Montreal's head office on Place d'Armes in Montréal (now the Québec, regional head office) the first truly monumental banking hall in Canada is 9,625 square feet as compared to 22,500 at the Toronto-Dominion Centre.
- 10 For a more detailed discussion of the development of the banking hall in Canada, see my thesis: "The Development of the Banking Hall in Canada," Phil M. thesis (University of Toronto, 1983).

## CUMBERLAND & STORM, MIES VAN DER ROHE

et le problème de l'architecture bancaire au Canada

Un des problèmes associés à l'architecture des établissements bancaires est celui d'en traduire la fonction interne dans la structure extérieure. Bien que ces établissements soient la clef de voûte du système bancaire, la coutume les a relégués à l'intérieur d'immeubles affectés à d'autres fonctions, soit résidentielles, soit commerciales. Cet article explore les rapports physiques et symboliques entre la banque et une structure d'une portée plus étendue. La démonstration est établie au moyen de deux exemples qui, bien que très éloignés l'un de l'autre dans le temps et l'ordre de grandeur, apportent au problème des solutions étonnamment similaires.

L'édifice de la Banque du Haut-Canada, à Windsor, date de 1855. C'est à notre connaissance la première fois en Amérique du Nord britannique qu'une structure est érigée à seule fin d'y installer des services bancaires. Le projet des architectes Cumberland et Storm présentait deux composantes qui, bien que distinctes l'une de l'autre, s'harmonisaient sur les plans physique et esthétique: la banque et la résidence du directeur. Ces deux parties, séparées par un mur mitoyen mais communiquant par un passage intérieur, au rez-de-chaussée, se distinguent par des entrées séparées et des éléments architecturaux propres à leur fonction respective. Le résultat est à l'avantage des deux parties. La banque y gagne un espace intérieur plus dégagé et plus souple qui, pour la première fois dans l'histoire des banques canadiennes, s'exprime librement à l'extérieur.

La solution remarquable de Cumberland et Storm au problème de l'organisation et de l'expression fonctionnelle des banques ne sera reprise qu'un siècle plus tard, lorsque Mies van der Rohe l'utilisera, sur une échelle beaucoup plus vaste, au Toronto-Dominion Centre érigé à Toronto entre 1963 et 1969. En logeant les services bancaires dans un pavillon séparé, plutôt que de les installer au rez-de-chaussée de l'une ou l'autre des deux tours originales, Mies résolvait les problèmes communs de circulation, de visibilité et d'expression qui se posaient aux architectes depuis les années 20, alors que les immeubles se mirent à atteindre des hauteurs de plus en plus impressionnantes. Mies avait sûrement compris, grâce à l'expérience acquise au Chicago Federal Centre (1959-73), qu'en aménageant la banque dans une structure distincte il obtiendrait une organisation spatiale plus flexible. La richesse d'expression atteinte par Mies au Toronto-Dominion Centre fait de ce pavillon bancaire le plus pur exemple de ce type de construction, le point culminant de 150 ans d'architecture bancaire au Canada.

Traduction: Élise Bonnette



fig. 8 Viljo Rewell, City Hall, Toronto, 1958-65, view of site, Records & Archives, City Hall, Toronto. (Photo: P. Goodwin, Toronto City Hall)