The Montreal Metro: Integration of Art and Architecture

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ABSTRACT

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In a lecture in 1951, A.C. Sewter proposed three relationships by which to consider the integration of painting and architecture of the past. This paper shows that these relationships -- art subordinated to architecture, art and architecture in equilibrium and art dominating architecture -- still provide a valid framework by which to consider the integration of art and architecture in typical stations of Montreal's subway system.

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LIST OF ILLUSTRATIONS

The illustrations are of details of stations of the Montreal Metro (1966-1978) discussed in this paper. Figures 2, 3, 4, 11, 12, 13, 14, 15 and 16 have been drawn after, or adapted from, photographs appearing in undated material published by the Metropolitan Transport Board of Montreal. The remaining illustrations are original. In the interests of concision, here, as elsewhere in the text, the word "station" has generally been omitted after each of the station names, e.g., "Verdun station" is written simply as "Verdun".

INTRODUCTION

1. The Pertinent Literature

As would be expected, the literature concerning Montreal's subway system is, like the Metro itself, scarcely twenty years old. The initial writing can be said to start with the development of the underground commercial passageways in downtown Montreal. An article by Norbert Schoenauer entitled "The New City Center" in Architectural Design exemplifies this early concern.[1] That ten years later interest had not waned can be seen from an article by Allen Freeman published in 1977.[2] Integration of the Metro into this core had already been indicated by Michel Barcelo ten years earlier.[3]

The important stimulus given by the construction of Place Ville Marie to the development of the underground passageways was underlined in an important article in Architectural Forum in 1963.[4] Accompanied by twenty

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[1] Norbert Schoenauer, "The New City Centre, Architectural Design, vol. 37 (July 1967), 310-323.

[2] Allen Freeman, "In Montreal, promenades weave multi-use developments into an integrated core", Journal of the American Institude of Architects, vol. 66 (Sept. 1977), 38-41.

[3] Michel Barcelo, "Montreal Planned and Unplanned", Architectural Design, vol. 37 (July 1967), 306-309.

[4] Architectural Forum, vol. 118 (Feb. 1963), 74-89.

illustrations, maps and elevations, the article described the site, the additional space made available and the building's effect in "solidifying Montreal's position as Canada's commercial capital". Since this time, Place Ville Marie has continued to be singled out as the cornerstone of the new development, as in Jean-Claude Marsan's Montréal en évolution[5].

In the eyes of Kenneth Frampton[6] and Reyner Banham[7], subsequent projects, especially Expo 67, placed Montreal as well as Canadian architects in an international context. With enthusiasm the city was described by Architectural Forum as the "first twentieth century city in North America".[8]

The development of Montreal's Metro was sometimes placed in the context of issues such as the link between transportation and urban form. Architectural Forum's title "Transit's Power to Shape a Region" gives an idea of the trend of this argument, the article drawing the conclusion that urban development significantly follows the lines of mass transfers system.[9]

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[5]Jean-Claude Marsan, Montréal en évolution (1974), 2nd ed.; Montreal: Fides, 1976.

[6]Kenneth Frampton, "Place Bonaventure, Montreal", Architectural Design, vol. 38 (Jan. 1968), 33-42.

[7]Reyner Banham, Megastructure, Urban Futures of the Recent Past, London: Thames & Hudson, 1976, ch. 6.

[8]Architectural Forum, vol. 128 (Jan. 1968), 47-85.

[9]Ibid

This same issue provided a comparison of various subways around the world while Donn Emmons in his article "Designing A Brand New System" stressed the need to maintain aesthetic ideals even in the midst of considerable engineering problems.[10] The general conclusion was that Montreal's was "the best subway system in North America and the one to which all others (had) henceforth to measure up".[11] By comparison, Toronto's was a dismal affair as Gretton pointed out.[12]

With few exceptions, articles appearing in the newspapers -- and these have been many -- have dealt only with questions of security such as fire prevention[13] and attempted suicides[14], costs (by far the most numerous and often repetitive)[15] and work stoppages.[16]

No doubt because, apart from Peel Station, the integration of art in the architecture of the metro was an after-thought, little writing appeared on this aspect

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[10] Don Emmons, "Designing a Brand New System", Journal of the American Institute of Architects, vol. 45 (May 1966), 56.

[11] Architectural Forum, Op. cit., p. 70.

[12] Robert Gretton and Norman Slater, "Montreal Metro", Canadian Architect, (Feb. 1967), 27-34.

[13] Le Devoir, Jan. 9, 1975.

[14] Le Devoir, June 18, 1974.

[15] For example: Le Devoir, Feb. 21, April 23, July 17 and July 25, 1975.

[16] Le Devoir, June 25 and Aug. 23, 1974.

of the metro in its early years. But as Montreal's Metro came to be defined in contrast to those of other cities, it has been increasingly presented as a model for other subway projects.[17] At the same time its characteristic presence of artworks in the public eye has gained attention. Guy Robert's inclusion of a small section on art in the Metro in his book L'art actuel au Québec (depuis 1970) is an eloquent example of this interest.[18] By the time the second series of Metro stations was built, the notion of art in the subway tended to be regarded as a fact of life. An article by René Viau published in 1979 seems to assume this attitude.[19]

However, when the Journal of the American Institute of Architects awarded its 1977 medal to the Montreal Metro in recognition of its integration of several disciplines related to architecture, no mention was made of the collaboration of artists and architects. Rather, the journal cited "the combined efforts of architects, engineers, interior designers, graphic designers and transportation planners in producing a system that is efficient, convenient and pleasant to use.[20]

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[17] Architectural Forum, Op. cit., p. 70.

[18] Guy Robert, L'art actuel au Québec (depuis 1970), Mont Royal (Qué.): Iconia, 1983.

[19] René Viau, "Un métro sans graffiti", Vie des Arts, No. 94 (Spring 1979), 16-21.

[20] Journal of the American Institute of Architects, vol. 66 (July 1977), 28.

Nevertheless interest in this experiment in integration is now such that articles are starting to appear in journals other than those specializing in art. One such example is an article by Lise Montas written for Le médecin du Québec in which the author discusses travelling in the Metro as an almost aesthetic experience largely because of the introduction of works of art in its midst.[21]

Among authors writing for the specialized art and architectural journals, René Viau and Georges Adamczyk may be singled out for their analyses (as distinct from reporting) of some aspects of art in the Metro. Adamczyk's article "La ville et le métro" in Vie des Arts written in 1972 is a pioneer work on some of the social as well as aesthetic issues, particularly in relation to Peel station.[22] Viau's "Une intégration réussie des arts à l'architecture à la station de métro LaSalle" in Habitat discusses some of the aesthetic concerns.[23]

Since neither in the specialized journals nor elsewhere have we found a comprehensive analysis of the relationship between art and architecture in the Metro that

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[21] Lise Montas, "Les oeuvres d'art du métro de Montréal", Le médecin du Québec, vol. 12 (Oct. 1977), 149,151.

[22] Georges Adamczyk, "La ville et le métro", Vie des Arts, no. 68 (Autumn 1972), 38-41.

[23] René Viau, "Une intégration réussie des arts à l'architecture à la station de métro LaSalle", Habitat, vol. 21 (1978), 56-60.

is applicable on a wide basis to all the stations of the network, we shall attempt such an analysis here referring in detail to typical examples of each relationship examined.[24]

2. Outline of Thesis

Our first chapter will describe briefly the development of downtown Montreal after the completion of Place Ville Marie in 1966 and the integration of the Metro into this "accidental megastructure" while our second chapter will discuss general questions concerning the integration of art and architecture and outline the three relationships which form the framework of our analysis.

Consequently, the third chapter will describe the first of these relationships -- that by which art appears to be subordinated to its architectural framework. Since this is the relationship that is by far the most common in the Metro, four typical stations will be considered. They are representative in that both their architects and the associated artists have employed the materials and techniques that are most widely used throughout the system. These include flat, painted surfaces, incised relief, formed concrete relief and glazed, ceramic tiles.

Integration in which art and architecture seem on equal terms will be discussed in the following chapter. Two stations have been chosen to illustrate this relationship,

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[24] See below, page 23.

one from the first series of stations (Peel 1966), a landmark because the first station in which the artist's collaboration was considered from the conception of the project, and one from the second series (Assomption 1976) because of the richness of the interlocking of the architectural and the artistic programmes and because of the contrast it provides with the former due to the use of entirely different materials.

A sole example is considered in order to denote the third relationship, that in which art is given a predominant role in respect to its architectural context, because LaSalle is indeed a unique example of this relationship.

In our conclusion, we contend that the three relationships we have used to describe the integration of art and architecture in the Metro -- and first proposed by A.C. Sewter of the University of Manchester in a lecture delivered to the Manchester Society of Architects in 1951 in regard to painting and architecture of the past -- do indeed provide a framework by which to consider art in architecture today.[25]

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[25]See below, pp. 23-29.

I

THE MONTREAL METRO

1. Megastructure Montreal

From humble beginnings in 1642, Montreal had become a large but generally poorly organized city by the mid-twentieth century.[1] The city's appearance had in fact changed little since the introduction of the railway before the turn of this century. But, from the early sixties on, qualitative and quantitative changes in the city's centre were not only to radically affect such features as public transportation and architecture but, in Norbert Schoenauer's words, "even the spirit and aspiration of its very inhabitants".[2]

The result was that Montreal emerged from being what Henry Aubin has described as the "graceful slow-paced hub of the Canadian economy" to become "a boomtown for the branch offices of multinational corporations and a prime consumer of the way of life they offer".[3]

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[1]Michel Barcelo, "Montreal planned and unplanned", Architectural Design, vol. 37, 306-309 (1967).

[2]Norbert Schoenauer, "The New City Center", Architectural Design, vol. 37, 310-323 (1967).

[3]Henri Aubin, City For Sale; Montreal: L'Etincelle and Toronto: James Lorimer & Co., 1979, p. 12.

Although attributable to many sociological, political and economic factors, the beginnings of this transformation took tangible form with the construction of Place Ville Marie (1962-66, I.M. Pei and Associates, architects) on an important seven-acre site in downtown Montreal. Its 45-story tower was outwardly Place Ville Marie's most spectacular feature. Of greater significance, according to Blake and Auerbach, was its multi-level underground network: one and a half miles of "pedestrian plumbing" linking offices, shops and promenades to the commuter trains of Central Station and to other facilities such as a parking garage.[4]

By segregating pedestrian and other traffic, by radically modifying current ways of thinking about commercial structures, Vincente Ponte, partner in charge, and Henry Cobb, city planner, established the model for the future integration of the Metro into Montreal's shopping core.[5]

The example thus set was followed, although with differing aesthetic aims, by Ray Affleck (of the architectural firm Affleck, Desbarats, Lebensold and Size) in 1967 in his Place Bonaventure, a "great multifunctional urban box" combining various functions and facilities which were to include access to the Metro -- Place Bonaventure

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[4]Peter Blake and Herbert Auerbach, "Downtown in 3D", Architectural Forum, vol. 125 (Sept. 1966), 31-49.

[5]Architectural Forum, vol. 118 (Feb. 1963), 81.

station, designed by Victor Prus.[6] Similarly Harold Ship in his Alexis Nihon Plaza of the same year was to link this popular multi-level shopping complex to the Atwater Metro station. These and subsequent links with major downtown department stores, prompted Banham to describe the whole of the Montreal downtown area, as "a single accidental megastructure, the "meta-form behind the megaforms" of the city's commercial centre.[7]

2. The Metro

Not surprisingly such extensive construction was accompanied by widespread concern for, and discussion of, urban problems, particularly in relation to transportation. For example, an article that appeared in the Journal of the American Institute of Architects in 1966 entitled "Cities on the Move", noted that the new skycrapers had brought with them, in Montreal as elsewhere, an influx of daily office workers with which existing transport networks could only inadequately cope.[8] Consequently, in Philadelphia plans were underway for improving its subway system while, by the early sixties, new construction had started in Washington, San Francisco, Boston and Cleveland; Toronto was adding to its system and plans were being

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[6]Reyner Banham, Megastructure; urban futures of the recent past (London, 1976), p. 121.

[7]Ibid., p.106.

[8]"Cities on the Move", Journal of the American Institute of Architectects, vol. 45 (May 1966), 41-56.

prepared for Atlanta and Los Angeles. Thus work on Montreal's subway was begun (in 1962) within the context of a general awareness in North America of the need to act and with the optimistic faith that resolute action could solve the city's transport problems.

Montreal's subway transit system was a serious and planned attempt at making underground travel an integral part of a spatial system connected both to the developing underground core and to the old surface grid system.[9] At the same time it offered, not incidentally, an efficient transport system free from the city's rigorous winter climate.

When service was opened in 1966, the Metro's initial network consisted of three lines:

- line no. 1, from Atwater in the west to Frontenac in the east;
- line no. 2, from Bonaventure, just south of the city's commercial centre, to Henri-Bourassa in the north;
- line no. 4, connecting the city centre (Berri-de-Montigny) with the South Shore (Longueil); (see appendix 3).

Montrealers seem to have appreciated its convenience from the start: in 1970, for instance, of the 266,700,000

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[9]Michel Barcelo, "Montreal Planned and Unplanned", Architectural Design, vol. 37 (July 1967), 306-309.

passengers transported by the Montreal Transport Commission, 119,700,000, or 45%, travelled by Metro; by 1975 this percentage had only increased by 1%.[10] The network's relatively narrow track width[11] made for smaller tunnels and therefore easier passage under public accessways while the wagons, riding on pneumatic tires, provided good adherence and low noise pollution levels.

In 1965, the responsibility for Metro transport was conferred upon the Montreal Transport Commission and in 1970, with the formation of the Montreal Urban Community, responsibility was placed in the hands of the newly-created Metropolitan Transport Board. Later extensions, the first of which were opened to the public in 1976-78, brought the total length of the Metro's underground network to 52.9 km (or 33 miles): line 1 was extended by seventeen stations; line 2 by sixteen new stations; and a new line -- line 5 -- undertaken in order to assure the transfer between the two branches of line 2 at Jean-Talon and Snowdon stations: 24 new stations for a length of 20.5 km. (The first stations of line 5 were opened to the public in 1986.)

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[10] J. Gaston, ed., Le métro de Montréal, Montréal: bureau de transport métropolitain, 1976, p. 44.

[11] The track width of Montreal's Metro is 8'3" or 2.50 m compared with the U.S. standard of 10'4" or 3.15 m.

When eventually completed by the end of the eighties, the Metro system will extend 44 miles and contain eighty-two stations.

3. Metro Architecture

The overall conception of the Metro was confided to the Metropolitan Transport Board whose architects and engineers standardized stations at 500 feet (152m) in length with the average distance between them being 2,300 feet or 700m. Of the twenty-six stations constructed in the initial network, four have a mezzanine at street level, while eight have a mezzanine below street level. Access to the platforms is gained either through adjacent buildings or from specially constructed kiosks. Station entrances were coordinated with bus lines, hence with the surface transportation network.

Uniform standards were established for such station appointments as lighting, exterior and interior doors, control installations, staff and maintenance equipment, ventilation, publicity and graphics. Stair and platform edge materials were also standardized throughout the system.

Similarly, the concrete shells for two types of station tunnel were also established by the Civil Engineering Division of the Metropolitan Transport Board.

Eleven of the initial stations were designed by the architects and engineers of the Metropolitan Transport Board, resulting in concomitant uniformity of appearance. The remaining fifteen stations, however, following U.S. practice[12] being contracted to private engineering and architectural firms. This practice was to have widespread implications in terms of the diversity of station architecture. It has resulted in a Metro system in which stations are different, creating a diversity that has made the Metro, according to Robert Gretton an experience to be lived".[13]

Recognizing that many of the stations -- some of those designed by Public Works architects and some by private firms -- "display architecture that is naive both in terms of spatial organization and materials", Gretton nevertheless finds that the subway as a whole is colourful, spatially exciting and imaginative.

This diversity contrasts with Toronto's original network (built in the fifties) which was entirely conceived by the Toronto Transit Commission and whose rather sterile atmosphere Gretton describes as "pathologically clean and not very colourful" since little thought seems to have been given at the time to the emotional experience of subway travel.

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[12] Architectural Forum, vol. 128 (Jan. 1968), 47-85.

[13] Robert Gretton and Norman Slater, "Montreal Metro", Canadian Architect, (Feb. 1967), 27-34.

Believing that "the functions of a subway system do not vary greatly from those of the familiar surface street system", Montreal Metro architects sought to relate tunnels, stairs, bridges and corridors to the more familiar surface environment as at Bonaventure, Place des Arts and many other stations. The scale, therefore, is that of the street rather than that of an interior. This aspect of station design is thoughtfully discussed by Victor Prus, architect of Bonaventure Metro station among others.[14]

Since users are dressed for the outdoors, Prus finds that it would be incongruous to treat these spaces solely as an interior environment. Thus, in Montreal materials such as granite, quartzite, brick, tile, steel and concrete have been exclusively used both for their inherent desirability and for the real (and perhaps, psychological) security they offer for passengers.

Variety is most often effected by variation or modulation of the relief of the wall surfaces such as at Jolicoeur (granite), Pie IX (concrete) and Sherbrooke (brick). In this way, the human aspect is considered by Prus "to consist of related and interacting agglomerations of sensory experiences".

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[14] Victor Prus, "Reflection of the subterranean architecture of subway stations", Canadian Architect, (Feb. 1967), 35-36.

The initial series of the Montreal Metro system's stations revolved around the downtown core. The two lines parallel with the river have had perhaps, as Banham and others suggest, the most direct effect on the downtown core, linking as they do business, hotels, governmental and university areas between Atwater and Berri-de-Montigny. In Banham's words, the entire system, however, "was seen as both the unifying factor in a seemingly disorganized city and the generator of new development in certain selected parts of the urban fabric, with major stations, particularly the interchanges, seen as shopping and business sub-centres into which passengers would be delivered directly as a 'captive audience'".[15]

In the form of entrance/exit kiosks constructed at each station, the Metro has carried elements of the central city's international style of architecture to the suburbs.[16] In this way, the invisible underground transport system, by erupting systematically along its length, tends to identify the outer reaches of the city with the "island within the island" -- with the otherwise isolated international style architecture of the downtown core. This extension of the

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[15]ReynerBanham, Op. cit., p. 120.

[16]I am indebted to Alain Médam, Research Professor at the National Centre of Scientific Research (Centre national de la Recherche scientifique), Paris, for this and subsequent ideas developed in this paragraph. They were proposed in a conference given at the Montreal Museum of Fine Arts entitled "Le modèle montréalais: un conglomérat de villages" on September 30, 1982.

central city into the suburbs, then, ultimately contributes to the unification of the city because of the strong visual identification accompanying it.

II

ART AND ARCHITECTURE

In the first subway series, only at Peel station was an attempt made to integrate art into the architecture from the beginning.[1] Private enterprise was later solicited to add murals and stained glass to the already-constructed stations. In the second series, the presence of works of art was more often forseen from the initial stages of the planning process. In such cases the independent architects were able to work with the artists of their choice, while architects of the Metropolitan Transport Board worked with Jean-Paul Mousseau, by this time advisor employed by the board.

One of the things that seems to have inspired the integrated approach to putting art in the Metro was the growing practice of governments to commission works of art to be placed in mewly-constructed public buildings. In 1961, for example, the Quebec Government, inspired by programes already established in Europe, adopted an Order in Council which permitted a very small percentage

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[1] I wish to thank Jean-Paul Mousseau, artist and advisor at the Metropolitan Transport Board, for information concerning collaboration between artists and architects for the Board's own projects. Most of this information was gathered during interviews with Mousseau in September 1982 and March 1983.

of the estimated construction cost of public buildings (buildings erected by the Ministry of Public Transport) to be spent on their adornment, or embellissement as it was called in the French text.[2] Modifications in 1979 and 1981 fixed this percentage at 1%, the name by which the programme is now more generally known. The atmosphere created by discussions on art in architecture and the tentative example set by the 1% programme surely helped provide a fertile climate for the integration of works of art in the Metro too.

The current value of the works of art in the Metro was estimated by the Board in 1983 as $2,543,000 (see appendix 4).

By placing importance both on the architect's initiative and on the integration of art, the designers of Montreal's Metro have created a sort of symbol of Montreal's prosperity.[3] And from these attempts many artists have not only found an important place for the public exhibition of their works: more importantly, they have received contracts permitting them to work in a significant social context.

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[2]Gouvernement du Québec: Les oeuvres d'art du ministère des Travaux publics et de l'approvisionnement ou la politique du un pour cent, Quebec, 1981.

[3]Alain Médam, conference 1982, Op. cit.

1. Towards a Definition of Interrelationships

A glance at David Thalacker's The Place of Art in the World of Architecture shows that collaboration between artists and architects is perhaps as prevalent today as in the past.[4] Yet, with the noteworthy exception of Barbaralee Diamondstein's anthology Collaboration: Artists and Architects, the nature of that collaboration has rarely been seriously analyzed.[5] We attempted to come to grips with this subject, but much more modestly, in an article published in 1980 in Cahiers des arts visuels au Québec (no. 8) in which we proposed classifying works of art created for an architectural context as autonomous, decorative and integrated.[6]

The autonomous work of art was described as one that might be placed anywhere, independently of its context, in a park, in front of a building or along a highway.

The decorative work of art, by contrast, was considered as being necessarily conceived for, and placed in, an architectural context. It has no role independent of this situation. Friezes, low reliefs, paintings and

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[4]David Thalacker, The Place of Art in the World of Architecture, New York: Chelsea House, 1980.

[5]Barbaralee Diamondstein, Corraboration: Artists and Architects, New York: The Architecture League, 1981.

[6]Graham Cantieni, "Dossier 1%", Cahiers des Arts visuels au Québec, no. 8, pp. 14-22.

ceramics tied to the two-dimensional surface may be decorative works. Such works do not assert themselves as independent entities, but remain unobtrusively in the background, fulfilling the role of agreably enhancing the environment.

Finally, we proposed that an integrated work interacts on equal terms with architecture. Both art and architecture would lose something if separated. Theoretically another work could not effectively replace the integrated work since its presence is a necessary part of the definition of the whole space itself.

However, for the purposes of this paper, the terms "integrated" and "work of art" will be used as defined in the Quebec Government regulation for the integration of art and architecture in its own buildings.[7]

In the terms of this law, "integration of the arts" is described as:

> the process aiming at the production of a work of art designated to be incorporated or inserted into a building as well as the work necessary for its incorporation or its insertion.

This same ordinance defines a "work of art" as:

> all artistic production tied to architecture or landscaping, such as the

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[7] Règlement sur l'intégration des arts à l'architecture et l'environnement des édifices du Gouvernement du Québec; loi sur le ministère des Affaires culturelles (L.R.Q., o. M-20, a. 2) 1981. Quebec official Editor, 1983. It should be noted that the regulation itself does not apply to the Metro which is under municipal jurisdiction. The translations given are my own.

> implantation of a mural or of a sculpture at the level of the common or public circulation areas of a building, the particular treatment of exterior or interior architectural covering either by color, light or by textural effect and the visual articulation of exterior areas.

By using this definition, some of the arbitrariness of our earlier definitions may be eliminated and the relationship between the work of art and its architectural framework may be considered as the basis of our analyses.

Interest, therefore, will centre on the work itself as perceived by the traveller rather than on the details of its development from the earliest stages of its conception to its final form. Not all of the architects, artists, engineers, urbanists, planners and their advisors have been interviewed.[8] The conception of a work and the anecdotes surrounding it certainly do not lack interest. However, it is the finished work of art and its relationship to the architectural context which ultimately dominates the public's perception and which will be considered here.[9]

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[8]For instance, of the seven architects contacted in March 1987, only one signalled his interest in discussing the integration of art and architecture in the station for which he was responsible.

[9]Marianne Strøm in Metro-Art dans les Metro-Poles (Brussels: Générale de la Banque, 1987) has also taken this same approach.

2. Three Relationships

The relationships between painting and architecture since the Renaissance have been described as:

(a) subordination of painting to architecture,

(b) compromise between artist and architect, and

(c) superiority of the artist.[10]

According to Sewter, the subordination of painting to architecture was universally accepted as the norm during the Middle Ages. However,

> it would be a mistake to represent it as a conception of subordination only. In this view, painting was actually a part, and very often an essential part, of architecture. Painting was not added to such a building as the Upper Church of St. Francis at Assisi merely as an afterthought. The walls occupied by Giotto's great frescoes had clearly been envisaged as areas to be painted on from the first conception of the interior. The painter, working under such conditions, accepted entirely the limitations of the architectural framework and setting, which allotted him a prescribed series of flat rectangular or lunette shaped areas.[11]

The application of this principle, according to A.C. Sewter, resulted in a certain "intimacy of relationship between the two arts, a pefection of separate achievement and of combined effect".

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[10] A.C. Sewter, A lecture on the Relationship between Painting and Architecture in Renaissance and Modern Times, London: Alec Tirani, 1952; 16 pages (paginated) plus illustrations (unpaginated). Originally delivered as a lecture to the Manchester Society of Architects in 1951.

[11] A.C. Sewter, Op. cit., p. 4.

After the end of the Middle Ages, the architect's "superiority" was not reasserted until the eighteenth century and afterwards, at which time the architect controlled "most of the decoration himself (as in Neo-classical architecture) leaving the occupier to hang up whatever pictures he cared in a few vacant spaces".[12] In Mannerist architecture, a "compromise" between architect and painter takes place, a compromise

> by which the painter agrees... to respect the original spatial construction (of the architectural setting) in return for a large measure of control over the character and disposition of ornamental features like mouldings and cornices... often added in stucco as well as painted in trompe l'oeil.[13]

Despite the large nudes in the foreground plane of Carracci's paintings for the interior of the Gallery of the Palazzo Farnese in Rome, for example, the decoration remained an integral part of the building because the simple structural lines of the room also form the framework of the painting.[14]

In regard to the third relationship, Sewter notes that in the subdivision of the vast area of the Sistine

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[12] Ibid, p. 10.

[13] Ibid, p. 8

[14] Ibid; see also: Walter Friedlaender, Mannerism and Anti-Mannerism in Italian Painting; New York: Schocken Books (1965) 1976, p. 65.

Chapel ceiling, Michelangelo respected the forms dictated by the architecture. But nearly fifty years later, when the artist came to paint the Last judgement on the east wall, the artist had a new wall installed obstructing the windows and covering over frescoes by Perugino. The painter in this instance asserts his superiorty over the architect, concludes Sewter.[15]

When discussing the twentieth century, some critics contend that the relationship between painting and architecture is different from what it had been in the past: "the painter as decorator of buildings has been forced, not merely into a subordinate role, but out of business practically altogether".[16] Regarding artists as researchers into the use of new forms and materials and the discovery of new formal relationships, the modern architect and the painter have been considered as investigating similar formal issues independently of one anothet. Sewter, for example, illustrates this proposition by comparing a Van Doesburg painting with a Gropius building, noting that a similar

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[15]Further examples of the painter transcending the architect's conception given by Sewter are Guercino's Aurora in the ceiling of the Casino della Villa Ludovisi in Rome (Sewter's fig. 14), Mantegna's illusionistic ceiling of the Sala dei Sposi (in the Ducal Palace in Mantua (fig. 4) and Bacciccio's ceiling of the nave in the chiesa del Gésu in Rome (fig. 15).

[16]Op. cit., pp. 11-12.

interest in "formal relationships" lies behind both compositions.[17]

While considering Sewter's comparison to be valid the three relationships outlined above at the beginning of this section[18] need not be confined to the past but may, we believe, be extended not only into the twentieth century but into contemporary art and architecture as well.[19]

We further believe that art does "come into vital relationship with architecture" in the twentieth century and that "essential contributions" in this regard are being made.[20]

The mural movement in Mexico[21] the U.S. General Service Administration (GSA) Art-in-Architecture

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[17]Sewter, Op. cit.

[18]See above, p.

[19]Attention should be drawn to Sewter's rather rapid conclusion which tends to categorize the important contribution of the members of the De Stijl group -- for example, Van Eesteren (Rosenberg exhibition, Paris, 1923), Van Doesburg (Café L'Aubette, Strasbourg, 1928-29), Rietveld (Schroeder House, Utrecht, 1924) and Oud (Café de Unie, Rotterdam, 1924-25) -- in their attempt to approach architecture, design and painting as a unified experience. For a more specific analysis of this integrated approach, see: Kenneth Frampton, Modern Architecture, A Critical History, New York and Toronto: Oxford University Press, 1980, pp. 142-148, and Leonardo Benevolo, History of Modern Architecture, Cambridge (Mass): The M.I.T. Press, pp. 406-411.

[20]In contrast to Sewter, Op. cit., p. 16.

[21]Antonio Rodriguez, A History of Mexican Mural Painting, New York: G.P. Putnam's Sons, 1969.

Program[22], and attempts to integrate painting in some of Stockholm's subway stations[23], to name just a few examples, continue the collaboraive tradition and indicate that art and architecture are indeed alive and interacting with one another in our century.[24] Indeed, we believe this to be so within the Montreal Metro system.

One of the factors differentiating our own period from earlier periods is that today all three relationships exist side by side.

The integration of art and architecture in a limited number of typical Montreal Metro stations will be considered in the following terms:

(a) where architecture dominates art (art is subordinated to architecture);

(b) where art and architecture are in equilibrium, neither seemingly more important than the other:

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[22]Stephen Prokopoff, "The Government as Patron", in Barbaralee Diamondstein, ed., Collaboration: Artists and Architects, New York: The Architectural League, 1981.

[23]Bengt Johansson, "Metropolodyte", Architecture, no. 398 (1976).

[24]For some European examples, see Paul Damaz, Art in European Architecture/Synthèse des Arts (New York 1956) and Louis Redstone (with Ruth Redstone), Public Art: New Directions (New York 1980) for some American ones.

(c) where the work of art is more important than the architecture which ostensibly contains it.

No hierarchy of integration is intented. Discussion will be confined to examples of each of the three types of relationship, all of which, in accordance with the definition stated above[25] will be considered to be "integrated" in varying measures.

[25] See above, pp. 21-22.

III

ART IN THE SERVICE OF ARCHITECTURE

The first of these relationships, that in which art seems to be subordinated to its architectural framework, is the most widespread throughout the Metro. In each instance the art so envisaged is confined to clearly delimitated spaces and consists of materials closely allied to those of the architecture itself. The artwork is invariably held to the two-dimensional surface and does not interact with the environment in a three-dimensional sense.

1. Four Stations

Among the many stations where this relationship occurs, we have selected four: Verdun, De l'Eglise, Viau and Honoré-Beaugrand. All are from the second series of stations (1976-78) for which consideration was given to the integration of art at a relatively early stage of the planning.[1]

Taken together, they cover most of the techniques and materials most frequently used in the Metro: flat, painted surfaces, incised relief, formed concrete relief and glazed, ceramic tiles.

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[1] See above, p. 18.

Verdun

Verdun station (1978, Jean-Marie Dubé, architect) is situated opposite the Town Hall in the heart of Montreal's neighbouring city of Verdun. The station's entrance kiosks are placed one on each side of Verdun Avenue, a busy commercial thoroughfare. The station itself is entered through passageways passing under the street from which a long descent by escalators leads to the control area on the mezzanine, placed to one side of the tunnel axis.

Unadorned concrete is the material most employed throughout, a material whose massiveness is at variance with the airy steel and glass framework of the kiosks. The lower part of the wall of the kiosk furthest from the station contains a series of white concrete panels into which are incorporated two horizontal painted strips of colour. The white background helps disengage the decoration from the grey of the unfinished concrete wall.

From the kiosk, the panels, together with their two bands of colour, continue on the walls flanking the escalators and stairways. Finally they lead from the control mezzanine via further flights of stairs to the platform where they terminate along the lower section of its walls. Thus, this forceful, decorative motif provides a visual continuity from the furthest reaches of the station's access network to the platform at its base.

The station's rectangular section is echoed in a sober interplay of squarish volumes and masses that tend to

be narrower at the top than at their base. Natural light floods the mezzanine through a skylight placed at the station's highest point directly above. This burst of light emphasizes the relation of solids and voids and emphasises the massive concrete beams supporting the roof.

The bands of colour -- red and middle violet -- are referred to in a Metropolitan Transport Board folder describing Verdun station as "strongly coloured broken lines juxtaposed on white concrete panels". They are coordinated with the colours used throughout the station on railings, light fixtures (orange) and control box (red). The benches along the platform are painted a deep violet. These colours introduce a bright accent into a grey interior completed predominantly in smooth, natural (unfinished) concrete.

Confined to well-defined areas of the architectural framework, the bands of colour outline and reinforce the horizontality of the tunnel. But despite their flat, decorative and abstract nature, as panels applied to the wall surface, they seem less part of the original concept than Antoine Lamarch's low-relief mural incorporated into the major vertical wall of the station.[2]

To understand the role of both decorative systems, we must consider the architectural framework in which each is placed. Whereas the coloured interwoven bands are understood in terms of movement, since they underline the

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[2]A brief biography of the artist appears in André Comeau, Artists plasticiens, Montréal: Les Editions Bellarmin, 1983, p. 150.

movement pattern of passengers, the wall relief is understood in terms of space -- that is, according to relationships of solid and void.

Profiting from the depth of the station, the architect has designed a mezzanine crowned by a vertical light well in the form of a truncated pyramid with near-vertical sides. As well, a dramatic effect has been obtained by exploiting the huge structural beams supporting the roof. Seen from the platform, the beams soar upwards framing like a massive doorway, the naturally-lit space behind them. It is on this wall that Dubé has incorporated Lamarch's relief (fig. 1).

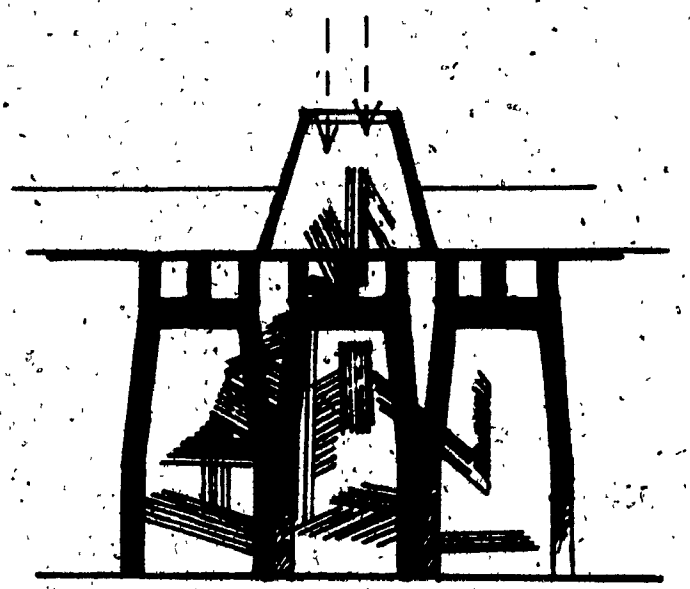

Fig. 1. Position of the low-relief mural in relation to structure and skylight.

The wall relief is thus relegated to its architectural framework while its incisions are given form by overhead lighting. In this combination of massive, abstract form (architecture) and delicate, incised wall relief (art), we have an excellent example of thoughtful and successful integration in a relationship in which art is subordinated to architecture.

De l'Eglise

De l'Eglise station (1978, Lemay-Leclerc, architects) is located under Wellington Street in the city of Verdun. From the beginning the architects established two guidelines for the designer of the station: (1) "to express the movement of the crowds by the structure itself" and (2) "to accentuate (détacher) the movement of the structure by the play of natural or artificial light".[3]

Because of a fault in the rock, the original plan of the station was modified: narrower, superimposed tracks replaced the standard type of station with two lateral platforms. Consequently this station has a track and platform for travellers on both levels.

The station includes two entrance kiosks which exploit natural light. Their physical situation in relation to the platform has necessitated using an access tunnel that spirals or folds down on itself. The natural concrete walls

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[3]Undate and unpaginated publication entitled Station de l'Eglise; Lemay-Leclerc architects; source: Metropolitan Transport Board.

and ceilings of these two tunnels form the support for Claude Theberge's reliefs, incised into the surface by sandblasting techniques.[4]

The outer kiosk at the corner of Galt and Wellington Streets (fig. 2) is characterized by interpenetrating volumes of simple, open, plain concrete vertical and horizontal panels with a more massive rectangular block finished in striated concrete of warmer tones. Similar beams cross the stair and escalator access areas creating a link between the kiosk and the mezzanine. The platform tunnels are crossed by suppressed arch vaulting.

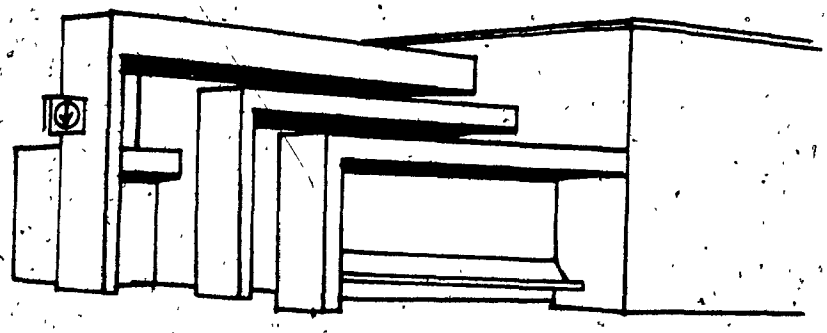

Fig. 2 De l'Eglise. The entrance kiosk.

[4]For details of the artist's background, see Patrick Schupp, "Claude Théberge", in Architecture, Batiment, Construction, vol. 22, no. 253 (Mai 1967), 30-32.

As at Verdun, two different schemes of decoration have also been introduced at De l'Eglise. The first scheme, as seen on entering from the entrance kiosk, consists of low relief striations obtained by sandblasting. They cover the ceiling and walls and flank the escalator.

The second scheme consists of a series of circular concrete panels which are often associated with red tiles placed either on the circles themselves or beside them. Both circles and tiles are found mostly on the walls of the platform but do occasionally occur elsewhere (for example, above the stairway).

Both schemes adhere closely to the two-dimensional wall surface but unlike the art in Verdun station, neither of the schemes at De l'Eglise actually accentuate the forms of the architectural framework. Nor are they sufficiently vigorous to compete with it.

Unfortunately, little in the spatial organisation and nothing in the decoration reflect the bold interpenetrating rectangles of the entrance kiosk.[5]

Viau

When entering Viau station (1976, Irving Sager, architect) from the street, one is struck by the spaciousness of the entrance kiosk. Situated entirely above ground at the corner of Viau Street and Pierre-de-Coubertin Boulevard, the station, together with Pie IX, serves

[5]See above, pp. 33-34.

principally the Olympic sports complex and adjacent residential areas.

The kiosk's structural system is of reinforced concrete; the columns and beams are of raw concrete finished in vertical striated patterning. This finish, obtained by sandblasting, constitutes the principal decoration throughout the station below (fig. 3).

The kiosk interior consists of four large bays, three of which are roofed with transparent skylight panels. From the skylights the ceiling panels (of concrete) descend at roughly 45° to their support beams.

From the kiosk the traveller proceeds directly by stairs to the platforms below. The walls here consist mostly of concrete very closely grooved vertically to give a textural effect (fig. 3). The floors are finished with brown or brick-red tiles, the stairs in black granite.

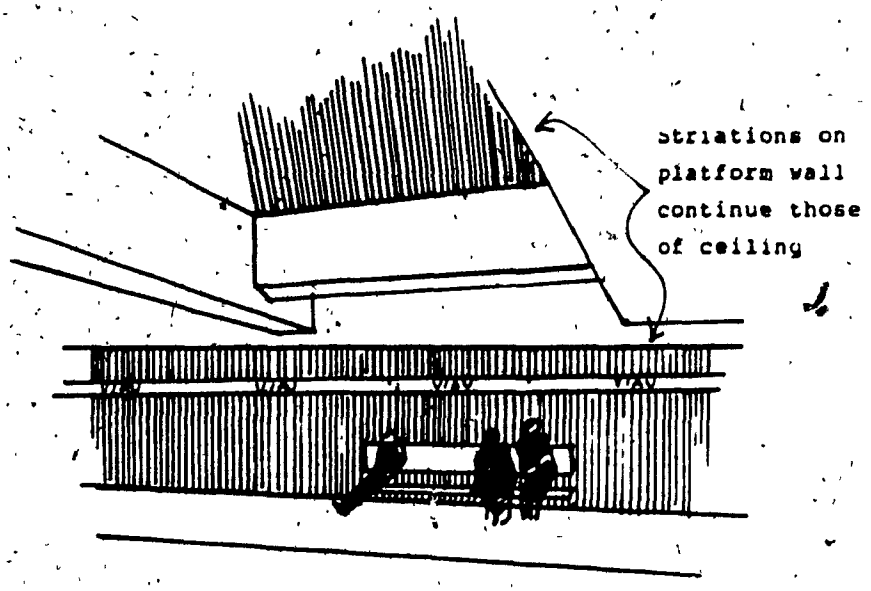

Fig. 3. Viau. Portion of platform.

It is in the combined entrance and control area that Jean-Paul Mousseau's collaboration is seen and felt (fig. 4).[6]

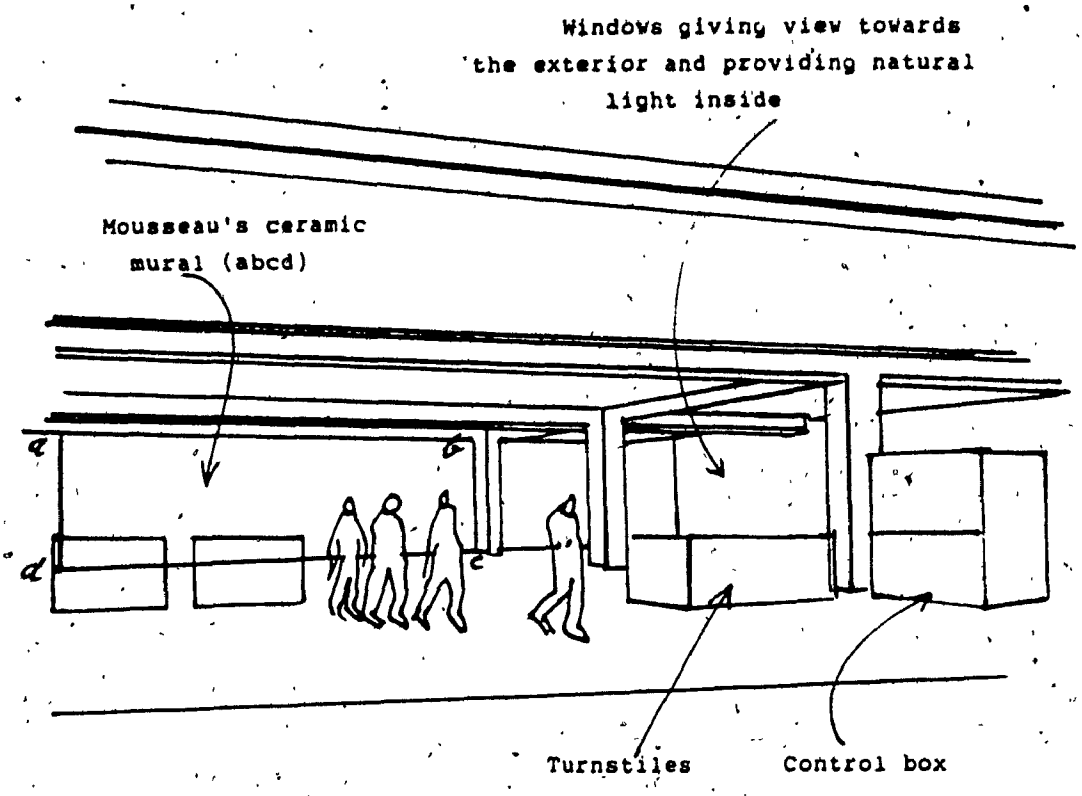

Fig. 4. Viau. The entrance and control area.

Yet despite the predominant place given to Mousseau's impressively large work -- a mural in ceramic tile -- its presence is not commanding. Although the bluish greens of its colour scheme culminate in a contrasting crescendo of pale orange in the centre of the composition,

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[6]Details of the artist's career up to this period can be found in Guy Robert, L'Art au Québec depuis 1940, Montréal: Les Editions la Presse, 1973, pp. 116-117.

its general effect is quiet. This, together with the subdued quality of a design based on random pattern, help relegate it to the background, reinforcing its unity with the wall.

Honoré-Beaugrand

Honoré-Beaugrand (1976, Yves Bernard, architect) has two spacious entrance kiosks, the glass walls of which are topped by a vertical concrete panel running around the perimeter at roof level.

The tunnels leading from both kiosks converge towards a vast mezzanine containing the turnstiles. Access to the platforms is gained by two monumental staircases flanked by symmetrical murals designed by Jean-Paul Mousseau.[7]

At the platform level, the walls widen progressively towards the exits, while the ceiling height varies, changing the character of the space from one area of the platform to the other. The walls are finished in poured concrete.

We can perhaps better understand the secondary role played by Mousseau's mural at Viau[8] by comparing it with that also designed by him and executed in the same material at this station. Here, two ceramic murals cover large walls on both sides of the station at the point where the stairs

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[7]See below, p. 39.

[8]See above, p. 37.

connect the platforms to the mezzanine of the control area (fig. 5). As at Viau the colours are subdued and the forms rectangular and simple. Again the artist has based his composition on random pattern distribution.

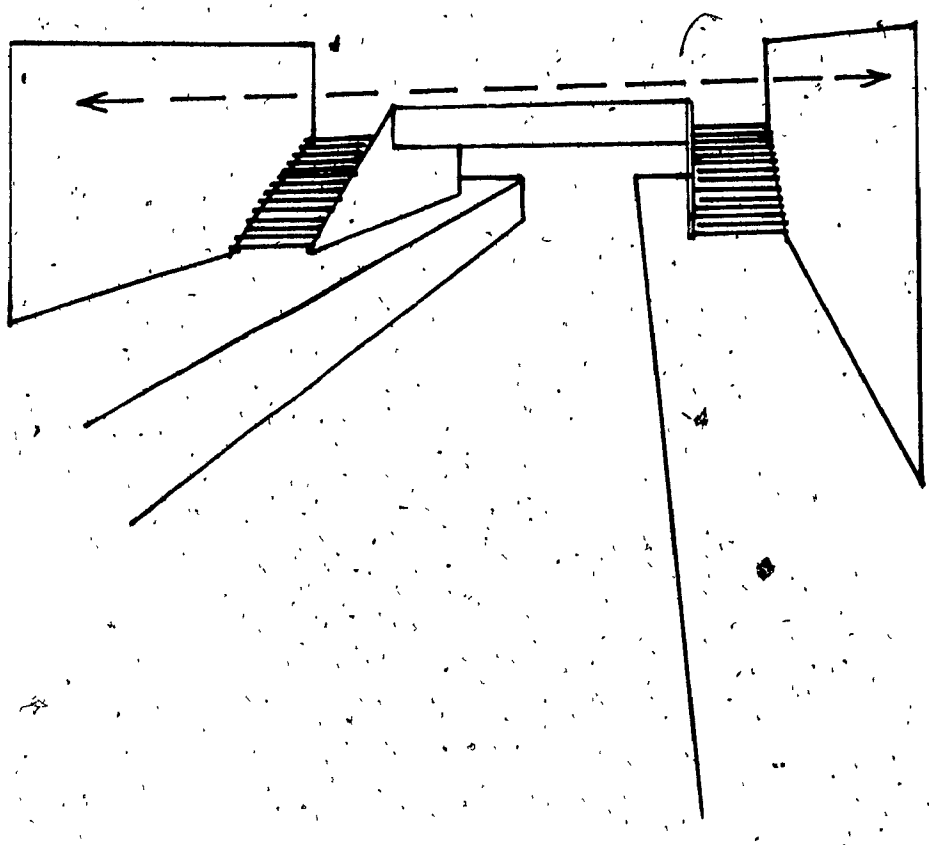

Fig. 5. Honoré-Beaugrand. Ceramic mural(s) flanking both sides of the station.

However, profiting from the juxtaposition of the two elements, Mousseau has created a mirror effect reaching across the tracks: what appears as positive shapes in one panel appears as negative shapes in the other. Thus, the works are not seen in isolation but in relation to one

another, forming a logical set in which a sort of formal dialogue is at work not only between art and architecture but also between two works of art that become one interrelated piece.

Because of their durability, ceramic tiles have often been used throughout the Metro for works of art such as Mousseau's at Viau and at Honoré-Beaugrand that we have just described. They have also been used at Assomption independently of Montpetit's panels[9] and at Peel.[10] And tiles are used extensively throughout the Metro as a durable surface finish where no artistic intent is evident: in an ordered distribution at Beaudry, in a haphazard pattern at Frontenac and uniformly covering platform walls at Sherbrooke and St-Laurent.

Yet we maintain that there is a fundamental difference between the way tiles have been used at Beaudry, Frontenac, Assomption and elsewhere and the way they have been used at Peel, Viau and Honoré-Beaugrand. We think that difference is partly explained by the fact that Mousseau's ceramic panels at Viau and Honoré-Beaugrand, as well as his tiled circles at Peel[11], reflect wider aesthetic (and other) concerns. (These are more fully discussed in the following chapter.)

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[9]See below, pp. 51-55.

[10]See below, pp. 44-51.

[11]Ibid.

Rather than mere coloured circles, the works at Peel, for instance, continue Mousseau's pictorial investigation in colour perspective. They are logical extensions of the chromatic variations of works such as Pastel (1958), his mural for the Hydro-Québec Building in Montreal (1961-62) and other works of the sixties, some of which were exhibited in 1968 at the Musée d'art contemporain in Montreal.[12]

Similarly, Mousseau's large ceramic tile mural at Honoré-Beaugrand goes beyond basic decoration. We have noted that this mural consists of two parts flanking each side of the station at the stairway areas connecting the platform and control areas.[13] The distribution of the colour would seem to be random or at least simulating random pattern. Both panels consist of balanced and sombre deep blues and reds. Each part is the inverted reflection of the other; that is, the forms (coloured rectangles) of one appear in the other in a relation of symmetry (reflection); the colours are reversed or inverted. Thus a "dialogue" takes place between the two halves, a relationship which tends to connect the parts and in so doing, the two sides of the station as well.

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[12]Illustrated in Mousseau: Aspects, exhibition catalogue, Musée d'art contemporain, Montreal 1968, plates 1 and 3. These works are composed in sections consisting of vertical stripes of contrasting colours. The resultant visual vibrations are thus firmly held within a relatively rigid formal structure.

[13]See above, pp. 38-40.

One is reminded on the two paltform-to-platform colour links created by Michèle Tremblay-Gillon for La Salle station[14] achieved in Mousseau's case with a much subtler economy of means.

Mousseau's concern for environment, for creating or manipulating a total space, such as we have seen at Honoré-Beaugrand -- and we will see in the following chapter that this is true of Peel station too -- can also be seen in other works of the period. In this respect, we are particularly reminded of his interior decoration for the Mousse-Spacthèque in 1966, although the artistic intention of the latter is quite different from that of both Metro stations.[15]

The extensive use of concrete relief in the Metro reveals that a similar duality exists in the use of this material as we have noticed in the use of tiles. Employed at Honoré-Beaugrand in an undulating, almost sensual manner, at Viau with a rugged, sharp-edged lack of finish and at Assomption, Verdun and LaSalle in subdued striations, concrete has been extensively used to provide rhythm and modulation to wall surfaces (fig. 3). Yet the same

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[14] See below, chapter V.

[15] Conceived in a completely different style and conveying a very different wood, Mousseau's discoteque nonetheless demonstrates the artist's interest in creating a total environment to which all the parts -- in this case, netting, mirrors, shop window mannequins, lighting, music and movement -- are subordinated. For a partial view of the Mousse-Spacthèque see Mousseau: Aspects, Op. cit., plate 4.

striations that at LaSalle and De l'Eglise appear as a relatively unobstrusive part of the architectural decoration, are perceived elsewhere (for instance at Verdun: fig. 1) as the artist's contribution while at De l'Eglise a second series of striations added by the artist complement those of the architectural finish.

In all the examples discussed in this chapter, the works of art have been created with materials closely allied to those of architecture. Firmly held within their architectural framework, they also adhere closely to the wall surface. In other words, they draw their raison d'être from their architectural context and are entirely subordinated to it.

IV

ART INTO ARCHITECTURE INTO ART: EQUILIBRIUM

1. Peel Station

One of the first series of stations completed in 1966, the entrances to Peel station (Papineau, Gérin-Lajoie and LeBlanc, architects) have been integrated into adjacent stores and existing buildings.[1] There are, therefore, no separate kiosks as at Verdun, Viau, Honoré-Beaugrand and elsewhere.[2]

From these "integrated" street level entrances, long and rather low corridors lead to the control area on the mezzanine. The roof or ceiling on the station is supported by a series of beams and columns some of which cut through the mezzanine floor, encompassing the whole height of the interior and thereby creating a visual as well as a structural link between the various parts.

According to Varry[3], the architectural forms at Peel were largely determined by structural needs, particularly that of supporting Burnside Street above. The reinforced concrete is totally exposed, the architects expressing the structure by a play of dynamic and elegant forms.

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[1] See above, p. 13.

[2] See above, pp. 13, 30, 33, 35, 38.

[3] Jacques Varry, "Le métro de Montréal", Architecture, vol. 21, no. 245 (1966), 25, 41-43.

The beams resting on steel-based columns express the transmission of force from one part of the construction to another. The solution thus adopted appears to treat the interior volume as a succession of confined and open units resulting from varied ceiling heights.[4]

Wall and floor surfaces are covered with whitish-grey round ceramic tiles having a 15cm diameter on the floors of the lowest (platform) level, 10cm on the floors of the mezzanine and corridors and 1cm for the walls. This helps create a unified surface which is illuminated by fluorescent lighting placed in such a way as to emphasize the architectural forms and volumes.

Using materials closely allied to architecture (and particularly to those used at this station), Mousseau has placed sixty-two large coloured circles on various walls and pavements of the station. Composed of ceramic tiles, six of these have a diameter of 3m 65; the remaining fifty-six are of 1m 83 diameter. The composition of each circle is similar: parallel bands of relatively bright colours (mostly blues and orange-reds) which closely reflect Mousseau's artistic interests of the early sixties.[5] Guido Molinari and Marcel Barbeau, to mention only these two artists, also

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[4]Georges Adamczyk, "La ville et le métro", Vie des Arts, no. 68 (1972), pp. 38-41.

[5]See above, pp. 41-42.

had similar concerns at the time.[6]

Subtle changes in finish distinguish the works placed on walls from those inserted into the pavement. On the walls, tiles with a shiny finish have been employed; on the floors, tiles with a mat finish. By this means security is maintained (the mat finish being less slippery) while at the same time their difference in function is underlined (one set to be looked at, the other to be walked on).

At Peel station, art and architecture are on equal terms: one has not been subordinated to the other. The implication of this relationship can be experienced throughout the station.

As mentioned above (see p. 45), a rhythm of simple, ample bays carries the eye along the platform to the mezzanine. At this level the station is characterized by the total absence of art -- except for two very large circles placed one on each side of the station which dominate the recessed wall alongside the stairs connecting platform and mezzanine. Placed in this position, they create and underscore the link between the two levels of the station. The overall mood is one of calm and sobriety.

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[6]Guy Robert, La peinture au Québec depuis 1940, Montréal: Les Editions La Presse, 1973, pp. 14-120. This production was perhaps influenced by British or American Op Art.

This is a context in which art is securely framed by, and no doubt subordinated to, its architectural context.

Yet from this wall flanking the stairway, across the mezzanine and along the connecting corridors, we are totally surrounded by the whole series of smaller circles.

In other words, two spaces have been created, the one dominated by a rhythmed encounter with works of art, the other stripped to the bare practicalities of subway transportation with its concomitant engineering solutions and unadorned practical beauty. The stairway provides both a functional and a visual link between the two zones.

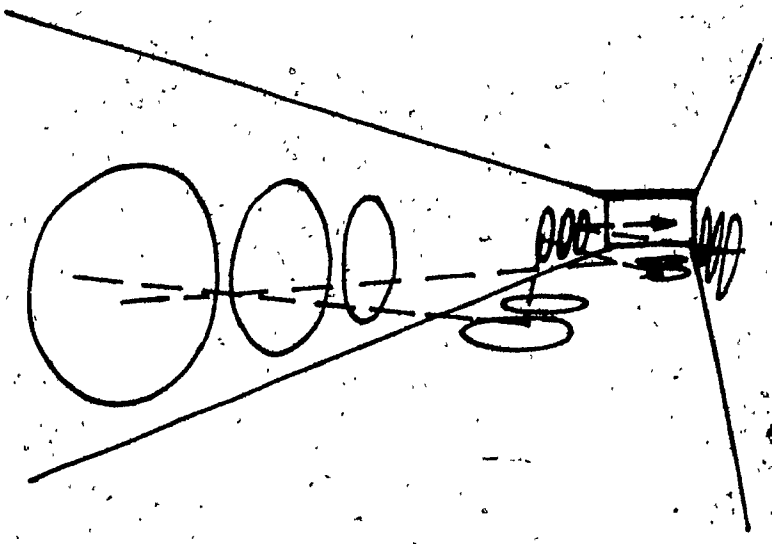

Fig. 6. Peel. Corridor.

Thus, it is especially in the corridors that art plays a dominant role; that is, in a confined space usually considered of secondary importance (fig. 6).

In an interview with Gilles Hénault published in the catalogue for the artist's exhibition at the Musée d'art contemporain (Montreal) in 1967, Mousseau explained his attitude towards art in architecture:

> I believe that the architect is the person who most influences our milieu, our society, the most aware person and one who works with people. That is part of human nature; I mean texture, colouring, lighting, one's way of walking. A corridor: why do we make corridors, why are corridors so stupid, insignificant, imbecile? And yet, because we go from one room to another, especially in public buildings, we are in corridors almost half the day; it should be possible to realize why we are walking in a corridor and that there are rhythms in a corridor, even if it is only the rhythms of doors, that we should use the rhythms of a door. We must make the lighting of corridors work too. I am thinking in particular of the Metro where really the corridors have been worked, where we have created, let's say, moments of silence, moments of high intensity or very strong impact and intermediary moments between them, always according to people's more or less quick pace, so that we break the monotony and remain awake to our environment.[7]

The rhythms created by Mousseau's work in the corridor are measured and orderly. They lead the eye from side to side anticipating our trajectory (as in fig. 6). Both vertical and horizontal surfaces are included: we enter into a total environment, one created by the artist. Certain corners mark a pause even while indicating a change in direction (fig. 7).

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[7] Gilles Hénault, Jean-Paul Mousseau: Aspects, exhibition catalogue, Montréal: Musée d'art contemporain, 1967.

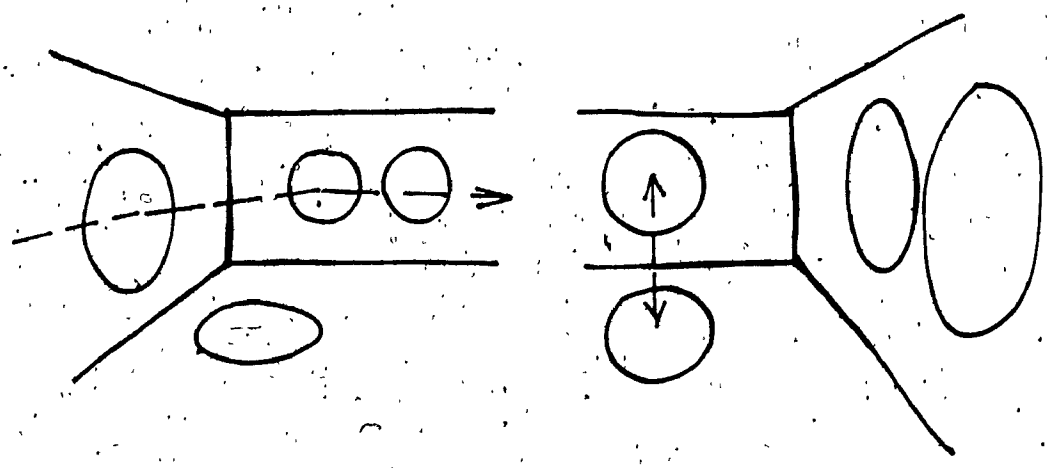

Fig. 7. Peel. Corner

As an example of the kind of punctuation Mousseau introduces into the corridor, we can think of no better example than that shown above (fig. 7) where two corner walls as well as the floor are brought into intimate relationship.

Within these overall rhythms, Mousseau introduced a secondary rhythm by changing the orientation of the strips of colour within the circles, thereby setting up a subtle interplay of obliques and verticals within an overall horizontal sequence (fig. 8).

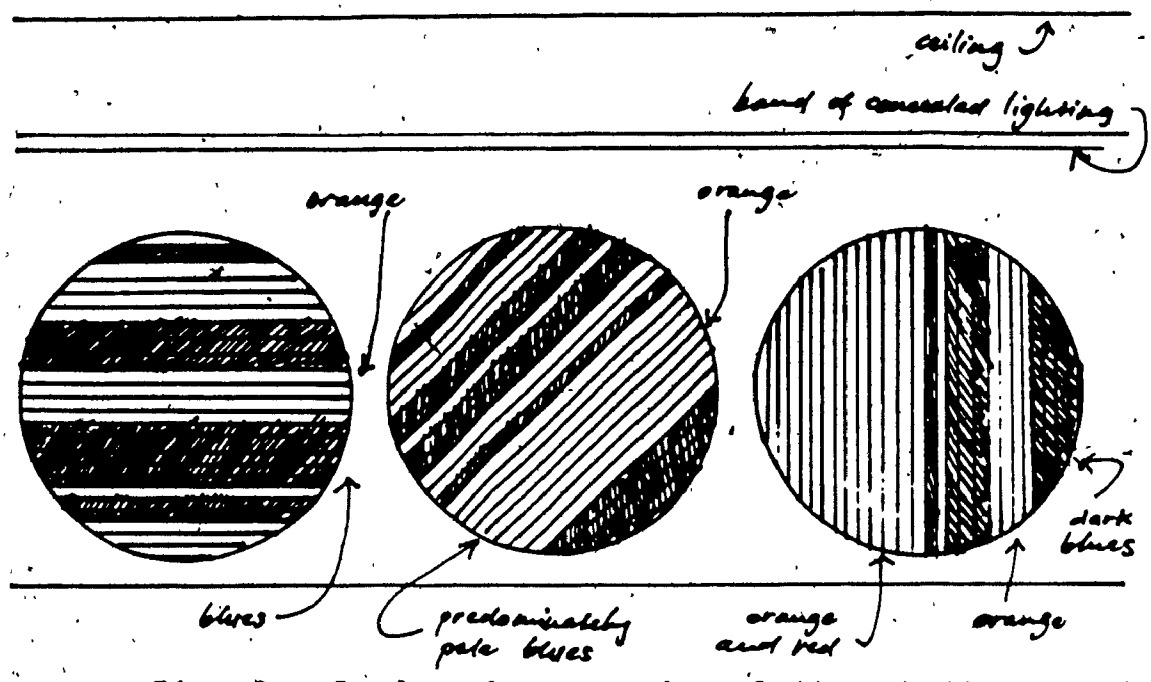

Fig. 8. Peel. An example of the rhythm created from work to work.

In order to emphasize the internal unity of the scheme, advertising was avoided in the corridors. "To convince others, it is necessary to be convinced oneself", says Mousseau, adding that "the perception of the environment is in the end the only true project of contemporary art".[8]

When artist Jean-Paul Mousseau worked in collaboration with the architects Papineau, Gérin-Lajoie and LeBlanc at Peel station, it was the first project of Montreal's Metro in which an attempt was made to integrate art with architecture.[9] Its successful outcome did much

[8]Georges Adamczyk, Op. cit.

[9]I am indebted to Jean-Paul Mousseau for details of this collaboration the initiative for which, as well as its successful completion, Mousseau attributes to Papineau's foresight and determination.

to make people aware that the success of the Metro as a whole "depended above all on the remarkable aesthetic qualities of the station".[10] This experiment has thus remained over two decades the epitome of an equitable balance between the demands of art and those of architecture.

2. L'Assomption

The entrance kiosk to Assomption station (1976, Duplessis and Labelle, architects) is built entirely above ground on Assomption Boulevard from which the station takes its name. It is a rectangular building in reinforced concrete and of modest proportions. Its most noticeable exterior feature is the treatment of the facade: an alternating series of concrete and glass triangles (fig. 9).

From the kiosk, a stairway leads immediately to an extremely long tunnel from which escalators take the traveller down to the control area on the mezzanine.

Massive concrete beams support the roof, an overhead depth of approximately nine metres requiring beams of unusual dimensions. The architects have used these beams to create a forceful and even rhythm directly above the mezzanine and above adjacent parts of the platforms. They interlock in a vigorous play of abstract forms with the vertical supports and triangular spaces of the mezzanine.

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[10] Georges Adamczyk, Op. cit.

Beyond the mezzanine, the platform roof is vaulted.

At Assomption it is also in the corridors that the contribution of art is most evident. Created in smooth, laminated plastic (coloured arborite), Guy Montpetit's murals entirely cover both side walls of the long corridor linking the entrance-kiosk on Assomption Boulevard with the escalators leading to the mezzanine (fig. 11).[11] The motif or forms integrated by the artist into this unbroken and unusually smooth surface are the interlocking, mechanical yet vaguely anthropomorphic constructions that characterize his work. Thus Guy Robert: Montpetit "has succeeded something rare in the topsy-turvy of today's art world: to develop a coherent and personal plastic style, immediately identifiable, but of which the syntax remains open to multiple conjugations and transformation".[12]

In the Peel station, Mousseau placed his glazed circles in relation to the user's pace and in order to direct the eye on a zig-zag path from side to side of the corridor. Montpetit, on the other hand, here subjects the traveller to an unrelenting rhythm dictated by the uniform distribution of his motifs. The user is captive.

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[11] Biographical information on Guy Montpetit can be found in Guy Robert, "Les murales récentes" in Vie des Arts, no. 89 (1977-78), pp. 26-29.

[12] Ibid, p. 26.

But the collaboration between artist and architect goes beyond this insertion of art into the passageway. From the street, two of the outer walls of the entrance kiosk present an alternation of concrete and glass triangles evenly disposed along the length of one side and continued, with an interruption for the doorway on the facade (fig. 9).

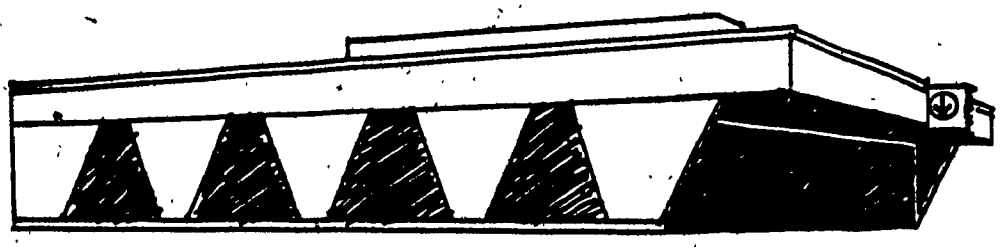

Fig. 9. Assomption. Kiosk.

These triangles echo the triangular form of the Olympic Village Apartment Buildings (1976, Roger D'Astous and Luc Durand, architects) which can be clearly seen from the station kiosk since they constitute the principal landmark of the neighborhood (fig. 10).

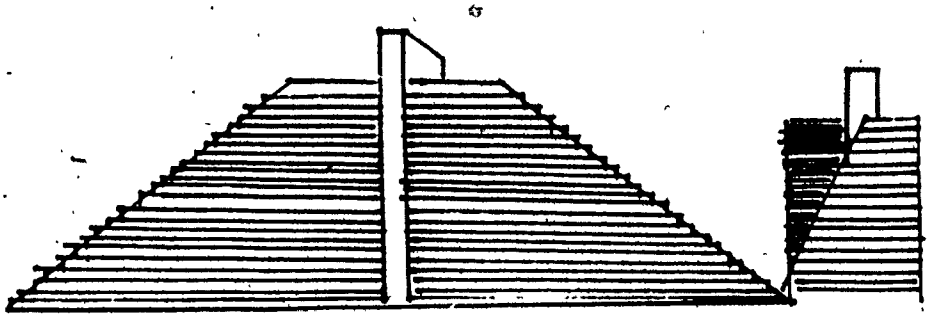

Fig. 10. "Olympic Village" Apartment Buildings.

The two remaining walls are uniformly flat and have no openings. On the inside, on the wall opposite the windows, three triangular panels of laminated arborite each contains -- or rather, each panel is -- a work by Montpetit.

When looking towards the exterior, the windows appear as very light openings in a dark wall. From the same position looking inwards, both panels and wall are lit by light coming from the windows (although fluorescent light is also used). A pale yellow background surrounds the actual forms depicted. Since the panels are lighter in tone than the walls behind them, they tend to repeat, though with much less contrast, the relationship between light and dark on the opposite wall.

Despite the fact that the kiosk is constructed above the surface, the prevailing ambience inside is dark. In this way, the user is prepared for the enclosure of the tunnel-like corridor and the long descent to the station platform.

The interaction and interdependance of art and architecture produce an experience rich in associations: from exterior landmark to window, from window (negative shape) to coloured panel (positive shape) and from panel to corridor (continuity of visual image). We may even add that the regular rhythm of the alternation of wall and window of the kiosk is repeated in the regular, even obsessive, repetition of the artist's forms along the corridor.

The interlocking relationship does not stop there, however. From the top of the escalators, the mezzanine can be seen to our right below cutting diagonally across the tracks. We then perceive the obliqueness of its floor as the final link in a series of associations starting in the station's environment. A glance at Duplessis and Labelle's plan (fig. 11) reveals that in fact the whole bay, of which the mezzanine forms only the central part, is roughly triangular in shape.

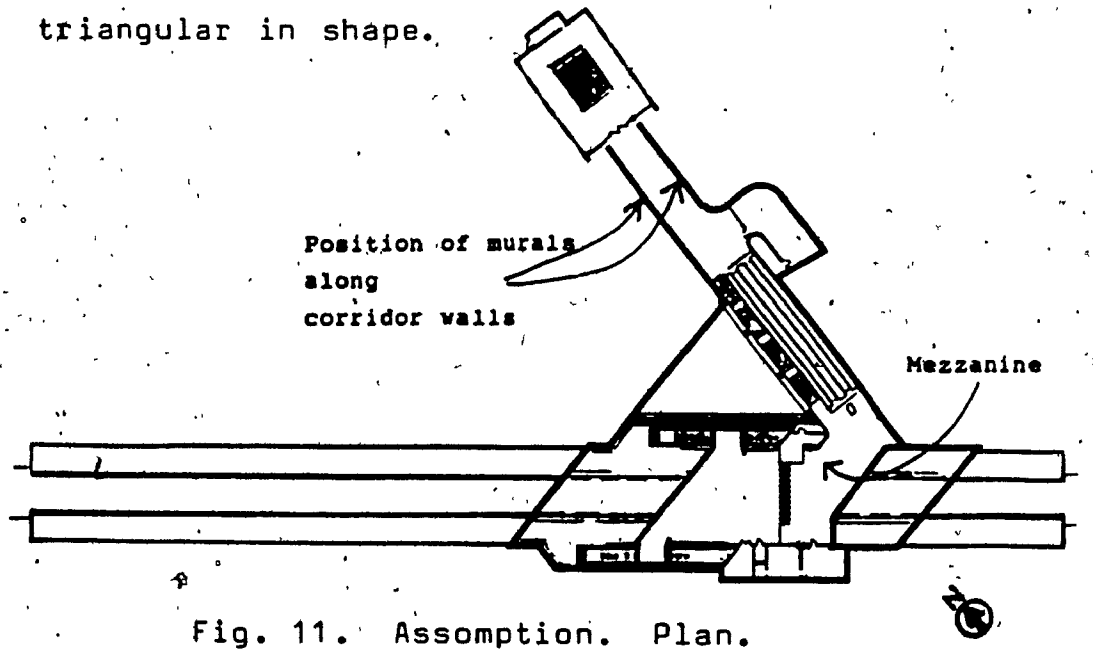

Fig. 11. Assomption. Plan.

Source: Metropolitan Transport Board.

Environment, art, architecture: the link and balance between them is thus sustained to the final details of both architectural and artistic form.

V

LASALLE: ARCHITECTURE SUBORDINATED TO ART

The unfolding of the architectural sequences of any building often depends on the direction from which we approach it. That is why our access to buildings in the past were often channeled by important thoroughfares or why they were given majestic plazas from which to contemplate them.

In the case of a subway station -- no doubt more humble in its aspirations than many of the palaces and civic buildings of the past -- the way we initially perceive its spatial sequences will depend on whether we arrive as travellers, entering from the street, or as passengers alighting directly on the platform. And the impressions of the latter will sometimes vary according to the direction from which we arrive (opposing platforms) as well as from the position along the platform from which we make our first contact.

At LaSalle station (1978), in each instance Didier Gillon, partner in charge of the concept and the project (Gillon - Larouche being the architectural firm), has created a set of formal indicators which prepare us for the unfolding of the visual programme and for the revelation of

the mezzanine wall, a folded metal relief sculpture projecting above the control mezzanine, the work of Peter Gnass (fig. 12).[1]

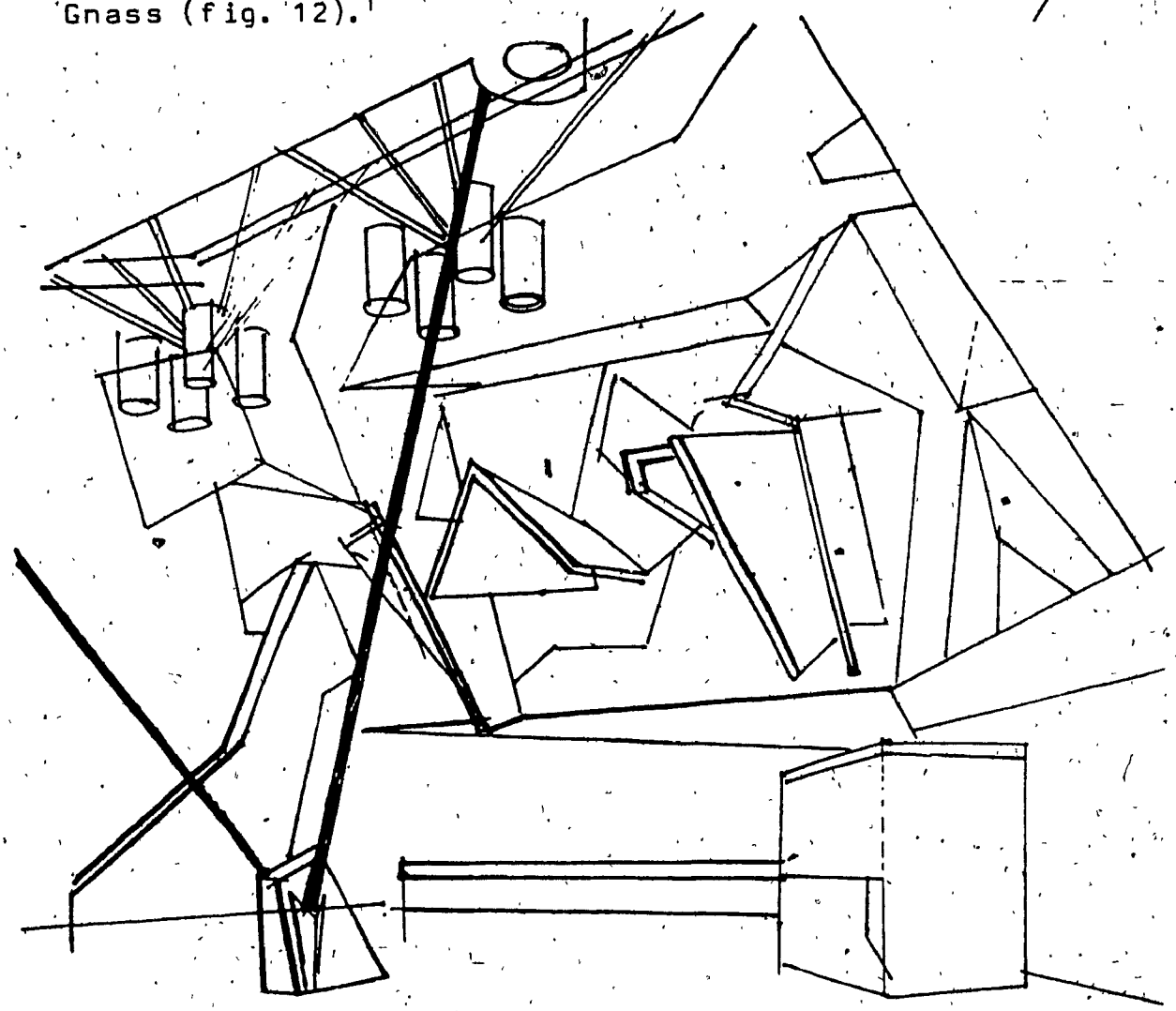

Fig. 12. LaSalle. The mezzanine.

From the outside, the folded and interlocking triangles of the entrance kiosk (fig. 13) are the indicators

[1]For biographical details concerning the artist, see Progressions: Peter Gnass, Ministère des Affaires culturelles du Québec, 1977; catalogue published for Gnass' exhibition at the Musée d'art contemporain, Montréal.

that herald the spaces and divisions of the interior. Similar in this respect to Assomption,[2] the homogeneity of the parts is in contrast to Verdun, for example, where the steel and glass skeletal framework of the kiosk is architecturally at variance with the concrete masses of the station interior.[3]

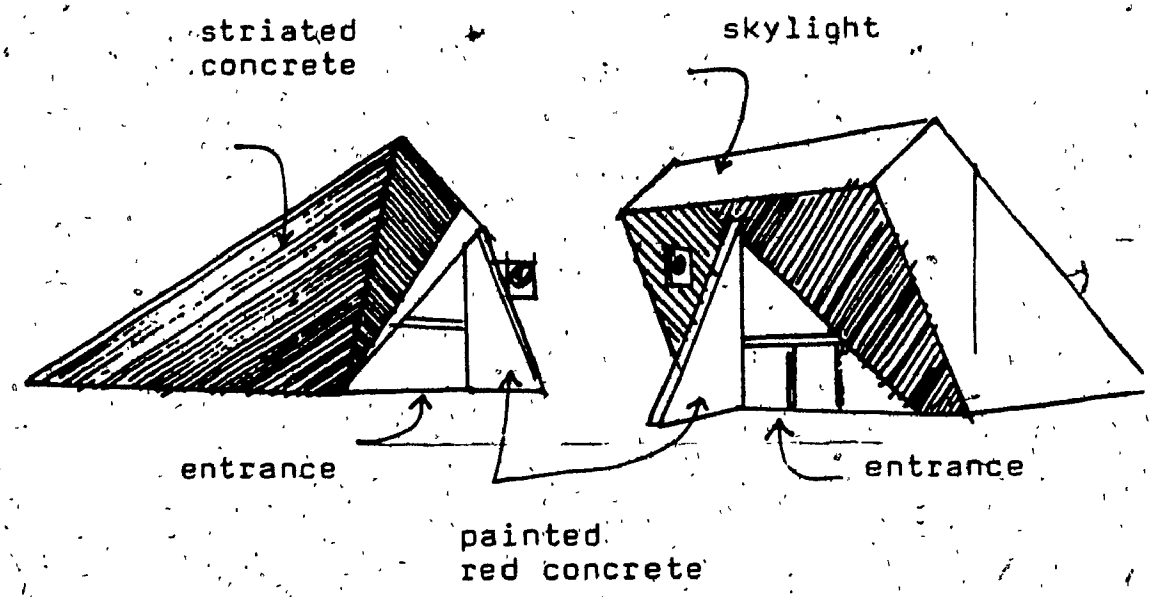

Fig. 13. LaSalle. Two views of the kiosk.

From the kiosk, the escalators lead directly down to the mezzanine where the traveller is enveloped in an atmosphere created by the dynamic forward thrust of Gnass' work, by the interlocking architectural volumes and surfaces emphasising the diagonals and by natural light entering from a skylight overhead.

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[2]See above, pp. 51-56.

[3]See above, pp. 30-33.

Stairs lead from both sides of the mezzanine to the platforms where large forms in concrete, whose form and colouring was conceived by Michèle Tremblay - Gillon, penetrate the station space from side to side. The section of the station is rectangular but its form is dissimulated by varying ceiling heights and by the triangular division of the vertical surfaces.[4]

On the platform level, the indicators that prepare the traveller for the visual explosion of the mezzanine are more numerous. They are:

1. the folded stainless steel seats along the walls of the platform,
2. protruding portions of Gnass' stainless steel sculpture seen below the central section of the platform ceiling (= mezzanine floor),
3. the ascending movement of the ceiling from its lowest points at each end of the platform to a climax above the mezzanine,
4. a gradation of lighting from dark to light from the ends of the platform towards the centre reinforcing the ascending movement of the ceiling,
5. interlocking triangular or converging masses of smooth concrete (the work of Michèle Tremblay - Gillon).

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[4]See below, p. 62.

As the object to which these indicators point, Gnass' folded stainless steel and aluminium sculptural relief (fig. 12) is the crowning aesthetic achievement of the station, the point of reference to which all the architectural details are subordinated.

When the station is viewed from the southern[5] extremity of the platform, the rectangular section of the tunnel cutting is obvious although its regularity is somewhat transformed by the varying height of the ceiling. From this point, we gain a glimpse of Gnass' sculpture through rectangular openings -- one above each platform -- which frame a see-through view over and above the mezzanine.

From the other, northern, end of the station, a transition from dark to light is clearly noticeable, the lightest part being reserved for the mezzanine. That this change should be judiciously controlled and modified along the way is a feature of this station; it is an aspect which contributes to its complexity and to our greater appreciation of its subtleties.

One of the effects of the movement from dark to light is to direct the passenger to the exit where a

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[5] LaSalle is one of the stations of Metro Line 1 which is generally considered to run east-west. This is because of Montrealers' practice of considering north to be perpendicular to the St.Lawrence River. However, a glance at a map will show that Line 1 runs decidedly north-east/south-west. At the point where LaSalle station is situated, it runs almost exactly north/south. For the purpose of this essay the map and plan in Appendix 3 may help the reader in need of orientation.

crescendo of light and movement is achieved at the mezzanine level. We become increasingly aware of the sculpture's presence as we move along the platform for as we do so the ideas behind the architectural and artistic scheme are revealed to us.

Again, it is from the northern end that the dynamic arrangement of interlocking obliques and diagonals has its greatest sequential effect. But it is from the middle of the station that Tremblay - Gillon's coloured masses most effectively fulfil their role of uniting both sides of the station. They set up an alternating rhythm of forceful movement and quiet areas on walls and ceilings, even moving across the rectangular space of the station's platform. Their continuity plays an important part in propelling our vision along the platform. They are also instrumental in creating a strong plastic unity throughout.

As well, their angular composition prepares us for Gnass' sculpture which at this point cannot be seen. They also help identify different parts of the platform. Thus, we alight in a coloured (vermillon or violet) or in a grey (natural concrete) section as the case may be.

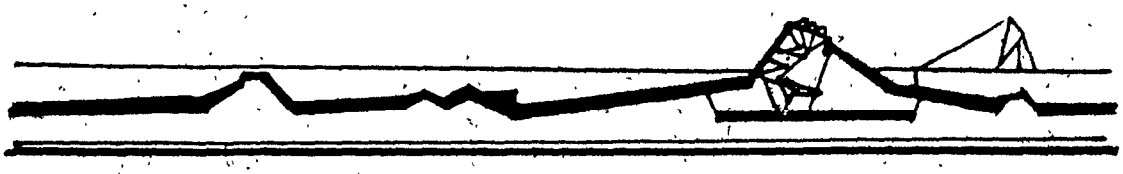

Fig. 14. LaSalle. Section.

The effects of the upward movement on the station (fig. 14) are alternatively reinforced and modified by the interaction of its three constituent elements:

1. the oblique masses of the coloured concrete wall and ceiling sections by Tremblay - Gillon that we have just referred to;
2. the judicious use of artificial and natural light;[6] and
3. the diagonal striations integrated into the remaining parts of the exposed concrete walls.

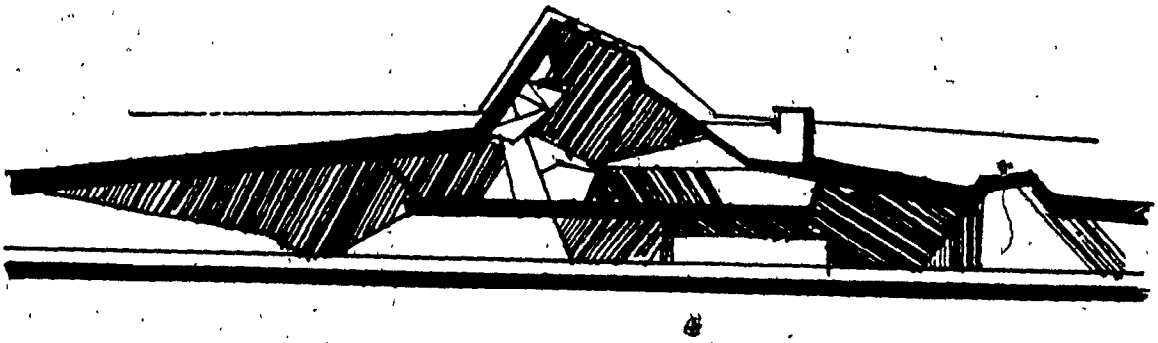

Fig. 15. LaSalle. Partial section showing the interlocking of flat and striated surfaces.

The insistant diagonals of the parallel striations (fig. 15), though not deeply cut (about 3 cm), direct the eye towards the stairways leading to to the mezzanine, but sometimes run counter to this movement. This is particularly so where the heavier formal elements -- such as Tremblay - Gillon's smooth, concrete masses -- form such strong directional ensembles that a lighter opposing

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[6] See above, p. 61.

movement especially when so closely allied to the surface, comes as a balancing counterpoint, helping to lock the different parts together.

The elements of Gnass' sculpture become increasingly visible as we move from the northern end of the station towards the mezzanine. Approaching the stairways, the eye is directed overhead where we discover a number of metal folds protruding below the ceiling anticipating our view of the scupture itself.

Once again the movement is upwards and outwards (i.e., towards ~~the~~ exit), more insistently so as we approach the stairs. From here on we enter into a space dominated by Gnass' relief. It is lit by natural light from a skylight above (fig. 16).

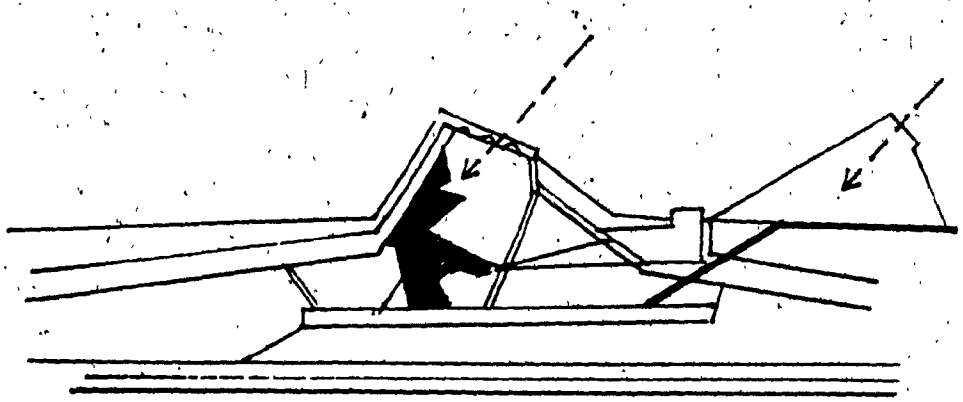

Fig. 16. LaSalle. Natural light entering the kiosk and mezzanine.

In the presence of this work the viewer is struck by the dazzling effect of light playing on reflecting geometric surfaces (fig. 12). The sculpture itself consists of a strongly three-dimensional wall of folded metallic forms jutting out from an inclined vertical wall. It visually -- and almost physically as well -- fills the space which it occupies. Two structural poles continue its diagonal thrust upwards across the mezzanine while red, concrete buttresses projecting from the sloping wall continue its movement on the horizontal plane. We are at a loss to determine where the sculpture begins and where it finishes.

Two steel poles provide a V-shaped frame through which platform below can be seen, the counterpart of the upward glance had earlier from the platforms. For the traveller coming from below, the two poles lead the eye upwards in anticipation of the upward trajectory we have to make in order to reach street level. On the mezzanine we feel that we have entered a vast hall; in reality we have entered a rather small cubicle with direct communication to the exterior.

The whole space of the mezzanine is characterized by the sense of excitement that comes from tension held in place.

The reflective quality of the polished surface acts as a distorting mirror animating the space above with the

movement and colours directed from below.[7]

The inclusion of art at LaSalle is due to Didier Gillon's desire "that art and sculpture be made an integral part of the structure by its strategic location in the station".[8] Its supremacy depends on three factors stemming from this desire, the first of these being the dynamic composition of Gnass' folded metal relief. At the same time this is almost a condensation, or perhaps one should say a compendium, of all the triangular and oblique forms used throughout the building. It is also the vital heart from which all the other triangles and obliques of the station radiate. This effect can be deduced from the sections reproduced in figures 15 and 16, and can be experienced in reality from all parts of the station itself as we have attempted to describe.

The second factor is the actual physical predominance given to Gnass' work on the facing (when arriving from outside) wall of the mezzanine. It should be added that this wall, although inclined, is the most nearly vertical of all the walls of the station. Only the longitudinal (north-south) walls of the platforms,

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[7]René Viau, "Une intégration réussie des arts et de l'architecture à la station de métro LaSalle", Habitat, vol. 21, no. 4 (1978), pp. 56-60.

[8]Canadian Architect, vol. 21, no. 6 (Dec. 1976), pp. 40-42.

considerably more reduced in scale, are more so. It is also the wall which benefits mostly (in fact, almost exclusively) from the natural light streaming in from the skylight immediately above (fig. 16).

Finally, by tying Tremblay - Gillon's work to the structure itself, the architect has ensured that art is present on the platform level. This is in contrast to Peel and Assomption stations where two spaces, one for art and one for architecture, were created.[9]

Furthermore, the striations on the natural concrete walls tend to be interpreted, as being an integral part of the "natural" wall and hence of the architecture. By contrast, Tremblay - Gillon's coloured, block-like forms tend to be read as art. And as art these masses punctuate the space while their colours create a unifying rhythm throughout the station.

In the Montreal Metro network, LaSalle is the only example of our third category, the relationship in which architecture is subordinated to art. As we have seen, the movement initiated by Gnass' work is continued throughout the station by the architectural forms, by coloured, angular masses conceived by Michèle Tremblay - Gillon and by the parallel striations later added to the wall surfaces by the architect, Didier Gillon. All of these factors, together

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[9]See above, chapter IV.

with the other details discussed in this chapter, seem to indicate that art here plays a dominant role.

The architect's concept, however, is more far-reaching. "What integration means", he says, "is a total fusion of the arts, a bringing together of all the various disciplines; in other words, the reconciliation of architecture, sculpture and painting. At LaSalle, I tried to find a way of integrating the three disciplines in a unified whole without boundaries".[10]

This aim is similar to that put forward by Bruno Taut in 1918 in promoting the unification of all the component elements in architecture: "The various disrupted tendencies can find their way back to a single unity only under the wings of a new architecture, so that every individual discipline will play its part in building. Then there will be no frontiers between applied arts and sculpture or painting. Everything will be one."[11]

Art plays a major role at LaSalle. It transcends individual characteristics and fuses all the more thoroughly with the architecture. In so doing art is not subordinated subordinated to architecture as at Verdun, De l'Eglise,

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[10]From an interview with Didier Gillon, June 9, 1987.

[11]Bruno Taut, "A Program for Architecture" (1918), Ulrich Conrads (ed.), Programs and Manifestoes on 20th-Century Architecture (1964), Michael Bullock (trans.), Cambridge (Mass): M.I.T. Press, 1977, pp. 41-43.

Viau or Honoré-Beaugrand;[12] instead it contributes to a new whole in which the lines of demarcation between art and architecture are impossible to establish.

[12]See above, chapter III.

CONCLUSION

In the Metro, as elsewhere, it is always the architect who invites the artist to participate in a project. It is thus perhaps not suprising that the architect's role is preponderant. If the design of a building comes first, it is difficult for works of art to add significantly to the whole. When invitations are extended after plans have been drawn up, budgets allotted or the site for the work of art already chosen, then almost inevitably art will be subordinated to architecture. Typically, as Prokopoff has pointed out, the artist will be "selected on the basis of (his or her) ability to provide the kind of work already designated". In practice, the onus has usually been on artists to formulate solutions compatible with an extant architectural conception.[1]

This procedure has perhaps led in the Metro to a preponderance of art in a relationship that is subordinated to architecture. We have confined our discussion to examples, such as Verdun (where one work of art has been incised directly into the wall provided by the architect Jean-Marie Dubé, another occupies panels along the lower

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[1] Stephen Prokopoff, "The Government as Patron" in Barbaralee Diamondstein (ed.), Colloboration: Artists and Architects (1981), pp. 78-87.

parts of the walls adjacent to te entrance, corridors, stairways and platforms), De l'Eglise and Viau, where the materials used are those closely allied to architecture. And we have seen that at Honoré-Beaugrand a more complex interaction takes place although the same materials have been used.

At Peel in the sixties a close collaboration between artist Mousseau and architect Papineau resulted in a station in which an equitable relationship between artist and architect was reflected from the project's conception. This achievement may not have been fully understood and, in any case, was not repeated until a decade later in the second series of stations at Assomption where a similar relationship was established by Duplessis/Labelle and Montpetit.

The importance of Jean-Paul Mousseau as an artist emerges as a secondary conclusion in our analysis. Although his major work over two decades has been exclusively in the public sphere, Mousseau has received little critical attention since his exhibition at the Musée d'Art contemporain in 1968.[2] Almost anonymously, he has produced an important body of work, in his murals at Peel (1966), Viau (1976) and Honoré-Beaugrand (1976) stations. This suggests a need for a new evaluation of his contribution

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[2]See above, p. 41.

to art in Quebec and, by extension, to art in North America.

Finally, at LaSalle, in the mid-seventies, Didier Gillon, by inviting Peter Gnass and Michèle Tremblay - Gillon to participate in his project from the beginning, paved the way for a new relationship in the experience of the Metro, that of architecture subordinated to art. In our opinion LaSalle best demonstrates this relationship. Only a collaboration between an architect and artists of consequence could have yielded such an exciting architectural solution.[3]

All the stations we have considered are efforts to create what Mousseau has called the "humanisation of public space'.[4] That such attempts can sometimes result in "superb stations" rather than "high kitsch" shows, we believe, that "humanisation" in the public domain can sometimes be achieved without loss of dignity and aesthetic ideals.[5] Montreal's policy of contracting each station to different architectural firms has made of the Metro a visible compendium of current ideas about art in architecture as practised in this city.

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[3]Our understanding of this collaboration has been corroborated by the awarding of one of the Canadian Yearbook Awards for 1976 to LaSalle station for its "marvellous... blending of architecture, sculpture and painting". See: Canadian Architect, vol. 21, no. 6 (1976), 40-44.

[4]Adamczyk, Op. cit.

[5]cf. Canadian Architect, vol. 23, no. 8.

Our study of the collaboration between artists and architects has tended to verify that the three relationships between painting and architecture proposed by Sewter in regard to the art of the past do indeed provide useful categories by which to consider relationships existing today between art and architecture in Montreal's Metro. LaSalle may be seen within these categories. It also transcends them, as we have shown, in the same way that the contribution of the architect and of the individual artists at this station transcend their own disciplines.

BIBLIOGRAPHY

The first section of this bibliography lists a selection of books, catalogues and articles consulted that have the most direct bearing on the relationship between art and architecture in the Metro. The second section contains a list of books, catalogues and articles consulted which deal with more general issues, some of the comparative material on other subways, discussion of public funding that aims at putting art in architecture, other Montreal stations that have helped us to clarify what is relevant about the stations discussed here and the development of the city core prior to the Metro's completion; this is a selective list of books and articles that have proven most useful.

For convenience, where the name of the author is not given, we have listed the articles that have appeared in the various architectural journals under the name of that journal, rather than by title.

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Van Ginkel, Blanche, "After Expo", Architectural Design, vol. 37 (July 1967).

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Whiteson, Leon. Modern Canadian Architecture. Edmonton: Hurtig Publishers Ltd, 1983, pp. 242-245.

Brief look at LaSalle station, photos and section.

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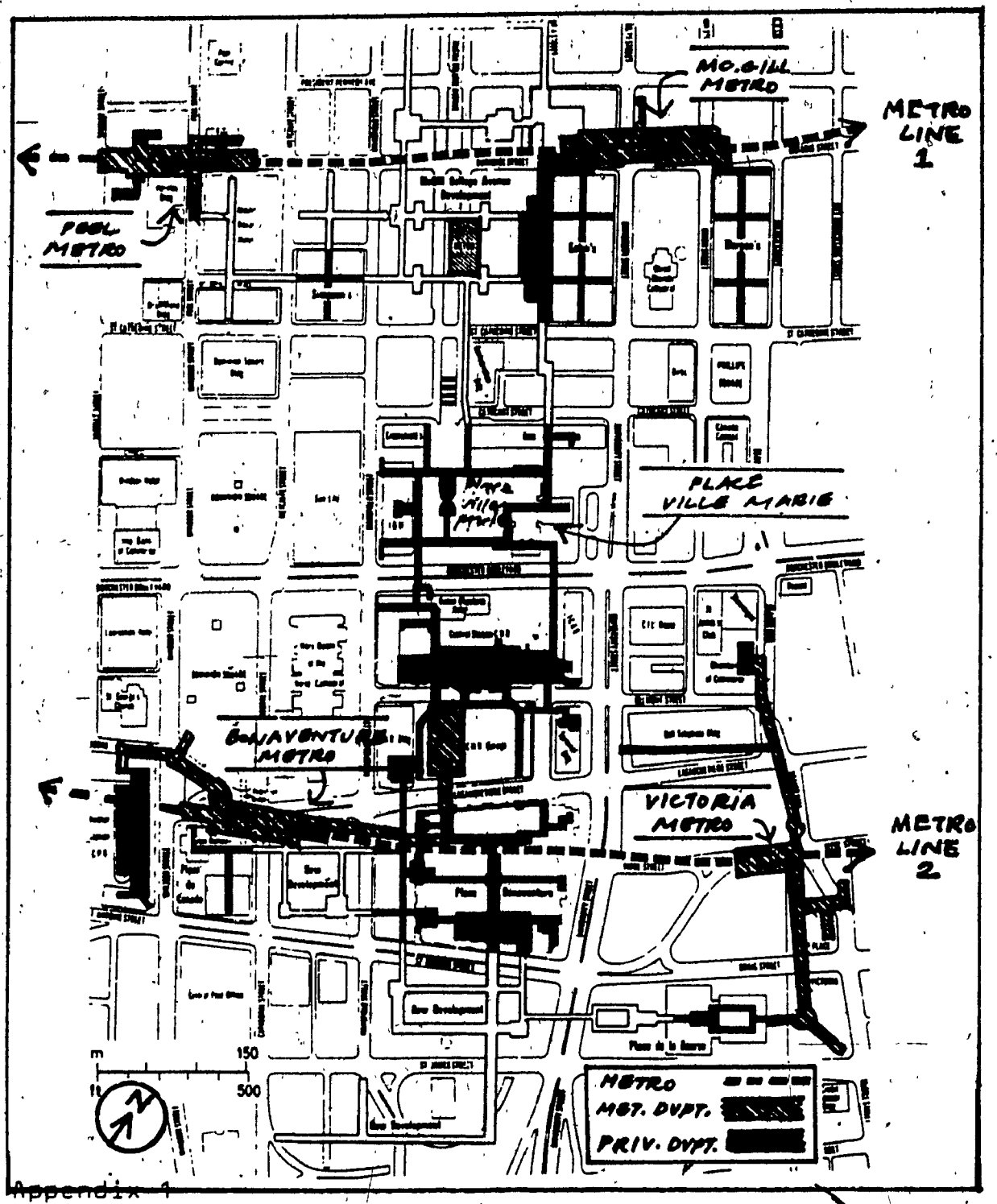
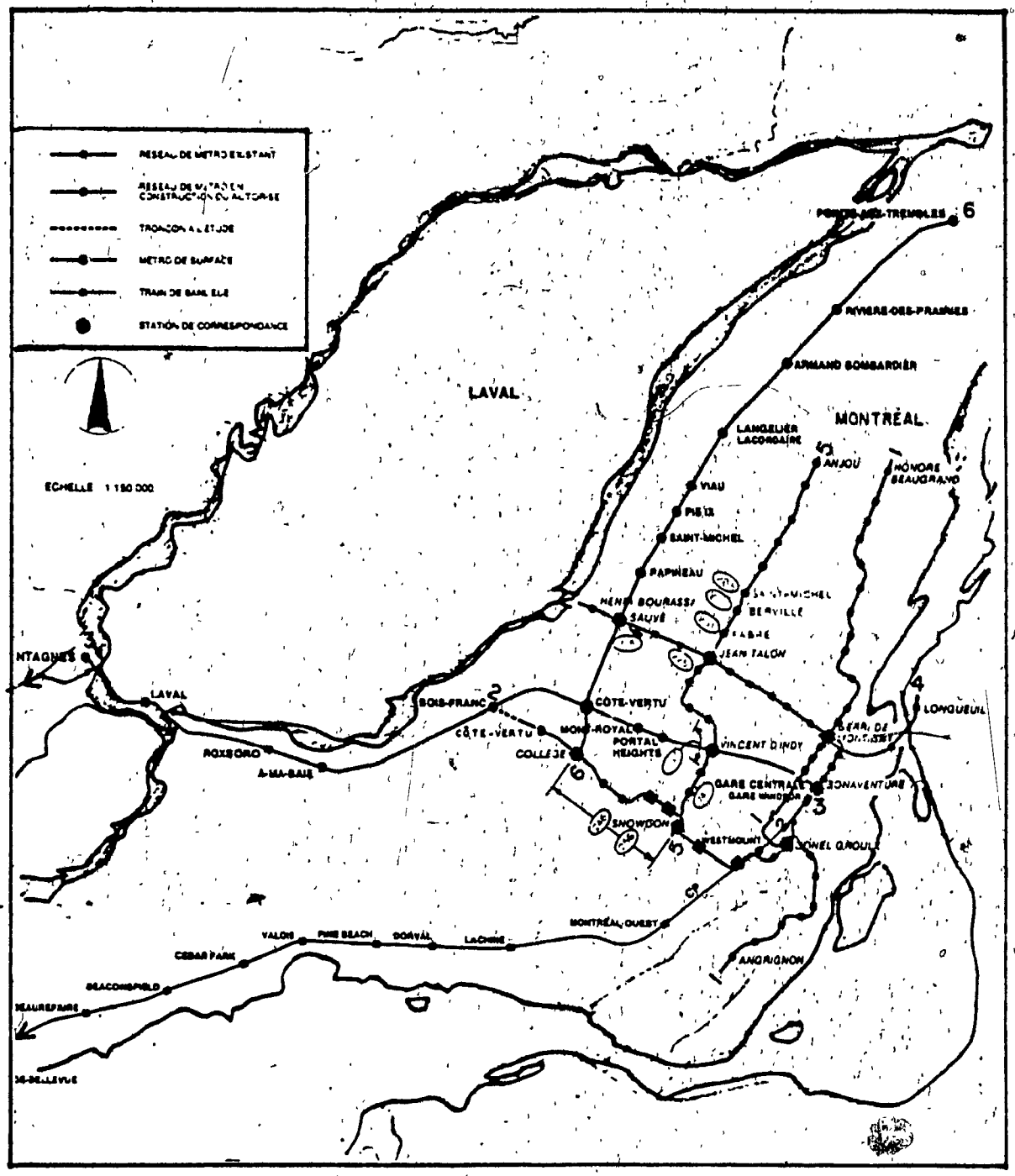
APPENDICES



Appendix 1

Downtown Montreal.

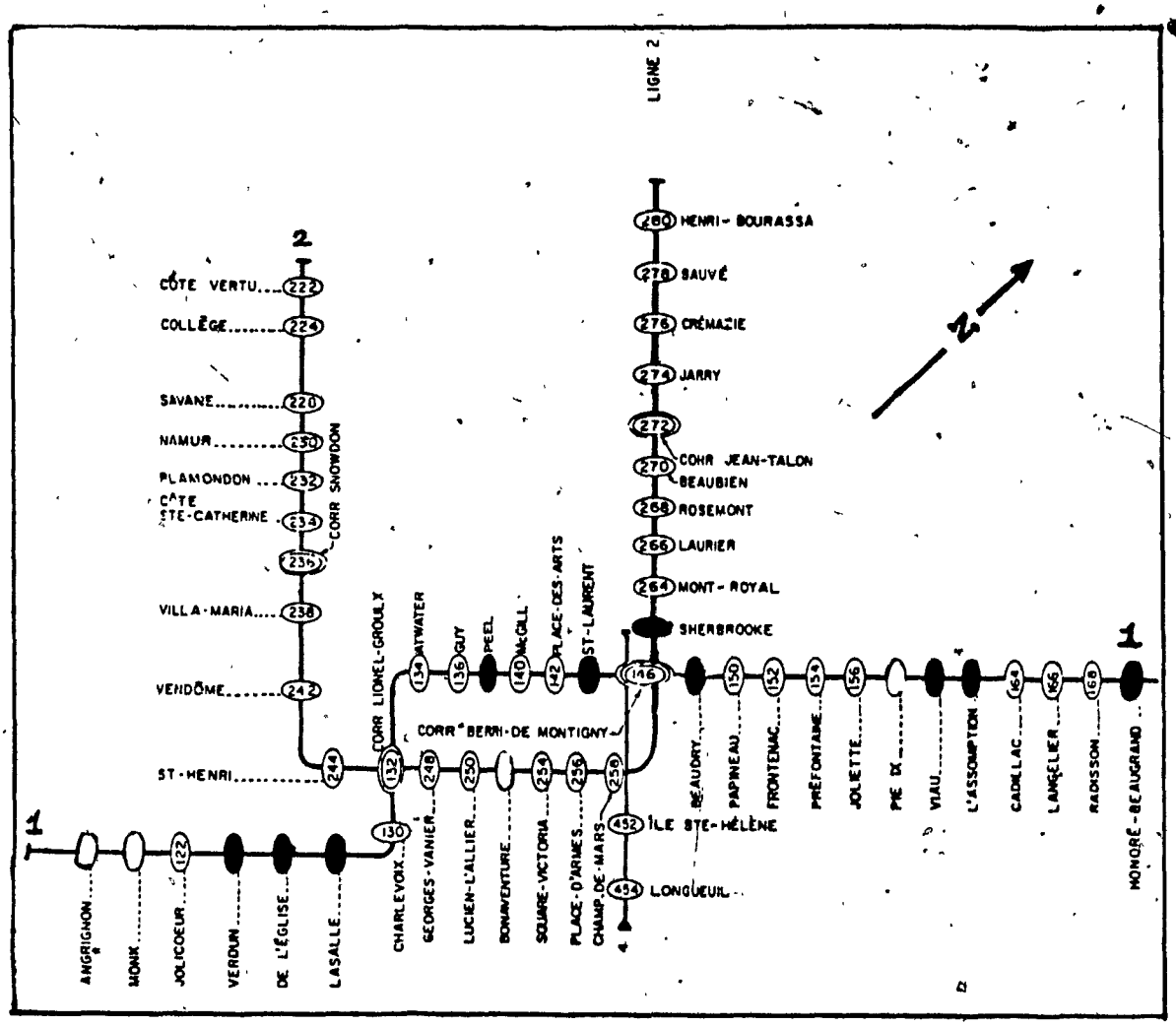
Interlocking of Metro with surface and underground pedestrian networks. Map updated and adapted after Norbert Schoenauer, "The New City Centre", Architectural Design, vol. 37 (July 1967), p. 312.



Appendix 2

Regional Public Transport Project.

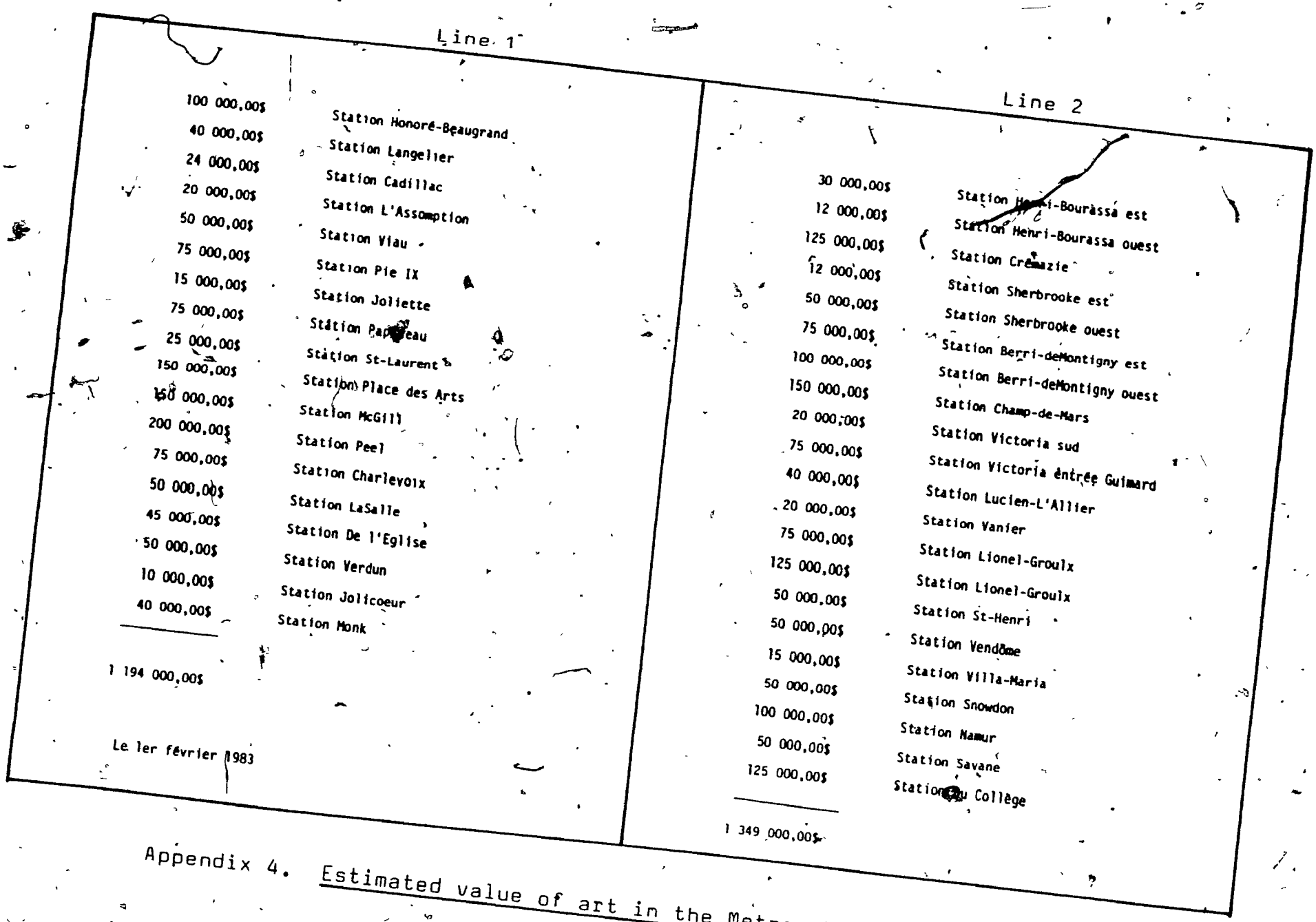
Future Metro lines and regional transport network.
Source: Metropolitan Transport Board, Summary of Activities, 1982.



Appendix 3

Metro, 1985.

Lines in service at the end of 1985.
Stations referred to in this paper are shown in black.
Source: Metropolitan Transport Board.



Line 1

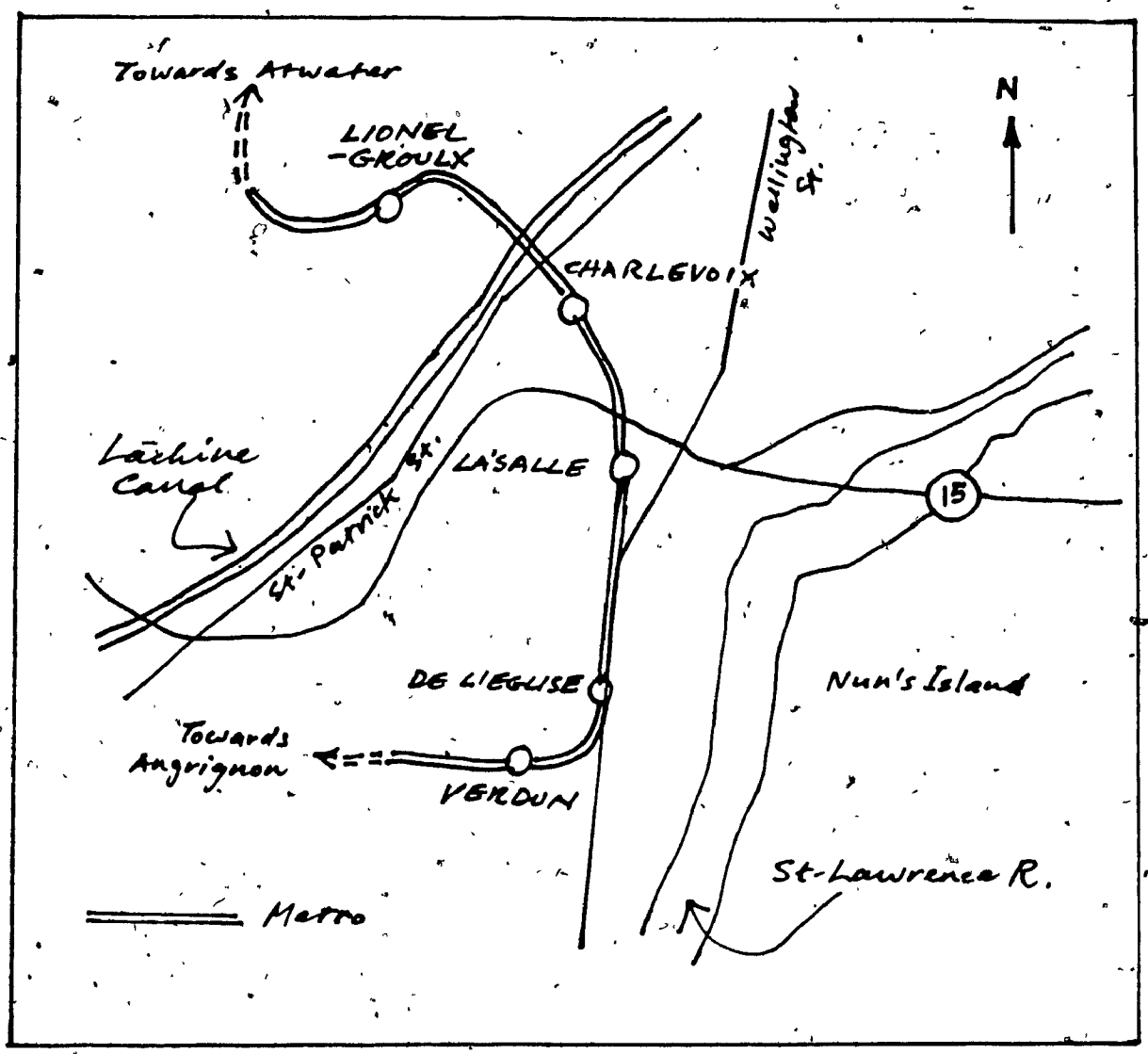
100 000,00$	Station Honoré-Beaugrand
40 000,00$	Station Langelier
24 000,00$	Station Cadillac
20 000,00$	Station L'Assomption
50 000,00$	Station Viau
75 000,00$	Station Pie IX
15 000,00$	Station Joliette
75 000,00$	Station Papineau
25 000,00$	Station St-Laurent
150 000,00$	Station Place des Arts
150 000,00$	Station McGill
200 000,00$	Station Peel
75 000,00$	Station Charlevoix
50 000,00$	Station LaSalle
45 000,00$	Station De l'Eglise
50 000,00$	Station Verdun
10 000,00$	Station Jolicoeur
40 000,00$	Station Monk
1 194 000,00$	

Le 1er février 1983

Line 2

30 000,00$	Station Henri-Bourassa est
12 000,00$	Station Henri-Bourassa ouest
125 000,00$	Station Crémazie
12 000,00$	Station Sherbrooke est
50 000,00$	Station Sherbrooke ouest
75 000,00$	Station Berri-deMontigny est
100 000,00$	Station Berri-deMontigny ouest
150 000,00$	Station Champ-de-Mars
20 000,00$	Station Victoria sud
75 000,00$	Station Victoria entrée Guimard
40 000,00$	Station Lucien-L'Allier
20 000,00$	Station Vanier
75 000,00$	Station Lionel-Groulx
125 000,00$	Station Lionel-Groulx
50 000,00$	Station St-Henri
50 000,00$	Station Vendôme
15 000,00$	Station Villa-Maria
50 000,00$	Station Snowdon
100 000,00$	Station Namur
50 000,00$	Station Savane
125 000,00$	Station du Collège
1 349 000,00$	

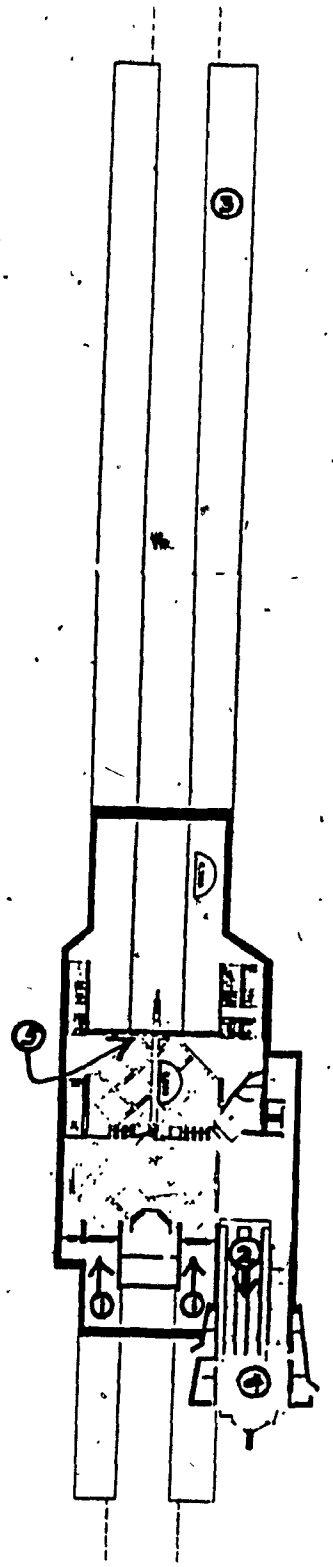
Appendix 4. Estimated value of art in the Metro, Feb. 1, 1983. Source: M.T.B.



Appendix 5--

LaSalle Station.

A. Situation map showing a section of Line 1 in the vicinity of LaSalle station.



8. Plan.

1 Positions from which sculpture is visible from platform.

2 Escalators leading to kiosk and exit.

3 Platforms.

4 Kiosk.

5 Base of inclined wall of sculpture.