The Lakehead University Campus as a Microcosm of Recent Canadian Architectural Practice

Figure 2. The Lakehead Technical Institute, Cumberland Street, Port Arthur, Ontario, 1947-57. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

The buildings on the campus of Lakehead University in Thunder Bay, Ontario, are a medley of colours, textures, materials, and rooflines, some crowded together in the central campus area, others scattered over the vast grounds[1] (**figure 1**). Disparagers tend to blame the architects for this melange, while the architects point their fingers at the client. But between the commissioning of a building and the completion of the structure, numerous compromising decisions can be made in the contemporary practice of architecture. At Lakehead University, the siting, materials, colours, and specifications of buildings are determined by the client, the Campus Development Committee. The university also has a policy of inviting architects to design its buildings; both local firms and architects of national importance have contributed to the campus at Lakehead University, thus ensuring a visual diversity.

by Patricia Vervoort

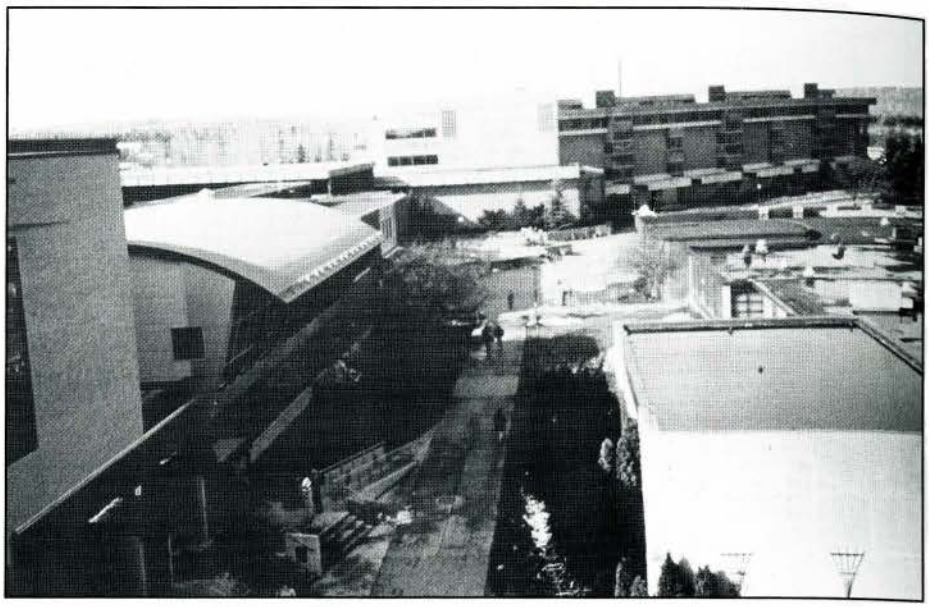


Figure 1. The central campus Lakehead University, Thunder Bay, Ontario, from the library. (P. Vervoort, 1997)

The purpose of this paper is to explain how Lakehead University's campus came to be characterized by its variegated assembly of buildings. The appearance of the campus cannot be attributed solely to its isolated location in Northern Ontario. Rather, its appearance reflects, in part, contemporary architectural practices and budgetary and time constraints. That is, the development of Lakehead University, which has occurred in only 40 years, can be seen a microcosm of recent Canadian architectural practice.[2] In regards to contemporary practice, Alf Roberts has commented on the dwindling role of the architect:

> Look at any new complex, and see how little the architect is involved with the major decisions of the development, other than offering design solutions for others to consider. The building type, density, and what the building's final form and materials are decisions taken by others.[3]

This paper will explain why the Lakehead campus looks as it does by investigating three different but interrelated aspects: the individual buildings and planning; the attitudes and approaches of the architects; and the university as a client. By looking at three successive building campaigns, buildings of three different styles and dates will be seen to represent the campus: the initial buildings and the adaptations of the International Style in the Braun Building, University Centre, and library; campus expansion and the Brutalist Centennial and Ryan buildings; and recent additions and Post-Modernism in the Forest Ecosystem Research, Regional, Student, and Health Sciences Resource centres. These stylistic designations demonstrate that architecture is affected by fashion. All of the buildings under discussion, except for Health Science Centre, are located in the centre of the campus.

PLANNING AND THE INITIAL CAMPUS

The initial impression of a haphazard arrangement of separate buildings suggests that the Lakehead campus[4] developed without prior planning. In fact, the first of many campus plans dates from 1956, before a single permanent building at the current site was constructed.[5] Planning for the campus and its overall appearance was a concern from the beginning; implementing a coherent design with compatible structures was a different matter. The Lakehead Technical Institute was established in 1946 and opened for classes in January 1948 in temporary quarters in downtown Port Arthur.[6] First-year university courses were being offered by September 1948. The new one-storey building was U-shaped, with a gabled roof and shingled exterior of white asbestos "cedargrain" cladding (**figure 2**).[7] In 1949, F.O. Robinson, M.P.P., said of its appearance: "it is housed in a temporary building which looks like a pretty nicely-built barn, and it is built right up to the sidewalk line of the city." He continued with a comparison: "I am afraid the University of Toronto would have quite an edge on us in appearance."[8] Between 1951 and 1955, students, with public support, agitated for "a University building which looked like one."[9]

1 "The Lakehead University physical plant now consists of 54 buildings and 140 hectares of property including 40 hectares of landscaped and maintained grounds." *Lakehead University, 1997-1998 Calendar* (Thunder Bay, Ont.: Office of the Registrar, Lakehead University, 1997), 9.

2 With thanks to Fred Cane of the Ontario Ministry of Culture and Communications for his comment about Lakehead University's architecture being a "microcosm."

3 Alf Roberts, "Practice: Typecasts and Forecasts," *The Canadian Architect* 35, no. 3 (March 1990): 41.

4 *Lakehead University, 1997-1998 Calendar*, 8. Lakehead University evolved from the Lakehead Technical Institute, established in 1946: classes began in January 1948; university courses were added to the curriculum in September 1948; the Institute became the Lakehead College of Arts, Science and Technology in 1956; the college achieved "university powers" in 1962; and it granted its first degrees in 1965. See P.M. Ballantyne, *A History of Lakehead University* (Thunder Bay, Ont.: Lakehead University, [c. 1966]), 5-8. The site for the future university — originally 60 acres in size — was determined in 1945.

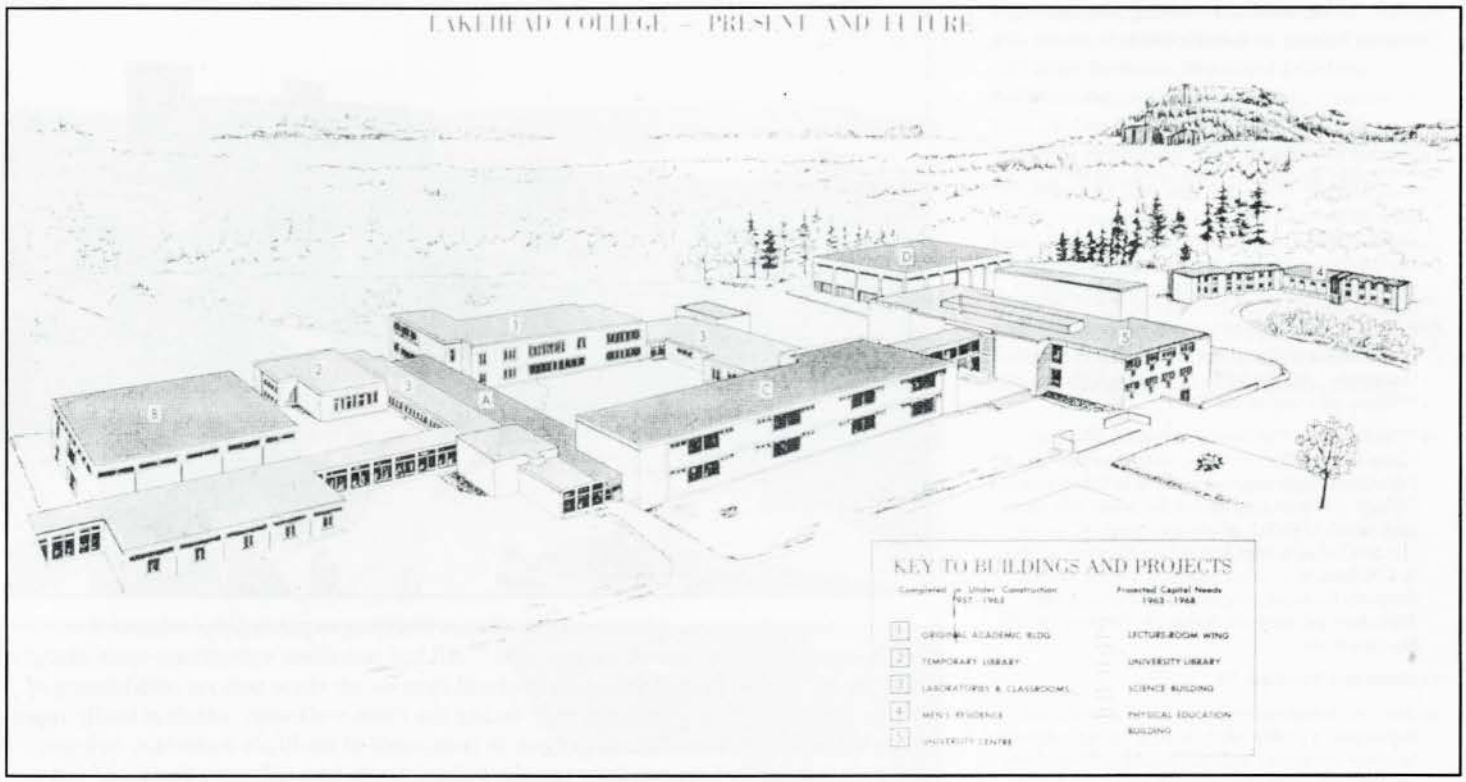
5 City of Thunder Bay Archives [hereafter TBA], Acc. no. 1993-23, Series 29, #709. This plan was evidently drawn by members of the science faculty.

6 Harold S. Braun and William G. Tamblyn, *A Northern Vision: The Development of Lakehead University* (Thunder Bay, Ont.: Lakehead University, 1987), 12, 15. The temporary structure recycled "a number of army huts which had been used during the construction of the Alaska Highway" (these were more likely the "seven army huts" constructed by the Dept. of National Defence in Current River Park in 1940; the park was only a few miles from the site of the new technical institute). TBA, City of Port Arthur Building Permit Applications, Roll 13, Permit 12, 30 August 1940.

7 TBA, City of Port Arthur Building Permit Applications, Roll 18, Permit 337, 7 October 1947, estimated cost $15,000. It was to be 130 ft. wide with two 24-ft. x 104-ft. wings. The owner was listed as Thunder Bay Home Finance. A Liquor Control Board of Ontario store now occupies the site, at 100 North Cumberland Street. See advertisement for "Lakehead Technical Institute," *The Daily News Chronicle*, Port Arthur, 26 August 1953, 3. Total fees per year were $82.00.

8 "Lakehead Tech In Poor Location, Not Attractive There – Robinson," *The Daily News Chronicle*, Port Arthur, 14 March 1949, 5.

9 Ballantyne, 12 [1946-1957].



Even before the first permanent building was completed on the current campus site in 1957, Harold Braun, principal of the Technical Institute, wrote: "You may be interested to know that a detailed plan for landscaping has been prepared by our architects.... We have an excellent piece of property, we are going to have a first class building and it is our intention to improve the grounds and make them as attractive as possible."[10] In 1959, R.J. Flatt, chair of the Board of Governors, stated: "We still have a good many things to do. We need an overall plan of construction and layout; we have a plan but this College will grow and that this growth be well planned is a necessity and an urgent one."[11] Thus, in the early years, there was recognition of the need for planning.

How these buildings would appear was shown on drawings by the first architects, a local firm, Mickelson, Fraser & Associates. They adopted some of the vocabulary of the International Style or "Modern Style" for the initial buildings, which, at least in the drawings, were consistent in design and spaciously arranged (**figure 3**). A view of the campus drawn in 1963 showed the university's first building as constructed.[12] Typical of Modernist buildings, the Braun Building (originally called the Main Building) was essentially an unadorned box with a flat roof. It was envisioned as a building that "would provide minimum requirements" but "would lend itself to further additions"[13] (**figure 4**). The Braun Building was constructed with a steel frame, curtain walls of yellow brick, and windows grouped together rather than banded.[14] In the stairwells, the windows were of glass blocks. Traditional-style stone window sills projected from the wall, negating the Modernist ideal of a planar wall surface. The flat roof, while a hallmark of the International Style, made no concession to the local climate. Nevertheless, the design for the Braun Building established a "benchmark" style for the new campus, and the initial planning by the architects indicated that the campus would have a visual coherence and homogeneity.

Opening ceremonies for the Braun Building in 1957 gave Dr. W.J. Dunlop, provincial Minister of Education, an opportunity to comment on "the erection of a 'fine' building. I am delighted with the work."[15] A *Daily Times Journal* editorial stated: "Notwithstanding the justifiable pride which was shared by yesterday's participants in the fine new architectural structure, those students-to-come will likely look at a picture of the building and judge it a humble beginning."[16] Indeed, the initial approach of the client was definitely one of "no frills."[17] In 1962, a single "frill," a ceramic mural by M.F. Chambers depicting Lakehead industries, was added to the inside wall opposite the main entrance. It was funded by a grant from the Canada Council.[18]

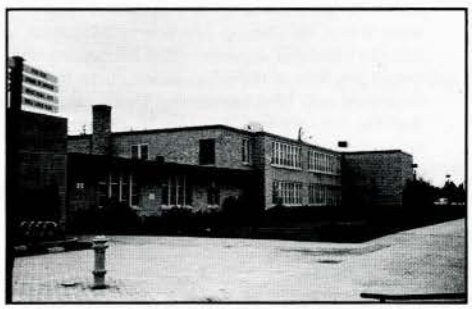


Figure 3 (top). "Lakehead College – Present and Future," 1963. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

Figure 4 (above). The Braun Building, formerly the 'Main Building," Lakehead University, Thunder Bay, Ontario, completed in 1957; Mickelson, Fraser & Associates, architects. (P. Vervoort, 1997)

10 Letter, H.S. Braun to Arthur Evans, City Clerk of Port Arthur, 7 May 1957, TBA, Acc. no. 1993-23, Series 29, #709.

11 Braun and Tamblyn, 47.

12 *Lakehead College of Arts, Science and Technology: A Decade of Growth 1957-1963. 1963-68 – Capital Needs College Building Fund* (Port Arthur, Ont.: Lakehead College of Arts, Science and Technology, 1963).

13 Braun and Tamblyn, 26. The cost was estimated at $340,000.

14 The Superior Brick and Tile Company provided the brick; see advertisement in *The Daily Times Journal*, Fort William, 28 March 1967, 6.

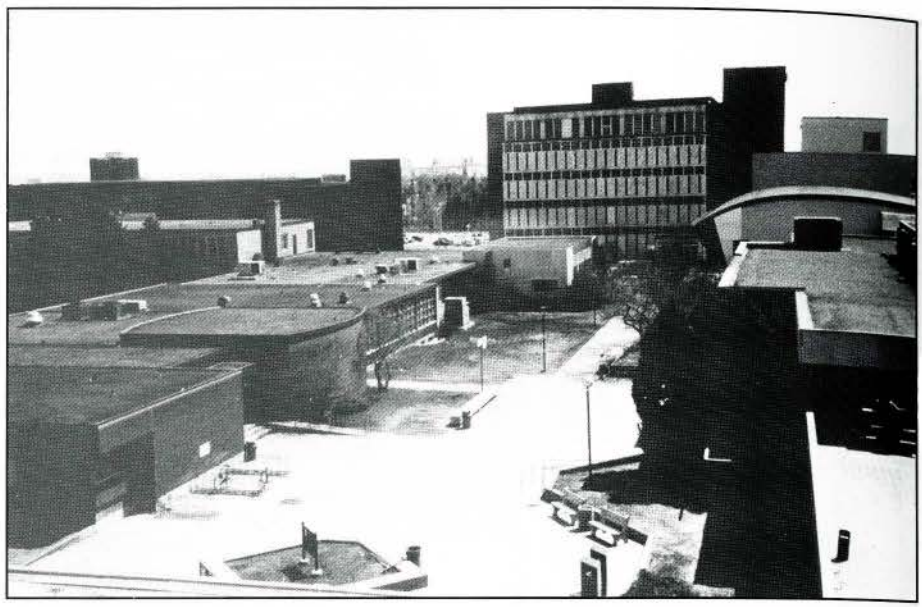


Figure 5. The expanded Braun Building (left), from the Centennial Building. (P. Vervoort, 1997)

Over the years, additions to the Braun Building expanded the original structure into a large quadrangle with a courtyard.[19] All but one these extensions were designed and carried out by the original architectural firm — yet there was no consistency of exterior finish. For example, the wall facing the main walkway, which actually represents six different building campaigns, is composed of multiple materials, colours, and textures, including concrete panels, yellow brick, two different shades of red brick, black terrazzo panels, yellow aluminum panels (replacing the original glass), and windows framed in either wood or aluminum (**figure 5**). Why this is so defies explanation. One possibility suggested by Dana Cuff in *Architecture: The Story of Practice* is that most projects have "10 people involved in the decision making."[20] In other words, this may be an example of building by committee. Nevertheless, the wall is a visual record of its construction over a period of years. One section, part of the classroom known as "The Snake Pit," is curved, in variance to the planar walls of the rest of the building. This was no doubt a response to less box-like buildings such as the new Toronto City Hall, the competition for which took place in 1958, being featured in contemporary architectural journals.[21] The curved wall was constructed in 1960, indicating that the architects were aware of and reacting to the most recent trends in Canadian architecture.[22]

A final addition on the north side of the Braun Building quadrangle was made in 1966. The addition provided office space for faculty and a new facade (but no new doorways) for the public. It faced the newly designed main entrance to the university and was completed in red brick, thus coordinating with the new red brick library and University Centre. A flat-roofed, no-frills box, this new construction echoed the forms of the existing "modern" buildings on the campus. The addition was designed by the university's original architectural firm, now named Mickelson, Fraser & Browne, and Fairfield & DuBois of Toronto.[23] The latter presented a development plan in 1966 that made numerous recommendations about architecture and planning on the campus, including the new entrance that the Braun Building addition now faced. A commentary in the plan diplomatically stated that, "Whereas the Campus plan at 10,000 enrolment level continues to show an existing University Main Building [the Braun Building], the Consultants are aware that in the next century or before, this building might well be removed and replaced by a new and more useful structure."[24] At the time the consultants made this recommendation, the original portion of the Braun Building was only *nine* years old.[25] The Braun Building still stands.

THE LIBRARY AND THE UNIVERSITY CENTRE

The next construction phase on the main campus involved building a library and a University Centre, each situated opposite the Braun Building, the library to the south and the University Centre to the west. Consultant for the design of the "theatre and arts centre," as the University Centre was originally conceived, was John A. Russell, Dean of the Faculty of Architecture at the University of Manitoba and an expert in

15 "Lakehead College is Opened Officially," *The Daily Times Journal,* Fort William, 3 October 1957, 1, 18. Architect A.J. Mickelson was a member of the platform party. In 1927, W.J. Dunlop was the University of Toronto's "director of university extension." He was in the city to propose "the possible erection of a building here for the purpose of carrying on the first two years of university work." See "Junior University Proposed for City," *The Daily Times Journal,* Fort William, 13 October 1927, 1, and "A Branch University," editorial, *The Daily Times Journal,* Fort William, 19 October 1927, 4.

16 "The Birth of a University," editorial, *The Daily Times Journal,* Fort William, 3 October 1957, 4. Port Arthur's city engineer noted that "The Lakehead College ... is presently served by means of a septic tank which is giving satisfactory service." Letter, T.B. McCormack, Port Arthur City Engineer's Office, to L.S. Johnston, Department of Public Works, Property Division, Toronto, 12 December 1957, TBA, Acc. no. 1993-23, Series 29, Property "S" file. See also n. 46.

17 Braun and Tamblyn, 52.

18 *Ibid.*, 54, where the mural is called a "frill," and Ballantyne, 5 [1960-1961]. As with all the buildings to come, the Braun Building would not have been constructed without local fundraising efforts to match the government grants. In 1953, before plans were drawn, Dr. Dunlop, Minister of Education, told the Lakehead organizers that his department would pay 50% of the construction costs. In 1955, impressed with local fundraising, Dunlop announced that the Department of Public Works under the direction of the Department of Education would construct the building. Local funds could be used for equipment or further expansion. See Braun and Tamblyn, 26, 30. The T.A. Jones Construction Co. won the contract, and the cornerstone was laid on 26 September 1956.

19 Additions to the Braun Building were made in 1959, 1960, 1963-64, and 1966. Braun and Tamblyn, 224.

20 Dana Cuff, *Architecture: The Story of Practice* (Cambridge: MIT Press, 1991), 77.

21 Harold Kalman, *A History of Canadian Architecture* (Toronto: Oxford University Press, 1994), 2:808. This competition has been called "the most significant architectural event of the post-war period." See Bureau of Architecture and Urbanism, *Toronto Modern Architecture 1945-1965* (Toronto: Coach House Press, 1987), 78.

22 This section was designed by Mickelson, Fraser & Haywood. Braun and Tamblyn, 224.

23 *Ibid.*

24 Lakehead University Planners, *Lakehead University Development Plan: A Pilot Plan for the First Stage Expansion and for Development at 5,000 and 10,000 Student Enrolment Levels* (Port Arthur, Ont.: Lakehead University, 1966), unp. The architectural planners were Fairfield & DuBois, with landscape architects Sasaki, Strong and Associates.

25 Taylor, Lieberfeld & Heldman (Canada), Ltd., in their "Report to Lakehead College of Arts, Science and Technology," July 1963, 141-45, recommended retaining the building, not "to fix a particular architectural form" but "because of the already established laboratories." Braun and Tamblyn, 38, noted that the laboratories "were set up so that they could be used as lecture rooms."

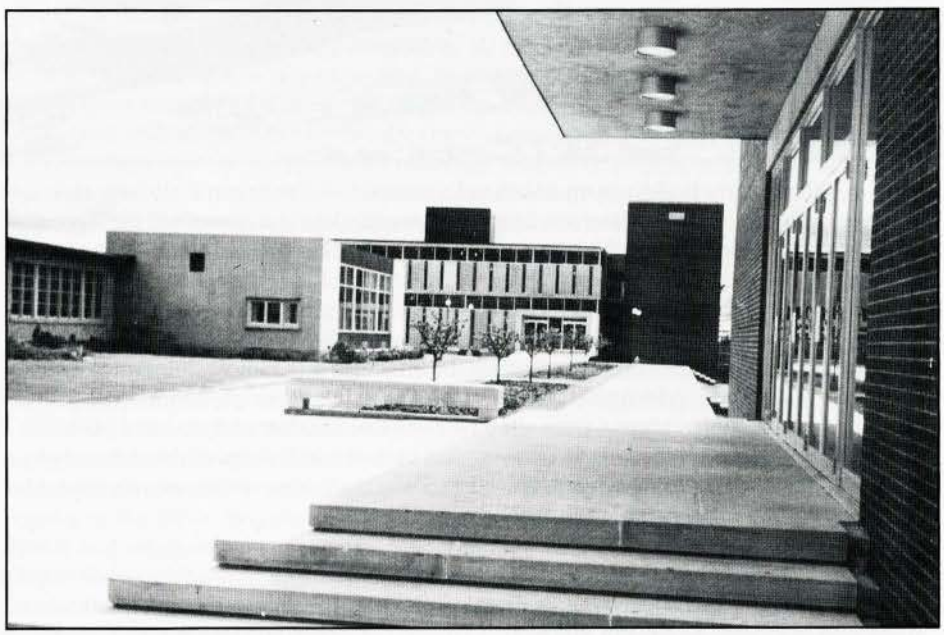


Figure 6 (above). The University Centre building (centre left), completed in 1964 (Mickelson, Fraser & Haywood with Green, Blankstein, Russell and Associates, architects); and the Centennial Building, completed in 1969 (Fairfield & DuBois, architects), Lakehead University, Thunder Bay, Ontario. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

Figure 7 (below). The Chancellor Norman M. Paterson Library, completed in 1965-67 (Mickelson, Fraser & Haywood, with Green, Blankstein, Russell and Associates, architects), from the steps of the University Centre, with the Braun Building on the left. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

theatre design.[26] The original campus architects, now known as Mickelson, Fraser & Haywood, were joined by the Winnipeg firm of Green, Blankstein, Russell and Associates for these two projects.[27] The University Centre (1964) was placed opposite the multi-coloured, multi-textured wall of the Braun Building. Constructed with a steel frame, flat roof, and planar walls, the University Centre continued the Modernist vocabulary already established, but the change to red brick signalled a slightly different era and a new group of architects[28] (**figure 6**).

The library (now the Chancellor Norman M. Paterson Library), with the same two architectural firms in charge, was built in two stages: the lower three floors were erected in 1963-65 (**figure 7**), and the top three storeys were completed 1966-67. The design followed the no-nonsense approach of the Modernists, with its boxy shapes, flat roofs, and planar walls. The tallest building on campus, the structure was organized into two upright rectangular slabs, one for the library proper, the other for the services. Despite its height, the emphasis was on horizontality. To parallel the rectilinearity of the general shapes of the structure, bands of horizontal windows on the facades alternate with concrete panels, and between the panels are small vertical windows. The library's service module was designed to accommodate a library of twice its size; in other words, the library slab could be duplicated in mirror-image so that the service module would be in the centre.

26 Braun and Tamblyn, 52. See also William P. Thompson, "John Alonzo Russell," *The Canadian Encyclopedia* (Edmonton: Hurtig, 1988), 3:1902. Russell (1907-1966) was director of the School of Architecture from 1946 and Dean from 1963. (He was not the Russell in the firm of Green, Blankstein, Russell and Associates.)

27 "Throughout three decades, GBR helped bring Modernist architecture to Manitoba." William P. Thompson, "Green, Blankstein, Russell (GBR)," *The Canadian Encyclopedia* (Edmonton: Hurtig, 1988), 2:936. The firm, founded in 1932 and still operating as GBR Associates, first consisted of Lawrence John Green (1899-1969), Cecil Nat Blankstein (1908-89), Gordon Leslie Russell (1901-77), and Ralph Carl Ham (1902-42). Green, Blankstein, Russell and Associates were the winners in the 1952 competition for a new national gallery in Ottawa; their success in this slow-moving competition was announced in 1954, but their project was never built. See Ruth Cawker and William Bernstein, *Contemporary Canadian Architecture: The Mainstream and Beyond* (Markham, Ont.: Fitzhenry & Whiteside, 1988), 21.

28 The brick used in the University Centre is not local brick, even though both yellow and red were locally available.

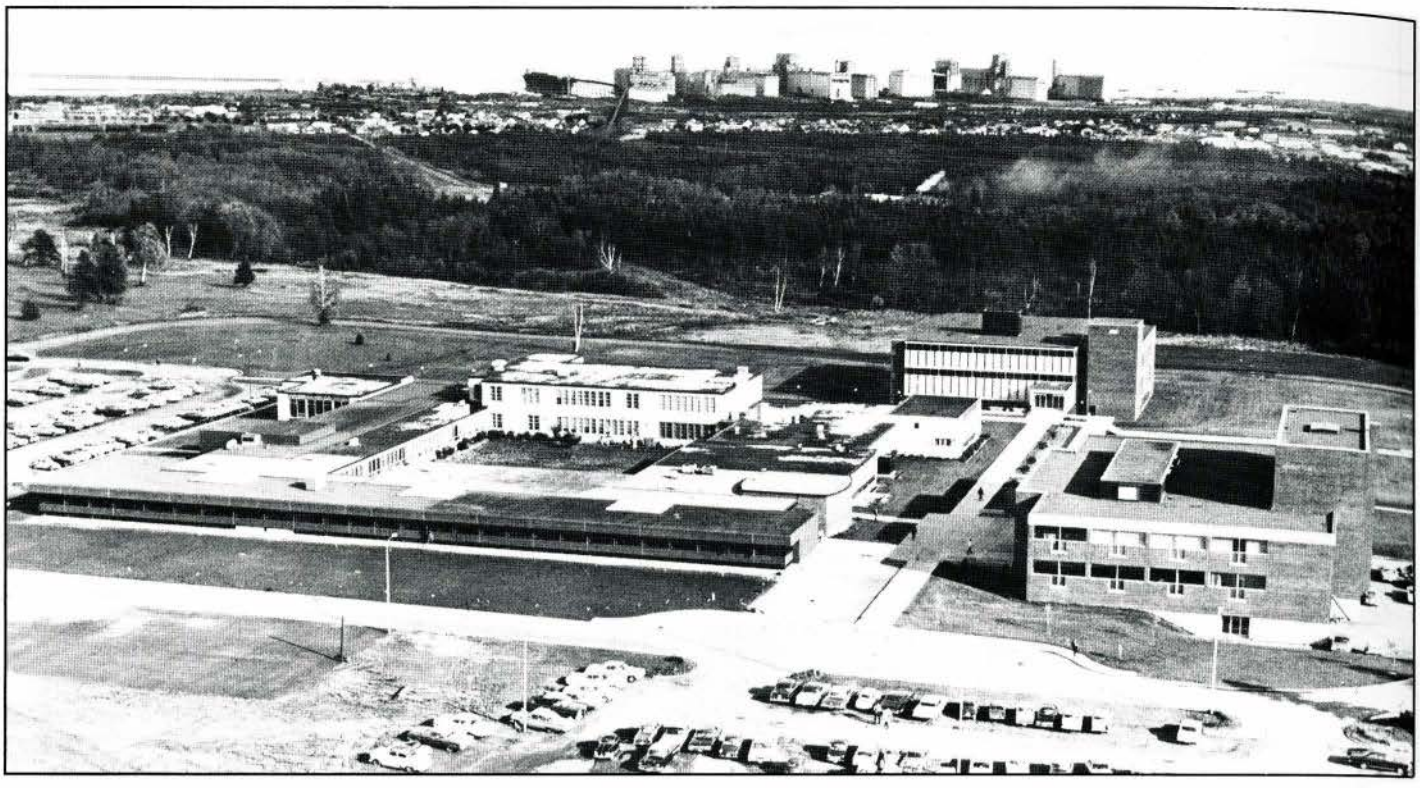


Figure 8. Aerial view of Lakehead University, with the Intercity Grain Elevators in the background, 1965. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

These early buildings on Lakehead's campus — the Braun Building, the University Centre, and the Paterson Library — established the precedent for future development (**figure 8**). The diversity of colours and materials and the assortment of rooflines and window shapes, ostensibly in variations of the "modern" style, clearly indicate that these were the only features left to the architects to assert their independent visions. The university's main intent during these years of initial growth was to increase the number of classrooms and laboratories. In selecting this new architectural style there was no room for adornment: bare walls and straight lines predominated. All the buildings on the main campus were sited close to one another and, in 1964, were linked by underground tunnels to allow access between buildings without having to go outside.[29] As will become evident, the existence of the tunnel system was an important consideration in siting future buildings.

THE MASTER PLAN AND THE CENTENNIAL BUILDING

In 1962, members of the university's Board of Governors expressed concern about long-range planning. As a result, the firm of Taylor, Lieberfeld and Heldman (Canada), Ltd., which had completed studies for the University of Manitoba and McGill, was invited "to provide a detailed program for the land use of the campus, the use of existing buildings, the construction of additional buildings, and financial requirements."[30] The same firm, in 1966, updated their previous report and prepared specific requirements for a new academic building. Fairfield & DuBois were appointed as "Planning Architects" for the university and worked on the preparation of the master plan for the university, the science and technology building (the Centennial Building), and the proposed new gymnasium. This was the first time that a long-range master plan for the campus had been prepared.[31] One of the proposals in the master plan was to dam the McIntyre River to create an artificial lake and to align the buildings within view of the water. According to Harold Braun and William Tamblyn, the lake "was the hub of the plan and, without its development, the plan would not have made much sense."[32] In 1971, the McIntyre River was dammed with a fish ladder to form "Lake Tamblyn" immediately behind the Centennial Building.[33]

The master plan was produced to determine the needs of a university with enrolments of 3,000, 5,000, or 10,000 students.[34] It included a series of recommendations about the architecture of the campus: "Each stage of Campus growth should have a sense of completion and architectural continuity." "New architecture should acknowledge the form and function of existing buildings whereby subsequent Campus

29 "Dr. Braun argued that tunnels would cut down on maintenance costs of the buildings due to the snow and slush what would be brought into the buildings by the student traffic between lectures." Service tunnels were also added. Braun and Tamblyn, 69.

30 Braun and Tamblyn, 63-65, identify Taylor, Lieberfeld & Heldman as "a New York" firm. In *Lakehead University Development Plan*, the authors identify the firm as Taylor, Lieberfeld & Heldman (Canada), Ltd.

31 Braun and Tamblyn, 89.

32 *Ibid.*, 100.

33 Minutes, Board of Governors Executive Committee, Lakehead University, 17 June 1971, capital projects.

34 Braun and Tamblyn, 89.

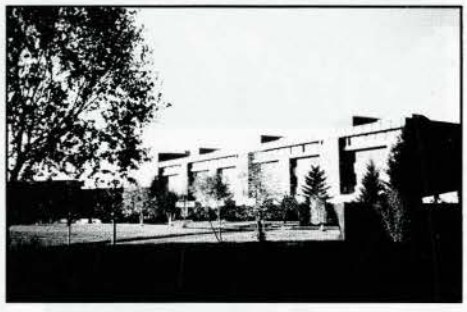


Figure 9 (above left). The Centennial Building, Lake Tamblyn side. (P. Vervoort, 1997)

Figure 10 (top). The Centennial Building from across Lake Tamblyn, showing the cantilevered president's office. (P. Vervoort, 1997)

Figure 11 (above). The Centennial Building from road. (P. Vervoort, 1997)

expansion would contribute to continued usefulness of present facilities." "Local climate conditions should be taken into account in all decisions involving planning and architecture." Its authors also recommended "that new building and site development work should grow out from the present Campus centre, always in correct scale with the whole and with minimum overdevelopment at any particular stage." The master plan did not impose specific guidelines for materials, shapes, or architectural styles. However, the planners did state that "the most vital ingredient of all is the quality of architecture."[35] In their vision of the campus, the planners indicated no buildings at all between the University Centre and the library. (By the fall of 1991, this area was the site of three new buildings.)

In addition to producing the master plan, Fairfield & DuBois designed the largest building on campus, the Centennial Building (1967-69).[36] This massive steel-framed structure introduced a new architectural idiom, Brutalism, to the campus. Clad in custom cast-concrete blocks that celebrated a roughness of finish, it presented a decided contrast to the smooth brick walls of the earlier buildings (**figure 9**). It is this rugged surface texture that characterizes Brutalism, as well as machine-made materials, sealed windows, and "a varied composition of differing forms, shapes, and textures."[37] Popular in the 1960s, Brutalism, like the International Style before it, eschewed historical details and emphasized contemporary technology — though in the Brutalist idiom the simple boxes of the International Style were superseded by irregularly planned and massed buildings, allowing for flexibility of interior planning while still using cost-effective materials.[38] In 1967, Dr. William Tamblyn, president of Lakehead University, told the press: "We have been most conscious of developing a functional design without the frills of some recent university projects across Canada.... But we have also been aware of the need for beauty, impression and lasting design ...." In conclusion, he stated: "A university is not merely a collection of buildings. The buildings are only the framework for the important main purpose, the extension of knowledge through study and research."[39]

The Centennial Building's custom concrete blocks have a distinctive shape, square with truncated corners. Architect Macy DuBois described them as *virile*: "We try to use unpretentious materials in ways which increase their impact."[40] The use of concrete blocks, precast concrete beams and panels, and interior ceilings covered with standardized aluminum strips was indicative of a "tough budget," though employing them accorded with DuBois' belief that "Materials and standards of finish must be economical and hard-wearing to withstand the battering of generations of boisterous students."[41]

On the exterior, a cantilevered open balcony fronts the president's office, providing a dramatic alteration in the flow of the building's lines as well as a focus for the water-side facade (**figure 10**). By contrast, the street-side facade is solid, except for small windows arranged in projecting bays (**figure 11**). With its large-scale textured wall surfaces and window and balcony projections, the Centennial Building asserted

35 *Lakehead University Development Plan*, recommendation no. 10.

36 Macy DuBois, "Cold Climate Campus: Centennial Building, Lakehead University, Ontario," *The Canadian Architect* 25, no. 12 (December 1970): 46-52. The firm, with Macy DuBois as the partner in charge of design, also produced plans for Lakehead's power house and the information kiosk at the Oliver Road entrance.

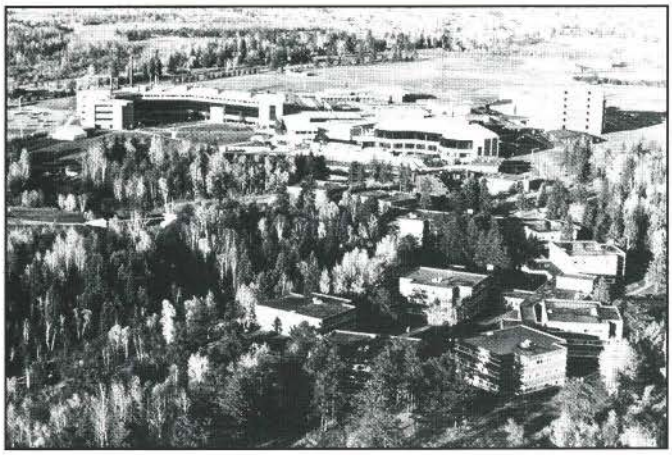
37 John Blumenson, *Ontario Architecture: A Guide to Styles and Building Terms, 1784 to the Present* (Toronto: Fitzhenry & Whiteside, 1990), 237.

38 Leslie Maitland, Jacqueline Hucker, and Shannon Ricketts, *A Guide to Canadian Architectural Styles* (Peterborough, Ont.: Broadview Press, 1992), 185-91.

39 "University Grows at Fast Pace," *The Times Journal*, Fort William, 28 March 1967, 2.

40 "Macy DuBois," *Contemporary Architects*, ed. Muriel Emanuel (New York: St. Martin's Press, 1980), 217.

41 Leon Whiteson, *Modern Canadian Architecture* (Edmonton: Hurtig, 1983), 141.



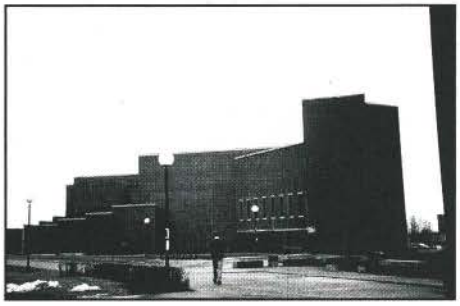


Figure 12 (top left). Aerial view of Lakehead University, showing the dominant Centennial Building (centre), c. 1985; in the foreground are dormitories. (Lakehead University Archives, Chancellor Norman M. Paterson Library)

Figure 13 (top right). The "Agora" in the Centennial Building. (P. Vervoort, 1997)

Figure 14 (above). The Ryan Building, Lakehead University, Thunder Bay, Ontario, completed in 1971; Fairfield & DuBois, architects. (P. Vervoort, 1997)

itself as the dominant building on campus (**figure 12**). Even today, photographs of the Centennial Building are used for promotional purposes by the university; in fact, it is the only building shown from the exterior in the university's current promotional literature.

In plan, the Centennial Building forms a large angular U-shape. Wide first-floor hallways with floor-to-ceiling glass maximize the view toward the river and the hills beyond; the upper floors have narrower hallways. Inside are classrooms, laboratories, cafeterias, the university's administrative offices, and the Agora, a multi-storey interior open space that has become the favoured site for indoor university activities (**figure 13**). Overall, the Centennial Building's spacious plan and massive bulk present an appearance decidedly different from that of the earlier campus buildings.[42] The Centennial Building, then under construction, was illustrated in "Project '68" of *The Canadian Architect Yearbook*, for which 33 buildings were selected from 250 submissions.[43]

Other works by DuBois demonstrate that the design of the Centennial Building combined elements he had already used elsewhere. For example, three schools in metropolitan Toronto feature elements recognizable in the Centennial Building: mass-produced materials, horizontal massing, and multi-storey interior gathering spaces. The metal strip ceilings and concrete block walls were used by DuBois in his Albert Campbell Library in Scarborough. The free-standing square piers so prominent in the interior of the Centennial Building, constructed of concrete blocks turned at a forty-five-degree angle to the wall grid, were previously explored by DuBois in his Dow Corning building, completed in 1965. Here, too, he used precast concrete panels and a distinctive angular U-shaped plan.[44] These same panels were used by DuBois on the Centennial Building around its roofline, on the exterior of the president's office, and on the inside and outside of the Senate Chambers. His proficiency in organizing mass-produced and economical materials into distinctive forms has resulted in recognizable "DuBois" buildings.

In 1971, Fairfield & DuBois completed the Ryan Building (**figure 14**) to accommodate the Faculty of Arts. Situated beside the library and opposite the Braun Building, the Ryan Building brought the massing and materials of Brutalism to the opposite side of the main campus. Complicated in design, the varied shapes visible on the exterior only hint at the plan of the interior. From the parking lot, the Ryan Building appears as two rectangular blocks, with windows arranged in horizontal bands to echo the flat roofs; this area contains faculty offices.The sloping metal roof of the facade closest to the main campus covers a large auditorium. Between the auditorium and offices are classrooms, most of which are triangular in shape. Glass was used sparingly in the Ryan Building, located away from views of the river and Lake Tamblyn. The classrooms have no natural lighting, which proves awkward for the use of chalkboards or audio-visual equipment, and overall it is dark and closed-in, especially the hallways.

During the rest of the 1970s and throughout the 1980s there was no new construction at Lakehead, despite increasing enrolments. By the time new construction began again, in 1990, the prevailing style of architecture had changed to Post-Modernism. Significantly, the new buildings of the early 1990s were sited independently of the master plan, heeding none of its recommendations to acknowledge the form and function of existing buildings, to minimize overdevelopment, or to respect scale.

42 "Official Ground Breaking Ceremonies for the LU Science and Technology Complex," *The News Chronicle*, Port Arthur, 31 March 1967, 1. The ground-breaking ceremony was also different because it entailed a blast of dynamite.

43 "Project '68: Lakehead University Centennial Building, Ont.," *The Canadian Architect Yearbook* (1967): 66. In 1964, Fairfield & DuBois won two Massey Medals for Architecture for the designs of the Oxford University Press building in Don Mills and the Central Technical School Art Centre in Toronto. See *Massey Medals for Architecture 1964* (Toronto: Royal Architectural Institute of Canada, 1964), 47-48.

44 Whiteson, 136-47.

Figure 15 (above). The Centre for Northern Forest Ecosystem Research, Lakehead University, Thunder Bay, Ontario, completed in 1990; Kuch and Stephenson, architects. (P. Vervoort, 1997)

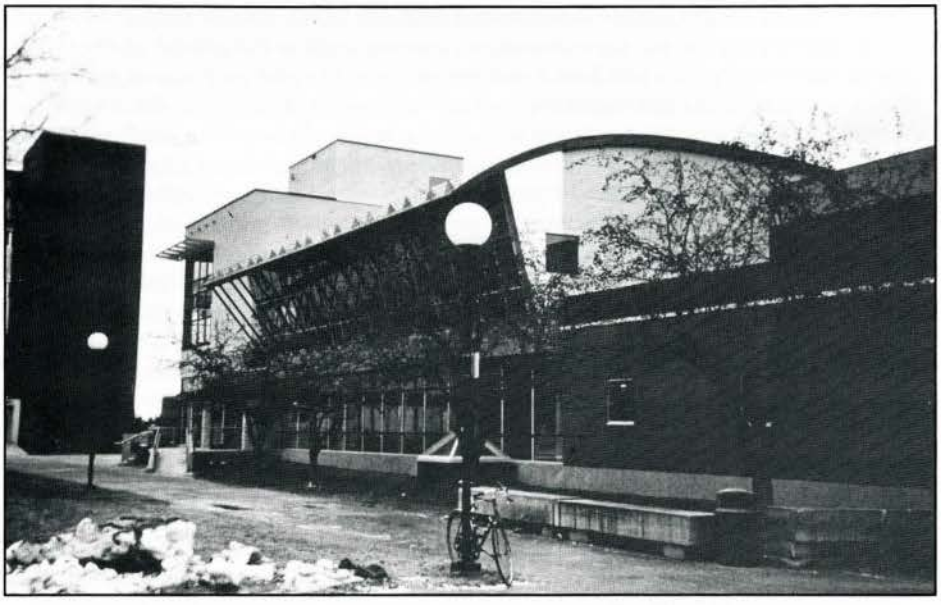


Figure 16 (below). The Regional Centre and the Lakehead University Student Centre, Lakehead University, Thunder Bay, Ontario, completed in 1991; Tett and Landy, with Carley & Phillips, architects. (P. Vervoort, 1997)

POST-MODERNISM AND THE 1990s

Architectural Post-Modernism is defined by Charles Jencks as "double coding: the combination of Modern techniques with something else (usually traditional building)."[45] Post-Modernism at Lakehead University reintroduced colour and fanciful shapes, as exemplified in the Centre for Northern Forest Ecosystem Research, which was a cooperative effort between Lakehead University and the provincial ministries of Colleges and Universities and Natural Resources (**figure 15**). Officially opened in October 1990, this small, low building by John K. Stephenson of Kuch and Stephenson, Architects, echoes the International Style in its basic form; the "something else" includes a triangular-shaped skylight running the length of the building and an analogous triangular glass projection forming the street entrance, a portico supported by red columns, and two different colours of brick— yellow and red — arranged in geometric designs. Some of the building's ventilation equipment on the roof is partially concealed by brightly-coloured green metal sheets angled to echo the skylights. Though the Centre is small, its design elements are readily visible.

The Forest Ecosystem Research buildi ıg stands out from its surroundings, proclaiming itself totally independent of its neighbours. Its placement beside the library's tall service module is distracting, and ended any possibility of enlarging the library as originally envisioned.[46] The Centre is obviously a box that has been altered, but altered with a precision of proportion: the architect clearly treated the building as a work of art.[47]

45 Charles Jencks, *What is Post-Modernism?* (New York: St. Martin's Press, 1986), 14.

46 "Local Architects Designing Biology Centre," *The Chronicle-Journal,* Thunder Bay, 30 January 1987, 3, also states the architects were "working out the site selection for the building." An unexpected delay in construction resulted when the digging equipment encountered an old septic tank; the diagrams of below-ground piping given to the architects indicated nothing under this site. See also n. 16.

47 Carol Moore Ede, *Canadian Architecture 1960/70* (Toronto: Burns & MacEachern, 1971), 6.

Anthony Jackson blames this self-centred attitude on Le Corbusier's claim that "his buildings as autonomous works of art were equal to those of Picasso and Brancusi."[48] This attitude persists: a recent example is Avi Friedman's criticism of architectural education, wherein, he says "the emphasis on design projects is to produce an *objet d'art*."[49] The Forest Ecosystem Research Centre would best be seen without any other buildings near it; as-is, this *objet d'art* is not autonomous.

In September 1991, two more new buildings opened in the middle of the main campus, the Regional Centre, a classroom building, and the Student Centre, boasting the biggest bar (officially, "the largest dance floor"[50]) in Northwestern Ontario (**figure 16**). Built to connect with the University Centre, these buildings are situated opposite the Braun Building and the Forest Research Centre, which means that each of its neighbours has a different colour, roofline, and massing. The Regional Centre and Student Centre, designed by architects Tett and Landy in joint venture with Carley & Phillips, were included in the exhibition *New Directions in Ontario Architecture*. To quote the exhibition catalogue,

> the challenge of the project was to satisfy two clients and design two programmatically and spatially different buildings, giving each a separate identity while connecting them with common architectonic elements. Making pleasant circulation spaces was given design priority in response to the existing campus solution of underground tunnels and hallways buried within the existing buildings.[51]

These are obviously two separate buildings, as the general shapes, rooflines, and materials indicate, but they also share common walls at the ground and below-ground levels. Both have small enclosed entrances on the east side, placed side by side, to emphasize the fact that there are two buildings. The shared walls of both are clad in red brick, whereas the upper walls of the Regional Centre are smooth planes of yellow brick. Wrap-around windows on two floors emphasize the origins of the design in the International Style, brought up-to-date with colour and a projecting horizontal screen over part of the two-storey window wrap. This screen is not merely an adornment; it prevents snow and ice from falling to the busy sidewalk below. The south side of the Regional Centre has windows that form part of the wall screen, as in International Style buildings, but also sports the "punched" windows with deep surrounds found in Post-Modern buildings. On the first-floor, a glassed-in hallway brings in natural light and solar heat, but also has protruding V-shaped posts between the glass panels to interrupt the smoothness of the wall. On the west side, the two upper floors project in a triangular shape reminiscent of the Forest Research Centre, but the effect is less dramatic as this projection is composed primarily of black aluminum panels and only partly of glass. The Regional Centre provides 29,500 square feet of new classrooms and offices.[52]

The Regional Centre illustrates the "form follows profit" principle bemoaned by architect Richard Rogers, who wrote that "design skill is measured today by the architect's ability to build the largest possible enclosure for the smallest investment in the quickest time."[53] A similar argument espouses "adherence to fiscal responsibility"; that is, budgetary concerns are always uppermost and therefore architects should heed their clients and design accordingly.[54] In fact, Dana Cuff has cited a survey carried out by *Building Design and Construction* that ranked the requirements of clients when hiring architectural firms. First-ranked was the "ability to complete on budget and ability to make the building function," whereas "aesthetic quality ranked tenth."[55] These arguments related to architectural practice are not unique to Lakehead University, but can be said to characterize contemporary architecture in general.

The Student Centre, directly opposite the colourful wall of the Braun Building, boasts green and silver aluminum siding, black aluminum siding at the rear, red brick with stripes of black brick on the front, tinted glass, and black steel beams to produce another medley of colours and textures. The green metal-clad roof is supported by nine 82-foot-long steel girders,[56] its curved shape contrasting with the flat roofs of the surrounding buildings. This roof encloses a two-storey events hall that features a dance floor and stage surrounded by a bar, with seating on two levels; the mezzanine is suspended. Inside and out, aluminum siding is the material of note. Below ground-level are the offices of the Lakehead University Student Union (LUSU), which commissioned the building and for which all students pay a special building fee as part of their student activity plan.[57] A small glass pyramid, *à la* I.M. Pei's Louvre pyramid, sits forlornly next to the facade and brings daylight to the tunnel and main office of

48 Anthony Jackson, *The Future of Canadian Architecture* (Halifax: Nova Scotia Technical College, 1979), 18.

49 Avi Friedman, "Architectural Education and Housing," *The Canadian Architect* 37, no. 10 (October 1992): 37.

50 "The Long Wait is Over – Student Centre Opens," *Lakehead University Agora* 8, no. 10 (November 1991): 1. The $3.75 million building opened 30 October.

51 Larry Richards, Michael Sorkin, Loretta Yarlow, and Cameron C. Ridsdale, *New Directions in Ontario Architecture: A Juried Exhibition of Buildings 1989-1991* (Don Mills, Ont.: Ontario Association of Architects, 1993), 60-61.

52 " 'Regional Centre' Opens," *Lakehead University Agora* 8, no. 11 (December 1991): 3. Total cost of the Regional Centre was $5.4 million; $3.5 million was provided by the provincial Ministry of Colleges and Universities, the remainder by the Lakehead University Partners' Campaign Building Fund.

53 Richard Rogers, *Architecture: A Modern View* (New York: Thames and Hudson, 1992), 20.

54 Jim Kaulbach, "Perspectives: Letters," *The Canadian Architect* 35, no. 11 (November 1990): 6.

55 Cuff, 55.

56 "On the Beam," *The Chronicle Journal/The Times News*, Thunder Bay, 18 November 1990, A3.

57 LUSU president Ian Middleton commented on the $2.5 million building's fundraising: "We have students on this campus now whose parents were probably in the conceptual phase" of the building. "Two New L.U. Buildings," *The Chronicle Journal/ The Times News*, Thunder Bay, 7 July 1990, A3. The minutes of the Executive Committee of the Board of Governors for 30 March 1972 record their decision to rescind a motion of 20 May 1971 that proposed — and, in fact, started collecting — an additional five-dollar fee from each student "for the purpose of building a student union centre."

Figure 17. The Health Sciences Resource Centre, Lakehead University, Thunder Bay, Ontario, completed in 1991; Peterson & Habib, architects. (P. Vervoort, 1997)

LUSU below. The overall shape of the Student Centre was selected by the LUSU clients, and, if rumour holds true, is modeled on a bar near the University of Waterloo — a bar situated in a former Safeway store, hence the curved roof. As built, the Student Centre is very different looking than the sketches publicized by LUSU in 1989, which indicated a continuation of the Centennial Building's shapes and materials.[58] When the Centre was finished, the Student Union president complained that it was "built under the bare minimum philosophy."[59] The Student Centre and the Regional Centre, like the Braun Building across the walkway, are "no frills" structures.

As the Regional Centre and the Student Centre were nearing completion in 1991, there was discussion again among members of the Board of Governors concerning the overall planning and construction of campus buildings, with a plea from one member to establish design policies. Significantly, the university was urged to plan ahead, as "all construction is subject to financial and time constraints."[60] In response, a memo from the Campus Development Committee to the Board in March 1992 stated that "it was within the mandate of the Campus Development Committee to be responsible for change and development of the campus, and that it should obtain other professional assistance as it deems necessary."[61] As this memo made perfectly clear, the Campus Development Committee understood no reason to have design or planning advice. Thus, with this philosophy, the Campus Development Committee ensures that any future construction is likely to be of the mix-and-match variety.

HEALTH SCIENCES RESOURCE CENTRE

The Health Sciences Resource Centre (**figure 17**) was designed by Ahsanul Habib of Peterson & Habib, Architects, and located away from the central campus, next to the Balmoral Street entrance. Opened in September 1991,[62] it was a joint venture project funded by the provincial Ministry of Health with cooperation from the Ministry of Colleges and Universities and Lakehead University."[63] Housed here are the health care programs offered cooperatively by McMaster University and Lakehead University. The white brick building, startlingly bright in the sunlight, is deceptively simple in form because the overall plan is not immediately perceptible. Architectural projections, compared by some to "flying buttresses without the arch," lead the eye to the entryway but also mask the building's two flat-roofed boxes arranged in an L-shape. The tinted windows in black aluminum frames are arranged in modular sections to contrast with the white brick walls. On the facade, glass blocks are organized in a zigzag pattern to provide visual interest as well as bring light into the two-storey lobby. The stark contrast of the white and black building materials, the flat walls and roofs, and particularly the extensions of the walls into the landscape recall th · John F. Kennedy Library in Boston, by I.M. Pei (1964-79).[64]

The Health Sciences Resource Centre, like all the other buildings on the Lakehead campus, was constrained by its budget. Bruce Wing, speaking for the contractors, A. J. Wing and Sons, stated: "Design and construction had to be carefully

58 "Your Student Centre," brochure, LUSU, 1989.

59 Trish Hennessy, "Not All is Rosy at LU as School Year Starts," *The Chronicle-Journal*, Thunder Bay, 3 September 1991, 15.

60 Letter, Annette Augustine to Robert Paterson, chair, Board of Governors, 29 July 1991. For similar arguments and a discussion of Lakehead University as a role model of architecture and planning for students in Northern Ontario, see P. Vervoort, "The Built Environment: Arguments for a Positive Vision," in *The Role of Circumpolar Universities in Northern Development: Proceedings of the First Annual Conference of the Association of Circumpolar Universities, November 24-26, 1987*, Occasional Paper No. 4 (Thunder Bay, Ont.: Lakehead University, Centre for Northern Studies, 1991), 115-21.

61 Memorandum, John O'Brien, chair, Campus Development Committee, to the Board of Governors, 6 March 1992.

62 "Health Sciences Resource Centre Opens," *Lakehead University Agora* 8, no. 9 (October 1991): 4.

63 *Lakehead University, 1997-1998 Calendar*, 9.

64 Carter Wiseman, *I.M. Pei: A Profile in American Architecture* (New York: Harry N. Abrams, 1990), 92-119.

coordinated using the design build project management system in order to maximize building quality while maintaining minimum costs in the limited amount of time."[65] What distinguishes this building from the others on campus, however, is the relationship of its design to its site. Isolated, its simple forms and stark colouring are enhanced by the surrounding landscape of lawn and trees in the summer; the snow in winter calls attention to the black glass. "Like the medical profession," a local reporter wrote, "the design is dominated by impressions of cleanliness and innovation. White brick, panoramas of black and white glass, and white brick archways thrusting out like compass points, exemplify what's going on inside the Centre, and beyond."[66] The Health Sciences Resource Centre, unlike any other building on campus, utilizes the Northern Ontario landscape for the benefit of both building and setting.

CONCLUSION

The campus of Lakehead University evolved slowly over the past 40 years. Its buildings, constructed in three major building campaigns and in three different architectural styles, display a variety of colours, materials, and rooflines. These buildings are evidence of the changing tastes and preferences in contemporary architecture. Thus, the appearance of the campus at Lakehead University can be explained by the interaction of three factors.

First, two decisions made in the initial stages of the development of Lakehead University had lasting repercussions on all subsequent decisions. The first decision, for a bare-bones, "no-frills" architecture for the Braun Building, set the tone for all that was to follow, an approach mandated by the necessity to raise funds locally in a have-not area of the province. In addition, the original building was constructed for the Lakehead Technical Institute and not for a university, thus restricting the amount of government funding available. The second decision, to create pedestrian tunnels, meant the siting of individual buildings, especially those on the central campus, would depend on having access to these tunnels. It is for this reason that the central campus appears to be crowded. It is significant that these decisions occurred *before* Lakehead was a university.

Second, architectural practice includes all the steps between an architect being commissioned to design a building and a client accepting the finished building. It was the client who determined the siting of the individual buildings — and therefore their relationship to one another — and the details of form and finish for each building. These elements are usually determined, at least in part, by an overall plan. The master plan created for Lakehead University in the mid 1960s was intended to cover developments until enrolment reached 10,000 students, a level not yet achieved. Circumstances throughout most of the 1970s and 1980s caused a hiatus in building activity on the campus, and when new construction began again in 1990, the master plan was forgotten.

Third, the individual buildings clearly demonstrate that different architects were involved and that their tastes and preferences changed in response to the changing concepts of "style" over a span of 40 years. Even the Braun Building, the separate parts of which were designed by the same firm, illustrates that architecture is not static. Thus, a diversity of materials and rooflines on the campus was evident from the beginning. Each succeeding architect attempted to leave an individual architectural statement behind; this is especially evident along the pathway from the library to the Centennial Building. There is no coherence or unity, a situation for which the public blames the architect and the architect blames the client. The campus today represents an architecture of compromise — of architect and client versus time and money, with the added considerations of a northern location and no adherence to planning guidelines. Thus, Lakehead University's campus speaks to major trends, ideas, materials, and forms found in contemporary Canadian architecture over the last 40 years.

65 Larry Sanders, "The Health Sciences Resource Centre," *Thunder Bay Magazine* 10, no. 1 (February/March 1992): 8.

66 *Ibid.*

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