RACAR : Revue d'art canadienne
Canadian Art Review

Transportation Architecture in Canada

Report on the Third Annual Meeting of the Society for the Study of Architecture in Canada, Fredericton, New Brunswick, 14 — 16 June 1977

Harold Kalman

Volume 4, Number 2, 1977

URI: https://id.erudit.org/iderudit/1077360ar
DOI: https://doi.org/10.7202/1077360ar

See table of contents

Publisher(s)

UAAC-AAUC (University Art Association of Canada | Association d'art des universités du Canada)

ISSN

0315-9906 (print)
1918-4778 (digital)

Explore this journal

Cite this note

Kalman, H. (1977). Transportation Architecture in Canada: Report on the Third Annual Meeting of the Society for the Study of Architecture in Canada, Fredericton, New Brunswick, 14 — 16 June 1977. *RACAR : Revue d'art canadienne / Canadian Art Review*, *4*(2), 95–98. https://doi.org/10.7202/1077360ar

Transportation Architecture in Canada

Report on the Third Annual Meeting of the Society for the Study of Architecture in Canada Fredericton, New Brunswick, 14 — 16 June 1977

The Society for the Study of Architecture in Canada met as a part of the Learned Societies Conferences, as has been its custom since inception. The theme of the meeting, *Transportation Architecture in Canada,* was chosen to increase members' awareness of the vital rôle that transportation systems and structures have played in the development of Canada and its buildings. "Architecture" was interpreted in its broadest sense to refer to any and all aspects of the built environment. No chronological limits were imposed upon the participants, and so papers dealt with subjects ranging from the eighteenth century into the future. Individual sessions concentrated on the four principal modes of travel: rail, air, road, and water. Lynne D. DiStefano, Brescia College, London, served as programme co-ordinator.

FIGURE 1. Canadian Pacific Railway Station, Berthier Junction, Quebec, ca. 1892. Montreal, Canadian Pacific Corporate Archives.

RAIL TRANSPORTATION *Harold Kalman, Chairman*

Christopher Andreae, a museology student at the University of Toronto, began with *The Influence of Engineering on Canadian Railway Design.* He showed how the economics of construction and available technology determined the various elements of railway design, referring specifically to trackage, stations, and bridges. Interesting contrasts were made with respect to the differences between the high standards of British design and the American method of light initial construction, and between the approaches of architects and engineers.

This last theme was taken up by George Richardson, Associate Professor of Engineering at Queen's University, who spoke on *Frederick William Cumberland: Railroad Engineer, Part-time Architect.* He noted the familiar architectural career of Cumberland (1821–81), and then discussed his deep involvement with the construction of the Northern Railway connecting Toronto with Collingwood.

David Van Zanten, Associate Professor of Art History at the University of Pennsylvania, offered a paper *(in absentia)* on *The Victoria Bridge.* Designed for the Grand Trunk Railway by British engineers Robert Stephenson and Alexander Ross to cross the St. Lawrence River at Montreal, the Victoria Bridge (1852–59) was the longest in the world. Van Zanten suggested that the bridge should be judged not as a static work of "art," but dynamically as a part of the speed and relentless progress of the railway.

Turning from a bridge to a tunnel, Wanda Idyll, Teaching Master at St. Lawrence College, Brockville, introduced *The Oldest Railway Tunnel in Canada*. She told how the Brockville Tunnel was built beneath the town in 1854–60 by the Brockville and Ottawa Railway, and showed some of the peculiarities of its construction.

Rolling stock was introduced by James Shields, Assistant Supervisor of Corporate Archives with Canadian Pacific, Montreal. He spoke on *Castles and Cinders: An Overview of Canadian Pacific's Wooden Passenger Car Design*, describing the kinds of cars used on the Pacific Express at the end of the nineteenth century. Shields referred specifically to developments in the design of their seats, ornamentation, sanitary facilities, heating, and lighting.

Railway stations comprised the subject of two papers. *An Historical Appraisal of Canadian Pacific Rural Stations* was offered by Omer Lavallée, Corporate Archivist at Canadian Pacific. He surveyed the kinds of stations that were built or inherited by the Canadian Pacific Railway before 1900, many of which were erected to standard designs, and illustrated them with contemporaneous photographs by engineer Joseph Heckman and others (Fig. 1).

Mathilde Brosseau, an architectural historian from Chambly, Quebec, presented *Le dessin des gares du Grand Tronc, des années 1850 aux années 1920*. Beginning with the Montreal-to-Toronto line completed in 1858, she showed the types of stations built along each of the Grand Trunk's divisions. She explained their sources in stations and other buildings of Britian, the U.S., and Canada. Brosseau concluded by discussing a number of major terminals, culminating in Toronto's great Union Station (1913–27).

Alan Gowans, Professor of History in Art at the University of Victoria, presented a paper *(in absentia)* on *The Social Function of Château-Style Railway Hotels*. He explained that the models for the Canadian hotels were buildings such as St. Pancras Hotel in London that constituted a metaphor of the British Empire. The Château Frontenac and Empress Hotel, he suggested, were deliberately sited to obscure symbols of Canada's French past and make a statement of English dominance.

The next paper turned from buildings erected by the railways to the effect of trains upon architecture in general. John Bland, Macdonald Professor of Architecture at McGill University, delivered a paper entitled *Overnight Trains to Boston and New York make Montreal "American."* He showed how the introduction of fast overnight trains brought American architects and American influences to Montreal, causing vast changes to the commercial architecture of the city.

Conservation was discussed next. Peter B. Waite, Professor of History at Dalhousie University and former chairman of the Historic Buildings Committee of the Historic Sites and Monuments Board of Canada, explained the criteria by which the Board considered the architectural and historical significance of railway stations, and cited the twenty-one stations recently recommended for commemoration as National Historic Sites. He introduced his talk as *A Cross of Stations*.

Moving from the general problem of conservation to a specific case, Toronto architect George Baird addressed the meeting on *Rescuing Toronto's Parkdale Station*. He described how the Canadian National Railways station was recently moved to a new site in an effort to ensure its conservation.

A glimpse into *Passenger Rail Transportation of the Future* was offered by Morley L. Smith, Jr., industrial designer and Vice-President of Jacques Guillon Designers Inc. of Montreal. Smith showed his firm's design for the interior of new passenger cars, soon to be built, and explained the criteria that were used in developing the design. He concluded by describing a novel type of taxi proposed by the firm.

AIR TRANSPORTATION *Michael McMordie, Chairman*

Buildings erected for the use of airplanes and passengers provided the topic for the next session. Paul Stumes, an engineer for Restoration Services, Parks Canada, Department of Indian and Northern Affairs, Ottawa, described the cheap, utilitarian *Air Hangars of World War II* developed by the Defence Department. The hangars' large spans were permitted by Warren trusses built up from low-grade timbers, with joints strengthened by split-ring connectors. Frame walls were covered by asbestos shingles. The hangars not only served their purpose well, but many promise a long useful life span ahead.

The president-elect of the Society for the Study of Architecture in Canada, Michael McMordie, Associate Professor of Architecture at the University of Calgary, spoke on *The First Aeroquay: Terminal 1, Toronto International Airport*. He introduced the work of the firm of Parkin Associates (and described the contents of the Canadian Architectural Archive at the University of Calgary). Turning his attention to Toronto's Terminal 1, McMordie showed the de-

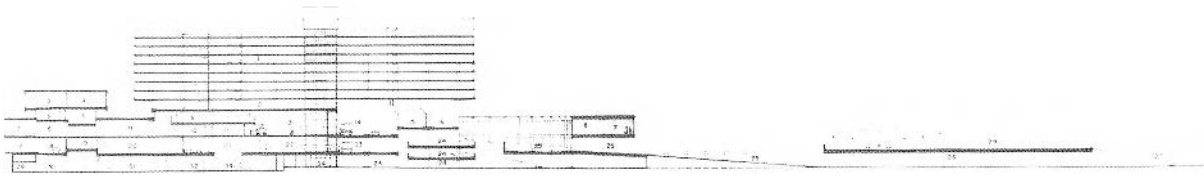

FIGURE 2. John B. Parkin Associates, Terminal 1, Toronto International Airport, Section. Canadian Architectural Archive, University of Calgary.

velopment of the design during its early stages in 1957 (Fig. 2), and cited criticisms of the building upon its opening in January 1964.

Two architects deeply involved in airport design concluded the session. L. Frederick Valentine, an architect with the Parkin Partnership, Toronto, offered ideas *Towards Developing Design Criteria for Contemporary Terminals*. He suggested that terminal facilities may either be clothed in the vernacular of the place and time (as was Terminal 1, Toronto), or may express popular views of air travel (as in the TWA Terminal at Kennedy Airport, New York). He described his firm's proposed terminal at Logar, near Kabul, Afghanistan, showing the design response to the particular functional problems and contextual conditions.

Peter Haley, an architect and planner with International Airport Consultants of Montreal Ltd., gave a presentation entitled *Mirabel Terminal: Principles of Design and Subsequent Influence*. He showed how the programming factors for Mirabel led to its "detached gate" concept and its simple appearance, and then discussed how well the building functions as a terminal and succeeds as architecture.

ROAD TRANSPORTATION *George Baird, Chairman*

The significance of the road as a part of the built environment was emphasized by John van Nostrand, an architect with the Ministry of Housing, Government of Ontario, Toronto, in his paper *On the Nature of the Road*. He explained the design and development of road patterns in the Pickering area (east of Toronto) from the first survey in the 1790s until the present. He showed the rôle of the road in the determination of settlement patterns and argued its importance as a symbol of political ideology.

The Preservation of Heritage Bridges was discussed by Jacques Beauchamp, Chief Bridge Engineer for the Department of Public Works, Ottawa. Beauchamp offered a set of criteria for determining the significance of older bridges, and described his department's rehabilitation of the metal Alexandra Bridge (1900) and a stone arch of the Chaudière Bridge (ca. 1830), both of which link Ottawa with Hull.

George Baird delivered a paper on *The Road: Geometry, Tenure, and Circulation*. In many respects continuing a theme begun by Van Nostrand, Baird showed the evolution of the geometry of settlements from the orthogonal grid to the form of today's regional road systems. He explained the mechanisms of "subdivision" and "assembly," and ended by discussing shifts in circulation patterns from early-twentieth-century street railways to the present hierarchies of road systems.

WATER TRANSPORTATION *Pierre de la Ruffinière du Prey, Chairman*

The meeting ended with a session on water transportation, a theme particularly appropriate for a conference in the Atlantic Provinces. Leslie Maitland, assistant architectural analyst with the Canadian Inventory of Historic Building, Parks Canada, Ottawa, described and analyzed *The Rideau Canal* (1826–32). She evaluated the canal structures as monuments of architecture, explained the characteristics of surviving engineering drawings, and discussed the perception of the canal by contemporaneous landscape painters.

Edward F. Bush, a researcher with the National Historic Parks and Sites Branch, Parks Canada, Ottawa, gave an historical survey of *The Canadian Lighthouse*. He described the different kinds of lighthouses and lights, and then discussed a selection of important lighthouses from coast to coast (Fig. 3).

Seaboard Structures on the Fundy Shores were illustrated and described by Mary Peck, a research historian with the Historical Resources Administration, Province of New Brunswick, Fredericton. She showed boats and buildings in a number of parts of the Bay of Fundy, and concluded with a detailed examination of the buildings of Deer Island, New Brunswick.

Some of the papers presented at the meeting may eventually be published as articles in **racar** and other periodicals. Abstracts of ten of the papers are available for $.25 (plus postage) from the Society for the Study of Architecture in Canada, P.O. Box 2935, Station D, Ottawa, Ontario K1P 5W9.

H.K.

FIGURE 3. Lighthouse, Green Island, Quebec, 1809 (Photo: Public Archives of Canada).