

Ceci n'est pas un parc:
Reconsidering the Island Site of Expo 67

by
Edward Jae Hamilton

A thesis
presented to the University of Waterloo
in fulfillment of the
thesis requirement for the degree of
Master of Architecture

Waterloo, Ontario, Canada, 2011
© Edward Jae Hamilton 2011

AUTHOR'S DECLARATION

I hereby declare that I am the sole author of this thesis.
This is a true copy of the thesis, including any required final
revisions, as accepted by my examiners.

I understand that my thesis may be made electronically
available to the public.

ABSTRACT

This thesis examines the landscape of Expo 67, in both its original and current state, and diagnoses a set of design and programming issues. In the mid-1960s, the city of Montreal undertook a vast construction project in the St. Lawrence River, which doubled the size of the existing Ile-Sainte-Hélène and entirely created the adjacent Ile-Notre-Dame. Together, these new islands provided the site for Expo 67. The world exhibition has since been dismantled and the site now contains a patchwork of landscape design proposals.

The construction of the islands is investigated relative to the earthwork practices that were emerging at the time they were built. Adjacent art practices are subsequently mined to develop a response to the present state of the site. This somewhat rhetorical design method intends to provoke discussion of the best use of the site and attempts to recover the specific nature of the place – a once densely built ground, partially conceived as a laboratory of ideas for the future of the city – now obscured beneath a relatively generic mantle of picturesque landscaping.

The proposed design features a series of large-scale greenhouse structures arrayed in relation to the site's existing metro station, connecting the present landscape's features in an integrated network with sustainable elements. This network aims to restore the civic status of the park, to promote the use of the territory as an experimental ground, and to strengthen the dialectic between the site and the culture of the city that created it.

ACKNOWLEDGEMENTS

I'd like to extend a most sincere thank you to my supervisor, Marie-Paule Macdonald, for her generosity, her guidance, and her insight into this work.

Many thanks to my committee members, Anne Bordeleau and Scott Sørli, for their very helpful questions, comments and suggestions; and to my external reader, Adrian Blackwell, for his observations and enthusiasm.

I am most grateful to Angie Michail for keeping all those layers straight, and for always knowing when to call, and what to say; to Vien Nguyen for her commiseration, her camaraderie, and her computer;

And especially to Yiu-Bun Chan for his support, patience, kindness and care, which have made all the difference.

for mom, dad, and jim.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS	ix
NOTES ON THE TITLE (AN INTRODUCTION)	1
MONTREAL WINS THE FAIR	7
ÎLE SAINTE-HÉLÈNE	13
THE EXPO SITE	19
THE MASTER PLAN	25
DRAWING IN DIRT	37
WATER FEATURES	45
URBAN LANDSCAPE	53
URBAN LABORATORY	57
A PERMANENT EXHIBITION	71
SUBTRACTIONS AND ADDITIONS	81
PARC DES ÎLES	89
MEMORIALS	93
THE MONTREAL-PARIS TOWER	97
EARTHWORKS	99
A NEW GROUND	107
A PROPOSED GARDEN GRID	111
SELECTIVE DELETIONS	115
SCATTER	121
A PROPOSED SCATTER PIECE	129
DISTRIBUTIONS AND DEBRIS	135
LES HALLES: A FICTIONAL CONCLUSION	139
ENDNOTES	175
REFERENCES	189

LIST OF ILLUSTRATIONS

FIG PAGE

xix	Frontispiece: Rene Magritte's <i>La trahison des images</i> modified by author to show a map of Ile Sainte-Hélène and to read <i>parc</i> instead of <i>pipe</i> . 2009.
1	4-5 Map of the public parks on the Island of Montreal, image manipulated by author from an original drawing in the archives of M-P Macdonald, 2011.
MONTREAL WINS THE FAIR	
2	6 Photograph of Jean Drapeau, former Mayor of Montreal, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.52.
3	6 Photograph of Lucien Saulnier, former Chairman of the Executive Committee of the City of Montreal, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.53.
4	6 Photograph of Claude Robillard, the first General Manager of Expo '67, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.53.
5	7 Photograph of the ceremony marking the start of construction of the Expo Islands, from <i>Montreal '64 Magazine</i> Vol.1 No.1 (May), 1964. p.23.
6	8 Photograph of Pierre Dupuy, the Commissioner General of Expo '67, from the <i>Expo '67 Memorial Album</i> , 1968. p.7.
7	8 Photograph of Robert Shaw, the Deputy Commissioner General of Expo '67, from <i>This Was Expo</i> , by Robert Fulford, 1968. p.202.
8	9 Photograph of Colonel Edward Churchill, the Installations Director of Expo '67, from <i>This Was Expo</i> , by Robert Fulford, 1968. p.202.
9	9 Photograph of Phillipe de Gaspé Beaubien, the Operations Director of Expo '67, from <i>This Was Expo</i> , by Robert Fulford, 1968. p.202.
10	10-11 Map of the original Ile Sainte-Hélène, drawing by author, 2011.
ILE SAINTE-HELENE	
11	12 Aerial Photograph of Ile Sainte-Hélène looking north-west, by Yvon Bellemare in the Archives de Montreal Institutional Affairs Fonds VM94/EX2-109, 1963.
12	12 Aerial Photograph of Ile Sainte-Hélène looking south-west, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.26.
13	12 Aerial Photograph of Ile Moffat and Ile Sainte-Hélène looking north-west, from the <i>Expo'67: Official Guide</i> , 1967. inside front cover.
14	13 Photograph of the fortifications on Ile Sainte-Hélène, from www.hauntednorthamerica.com/montreal.htm , 2010.
15	13 Photograph of the Tour de Lévis on Ile Sainte-Hélène from www.hauntednorthamerica.com/montreal.htm , 2010.
16	14 Frederick Todd's Revised General Plan for the landscaping of Ile Sainte-Hélène, 1937, from <i>Frederick Todd and the Creation of Canada's Urban Landscape</i> , by Peter Jacobs, 1983. p.32.
17	15 Photograph of a pond designed by Frederick Todd beside the historical powder magazine on Ile Sainte-Hélène, from www.skyscrapercity.com/showthread.php?t=241171&page=11
18	15 Photograph of a pond designed by Frederick Todd next to the historical powder magazine on Ile Sainte-Hélène, from www.skyscrapercity.com/showthread.php?t=241171&page=11
19	16 Aerial photograph of the Port of Montreal, from <i>Montreal '64 Magazine</i> Vol.1 No.1 (May), 1964. p.17.
20	16 Map entitled <i>Suggested Site for the Canadian World Exhibition</i> (dated February 1963), prepared by the National Harbour Board, Montreal Harbour, from the Archives de Montreal Institutional Affairs Fonds VM74/S3,D91, 1963.
21	17 Aerial photograph of the Jetée Mackay and the Port of Montreal, from <i>Montreal '65 Magazine</i> Vol.2 No.5 (May), 1965. p.28.
22	17 Aerial photograph of the Jacques-Cartier Bridge approach ramp from Longueuil, from Jacques Cartier and Champlain Bridges Incorporated, Multimedia Room – Historical Photos. www.pjcci.ca/English/Multimedia/anciennes14.htm .
23	17 Aerial photograph of the construction of a new ramp onto Ile Sainte-Hélène from the Jacques-Cartier Bridge, from Jacques Cartier and Champlain Bridges Incorporated, Multimedia Room – Historical Photos. www.pjcci.ca/English/Multimedia/anciennes07.htm .

THE EXPO SITE

- | | | | | | |
|----|------|--|----|----|---|
| 24 | 18 | Map of the locations studied for the site of Expo '67, adapted from "Existing Street Network on the Island of Montreal, 1960," by Lalonde, Girouard, and Letendre, engineers, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.145. | 33 | 25 | Rendering of an urban square on Expo '67's Cité du Havre, from <i>Montreal '66 Magazine</i> Vol.3 No.4 (April), 1966. p.11. |
| 25 | 18 | Photograph of the "Man and the City" presentation model for the Canadian Corporation for the 1967 World Exhibition, by Van Ginkel Associates, architects and planners, 1962, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.145. | 34 | 26 | Site plan of an urban square on Expo '67's Ile Notre-Dame, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. |
| 26 | 20 | Reproduction print of an early study of the river site of Expo '67 by Bedard, Charbonneau, Langlois, architects, from the collection Bruno Bedard in <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.144. | 35 | 26 | Artist's rendering of an urban square on Expo '67's Ile Notre-Dame, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. |
| 27 | 20 | Reproduction from microfilm of a sketch proposal for Expo '67 master plan, by Eugène Beaudouin, architect and planner, November 1963, from the Library and Archives Canada, Ottawa, RG 71M, acc.85603/4, in <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.145. | 36 | 27 | Artist's rendering of an urban square on Expo '67's Ile Sainte-Hélène, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. |
| 28 | 21 | Artist's conception of the Master Plan of the 1967 World Exhibition, an Official Postcard of Expo '67, printed by Benjamin News Co. Ltd., 1967. | 37 | 27 | Site plan of an urban square on Expo '67's Ile Sainte-Hélène, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. |
| 29 | 22-3 | Map of the Master Plan of Expo '67, drawing by author, 2011. | 38 | 28 | Early concept rendering of the truncated tetrahedral theme pavilions at Expo '67, from <i>Montreal '66 Magazine</i> Vol.3 No.8 (August), 1966. p.20. |
| | | THE MASTER PLAN | 39 | 29 | Artist's rendering of the <i>Man the Explorer</i> theme pavilion on Ile Sainte-Hélène, an Official Postcard of Expo '67, printed by Benjamin News Co. Ltd., 1967. |
| 30 | 24 | Artist's rendering of a bird's-eye view of the AutoStade and Place d'Accueil at Expo '67, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. | 40 | 30 | Model of the <i>Man in the Community</i> theme pavilion on Cité du Havre, from <i>Montreal '67 Magazine</i> Vol.4 No.1 (January), 1967. p.7. |
| 31 | 24 | Artist's rendering of an urban square on Expo '67's Cité du Havre, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. | 41 | 30 | Artist's rendering of the <i>Man the Creator</i> theme pavilion on Cité du Havre, from <i>Montreal '65 Magazine</i> Vol.2 No.7 (July), 1965. p.29. |
| 32 | 24 | Site plan of an urban square on Expo '67's Cité du Havre, from the Canadian Corporation for the 1967 World Exhibition's <i>Introduction of an Urban Concept in the Planning of the Exposition – Expo '67</i> , 1965. | 42 | 31 | Model of the <i>Man the Provider</i> theme pavilion on Ile Notre-Dame, from <i>Montreal '67 Magazine</i> Vol.4 No.1 (January), 1967. p.5. |
| | | | 43 | 31 | Artist's rendering of the proposed cattle exhibit for the <i>Man the Provider</i> theme pavilion on Ile Notre-Dame, from <i>Montreal '65 Magazine</i> Vol.2 No.4 (April), 1965. p.21. |
| | | | 44 | 31 | Artist's rendering of the proposed soils exhibit for the <i>Man the Provider</i> theme pavilion on Ile Notre-Dame, from <i>Montreal '65 Magazine</i> Vol.2 No.4 (April), 1965. p.20. |

FIG PAGE

45	32	Parti sketch of the concept for the street furniture of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. cover.	59	40	Institutional Affairs Fonds VM94/EX-34-8, 1964. Aerial photograph of the completed dyke extending from Ile Sainte-Hélène around the former Ile Ronde, from http://expo67.morenciel.com/an/misc/construction.php .
46	32	Model of the telephone booths of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.2.	60	40	Aerial photograph showing the quarry on the former Ile Ronde filled with water, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.25.
47	32	Model of the lamp-posts, benches and telephone booths of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.8.	61	41	Photograph of dump trucks collecting fill from the quarry on Ile Ronde, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.24.
48	33	Model of the planter boxes of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.4.	62	42-3	Map of the water features of the Expo Islands, drawing by author, 2011.
49	33	Model of the mail boxes of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.4.			
50	33	Model of the drinking fountains of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.5.	63	44	WATER FEATURES Photograph of dredge pipes, from the <i>Expo '67 Memorial Album</i> , 1968. p.322.
51	33	Model of the trash receptacles of Expo '67, by Luis F. Villa/Frank Macioge Assoc. in <i>Site Furniture at Expo '67</i> , 1963. p.4.	64	44	Aerial photograph of Ile Sainte-Hélène, Cité du Havre and the Harbour of Montreal, from <i>Montreal '66 Magazine</i> Vol.3 No.3 (March), 1966. p.22.
52	34-5	Map of the construction of the Expo '67 Islands, drawing by author, 2011.	65	45	Photograph of dredge pipes, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.26.
		DRAWING IN DIRT	66	46	Aerial photograph of Ile Notre Dame, from <i>This Was Expo</i> , by Robert Fulford, 1968. p.11.
53	36	Photograph of the construction of dykes to enlarge Ile Sainte-Hélène, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.25.	67	47	Aerial photograph of the Expo Islands, from the <i>Expo '67 Official Guide</i> , 1966. inside front cover.
54	36	Photograph of one of the two most powerful dredges in the world, which were used to create the new Ile Sainte-Hélène, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.23	68	48	Aerial photograph of Expo Islands under construction, from the <i>Expo '67 Memorial Album</i> , 1968. p.40-41.
55	36	Photograph of the construction of dykes around the original Ile Ronde, from <i>Montreal '64 Magazine</i> Vol.1 No.2 (June), 1964. p.25.	69	48	Partial photograph of an early planning model of La Ronde, from <i>Montreal '65 Magazine</i> Vol.2 No.3 (March), 1965. p.20.
56	37	Photograph of the quarry on Ile Verte during the construction of the Expo Islands, by Maurice Macot in the Archives de Montreal Institutional Affairs Fonds VM94/EX-34-6, 1964.	70	50-1	Map of Expo '67's multi-modal transportation network, drawing by author, 2011.
57	38	Aerial photograph of the construction of the enlarged Ile Sainte-Hélène, October 1963, from <i>Montreal '64 Magazine</i> Vol.1 No.1 (May), 1964. p.23.			URBAN LANDSCAPE
58	39	Photograph of the channel between the new Expo islands showing the construction of Ile Notre-Dame, by Maurice Macot in the Archives de Montreal	71	52	Photograph of city blocks razed to make way for new Trans-Canada Highway, from <i>Montreal '64 Magazine</i> Vol.1 No.3 (July), 1964. p.25.
			72	52	Photograph of new Decarie Boulevard interchange, from <i>Montreal '64 Magazine</i> Vol.1 No.3 (July), 1964. p.25.
			73	52	Photograph of the traffic interchange at the intersection of the Decarie Expressway, the Metropolitan Boulevard and the Laurentian

		Autoroute, from <i>Montreal '66 Magazine</i> Vol.3 No.9 (September), 1966. p.17.	89	60	Photograph of criss-crossing minirails on Ile Notre Dame, from the <i>Expo '67 Memorial Album</i> , 1968. p.44.
74	53	Photograph of extensions to the Metropolitan Boulevard, from <i>Montreal '64 Magazine</i> Vol.1 No.3 (July), 1964. p.26.	90	60	Photograph of the minirail at the Lausanne Expo of 1964, from www.worldfairs.info/forum/viewtopic.php?f=39&t=712&start=0 .
75	53	Photograph of the Metropolitan Boulevard, from <i>Montreal '64 Magazine</i> Vol.1 No.3 (July), 1964. p.27.	91	61	Photograph of the Sky Ride at Expo '67, from the Library and Archives Canada, Expo '67 collection, FA-173-Expo 67, 1967.
76	54	Aerial photograph of the tunnel portion of the Louis-Hippolyte-Lafontaine bridge-tunnel, from <i>Montreal '66 Magazine</i> Vol.3 No.6 (June), 1966. p.20.	92	61	Photograph of the blue minirail and the Ethiopian pavilion at Expo '67, from www.dchillier.com/site/ethiopia.html .
77	54	Aerial photograph of the bridge portion of the Louis-Hippolyte-Lafontaine bridge-tunnel, from <i>Montreal '66 Magazine</i> Vol.3 No.9 (September), 1966. p.21.	93	62	Map of Montreal's original metro lines, from <i>Montreal '66 Magazine</i> Vol.3 No.12 (December), 1966. p.9.
78	55	Aerial photograph of the Bonaventure Expressway, from www.havremontreal.qc.ca/en/medias/images_autoroute_bonaventure.htm , 2004.	94	62	Photograph of the Rosemont station of the Montreal metro, from <i>Montreal '66 Magazine</i> Vol.3 No.12 (December), 1966. p.5.
79	55	Aerial photograph of the Expo '67 parking lot in Longueuil, Québec, from <i>Montreal '67 Magazine</i> Vol.4 No.4 (April), 1967. p.9.	95	62	Photograph of the Peel station of the Montreal metro, from <i>Montreal '66 Magazine</i> Vol.3 No.12 (December), 1966. p.12.
		URBAN LABORATORY	96	63	Photograph of the "Jumbo" drill used to create tunnels for the Montreal metro system, from <i>Montreal '64 Magazine</i> Vol.1 No.5 (September), 1964. p.5.
80	56	Artist's rendering of the Place d'Accueil at Expo '67, from <i>Montreal '67 Magazine</i> Vol.4 No.4 (April), 1967. p.5.	97	63	Photograph of the construction of the metro tunnel on Ile Sainte-Hélène, from <i>Montreal '64 Magazine</i> Vol.1 No.8 (December), 1964. p.29.
81	56	Photograph of the Place d'Accueil at Expo '67, from www.dchillier.com/site/receiving.html .	98	63	Photograph of the trench for the metro tunnel between the Expo islands, by Marcel Houle, from the Archives de Montreal Institutional Affairs Fonds VM94/M76-15, 1964.
82	56	Photograph of the gallery of the International Broadcasting Centre at Expo 67, from <i>Montreal '67 Magazine</i> Vol.4 No.3 (March), 1967. p.6.	99	64	Diagram of Montreal's underground network, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.153.
83	57	Artist's rendering of the Expo Express on Cité du Havre, from <i>Montreal '66 Magazine</i> Vol.3 No.4 (April), 1966. p.10.	100	64	Diagram of Rockefeller Center's subterranean concourse, from <i>The 60s: Montreal Thinks Big</i> , edited by André Lortie, 2004. p.153.
84	57	Photograph of the Expo Express on Ile Notre-Dame, from the <i>Expo '67 Memorial Album</i> , 1968. p.46.	101	64	Photograph of the construction of the Berri-deMontigny metro station, from <i>Montreal '65 Magazine</i> Vol.2 No.11 (November), 1965. p.6.
85	58	Photograph of the construction of the Concordia Bridge piers, by Raymond Gagnon, from the Archives de Montreal Institutional Affairs Fonds VM94/EX-38-18, 1964.	102	64	Photograph of the pneumatic tires of the new Montreal metro car, from <i>Montreal '64 Magazine</i> Vol.1 No.5 (September), 1964. p.7.
86	58	Photograph of the Concordia Bridge, from <i>Montreal '66 Magazine</i> Vol.3 No.3 (March), 1966. p.24.	103	64	Photograph of a full scale model of the new Montreal metro car, from <i>Montreal '64 Magazine</i> Vol.1 No.5
87	59	Aerial photograph of the Concordia Bridge and the Cite du Havre, from <i>Montreal '66 Magazine</i> Vol.3 No.3 (March), 1966. p.23.			
88	59	Photograph of the Pont des Iles, from the <i>Expo '67 Memorial Album</i> , 1968. p.44.			

		(September), 1964. p.6.			on Ile Sainte-Hélène, from <i>Montreal '67 Magazine</i> Vol.4 No.10 (October), 1967. p.7.
104	65	Photograph of the stairs in the Ile Sainte-Hélène metro station, from <i>Montreal '67 Magazine</i> Vol.4 No.3 (March), 1967. p.29.	120	75	Photograph of dignitaries at the opening ceremony of Terre des Hommes '68, from <i>Montreal '68 Magazine</i> Vol.5 No.5 (May-June), 1968. p.5.
105	65	Photograph of the exterior of the Ile Sainte-Hélène metro station, by author, 2009.	121	76	Photograph of the Yugoslavian pavilion at Expo '67, from www.dchillier.com/site/yugoslavia.html .
106	65	Photograph of the platform level of the Ile Sainte-Hélène metro station, by author, 2009.	122	76	Photograph of the Provincial Seaman's Museum in Grand Bank, Newfoundland, from http://expo67.ncf.ca/expo_yugo_grandbank_p1.html .
107	65	Drawing of the figure of Atlas in the murals of the Ile Sainte-Hélène metro station, by author, 2010.	123	76	Photograph of the mural on the Provincial Seaman's Museum in Grand Bank, Newfoundland, from http://expo67.ncf.ca/expo_yugo_grandbank_p2.html .
108	66-8	Map of Expo '67, by author, 2011.	124	76	Photograph of the Czechoslovakian pavilion at Expo '67, an Official Postcard of Expo '67, printed by Benjamin News Co. Ltd., 1967.
109	68-9	Aerial photograph of the site of Expo '67, from the <i>Expo '67 Memorial Album</i> , 1967. p.50-51.	125	76	Photograph of the Gordon Pinsent Centre for the Arts in Grand Falls, Newfoundland, from www.artsandculturecentre.com/gfw/photos.html .
		A PERMANENT EXHIBITION	126	77	Photograph of the USSR pavilion at Expo '67, an Official Postcard of Expo '67, printed by Benjamin News Co. Ltd., 1967.
110	70	Aerial photograph of the fairgrounds on Ile Sainte-Hélène, from "The Ambitious Expo" by Joseph Baker in <i>Canadian Architect</i> , August 2007. www.canadianarchitect.com/news/the-ambitious-expo/1000214415/	127	77	Photograph of the dismantling of the USSR pavilion after Expo '67, by Robert Vandensteene, in the Archives de Montreal Institutional Affairs Fonds VM94/TDH-16-14. 1968.
111	70	Aerial photograph of Ile Sainte-Hélène during Expo '67, from www.expolounge.blogspot.com/2007/04/expo-67-photos-in-la-presse.html .	128	77	Photograph of the former USSR pavilion reconstructed in Moscow, from the All Russian Exhibition Centre, http://expo67.ncf.ca/expo_67_post-era_p3.html .
112	71	Photograph of "Expo Forever" banner at the closing ceremony of Expo 67, from <i>Montreal '67 Magazine</i> Vol.4 No.11 (November), 1967. back cover.	129	78-9	Map of the remains of Expo '67, drawing by author, 2011.
113	72	Photograph of the interior of the American pavilion at Expo '67, from the <i>Expo '67 Memorial Album</i> , 1967. p.155.			SUBTRACTIONS AND ADDITIONS
114	72	Photograph of the interior of the Biosphere at Terre des Hommes '68, from <i>Montreal '68 Magazine</i> Vol.5 No.6 (July), 1968. p.29.	130	80	Aerial photograph of the Expo '67 site covered in snow, from <i>Montreal '68 Magazine</i> Vol.5 No.1 (January), 1968. p.4.
115	72	Photograph of the interior of the Biosphere at Terre des Hommes '68, from <i>Montreal '68 Magazine</i> Vol.5 No.6 (July), 1968. p.25.	131	80	Aerial photograph of the Ontario pavilion at Expo '67, from the <i>Expo '67 Memorial Album</i> , 1967. p.123.
116	73	Photograph of the exterior of the British pavilion at Expo '67, from www.dchillier.com/site/britain.html .	132	80	Photograph of the Ontario pavilion on fire, a colour slide from the Archives de Montreal Institutional Affairs Fonds VM94/TDH75, 1975.
117	73	Photograph of the tower of the former British pavilion at Terre des Hommes '68, from <i>Montreal '68 Magazine</i> Vol.5 No.7 (August-September), 1968. p.24.	133	81	Photograph of the American pavilion at Expo '67, an Official Postcard of Expo '67, printed by Benjamin News Co. Ltd., 1967.
118	74	Aerial photograph of Ile Sainte-Hélène during Terre des Hommes 1968, from <i>Montreal '68 Magazine</i> Vol.5 No.8 (October), 1968. p.28.			
119	74	Photograph of the crowd around the theme pavilions			

- 134 81 Photograph of the Biosphere on fire, by Gilles Hermann, in the Archives de Montreal Institutional Affairs Fonds VM94/Ud77-27, 1976.
- 135 82 Screen capture of Starbuck and Hector from Battlestar Galactica Episode #19/20: "Greetings from Earth", from www.worldsfairphotos.com/expo67/battlestar-galactica.htm.
- 136 82 Screen capture of Expo '67s former French pavilion from Battlestar Galactica Episode #19/20: "Greetings from Earth", from www.worldsfairphotos.com/expo67/battlestar-galactica.htm.
- 137 82 Screen capture of Expo '67s former theme pavilion from Battlestar Galactica Episode #19/20: "Greetings from Earth", from www.worldsfairphotos.com/expo67/battlestar-galactica.htm.
- 138 82 Screen capture of Expo '67s former American pavilion from Battlestar Galactica Episode #19/20: "Greetings from Earth", from www.worldsfairphotos.com/expo67/battlestar-galactica.htm.
- 139 83 Aerial photograph of the roof of the French pavilion at Expo '67, from the *Expo '67 Memorial Album*, 1967. p.163.
- 140 83 Photograph of the Casino de Montreal at the former French pavilion of Expo '67, from www.tourisme-montreal.org/What-To-Do/Nightlife/casino-de-montreal.
- 141 83 Artist's rendering of the Quebec pavilion at Expo '67 by night, from the Library and Archives Canada, Ottawa, 1970-019 in *The 60s: Montreal Thinks Big*, edited by André Lortie, 2004. p.57.
- 142 83 Photograph of the Casino de Montreal at the former Quebec pavilion of Expo '67, from <http://expo67.morenciel.com/an/cartes/iles.php>.
- 143 84 Aerial photograph of the Expo '67 islands, from the southern end of Ile Notre-Dame, from *This Was Expo*, by Robert Fulford, 1968. p.6+7.
- 144 84 Aerial photograph of the islands, from the southern end of Ile Notre-Dame, from http://expo67.ncf.ca/view_of_notre-dame_circa_1999_p1.html.
- 145 85 Photograph of Ile Notre-Dame after the permanent closure of the Terre des Hommes exhibition, by Rick Rake, from http://expo67.ncf.ca/tower_from_british_pavilion_p2.html, 1984.
- 146 85 Photograph of the tower of the former British pavilion after the permanent closure of the Terre des Hommes exhibition, by Rick Rake, from http://expo67.ncf.ca/tower_from_british_pavilion_p1.html, 1984.
- 147 86-7 Map of the Parc des Iles, drawing by author. 2011.
- ### PARC DES ILES
- 148 88 Aerial photograph of the Parc des Iles on Ile Sainte-Hélène, from http://expo67.ncf.ca/view_of_sainte_helene_circa_1999_p1.html.
- 149 88 Photograph across Swan Lake in the Parc des Iles on Ile Sainte-Hélène, by Johanne Palasse, in the Archives de Montreal Institutional Affairs Fonds VM94/1994-0336-088, 1994.
- 150 89 Photograph of the Tunisian pavilion from the Library and Archives Canada, Expo '67 collection, FA-173-Expo 67, 3198379, 1967.
- 151 89 Photograph of the former Tunisian pavilion at Expo '67, by Bruno Paul Stenson, MA. from http://expo67.ncf.ca/expo_67_post-era_p25.htm, 1997.
- 152 89 Photograph of the Jamaican pavilion at Expo '67, by W. Mackenzie, from www.chamblycounty.com/Page31A.html, 1967.
- 153 89 Photograph of the former Jamaican pavilion at Expo '67, by Amber Goodwyn, from <http://ambergoodwyn.com/2010/10/11/expo-67s-jamaica-pavillion/>.
- 154 90 Photograph of the dais of Place des Nations during the opening ceremony of Expo '67, by Claude Latour, from http://expo67.ncf.ca/expo_67_opening_ceremonies_p1.html, 1967.
- 155 90 Photograph of the audience at Place des Nations during the opening ceremony of Expo '67, from the *Expo '67 Memorial Album*, 1967. p.10.
- 156 90 Photograph of the current condition of the dais of Place des Nations, from <http://pluche.wordpress.com/2007/05/25/40-ans-et-des-ruines/>, 2007.
- 157 90 Photograph of the current condition of the grandstands of Place des Nations, from <http://pluche.wordpress.com/2007/05/25/40-ans-et-des-ruines/>, 2007.
- 158 91 Photograph of the Korean pavilion at Expo '67, from the *Expo '67 Memorial Album*, 1967. p.146.
- 159 91 Photograph of the current condition of the former Korean pavilion, from <http://www.koreanarchitecture.com/plaza/883>.

MEMORIALS

- 160 92 Photograph of Alexander Calder's sculpture *Man* at Expo '67, from the *Expo '67 Memorial Album*, 1967. p.316.
- 161 93 Photograph of Yves Trudeau's sculpture *Le Phare du Cosmos* at Expo '67, from the *Expo '67 Memorial Album*, 1967. p.318.
- 162 95 Photograph of Robert Smithson's *Spiral Hill*, 1971, from *Earthworks*, by Suzann Boettger, 2002. p.230.

THE MONTREAL PARIS TOWER

- 163 96 Photograph of Mayor Jean Drapeau presenting the planned Montreal-Paris Tower in Montreal, by Yvon Bellemare, from the Archives de Montreal Institutional Affairs Fonds VM94/EX-36-3, 1964.
- 164 96 Artist's rendering of the proposed Montreal-Paris Tower, from the Library and Archives Canada, Expo '67 collection, FA-173-Expo 67, 1970-019-736, 1964.
- 165 96 Photograph of a model of the proposed Montreal-Paris Tower, from the Library and Archives Canada, Expo 67 collection, FA-173-Expo 67, 1970-019-737, 1964.
- 166 98 Photograph of a model of Ile Sainte-Hélène, showing the proposed Montreal-Paris Tower, from http://expo67.ncf.ca/the_montreal-paris_monument_p4.html.

EARTHWORKS

- 167 99 Photograph of Claes Oldenburg's *Placid Civic Monument*, by Daniel McPartlin, in the New York City Parks and Recreation Archive, from *Earthworks*, by Suzann Boettger, 2002. p.18.
- 168 100 Photograph of Robert Morris' *Observatory*, from *Overlay*, by Lucy Lippard, NY: Pantheon, 1983. p.110.
- 169 101 Satellite photograph of James Turrell's *Roden Crater*, from <http://maps.google.ca: Roden Crater, Coconino, Arizona 86004, United States>.
- 170 102 Aerial photograph of Michael Heizer's *Double Negative*, from http://doublenegative.tarasen.net/double_negative.html.
- 171 102 Photograph of Michael Heizer's *Double Negative*, from http://doublenegative.tarasen.net/double_negative.html.
- 172 103 Photograph of Dennis Oppenheim's *Landslide*, from

<http://www.dennis-oppenheim.com/works/138>.

- 173 104-5 Existing site of the thesis proposal on Ile Sainte-Hélène, drawing by author, 2011.

A NEW GROUND

- 174 106 Agnes Martin, *Orange Grove*, 1965, detail, in the collection of Mr. and Mrs. Max Kozloff, from the *Agnes Martin* exhibition catalogue of the University of Pennsylvania's Institute of Contemporary Art, 1973. p.27.
- 175 106 Agnes Martin, *Trumpet*, 1967, detail, in a private collection, from the *Agnes Martin* exhibition catalogue of the Whitney Museum of American Art, 1992. p.73.
- 176 108 Agnes Martin, *Leaves*, 1966, detail, in the collection of Vera List, from the *Agnes Martin* exhibition catalogue of the Whitney Museum of American Art, 1992. p.71.
- 177 109 Agnes Martin, *Leaf*, 1965, detail, in the collection of Mr. and Mrs. Daniel W. Dietrich II, from the *Agnes Martin* exhibition catalogue of the University of Pennsylvania's Institute of Contemporary Art, 1973. p.50.

A PROPOSED GARDEN GRID

- 178 110 Agnes Martin, *On a Clear Day*, 1964, detail, in a private collection, courtesy Anthony Meier Fine Arts, San Francisco, from the *Agnes Martin/Richard Tuttle* exhibition catalogue of the Modern Art Museum of Fort Worth, 1998. p.6.
- 179 112-3 Proposed site plan of the garden grid on Ile Sainte-Hélène, drawing by author, 2011.

SELECTIVE DELETIONS

- 180 114 Map of the grounds of Blenheim Palace before they were "improved" by Capability Brown, from *The Poetics of Gardens*, by Charles Moore et al., 1988. p.64.
- 181 114 Map of the grounds of Blenheim Palace after they were "improved" by Capability Brown, from *The Poetics of Gardens*, by Charles Moore et al., 1988. p.64.
- 182 116 Carl Andre, *Equivalents I-VIII*, 1966, from *Earthworks* by Suzann Boettger, 2002. p.76.

183 116 Carl Andre, *Cuts*, 1967, from *Earthworks* by Suzann Boettger, 2002. p.76.

184 118-9 Proposed site plan of the selective deletion of plots in the garden grid on Ile Sainte-Hélène, drawing by author, 2011.

SCATTER

185 120 Barry Le Va, *Bearings Rolled (six specific instants: no particular order)*, 1966-1967, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.92.

186 122 Robert Morris, *Untitled*, 1966, photograph by John D. Schiff, from *Robert Morris* by Marcia Tucker, 1970. p.28.

187 123 Robert Morris, *Untitled*, 1966, photograph by Rudolph Burckhardt, from *Robert Morris* by Marcia Tucker, 1970. p.32.

188 124 Carl Andre, *Lever*, 1966, in the collection of the National Gallery of Canada, from *Earthworks* by Suzann Boettger, 2002. p.22.

189 126 Richard Serra, *Shift*, 1970-72, (detail), photograph by Leo Castelli Gallery, from *The Originality of the Avant-Garde and Other Modernist Myths* by Rosalind E. Krauss, 1986. p.266.

190 127 Richard Serra, *Shift*, 1970-72, photograph by Leo Castelli Gallery, from *The Originality of the Avant-Garde and Other Modernist Myths* by Rosalind E. Krauss, 1986. p.265.

191 128 Carl Andre, *64 Steel Square*, 1967, in the collection of the Edward R. Broida Trust, Los Angeles, from *Earthworks* by Suzann Boettger, 2002. p.82.

192 128 Carl Andre, *Spill (Scatter Piece)*, 1966, in the collection of John Powers, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.26.

A PROPOSED SCATTER PIECE

193 130 Carl Andre, *Alcloud*, 2001, in the Galerie Tschudi Inventory, from www.artnet.com/artwork/426066054/alcloud.html.

194 132-3 Proposed site plan of the scatter piece on Ile Sainte-Hélène, drawing by author, 2011.

DISTRIBUTIONS AND DEBRIS

195 134 Barry Le Va, *Five Layers, Grey Felt, Aluminum*, 1968, in the collection Patricia and Morris Orden, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.110.

196 134 Barry Le Va, *By Four/Equal Quantities (within four equal spaces): arranged; rearranged. Borrowed: exchanged*, 1967, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.25.

197 135 Cover, *Artforum* 7, no.3 (November 1968) of Barry Le Va, *Distribution Piece, Particles and Strips (detail)*, 1968, photograph by Elaine Mayes, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.39.

198 136 Barry Le Va, *Study for documenta 5*, 1972, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.69.

199 137 Barry Le Va, *Recovered (Catalogued in background)*, 1997, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.240.

200 137 Barry Le Va, *Untitled*, 1966, from the *Accumulated Vision, Barry Le Va* exhibition catalogue of the University of Pennsylvania Institute of Contemporary Art, 2005. p.240.

LES HALLES: A FICTIONAL CONCLUSION

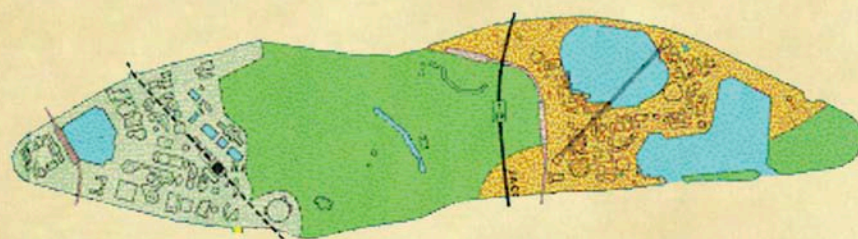
201 138 Artist's rendering of the interior of the auctions pavilion of Les Halles (Narjoux, *Halles Centrales*, 1883), from *Les Halles de Paris*, by Bertrand Lemoine, 1980. p.177.

202 138 Bird's-eye perspective of the pavilions of Les Halles, from *Les Halles de Paris*, by Bertrand Lemoine, 1980. p.179.

203 139 Interior of the fish-market pavilion of Les Halles, photograph by Roger-Viollet, from *Les Halles de Paris*, by Bertrand Lemoine, 1980. p.177.

204 140 Aerial photograph of the Les Halles quarter, 1952, photograph by Roger Henrard, from *Above Paris*:

		<i>the aerial survey of Roger Henrard</i> , by Jean-Louis Cohen, 2006.	219	161	Vignette of a proposed pavilion on the existing hill of Ile Sainte-Hélène, photo-collage by author, 2011.
205	141	Interior of Les Halles pavilion, photograph by Robert Doisneau-Rapho, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. p.183.	220	162	Vignette of a proposed pavilion over the existing metro station on Ile Sainte-Hélène, photo-collage by author, 2011.
206	142	Interior of Les Halles pavilion, photograph by Robert Doisneau-Rapho, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. p.182.	221	163	Vignette of a proposed pavilion rising behind the entrance plaza on Ile Sainte-Hélène, photo-collage by author, 2011.
207	143	Photograph of the Marché des Innocents, in the collection of the Musée Carnavalet, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. p.160.	222	164	Vignette of a proposed pavilion and garden boxes on the existing hill on Ile Sainte-Hélène, photo-collage by author, 2011.
208	144	Aerial photograph of the demolition of Les Halles, from the archives of M-P Macdonald.	223	165	Vignette of a proposed pavilion and garden boxes along the shore of Swan Lake on Ile Sainte-Hélène, photo-collage by author, 2011.
209	145	The demolition of Les Halles, photograph by Robert Doisneau-Rapho, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. p.215.	224	166	Vignette of proposed pavilions along the existing stream on Ile Sainte-Hélène, photo-collage by author, 2011.
210	146	The dismantling of pavilion no.8, photograph by Roger-Viollet, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. p.216.	225	167	Vignette of proposed pavilions along the shore of Swan Lake on Ile Sainte-Hélène, photo-collage by author, 2011.
211	147	Drawings of the elevations and sections of Les Halles, from <i>Les Halles de Paris</i> , by Bertrand Lemoine, 1980. plates XII-XIII.	226	168	Vignette of a proposed pavilion along the banks of the Saint Lawrence River on Ile Sainte-Hélène, photo-collage by author, 2011.
212	148-9	Proposed site plan of the Les Halles pavilions inserted into the scatter piece on Ile Sainte-Hélène, drawing by author, 2011.	227	169	Vignette of a proposed pavilion along the banks of the Saint Lawrence River, next to the Alexander Calder sculpture, <i>Man</i> , on Ile Sainte-Hélène, photo-collage by author, 2011.
213	150-1	Proposed site plan of the underground passageways connecting the Les Halles pavilions in the scatter piece on Ile Sainte-Hélène, drawing by author, 2011.	228	171	Vignette of the interior of a proposed pavilion on the shore of Swan Lake on Ile Sainte-Hélène, photo-collage by author, 2011.
214	152-3	Proposed underground-level plan of the alterations to the Jean Drapeau metro station and the new neighbouring pavilion in the proposed scatter piece, drawing by author, 2011.	229	173	Vignette of the interior of a proposed pavilion on the banks of the Saint Lawrence River on Ile Sainte-Hélène, photo-collage by author, 2011.
215	154-5	Proposed ground-level plan of the alterations to the Jean Drapeau metro station and the new neighbouring pavilion in the proposed scatter piece on Ile Sainte-Hélène, drawing by author, 2011.			
216	156-7	Proposed east-west landscape section of the Les Halles pavilions in the scatter piece on Ile Sainte-Hélène, drawing by author, 2011.			
217	158-9	Proposed north-south landscape section of the Les Halles pavilions in the scatter piece on Ile Sainte-Hélène, drawing by author, 2011.			
218	160	Vignette of a proposed pavilion on the shore of the Le Moyne Channel between the Expo Islands, photo-collage by author, 2011.			



Ceci n'est pas un parc.

NOTES ON THE TITLE (AN INTRODUCTION)

The title of the thesis, *Ceci n'est pas un parc*, is borrowed from René Magritte's painting *La trahison des images* (commonly translated as *The Treachery of Images*), in which a quite realistically painted pipe floats above the phrase *Ceci n'est pas un pipe*, written in perfect, expository cursive. As Michel Foucault notes in his essay of the same name¹: "My God, how simpleminded!" No one "would seriously contend that the collection of intersecting lines above the text *is* a pipe... it is quite apparent that the drawing representing the pipe is not the pipe itself." And yet the purpose of the "drawing is to elicit recognition, to allow the object it represents to appear without hesitation or equivocation."² While the provocation in Magritte's painting relies on the representational capacity of images, it also plays on our collective understanding of "the meaning of the word *pipe*."³ Similarly, the thesis begins from a position that Montreal's former Expo islands, which are now called *Parc Jean Drapeau*, represent something quite different than the meanings conjured by the word "park."

As it quotes the contents of a painting, the title of the thesis also alludes to both its suggestion that the islands themselves might be seen as massive artworks, and its own proposals, which are based on art pieces germane to the era of the islands' construction.⁴ It also reflects a desire to emphasize the artifice of the park's current picturesque landscaping with the addition of new landscape elements also based on pictures (and alternate representations) of *other* landscapes.

Magritte's painting's combination of two separate systems of signification (that make opposite declarations) reflects his fascination with what James Harkness calls "visual non sequitors," and which Foucault dubs *heterotopias*. The philosopher describes these as *disorders* "in which a large number of possible orders glitter separately, in the lawless and uncharted dimension of the *heteroclite*; in such a state, things are 'laid,' 'placed,' 'arranged,' in sites so very different

from one another that it is impossible to find a common place beneath them all.”⁵ While the motley collection of constructions (buildings, sculptures, remnants, derelict infrastructures) and the patchwork of landscape design proposals which now spread across the former Expo site arguably qualify it for the distinction of heterotopia, these diverse expressions certainly belie the “fantastic, untroubled” oasis implied by its simple designation as *parc*.⁶

Parc Jean Drapeau owes much of its accumulation of diverse expressions to those who contributed to Expo 67, the pavilions of which even its chief architect Edouard Fiset described as *heteroclite*. During the fair, however, this variety was united by a common purpose – to present a comprehensive picture of the human world as it was in 1967. The Expo islands’ creation of a world that was also a representation of *the* world recalls the explorations of architecture as a “world-making rather than a world-representing art” in the avant-garde art journal *G*,⁷ which was edited by the Dadaist Hans Richter and published in the 1920s “between the breakup of Berlin Dada” and emergence of the Parisian surrealism⁸ of which Magritte was a part. Of the two types of projects that emerged from this concept of architecture as *Weltbild*, or world-making, Expo 67 was perhaps more like the first: a project of comprehensive environmental control, a descendant of the grand urban visions of Le Corbusier and Hilberseimer. While it is inspired by the use of the exposition as a laboratory for ideas of the future city, the thesis does not suggest the re-creation of such a comprehensive urban project as Expo 67, but aspires perhaps to the second type of *Weltbild* project: a “discrete work... representing a world in microcosm” that “if built, could provide its visitors an experience of the future [city] in advance of its fuller realization.”⁹ It is an example of “the ongoing struggle of making sense of the world as a creative world-forming process, without having to produce it as a totality.”¹⁰

The text’s contradiction of the image in Magritte’s painting also recalls the antagonism of the Dada movement that preceded

surrealism. “One says yes to a life that seeks to grow by negation,” declares the Dada manifesto of Tristan Tzara.¹¹ Inspired in part by the radical transposals of water and soil that took place during the construction of the site, the thesis employs the Dadaist technique of deliberate opposition in order to generate the successive layers of the project. In response to the somewhat banal picturesque landscaping most recently added to the site,¹² a formal picturesque landscape is proposed, based on the rational grid of an Agnes Martin canvas. The organized structure of this new landscape is subsequently compromised, as portions of it are selectively deleted in the style of Capability Brown, whose carefully composed romantic landscapes sought “a certain irregular wildness.”¹³ The relationship between the limits of new landscape and the extents of the island site itself is then challenged by the addition of an “anti-formal” scatter-piece, inspired by the works of Carl Andre and Barry Le Va. In the end, the elements of the scatter-piece are replaced with pavilions that evoke another Dadaist technique, that of the readymade.

Finally, to the degree that it portrays Jean Drapeau, the Mayor of Montreal, as the visionary mastermind behind the construction of Expo 67’s island sites, the thesis recalls the Dadaist manifesto’s assertion that “to be a Dadaist might sometimes mean being a businessman or politician rather than an artist.” Drapeau’s ardent support of the exposition was but one of his attempts to transform Montreal into the country’s cultural capital. As if to reinforce the Dadaist notion that he was an artist disguised as a politician, The Royal Architectural Institute of Canada awarded the mayor a Gold Medal in 1967, in recognition of his contributions to “architecture and the arts.”¹⁴





FIG. 1
One of these parks is not like the others.

A map of the public green spaces on the Island of Montreal. The present day Parc Jean-Drapeau sits in the Saint Lawrence River near the city's port. It is comprised of Ile Sainte-Hélène and Ile Notre-Dame, two islands created in the 1960s as the site for Expo 67.

FIG. 2, 3 + 4

Right: During his tenure as mayor of Montreal, Jean Drapeau oversaw the construction of the Metro de Montreal, the city's Place des Arts, Expo 67 and the 1976 Olympic Games. Below, left: Lucien Saulnier, Chairman of the city's Executive Committee from 1960 to 1970, and Mayor Drapeau's closest advisor. Below, right: Claude Robillard was made head of the city's new Parks Department in 1953, and the Director of the City Planning Department in 1961. He was the General Manager of Expo '67 until the fall of 1963, when a changeover occurred in the fair's administration. Expo's new management team didn't pursue Robillard's initial designs to use fair to improve the built fabric of the city itself.



MONTREAL WINS THE FAIR

The 1967 World's Fair was supposed to be held in the USSR. Montreal had competed to host the exhibition, but in 1960, at a meeting in their Paris headquarters, the Bureau International d'Expositions (BIE) awarded the fair to Moscow instead. By April 1962, for reasons never fully explained,¹ the Russians renounced their bid.² By this time, the very ambitious Jean Drapeau was the mayor of Montreal, and he was determined that Canada would host the fair.³ Drapeau "immediately sent a telegram to [Prime Minister] Diefenbaker, informing him that Montreal was always interested, and would like that Canada present again the petition of Montreal to the International Bureau."⁴ (Because it is an association of countries and not of cities, only countries – through their official representatives – can petition the BIE.)⁵

The following August, Drapeau flew to Paris to determine exactly what information the new application should contain. Because this was Canada's second request for the fair, the mayor felt "that Montreal would be the only city prepared for the meeting" of the BIE. "But we wanted to avoid that through some technical defect of the dossier, the decision be postponed. When a decision is postponed it's for six months, [until] the next meeting of the Bureau. During that period of six months... Montreal would really [have met] with competition."⁶



FIG. 5

In an elaborate ceremony and press conference, Jean Drapeau announces the start of construction work on the future Expo islands. August 12, 1963.

On November 13, 1962 an announcement from Paris made it official: Montreal would be the site of the World's Fair in 1967. Pierre Sévigny, one of the ministers responsible for the Expo proposal, expressed satisfaction that after long and often discouraging negotiations, Canada had finally won the fair.⁷

At the time of the announcement, the CBC reported that “the news was really no great surprise to Montrealers. The world’s fair was virtually the biggest election promise made by Mayor Jean Drapeau recently, and he... left no one in doubt at the campaign time that the fair would become a reality.” The vast amount of work required to prepare for the exposition was welcomed as part of “the city’s plan for a bigger better and more bustling Montreal.”⁸

FIG. 6 + 7

Below, left: Pierre Dupuy was the Canadian Ambassador to Paris when he was asked to become Expo’s new Commissioner General in the fall of 1963. His lifetime of diplomatic service and international contacts would prove indispensable in his attempts to convince the countries of the world to participate in the Exhibition. Below, right: Robert Shaw, a trained engineer and president of a construction company, became the fair’s Deputy Commissioner General. He was responsible for the implementation of the fair on the ground in Montreal, while Dupuy circled the globe, recruiting foreign participants.

“Thanks largely to Drapeau’s intensive international lobbying, the new exhibition would mark not the fiftieth anniversary of the Russian Revolution but the one hundredth anniversary of Canadian Confederation.”¹⁰ For the first time, a North American city would host an International and Universal Exhibition of the first category:¹¹ one that officially requires participating countries to construct their own pavilions;¹² which “constitutes a living testimony to the contemporary epoch;”¹³ and the “chosen theme [of] which must be of universal concern to all of humanity.”¹⁴



“The fair itself will take up at least 500 acres on the island of Montreal. The exact site still isn’t known, and city officials say now that it won’t be for probably a month yet. Whether it goes on unexploited land or replaces existing run-down parts of the city, it will bring great physical as well as financial benefits to Montreal. It’s certain the city will hardly be recognizable by the time the fair is over, with Mayor Drapeau wanting to turn it into not just the metropolis of Canada, but the metropolis of the world.”⁹

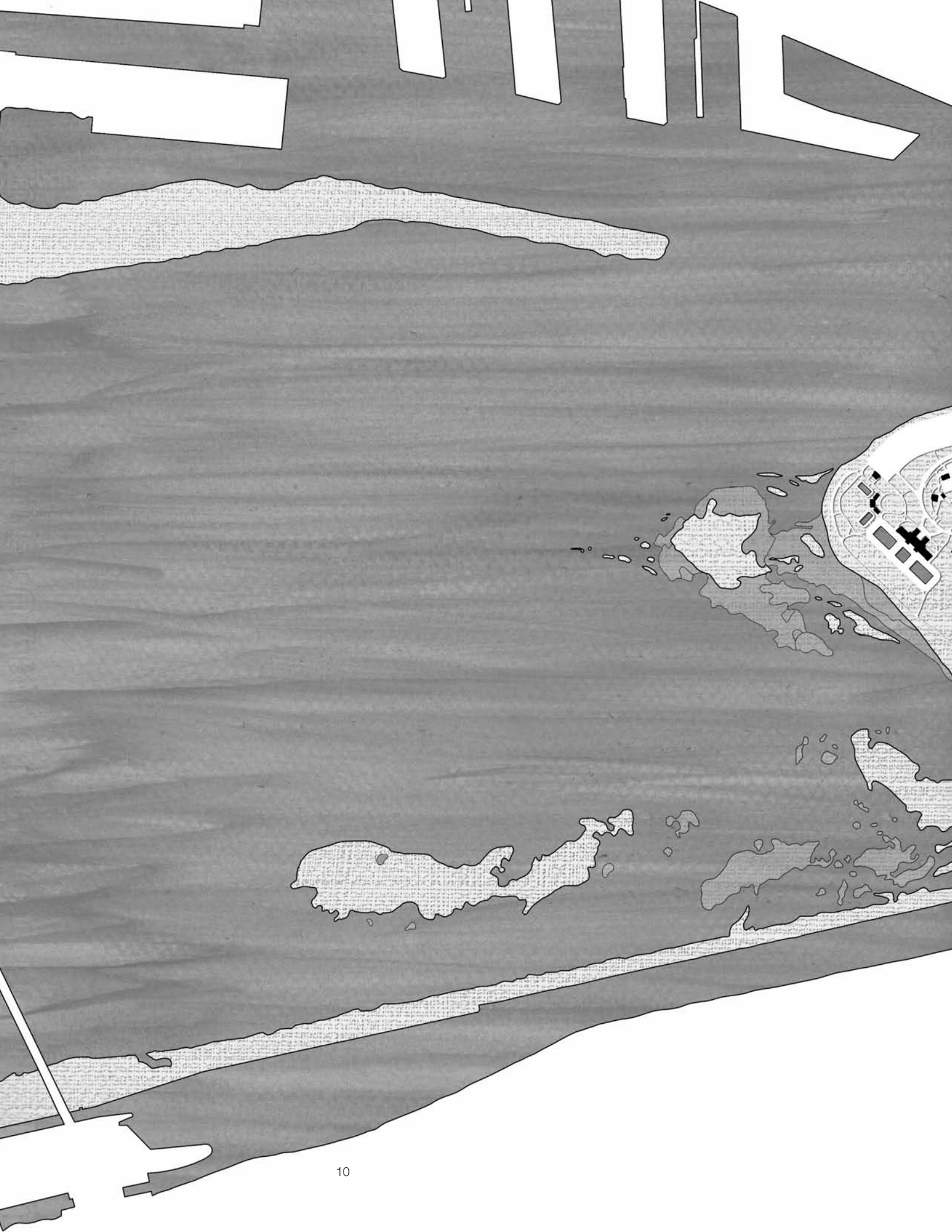
The BIE’s delayed decision due to Russia’s change of plans left Montreal with only four and a half years to design and construct a fair of the highest order. This was considered to be just over half the amount of time required and many people felt it couldn’t be done.¹⁵ That so much was accomplished in such a short amount of time remains central to the mythos of Expo 67.

The friction between Mayor Drapeau and almost all the other planners of the fair began immediately. At the time the fair was announced, at least six different sites across Montreal were being considered for the exhibition. “Real-estate interests all over the city frantically lobbied the Drapeau administration.”¹⁶ But the mayor had ideas of his own: to enlarge Ile Sainte-Hélène, an island park in Saint Lawrence River, and to create a second island alongside it, which would later be called Ile Notre-Dame.¹⁷



FIG. 8 + 9

Far left: Engineer Colonel Edward Churchill was asked by Robert Shaw to serve as Expo's Installations Director. Meticulous and impatient, the Colonel is often praised as the reason why the fair was constructed in such a short period of time. His famed Critical Path Method co-ordinated both the site's provisions requisitions and its massive workforce, in order to streamline the simultaneous construction of hundreds of projects. Left: Expo's Operations Director Phillipe de Gaspé Beaubien insisted that his team be hired as early as 1964, so they could oversee the construction of the fair they would be responsible for operating, much to the consternation of Colonel Churchill.



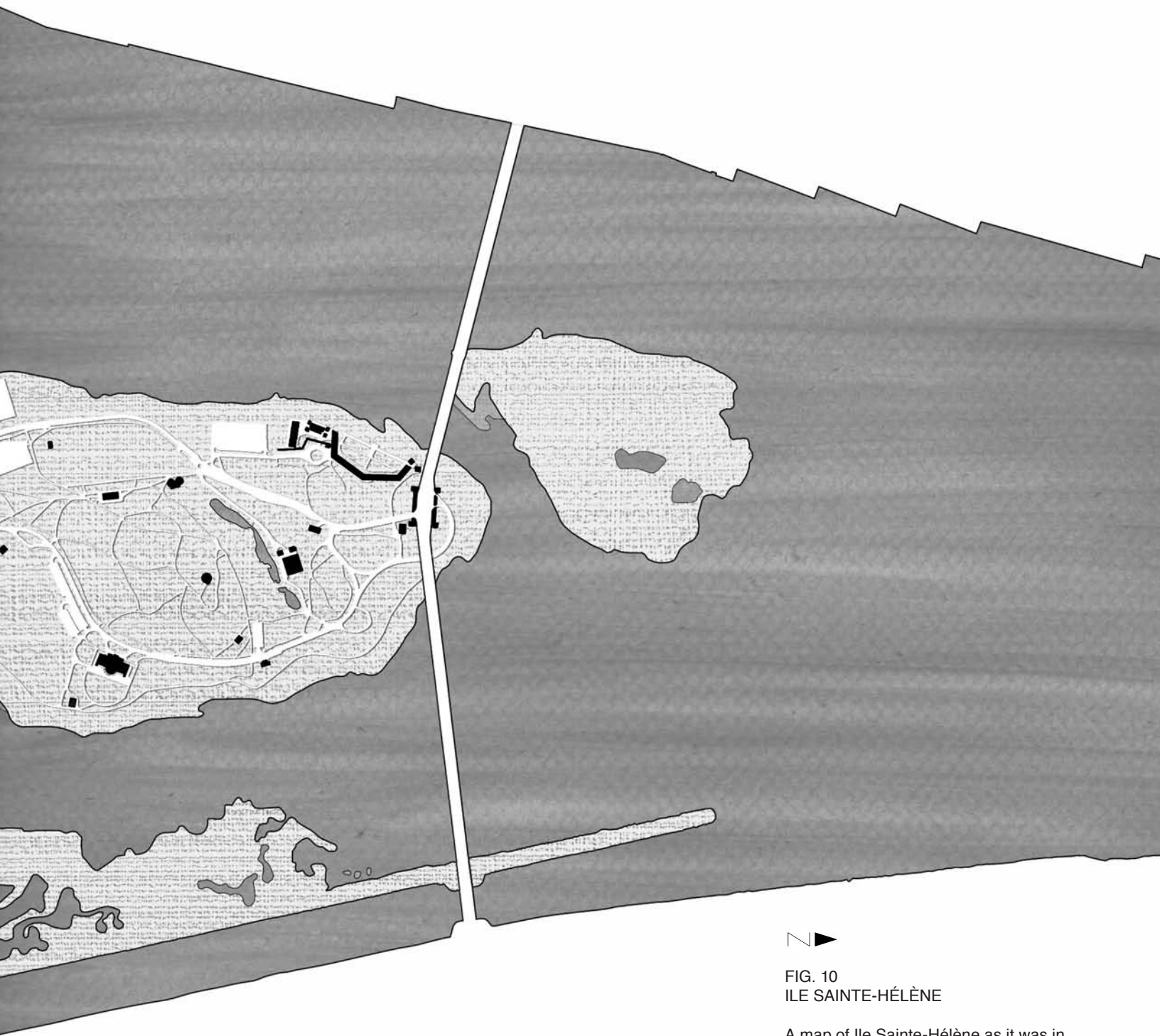
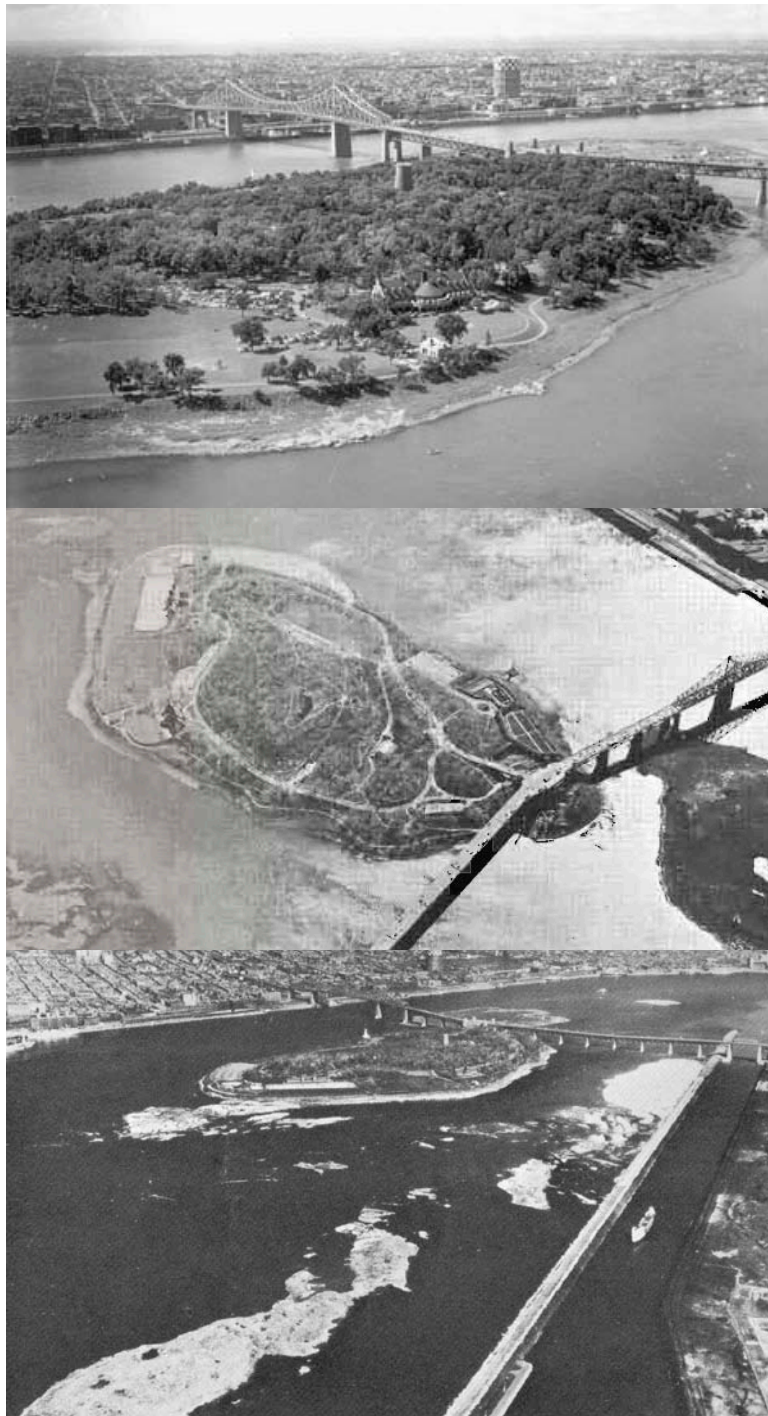


FIG. 10
ILE SAINTE-HÉLÈNE

A map of Ile Sainte-Hélène as it was in 1963, before the start of construction work that would double its size. The Jacques-Cartier Bridge spans the Saint Lawrence River between Ile Sainte-Hélène and the downstream Ile Ronde. The smaller Ile Verte sits just upstream, and Ile Moffat to the south-east, next to the channel of the Saint-Lawrence Seaway, which begins here.

FIG. 11, 12 + 13
 Aerial photographs of Ile Sainte-Hélène
 as it appeared in the early 1960s. Above:
 The Tour de Lévis crowns the island
 in front of the Jacques Cartier Bridge.
 Centre: Ile Ronde flanks the island
 downstream on the other side of the
 bridge. Below: Ile Moffat sits upstream,
 beside the Saint Lawrence Seaway,
 along the side of which extensive mudflats
 emerge when the water level is low.



ÎLE SAINTE-HÉLÈNE

In early 1963, most of what would become Expo 67 was still underwater.¹ Ile Sainte-Hélène was the only part of the site that already existed in the Saint Lawrence River. Named in 1611 by Samuel de Champlain in honour of his wife, Hélène Boullé,² it was the island to which General Lévis retreated as New France surrendered to the British in 1760.³ British Governor Guy Carleton defended it against American invaders in 1775. A fort, powderhouse and blockhouse were built on the site in the 1820s, as its location had a strategic advantage in the protection of the city. In 1870, the island was acquired by the newly formed Canadian government, and it was converted into a public park in 1874.⁴

Expo's Commissioner General, Pierre Dupuy, remembers taking the ferry to the island as a child:

"Ile Sainte-Hélène would have simply been a floating bosc had a watchtower not been built upon it. But that tower was a glorious testament, despite the defeat – a reminder of Lévis' decision to burn the regimental flags rather than surrender them. Our trips to the island weren't nearly so chivalrous. We came to picnic and to escape the heat of the city on those torrid days of July. Once arrived, we'd kick off our shoes, wander between the rocks and fish for shrimp or tiny bleak, which dear mother had to bring back alive in our jam jar."⁵

Ile Sainte-Hélène was the largest in a chain of shoals in the stretch of river alongside the port of Montreal. Ile Ronde flanked it downstream and the much smaller Ile Verte flanked it upstream. Dupuy recalls that together these were "a paradise for birds, a sanctuary in which hunting was forbidden. Gulls multiplied upon them in clouds of white lovemaking."⁶

But this natural paradise of Dupuy's memory was the result of a considered design. In 1936, the landscape architect Frederick Todd remodeled Ile Sainte-Hélène as part of a depression-era



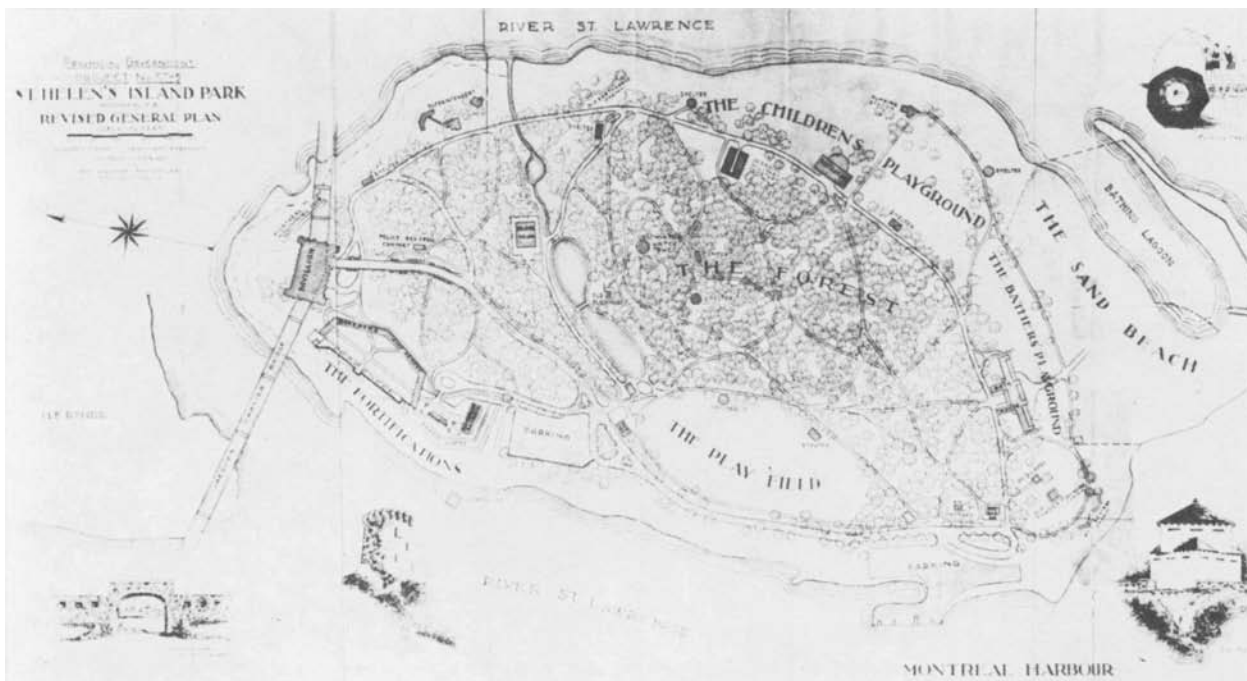
FIG. 14 + 15

Above: The imposing fortifications of Ile Sainte-Hélène were built between 1820 and 1824 by the British, who used the island as a military depot serving their troops in North America. Since the late 1960s the fort buildings have housed the Stewart Museum, which documents early life in the settlement of New France. Below: The Tour de Lévis was built in the 1930s as part of Frederick Todd's landscaping of the island. It originally served as a water reservoir and observation tower, and today it can be rented out as a special event space.

work relief program.⁷ “A passionate advocate of the wise use of natural resources,”⁸ Todd “popularized naturalistic landscape designs”⁹ in Canada. Born in New Hampshire, he most likely moved to Montreal as an apprentice to Frederick Law Olmsted, who in 1875 was commissioned to design the urban park on Mount Royal. A lack of appreciation for Olmsted’s plan slowed the progress of the park, and the young Todd was responsible for supervising the ongoing site work. (Later in his career he would succeed in implementing the Beaver Lake portion of the park’s design, which had not yet been realized.) In his subsequent projects, Todd strove to accentuate “the particular characteristics of each site.” On Ile Sainte-Hélène he exploited the island’s potential for recreation, as well as the restoration of its 19th Century military installations, as the departure point for his design:

“St. Helen’s Park will provide Montreal’s underprivileged citizens with a much needed rest and recreation center. Within walking distance of the homes of 100 000 people, it is readily accessible

FIG. 16
A drawing of Frederick Todd’s depression-era landscaping project for “St. Helen’s Island Park.” A sketch of the Tour de Lévis sits in the lower left corner, beneath the plan of the island. Todd’s proposal to extend a jetty from the island, to create a protected bathing lagoon in the river, is shown on the right. It’s the only part of this vast remodelling project that wasn’t realized.



to those who live farther away. The historical background of [the island] alone makes the work interesting – for there is no place where Montreal’s early history can be so vividly portrayed.”¹⁰

The restored barracks are now a museum and the powder-house a stage for summer theatre. Todd wove paths across the site to connect these “historical points of interest.” His own interest in the site’s history may have influenced the design of the watchtower that sparked Pierre Dupuy’s boyhood imagination. Built in 1936 of stone quarried on the island,¹¹ the Tour de Lévis isn’t a bastion of the island’s military past but a water tower designed to resemble a Martello. It once housed tanks connected to the island’s water system.¹² Todd also added a lake and a stream to the site (to facilitate necessary drainage work) as well as “one of the first playing fields for girls” and a children’s playground. “An elaborate scheme for swimming on a sand beach built into the Saint Lawrence River” is the only part of his plan that wasn’t implemented.¹³ The design, to create a quiet bathing lagoon by connecting Ile Sainte-Hélène to Ile Verte with a sandy breakfront, presaged Expo 67’s island-extension plans by thirty years.

Access to the island changed significantly when the Jacques Cartier Bridge opened to traffic in May 1930. By this time, it had become difficult to access the riverbank – and the island ferry – by crossing the port on foot, due to the substantial development of its facilities.¹⁴ At the turn of the century, a long jetty was built to both shelter the harbour from springtime ice floes and to create a zone of calm water in which the ships could manoeuvre. Pierre Dupuy recalls that:

“The jetty was difficult to access... [but] from it one could see that the port had become, for the citizens of Montreal, an almost insurmountable obstacle between the city and the river. Views from the Victoria Bridge, upstream, or the Jacques Cartier bridge, downstream... made the imagination lament that such a vast urban development had already taken advantage of so picturesque a setting.”¹⁵

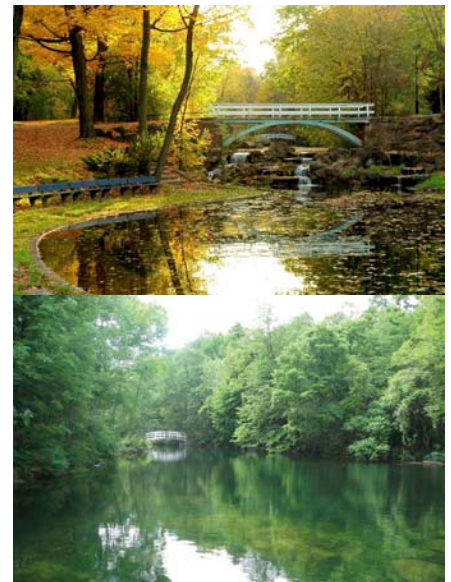


FIG. 17 + 18
Two of the water features created in the centre of the island, next to the old powder magazine, by Frederick Todd in the 1930s. Cool oases for “rest and recreation.”

FIG. 19 + 20

Right: Le quai de L'Horloge in the foreground of the port of Montreal in 1963. It is from here that the port master Guy Beaudet took Jean Drapeau out in a converted tugboat, and suggested the middle of the river might be the ideal location for the exhibition. In a letter dated 13 March 1963, Beaudet explains to Lucien Saulnier, president of the city's executive committee, that the Laboratoire d'hydraulique LaSalle Ltée has begun a study of the river as a potential site for the fair. Below: He includes a map indicating an enlarged Ile Sainte-Hélène and a new Ile Notre-Dame - the outlines of which are nearly identical to the final shapes of the islands.

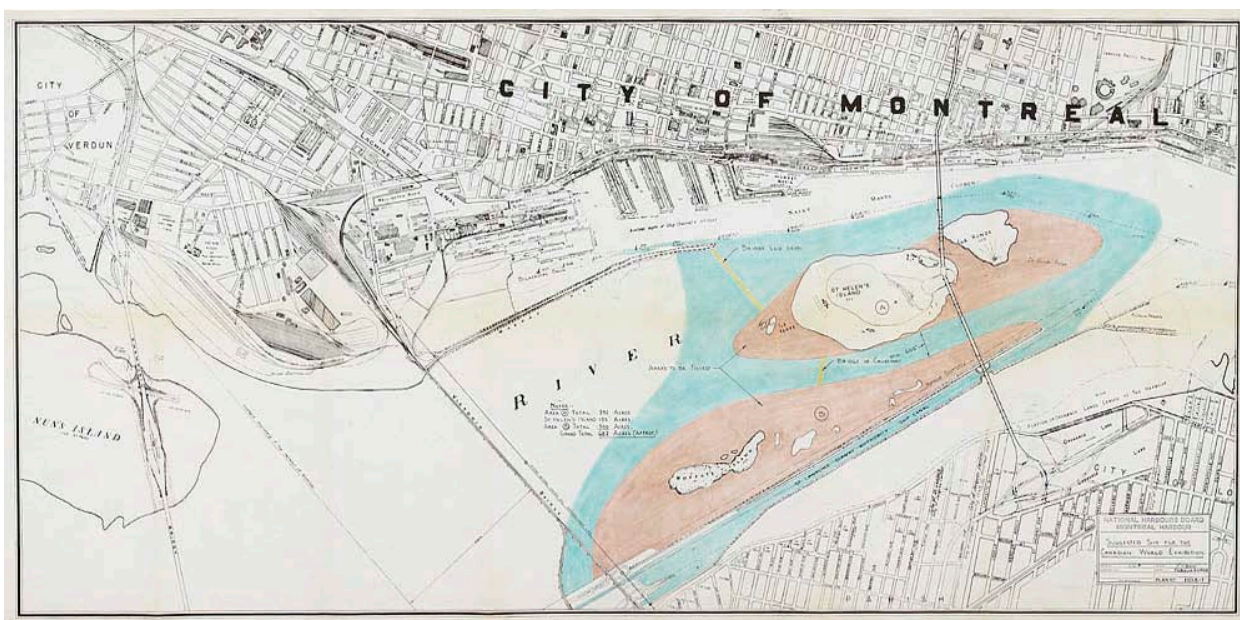




FIG. 21

Left: An aerial photograph looking south-east across Montreal's harbour as it appeared in early 1963. Over the next two years, the muddy breakwater of the Jetée Mackay (on the top left) was enlarged into the Cité du Havre, on which Expo's more permanent buildings, such as Habitat 67, were constructed.

It was not from the Jetée Mackay, but from the deck of a converted tugboat sailing nearby, that Montréal's port master, Guy Beaudet, pointed out the mud flats along the wall of the Saint Lawrence Seaway to Mayor Jean Drapeau, in early 1963. By adding rock excavated from the construction of the metro system or dredged from the riverbed to those flats, Beaudet suggested that islands could be built along the seaway. These could even be linked to Ile Sainte-Hélène, which could be similarly enlarged to encompass the small islands on either side of it. According to Yves Jasmin, Expo's director of public relations, "the mayor was immediately seduced. Holding the exposition in the middle of the river would be enchanting."¹⁶

In his memoirs, Prime Minister Lester Pearson (whose minority government "inherited Expo from John Diefenbaker's regime" in April 1963)¹⁷ recalls that the idea of holding the Expo in the middle of the Saint Lawrence was "one of the silliest things I had ever heard." His thoughts reflected the general sentiment that "with four million square miles of land in Canada, we would be able to find a plot some place."¹⁸ The federal M.P. for Maisonneuve (one of the neighbourhoods considered for Expo) declared: "Drapeau is being unreasonable. We're offering him a nice Ford, and he insists on a Rolls-Royce."¹⁹ Even the mayor's own staff considered it crazy to enlarge an island and create one from scratch when remodeling the Mackay Pier and the grounds at Pointe Sainte-Charles would work perfectly.²⁰

"Montreal," Drapeau famously declared, "will not be plagued by a lack of imagination."²¹



FIG. 22 + 23

Top: The construction of on-ramps to the Jacques Cartier Bridge, which was built from 1925-1930. Above: In 1961, a second helix-style ramp was built from the north side of the bridge to provide additional access to Ile Sainte-Hélène and to eliminate dangerous cross traffic. The two ramps onto the island proved critical in the development of Expo: for 15 months in 1963 and 1964, thousands of truckloads of fill were carried to the site to enlarge Ile Sainte-Hélène and create Ile Notre Dame.

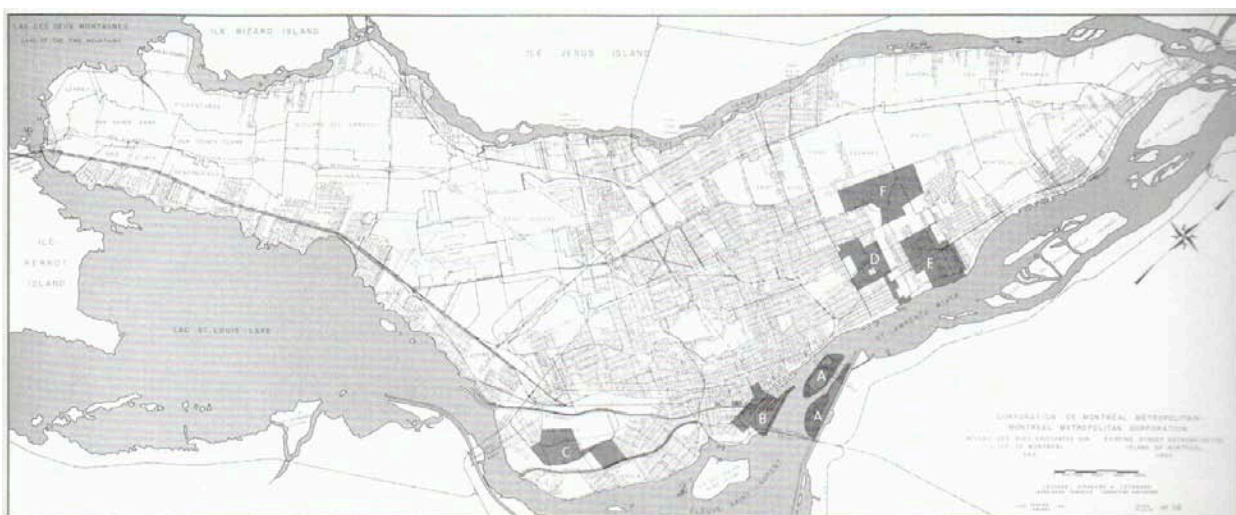
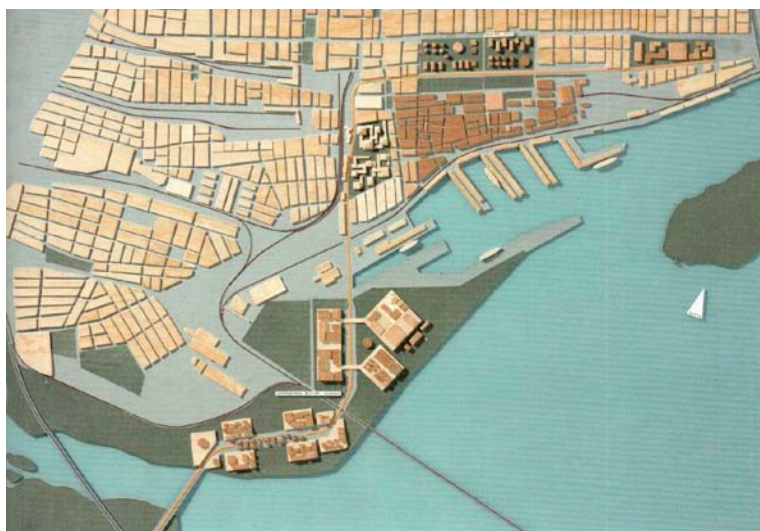


FIG. 24

Above: A map of the island of Montreal indicating the various locations studied for the site of Expo: A. The islands; B. Pointe Saint-Charles; C. LaSalle, D. Maisonneuve, E. Mercier; and F. Saint-Léonard and Anjou.

FIG. 25

Right: Van Ginkel Associates' presentation model for the Canadian Corporation for the 1967 World Exhibition shows the van Ginkels' proposed Expo site at Pointe Saint-Charles, as well as their other studies for the central section of Montreal: a housing development on McGill Street; Old Montreal; renovations of the La Gauchetière and Hôtel-de-Ville sector; and the grounds of the Maison de Radio-Canada.



THE EXPO SITE

The idea of creating islands wasn't new. Frederick Todd imagined expanding Ile Sainte Hélène in 1936, and Raymond Grenier, a journalist for *La Presse*, recalls a similar proposal from the end of the previous century in his *Regards sur l'Expo '67*.¹

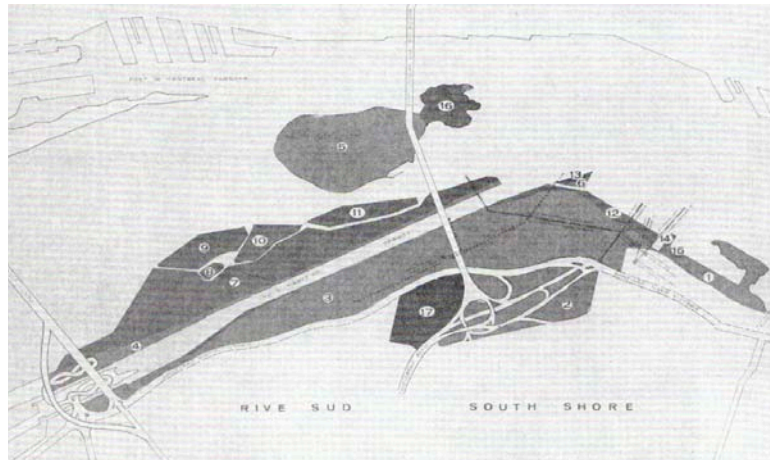
A scheme to create new islands in the Saint Lawrence had been suggested much more recently, however. In 1962 (the year before Beaudet took Drapeau out on his tugboat) the Montreal architecture firm of Bédard, Charbonneau, and Langlois “prepared a study of the river site,”² that proposed a new island along the Seaway, one which bears an uncanny resemblance to the final shape of Ile Notre Dame. Charbonneau had taken the proposal to Pierre Sévigny, the minister responsible for Expo at the time, who promptly rejected the idea as completely absurd.³ The firm “would never be given proper credit for originating the idea.”⁴

At that time, the various locations being considered for the exhibition included “parcels of land to be made viable and neighbourhoods that were due for renewal”⁵ such as Pointe Saint-Charles, LaSalle, Maisonneuve, Mercier, Saint-Léonard and Anjou.⁶

The Canadian Corporation had hired the architect Daniel van Ginkel as a planning consultant for the 1967 World Exhibition.⁷ His office developed a scheme that proposed to build Expo on multiple under-developed sites across Montreal: in Pointe Saint-Charles; on land to the west of the old port; and to the east of the city centre, on land now occupied by the CBC.⁸ Drapeau had shown a presentation model of this scheme to the International Bureau of Expositions on his trip to Paris in the fall of 1962, and was later accused of “abusing the confidence” of the BIE, which accepted Montreal's proposal based on the van Ginkel site plan.⁹ The presentation model of that plan was never revealed to the public during the planning of Expo. It was

FIG. 26 + 27

Right: Bédard, Charbonneau, Langlois, architects, prepared an early study of the river site at their own expense, showing fairgrounds on Ile Sainte-Hélène, a new island very similar in shape to Ile Notre-Dame, and on the south shore of the river. According to André Lortie, they were never given proper credit for originating the idea. Below: A sketch of architect and planner Eugène Beaudoin's proposed master plan for Expo, which incorporates the architects André Blouin and Victor Prus' previous studies for a "Confederation Boulevard" in the city (on the top left).



displayed for the first time at a CCA exhibit in 1993. That exhibit asked the question that has plagued Expo's creators since the end of the fair: would the sites proposed by van Ginkel not have provided greater opportunities for urban design and re-generation, post-Expo, than the islands have provided to date?¹⁰

"Would the Expo have been so successful had it been built in a rather dull urban location?" responds Yves Jasmin, who admits that it may "have been very advantageous for Montreal if the Expo could have improved decrepit quarters of the city, but the success of the Expo itself was our first priority."¹¹ The decisions of the Expo Corporation prioritized the success of its own venture, to the point of refusing the urban planning advice of the very consultants it hired to study the location of the fair. The long-term consequences of its choices were left for others to consider. Mindful of Expo's theme, Pierre Dupuy found the Saint Lawrence an ideal site for the fair, because the river "carried civilization itself into our country... it is the heart of our history and... a great artery of our prosperity."¹² On a more practical level, both he and Jasmin argued that the bureaucracy required to expropriate various existing urban sites could easily have required more time and money than it took to build the islands.¹³

And there was no time to waste.

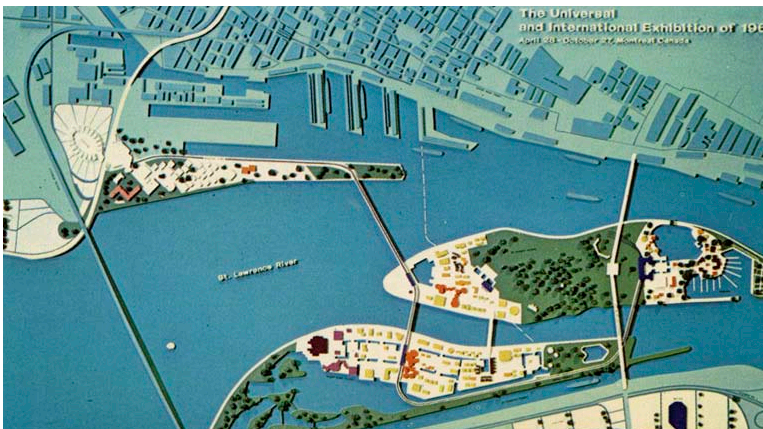


FIG. 28

An early site-planning model showing the four main sectors of the fair: Cité du Havre; pavilions (upstream) and La Ronde amusement park (downstream) on Ile Sainte-Hélène; and Ile Notre-Dame.



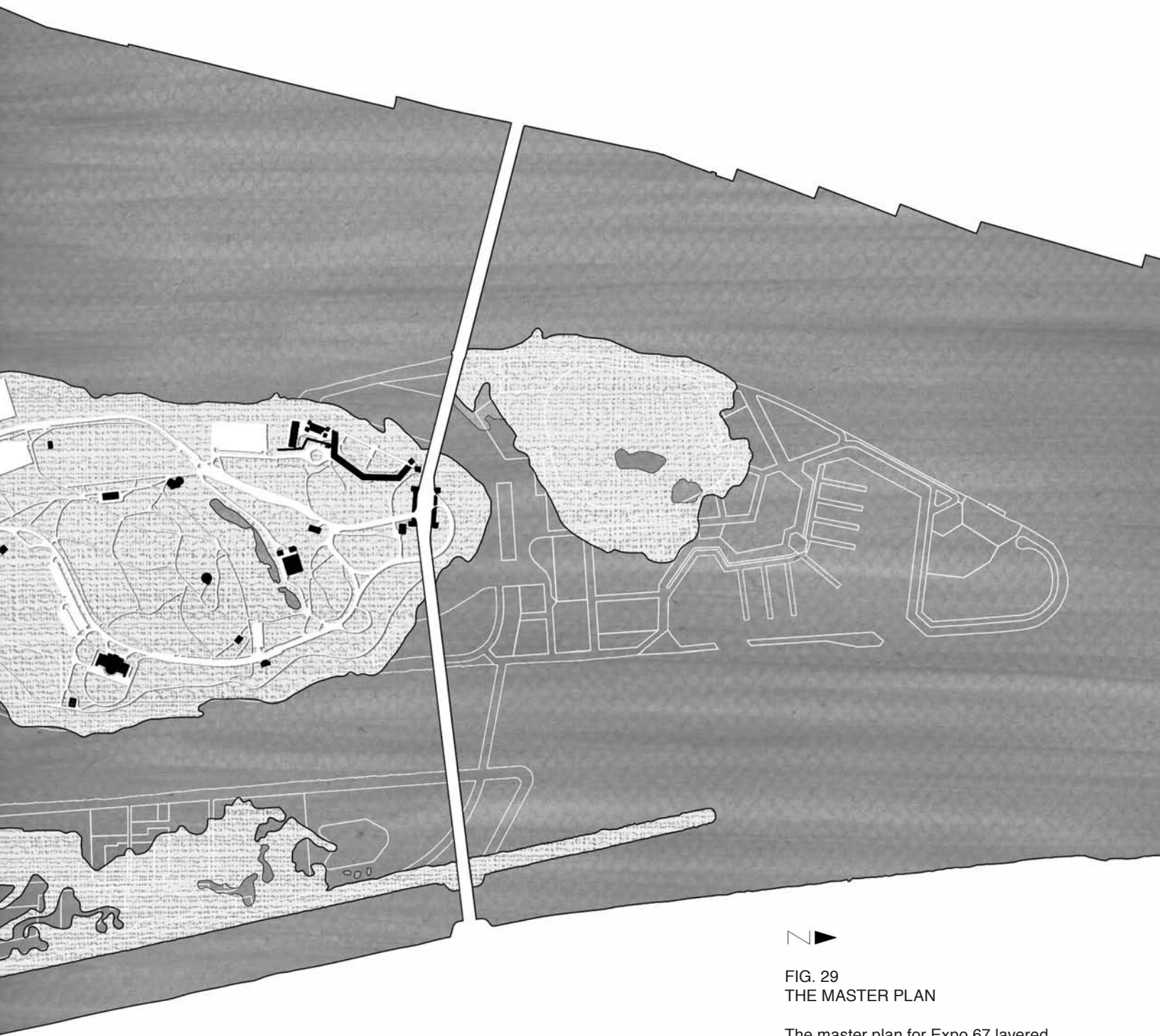
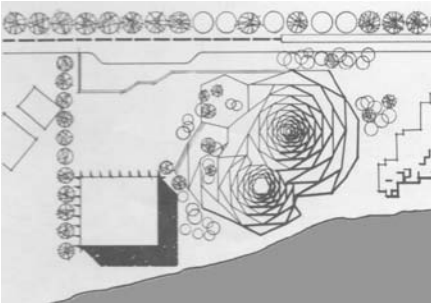
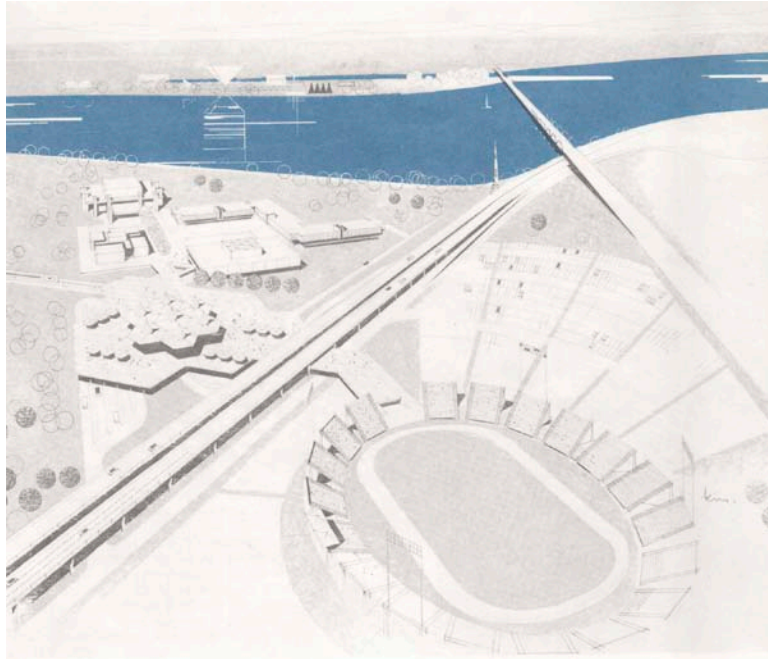


FIG. 29
THE MASTER PLAN

The master plan for Expo 67 layered over the original Île Sainte-Hélène, showing the relative sizes and dense clusters of the pavilion plots in relation to vast open spaces (one of which is the original island, left relatively undisturbed). The master plan's detailed zoning of the site responded to the requirements of a complex program that included thematic, national and private pavilions, shows, amusement rides, concessions, performance spaces and areas for relaxation.

FIG. 30, 31 + 32

In his publication of *The Introduction of An Urban Concept in the Planning of the Exhibition*, Expo's chief architect Edouard Fiset reinforced his concept of the master plan as a collection of "urban compositions," the "highly urbanized and orderly nature" of which would be "emphasized by contrast" to the two large "English type" gardens in the master plan (the existing one on Ile Sainte-Hélène and a new one on Ile Notre Dame). The urban scale of the squares and open spaces (around which the pavilions were organized) was communicated to the foreign participants through Fiset's plans and renderings. Right: Expo's stadium, entrance plaza and first urban square are shown in a birds-eye perspective. Below, left and right: A plan and perspective rendering show another urban square further along the Cité du Havre.



THE MASTER PLAN

“The World’s Fair is a tired institution. It is a long time since it startled the world with its products or offered stimulating or controversial ideas. No longer an instrument of genuine intellectual exchange, it has been reduced to an expeditious economic shot in the arm and an instrument of national propaganda,” wrote Ada Louise Huxtable in 1960.¹ The planners of Expo 67 were determined to prove her wrong.

In 1962, Mayor Drapeau assembled a team of advisers to discuss the theme of the fair, in light of the BIE’s suggestion that, as a Category 1 Exposition, it should be “essentially non-commercial and should reflect the epoch.”² Claude Robillard, an urban planner (he was also Expo’s chief planner in its early stages)³ “who had once spent an afternoon with [Antoine de] Saint Exupéry,”⁴ suggested *Terre des hommes*, the title of one of the author’s novels.

In May of that year, a group of respected Canadians gathered for a three-day conference, at the Seignury Club in Montebello, Quebec,⁵ to elaborate on the application of Saint Exupéry’s notion that: “To be a man is to feel that by carrying one stone you can contribute to the building of the world.”⁶ The author Gabrielle Roy, an active participant at the conference, was adamant that Expo’s planners remain true to the idea, and the theme pavilions that resulted were an attempt to reinforce this humanist view.⁷

The conference participants felt that: “In the phrase Man’s Earth we can appreciate the sense of order derived from each human being in his place... who is to say which one is more important in the final count of all the musicians [in] the orchestra?”⁸ The fervent idealism of such a theme recalls the 19th century humanism of the great expositions, as Richard Mandell explains in *Paris 1900, The Great World’s Fair*: “Most of all, the fairs themselves were manifestations of the positivists’ faith in material and scientific progress as panaceas for man’s



FIG. 33

A rendering showing one of Expo’s urban squares. This one, on the Cité du Havre, is bound by the theme pavilion *Man the Creator* (an art gallery), the Expo Theatre, and the exhibition’s administration building.

ills.”⁹ But some critics considered its application in the second half of the 20th-century to be naïvely utopian. “If a world’s fair had been held in Michelangelo’s day, its theme might well have been *Man and His World*; that was the great age of humanism,” wrote Barry Lord, the editor of *arts/canada* magazine, in 1967. “But for a world’s fair *today*, it would be difficult to conceive of a less appropriate theme. For we live in a world in which humanist values are either wholly eclipsed, or rapidly vanishing.”¹⁰

The concern at the conference, Gabrielle Roy would later write, was whether “a world exhibition, an exchange of displays on a mass scale, [could] take its inspiration from such an ideal... Here it was necessary to distinguish between a fair, where man brings the products of his activities to sell, and an exhibition where his purpose is to compare, to show with pride, to emulate... [The Corporation] should devote its efforts to making the theme the central core of all its pavilions and all its other projects... The theme pavilions, with constant emphasis on human interdependence, would then form the hub of the great wheel of men and nations.”¹¹

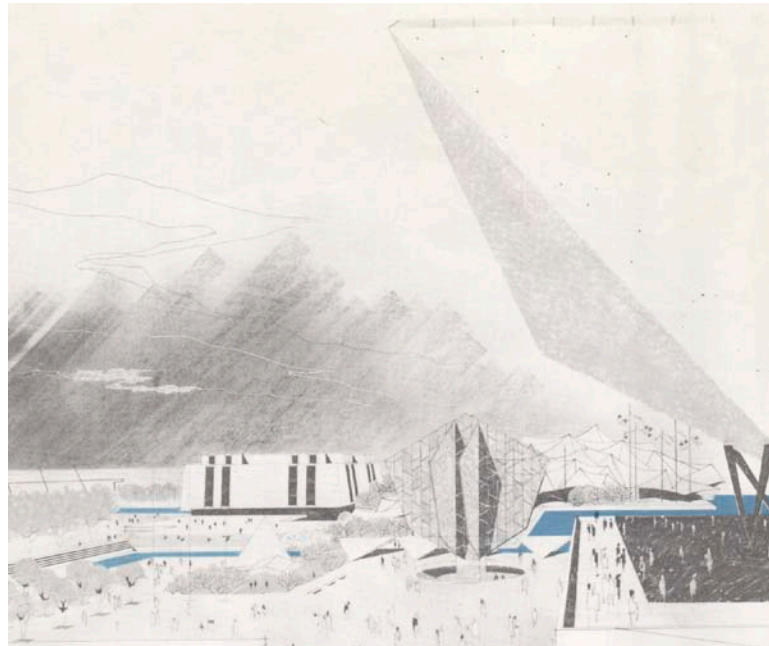


FIG. 34 + 35

On Ile Notre-Dame, Canada’s national and provincial pavilions were organized around a series of squares and plazas bound by canals. Above and right: The plan and perspective sketch show the relationships among the Canada, Ontario, Quebec and Western Provinces pavilions, as well as Canada’s massive inverted pyramid *Katimavik* and giant *People Tree*.

The transformation of “this philosophical concept into concrete reality” fell to Edouard Fiset, the chief architect of Expo 67.¹² Fiset studied at the Ecole de Beaux Arts and after the war worked with the great French urbanist Jacques Gréber on the plan of Ottawa. He was employed by the government in Québec when Pierre Dupuy poached him to work on Expo.¹³

As a result of the theme developed at Montebello, Fiset’s team initially considered a concept quite different from the one they adopted in the end.¹⁴ The logical result of the conference’s conclusions that the fair’s theme be expressed above all else was “an exhibition that would be purely and totally thematic, one in which the various countries, while preserving their own identities, would all participate in the elaboration of the theme. A theoretical approach was conceived by which the visitor could follow the development of a theme idea as he progressed along a horizontal circuit, while still being able to identify national participants in the different sectors by following vertical paths.”¹⁵ Although this scheme was a logical development of the theme, it was superseded by a site plan of individual

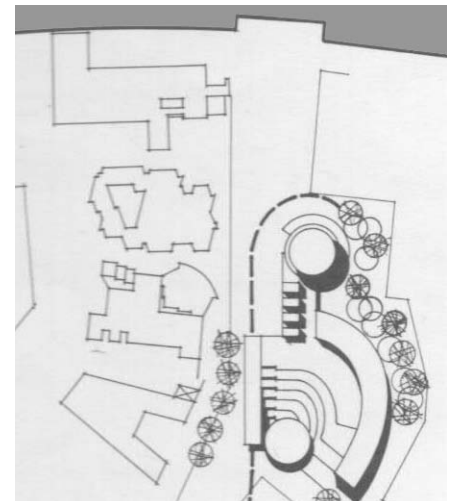
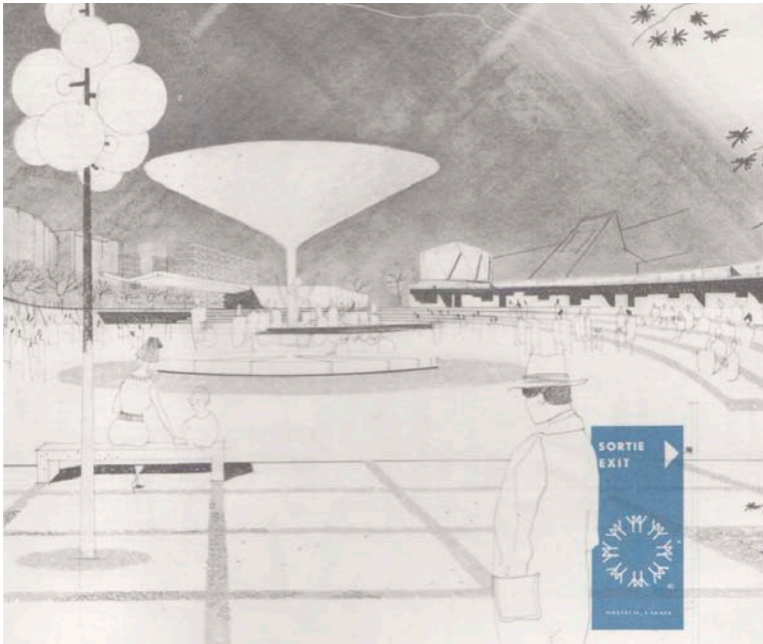


FIG. 36 + 37
Above and left: A plan and perspective of a sunken square on Ile Sainte-Hélène, containing a visitors services kiosk, and surrounded by national pavilions.

national and private pavilions surrounding theme buildings that were positioned in the center of each of Expo's "sectors." Fiset contends that traces of the original scheme remain in the final plan of the fair, although they are difficult to identify. Ultimately, foreign participants were invited to contribute content to the theme pavilions, in addition to their own.¹⁶ Pierre Dupuy recalls that it was very difficult to plan these combined efforts as the foreign contributions proved difficult to co-ordinate and finalize. The planners attempted to create buildings that could expand and contract to accommodate the ever-changing size (and nature) of these contributions - or the sudden lack thereof.¹⁷ The massive, lumpy, tetrahedral structures which ultimately housed many of the thematic presentations, although chosen because their forms were thought to nest and combine at multiple scales, proved an unfortunate choice for structures that were meant to "expand and contract as necessary, like a bellows."¹⁸

Ultimately, Fiset felt that "the exhibition required a setting that would emphasize the close relationship between man and his works, one where both would retain their individuality but where each would contribute, as Saint-Exupéry said, to the building of the world."¹⁹ The design of such a setting would necessarily preclude two of the previous concepts that had been considered for the site: "the first favoured the eventual sub-division and re-sale of the grounds, covered by a summary form of legislation;

FIG. 38

An early concept rendering of one of Expo's massive theme pavilions, composed of truncated tetrahedrons. One on Ile Sainte-Hélène and another on Ile Notre Dame (which presented the themes *Man the Explorer* and *Man the Producer*, respectively) were meant to serve as gateway pavilions to the clusters of pavilions that surrounded them (the elevated bar next to this one is an Expo Express Station).



the second proposed a key architectural style in which the parts would become subordinate to the whole. Once these two formulas had been set aside, it became easier to envisage the principles that would govern the composition.”²⁰

The BIE’s requirement that the fair be composed of individual pavilions (constructed by participating nations) ultimately took precedent over designs which might have created a more apparent built expression of “human values and aspirations in the theme *Terre des Hommes*,” as opposed to the presentation of “a *Terre des Nations* or a *Terre des Machines*.”²¹ It also dictated the master plan of the fair. “Canada invited each country to come and assert its own identity in a distinctive national pavilion. Therefore the possibility of using a super-palace or super-shelter to group all countries under one roof was out of the question, as well as architectural concepts of a monolithic nature.”²²

The motley assemblage of pavilions that resulted drew its share of criticism. Sibyl Moholy-Nagy called it a collection of hats.²³ Peter Collins, of McGill’s School of Architecture, sought a more integrated architecture at Expo and felt that “the desire for individualistic expression [had] become... rabid.” As Fiset saw it, individualism was the point, “within a context of careful site planning.”²⁴

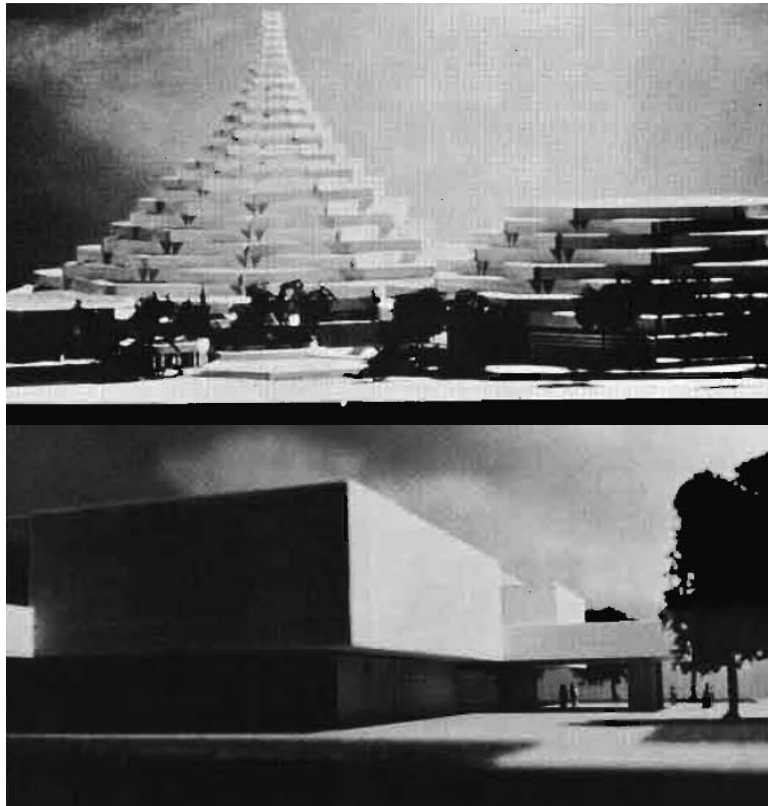


FIG. 39
An Expo postcard showing a rendering of the elevated walkways that connected the three truncated tetrahedrons of the *Man the Explorer* pavilion complex on Ile Sainte-Hélène (and that bound the urban plaza in the centre).

FIG. 40 + 41

Expo's truncated tetrahedron theme pavilions proved very difficult to construct. There weren't enough welders in Canada to join the thousands of pieces of the space frames together, so 2.5 million nuts and bolts were used instead. In the meantime, other designs were sought for the theme pavilions on Cité du Havre.

Above: The wooden cone of Arthur Erickson's *Man in the Community* theme pavilion was considered one of the most beautiful structures at the fair. Rain fell through the spaces between the roof's rotated hexagonal rings and into a pool in the garden below. Below: Gauthier & Guité's more somber *Man the Creator* pavilion housed fine arts, contemporary sculpture, photography and industrial design exhibits.



That planning began by designating the four distinct sectors of the site: 1. Cité du Havre, which extended from the city along the former Jetée Mackay; 2. the amusement park La Ronde, on the upstream end of the enlarged Ile Sainte-Hélène; 3. a group of national, private and theme pavilions on the downstream end of Ile Sainte-Hélène (at the tip of which was Place des Nations, a large plaza designed for presentations and official ceremonies); and 4. a second group of pavilions on the new Ile Notre-Dame (which would also feature a large landscaped park surrounding a new lake).²⁵

"To avoid compromising the future of the islands," Expo's large permanent projects, such as the art gallery, stadium, theatre, Press and Administration Building, and International Broadcasting Centre, were all to be constructed on Cité du Havre.²⁶

The largest pavilions were positioned along the perimeter of each sector to “achieve volumetric equilibrium,” create “larger poles of attraction,” and “force the visitor to pass through less interesting sections,” (such as the smaller pavilions, which might otherwise be overlooked in favour of the more prominent exhibits).²⁷ The theme pavilions were the exception to this rule and were placed in the centre of each sector, to “form the major nuclei of the Exhibition in these parts both physically and emotionally.”²⁸

“The Theme Areas are centre pieces for the National and Private Exhibits [in each sector] and their purpose is to present the Theme of the Exhibition, in powerfully moving ways... the Theme Areas can be said to have a gateway function while being essentially didactic.”²⁹

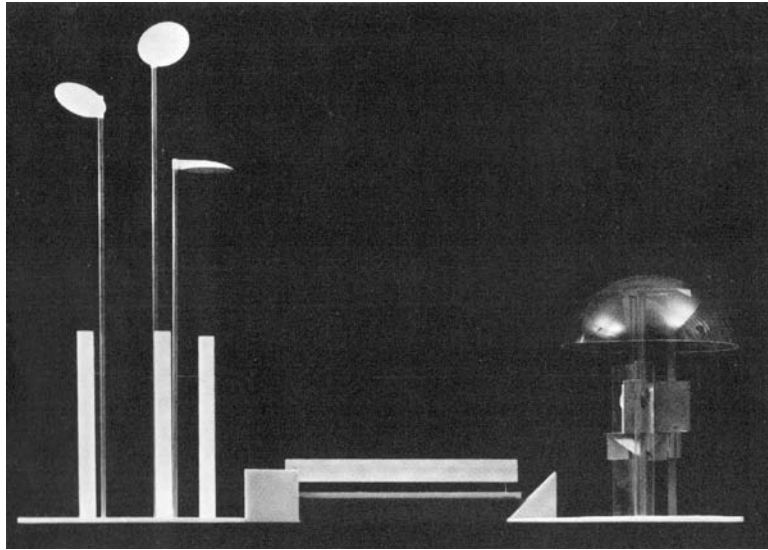
When allocating plots to the foreign participants, the Commissioner General and Chief Architect, aware of the animosities which divided certain nations, were careful to avoid aggressive neighbours.³⁰ The national pavilions weren’t otherwise placed relative to either their global location or politics, except where groups of countries exhibited together in a single pavilion or collection of pavilions – as did the Scandinavian, Arab and African countries, respectively. A Plaza



FIG. 42, 43 + 44
 Left: The buildings in Expo's *Man the Provider* theme pavilion surrounded a Sun Acre, which presented exhibits that symbolized humankind's "striving for increased productivity on the farm," by measuring yields on a standard area. Top and above: Early concept sketches for the pavilion explored an exhibit comparing types of cattle and a human-scaled worm hole (to demonstrate the importance of healthy soil).

FIG. 45, 46 + 47

Below: A parti drawing of the clustered triangular bases of Luis Villa's system of street furniture for Expo 67. Bottom: A model of Villa's acrylic-domed phone booths, which were among the most handsome sculptural objects at the fair. Right: A maquette showing a combination of lamp-posts, bench, and phone booth.



de las Américas had similarly been planned for potential Latin American participants, but was never realized.³¹

The planners anticipated that visitors would be eager to compare the pavilions of the USA and the USSR and so placed them within sight of one another, on opposite shores of the LeMoynes Channel, which separates Ile Sainte-Hélène from Ile Notre-Dame. The Passerelle du Cosmos, named for the space race between the two countries, would stretch across the Channel between their respective pavilions.³²

Because so much of Expo was planned in advance of final figures on the number and size of its exhibits (which would in turn affect the size of its crowds, and thus the width and position of its access routes), Fiset sought to make the plan as flexible as possible.³³ Certain principles, however, remained from the start. Expo would have an urban character, a “high density of surface construction” and its parks, where they occurred, would be clearly defined.³⁴ National pavilions were encouraged “to preserve... the design intent of the plan, which call[ed] for a pattern of enclosed urban spaces, where pavilions may crowd together for the best visual result, alternating with less dense green spaces.”³⁵ Pavilions were to be built “close to the public

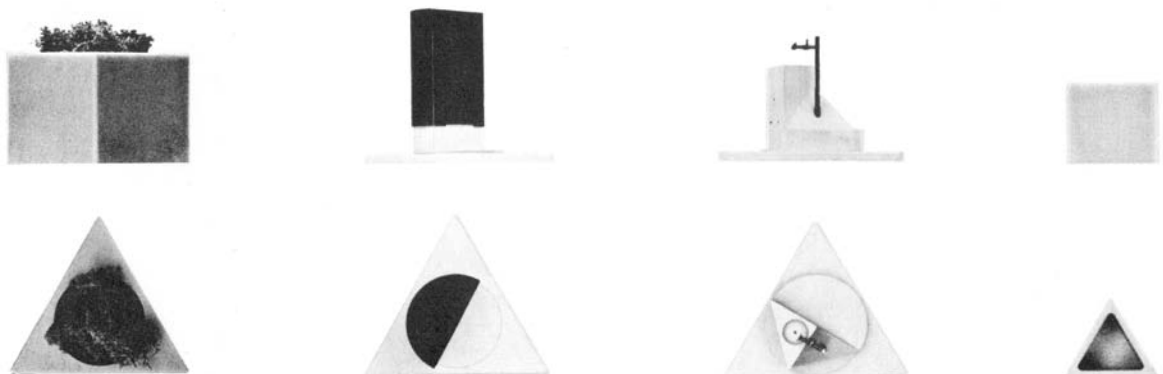
spaces, plazas, activity areas and thoroughfares, and their gardens or open spaces... on those sides facing the lakes or green spaces.” Fiset felt this would reinforce the established “pattern of the plan” and “its fundamental rhythm of green space and urban space.”³⁶ The pastoral “English” landscaping on the existing Ile Sainte-Hélène would be emulated in the new park on the man-made Ile Notre-Dame. These green spaces were meant to “emphasize by contrast the highly urbanized and orderly nature of the areas reserved for the pavilions.”³⁷

On a site containing “a considerable diversity of expressions”³⁸ rendered in “many diverse forms, volumes and materials,”³⁹ the master plan sought visual continuity through: the presence of water; the consistent design of street furniture and services buildings; and “a judicious policy in the use of graphics and of colour” on the buildings.⁴⁰

Many visitors felt that Fiset was successful in his efforts to bring coherence to the site. Pierre Burton remembers, “If Expo made visitors feel good it was partly because it had a unity of design that other exhibitions failed to achieve. In lesser hands it would have been chaos – jarring and cacophonous – as the New York fair [of 1964-65] had been. As more than one commentator noted, the order and unity imposed on the site by the strict control of street furniture and signage was almost puritanical. The result wasn’t sombre, and it certainly wasn’t sterile. It was exuberant in a way that few Canadian cities were.”⁴¹

FIG. 48, 49, 50 + 51

Norman Hay, the head of Expo’s design division, commissioned several Canadian studios for concept sketches of Expo’s street furniture, but none produced the system of elegant yet unobtrusive drinking fountains, lamp posts, waste-baskets and benches he was looking for. The planning for the furniture fell so far behind that Colonel Churchill threatened to buy stock pieces if he wasn’t given sketches within ten days. One of Expo’s architects suggested Luis Villa, a Colombian designer then working in Philadelphia. Sent for immediately, Villa arrived in Montreal two days later and within a week produced a set of designs for Expo’s furniture pieces, whose triangular bases could be nested together in multiple combinations. Below, from left to right: Plans and elevations of Villa’s designs for a planter, a mail-box, a drinking fountain and a trash receptacle (the last of which would prove both too small and too few on the Expo grounds).





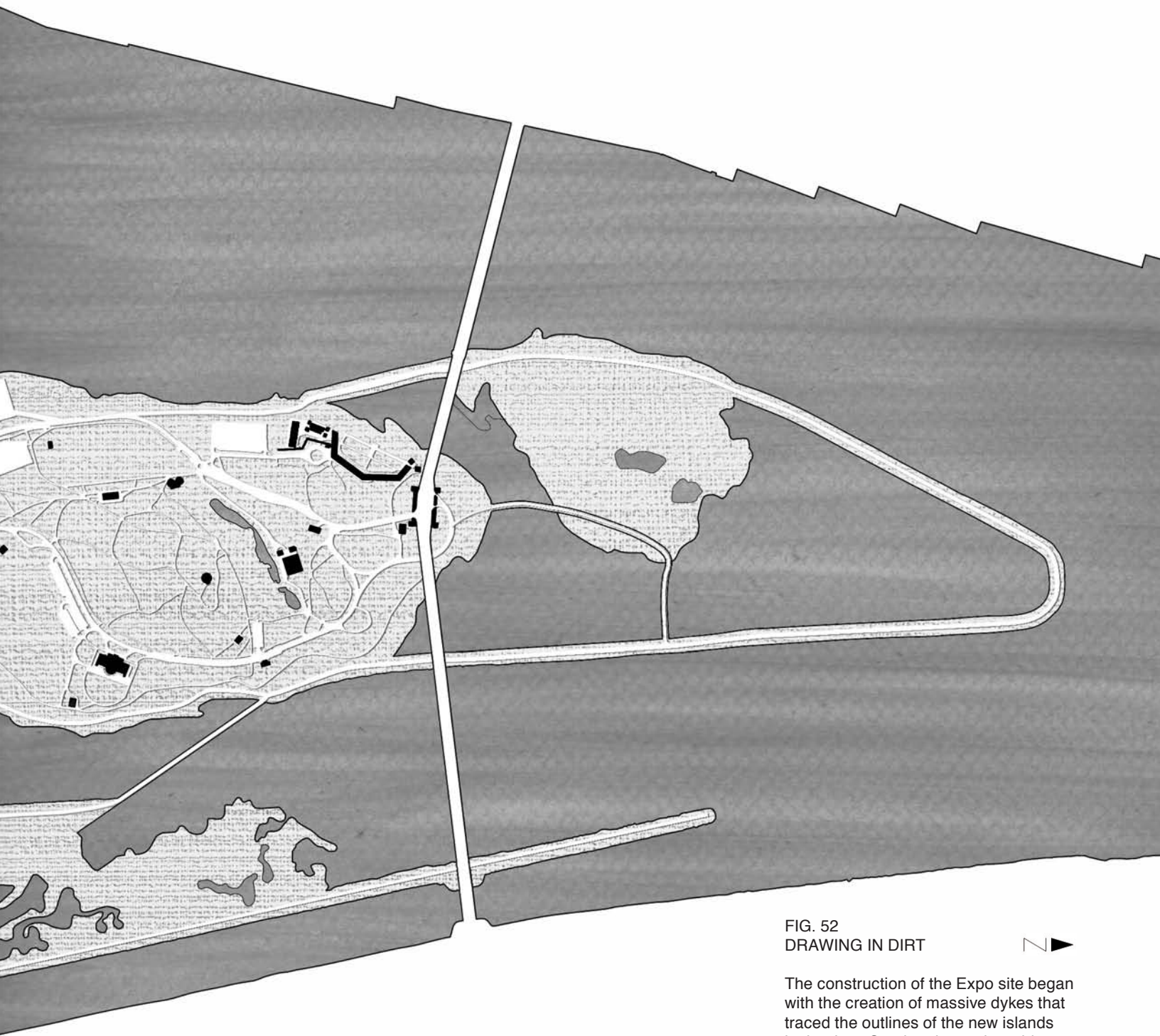
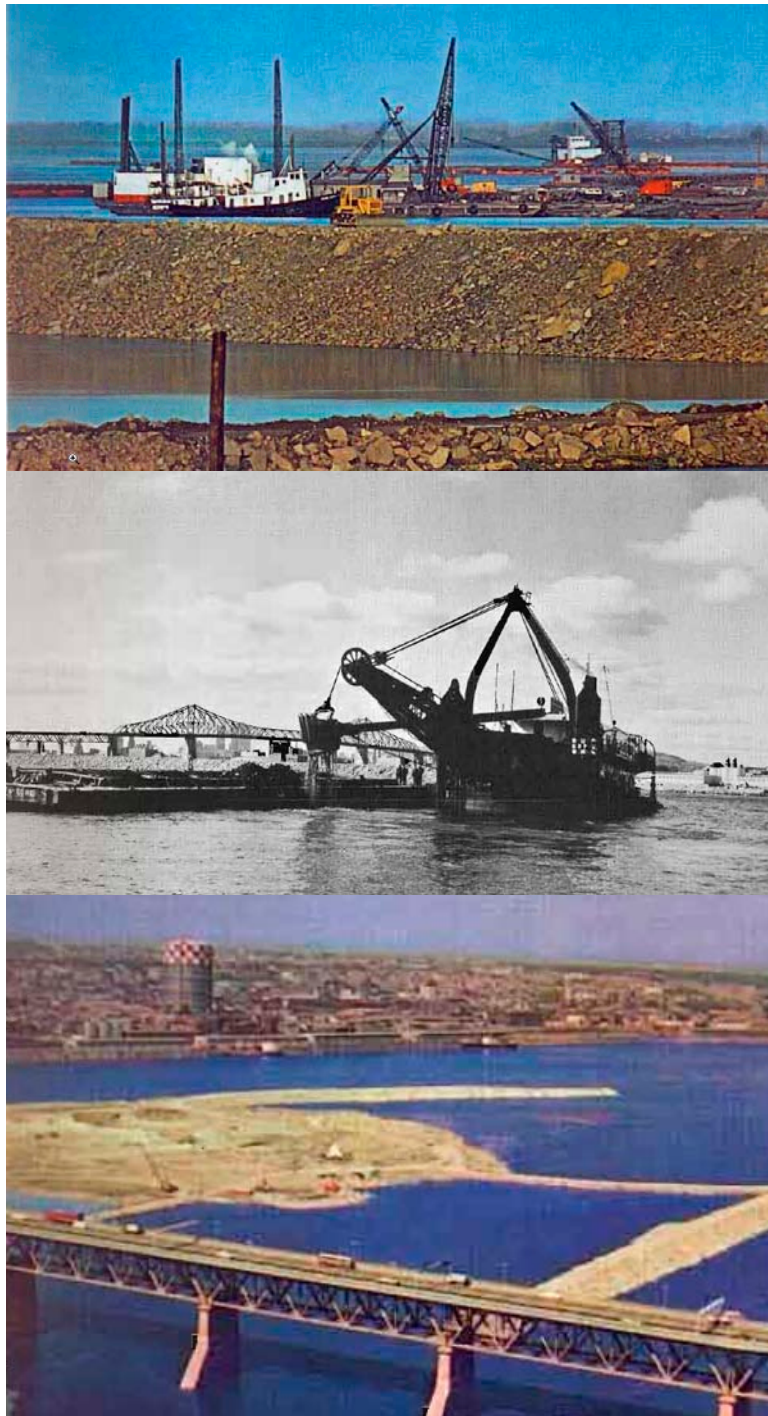


FIG. 52
DRAWING IN DIRT



The construction of the Expo site began with the creation of massive dykes that traced the outlines of the new islands in the river. Sand and gravel would eventually be both dredged from the river and trucked onto the islands to fill these enclosures. At first, however, the smaller islands in the river were mined to provide the dirt for the outlines that would eventually surround them. Temporary dykes were also constructed to block off a section of the channel between the new islands, which was later drained to facilitate the construction of the bridges (and tunnel) that would eventually cross it.

FIG. 53, 54 + 55
Photographs showing the early stages of construction of the Expo islands. Above: A bulldozer negotiates the path along the top of a new dyke. Centre: One of the two largest dredges in the world, which were used to create the new islands. Below: Lines of dirt extend from Ile Ronde as the perimeter of the new Ile Sainte-Hélène stretches beneath the Jacques-Cartier Bridge.



DRAWING IN DIRT

Jean Drapeau “could not be deterred, in spite of vigorous opposition, from his plan to build the exhibition on two man-made islands in the St. Lawrence.”¹ On August 13, 1963, the Mayor invited the Prime Minister to inaugurate the building of the Expo site by tipping twenty-five yards of earth onto Ile Sainte-Hélène, even though the site had not yet been officially chosen.² Pearson remained skeptical. “I would be less than frank,” he said at the time, “if I did not add that I feel we all have cause for concern over the magnitude of the tasks that must be accomplished if the fair is to... be the success it must be.”³

Despite the protests of his own council, the Mayor was quick to consult both the provincial and federal governments about the creation of the islands. He promptly received permission. With the opening day fast approaching, there wasn't time to debate the question any longer. Robert Shaw, Expo's Deputy Commissioner General, declared that the decision to build the islands was made, and he refused to re-visit it.⁴ By holding the Expo on the islands, Drapeau “outflanked the bickering municipalities and real-estate firms” that hoped to profit from holding the fair in their neighbourhoods. He “made it impossible for speculators to profit from adjoining real estate.”⁵ He also prevented those neighbourhoods from benefiting from any revitalizing effects that Expo's building or infrastructure projects may have brought them.

The city of Montreal, required to provide the Expo Corporation with a site for the exposition, was thus responsible for creating the new islands and for filling-in vast low-lying areas at Pointe Saint-Charles and at Longueuil on the south shore.⁶ The city agreed to turn the completed islands over to the corporation on July 1, 1964.⁷

While “hydraulic studies [were] conducted to determine the boundaries of the islands,”⁸ Shaw turned his efforts toward getting millions of tonnes of earth into the river, to where he



FIG. 56
Looking up from within the quarry on Ile Verte as the island is hollowed out to provide earth for the new dykes.

was going to get it, and how quickly. Simply dredging the river would not be fast enough.⁹ Ile Sainte-Hélène was to be “enlarged by extending dykes beyond the two tiny islands at each end – Ile Ronde and Ile Verte.”¹⁰ Those islands, it was decided, would provide the rock for the dykes.¹¹ The first quarry was established on Ile Ronde, from which enormous blocks of rock were blasted and used to create the 15km long periphery walls of the new islands.¹² The smaller Ile Moffat and its adjacent mudflats were equally subsumed within the much larger outline of the new Ile Notre Dame, which was anchored to the dyke of the Saint Lawrence Seaway.¹³ The Quebec Society for the Protection of Birds protested “the destruction of the mudflats, which were nesting places for thousands of ring-billed gulls.”¹⁴

FIG. 57

An aerial photograph showing new dykes connecting Ile Sainte-Hélène to Ile Ronde (left) and Ile Verte (right). The low water level of the river reveals the contours of mudflats around Ile Verte and along the Saint Lawrence Seaway (top). These closely resemble the shapes the new islands will take in these areas, and suggest that the proposed outlines took advantage of the areas where the existing riverbed was shallowest.

In August 1963, the periphery of the new islands was complete and the work of filling them in began.¹⁵ Shaw started by dredging the river with two of the most powerful dredgers in the world, scraping up the riverbed and dumping it within the perimeter walls, but he soon ran into “heavy digging in the river



bottom” which slowed his efforts.¹⁶ He considered trucking-in the necessary fill, but found that the ramp from the Jacques Cartier Bridge (the only vehicular access to the islands at the time) had a capacity of only 15 tonnes.¹⁷ Over the course of four months, starting in October 1963, “the ramps were altered to accommodate 40-ton trucks with fourteen feet headroom.”¹⁸ Once the ramps were complete, trucks brought earth from the excavation of the metro tunnels and from mounds of dirt remaining from the excavation of the Seaway and dumped it onto the new islands.¹⁹ At the height of the construction, a truck arrived at the site every four minutes, day and night. A total of 25 million tonnes of earth and rock were transported to the site, in addition to what was dredged from the river.²⁰

Shaw found an engineer who had worked on the canalization of the Saint Lawrence (and was thus very familiar with the riverbed) and placed him in charge of the dredging.²¹ Robert Hewitt of Hewitt Construction proposed constructing a dam in the river so that trucks could descend a ramp to collect the rock being



FIG. 58

A temporary passage is constructed across the LeMoyne Channel between Ile Sainte-Hélène (right) and Ile Notre Dame (left). A portion of the channel will be blocked-off and drained to facilitate the construction of two bridges that will link the two islands: Expo's *Pont des Iles* and *Passerelle du Cosmos*.

FIG. 59 + 60
Above: An aerial photograph shows the completed outline of the northern extension of Ile Sainte-Hélène (which encompasses Ile Ronde). Below: A second aerial shows that as the perimeter of the new island starts to be filled-in, Ile Ronde, now completely quarried, has filled with water. As what was river becomes island, what was island becomes lake.



blasted from the riverbed. The deep pockets carved into the bottom of the river, along with the presence of the new islands, retraced the path of the river considerably, and accelerated its already speedy current.²² New studies suggested that the islands could cause dangerous ice jams in the springtime, when ice from nearby Lac Saint-Louis descended the Lachine rapids. The Expo Corporation built an estacade just upstream from the Pont Champlain, to break up the ice floes before they reached Ile Notre Dame and the narrow LeMoyne Channel between the islands.²³ The cost of creating this ice boom – in addition to building the Cité du Havre pier, enlarging one island and creating another, and providing new bridges to link the three sites – soon exceeded the amount spent on the Saint Lawrence Seaway.²⁴

Perhaps to dispel public doubts that their construction was on schedule, a CBC reporter was dispatched to the future Expo islands as they were beginning to rise from the river, in the fall of 1963. “Canada has certainly one of the most spectacular sites for a fair, ever, here in Montreal,” came the unbiased report. “Most of the responsible people I’ve talked to claim that it will be ready in time. In fact, the engineers say that weeds will be growing all over the site, here, before the exhibitors are ready to begin building their pavilions, and these same people also say that the fair should be, in the Mayor of Montreal’s own words: ‘One of the finest exhibitions of its kind that the world has ever seen.’ Now I know that this sounds promotional, indeed it probably is. But it may also, probably, be true.”²⁵

Just after midnight on July 1, 1964, in an elaborate ceremony on the newly completed islands, Mayor Drapeau handed the site over to Expo’s Commissioner General Pierre Dupuy, along with a document that gave the Expo Corporation possession of the islands until the end of 1967.²⁶ Gabrielle Roy, who visited the site around this time, saw little more than “a soggy field, its edges trailing away into the mists of the river – nothing but acres of mud and the whining of the dump trucks.” She wondered if “anything as glittering as a world’s fair could rise from this mess?”²⁷

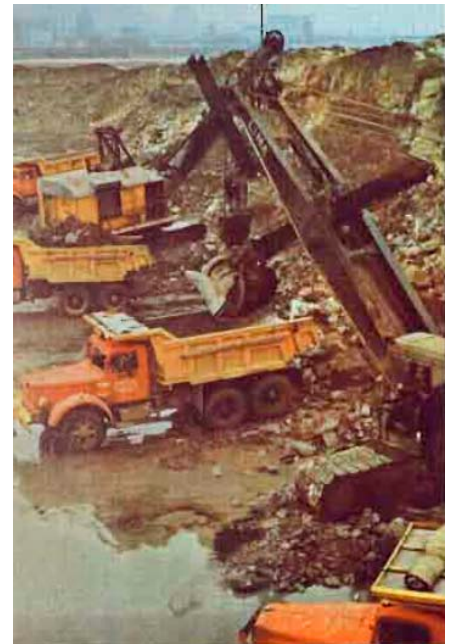
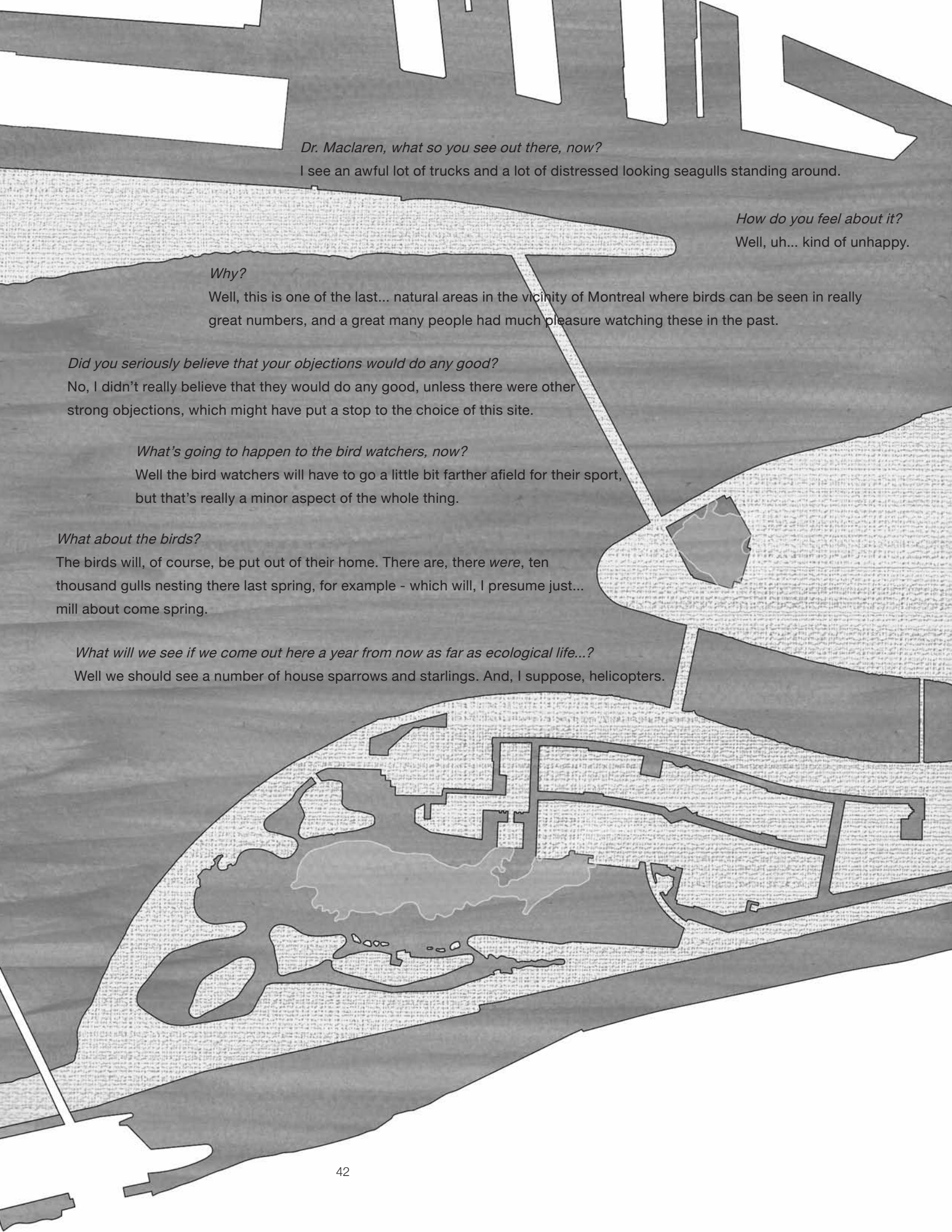


FIG. 61
Dumptrucks collecting fill quarried from Ile Ronde. In less than a year, more than 25 million tonnes of earth and rock are moved in the process of building the islands.



Dr. Maclaren, what do you see out there, now?

I see an awful lot of trucks and a lot of distressed looking seagulls standing around.

How do you feel about it?

Well, uh... kind of unhappy.

Why?

Well, this is one of the last... natural areas in the vicinity of Montreal where birds can be seen in really great numbers, and a great many people had much pleasure watching these in the past.

Did you seriously believe that your objections would do any good?

No, I didn't really believe that they would do any good, unless there were other strong objections, which might have put a stop to the choice of this site.

What's going to happen to the bird watchers, now?

Well the bird watchers will have to go a little bit farther afield for their sport, but that's really a minor aspect of the whole thing.

What about the birds?

The birds will, of course, be put out of their home. There are, there were, ten thousand gulls nesting there last spring, for example - which will, I presume just... mill about come spring.

What will we see if we come out here a year from now as far as ecological life...?

Well we should see a number of house sparrows and starlings. And, I suppose, helicopters.

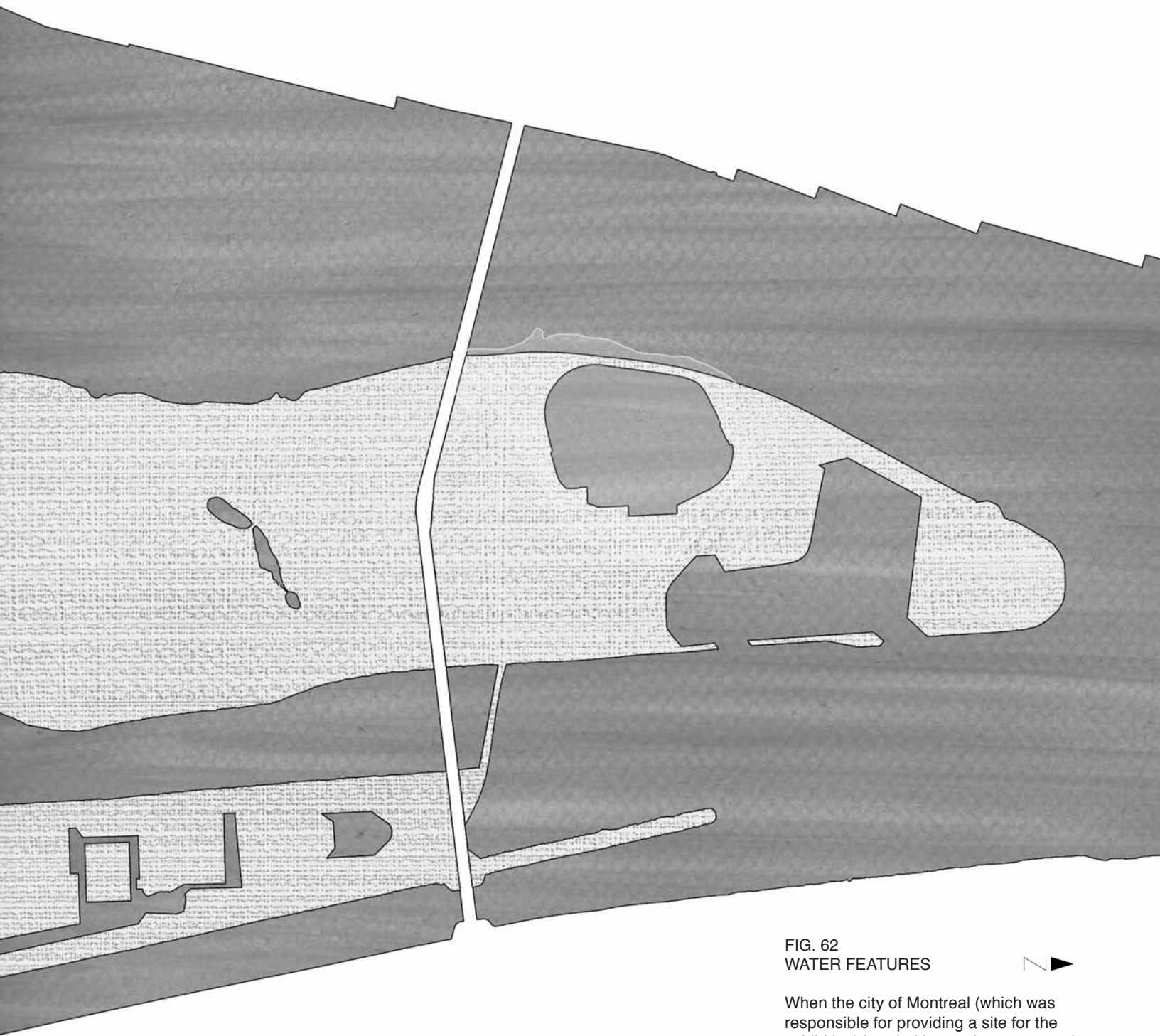


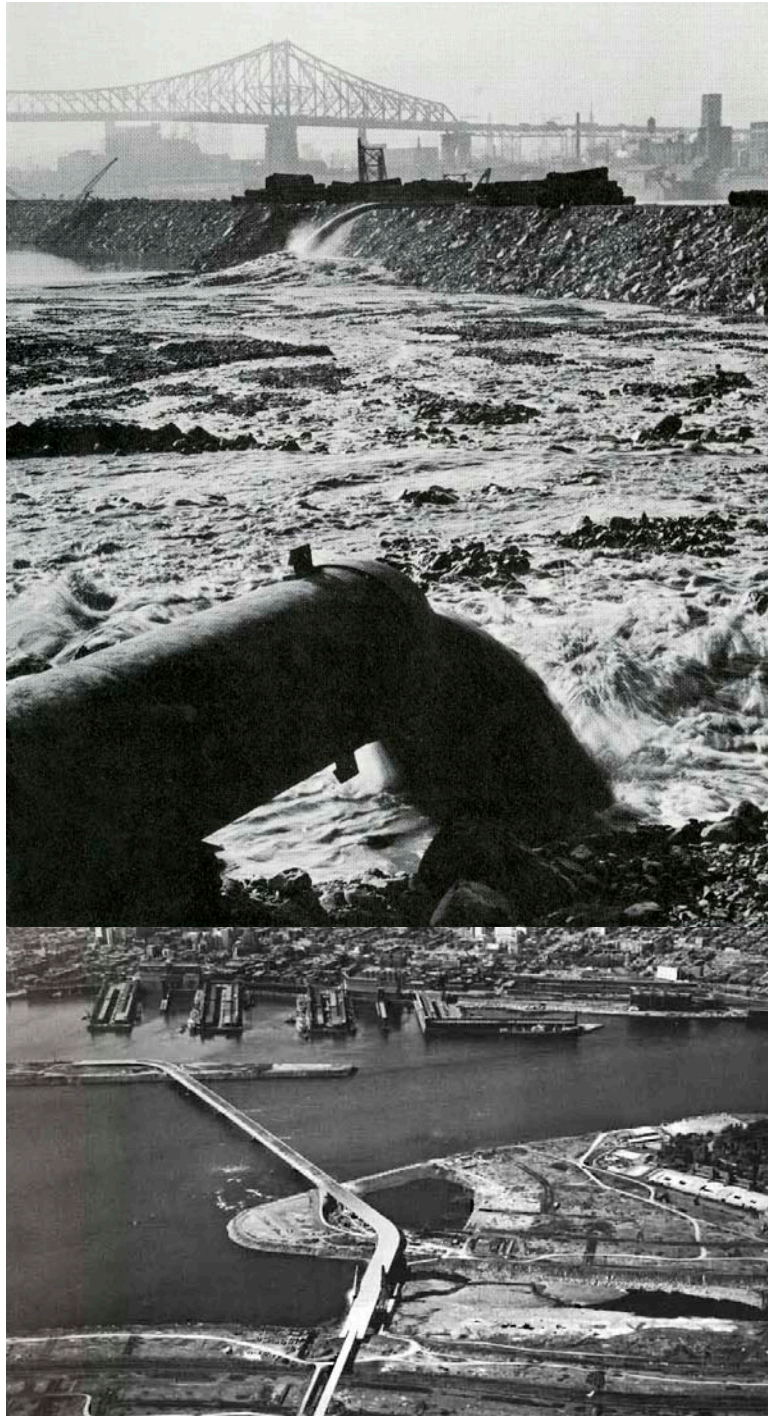
FIG. 62
WATER FEATURES



When the city of Montreal (which was responsible for providing a site for the exhibition) handed its newly constructed islands over to the Expo Corporation just after midnight on July 1st, 1964, they were but vast, alternating landscapes of soil and water. The new elongated landforms completely subsumed the former Ile Ronde, Ile Verte and Ile Moffat. Fully excavated during the construction process, these smaller islands respectively became Dolphin Lake, Swan Lake and Regatta Lake, Expo's most prominent water features.

FIG. 63 + 64

Above: Two of the most powerful dredges in the world were initially responsible for filling-in the new islands with rock lifted from the bed of the Saint Lawrence and from the rocky shoals on either end of Ile Sainte-Hélène. When planners realized that the river couldn't provide the required amount of fill, and that winter ice would seriously hamper the dredging, they suspended work in the river after only 2,400,000 tons of fill had been raised. Starting in January 1964, fill was transported to the site by dumptruck, instead. Below: An aerial photograph of the completed islands shows Swan Lake on the tip of Ile Sainte-Hélène and traces of the network of canals on Ile Notre-Dame. The water level in the Le Moyne Channel between the islands is noticeably lower than that of the rest of the river: a portion of the channel was drained to facilitate the construction of the bridges which now cross it.



WATER FEATURES

Perhaps it was her position on the ground that caused Gabrielle Roy to doubt the site could become a glittering fair. From a vantage point high above the islands, Pierre Dupuy's outlook was much more optimistic. "In beginning, when the terrain had not yet solidified, we would fly over that sea of mud in helicopters" he said. "With some imagination one could glimpse what the Exposition might become... From above, [the site] was already impressive - the sheer extent of it - and its alternating landscape of soil and water."¹

By virtue of its location, its construction and its master plan, the Expo site employed water as a primary aspect of its design. Of the four hundred hectares that comprised the site, sixty of them were water.² "The universal presence of water was one of the principal factors governing the composition of the master plan. Thus, not only the river, but also lakes, lagoons and canals to be created inside the islands, were to constitute the framework and leit-motif of the plan."³

Because the two smaller islands flanking the original Ile Sainte-Hélène had been quarried for rock to fill-in the enlarged site, they became depressions in the landscape. This is how, once filled with water, Ile Ronde became Dolphin Lake (around which La Ronde amusement park was designed) and Ile Verte became Swan Lake (the central water feature on the upstream end of the new Ile Sainte-Hélène).⁴ Similarly, closer to the south shore along the wall of the seaway, the existing Ile Moffat and the mudflats around it were mined to fill-in the new Ile Notre-Dame. Thus they became the large Regatta Lake around which a park was designed on this part of the site.⁵ The *Parc de Notre Dame* was designed by Expo's chief landscaper, Robert Calvert. Pierre Dupuy recalls it "was created with all the splendour of Laurentian nature: water courses, little islets, bosquets, lakes and the solitudes. It was a Mecca for reflection that would inspire future generations."⁶



FIG. 65
In the spring of 1964, the massive dredge was pressed back into service to help complete the task of filling-in the islands. An extensive piping network was created to deliver the newly dredged fill to those areas of the islands that most required it.

FIG. 66
An aerial photograph showing the great quarry in middle of Ile Notre-Dame - the remains of the former Ile Moffat. The outlines of the small islands designed to ring the completed Regatta Lake can be seen to the right of the central depression. The canals that will ultimately stretch from this lake (to the left of the hole) have not yet been excavated.



Once the backfilling of Ile Notre-Dame was complete, the site builders began to carve out canals from the centre of the island.⁷ Pierre Burton attributes the idea to Moshe Safdie, who was working on his Habitat 67 at Daniel van Ginkel's office at the time. When the notion was taken to Edward Churchill, the retired army officer responsible for constructing the fair, the Colonel was understandably exasperated. "I've just taken the water *out*," he said, "I'm damned if I'm going to build a canal."⁸ But he was convinced to build more than 1500 linear metres of canals nonetheless, as well as the 27 bridges required to cross them.⁹

The banks of the islands' new water features were created of broken stones held together "with wire mesh forms built on an Italian model, the Gabbione process."¹⁰ The designers originally intended for the lakes and canals to be at the height of the river itself, but this proved difficult to achieve. Their waters would have fluctuated with the changing height of the river, and their banks would have been dangerously high. In the end, the water level of the lakes and canals was five metres higher than the river.¹¹

Perhaps because their water levels were so much closer to the ground level of the exhibition, pavilions and visitors were more often oriented toward the lakes and canals than toward the site's grandest water feature, the Saint Lawrence itself. "We always wanted the visitor to be in the presence of water... the large and numerous avenues were always directed toward the best view – either of a lake, a pavilion, or a canal."¹² But rarely toward the river, however. The master plan of the exposition reinforced this as well: exhibitors were instructed to turn their pavilions toward the "urban squares" at the centre of the site. The large pavilions along the perimeter of the site, "their ground levels... slightly raised above those of the central areas" often blocked potential views of the river.¹³



FIG. 67

An aerial photograph showing the new islands' dramatic location in the Saint Lawrence River. Both Swan Lake and Dolphin Lake are visible on the enlarged Ile Sainte-Hélène. Regatta Lake is beginning to appear on Ile Notre-Dame: the deepest part of the quarry has been filled with water, and traces of the island's future canals are visible to the left of the lake.

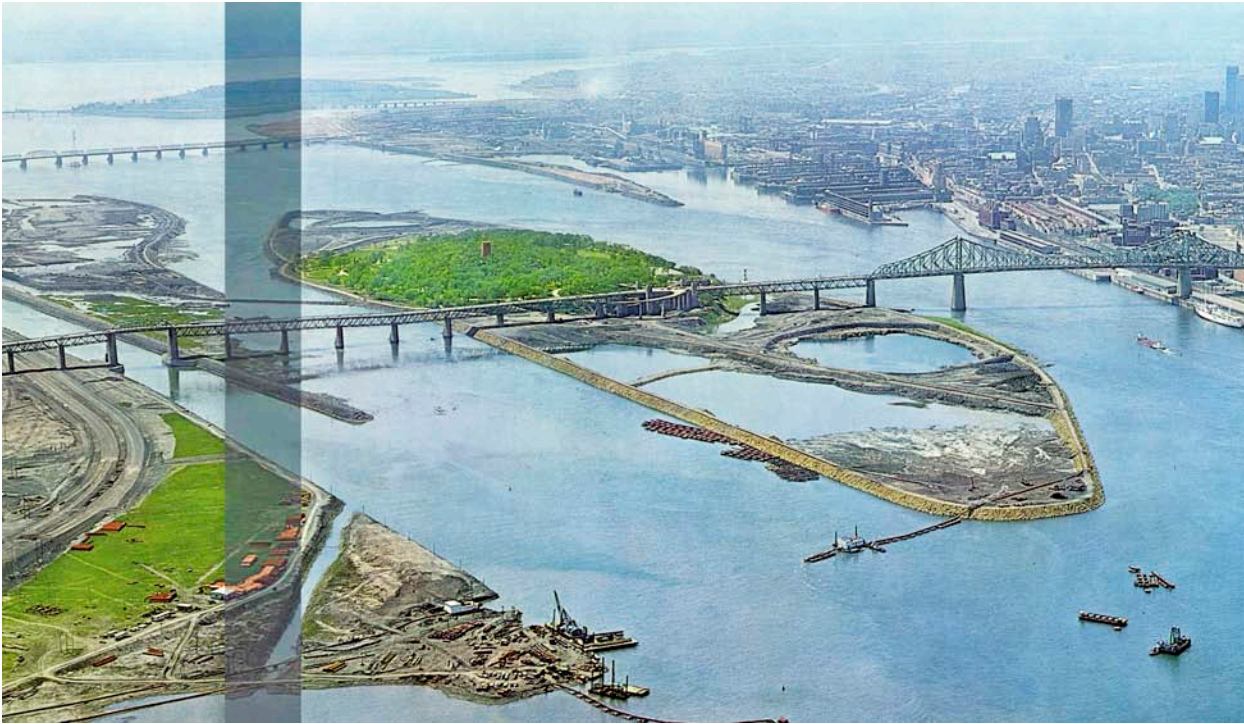


FIG. 68 + 69

Above: The two main water features of La Ronde take shape on the downstream end of Ile Sainte-Hélène. Ile Ronde has become Dolphin Lake and the outline of the new island encloses a portion of the river that will become the Port Sainte-Hélène Marina. Right: The final forms of these landscape elements and the amusements that will surround them are explored in an early planning maquette.



At times, the nature of the river was at odds with Expo's operations. The annual mass emergence of shadflies (known colloquially as "fisherman's hampers"¹⁴), whose larvae thrive in the fast moving waters of the Saint Lawrence, threatened to aggravate the visitors to the fair. Large clouds of the flies typically swarmed Montreal's port around the end of May.¹⁵ Medical reports from the Niagara region found that "these insects caused asthmatic reactions, evidently from the setae on the wings which... [becomes] air-borne during periods of abundance."¹⁶ The 1967 World Exhibition Shadfly Project was initiated to examine the larvae around the Expo site, which were ultimately "controlled by four applications of the larvicide DDD at monthly intervals during the summer of 1967."¹⁷ (After each application of the chemical, the river's downstream drift gradually restored the larvae populations and subsequent investigations of the river indicated that its residue was negligible and had no effect on fish populations.¹⁸) As a result, no shadflies emerged from the Saint Lawrence to hamper the fun at Expo. Five years earlier, Rachel Carson's acclaimed *Silent Spring* had reported "that DDD produced in dogs a condition very similar to... Addison's disease" and that recent medical research "revealed that DDD... strongly suppress[es] the function of the human adrenal cortex."¹⁹

The river wasn't the only body of water to plague the operators of the fair. In late 1963, the media found engineers who declared that an exposition built on such loosely compacted earth would threaten to sink into the river. Robert Shaw countered that it was much worse to build on a combination of backfill and bedrock (as Saint Peter's Cathedral was) than it was to build on backfill alone.²⁰ Once Expo opened, a Puddle Patrol (Le Comité des Flaques) was established and dispatched to any part of the site where the ground had sunk and filled with rain.²¹ The patrol would promptly fill and pave-over these smallest and least-charming water features of the fair.



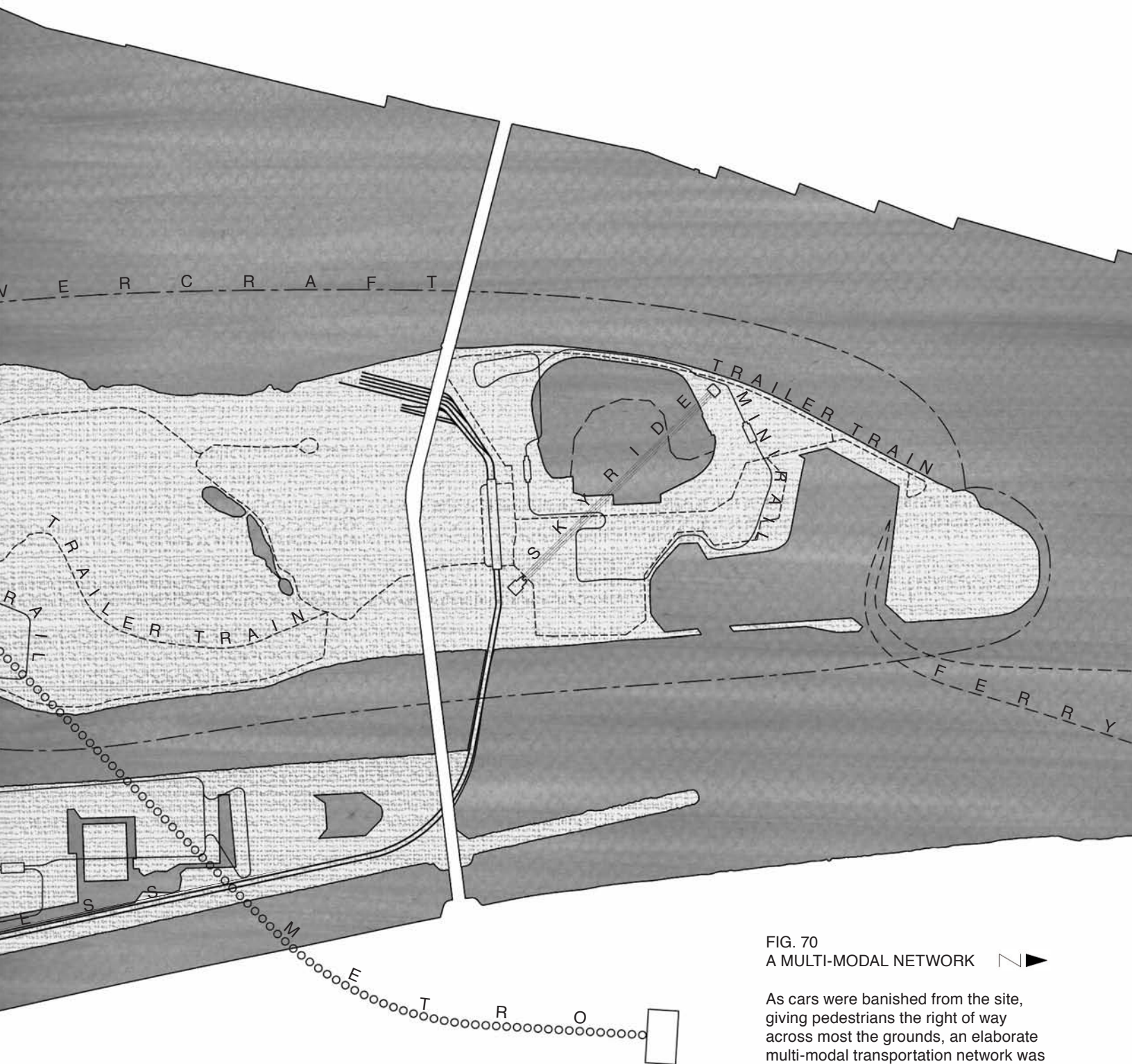


FIG. 70
A MULTI-MODAL NETWORK

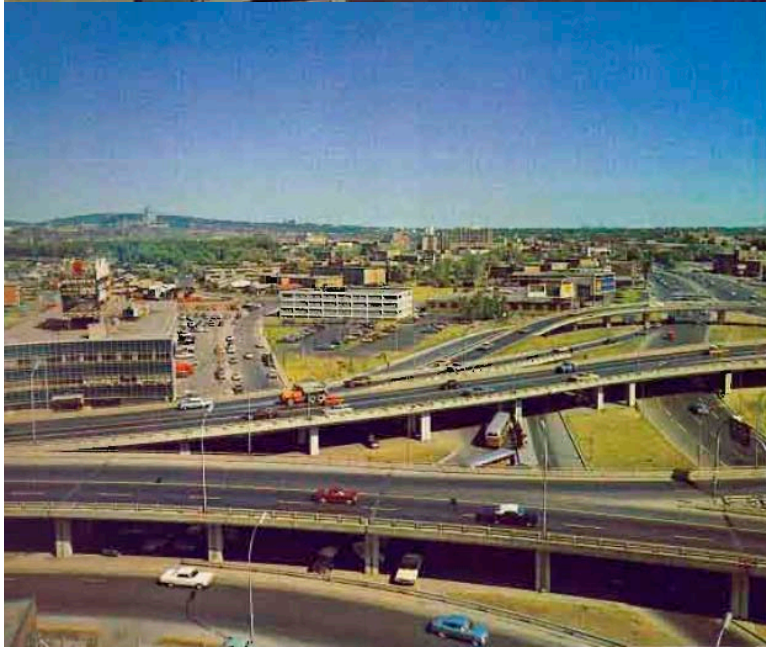


As cars were banished from the site, giving pedestrians the right of way across most the grounds, an elaborate multi-modal transportation network was designed to bring visitors to Expo, and to help them move around it. The city's new underground metro delivered visitors to the heart of Ile Sainte-Hélène, while the elevated trains of the Expo-Express carried them overhead, and stopped at stations in each of the fair's four main areas. Minirails, trailer-trains, sky-rides, and vaporettos carried visitors around the site itself.

FIG. 71, 72 + 73

In anticipation of the millions of visitors who would make their way to Expo 67 in their own cars, or in commercial, chartered or tour buses, the city embarked on the largest road development program in its history. Designed to provide easy access to the island-sites of the World's Fair, the improvements aimed to create nothing short of "the most modern highway network in the world" according to the city's promotional literature. Among the key projects in the expanded network were an extension to the Trans-Canada Highway in the east end of Montreal Island, and the new Decarie Boulevard, a six-lane depressed thoroughfare which would provide a new north-south route across the western end of the city. Above: Vitre Street buildings being demolished to make way for the Trans-Canada Highway.

Below, right: The Decarie Boulevard interchange leading to the Metropolitan Boulevard. Below: The interchange of the Decarie Expressway, Metropolitan Boulevard and Laurentian Autoroute.



URBAN LANDSCAPE

An exhibition the size of Expo 67 required the careful planning of two transportation networks at very different scales: the metropolitan network that would direct vast amounts of traffic to the fair; and the network on the site itself, which would facilitate the movement of thousands of visitors across its 1000 acres. Preparations for the fair prompted considerations of the future development and “urbanization of new areas” of Montreal, and reignited a series of infrastructure projects that the city had studied for decades.¹ On the Expo islands themselves, “special attention was paid to the flow of visitor traffic, handled by a transportation network that was inspired by the latest multimodal theories.”² Together, these transportation networks provided the most visible effects of Expo 67 on its wider context, as well as examples of the fair operating at the scale of a mini-metropolis, within which ideas for the future of the actual city could be imagined and tested.

From his attendance at previous world’s fairs, Commissioner General Pierre Dupuy understood that much of Expo’s success depended on how easily it could be accessed by visitors, and how quickly and easily they could move around it once inside.³ In the beginning, access to the site was the biggest problem. The Jacques Cartier Bridge provided the only entrance to the islands, and both “congestion and inadequate approach roads” limited its capacity.⁴ An additional bridge and a metro tunnel were added to the Master Plan for the site, but with so few access points from the city, Expo would require carefully planned feeder roads, vast parking lots and large crowd dispersal areas, all of which “re-oriented urban development in metropolitan Montreal.”⁵

In his essay *Montreal 1960: The Singularities of a Metropolitan Archetype*, André Lortie states that although the era’s new “expressways were the vectors of the extensive urbanization of Montreal’s periphery, nothing predestined them to extend into” the dense core of the city. “But the necessity of preparing

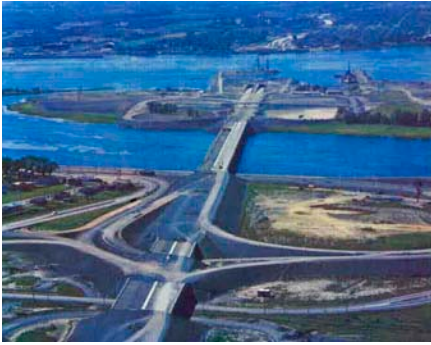
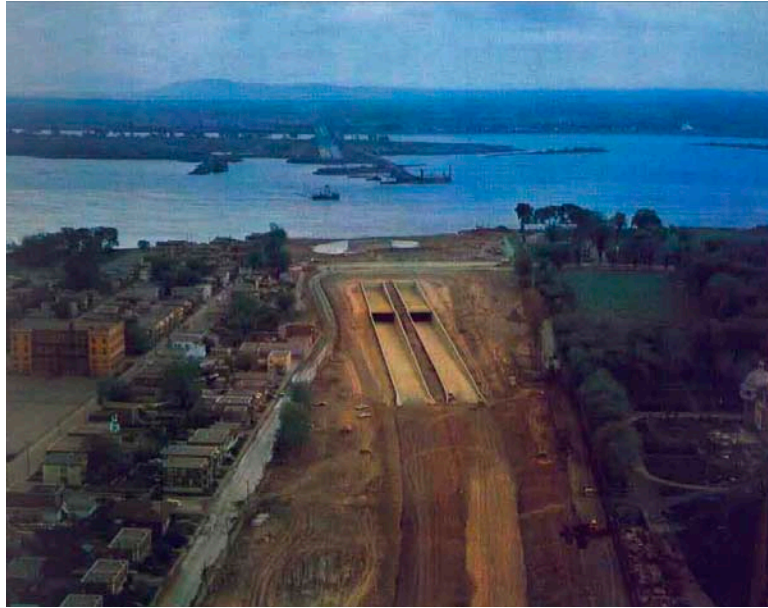
FIG. 74 + 75

Below: Extensions to the Metropolitan Boulevard, an east-west route across the northern portion of Montreal Island, connect it to the Décarie and Montée Saint-Léonard. Bottom: Originally planned in the 1950s, the Boulevard is partly elevated and partly below grade. Separated from the city grid it supports, it is a precursor of the urban-expressway.



FIG. 76 + 77

Conceived to link the east end of Montreal Island with the south shore of the Saint Lawrence River, at the time of its creation the Louis-Hippolyte Lafontaine bridge-tunnel complex was the largest pre-stressed concrete construction job in the world. Right: The tunnel portion descends 73 feet beneath the river's north navigation channel and emerges on Ile Charron in the centre of river. Below: The low-level bridge completes the crossing of the river's south channel, connecting traffic from eastern Quebec, the Atlantic provinces and the United States with the city of Montreal. Each of the tunnel's seven pre-stressed concrete segments were constructed in a specially-built drydock, floated into position, and sunk into place with eight tons of rocky ballast.



Montreal to receive Expo 67 and the subsidies offered for the building the Trans-Canada Highway pushed forward construction of the Metropolitan Boulevard extensions, the Décarie Expressway, the Louis-Hippolyte Lafontaine Bridge-Tunnel, and Montée Saint-Léonard.”⁶

At the time, Guy Legault was deputy to Claude Robillard, the city's chief urban planner.⁷ He remembers that, although the city was already considering many of these infrastructure projects, most were greatly accelerated once the fair was announced.⁸ Consultants sent by the Provincial Highways Department to manage the projects weren't familiar with Montreal's particular urban constraints, however. “The heart of the city is squeezed between the Mountain and the River. At the time, there was no important east-west route between Sherbrooke and Jean-Talon streets. The engineers wanted to place an autoroute along the river banks, but we protested because we didn't want to rob Montrealers of their access to the river.”⁹ Expo was long over by the time this sunken east-west expressway, the Ville-Marie, was opened. It remains unfinished (“a victim of the ecologists,” according to Legault).¹⁰

The Bonaventure Expressway, built especially for Expo,¹¹ was curiously placed directly along the riverbank, disconnecting the Pointe Saint-Charles neighbourhood from the Saint Lawrence. The Bonaventure extends from the Décarie expressway (which directs traffic from Trans-Canada Highway to the north) and also links the Champlain Bridge to the city-centre via University Street, which previously terminated “among modest residences in Pointe Saint-Charles.”¹² The new autoroute also led motorists from the north and west directly into the immense, 20 000 stall Victoria parking lot, from which shuttle buses completed the journey to Expo’s gates.¹³ The Trans-Canada Highway and new Louis-Hippolyte-Lafontaine Bridge/Tunnel ushered visitors from the south and east toward Expo. To avoid crossing the river, these motorists could also stop at the 12 000 stall parking lot on the south shore at Longueuil, and then take the metro to the exhibition.¹⁴

These new thoroughfares provided Expo with a set of access routes “of the first order,” and in them, Montreal could see “the broad strokes of its future expansion made visible across its terrain.”¹⁵



FIG. 78 + 79

Left: The Bonaventure Expressway was the most significant new road project for Expo, as it provided the main vehicular approach to the site. While the Bonaventure linked the Champlain Bridge with the foot of University Street and directed visitors into the 20,000 stall parking lot opposite the main entrance to the fair, its path also created an effective barrier between the city and the river. Forty-five years after its construction, the non-profit Montreal Harbourfront Corporation is generating proposals to relocate a portion of the expressway in order to reconnect this area of the city with its waterfront. Above: Expo’s second main parking lot, the 12,000 stall Autoparc Jacques-Cartier on the south shore of the River in Longueuil.

FIG. 80, 81 + 82

Planners' desires to prevent vehicular traffic from impeding the pedestrian's experience of the fair began right at Expo's main entrance. Above, right:

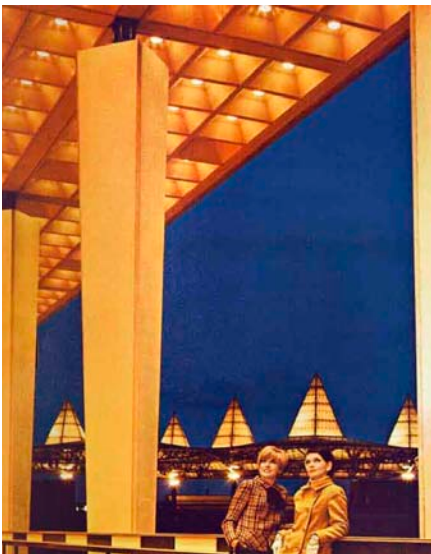
Place d'Accueil was designed to allow vehicular traffic to pass underneath a large pedestrian plaza, from which visitors could

board the Expo Express, an elevated train that would deliver them to dedicated stations at the centre of each of the fair's

four main sectors. Below, right: Multiple sets of stairs elevated visitors onto the 2 ½ acre plaza from taxi and bus stops on the ground below. The canopy's seven

translucent plexiglass hexagons sheltered information booths, travel offices, shops, banks, snack bars, a post office, a liquor store and a beauty parlour. Below:

Fashionable fair-goers on the covered gallery of Expo's International Broadcast Centre, which was connected to Place d'Accueil by an elevated walkway.



URBAN LABORATORY

Once the city's new routes had delivered visitors to Place d'Accueil, Expo's main entrance at the start of Cité du Havre, they could "proceed to all of the main areas by internal systems of transportation."¹ Visitors to the New York World's Fair complained that its internal transportation was both too costly and too often impeded by pedestrian traffic.² In response, Montreal's planners chose to transport Expo's huge crowds in a system with "spacious cars, frequent trains and a dedicated track."³ The fair's primary access system, the Expo Express, "a rapid electric railway, totally separate from pedestrian and other circulation"⁴ was provided free of charge.⁵ Its eight trains (each with 6 cars) carried visitors to each of the fair's four sectors: Cité du Havre, Ile Sainte-Hélène, Ile Notre-Dame and La Ronde (whereupon they made the reverse trip back to Place d'Accueil).⁶ The Expo Express transported 50 million passengers over the course of the fair,⁷ but despite its 30 000 rider hourly capacity, it had to be supplemented with a bus service from Place d'Accueil to Ile Notre-Dame.⁸ Plans to reuse the trains after the fair – either as suburban commuters in tunnels under the mountain, or as transit to Dorval and Mirabel airports – were never realized. The trains were scrapped in 1995.⁹



FIG. 83 + 84

Above: In an early concept rendering, the Expo Express hurtles toward the glowing fantasies and klieg lights of the exhibition. Left: The Expo Express carried visitors from Place d'Accueil, along the jetty of Cité du Havre, across the Concordia Bridge, onto Ile Sainte-Hélène, and then along a 7 ½ mile track through the fair itself. The first fully-automated, passenger-carrying, urban mass transit system in the world, it was also the quietest, and both air-conditioned and provided free of charge. A national production, it was assembled with timber from BC, aluminum and wheels from Quebec, axles and rails from Nova Scotia and trucks from Ontario.

Similarly, the Concordia Bridge, which carried the Expo Express over the river from Cité du Havre to Ile Sainte-Hélène,¹⁰ was built six lanes wide by the Expo Corporation. Looking ahead, director of installations Colonel Edward Churchill saw that with the future addition of a bridge over the Saint Lawrence Seaway, the Concordia Bridge could link Montreal to Longueuil on the south shore.¹¹ This additional bridge was never built. The six lanes of the Concordia Bridge currently continue over the Pont des Iles (which connects Ile Sainte-Hélène to Ile Notre-Dame) and then reduce to two lanes, both of which terminate in an underground parking lot beneath the Casino de Montreal (the former French pavilion).



FIG.85 + 86

Above: Construction of the Concordia Bridge piers in the middle of the Saint Lawrence River, in December 1964.

Right: Its orthotropic design, in which a steel plate deck forms part of the main load-carrying structure, and is subsequently covered to create the roadway, made the Concordia Bridge 30% lighter than a more conventional structure, and this meant the spans could be longer, less expensive and easier to construct in the fast-flowing current of the Saint Lawrence. Normally a three year job, the Expo Corporation completed the bridge in just 18 months, as the access it provided to the islands was urgently required by contractors working on the exhibition site.

Since the superstructure doesn't rise above the deck, the bridge itself doesn't interrupt the panoramic views it provides of both the islands and the city.

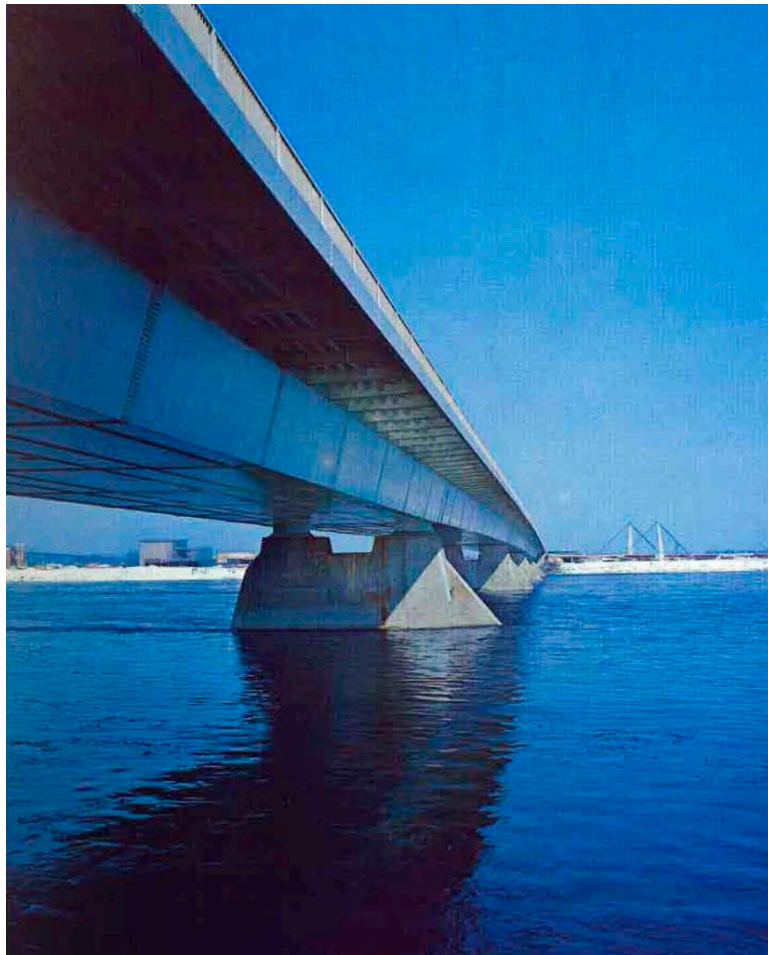




FIG. 87 + 88

Left: The Concordia Bridge stretches across the Saint Lawrence River from the tip of Cité du Havre to Ile Sainte-Hélène, from which Pont des Iles crosses the channel to Ile Notre-Dame. Below: The original design of Pont des Iles, in which the bridge deck was held by 36 steel cables suspended from the two towers rising from its single, central pier. Structural alterations in the 1990s replaced the cables with two additional sets of piers supporting the bridge deck from below, and thus made the towers redundant. The bridge's existing box girders, deck and cables were also replaced with new steel beams and a reinforced concrete deck.



Expo's secondary transport system consisted of "loops of various kinds of slower moving vehicles connecting with the primary system at each of its stations and serving the whole of the Exhibition by means of stops at focal points."¹² The most popular of these was the minirail,¹³ which was overseen by Stephen Staples. He purchased the cars from the Lausanne Expo and designed their meandering trajectories, which dismayed his engineering colleagues. Colonel Churchill, however, was charmed by the whimsical turns and dips of the capricious circuit.¹⁴ Despite its fee (charged "to discourage children from riding it around all day"¹⁵) the "privileged viewpoint" offered by the elevated minirail proved a popular way to "see the sights of Expo without being jostled around on the ground."¹⁶ It widely surpassed its maximum-use predictions,¹⁷ as did the other secondary forms of transport on the site (the canal boats, electric trailer-trains, hovercraft and sky-ride) despite the fact that they were conceived "as amusements much more than as functional means of transportation."¹⁸

Above all else, Expo was designed for the pedestrian.¹⁹ Wherever possible, the public transportation was designed to be separate

FIG. 89 + 90

Expo's minirail system consisted of two different kinds of trains running in five separate loops. The yellow-line trains were constructed in Switzerland in 1964, whereas the blue-line trains were constructed in Montreal especially for Expo. The trains ran over land and water, under waterfalls and through pavilions, and gave passengers a comprehensive view of the fairgrounds while delivering them to their next destination. They were a hit with fairgoers as they combined a place to rest with an ever-changing view. Right: Two blue-line trains criss-cross on Ile Notre-Dame. Below: A yellow-line train in its original location at the Lausanne fair.



and independent of pedestrian paths.²⁰ Food suppliers and other deliveries had “to adapt themselves at night to conditions created for visitors on foot”²¹ and only when necessary did cars, trucks, ambulances and other emergency vehicles circulate on the grounds during the day.²² “A pedestrian-centered plan like this foreshadow[ed] the city of the future with mechanical traffic entirely separated from walkways.”²³

In the fall of 1967, Jacques Folch-Ribas wrote that at Expo, a system of juxtaposed, complementary means of transportation, which took into account the speed of each, had finally been implemented.²⁴ Expo-Express, the minirail, canal boats, hovercraft, sky-ride and electric trailer-train together represented the entire suite of transportation types that had been discussed in planning theories “throughout the 1960s, and were generally regarded as prototypical of the future of urban mobility.”²⁵ The island site of Expo 67, however, prevented “the larger-scale deployment of much mixed transport” from spreading “to the rest of the city. The Expo-Express could not leave the port area to reach Place Bonaventure or the parking lot on the Radio-Canada site, as originally envisaged by the urban planners.”²⁶ The canal boats would have required a system of locks to descend to the height of the river and the minirail simply turned in endless loops. “Isolated in the middle

of the Saint Lawrence River, all this was merely a picturesque demonstration... Only the metro linked the site to the urban network.”²⁷

The Montreal Street Railway Company, inspired by the systems already installed in New York, London and Paris, studied plans for a metro system in Montreal as early as 1910.²⁸ But it was only after the rapid growth of the city in the late 1950s that a potential metro system became a political priority, and an issue in the 1960 municipal elections. “In 1961, a group of engineers and architects... formed the Bureau de métro to “prepare plans [and] specifications” for the system. Guy Legault believes that the potential of hosting the World Exhibition prompted the city to proceed with the construction of the metro.²⁹ Work began on May 23, 1962.³⁰

André Lortie argues that the metro project “was a response to theories that, while dating from the early twentieth century, were based largely on the experience of the nineteenth, [which] recommended fluidity and density in the [city] centre, supported by mass transit (tram, metro, railway station, etc.), the widening and creation of roads, and the construction of buildings that would accommodate the [city’s] various economic, political, and other functions, *both essential and symbolic*.”³¹

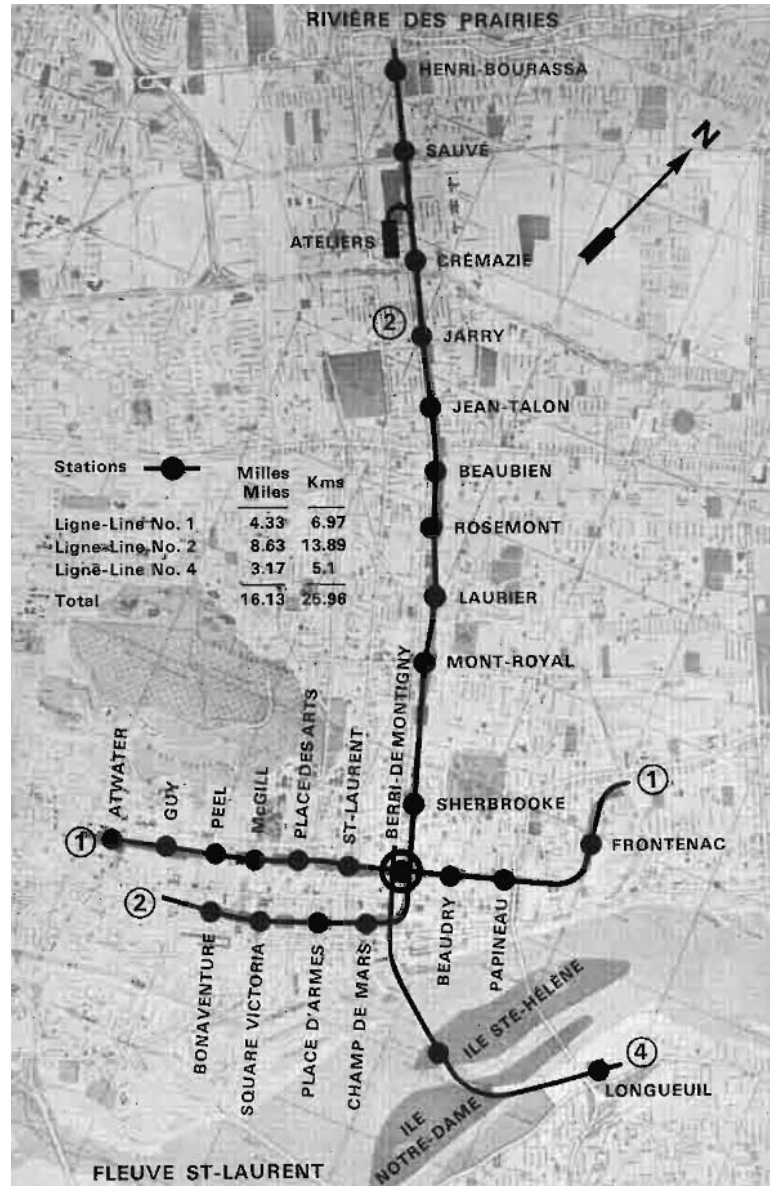


FIG. 91 + 92

Above: The Sky Ride, a 120-foot high cable car system, whose candy coloured gondolas each carried four passengers across Dolphin Lake, from the Expo Express station at the entrance of La Ronde, to Le Village, an historic replica of a rural Quebecois village. The cable cars offered visitors panoramic views of the fair and the city skyline, and also helped disperse the large crowds that arrived at the amusement park’s single entrance. Left: The blue-line minirail passes above a vaporetto on the canals of Ile Notre-Dame. In behind, the exotic Ethiopian pavilion completes the impression of a Shangri-La of alternative forms of transportation.

FIG. 93, 94 + 95

The City of Montreal broke ground on its new metro system in May 1962, and completed it in under five years. The city's Public Works Department accomplished the task so quickly thanks in part to the technical assistance agreement it held with the Parisian transportation commission, the RAPT. France's contributions included both engineering assistance and the development of the automatic fare collection equipment, a speedy new method of passenger handling. Right: A map of the original metro system. The north-south and east-west lines (Nos. 1 and 2) were opened in October 1966 and the Expo line (No. 4) under the river a few months later, in early 1967. All three lines are linked at the midtown station at Berri and de Montigny streets, which has since been renamed Berri-UQAM. Different architects were commissioned to design each of the metro's 26 original stations. Below: Rosemont Station by Duplessis, Labelle et Derome. Bottom: Peel Station by Papineau, Gerin-Lajoie, and Leblanc.



Claude Robillard, aware of the metro's symbolic potential as well as its functional role, fought to have the design and architecture of each station consigned to a different group of designers. Without increasing costs, this lent the Montreal metro an "undeniable artistic value," according to Legault.³²

Once the location of Expo was officially announced, Lucien Saulnier insisted that the metro should serve the exhibition grounds (he made it a condition of his joining the fair's executive committee³³). He lobbied the authorities in Longueuil to help defray the costs of a line that would extend under the river, connect Montreal to the south shore, and stop on Ile Sainte-Hélène in between.³⁴ The metro extension to Longueuil was made a priority and became the most convenient means of access to the exhibition – a few minutes' ride underground would take visitors from many parts of the city right to the heart of Expo.³⁵

While the metro emerged in a pavilion of its own on Ile Sainte-Hélène, its planners decided that its other stations would be incorporated into existing city blocks, despite the Parisians' advice that the entrances should emerge on the sidewalk, as theirs did.³⁶ The rubber tires of the new metro, however,

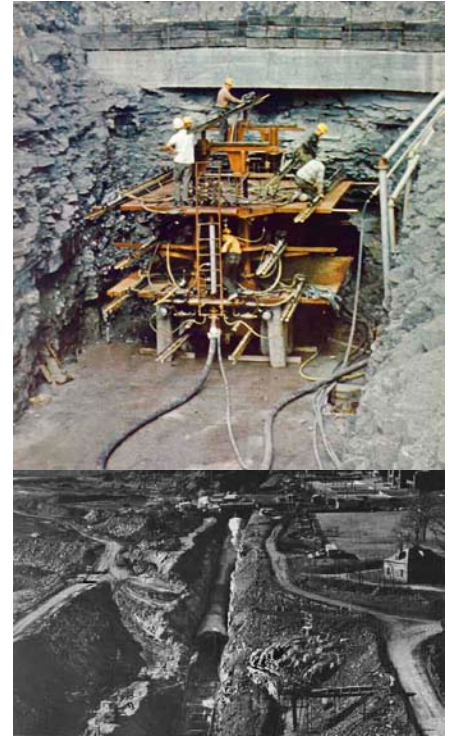


FIG. 96, 97 + 98

Top: Workers use a drill nicknamed “the Jumbo” to carve out one of the metro’s massive tunnels. While 70 percent of these tunnels were blasted through rock at significant depths below the city, the remainder were created by the open cut-and-cover method. Above: Work on the Expo line began on Ile Sainte-Hélène itself in an open cut trench. Left: The tunnel under the river between the islands was created by the open-cut method by first building two huge cofferdams, and then pumping out the water between them, so that crews could erect the subway tube. This section of the tube and roof had to be completed before the late December freeze-up, so the dykes could be removed before ice could jam up against them and create complications.

FIG. 99 + 100

Below: The underground network that has grown around Montreal's metro stations, compared to the subterranean concourse at that paragon of the urban ensemble and the privatized paradise, Rockefeller Center, above.



FIG. 101, 102 + 103

Right: The massive trench at Berri and de Montigny Streets, where the three original metro lines converge. Above: Like those of the Parisian system, the metro's pneumatic tires reduced noise, and allowed the trains to stop and start more smoothly. Top: A full scale model of the metro car, built in the shops of the Montreal Transportation Commission. The original system employed 369 of these cars.

were celebrated for their similarity those of the Paris Metro. "It was considered superior to other subways both because it ran so quietly and because of its "Frenchness."³⁷ This was perhaps the (implicit) shaping of the collective desires of a city transforming itself. "What kind of city did Montreal want to be? Civilized, like Paris? Efficient like New York or Chicago?"³⁸ The city's "francophile inflection, the idea of a North American Paris, was very pronounced [and] it reflected a notion of French civility that... was not current in the United States."³⁹ While, as "described by Freud in *Interpretation of Dreams*, the desire of being another city is both displaced and condensed in this [metro] technology," Montreal's displacement of Paris' famous boulevards into the subterranean pedestrian network that developed alongside the metro, is "fundamentally weird."⁴⁰ The city's underground network was more likely inspired by Rockefeller Center, "which was, even then, holy urbanistic writ." Rockefeller Center also marked "a return to the paradigm of the *ensemble*, and to the idea – however paradoxical – of enlightened development, the privatized paradise."⁴¹ A paradise not unlike the carefully designed, highly controlled, urban utopia that was conceived for Expo 67, and in such contemporary projects as Place Ville-Marie and Place Bonaventure in the real city across the river.⁴²





“This idea of a kind of adjacent, captive utopia as a goad to the reorganization of public spaces in the “real” city is remarkable. Expo 67 – pedestrian paradise, architectural zoo, pleasure garden – constantly informs what’s happening across the river in Montreal.”⁴³

The construction of the metro, and especially its station on Ile Sainte-Hélène, contributed to Expo’s very particular relationship to the city that built it – as it “confirmed that the site was an extension of the city centre and was both close to it (a few minutes’ ride) and far away from it (given the distant view of the down-town skyline and the totally different feel of the site).”⁴⁴ The metro was also, and today remains, the most visible connection between the large-scale projects that were taking place at the time, both at Expo and in the city itself. “In terms of social and urban history, a case could be made that this period was the one in which plans for society coincided with the embodiment of [its] ambitions in real space, on the scale of a metropolis that would become their heart.”⁴⁵

FIG. 104 + 105

The architect Jean Dumontier designed Ile Sainte-Hélène’s metro station to accommodate the thousands of visitors who would move through it during Expo. Left: To channel the crowds, each of the four broad staircases that connect platform and ground levels are divided into four separate stairs by board-formed concrete dividers. The station also features large waiting rooms at platform level, and was the only stop in the original system to contain both bathrooms and water fountains. It was renamed in honour of Jean Drapeau on May 10, 2000. Below: The station entrance on Ile Sainte-Hélène.

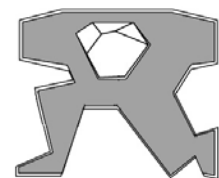


FIG. 106 + 107

Above: An abstracted Atlas is depicted on the platform walls of the station. On bended knee, he strains under the weight of the Terre des Hommes, above him.



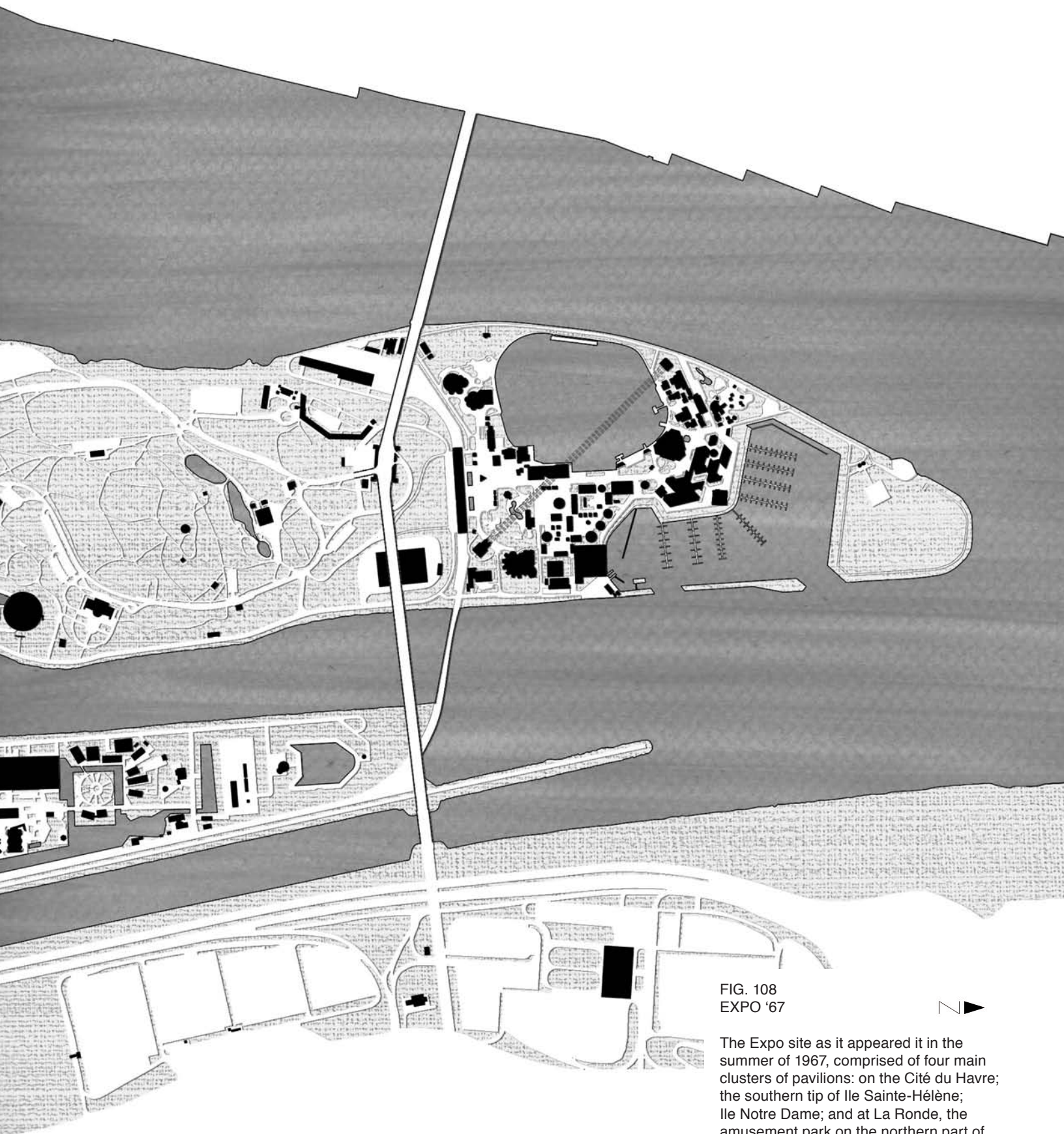


FIG. 108
EXPO '67

The Expo site as it appeared in the summer of 1967, comprised of four main clusters of pavilions: on the Cité du Havre; the southern tip of Ile Sainte-Hélène; Ile Notre Dame; and at La Ronde, the amusement park on the northern part of Ile Sainte-Hélène.





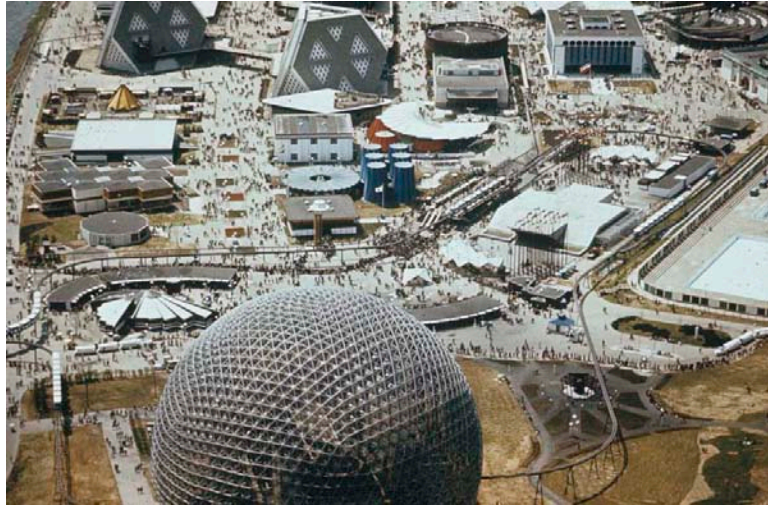
FIG. 109
An aerial photograph of the Exhibition,
taken in the fall of 1967.

FIG. 110 + 111

Aerial photographs of the southern end of Ile Sainte-Hélène during the fair.

Right: Looking south at (counter-clockwise from bottom) the American, Expo-Services, Banking, Visitor's Aid, International Scout, *Man the Explorer*, Telephone, Iran, metro, Korea, New York State, Maine, and Air Canada pavilions.

Below: Looking north-west. Alexander Calder's sculpture, *Man*, appears in the foreground, in front of the Scandinavian Pavilion and *Man the Explorer*. The dome of the American pavilion is in the top right, and in the background, the sylvan centre of the original island stretches behind the Bathing Pavilion, untouched by Expo.



A PERMANENT EXHIBITION

50 306 648 people reportedly attended Expo 67 before it was officially closed on October 29, 1967. Considering Expo's six-month duration, this figure broke all previous attendance records for a world's fair.¹ In his preface to the memorial album, Pierre Dupuy expressed his hopes for the legacy of the exhibition:

"When the lights go out for the last time, when the crowds have left the pavilions and the avenues, a World Exhibition begins a new life. Less glittering but more profound, this new life is nourished in the souls of those who visited the Exhibition, and will blossom into a legend for generations to come."²

But mere soul-nourishing memories were results too ephemeral for Jean Drapeau. Long before its closing ceremonies – perhaps even before it opened³ – the mayor had been working to ensure that Expo would become a permanent annual exhibition in Montreal.

Plans for the future of the site made headlines across the country. "Some suggested it become an international university under the aegis of the United Nations, others proposed a housing development."⁴ The Expo Corporation, which officially dissolved in December 1967, was not responsible for the future of the Expo site.⁵ Many members of the corporation likened Drapeau's desire to continue the fair to keeping the Christmas tree until July.⁶ But the Mayor, who had triumphantly disproved those who predicted disaster for Expo, managed to convince many others. Officials in Ottawa, Quebec City and Toronto, aware of the enthusiasm Expo had generated since its opening, were sympathetic to the mayor's desires, but questioned the practicality of maintaining the fair, given the amount of work it would involve.⁷

The majority of Expo was built to last six months. The buildings were designed to withstand the winter snow of 1966, but contained no heating facilities to warm visitors (mobile

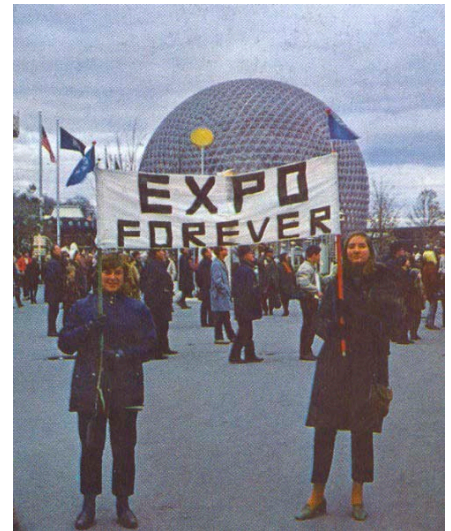


FIG. 112
Kilaran German of Ottawa and Julia Johnson of Montreal demonstrate their support for a permanent exhibition at Expo's closing ceremony on October 28, 1967.

salamanders were used to stave-off frost and to warm workers during construction). They contained no insulation, no boilers, no conduits for hot water and air. Similarly, the kilometers of pipes, sewers and sidewalks which ran through the site would require more depth and solidity if they were to become permanent.⁸ By the end of October 1967, some of the pavilions were already beginning to unravel. The autumn's heavy rains and high winds had damaged the Russian pavilion and some of the Theme exhibits. The mayor of Toronto (perhaps fearing the ill-effects a permanent fair in Montreal might have on his city's Canadian National Exhibition⁹) pointed out the high costs

FIG. 113, 114 + 115
 Right: During Expo, Buckminster Fuller's massive geodesic dome housed the pavilion of the United States, and was filled with light-hearted exhibits celebrating the spirit of the American pursuit of happiness. Huge Op art and Pop Art canvases were displayed next to Elvis Presley's guitar and a scorched Command Module from an Apollo space mission. Below, left and right: When the exhibition site reopened as *Terre des Hommes* in the summer of 1968, Fuller's bubble was renamed the Biosphere. It was now a vast aviary, its multiple levels transformed into garden terraces. The once-exuberant interior of the former American pavilion had become a 20-storey birdcage.





FIG. 116 + 117

Left: Many critics felt the British Pavilion's pretentious white bunker was a poor advertisement for the playful and amusing exhibits it contained. Its architect, Sir Basil Spence, considered the building an allusion to the white cliffs of Dover, and the deconstructed Union Jack atop its tower, an expression of Britain's unfinished business in the world. Below: For *Terre des Hommes* 1968, the pavilion became the Music Belfry and presented a vast repertoire of recorded music. The Union Jack was eventually replaced by the rose, thistle, shamrock and fleur-de-lis of the flag of the City of Montreal.



of making permanent structures of the pavilions. Nevertheless, governments in Ottawa and Quebec declared they'd be willing to preserve the remains of the Expo as long as other priorities, both in Montreal and elsewhere in Quebec, would not be compromised.¹⁰

At the end of Expo 67, while a few of the international pavilions were already sold or promised elsewhere, the city's invitation to preserve the remaining pavilions was enthusiastically received by the fair's foreign participants. Because these countries' contracts with the Expo Corporation made them responsible for their own demolition costs, it was much cheaper just to leave their buildings in Montreal.¹¹ Before the close of the fair, Drapeau had confirmed that thirty-five pavilions (including Buckminster Fuller's American dome) would remain on the site, in addition to the pavilions built by the Corporation – the theme pavilions, Habitat 67, and the facilities at La Ronde.¹² City officials hoped most of these could survive in some capacity without incurring large renovation costs.

Drapeau announced his victory in the November issue of his *Montreal 67* magazine. "Expo 67 is no more," he declared,

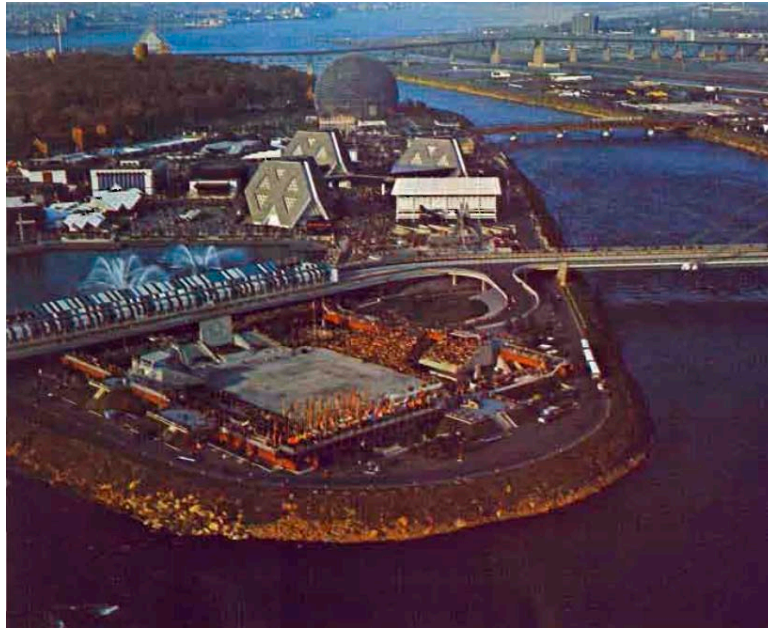
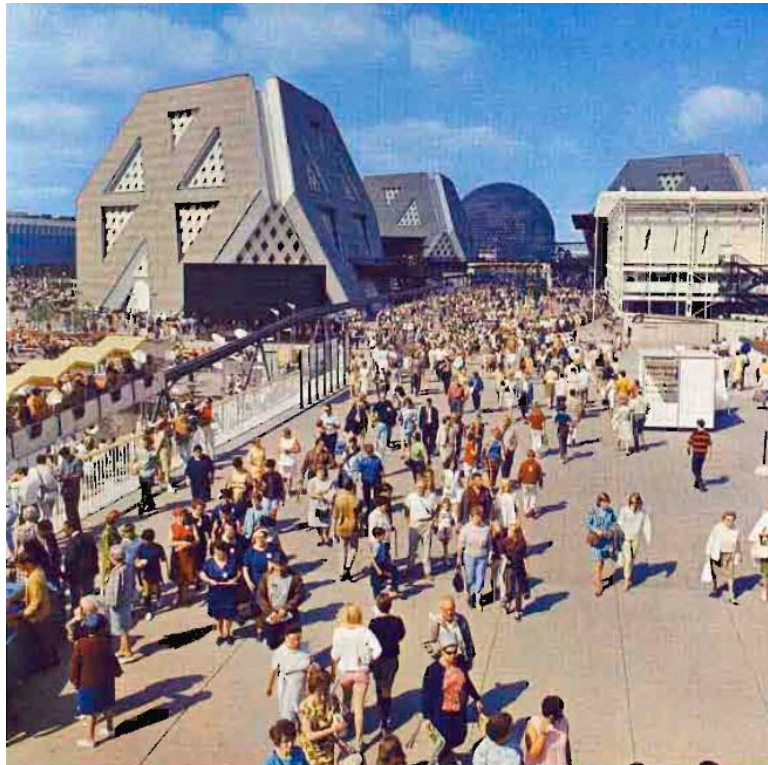


FIG. 118 + 119

The outward appearance of the southern portion of Ile Sainte-Hélène changed little between Expo 67 and Terre des Hommes 1968. Above: Place des Nations continued to host official ceremonies on the tip of the island. Across the Channel from the dome of the former American pavilion, however, the former Russian pavilion was removed from Ile Notre-Dame. The space was used instead as a helicopter landing pad.

Right: The truncated tetrahedrons of the theme pavilion *Man the Explorer* continued to dwarf visitors to the island, and retained their exhibits from the year before. The former Scandinavian Pavilion (far right) was reconceived as the *Mirror of Man*, in which dolls dressed in native costumes illustrated the history, anthropology and ethnology of people from the five continents, according to the fair's official guidebook.



“long live *Man and His World*.”¹³ After he acknowledged that it was “impossible to disobey... the 1928 agreement of the 32 countries which form the International Bureau of Exhibitions,” that stipulated “the duration of an exhibition is limited to one period of six months,” the mayor declared that “the City of Montreal believed it our duty to attempt to conserve as much as possible of [the] exhibition.” Starting in the summer of 1968, “many of the attractions of Expo” would become a permanent annual exhibition entitled *Terre des Hommes*, “a series of many monuments to the countries and other participants, which presented the most successful possible portrait of universal civilization.” This “greatest permanent cultural manifestation on earth”¹⁴ would “become even more prestigious... from year to year [as it was] expanded and perfected.”¹⁵

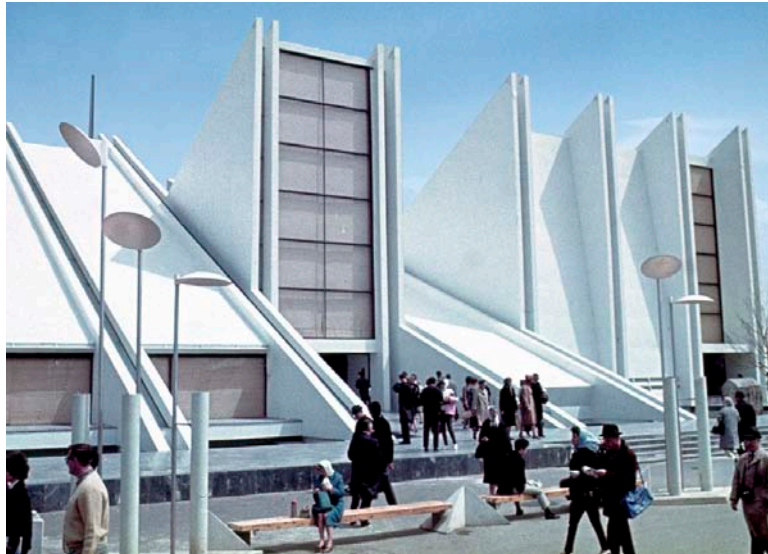
On a rainy afternoon the following May 17, “Jean Drapeau, proud and pleased at the fulfillment of a dream,” watched the flags of participating countries fly once again over the Expo site, as the official opening of *Terre des Hommes 1968* celebrated the 326th anniversary of the founding of Montreal. The mayor’s invited guests, including the Premier of Quebec, the Lieutenant-



FIG. 120

A transparent rain-slickered Jean Drapeau converses with Canada’s new Prime Minister Pierre Elliot Trudeau at the opening ceremonies of *Terre des Hommes* on May 17, 1968. Quebec’s Lieutenant-Governor Hughes Lapointe sits next to the Mayor, and on the far left sits Lucien Saulnier, chairman of the City’s executive committee.

FIG. 121, 122, 123, 124 + 125
 Two of Expo 67's pavilions didn't remain on the site as part of the permanent exhibition, as they'd already been promised to the province of Newfoundland. Top: The Yugoslavian Pavilion on Ile Notre-Dame during Expo. Centre, right: After Expo closed, the pavilion was purchased for one dollar and relocated to Grand Bank, Newfoundland, where it re-opened in 1971 as the Provincial Seaman's Museum. Centre, left: The building is now painted with Atlantic Canada's largest mural, depicting the rich history of its adoptive province. Below, right: The two buildings of the Czechoslovakian Pavilion on the banks of a canal on Ile Notre-Dame. Below: Legend holds that the Czech government offered these pavilions to the cities of Gander and Grand Falls as a gesture of gratitude to the citizens who helped rescue the survivors of a Czech Airliner that crashed just after take-off from Gander International Airport on September 5, 1967. The Grand Falls pavilion was made a Centre for the Arts and in 2005 was named in honour of Gordon Pinsent, a native son of the city.





Governor, and new Prime Minister Pierre Trudeau, watched as “the symbolic torch was lit” amid “a mass of swirling dancers in the national costumes of some 60 ethnic groups” while overhead “two Air Canada jets roared low across the site... and four helicopters let loose a shower of rose petals.”¹⁶

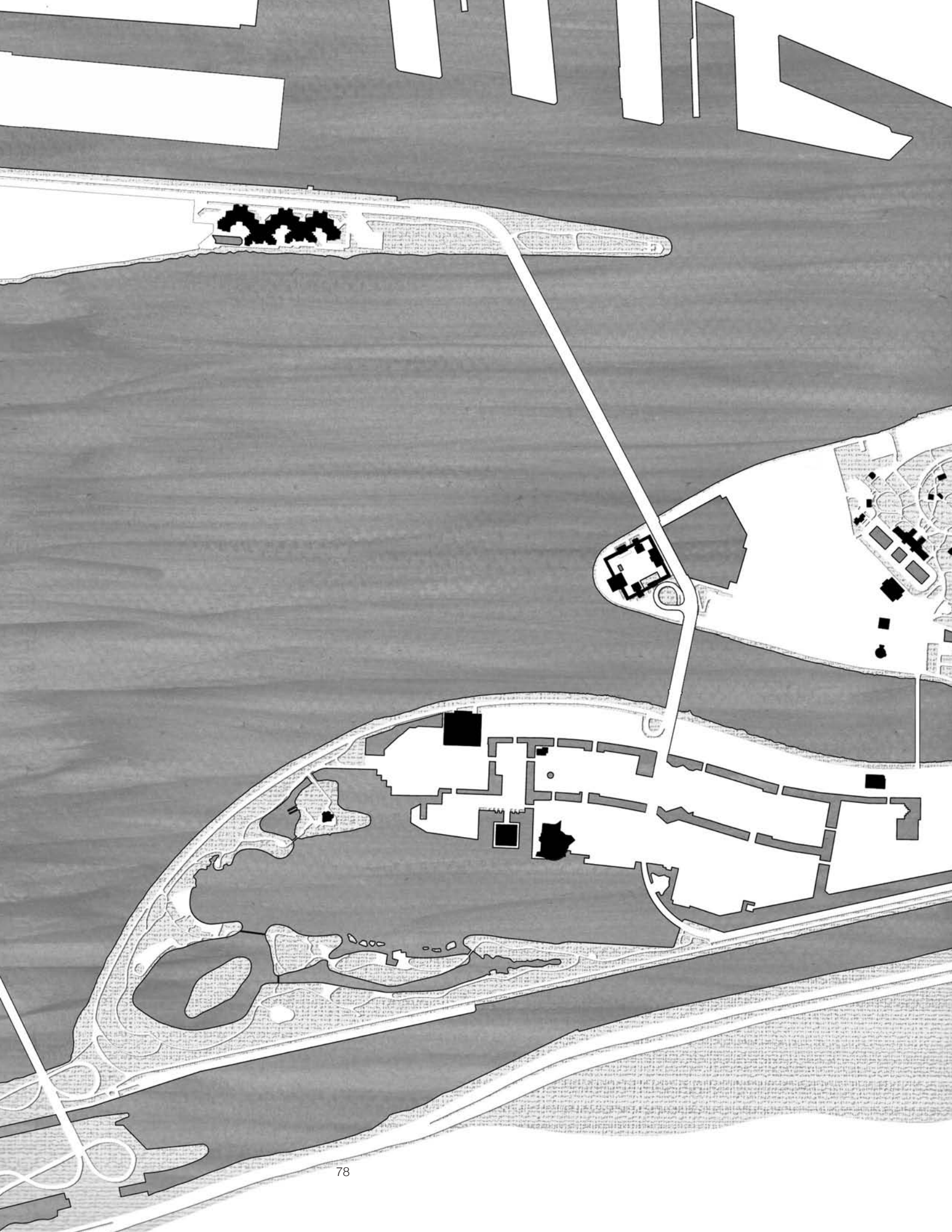
“Only three of the pavilions at Expo – those of the Soviet Union, Czechoslovakia and Yugoslavia – had been removed. Forty-three of the nations that participated in Expo had returned and two new ones – Ireland and Poland – had been added.”¹⁷ In addition, sixteen new attractions had been added to the site, including an Expo 67 Memorial, a pavilion of the history of Montreal, a “display of the cars of yesteryear... a cinema pavilion; another [covering] wintertime, and still another about stamps.”¹⁸ The former American pavilion – renamed the Biosphere¹⁹ – became home to “the second largest aviary in the world” and Expo’s tetrahedral theme pavilions, Man the Producer and Man the Explorer, as well as its agriculture exhibit, Man the Provider, remained as they were the year before.²⁰

Time magazine noted that the “gay spirit of the crowds... [made] it seem as if Expo had never closed” and the Ottawa Citizen declared the site was “still the most exciting 1000 acres to be seen anywhere in the world.”²¹

FIG. 126, 127 + 128

Left: The sweeping roof and glass walls of the USSR pavilion contained one of the most comprehensive displays at Expo. Below: At the end of the fair, the pavilion was carefully dismantled and shipped to Russia, where it was re-erected (bottom) as an exhibition facility for the Moscow Centre for Scientific and Technical Advances Implementation, a state owned enterprise. Local residents reportedly call the building “Montreal”.





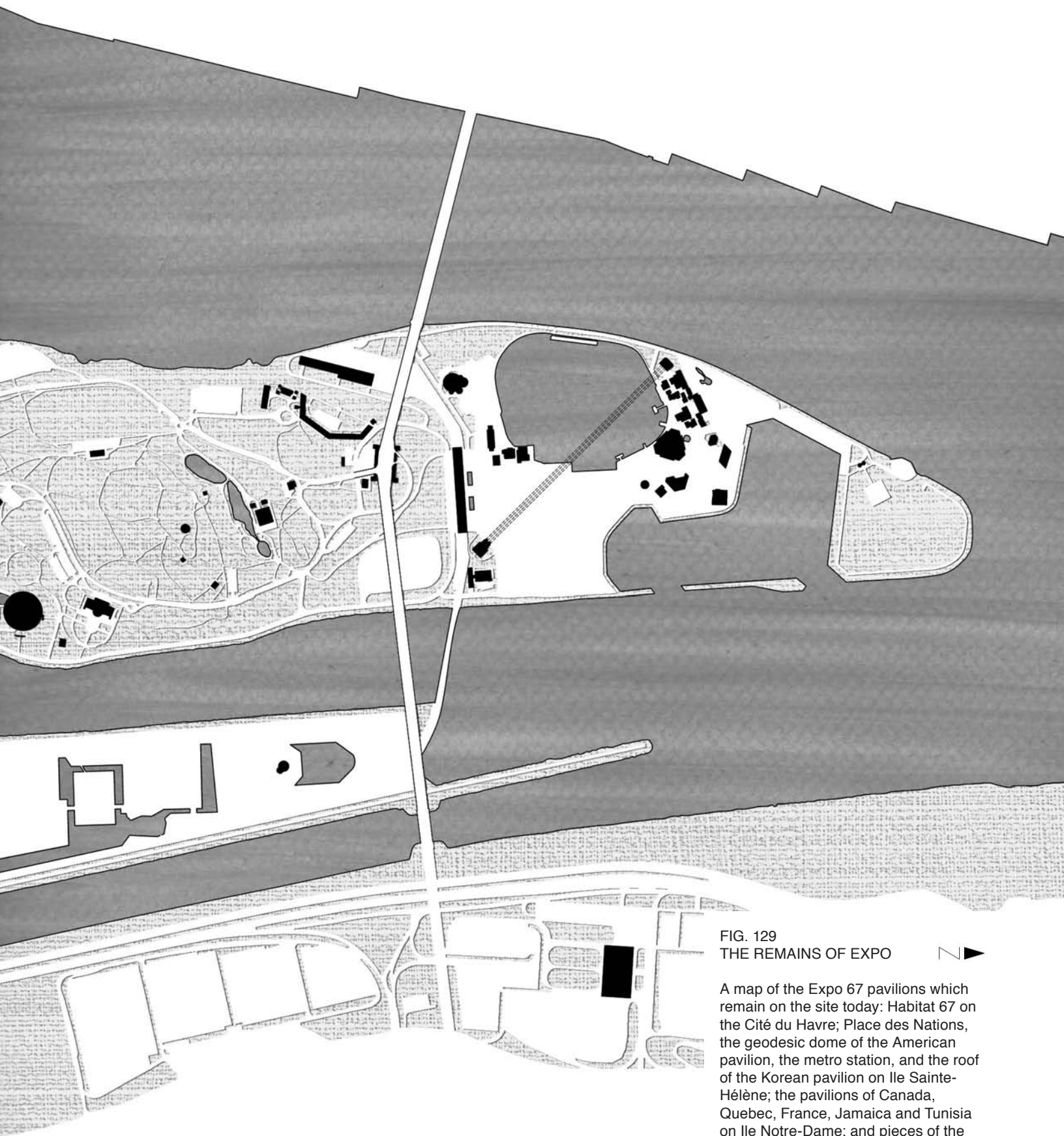
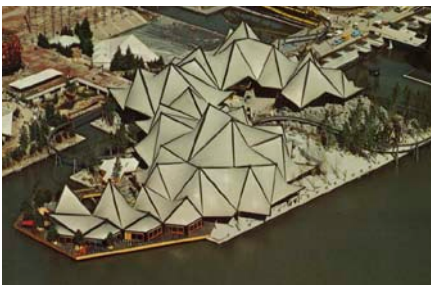
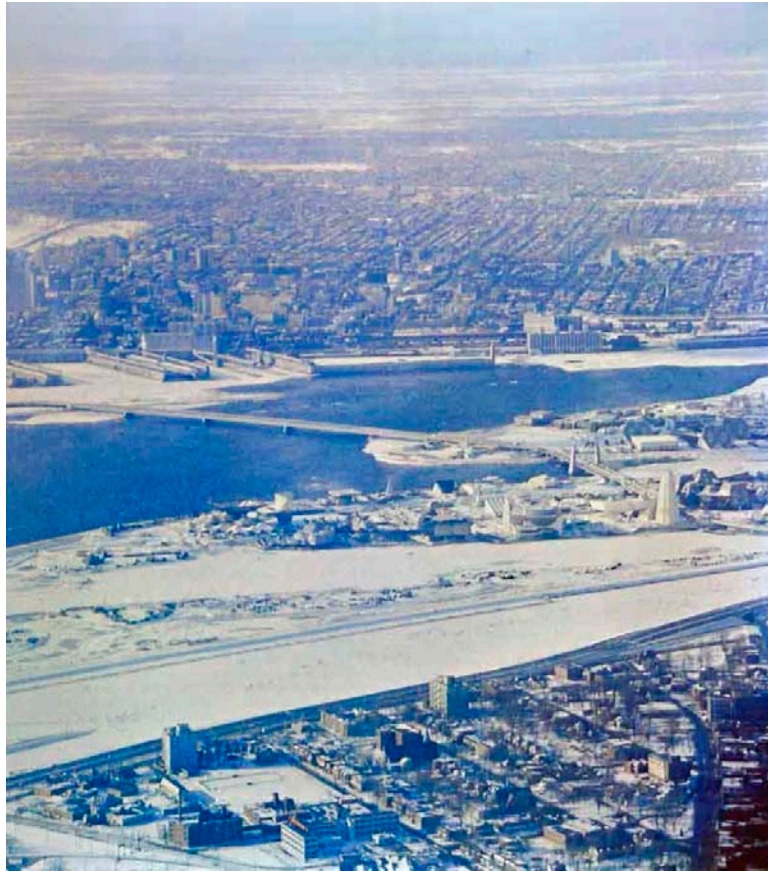


FIG. 129
THE REMAINS OF EXPO

A map of the Expo 67 pavilions which remain on the site today: Habitat 67 on the Cité du Havre; Place des Nations, the geodesic dome of the American pavilion, the metro station, and the roof of the Korean pavilion on Ile Sainte-Hélène; the pavilions of Canada, Quebec, France, Jamaica and Tunisia on Ile Notre-Dame; and pieces of the amusement park at La Ronde.

FIG. 130, 131 + 132

Right: An aerial photograph taken in January 1968 shows the Expo site under a blanket of snow. Many of the fair's pavilions were designed to be temporary structures and, despite the best efforts of the maintenance teams of the annual *Terre des Hommes* exhibition, Montreal's harsh winters and significant seasonal temperature swings took their toll on the buildings, many of which decayed quite rapidly. Below: Not to be outdone by the fair's host province, Ontario created the sixth largest pavilion on the fifth largest site at Expo, on the shores of Ile Notre-Dame's Regatta Lake. The architects Fairfield and DuBois conceived a pavilion open on all sides, covered by a somewhat lumpy assembly of steel girders covered with a vinyl-coated fiberglass. One critic likened the roof to a bat struggling under a sheet, but many reported that the contents of the pavilion were really "swinging". Below, right: On July 19, 1975, the pavilion was destroyed by fire.



SUBTRACTIONS AND ADDITIONS

Although 12.5 million people visited *Terre des Hommes* in its first year¹, attendance declined steadily as the years passed, and the city found it increasingly difficult to maintain the decaying pavilions.² A fire ravaged the Ontario pavilion in the summer of 1975³ and another melted the acrylic shell off the Biosphere the following year.⁴ The exhibits on Ile Notre-Dame had already been closed to the public when, in 1979, the island was featured as a ruined city on a war-torn alien planet, in an episode of the television program *Battlestar Galactica*.⁵

By the time the remaining *Terre des Hommes* exhibits on Ile Sainte-Hélène closed permanently in 1981, Ile Notre-Dame had undergone several changes.⁶

In May 1974, construction began on the Olympic Basin on Ile Notre-Dame. By the following summer, multiple pavilions at the north end of the island had been replaced with a 2180m long and 110m wide artificial lake, which remains the largest of its kind in North America. During the 1976 Olympic Games, a complex pumping system ensured the water level in the 2.3m deep basin remained below that of the river, to “diminish wind action in the competition zone.”⁷ Several “former Expo 67 pavilions

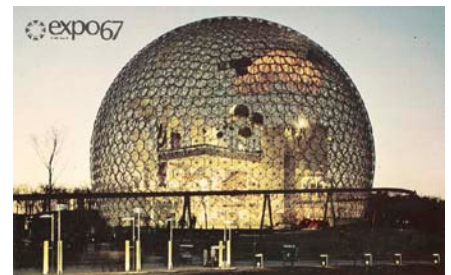


FIG. 133 + 134

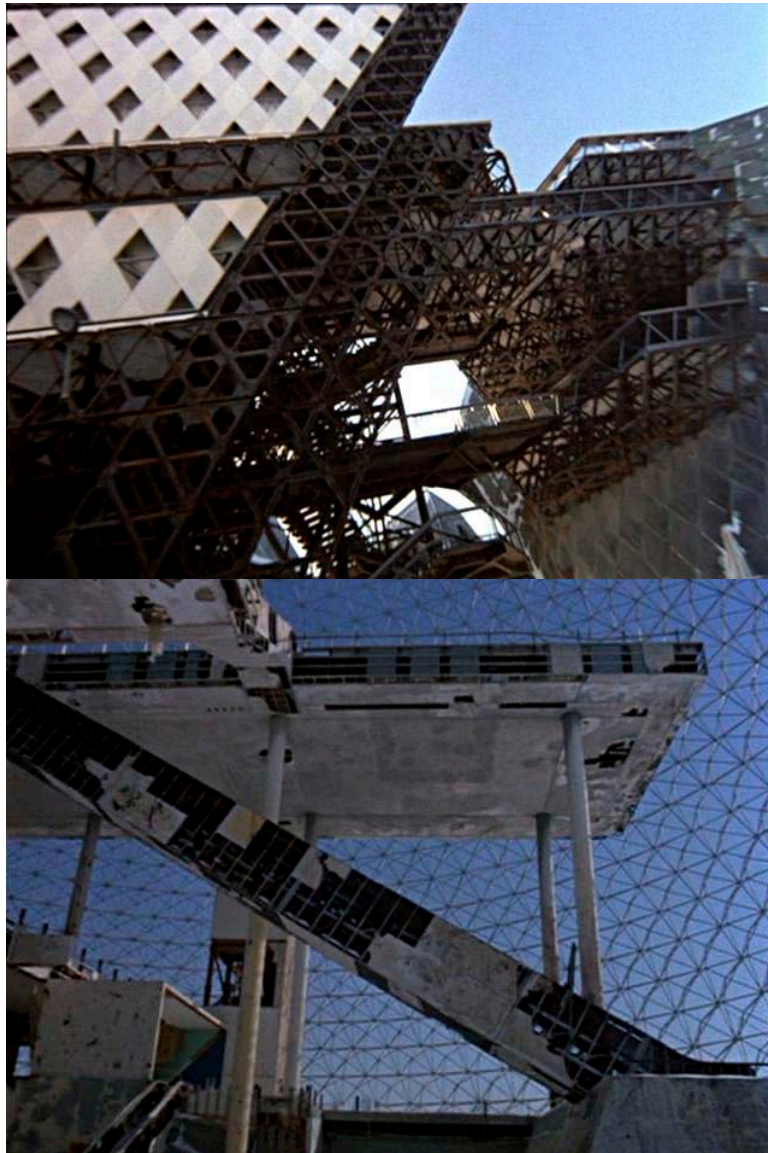
Above: The Biosphere was perhaps most captivating when its translucent acrylic membrane glowed in the setting sun.
Left: On May 20, 1976, a spark from a welder's torch set the membrane on fire, and the pavilion's entire outer shell was burned away. Although the metal structure of the dome remains, its casing has never been replaced.

FIG. 135, 136, 137 + 138

Although *Terre des Hommes* continued to operate on Ile Sainte-Hélène until 1982, the remaining pavilions on Ile Notre-Dame were shuttered in 1971. Appropriately enough, the grounds served as a ruined city of the future on an episode of *Battlestar Galactica* in 1979. Below: The former British pavilion is visible behind Lieutenant Starbuck and Hector the Android as they arrive on the exhibition site. Bottom: Our heroes mount the steps of the derelict French pavilion. Top, right: By this time, the thematic tetrahedrons on Ile Notre-Dame have lost much of their exterior cladding. Below, right: Now exposed to the elements, the elevated platforms and massive escalator of the Biosphere have begun to disintegrate.



had been renovated for the occasion,” including one assigned to members of the press, and another to site managers and service personnel. “The canoeists were accommodated in [the former] British Pavilion” which was “completely renovated for the Games.”⁸ Today, the basin is home to the Montreal Rowing Club and is used for skating and cross-country skiing in the winter.⁹





In the summer of 1978, a racing circuit was built on Ile Notre-Dame. It was later named in memory of Gilles Villeneuve, who won the first Canadian Grand Prix held at the track.¹⁰

A large part of Ile Notre-Dame was redesigned in 1980, for a BIE-sanctioned¹¹ horticultural fair, the Floralies Internationales de Montreal.¹² The various gardens – which were created by

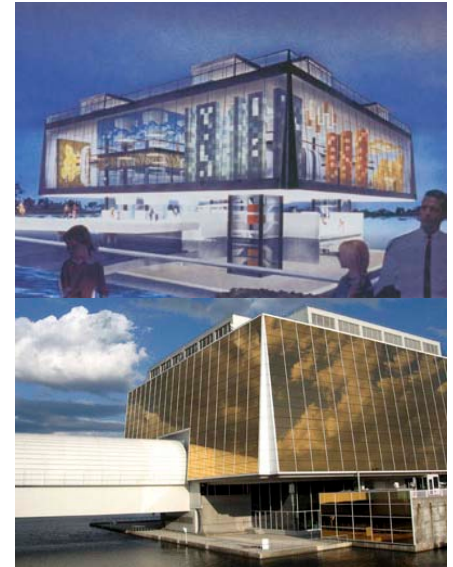


FIG. 139, 140, 141 + 142

Above, left: Jean Tinguely's motorized "art machines" impaled Niki de Saint Phalle's sculptures in the exuberant "fantastic garden" on the roof of Jean Faugeron's French pavilion, which was otherwise considered as humourless as it was overwrought. Below, left: In 1993, the pavilion was re-opened as the Casino de Montreal. Top: By night, the mirrored facade of the Quebec pavilion's elegant glass box became a giant window through which visitors could glimpse designer Gustave Maeder's stylish and sophisticated interior. Above: In 1996, the casino annexed the former Quebec pavilion via a lumpy bridge connection into the pristine glass box. The pavilion's new gold cladding permits views neither into nor out of the building.



FIG. 143 + 144

Above: An aerial photograph of the Expo islands taken during the fair shows the original shape of Ile Notre-Dame's Regatta Lake in the foreground, as well as the multiple small islands created by the park's designers to provide natural areas in which visitors could rest and relax, away from the sights and sounds of the exhibition itself. Right: In 1974, these islands were removed and the size of Regatta Lake dramatically reduced to make room for the new Olympic Rowing Basin, which stretches across nearly the entire eastern edge of the island, alongside the Saint Lawrence Seaway. The Gilles Villeneuve Racing Circuit, constructed in 1978, is also visible in the foreground, as well as its pit stop, between the Lake and the Olympic Basin.



landscape designers to reflect their native lands – still exist on the island, but have become overgrown and difficult to differentiate.¹³

In 1985, the CBC news reported that the remains of Expo were “slowly rotting in the middle of the Saint Lawrence river.” Years of neglect left the walkways covered in weeds and the old pavilions crumbling and vandalized. Most of the buildings were declared beyond repair. Pierre Bourque (then the minister of Public Works responsible for the Floralties and for Montreal’s Botanical Gardens) noted “the city invested lots of money [over the] years to try to keep them, but couldn’t afford to keep all of them.”¹⁴

Despite the decay, plans were underway to rejuvenate many parts of the site. Earlier that year, the former French pavilion was refurbished, renamed the “Palais de la civilisation”¹⁵ and inaugurated with an exhibit on Ramses II.¹⁶ It also hosted two more exhibits: *The Treasures and Splendours of China* and *Gold of the Thracian Horsemen*¹⁷ before it became the Casino de Montreal in 1993.¹⁸ The casino expanded in 1996 to include the former Montreal pavilion next door.¹⁹ Although most of the remaining pavilions would be demolished, the CBC news article also reported that “a new 40 million dollar food and agricultural exhibit” would incorporate the former theme pavilions and would open on Ile Notre-Dame the following summer. “By 1990” the former American pavilion would become part of “a new 100 million dollar science and technology centre” on Ile Sainte-Hélène.²⁰ It appears that neither of these projects was completed. No further evidence of their development has been found.

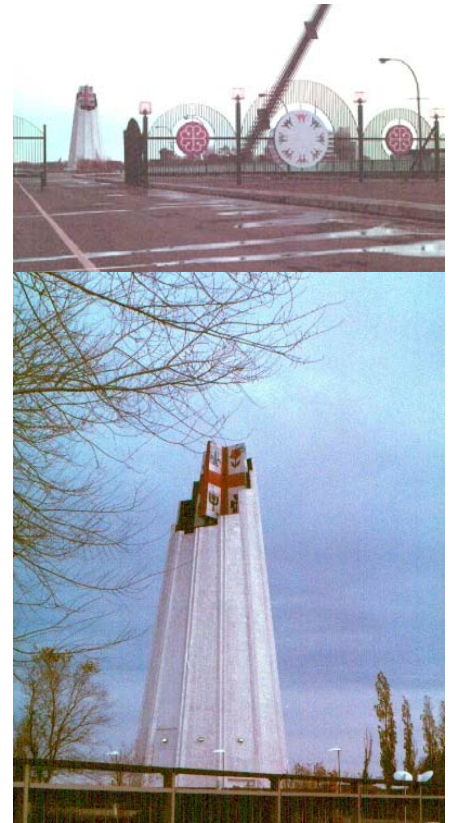


FIG. 145 + 146

Above: Only the tower of the former British pavilion remains on the site in this photograph from 1984. Top: the forlorn tower stands alone on Ile Notre-Dame, behind a fence which bears the symbols of the *Terre des Hommes* exhibition and the City of Montreal.





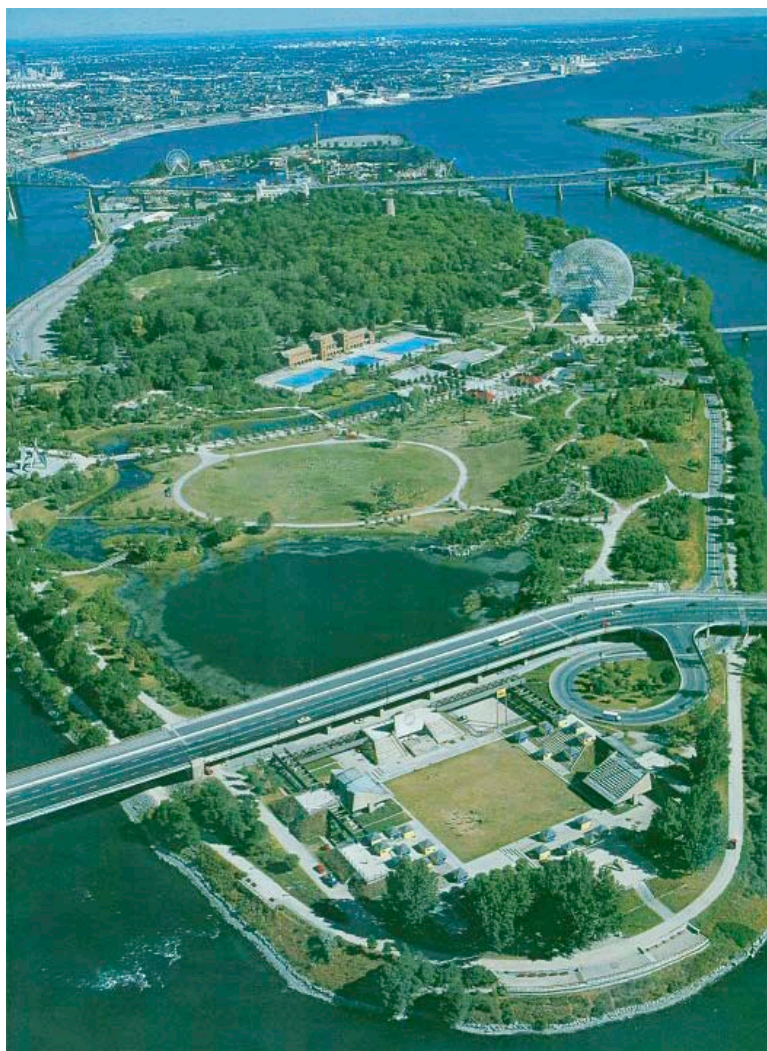
FIG. 147
PARC DES ILES



The Expo site as it appears today, showing, on Ile Notre-Dame: the Rowing Basin constructed for the 1976 Olympic Games; the Gilles Villeneuve racing circuit created in 1978; what remains of the landscape of the 1980 horticultural exhibit, the Floralies Internationales; and the France and Quebec pavilions now linked together to house the Casino de Montreal. The most recent landscaping on the southern end of Ile Sainte-Hélène has softened the perimeter of Swan Lake and created a stream which flows from the lake, around to the metro station to the north.

FIG. 148 + 149

Right: An aerial photograph of Ile Sainte-Hélène taken after the most recent landscaping of the island. The three major components of the new landscape are visible between the Pont de la Concorde and the sylvan centre of the original island. These are: the softened contours of Swan Lake, the large flat field to the north, and the planted hillock to the east, where the truncated tetrahedrons of the Man the Explorer theme pavilions once stood. A new brook winds from the lake, around to the metro station next to the pools of the original Bathing Pavilion. The Place des Nations remains, slowly crumbling, at the tip of the island. Below: The hillock rises behind Swan Lake in a photograph taken from underneath the Pont de la Concorde. On the right, a new bridge crosses a waterfall which feeds into the lake.



PARC DES ÎLES

In 1992, to celebrate the 25th anniversary of Expo and the 350th anniversary of the founding of Montreal, the city extensively renovated portions of the islands.¹ Renamed Parc des Îles, they became a vast park and recreation ground.

The majority of this remodelling project focused on the southern portion of Ile Sainte-Hélène² (which was created in the 1960s) and more specifically on the area between the original island to the north and the Pont de la Concorde, which runs across the southern tip of the island and separates the Place des Nations from the rest of the terrain.

The resulting design seems inspired by Frederick Todd's landscaping of the original Ile Sainte-Hélène in the 1930s, in an attempt to draw these two parts of the island together. This pastoral extension is primarily composed of three large landscape devices: the lake, which remains from Expo, its former formal edges now softened into gently curving contours that nature itself may have created; the hillock, which rises and falls along the island's eastern shore with a regularity found less frequently in the untamed wild (could it be a large burial mound for the rusting remains of more than one thematic tetrahedron?); and the field, which stretches between the hill and the lake, and is bound in the west by a new brook that winds from the lake around to the metro entrance further north.

Apart from the specific events it hosts, such as rock concerts, Grand Prix races or rowing regattas, the majority of the site remains under-utilized, perhaps due to both the great size and diversity of the grounds.

It is now very difficult to imagine the Expo that once spread across this terrain, despite vestiges of the fair, which remain scattered across it. On Ile Notre-Dame, in addition to the French and Quebec pavilions, which have become the Casino de Montreal, the remaining part of the Canadian pavilion complex

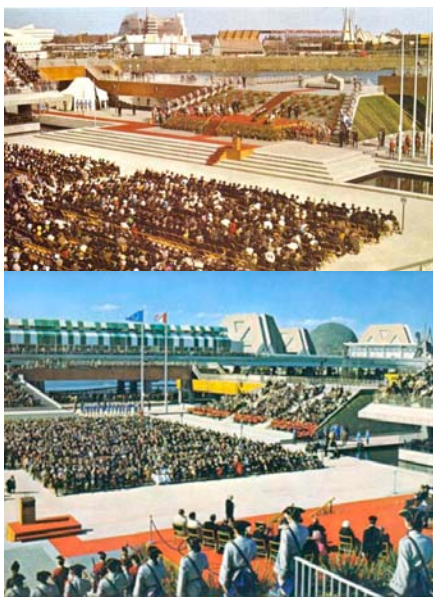


FIG. 150, 151, 152 + 153

Top: The Tunisian pavilion as it appeared during Expo. Above: The pavilion is now used by the park's grounds crew. Below: During the fair, the Jamaican pavilion housed a popular rum bar. Bottom: It remains on Ile Notre-Dame and was recently renovated into a banquet hall.



FIG. 154, 155, 156 + 157
 Expo Now and Then. The crumbling
 state of Place des Nations is poignantly
 illustrated in these comparative photo-
 graphs of the site. Below: The gathering
 space in full regalia during the official
 ceremonies of the Exhibition. Right: Recent
 photographs taken from similar vantage
 points as those below, showing the current,
 derelict state of the Plaza.



now houses event spaces and the park's administrative offices. The two smaller pavilions that remain are more difficult to identify: the Tunisian pavilion, nestled discretely in the overgrown landscaping, is a meeting space for the park's works crew; and alongside a forlorn canal sits the incongruous little Jamaican pavilion. Originally modeled on a nineteenth century Jamaican country shop,³ it has recently been completely renovated as a small banquet hall.⁴

On Ile Sainte-Hélène, the American pavilion's vast geodesic dome remains. In 1995, a massive renovation turned Buckminster Fuller's "vision of the future" into "a multi-media museum, built to promote the protection of the Saint Lawrence River." Environmentalists reproved the huge costs of the new building, and questioned its efficacy. Instead of talking about the river, they suggested spending the money to actually clean it up. "We have spent 17.5 million dollars of tax-payers' money to create a museum next to the river that almost keeps people away from the river flowing past it," said one critic, who felt the river should have been "pumped through the Biosphere, so analysts could test the quality of the water and make the river itself part of the attraction."⁵

The once stately Plaza of Nations still stands on the southern tip of the Ile Sainte-Hélène. Now overgrown and crumbling, its stepped risers resemble a ruined Aztec temple. The metro building, closer to the centre of the island, has changed little since its debut at Expo. As each train arrives, small groups emerge from the station and shuffle toward the neglected wooden roof of the former Korean pavilion next door. From there, a shuttle bus takes them to the casino.



FIG. 158 + 159

Top: The arresting polished wood Korean pavilion and its tower at Expo 67. Above: Both the tower and the roof of the pavilion remain on Ile Sainte-Hélène today. The later serves as an oversized shelter for visitors waiting to catch the bus to the casino on Ile Notre-Dame.

FIG. 160
Positioned atop International Nickel Plaza,
between the Scandinavian pavilion and
the pedestrian ramp from the Pont de la
Concorde on Ile Sainte-Hélène, Alexander
Calder's *Man* was designed for Expo
67 and created of 48 tons of Canadian
stainless steel. Its commissioners, the
International Nickel Co. of Canada Ltd.,
entertained invited guests in a small
restaurant located in the sculpture's plinth.



MEMORIALS

Two of the largest sculptures commissioned for Expo remain on the southern portion of Ile Sainte-Hélène. The first, Yves Trudeau's giant robot, *Le Phare du Cosmos*, now stands in a depression in the hillock, at the intersection of paths.¹ The second, Alexander Calder's monumental stabile *Man*, was "planned as not only one of the great artistic events of the fair but also as a kind of symbol of its purpose."²

Commissioned for Expo and subsequently donated to the city by the International Nickel Co. of Canada, the 48-ton stabile was fabricated of stainless steel in Saché, France.³ The largest Calder ever constructed, its great size was precisely the point, according to Robert Fulford's pictorial recollection *This Was Expo*.⁴ Expo's creators, seeking sculpture that could both compete with its vast grounds and speak to its theme of the human world, were drawn to sculpture that depicted what Fulford calls "humanistic shapes on the monumental scale."⁵

Just as Calder's *Man* symbolized the spirit of the fair in 1967, its continued presence accurately reflects the current atmosphere of the site. Moved during the most recent landscaping (from its original location near the Pont de la Concorde) to a new circular platform on the western shore of the island, the sculpture now commands views across the Saint Lawrence toward the distant city skyline.⁶ A time capsule, buried in its plinth on May 17, 1967,⁷ was moved along with the sculpture; the plaque above the capsule instructs the city's mayor to reveal its contents in 2067.⁸ This memorial of the fair, literally preserving documents from the era of Expo, symbolizes the field it sits upon, forever fixed in the summer of 1967, immobile as the sculpture itself.

Calder, his reputation long established by 1967, was primarily celebrated for his fluid, graceful, even delicate, *mobiles*, a genre he invented.⁹ But because Expo's vast grounds necessitated massive sculptures, the artist was asked to create a hulking stabile instead. "Instead of stimulating an artist to a new

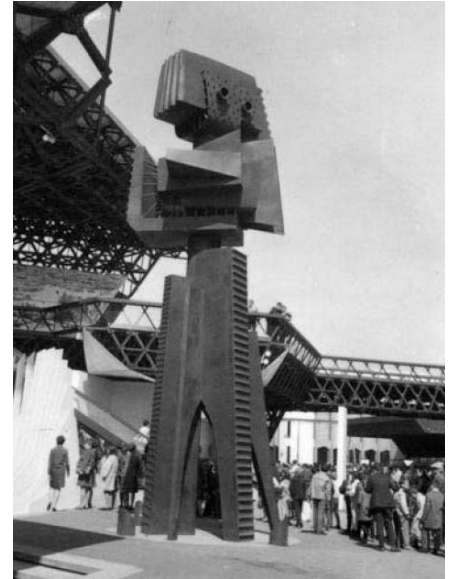


FIG. 161

Québec artist Yves Trudeau created his *Phare du Cosmos* as an expression of a new civilization of space and electronics. Originally mechanized and wired for sound, both the head and torso of the 27 foot high robot rotated about its vertical axis, like the lamp of a lighthouse. During Expo, it was located in the Plaza of the Universe in the *Man the Explorer* theme pavilion on Ile Sainte-Hélène. When the exhibition closed, the House of Seagram donated the sculpture to St. Dunstan's University on Prince Edward Island, which in turn gave it to the City of Montréal. Refurbished and relocated (though not re-wired) when the park was landscaped in the 1990s, the *Phare du Cosmos* now stands near Swan Lake, at the intersection of paths.

achievement,” Fulford declared, the fair “pushed him toward a vain and empty gesture.”¹⁰ Fulford felt that much of the sculpture commissioned for the fair suffered for the same reason: artists accustomed to the spatial confines of the gallery, when asked to work on a monumental scale, created pieces that felt “pompous and empty.” But he also suggested that in its search for monumental figurative sculpture, Expo was “shopping for the wrong kind of art at the wrong time.” By the mid-1960s, the abstracted figures of Calder and Henry Moore were yielding to new concepts, to pieces that “involved [the spectator] as a kind of participant,” and to the creation of whole “environments.”¹¹

Rosalind Krauss examines the new types of work emerging at the time, and the evolution of sculptural work beyond the strict confines of the commemorative monument, in her essay *Sculpture in the Expanded Field*. Calder’s *Man*, in both its original and current applications, exemplifies what Krauss calls the “historically bounded category” of sculpture, the “internal logic” of which is “inseparable from the logic of the monument... It sits in a particular place and speaks in a symbolical tongue about the meaning or use of that place.” Its pedestal, “an important part of the structure,” mediates “between the actual site and representational sign.”¹²

But Krauss argues that in the late 19th century, Rodin’s *Balzac* and *Gates of Hell* initiated the slow collapse of sculpture’s “logic of the monument” as the ultimate sitelessness of these two projects introduced its negative condition – the “absolute loss of place.” This modern condition, in which sculpture operated in the absence of the site, produced the monument as abstraction, “as pure marker or base, functionally placeless and largely self-referential.” As the development of these works exhausted the “idealist space generated by the negative condition of the monument,” however, it eventually became possible to locate sculpture “only in terms of what it was not.”¹³ Outdoors, for instance, this “combination of exclusions” could be used to identify a sculpture by the “addition of the *not-landscape* to the *not-architecture*.”¹⁴ The production of sculptural art was thus suspended “between the built and not-built, between the cultural and the natural.”¹⁵

Krauss generates the essay's titular *expanded field* through her conceit that a definition of sculpture based on the combination of exclusions generates the possibility of an opposite definition based on the combination of positive terms; the addition of *landscape + architecture*, for instance. The results of such a combination are found in labyrinths and mazes, in Japanese gardens, and in the "ritual playing fields" of other cultures – all of which are *both* landscape and architecture, though none are considered sculpture. Instead, she designates them *site-constructions*.¹⁶

Starting in the late 1960s, a number of artists – including Robert Morris, Michael Heizer, Robert Smithson, and Richard Serra – were actively expanding this *field*. The combination of one positive and one negative term, for instance, was seen in Heizer's *Double Negative* (1969) and Smithson's *Spiral Jetty* (1970), both massive outdoor works positioned at the intersection of *landscape* and *not-landscape*. While Krauss labels such works *marked sites*, they are more commonly called *earthworks*.¹⁷

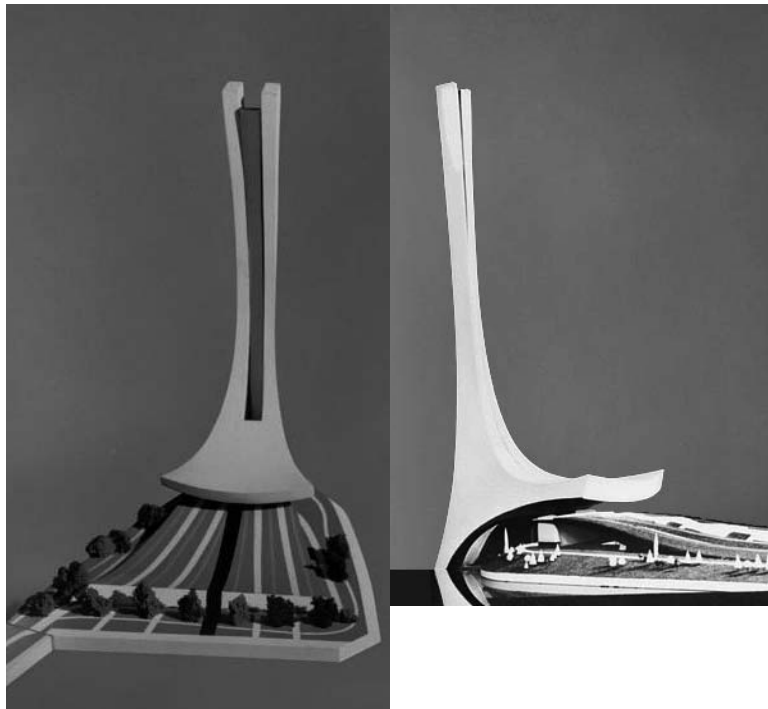


FIG. 162
Robert Smithson, *Spiral Hill*, 1971;
photographed shortly after completion.
Estate of Robert Smithson/VAGA,
New York, N.Y. A path winds counter-
clockwise up a small cone-shaped hill
on the site of a (then) active sand quarry
in Emmen, the Netherlands. Smithson
seeded the hill with a low groundcover
to prevent erosion, and covered the path
with a highly contrasting white sand.



FIG. 163, 164 + 165

Above: Mayor Jean Drapeau presents a model of his proposed Montreal Paris Tower, on December 10, 1964 in Montreal. Below, left and right: A rendering of the face of the proposed tower and a model photograph of its side elevation showing its dramatic cantilever and foundations in the river off the tip of the island. Fountains were planned around its base, and a restaurant inside.



THE MONTREAL-PARIS TOWER

Although he was in the process of building one, *earthwork* was not yet an established concept in 1964, when Jean Drapeau embarked on a campaign to crown his new islands, and burnish his legacy, with a more traditional construction. The Mayor was determined that the city of Montreal would contribute a tower to the Expo site.¹ His best friend (and Expo's artistic director), the caricaturist Robert LaPalme, recalls that the mayor first tried to borrow the Eiffel Tower for the duration of the fair.² Preliminary studies suggested that dismantling the Parisian landmark and re-erecting it in Montreal would cost much less than building a brand new tower – and that the Eiffel could undergo necessary refurbishment in the process. President de Gaulle approved the secret plan, but the tower's owners could not be convinced; they were fearful that, if the President were to die in the meantime, they would be prevented from re-installing it in Paris.³

Undeterred, Drapeau pursued designs for a new monument, a permanent contribution that would forever commemorate the fair. On December 10, 1964, he unveiled a model of the tower, which would rise from the northern tip of Ile Sainte-Hélène to a height of 325 metres, to mark the 325th anniversary of the founding of Montreal.⁴ A joint endeavour of Montreal and Paris, the proposed tower celebrated the friendship between the two cities,⁵ and its cantilever “boasted not only the engineering panache of the Eiffel, but the lean of Pisa.”⁶

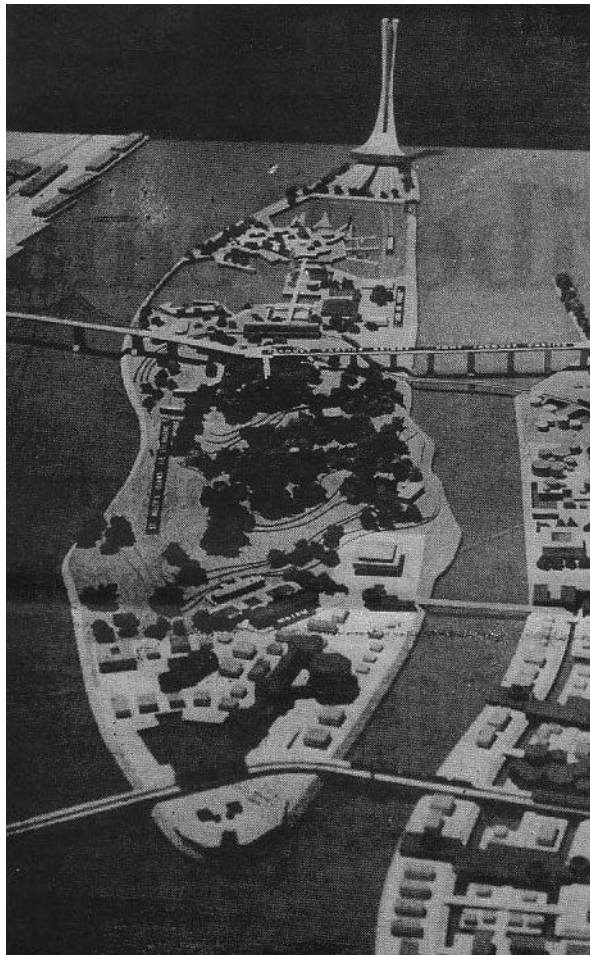
Colonel Churchill thwarted the mayor's plans at every turn. First, he declared the tower, originally budgeted at 20 million dollars, would require 44 million to build. By the time Drapeau returned to him with a cheaper scheme, Churchill said it couldn't be finished before 1968.⁷ What the mayor called his “poem in concrete”⁸ was built a decade later on a new site, when Roger Taillebert's design for Montreal's Olympic Stadium included an inclined tower, which bears a striking resemblance to the one imagined for Ile Sainte-Hélène.⁹

When plans for the Expo tower were first unveiled in 1964, the mayor was asked if it should be called the *Drapeau Monument* or *Drapeau Tower*. “Now, I think that we must honour the founders of Montreal,” he modestly responded, “and if the generations of the future think that we deserve a monument or a wooden shack, they will decide.”¹⁰ In 1999, the islands, which had been called Parc des Îles since their refurbishment a decade before, were renamed Parc Jean Drapeau.¹¹ The mayor’s contributions to the city are thus commemorated not by a tower or other building, but by the islands themselves, his original constructions: two massive earthworks in the Saint Lawrence River, the unwitting vanguard of the typology itself.

FIG. 166

Model of Ile Sainte-Hélène showing the proposed location and dramatic height of the Montreal-Paris Tower on the northernmost (downstream) tip of the island.

A proposed 325 metres tall, in 1967 it would have been second in height only to the Empire State Building. Between eight to ten 2- and 3-deck elevators were planned to carry visitors to the top of the tower, from which views would spread for 50 miles - and over the top of nearby Mount Royal.



EARTHWORKS

It is perhaps fitting that Drapeau's tower wasn't built on Expo's constructed islands; in the late sixties, monument construction was heading in the opposite direction. On October 1, 1967 – a month before Expo closed – Claes Oldenburg oversaw the digging of a hole in Central Park, Manhattan's pastoral *Other*.¹ The artist's notes indicate that ground was broken at 10 am and a "grave dug 10:30-12:30."² After lunch, the hollow was filled back in; the ground smoothed over and trimmed. Although officially titled *Placid Civic Monument*, Oldenburg referred to his witty "refutation of formal monumentality... more bluntly as *The Hole*."³

Although Oldenburg is not associated with (much less considered the progenitor of) the artistic movement, Suzaan Boettger believes his ephemeral *Hole* encapsulates "the fundamentals of [the type of] sculpture that... became known as earthworks."⁴ This gravesite conflated "a spectrum of current debates that would pertain to that genre of environmental sculpture, and to a time in which nature was, very prominently but nonetheless ambiguously, becoming culture."⁵

The day before Oldenburg dug his *Hole* in the park, the artist and writer Robert Smithson took a day trip and "engaged in his own (in)version of the conventional ideas of monumentality."⁶ Later published in *Artforum*, his "Tour of the Monuments of Passaic, New Jersey," included visits to an old bridge, a pumping derrick, six large water pipes, and a small sandbox.⁷ In this critique of "the idealizing associations of 'monumentality,' both those of gravitas and grandeur," Smithson, like Oldenburg, "turned upside-down the customary commemorative function of sculpture in the public arena, proposing, in effect, counter-monuments."⁸

Reacting to a culture of "social materialism of expensive collectibles" that engendered the "cultural confinement" of artists and the "institutionalized neutralization" of their works,

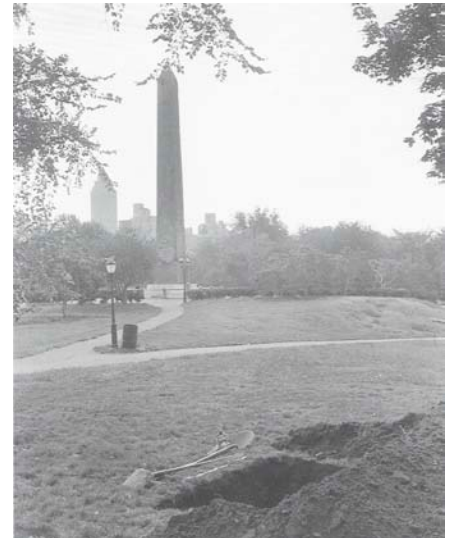


FIG. 167

On October 1, 1967, Claes Oldenburg oversaw the excavation of his *Placid Civic Monument* in Central Park. Also known as *The Hole*, Oldenburg's Dada-esque refutation of formal monumentality was dug next to its morphological opposite, the Egyptian obelisk known as Cleopatra's Needle.

Smithson “advocated instead a dialectic with greater systems – be they spatial, social, or environmental.”⁹ The dialectic between his subsequent constructions and their environments was evident foremost in the material of their construction – the earth itself. In his essay “Towards the Development of an Air Terminal Site,” Smithson first considered the “aesthetic potential” of the manipulation of earth in such creations as “holes, trenches, mounds, heaps, ditches [and] roads” and he suggested that “remote places... could be coordinated by art forms that would use the actual land as medium.”¹⁰ Because Smithson and his colleagues sought to investigate the relationships between ecological processes and the effects of modern industry on the earth (as both a place and a system)¹¹ his essay suggested, “instead of using a paintbrush to make his art, Robert Morris would like to use a bulldozer.”¹² This essay was the first to use the phrase “earth works” in relation to art practice, and it effectively announced “a new genre of sculpture” that would have “a galvanizing impact on New York sculptors.” In October 1968, only a year after Oldenburg dug his *Hole*, the Dwan Gallery devoted an exhibition exclusively to this new type of work.¹³

Six years earlier, Rachel Carson’s *Silent Spring* triggered the start of the public’s awareness of the damage caused to the earth’s natural systems by technological processes. Serialized in the New Yorker and widely read, “Carson’s articulation of

FIG. 168
Robert Morris, *Observatory*, 1971-77.
Lelystad, the Netherlands. Earth, wood,
granite, steel and plant ground-cover,
298 ft. 7 in. in diameter.



ecological threats was so pervasive, and the environmental position so compelling, that critics automatically presumed that vanguard artists working with geological material shared her sympathy for the environment.”¹⁴ In her New York Times review of the Earthworks show at the Dwan Gallery, Grace Glueck accused the artists of “geophilia,”¹⁵ strengthening the popular impression that their work stemmed from “a pastoral sympathy with – and for – nature.”¹⁶

Despite the prevailing notion that these earthworkers held the new “socially correct attitudes of the nascent environmental movement” and were thus “avant-garde art’s corollary to the counterculture’s back-to-nature movement,” the artists themselves rejected such perceptions of nature as outmoded sentimentality.¹⁷ (Dan Graham recalls: “Sol [LeWitt] would call [Smithson] a romantic, which was a very negative world to us.”)¹⁸ Beyond the artist’s intentions, the double reading inherent in the material of the earthworks – of dirt as a lowly material and of the earth as a precious system – reflected society’s ambivalence toward the environment and the conflict between the ecological processes of the earth and a “belief in humankind’s right of dominion over it.”¹⁹

While Smithson didn’t expect art to rescue the planet from the onslaught of technology, “he was interested in a form of aesthetic resistance to the technological powers which seem to



FIG. 169
James Turrell, *Roden Crater*, begun 1979.
A series of spaces, including a naked eye
observatory, cut into an extinct volcanic
cinder cone in Arizona’s Painted Desert.

FIG. 170 + 171
Michael Heizer, *Double Negative*, 1969-70. Two trenches cut into the Mormon Mesa on opposite sides of a valley, northwest of Overton, Nevada. 457m long, 15.2m deep, 9.1m wide.



dominate the contemporary world.”²⁰ As he began to work on the artistic reclamation of landscape sites, he scorned the idealistic romanticism of the era’s new conservationists.²¹ “Modern day ecologists... still see the operations of industry” as the devil’s work; “the image of the lost paradise garden leaves one without a solid dialectic, and causes one to suffer an ecological despair” he declared in his essay “Frederick Law Olmsted and the Dialectical Landscape.”²² He denounced such a “static formalistic view of nature” and praised Olmsted’s application of “a dialectical materialism... to the physical landscape,” one which recognized both “chance and change in the material order of nature.”²³ Smithson, dialectician, considered nature to be morally neutral²⁴ and thus “*indifferent* to any formal ideal.”²⁵ He felt that a comprehensive understanding of nature should integrate its capacity for violence and should consider it more than a simple “place of refuge.”²⁶

Smithson felt this violence included the impact of human industry on the earth, as we do not exist “outside the natural order of things.”²⁷ His dialectic privileged neither, however: “the machine was no more important than the earth it moved – steel was no more important than rust.”²⁸ He felt that critics who considered “earth work artists [to] cut and gouge the land like Army engineers”²⁹ in a manner devoid of the lyricism of picturesque canvases, failed to “recognize the possibility of a direct organic manipulation of the land devoid of violence and “macho” aggression.”³⁰ Such a manipulation is evident in the pairs of photographs of Central Park landmarks (one taken at the turn of the century and the other by Smithson in the 1970s), which he used to illustrate how the park is created both by its designers and caretakers and by the growth and decay of nature itself.

Unlike Central Park, which is surrounded by the metropolis to which it declares its opposition, the radical *otherness* of many earthworks is reinforced by their remote locations.³¹ Just as they declare their separation from world, these Foucauldian “counter-sites” reflect their real-world counterparts as they

“represent, contest, and invert significant aspects of art, nature, society,” and the traditional relationships among them.³² In their crude physicality and sometimes-aggressive means of construction, as well as their refusal to harmonize the divide between nature and culture, they perhaps express pastoral’s unconscious – not a rendering of the bucolic ideal, but of its underside – “the sense of loss that prompts the compensatory fantasy.”³³

Smithson wrote, “The best sites for ‘earth art’ are sites that have been disrupted by industry, reckless urbanization, or nature’s own devastation.”³⁴ His *Spiral Jetty* was built in a dead sea, his *Broken Circle* and *Spiral Hill* in a functioning sand quarry.³⁵ Through the course of his interventions, these sites were “cultivated or recycled as art.”³⁶

While neither ravaged by industry nor by the vagaries of nature, the forlorn ground of Parc Jean Drapeau has been stripped of its original purpose and abandoned by the culture that created it. The desolate site now masquerades as a bucolic retreat from the demands of the city and plays benign host to insipid entertainments. A pastoral mantle obscures the site’s origin as a *counter-site*, which once “re-presented, inverted, and contested” its reciprocal sites in the city (and the world) itself.

Like the territories of other earthworks of the era, upon which the often fraught intersections of the human and natural worlds were explored – using materials considered both degraded artistic media and precious substances for cultivation³⁷ – this *Terre des Hommes* might also be “recycled as art” in a manner that recovers its original purpose and reestablishes the dialectic between the ecological and human forces that created it.

FIG. 172

Dennis Oppenheim, *Landslide*, 1968. Right angled boards, earth. 305m long. Long Island Expressway, Exit 52. *Landslide* activates the existing ground through a series of parallel bands, the distance between which increases by a factor of two. In spirit, it carries around the globe, like lines of latitude.



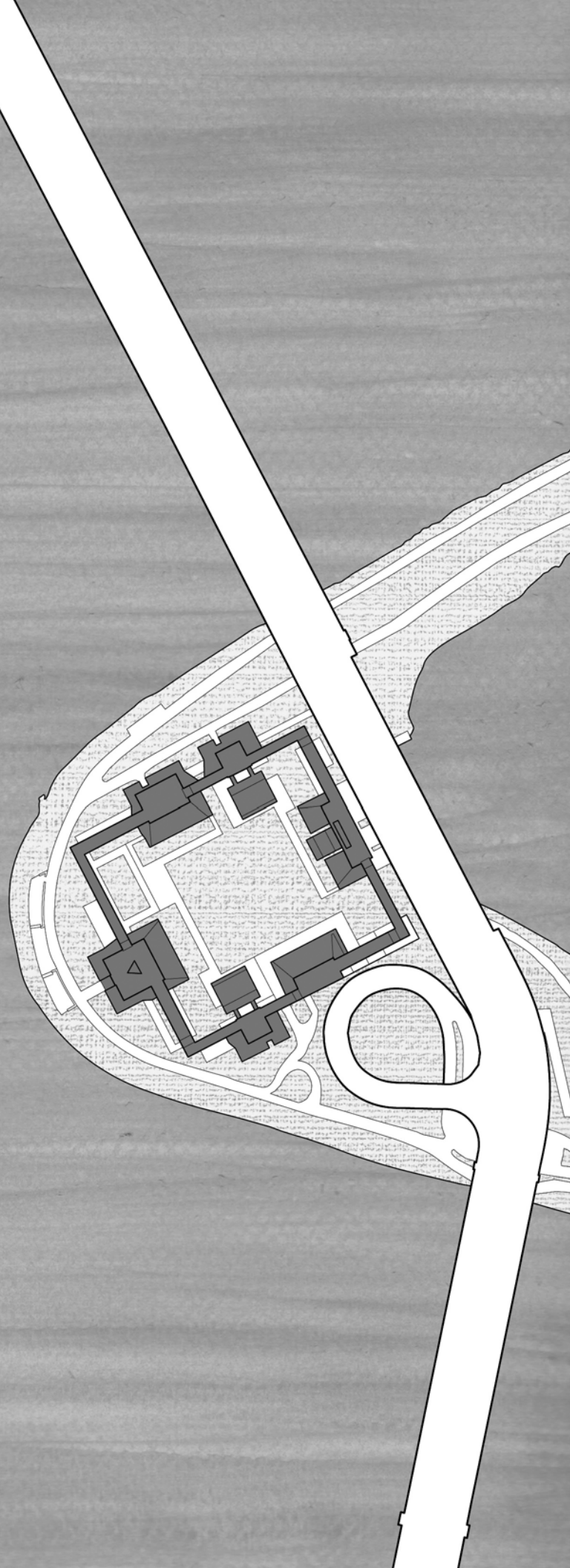


FIG. 173
PARC DES ÎLES

The vast, vestigial ground at the southern end of Ile Sainte-Hélène has become a kind of terrain vague, abandoned by the culture that created it. The pastoral veil now stretched thin over the surface of the island is a cosmetic fix. This memorial ground paints over the recent history of an Exposition left to rot, and attempts to preserve only the joyful memories of the fair itself. While the new landscaping might alleviate the discomfort once generated by the derelict site, it also obscures the origins of the place as an experimental ground, which once fostered ideas of the future city.



FIG. 174
Agnes Martin, *Orange Grove*, 1965
(detail). Acrylic and pencil on canvas,
72 x 72 (182.9 x 182.9)

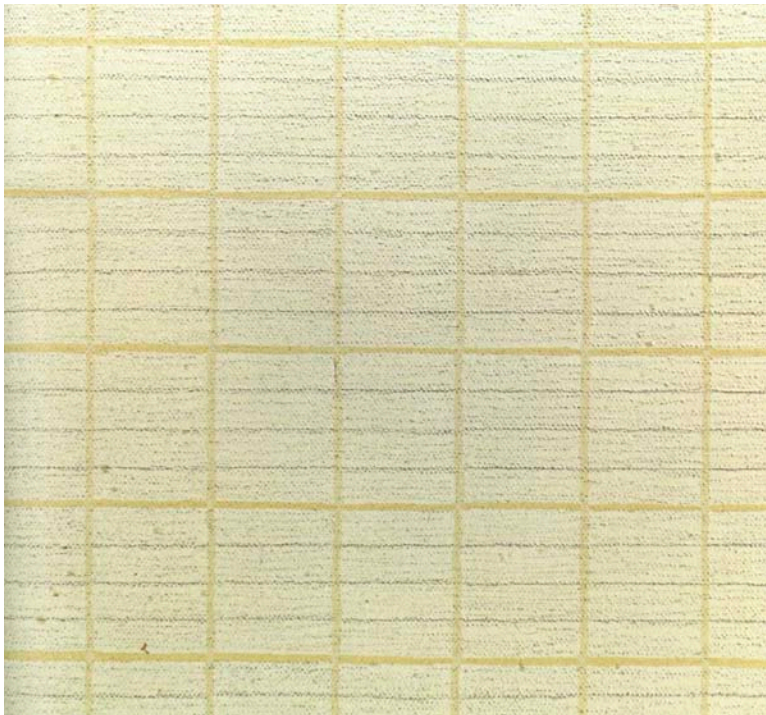


FIG. 175
Agnes Martin, *Trumpet*, 1967 (detail)
Acrylic and graphite on canvas,
72 x 72 (182.9 x 182.9)



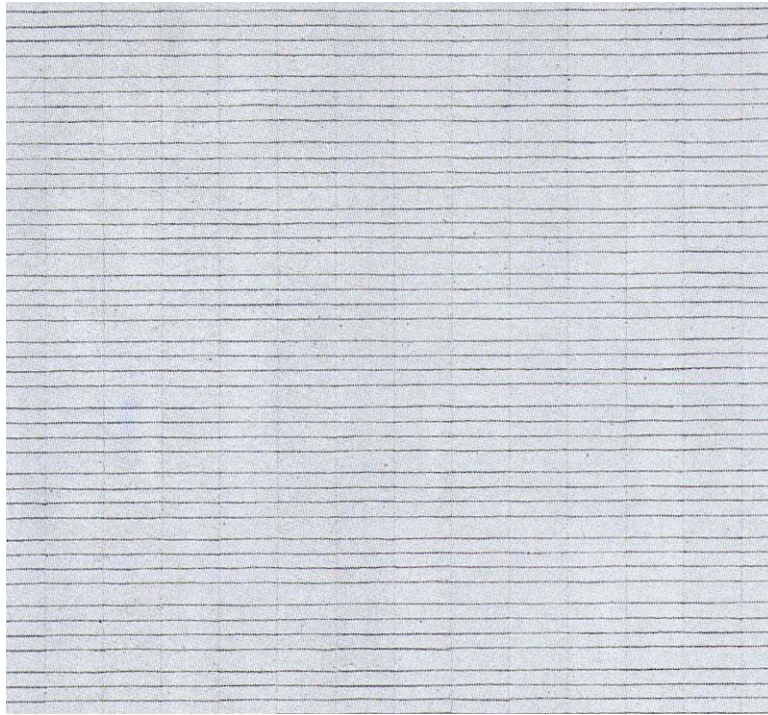
A NEW GROUND

In 1967, Agnes Martin left New York City and the art world behind. As the distractions of the city began to thwart her retreat into the gridded canvases that established her unique status among minimalist painters, Martin packed a pickup truck and set out to wander through her native Canada and the American West.¹ Prior to her departure, her “wordless and silent grids” had been “vehicles of revelation for artist and viewers alike,”² and they continue to offer “an effective refuge for the cluttered minds and jangled nerves” of the urbanite. Like a city park’s patch of green,³ the restorative aura of her paintings invite the viewer “to slow down... to begin anew.”⁴

Agnes Martin’s obsession with the grid originates from a painting expedition she once took in the mountains: “I was coming out of the mountains, and... I came out on this plain... I thought, This is for me! The expansiveness of it. This plain... was just like a straight line. It was a horizontal line... The more I drew that line, the happier I got.”⁵ The feeling of expansion she felt that day, “the expansion of that experience,”⁶ inspired the horizontal lines of her subsequent canvases. “In exalting the experience of the plains over that of the mountains, Martin *inverted* the standard order of the high over the low, the impressive over the humble.”⁷

Although her canvases are often described as abstractions of nature, the painter has expressed an ambivalence, similar to that of the earthworkers, toward nature as a subject matter. “Anyone who can sit on a stone in a field awhile can see my painting,” she has said. “Nature is like parting a curtain, you go into it. I want to draw a certain response from people like this... Not a specific response but that quality of response from people when they leave themselves behind, often experienced in nature.”⁸ She has also declared that her “work is anti-nature. It is not what is seen. It is what is known forever in the mind.”⁹ For Martin, “nature was the wheel of life, the continuous cycle of conquest and defeat,” while art was a refuge, an opportunity

FIG. 176
Agnes Martin, *Leaves*, 1966 (detail)
Acrylic and graphite on canvas,
72 x 72 (182.9 x 182.9)



to turn “one’s back on the turmoil.”¹⁰ Rosalind Krauss, in her 1978 essay “Grids,” supports this latter view of Martin’s subject matter, declaring the grid itself to be “antinatural, antimimetic, antireal... what art looks like when it turns its back on nature.”¹¹

Although he acknowledged Martin’s own cautions “against understanding her work as an abstracted nature,”¹² Lawrence Alloway fostered the reading of her paintings as a kind of crypto-landscape in the catalogue of her 1973 retrospective. “We perceive a grid,” wrote Alloway, “but... we recognize a form of nature imagery.” An imagery bolstered by the pastoral titles of the canvases themselves.¹³ Krauss notes that, while “the rubric ‘abstract sublime,’ [with its] covert allusion to nature,” subsequently “slid into the space between [Martin’s] work and its succession of interpreters,”¹⁴ only Kasha Linville’s “careful phenomenological reading” of the work truly respected Martin’s own rejections of Romanticism.¹⁵

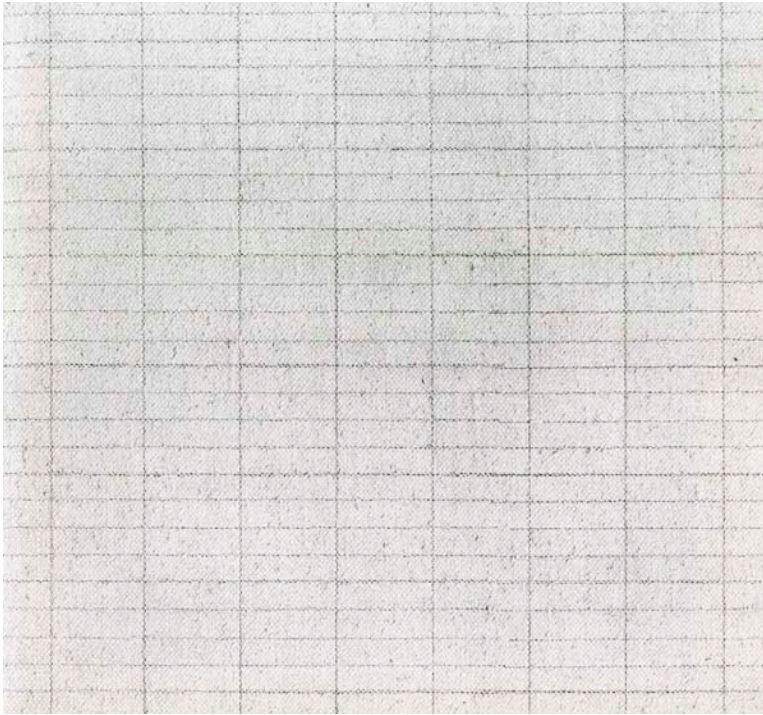
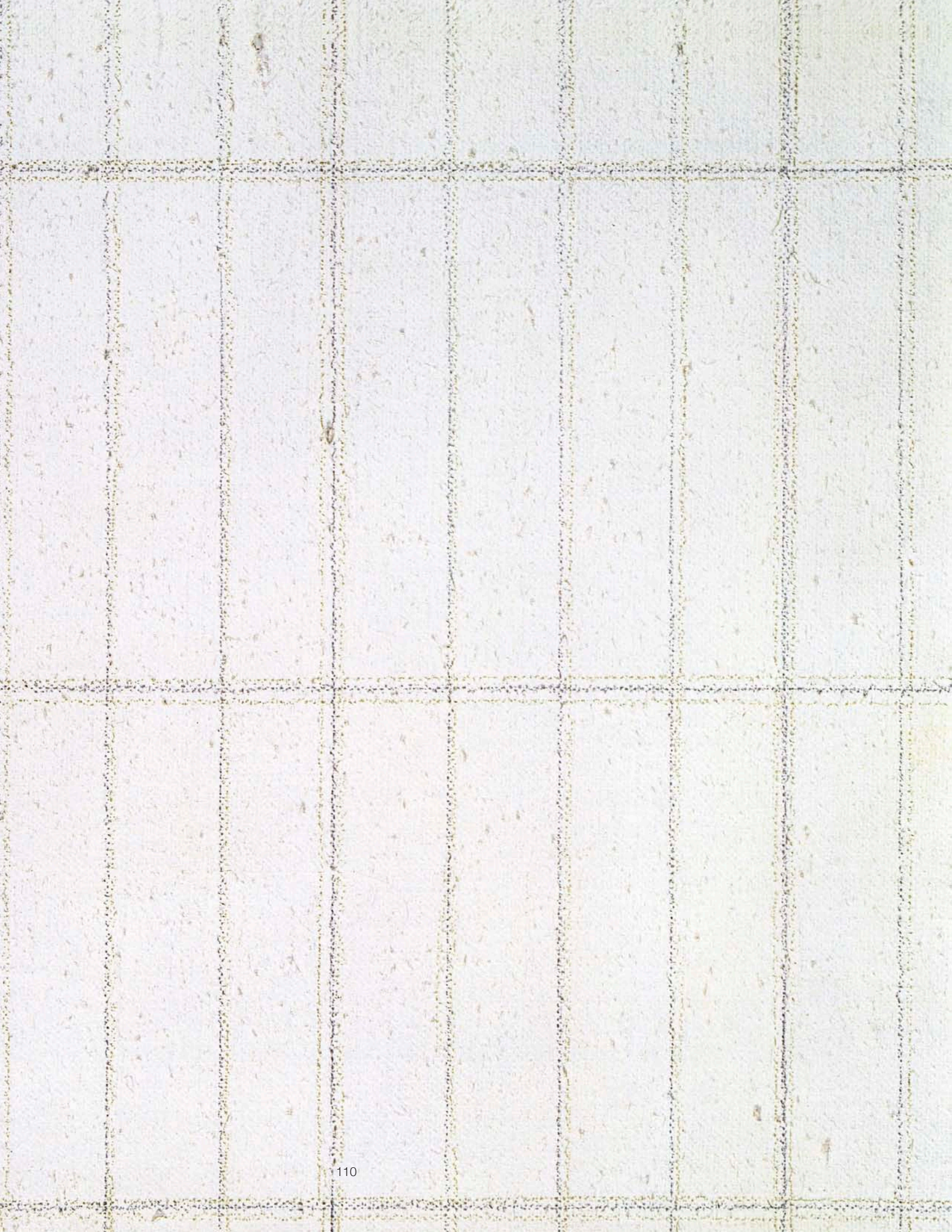


FIG. 177
 Agnes Martin, *Leaf*, 1965 (detail)
 Acrylic and pencil on canvas,
 72 x 72 (182.9 x 182.9)

Linville views Martin's canvases from three distinct vantage points and discovers the paintings "are sequences of illusions of textures that change as viewing distance changes."¹⁶ Viewed at close range, Martin's "line respects the canvas grain, skimming its surface without filling the low places in the fabric so it becomes almost a dotted or broken line."¹⁷ It is from the second viewing distance, as the viewer moves back from the canvas, "that the paintings go atmospheric" and become "a non-radiating, impermeable... mist. It feels like, rather than looks like, atmosphere. Somehow, the... lines dematerialize the canvas, making it hazy, velvety."¹⁸ At the third distance, when the viewer has stepped back far enough to register the entire canvas – to perceive it as a single, fixed, object – "the painting closes down entirely, becoming completely opaque." In Linville's reading of the painting, "abstract sublime" refers not to the concealed, coded content of the image, but to the atmosphere it generates (an atmosphere, which itself is not the content of the image, but which points to it).¹⁹



A PROPOSED GARDEN GRID

Agnes Martin's 1964 painting, *On a Clear Day*, is mapped onto the surface of Ile Sainte-Hélène. The original 6-foot-square canvas is scaled-up to correspond with the size of the terrain; each module in its array becomes a planting bed 1.5m wide by 11m long. Piercing through the island's pastoral shroud, this new ground rises, shimmering against the existing terrain beneath it. The site's once-desolate field becomes a planted parterre, or more specifically, a potager: a formal kitchen garden at the scale of the city. Just as the original canvas encourages "the eye to participate in uninterrupted, nonselective, 'free and easy wandering'"¹ across its surface, the whole body is invited to similarly wander through the island-scaled garden grid. At this scale, as the viewer moves around the garden, the eye perceives a "constant oscillation between figure and ground"² as the green-planted plots flicker over the memory-laden terrain below. The ground itself is the interface across which this optical play encourages what had "formerly been background to emerge as object."³ No longer inhabited exclusively in the memory, a reminder of past glories, nor a simple a plane upon which diverse entertainments may be deployed, the ground of the island emerges as a place in itself.

The garden grid, though expansive, is tended by hand. While a "fellow adept of the grid such as Sol LeWitt" proclaimed himself a 'conceptual' artist for whom "the idea becomes a machine that makes the art,"⁴ Martin used only a straightedge to create her grids. In this way, she distinguished herself from other Minimalist artists who employed mechanical means to erase traces of subjectivity from their work, and who thus reflected the increasing mechanization in modern society.⁵ "Mechanization, standardization, overspecialization and parcellization of labor, which in the past determined only the realm of commodity production in actual industry, now penetrate into all sectors of social life... [into] recreation just as much as the organization of work," explains Ernest Mandel.⁶ Late capitalism thus becomes "the moment in which the last vestiges of Nature which survived on into classical capitalism are at length eliminated."⁷

FIG. 178, opposite
Agnes Martin, *On a Clear Day*, 1964
(detail). Gesso, acrylic, pencil and
coloured pencil on canvas, 72 x 72 (182.9
x 182.9)

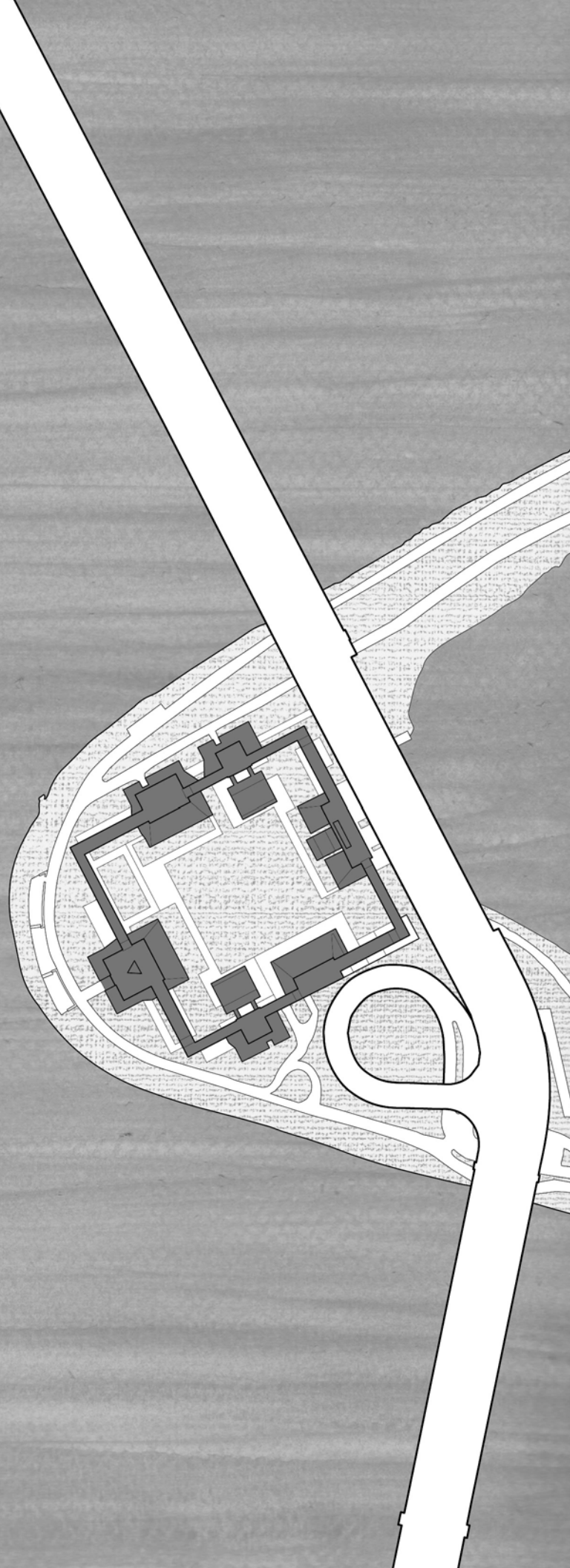
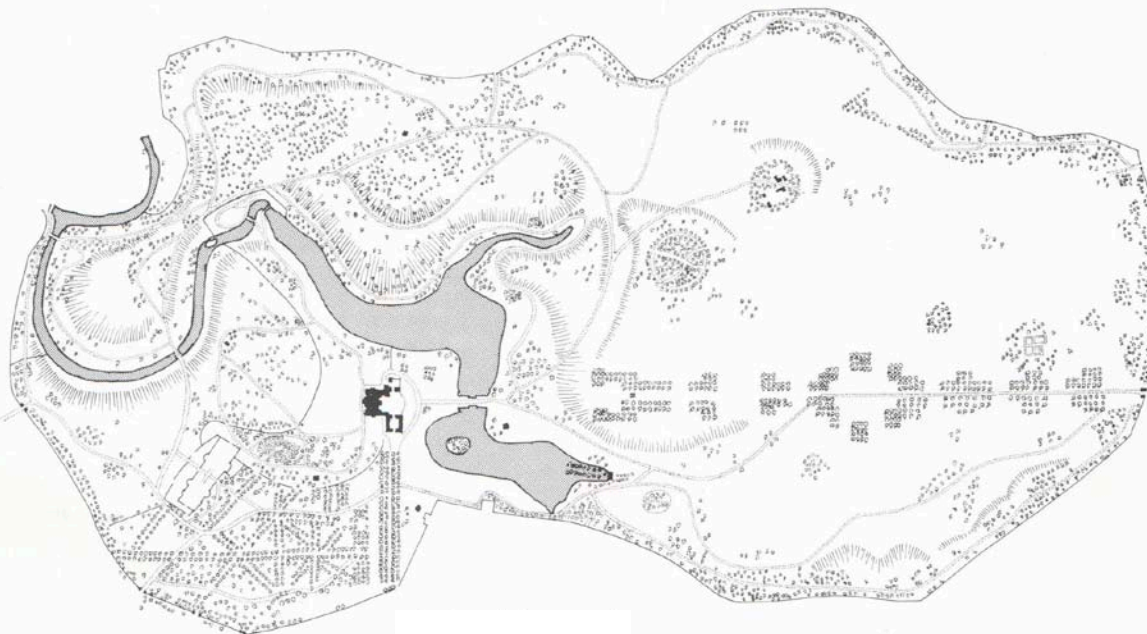
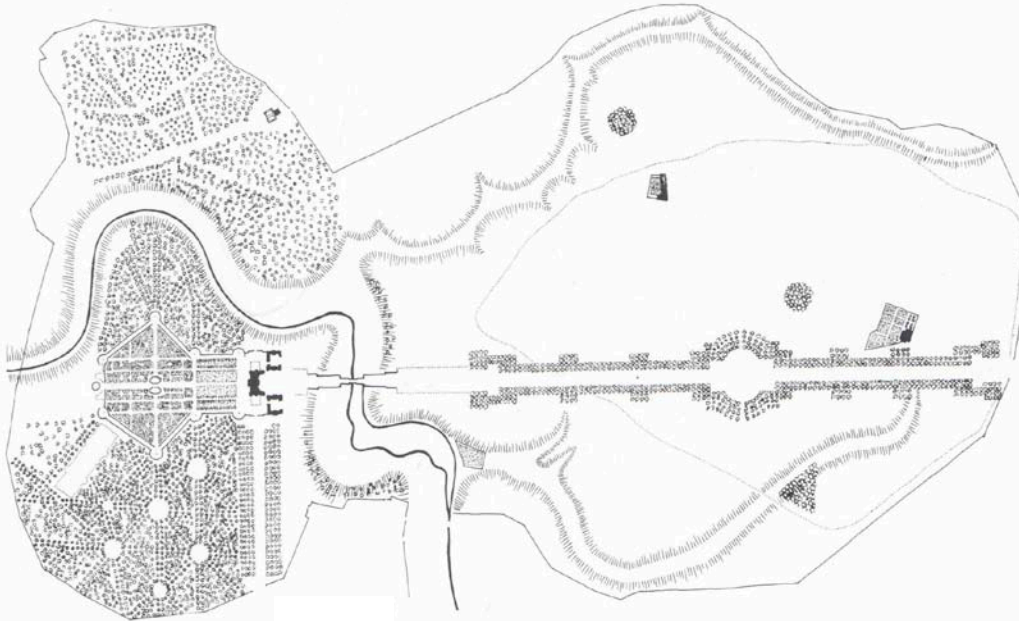


FIG. 179
A GARDEN GRID

Agnes Martin's painting, *On a Clear Day*, rises from the ground of Ile Sainte-Hélène. Each planter in the new garden, a city-scaled potager, is 1.5 metres wide and 11 metres long. While the terrain's previous landscaping created a kind of memorial ground that fixed the island in the summer of 1967, the cycles of planting and harvesting, and tending to the garden boxes, introduce a sense of the passage time to the island, just as the earthworks of the 1960s embraced the changes wrought by time as a means of shaping and altering their form and appearance. The growth of the garden grid will draw citizens to the island on a regular basis, strengthening its connection to the daily life of the city.





SELECTIVE DELETIONS

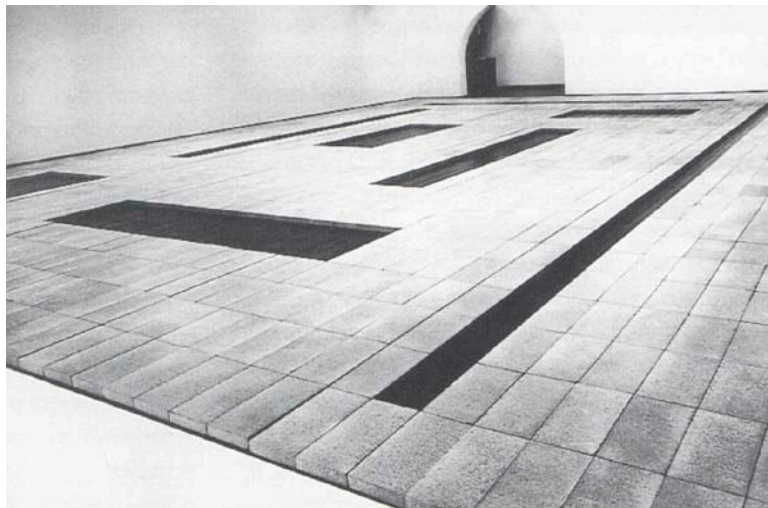
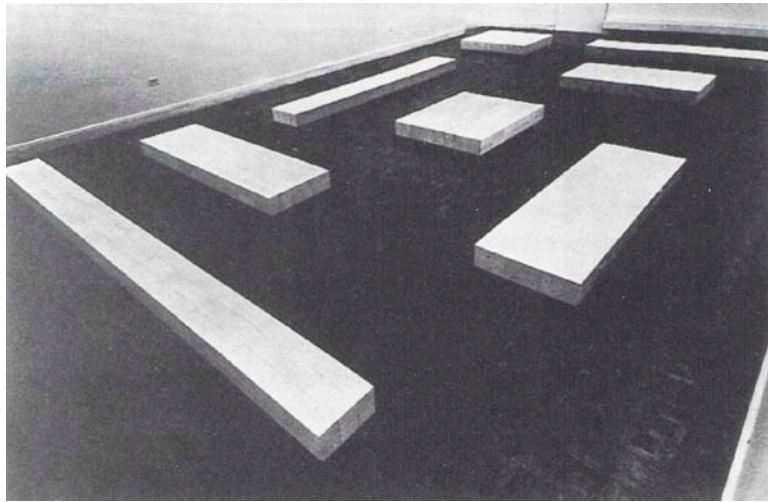
If, at the closest of Linville's scales, the warp and woof of Martin's canvas become the planted garden plots; and at the second scale, the optical play of these figures against their ground generates a new atmosphere across the terrain; at the third scale, just as gridded canvas is read as a single object, the array of plots remains a bound entity within the wider landscape. It is possible to register the composition of the parterre as a discrete element within the extents of the territory itself, within the limits of the island. The selective deletion of the plots attempts to further harmonize the garden grid with this specific ground.

Capability Brown, influential eighteenth century practitioner of pastoral artifice¹, employed the technique of selective deletion in his schemes to "improve" the landscapes surrounding the country houses of his aristocratic patrons. To emphasize the "genuine" beauty of these landscapes, Brown meticulously culled plants and trees – from both the formal gardens near the house and from densely planted groves around the property – in order to create a more "natural" looking landscape.² Just as the original, formal perimeter Ile Sainte-Hélène's Swan Lake has been softened into gracefully inflected curves, which reflect the "sinuous line of beauty"³ Brown sought in his landscapes, the selective deletion of plots similarly softens the formal garden grid, renders it more "natural," weaves it into the wider scene.

While these deletions are consistent with the reversals of river into island and island into lake that characterize this landscape, the inversion of positive and negative ground was often explored by the conceptual artists of the 1960s. "Inversion was a device that in 1967 had gotten a lot of play." In March, Carl Andre exhibited "an installation of unaffixed bricks smoothly covering the floor except for a few narrow rectangular areas. The negative spaces became recessed 'holes' in the brick 'floor.'"⁴ In *Artforum* the following June, Robert Smithson identified Andre's motto to be: "A thing is a hole in a thing it is

FIG. 180 + 181, opposite
Above: The formally planted gardens and approach road of Blenheim Palace in Oxfordshire, England, before the grounds were "improved" by the landscape gardener Capability Brown. Below: Brown altered the formal gardens adjacent to the house and along the approach by selectively deleting certain plantings from both. He aimed to augment what he considered the natural beauty of the existing landscape, and to create the pastoral ideal of the English countryside.

FIG. 182 + 183
Robert Smithson described Carl Andre's motto as: "A thing is a hole in a thing it is not." Andre's explorations of material reduction and the tension between positive and negative spaces are visible in these floor pieces. Above: Carl Andre, *Equivalents I-VIII*, 1966. Sand-lime brick: 5 1/2 x 176 3/4 x 285 in. overall. Below: Carl Andre, *Cuts*, 1967. Concrete block capstone: 2 x 368 x 512 in. overall.



not.”⁵ A year before, Smithson himself made “a maquette for a proto-earthwork, *Tar Pool and Gravel Pit*, which consisted of a square recession in the middle of the top of a larger square box.”⁶

The removal of particular garden plots from the composition also alludes to the sense of disintegration that is an inherent part of Smithson’s work. Never completely protected from deterioration, the continual “erosion and subsidence” of his earthworks underlines Smithson’s awareness of nature’s “inescapable processes of decay.”⁷ In contrast to “the classical idea of making a piece of sculpture... to take a block of marble and then chip away until you find this form or structure in there.” Smithson was “more interested in the chips, the things that are disposed of... [As] they correspond more to our constant state of disintegration, which... is more fundamental than any attempt to build up some kind of object.”⁸

The selective deletions may help disintegrate the formal contents of the garden grid, but from the furthest of Linville’s vantage points, the formal boundaries of the grid itself (the limits of the “canvas”) remain legible in the landscape. Although it repurposes the terrain within it, the composition remains a bound object, set within the greater limits of the place; it does not address the extents of the island itself. Whether, as Krauss explains, this grid is understood to be *centripetal* – that is “complete and internally organized,” fixed and material – or *centrifugal*, “a mere fragment, a tiny piece arbitrarily cropped from an infinitely larger fabric,”⁹ it fails to recognize the limits of its island location. In the first case, it turns inward toward itself; in the second, it logically “extends, in all directions,” ignoring the island’s watery boundaries, and spreading across the Saint Lawrence toward the ever-receding horizon.

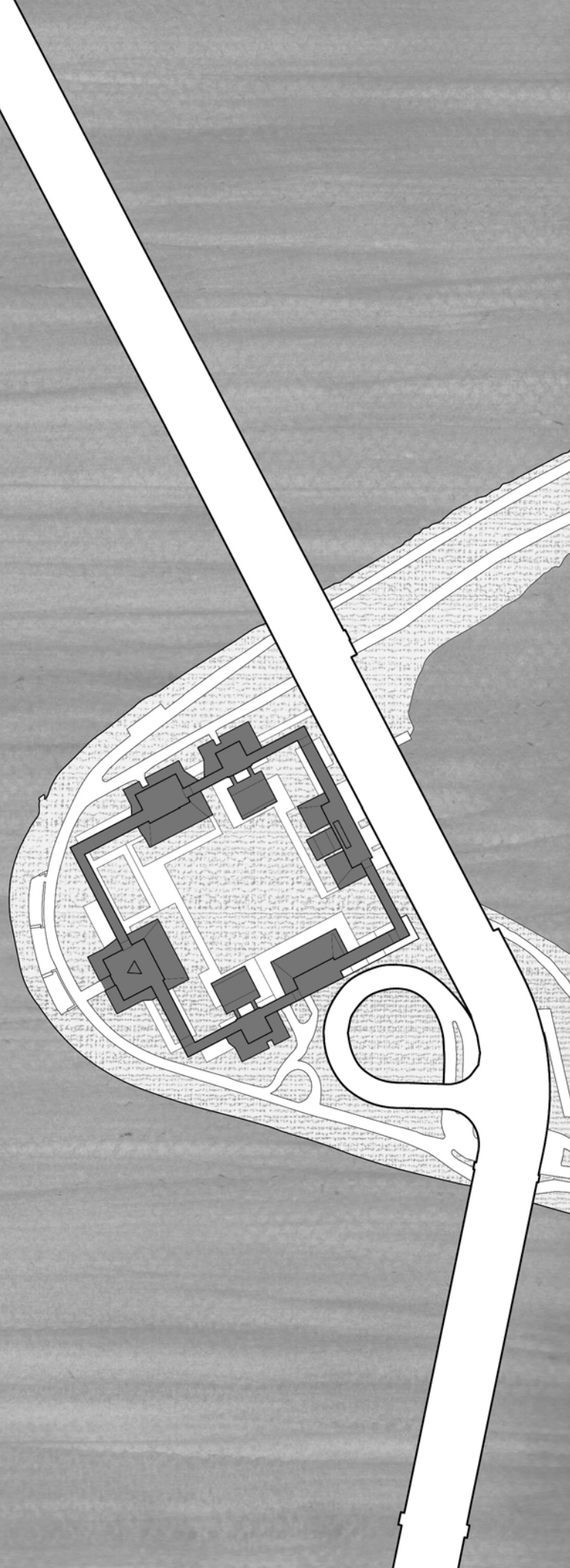
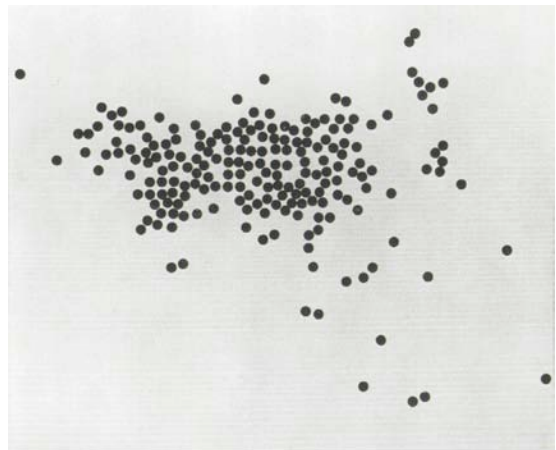
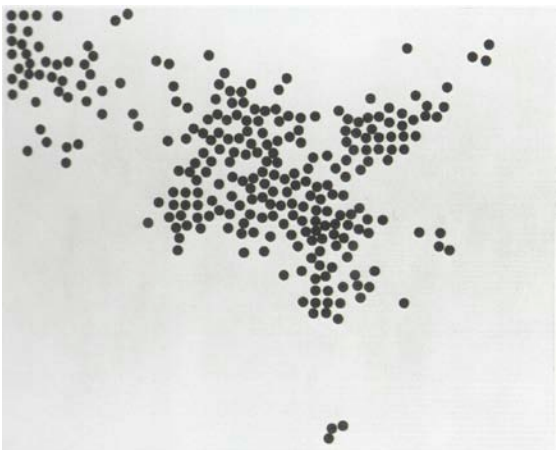
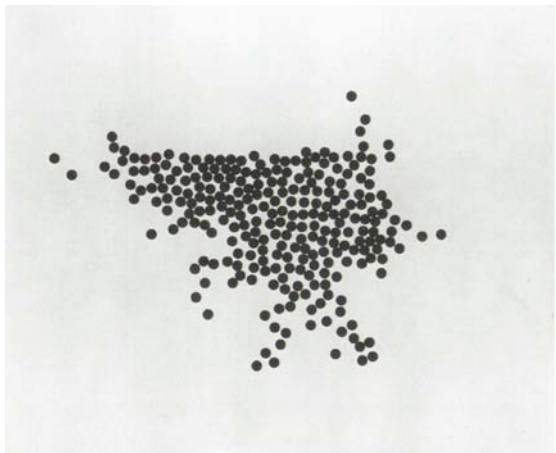
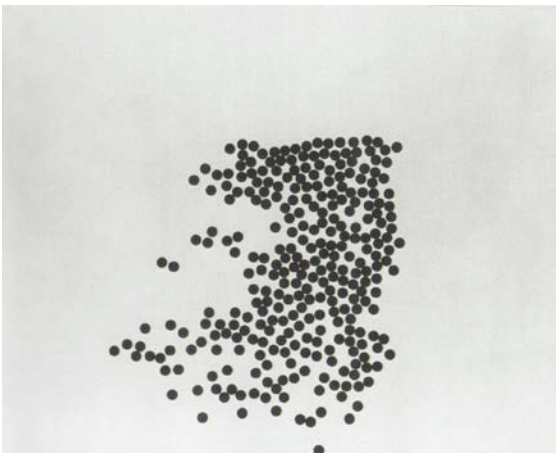
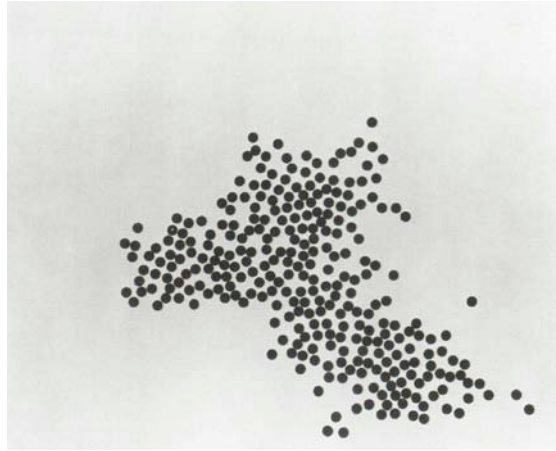
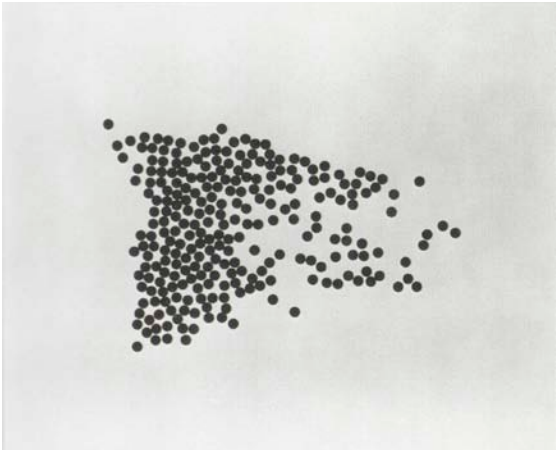


FIG. 184
SELECTIVE DELETIONS

In an attempt to further integrate the new garden with the existing setting, certain plots in the grid are selectively deleted from the composition, in the style of Capability Brown. The limits of the garden remain legible within the wider landscape, however. Like the centripetal grid of the Martin canvas, or the master plan of Expo '67, the garden grid turns inward; it focusses visitors toward the centre of the territory - and fails to encourage them to explore of the extents of the island, and to appreciate its greater setting in the Saint Lawrence River.





SCATTER

Various vestiges of Expo 67 remain on Ile Sainte-Hélène today, some more visible, and some more identifiable, than others. Buckminster Fuller's heroic American dome, stripped of its outer shell and filled with an environmental museum, can be seen from many parts of the island. Conversely, the crumbling Place des Nations, though vast, can hardly be seen from afar - it sits low behind the Pont de la Concorde, which cuts off the plaza, and the southern tip of the island on which it stands, from the rest of the territory. The metro station remains the least altered of the exposition's buildings - the only structure whose original form and function remain unchanged. Next door to the metro, only the roof of the former Korean pavilion remains to serve as an oversized bus shelter. Nestled in a grove of trees just east of the bus stop, a small circular structure, once one of Expo's banking pavilions, still stands, decaying, disused and difficult to find.

It is hard to imagine that this motley collection of remains, which vary so widely in scale, shape and state-of-repair, were ever parts of a legible *whole*, of the vast and relentless architectural safari that was Expo 67. Perhaps the fair's great number of pavilions, in addition to their concentration on the islands, allowed such disparate structures to coalesce into a single place. Or perhaps the Expo visitor's understanding of the singular purpose of the grounds helped create the sense that they were somehow a coherent territory.

On the site today, the scattered remains of these former pavilions and their diverse programmes - together with the few discrete buildings since added to the site (a small snack bar and some restrooms) and the somewhat insipid landscape which surrounds them - contribute to the sense that this is a place anchored firmly in the past. As the function of the remaining pavilions has changed, one by one (from Expo pavilion to museum, casino, administration centre, rental hall, bus stop and ruin, respectively) they've lost the single quality that once unified them, and have become independent structures merely

FIG. 185, opposite
Barry Le Va, *Bearings Rolled (six specific
instants: no particular order)*, 1966-1967.
Ink on paper: six sheets, 13 1/2 x 16 1/2"
each. Sonnabend Gallery New York.

sharing a common ground. While the buildings themselves remain souvenirs of the fair, they underscore the vacant quality of the rest of the terrain and contribute to the site's sense of loss – to feeling that these grounds remain primarily the *former* location of something, a place to be experienced not in the present, but in the memory.

The sense of this place as vestige is made explicit in a recently introduced walking tour of the island, conceived and coordinated by the Biosphere museum. This “unique, interactive walking circuit” guides participants to various locations around Ile Sainte-Hélène using a pre-programmed GPS navigational device, which reveals the historical significance of each location through photographs and videos of how it appeared during Expo 67¹. This way, current visitors to the island need neither engage the landscape as it is today, nor strain to recollect their own memories its heyday; these are now provided free of charge via the miniscule screen of a hand-held device, a window into the collective memory, digitized for the visitor's convenience.



FIG. 186
Robert Morris, *Untitled*, 1966. Painted plywood: 4' x 8' x 8'. Collection: unknown.

An attempt to build on the current state of the site, and to contribute to it in a manner that might increase its chances of being occupied in the present tense, begins with Marcia Tucker's examination of Robert Morris' minimalist sculptures of the mid-sixties.

Tucker equates our experience of time to various sculptural modes. The reductive method, “in which shape is made by *carving away* from a larger block,” she likens to our understanding of our own past, in which “we eliminate all but the essential things we wish to recall” and thus allow those essentials to represent the whole. Conversely, we imagine the future “only by the constructive process of grafting expectations onto the branch that connects present situations with future assumptions.”²

To perceive the present, Tucker suggests, “we must do the impossible – we must stop time.” Robert Morris' minimal pieces

attempt just this because “they are *formed* rather than carved or constructed.” The objects appear to have been made at once; they collapse the beginning and the end of their creation into a single moment. Our perception of time is similarly arrested when we experience these sculptures, as “we must become actively and uniquely engaged with what is immediately before us.” We perceive these simple, indivisible shapes immediately and in their entirety, “according to Gestalt principles, we are aware of a whole form before becoming aware of its parts.”³ As Morris has said of his cubes, “one sees and immediately ‘believes’ that the pattern within one’s mind corresponds to the existential fact of the object.”⁴

Unlike our experience of conventional sculpture, in which our “perception of the work changes as [we move] in relation to it because *the work itself changes*, presenting us with varying internal relationships and shapes from every angle,” Morris’ pieces contain no changing internal relationships because they consist of a single shape. “We perceive only those alterations in the piece and the field of vision in which it is situated that are occasioned by our fluctuating vantage point.”⁵ As viewers, we experience the sculpture in our own variable time and space. We engage the object in an attempt to examine our expectations of it, only to have those expectations confirmed – the sculpture stresses or activates external relationships (with both its surroundings and with its viewers) as opposed to the internal relationships of the piece itself. The pieces encourage viewers to confront our own perceptions of things, “how we are involved with the work, how we react to it and to what extent our involvement lends it meaning.”⁶

As the minimalists began to “question their covertly platonic devotion to perfectly clarified form,” the primacy of the object was challenged by the space of the gallery itself – the site in which “thought, perception and gesture could become alive to one another” and in which “the achievement of that precarious awareness became the salient quality” of the work.⁷ Reflecting on the development of the minimalist practices of the late 1960s,

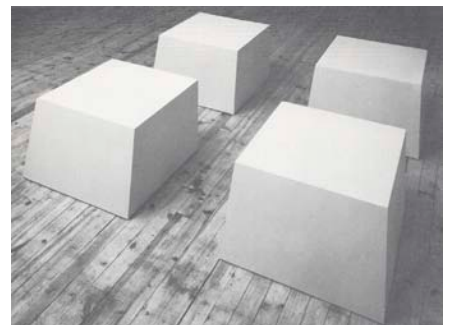
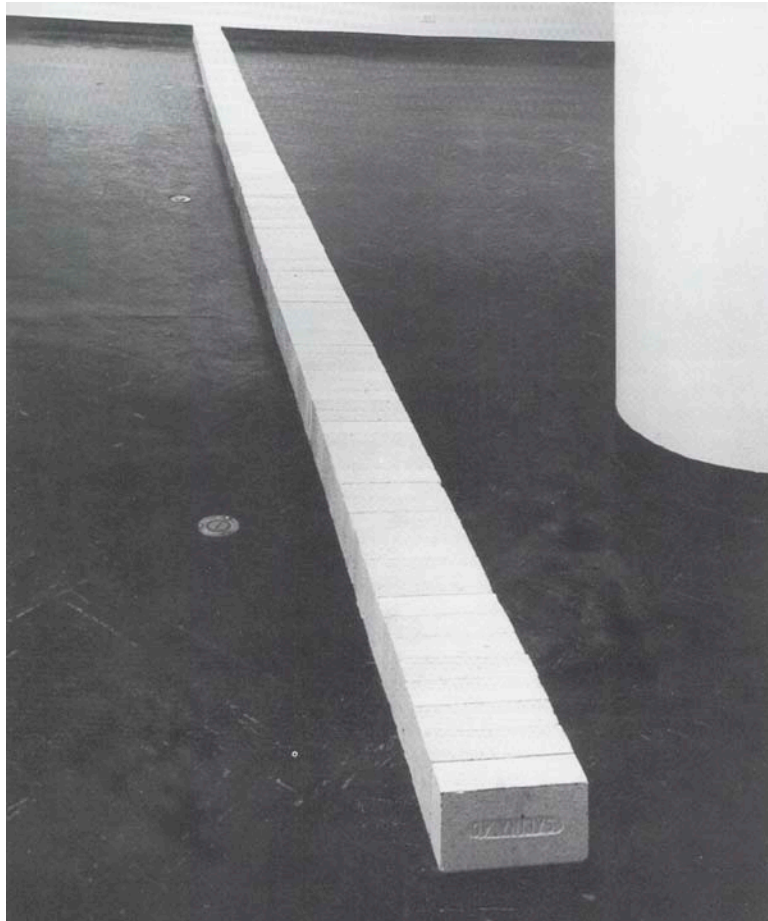


FIG. 187
Robert Morris, *Untitled*, 1966. Fiberglass:
4 parts, each 3' x 3' x 2'h. Collection:
Robert Morris.

Morris himself later proclaimed that “as the dialectical edge of Minimalism grew dull, as it had to in time, and as the radicality of its imagery, contexts, or processes became routine, its options dwindled to a formula: use more space.”⁸ Morris’ fellow minimalist Carl Andre described this sublimation of the focus of the work as “a shift from *sculpture as form* to *sculpture as structure* to *sculpture as place*.”⁹ What art critic David Bourdon called a “history of assiduous renunciation,” Suzaan Boettger perceives as the birth of the conceptual terrain of Earthworks, as “sculpture’s traditional domain” expands from “discrete masses of naturalistic figuration to anti-illusionistic abstractions and then to spatial installations in which the viewer’s movement becomes participatory.”¹⁰ Boettger quotes David Antin’s

FIG. 188

Carl Andre, *Lever*, 1966. One hundred thirty-seven fire bricks: 4 1/2" x 9 1/8" x 34 1/2 feet overall. Installation at Primary Structures exhibition, Jewish Museum, New York, April-June 1966.



definition of a place as “a specific space in which the observer is thrust” and recalls his identification of Morris’ floor bound installations of multiple geometric units as “landscapes.”¹¹

Andre considered each of his floor pieces to create a place, which he defined as “an area within an environment which has been altered in such a way as to make the general environment more conspicuous.”¹² The formal arrangement of these pieces could be altered from installation to installation,¹³ to “operate dialectically with regard to site specificity: like any object, they mark the place in which they are located, but they also initiate an encounter” with the space itself.¹⁴ Often, these pieces challenged the expectation “that a sculpture should be a conclusive form”¹⁵ by suggesting the “formal property of potentially infinite lateral expansion” across the floor of the gallery and (at least symbolically) out into the landscape beyond.¹⁶ For instance, Andre’s *Lever*, “a simple row of firebricks installed along the floor of a gallery, could keep going, if more bricks were added.”¹⁷ Perhaps more significantly, when it was first installed at the Jewish Museum, *Lever* extended through two separate rooms, “so that there was no possible side view of the whole piece.” Instead of being viewed as a fixed, bounded artwork, it operated like a tool on the viewer’s sense of location, “a kind of artisanal technology of place-making.”¹⁸ While the work challenged viewers’ expectations of its own form, it also questioned their assumptions (and influenced their experience) of the spaces it occupied.

Lever’s suggestion of infinite lateral expansion alludes to experiences of “potentially limitless spaces outside the gallery,”¹⁹ such as the sculptor and architect Tony Smith’s nocturnal drive on the then-unfinished New Jersey Turnpike in 1966. While the “road and much of the landscape were artificial... it couldn’t be called a work of art,” he recalls, “[but] it did something for me that art had never done... There was no way you can frame it, you just have to experience it. Most painting looks pretty pictorial after that.” For Smith it was the dawn of “artificial landscape without cultural precedent.”²⁰

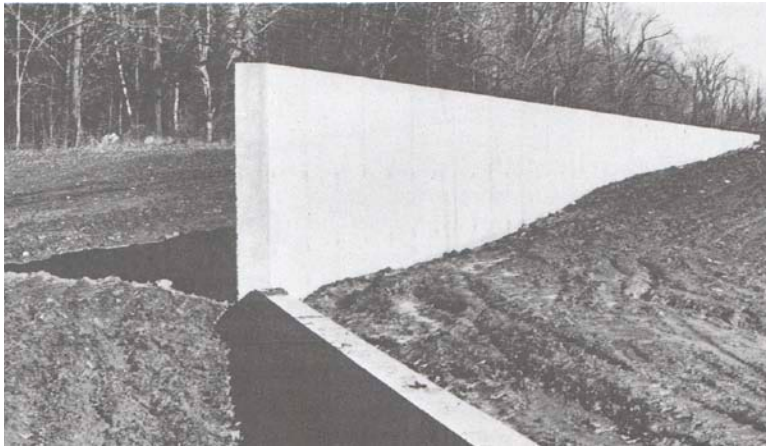


FIG. 189
A detail of two of the six concrete walls
which comprise Richard Serra's *Shift*.

Unlike the fixed destinations of the turnpike, however, the “infinite” or “unspecified” destination of *Lever's* path suggest it could be “a particularly abstruse form of pastoral,” pointing to “another” place, “a place of escape,” accessible “only as a point on an ethical compass.”²¹ The work's allusions to external territories and Andre's “gestures to that other, better place – the displacement central to the pastoral mode,” ultimately tempted him to “escape the gallery in literal terms.” The two works he subsequently created outdoors in Aspen Colorado in 1968, however, were not considered successful. “His future explorations... would be limited to gallery-bound installations. When the place of escape became real rather than figurative, his work fell flat.”²²

Perhaps, as Andre himself suggested, “Aspen needed very little of my art”²³ and the outdoor work was less successful because, once actually located in the places it previously only pointed to, it became redundant. Two years later, in 1970, his fellow artist Richard Serra began an outdoor work in King City, Canada, the intention of which was the inverse of Andre's. Though it could also be considered a tool operating on the place it occupies (and on the viewer's understanding of that place) Serra's *Shift* doesn't allude to another place, but is born of the very terrain it occupies, and is formed by the artist's experience of that terrain.

Created in a farming field “consisting of two hills separated by a dog-leg valley,”²⁴ *Shift* is composed of six concrete walls, the positions and dimensions of which were determined by Serra and his partner Joan Jonas as they walked the field opposite one another, always keeping the other in sight. “The boundaries of the work became the maximum distance two people could occupy and still keep each other in view. The horizon of the work was established by the possibility of maintaining this mutual viewpoint,” explains Serra. “What I wanted was a dialectic between one’s perception of the place in totality



FIG. 190

Richard Serra, *Shift*, 1970-72.

Six concrete sections: each 5 feet high by 8 inches thick; total length of the sections, 815 feet. King City, Ontario.

and one's relation to the field as walked. The result is a way of measuring oneself against the indeterminacy of the land."²⁵ Rosalind Krauss perceives *Shift* to be a logical development of the minimalist works of the 1960s, such as those of Robert Morris, in which "abstract geometries are constantly submitted to the definition of a sited vision."²⁶ In Serra's case, the work no longer tests the viewer's understanding of an object, but becomes an instrument through which viewers might test their own perceptions of the landscape, and their relationship to it.

While Serra used concrete to embody his process of tracing the landscape in King City, in the late 1960s, the specific qualities of various materials were often themselves explored to determine the form of the work they generated. Andre allowed the salient traits of his materials to dictate "rules for combining them in the simplest way."²⁷ Fire bricks he aligned in long rows (as in *Lever*); square metal plates he laid down in neat grids²⁸ (which at times he called "plains"²⁹); and when the individual units were too small to arrange easily, he might simply drop a batch of them on the floor.³⁰ He did this for the first time in 1966 when he dumped eight hundred plastic chips (tiny minimalist "cubes") from a canvas bag, to produce a "radically non composed sculpture" entitled *Spill*.³¹ Such works were subsequently referred to as "scatter pieces." Soon thereafter, Serra expanded his well known 'verb list' (which dates from 1967 to 1968): "to roll, to crease, to fold, to store" to include "to scatter" in its string of infinitives meant to counter traditional notions of sculptural composition.³²

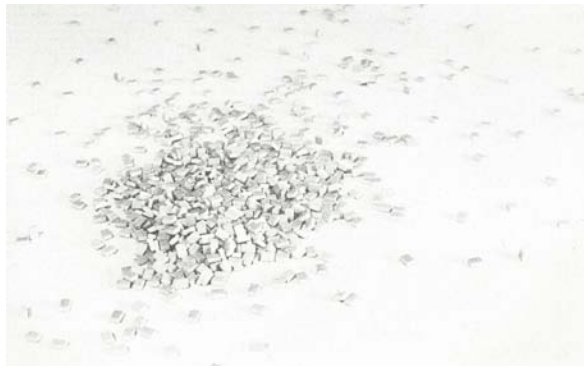


FIG. 191 + 192
Above: Carl Andre, *64 Steel Square*, 1967.
Hot-rolled steel: sixty-four 8" x 8" square
units; 3/8" x 64" x 64" overall. Right: Carl
Andre, *Spill (Scatter Piece)*, 1966. Plastic
chips, canvas bag: dimensions variable.
Collection: John Powers.

A PROPOSED SCATTER PIECE

In the spirit of both Andre's *Spill* and Serra's *Shift*, a scatter piece at the scale of the landscape is deployed across the terrain of the southern tip of Ile Sainte-Hélène. Just as Andre's floor pieces challenge the viewer's assumptions of the places they occupy, Ile Sainte-Hélène's scatter piece acts as a tool through which to explore and discover the landscape of the island. Just as the scatter pieces draw the floor of the gallery into the extents of the artwork, the island's scatter piece draws the territory of the island itself into its composition. Whereas the gestalt of a single pavilion added to the island could be read as an element distinct from the wider territory, the scattered pavilions draw the territory itself into their arrangement, charge the landscape that stretches around them, and encourage the visitor to consider the present terrain of the island as a whole. These 'pieces' challenge not the viewer's understanding of the gestalt of the object, but of the place. As in the gallery, the anti-compositional scatter piece "dislodges the viewer spatially... returning him or her to the real,"¹ that is, to the present place and time of the island. And, like Serra's human-scaled *Shift*, the piece encourages visitors to test their pre-conceptions of the place against their physical experience of it, as they explore the relationships among the scattered pavilions and the landscapes they occupy.

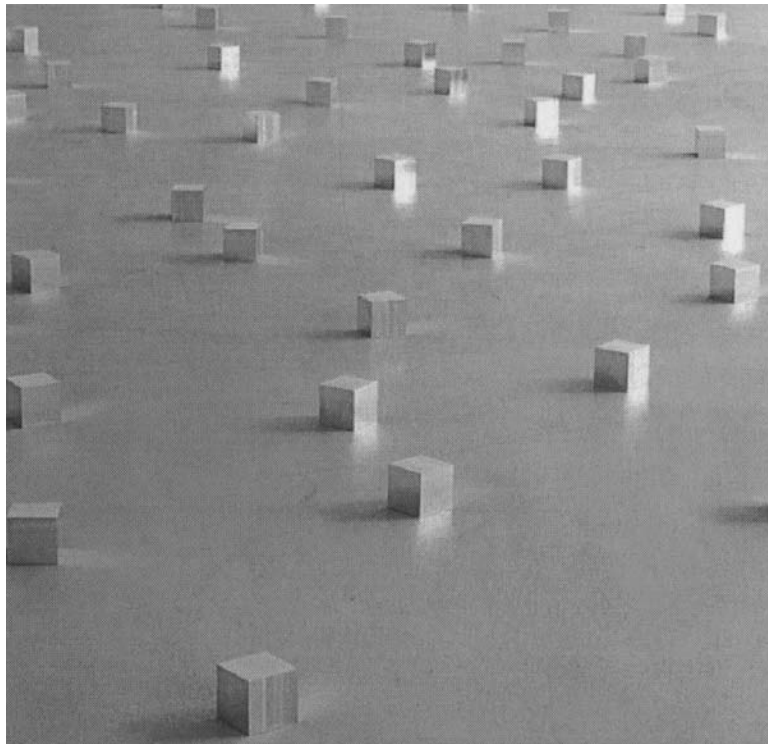
If, as Laurie Spurling suggests in *Phenomenology and the Social World*, art seeks to overcome the preconceptions which ordinarily underpin our perceptions, "by making the return to the pre-objective world the actual project of art,"² the island's scatter piece attempts to dislodge the visitor's pretense that the territory is primarily the *former* site of something.

The island's scatter piece, like Serra's *Shift*, places an "emphasis on the specifics of the place" such that, as the viewer "moves through" the work, "shifting and surprisingly dynamic relationships are set up between the pieces... and the spaces and the gradients of the [landscapes] they occupy."³

Rosalind Krauss believes this “embodied experience,” created by the “network of perspectives that establish an ‘internal horizon’ for the work, which in turn constantly define one’s vision of the object in terms of one’s relation to it,” results from the minimalist generation’s absorption of Maurice Merleau-Ponty’s *Phenomenology of Perception*.⁴

First translated into English in 1962, Merleau-Ponty’s work explores “phenomenology’s recharacterization of perception as a function of intentionality; as the simultaneous cause and result of the viewer’s *prise sur le monde*.”⁵ It suggests that “once the experience of spatiality is related to our implantation in the world, there will always be a primary spatiality for each modality of this implantation” (*night*, for example, creates a world without “clear and articulate objects,” in which our perceptual being “evolves a spatiality without things”⁶). One could consider that, on Ile Sainte-Hélène, visitors operate in a kind of memory-mode, in which their perceptions of the territory both cause and result

FIG. 193
Carl Andre, *Alcloud*, 2001. 144 Aluminum
cubes: each 10 x 10 x 10 cm; random
array on floor: variable. Galerie Tschudi
Inventory.



from their understanding of the *previous* life of the place. The scatter piece attempts to re-wire this modality by generating a situation through which new perceptions of the place may be embodied by viewers, and not merely remembered by them.

If, as Merleau-Ponty suggests, we can “see an object in so far as objects form a system or a world, and in so far as each one treats the others round it as spectators of its hidden aspects, which guarantee the permanence of those aspects by their presence,”⁷ the system through which we currently perceive the remains of Expo is a former system, a system *remembered*. The introduction of the scatter piece attempts to draw those vestigial elements of a former system (the exposition) into a reading of the present state of the place. Without resorting to a *tabula rasa* (the eradication of those remaining pieces that trigger the memory of the place), nor to the simple introduction of autonomous structures, the “internal horizons” of the newly added scattered pavilions (that is, the “network of views from everywhere within which [they] are caught”⁸) incorporate the internal horizons of the island’s existing structures into a new system – one which attempts to uncover the pre-objective ground of the site, and one whose perceptible limits are indistinguishable from the site as a whole.

On this ground, which has remained moored in the summer of 1967, the scatter piece introduces a set of structures through which visitors might engage the current state of the territory. As viewers move across the site, they will perceive the changing relationships among the pavilions, as these form and re-form relative to the viewers’ own changing positions. The immediacy of this forming will afford visitors a “sense of a continued present tense” as it marks their own time on the island, “and it is that which lies behind the aesthetic object, as its subject.”⁹

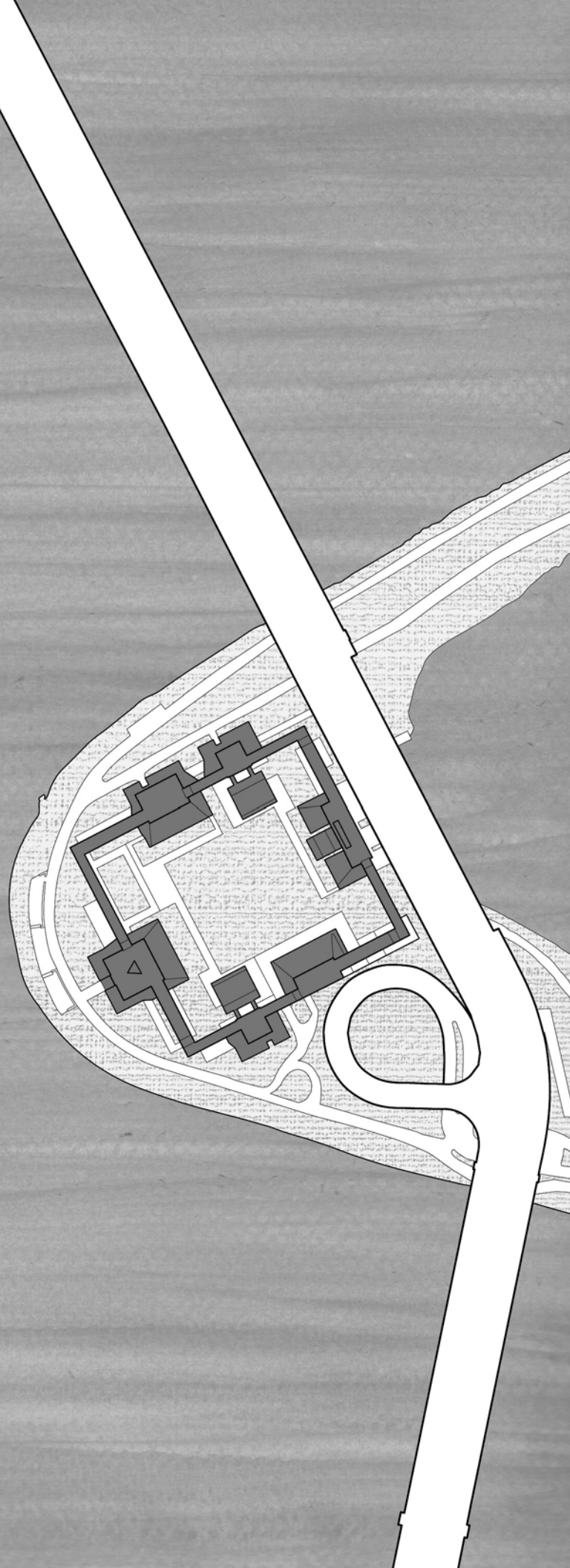


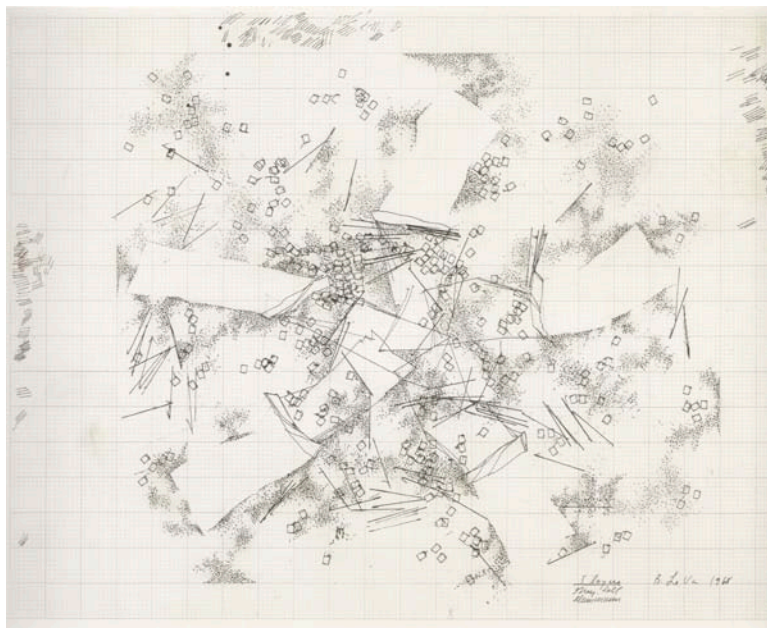
FIG. 194
A SCATTER PIECE

A set of greenhouses is scattered across the terrain of Ile Sainte-Hélène. Unlike the centripetal garden grid, which pulls visitors into the centre of the landscape, the centrifugal motion of the scatter-piece casts its elements toward the borders of both the island and its many features.

While the greenhouses in the scatter-piece engage the boundaries of the lake, the stream and the garden-grid, they also draw visitors to the shore of the Le Moyne Channel, with its views of Ile Notre-Dame, and to the banks of Saint Lawrence River, across which rises the skyline of the city.



FIG. 195 + 196
 Right: Barry Le Va, *Five Layers, Grey Felt, Aluminum*, 1968. Ink on paper: 17 1/2" x 22". Collection: Patricia and Morris Orden. Below: Barry Le Va, *By Four/Equal Quantities (within four equal spaces): arranged; rearranged. Borrowed: exchanged*, 1967. Installation at Daniel Weinberg Gallery, San Francisco, 1977.



DISTRIBUTIONS AND DEBRIS

While Carl Andre's work attempted, in part, to dismantle the minimalist object in the service of the "place" it created, Carter Ratcliff suggests that his gridded metal "plains" and spilled "scatter pieces" remained "the focus of whatever spaces they occup[ied]." While the works might have been "fitted with precision to the idiosyncrasies of their settings," they nevertheless "[proclaimed] their rigidity."¹

The primacy of the minimalist object was perhaps more effectively challenged in the work of Barry Le Va, who received his M.F.A. from the Otis Art Institute in Los Angeles in 1967.² Le Va admired the minimalists' attempts to take "the expressionism out of art" and to produce art that "as you looked at it, figured it out, the work itself dissolved into thought... That was an exciting process, yet the object remained. The objecthood of the object [was] reinforced."³

Le Va sought a "passage to thought that didn't begin with an adamantly object-like object of the minimalist kind."⁴ His frustrations with "the contained mass of sculpture" and "the bounded surface containment of painting" led him to develop an art practice without "end products."⁵ This desire to "undermine the obstinate authority of the object" and "its traditional preciousness"⁶ in favour of "real time, real space [and] real locations" resulted in works that "transpose drawings into three dimensions without producing sculpture."⁷

"One day," Le Va remembers, "after I'd been constructing a piece for about three hours, I suddenly became aware of all the debris on the floor, bits of canvas and other stuff, and this residue seemed much more interesting and significant than what I was making. It had exactly what I was after. Not so much indications of a specific process... as of marking off stages in time."⁸ As the "absence of specific form" in "the stuff lying around in the making" became "more important than the object itself,"⁹ Le Va used the scraps themselves as the materials of his works: "lengths of wood and aluminum tubing, felt cut to minuscule shreds" and "ground chalk."¹⁰

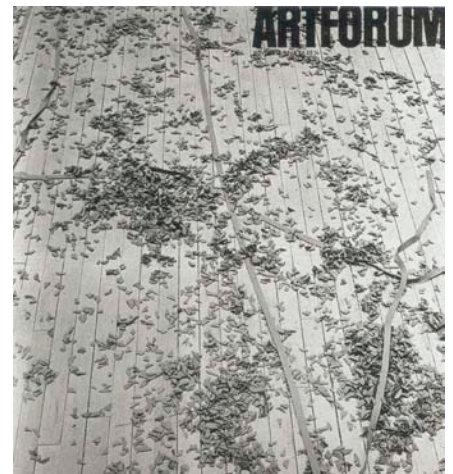


FIG. 197
Cover, *Artforum* 7, no.3 (November 1968),
Barry Le Va, *Distribution Piece, Particles
and Strips* (detail), 1968. Photo: Elaine
Mayes.

it. The point, it seems, was not to accurately reconstruct the work, but to spend the time trying, and to engage the field that resulted. “The scale of the work is generous: the whole room,” declares Rhea Anastas of Le Va’s *Centerpoints and Lengths*, “precisely how it is employed cannot immediately be seen.”¹⁷ For Le Va, discovering the work was discovering the room.

Le Va’s attempts to shift the meaning in his work away from the objects he used (and the image of those objects) and toward the viewer’s attempts to reconstruct his scenes was partly a function of his desire to reduce what he called “eye intimacy,” which he described as the “virtual stroking of the retina by the precious art object.”¹⁸ This quality of Le Va’s work prompted his instructors to send photographs of his pieces to art historian Barbara Rose in New York. Rose had recently written an essay, which appeared in the April 1967 issue of *Artforum*, in which she proposed a new category of work she called “didactic art.”¹⁹ Such work, she wrote, was designed to have “no esthetic content,” beyond perhaps the “equivalent aesthetic pleasure of solving, say, a math problem,”²⁰ and was exemplified by the work of Marcel Duchamp. In his desire to avoid what he called the “retinal,” a “negative term he coined to describe art that appealed only to the eye,”²¹ Duchamp introduced a type of art he named the readymade (“a sculpture already made”) which typically consisted of a common, manufactured item that was deemed to be art simply because the artist identified it as such.²² *Bottle Rack*, *In advance of the Broken Arm* (a shovel), and his infamous *Fountain* (a urinal laid horizontally) count among Duchamp’s readymades. Barbara Rose identified Le Va’s similar rejection of the “retinal” in his “casual antiformal arrangements”²³ created of scraps and remnants, which reacted “against conceptually predetermined composition.”²⁴

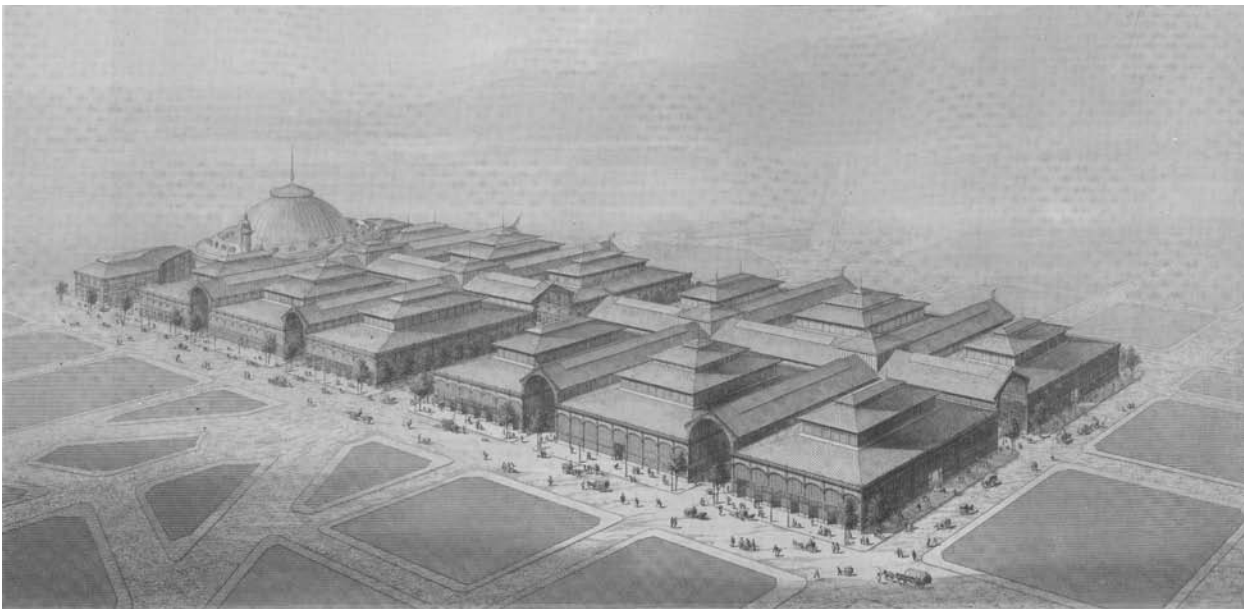
FIG. 199 + 200

Above: Barry Le Va, *Untitled*, 1966 from the exhibition “Circa 1968” at the Fundacao de Serralves, Porto, Portugal, June 6 - August 29, 1999. Below: Barry Le Va, *Recovered (Catalogued in background)*, 1997 from his solo exhibition “Recovered. Catalogued. Confined” at Danese, New York, April 25 - May 24, 1997.



FIG. 201 + 202

Right: An artist's rendering of the interior of the auctions pavilion of Les Halles, Paris' former central food market, which was built in 1853 and demolished in 1971. The perspective is distorted by the size of the people, who are drawn too large (relative to the building, the couple in the foreground is 2.4 metres tall). Below: A bird's eye perspective of Victor Baltard's complete project for Les Halles, showing twelve pavilions in two clusters. The last two pavilions are shown curved around the drum of the preexisting Halle au ble, which survived the destruction of the market buildings. Today it houses the Parisian Stock Exchange.



LES HALLES: A FICTIONAL CONCLUSION

In the mid 1960s, just as Mayor Drapeau was scheming to dismantle the Eiffel Tower and re-erect it on the site of Expo 67, the city of Paris passed a motion to dismantle another of its famous landmarks, the “scraps” of which might have been reconstructed on the Expo grounds after the fair. The market buildings of Les Halles, from which Parisians had acquired their fresh produce for more than a century, were slated for demolition, and would have been ideal readymade pavilions for the scatter piece on Montreal’s Ile Sainte-Hélène.

The legend, as it is written in the memoirs of Georges-Eugène Haussmann, is that the Baron himself, recently appointed Prefect of the Seine by Napoléon III, encouraged the architect Victor Baltard to sketch a proposal for Paris’ new central market buildings¹ composed entirely of cast iron and glass. He based this advice on the emperor’s own drawing of the new buildings, which depicted vast umbrellas of cast iron: “Du fer, du fer, rien que du fer!”² Skeptical that such a material, an “industrial metal” more commonly used to cover railway stations, was an appropriate choice for the market buildings, Baltard nonetheless created three schemes, each of which utilized varying amounts of both cast iron and stone. The emperor selected the scheme composed almost entirely of cast iron, and the first of Baltard’s pavilions began construction in 1854.³

Baltard’s site plan consisted of two pavilion types: a large square and a smaller rectangle (both designed on a six metre column grid) that were combined in two large blocks of six pavilions each. Vast covered streets ran between the pavilions in each block. The first six cast-iron pavilions were completed between 1857 and 1858⁴ and the next four between 1860 and 1874.⁵ (The last two pavilions, which were built later, but in the style of the Baltard pavilions, had to be curved around the drum of the adjacent Halle au Blé. They were begun in 1935 but not finished until 1948.⁶)



FIG. 203

The interior of the fish market pavilion. Each of the pavilions was devoted to, and designed specifically for the sale of, a particular food product. Beef, porc, chicken, fish and seafood, eggs and butter, and fresh fruits and vegetables were all sold in distinct areas.

FIG. 204
An aerial photograph of the Les Halles quarter in which the clarity of the completed market pavilions stands in sharp contrast to the surrounding fabric of the city. The church of Saint-Eustache is visible to the north and the drum of the Halle au ble to the west.



The design of the pavilions was admired even before they were completed.⁷ Shallow cast iron arches, holding large screens of frosted glass louvers, rose from brick walls at ground level (which prevented strong breezes from flowing through the buildings). The sloped roofs of the pavilions then rose up toward a central ring of columns, above which sat a tier of arched, frosted glass windows. The roof above this second tier of windows was capped with a single glass lantern in the small pavilions, and two tiers of lanterns in the large pavilions. Air and (diffused) light entered through the vast upper screens of the pavilions, while the solid zinc roof blocked sunlight from falling directly on the exposed food of the market stalls.⁸

Upon completion of the pavilions, Haussmann boasted that Baltard's use of cast iron, which "at first so revolted his artistic instincts," proved that in the hands of a skilled designer, even such a humble, industrial material could produce a great building. The Baron praised the pavilions' use of simple, repeated elements, which were combined to great effect into a "monumental ensemble."⁹ Viollet-le-Duc, who despised the "warehouses" that so often resulted from cast iron construction¹⁰, wryly acknowledged of Les Halles that "if all our monuments were raised with such respect for the needs and

habits of our population, and if they celebrated so resolutely the means of their construction, they would boast a character appropriate to our times, and moreover they would create art forms both beautiful and legible. Here, the requirements of the programme and the potential of the material have created a very beautiful building. Perhaps art was not sought here, specifically. It makes one wish that it not be sought at all, today; that might be the shortest route toward such masterpieces, such expressions of our civilisation.”¹¹

Emile Zola was struck by the juxtaposition of these new cast-iron temples standing in front of the massive stone church of Saint-Eustache. “This will kill that,” he said. “Iron will kill stone and the time is nigh. Les Halles is a manifesto; it’s modern art growing up before the ancient art. It is a bold work, and but a glimpse of the 20th century.”¹² In his book, *The Belly of Paris*, Zola immortalized the richness of the daily life and community in the “palace of the people”¹³ that was Les Halles. Of one foggy day, he writes, “the shadows, dozing in the hollows of the roof, multiplied the forest of pillars, infinitely expanded the delicate veins, the cut-out shapes overhead, the translucent louvers; and from obscure depths it rose above the city, this mass of



FIG. 205
The interior of one of the large pavilions,
which had two levels of clerestory
lighting.

vegetation, all in flower, this massive metal blossoming, amidst which the stems shot up like rockets, their branches writhing and knotting, and covering the world in the delicate foliage of an ancient grove.”¹⁴

Zola’s florid description of the sylvan-moderne effects of Les Halles were perhaps influenced by the bustling activity on the ground; the swarming crowds, clamoring for their daily rations. If the market was teeming in Zola’s day, by 1939 it had become the largest food center in the world, serving 10% of the French population and the entire Parisian wholesale trade. By 1950, one-fifth of all French food supplies passed through Les

FIG. 206
A detail of the lower arches and the
louvred screens of the pavilions’
clerestory. The streetlamps are not
original to Baltard’s design.





FIG. 207

A photograph demonstrating the liveliness of the neighbourhood. This is the Marche des Innocents, named after the fountain at its centre, which is adjacent to the pavilions of Les Halles.

Halles. The district had become impossibly congested, in dire need of an organized communications system. To unblock the neighbourhood, the Council of Paris voted in 1965 to transfer the vegetable market to Rungis and the meat market to La Villette. Shortly thereafter, when the RER, a new underground suburban rail network, was planned to pass through the site, Les Halles were condemned.¹⁵

The last of the merchants abandoned the market in 1968.¹⁶ As the pavilions awaited demolition they were appropriated for many uses, and adapted themselves “with ease” to such diverse activities as commercial exhibitions, salons of sculpture and painting, antiques fairs, seasonal festivals, skating rinks and “performances of all kinds.”¹⁷ When challenged by a growing faction of citizens who wished to conserve all, or at least a portion of the pavilions, the director of the Atelier Parisien d’Urbanisme (a municipal body responsible for the development of the area) declared that “like most important works of architecture,” the great quality of the buildings lay in their “rigorous adaptation to their specific function.” With the market gone, the renovations necessary to adapt the pavilions would “compromise precisely that which we desire to preserve.”¹⁸ Destruction, it seems, was the most respectful option.

FIG. 208
 An aerial photograph of Paris captures the demolition of the market pavilions, a process which began in August 1971. Over the next decade, the site remained little more than a hole in the ground, which Parisians aptly named “le Trou des Halles”. In 1974, Valery Giscard D’Estaing, president of the Republic, held a competition for the design of the site, which was won by the Catalan architect Ricardo Bofill. In 1978, Paris’ new mayor Jacques Chirac halted work on the Bofill scheme, and declared himself chief architect of the project. A year later, Chirac’s designs for the new Forum des Halles were approved by the Council of Paris. The project was completed in 1986.



A campaign was mounted to save the buildings.¹⁹ A petition containing thirty-thousand signatures was presented to the city. Together, five community associations funded the creation of a scale model to show how neighbourhood might look if six of the pavilions were preserved.²⁰ The nine jury members (Jean Prouvé, Oscar Niemeyer and Philip Johnson among them) of the competition for Georges Pompidou’s new cultural centre,

which would shortly be built in the neighbourhood next to Les Halles, wrote a letter to the President imploring him to save at least a portion of the pavilions.²¹ Even Mies van der Rohe supported “the principle of conservation of the pavilions of Les Halles,” as they symbolized “the golden age of French construction techniques.”²² Pompidou would not be dissuaded.

Orrin Hein, an American financier, approached the President on behalf of an international consortium of bankers and industrialists who wished to save Les Halles. Hein offered to purchase the pavilions and to reconstruct them elsewhere in France, or in America, where they were considered a “unique example of the architecture which so inspired that of the United-States.”²³ Pompidou dismissed him, and the prefect of Paris declared that there was no longer a sufficient amount of time to properly dismantle the pavilions, given the schedule of works already slated for the site.²⁴ Architect and engineer Bertrand Lemoine suggests that the administration refused to capitulate to the American because it was embarrassed by his candid defense of a position that the French themselves ought to have taken.²⁵

On August 2, 1971, while France was at the beach, the demolition of Les Halles began.²⁶ The east block was destroyed



FIG. 209

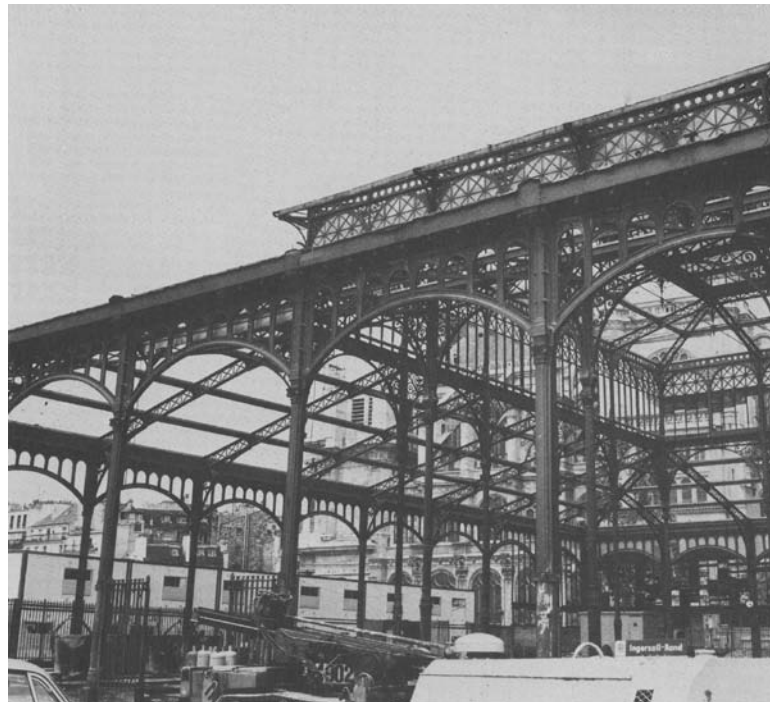
One of the short towers, which rose from the intersections of the covered passageways that connected the pavilions, is still visible to the left of this scene of the demolition of Les Halles.

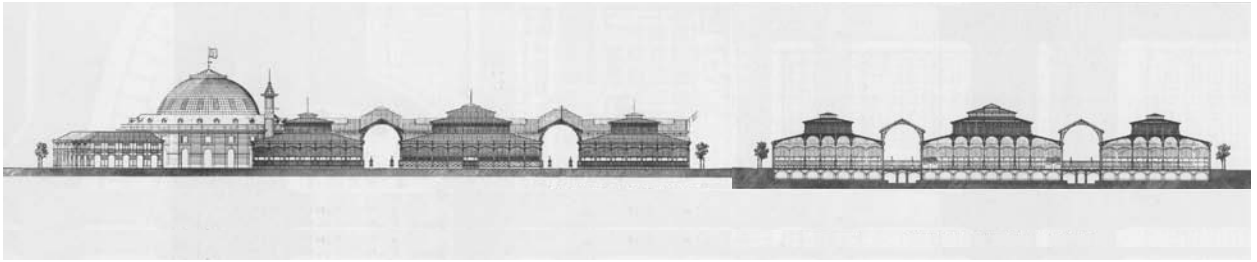
first, to make way for the massive open trench required to build the labyrinthine commuter train/metro station interchange and its vast, attendant, underground shopping complex. By the winter of 1973, all but one of the pavilions were gone. Despite the administration's assertions that they would be impossible to dismantle, pavilion no.8 was carefully deconstructed and rebuilt in Nogent-sur-Marne, on the border of the Bois de Vincennes. New blue mosaic panels replaced its old brick screens at ground level, its facades were sealed with large sheets of glass, a heating system was installed and the thermal isolation of the roof improved. A mezzanine was also added, along with an organ and a demountable stage set. The pavilion is now host to expositions, salons, concerts and other special events. Asked if they had great difficulty with the reconstruction of the pavilion, the architects responded: "none."²⁷

Lemoine remembers the market buildings as they once were, in the centre of Paris: "One first notices the lightness, the transparency of the pavilions. They do not come innocently by

FIG. 210

Despite the assertions of the city's administration that, given the schedule of works slated for the site, there wasn't sufficient time to carefully deconstruct Les Halles in a manner that would allow them to be re-erected elsewhere, pavilion no. 8 was carefully dismantled and later re-built in Nogent-sur-Marne, on the outskirts of the Bois de Vincennes.





the term ‘umbrella,’ which suits them so well. It evokes three orders of ideas: the almost portable, collapsible, in short, ephemeral nature of the protection they provide; the thinness of the protective surface, a simple wall held by a fine armature; the dematerialization of the boundaries of the protected volume. Both ephemeral and monumental, Les Halles seems at once a temporary shelter and a lasting work; a light structure, dematerialized to the extreme, and a monument.”²⁸ For many years after their removal, the great hole they left in the centre of the city “held the promise of unprecedented opportunities, utopias equal to its size and situation. Some dreamed of a great lake, a return to origins. Others, of gardens: the myth of hygienic nature regenerating the city. Water. Earth. Is it a coincidence that this is how we wished to fill the void left by an architecture that was primarily the domain of air?”²⁹

If, after 1968, the pavilions could no longer remain in Paris, they might have found a new home on Ile Sainte-Hélène, in a bucolic setting to complement their elemental and ethereal nature. Of the ephemeral qualities of the floor pieces of the late sixties, Dan Graham wrote that the “constituents are literally transported from view when the exhibition is terminated, the parts having been recovered and perhaps put to an entirely non related use, as part of a different whole, in a different future.”³⁰ In such a future, and in the spirit of Le Va’s works, such as “arranged, de arranged, borrowed, exchanged (1967),”³¹ the pavilions of Les Halles are inserted into the scatter-piece on the former Expo grounds, carefully de arranged in response to their new site. Adapted into greenhouses, they continue to produce food for their adoptive city, as they fulfill Drapeau’s dreams of having a piece of France on his islands in the Saint Lawrence River.

FIG. 211

Above, left: The elevation of one cluster of Les Halles’ pavilions. Above, right: A section through three of the pavilions, showing their extensive underground cellars.

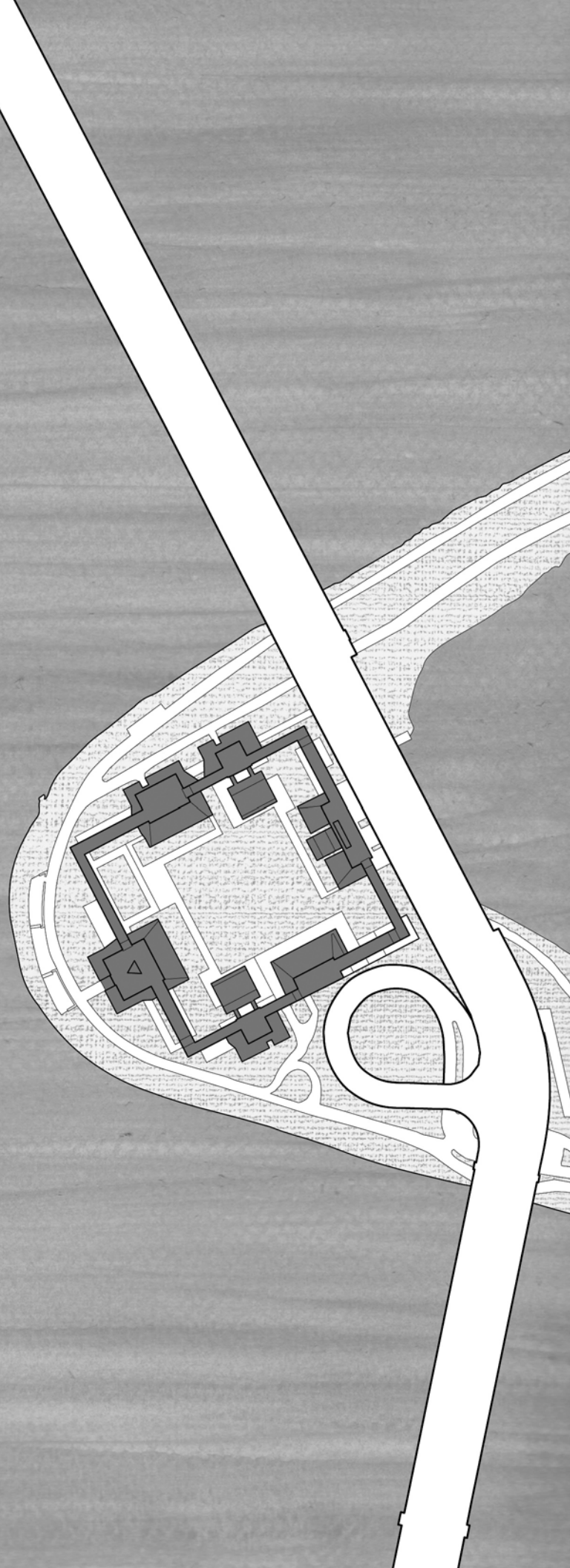


FIG. 212

The pavilions of Les Halles are converted into greenhouses and inserted into the scatter piece on Ile Sainte-Hélène. The greenhouses will allow the island to produce food year-round, and the underground passages that connect them to the existing metro station will encourage citizens to visit during the winter months, when these warm, sunlit spaces, and the fresh produce they contain, will provide respite from the frozen city.



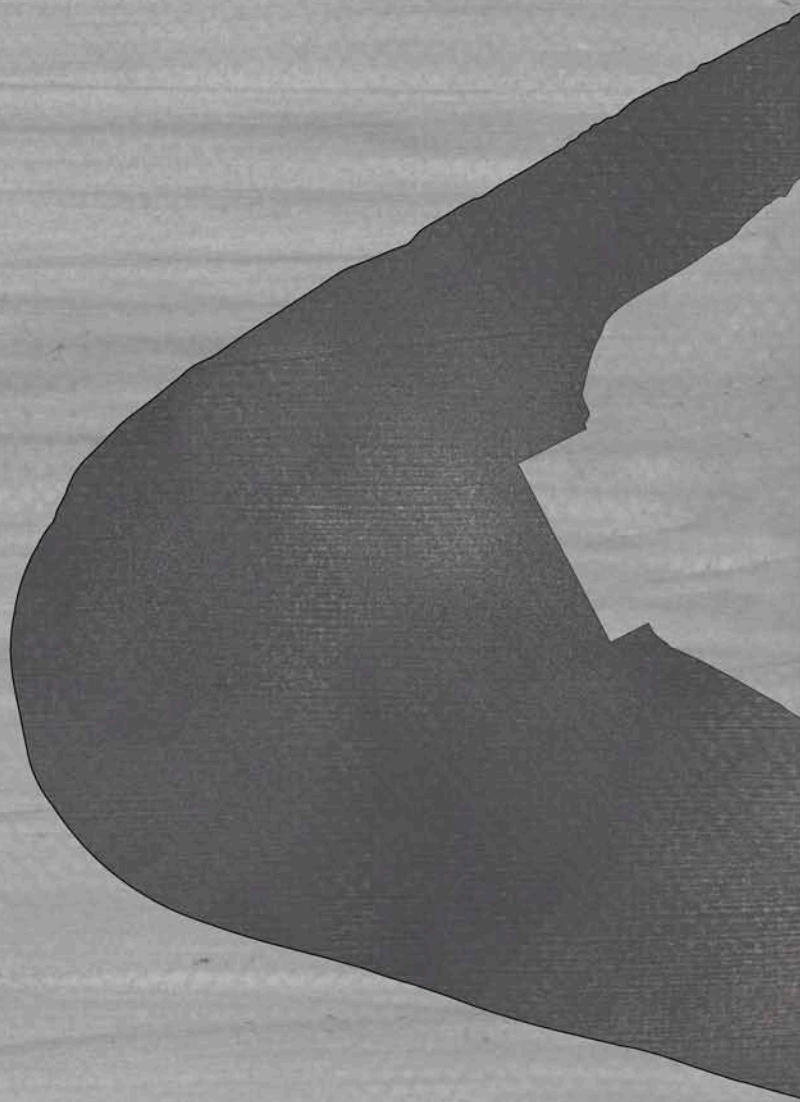


FIG. 213

The proposed network of subterranean passageways that connect the pavilions' respective underground levels to the platform level of the Jean Drapeau metro station on Ile Sainte-Hélène.

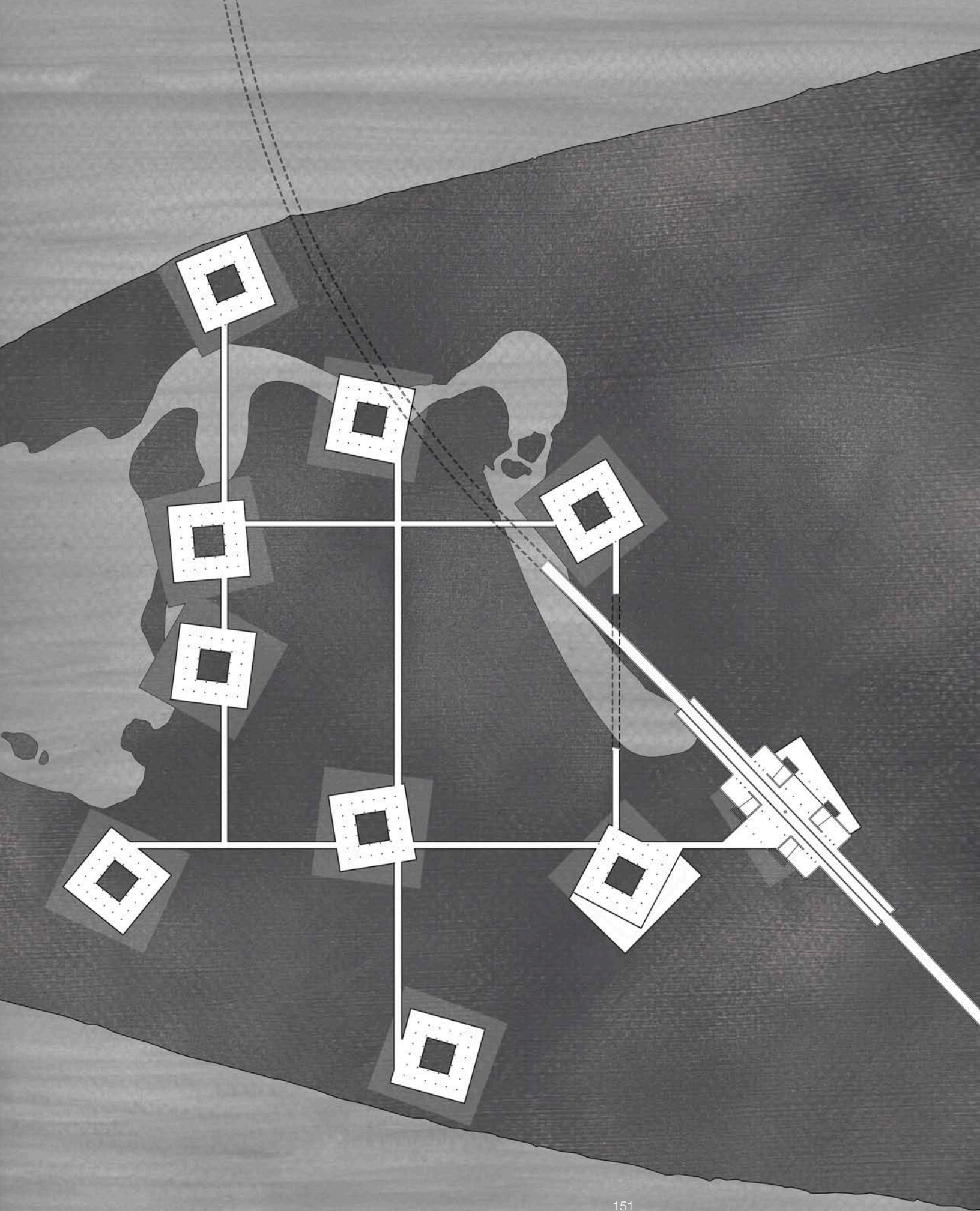
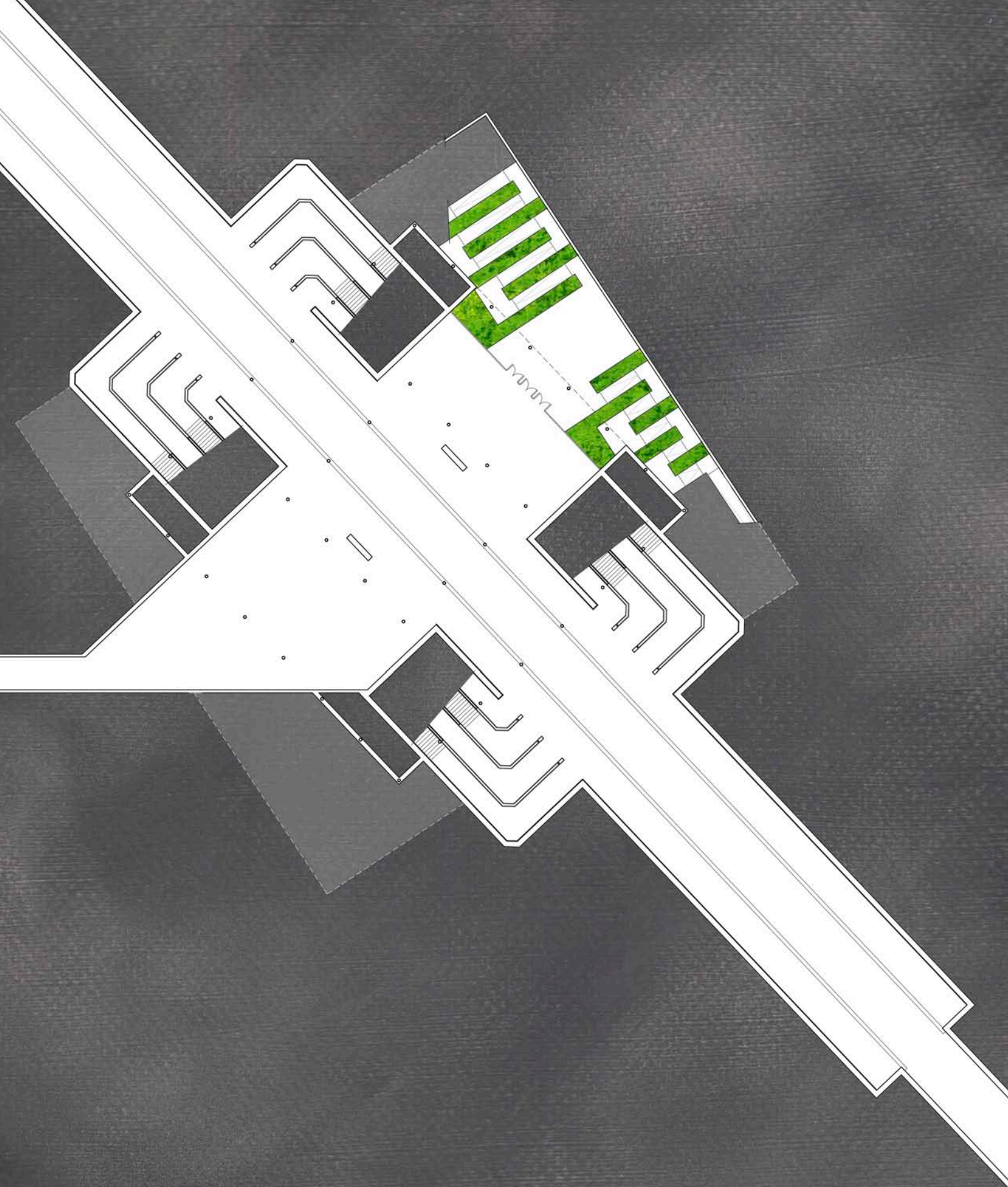




FIG. 214
The proposed alterations to
the underground level plan of the
Jean Drapeau metro station on Ile
Sainte-Hélène, its new neighbouring
pavilion, and their proposed sunken
courtyards.





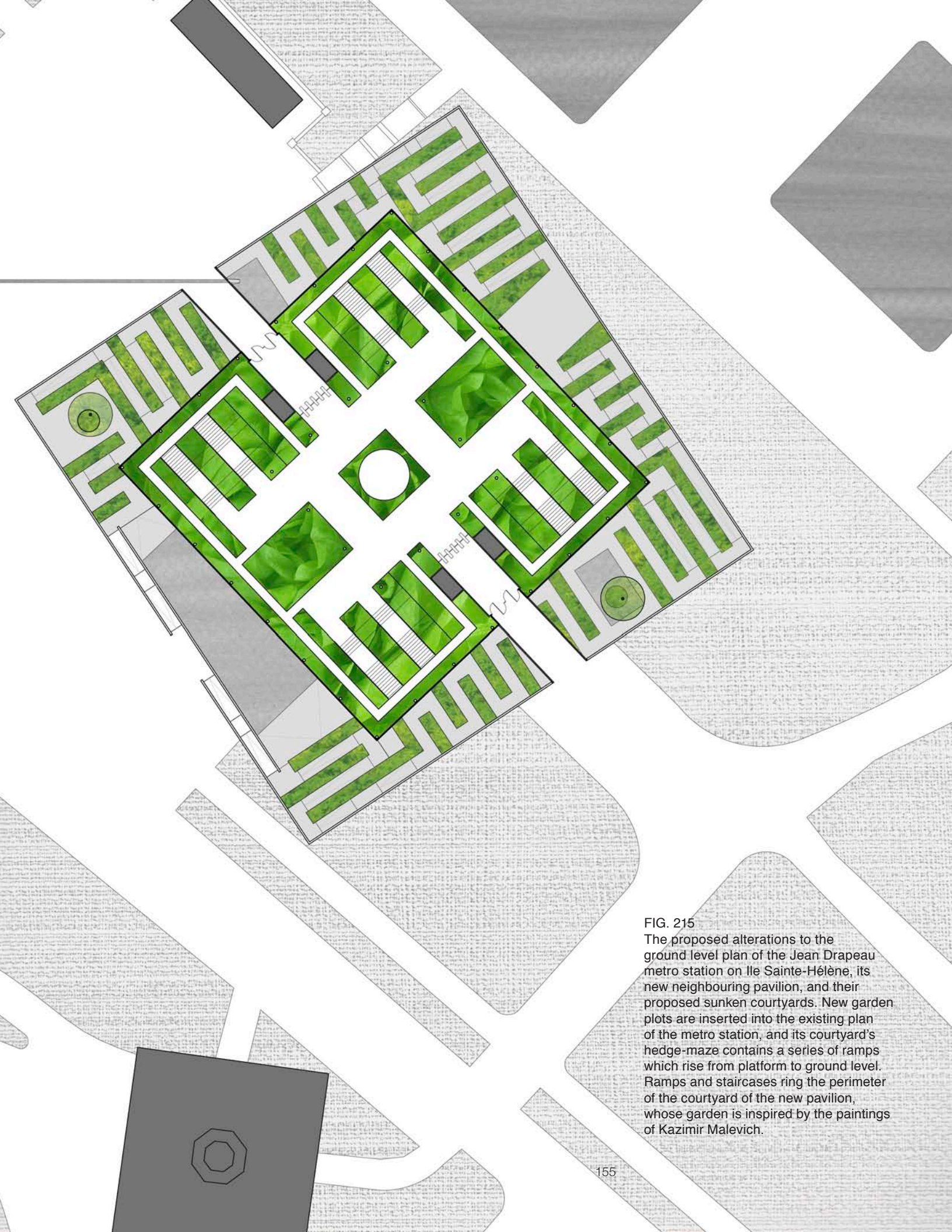
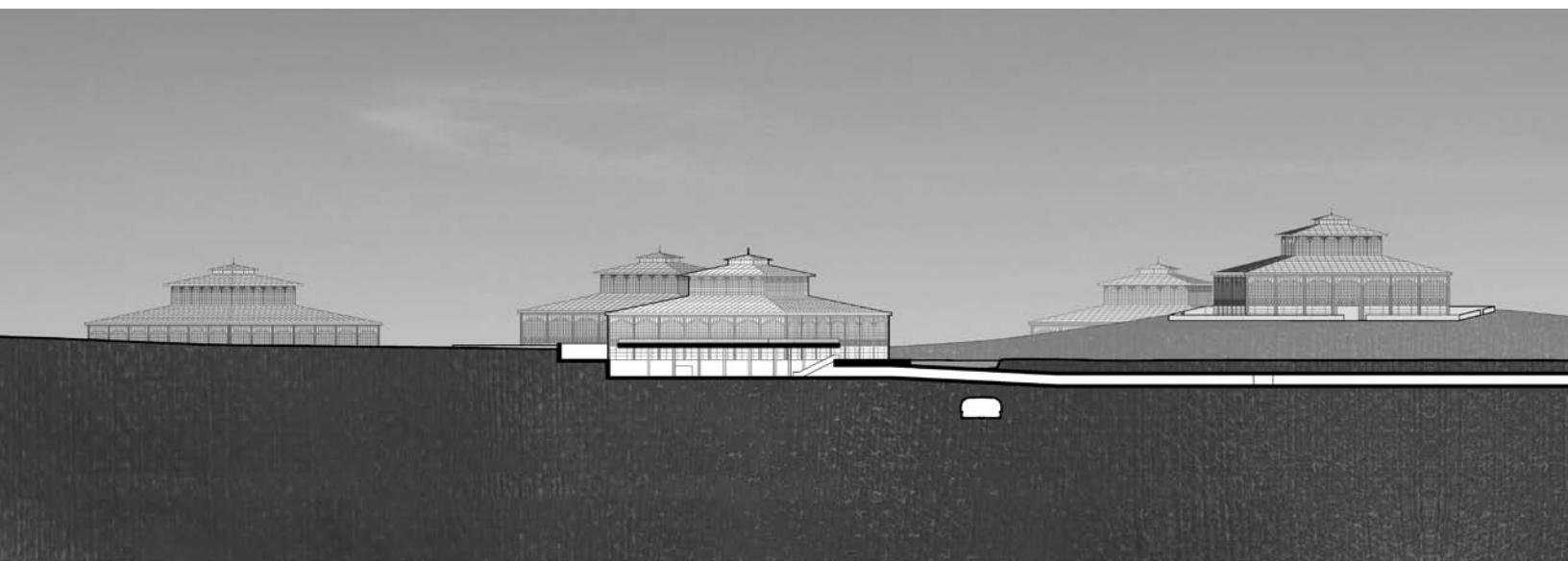


FIG. 215
The proposed alterations to the ground level plan of the Jean Drapeau metro station on Ile Sainte-Hélène, its new neighbouring pavilion, and their proposed sunken courtyards. New garden plots are inserted into the existing plan of the metro station, and its courtyard's hedge-maze contains a series of ramps which rise from platform to ground level. Ramps and staircases ring the perimeter of the courtyard of the new pavilion, whose garden is inspired by the paintings of Kazimir Malevich.





FIG. 216
The proposed east-west landscape section across Ile Sainte-Hélène, from the Le Moyne Channel (left) to the Saint Lawrence River (right), showing the pavilions of Les Halles in the proposed scatter-piece and the underground passages that connect them.



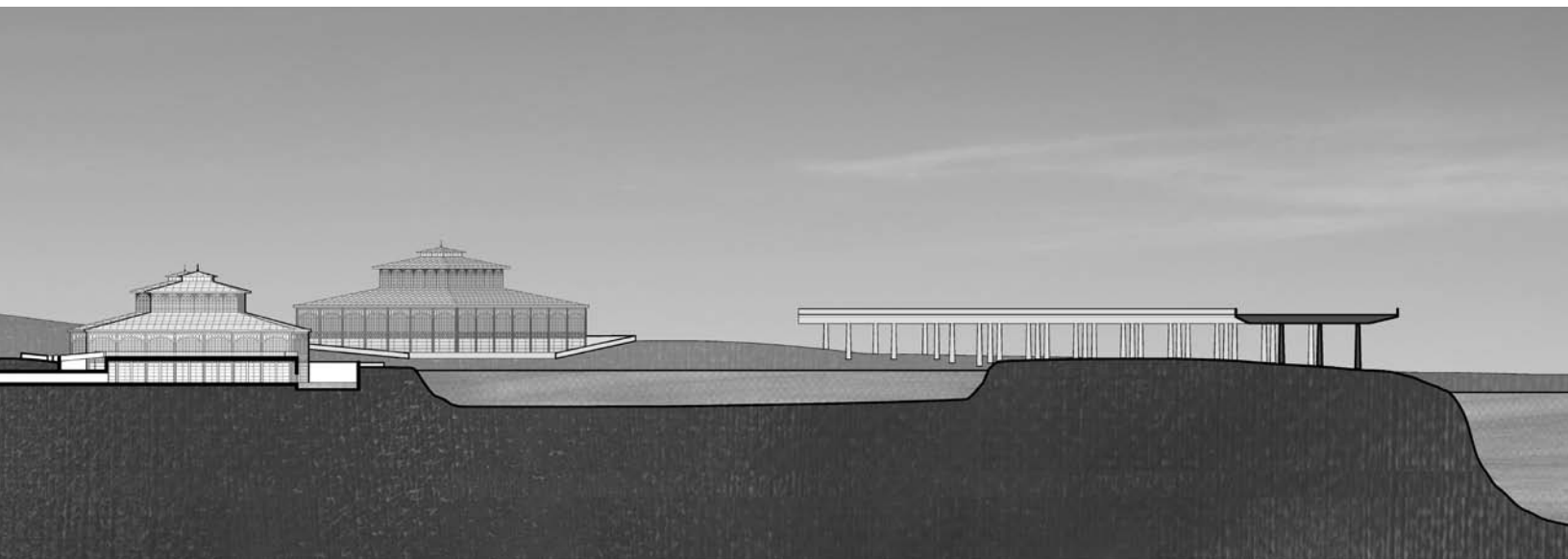


FIG. 217

The proposed north-south landscape section across Ile Sainte-Hélène, from the original centre of the island (left), through Swan Lake (centre right), to the Saint Lawrence River (right), showing the pavilions of Les Halles in the proposed scatter-piece and the underground passages that connect them.



FIG. 218
A proposed pavilion on the banks of the
Le Moyne Channel between Ile Sainte-
Hélène and Ile Notre Dame.

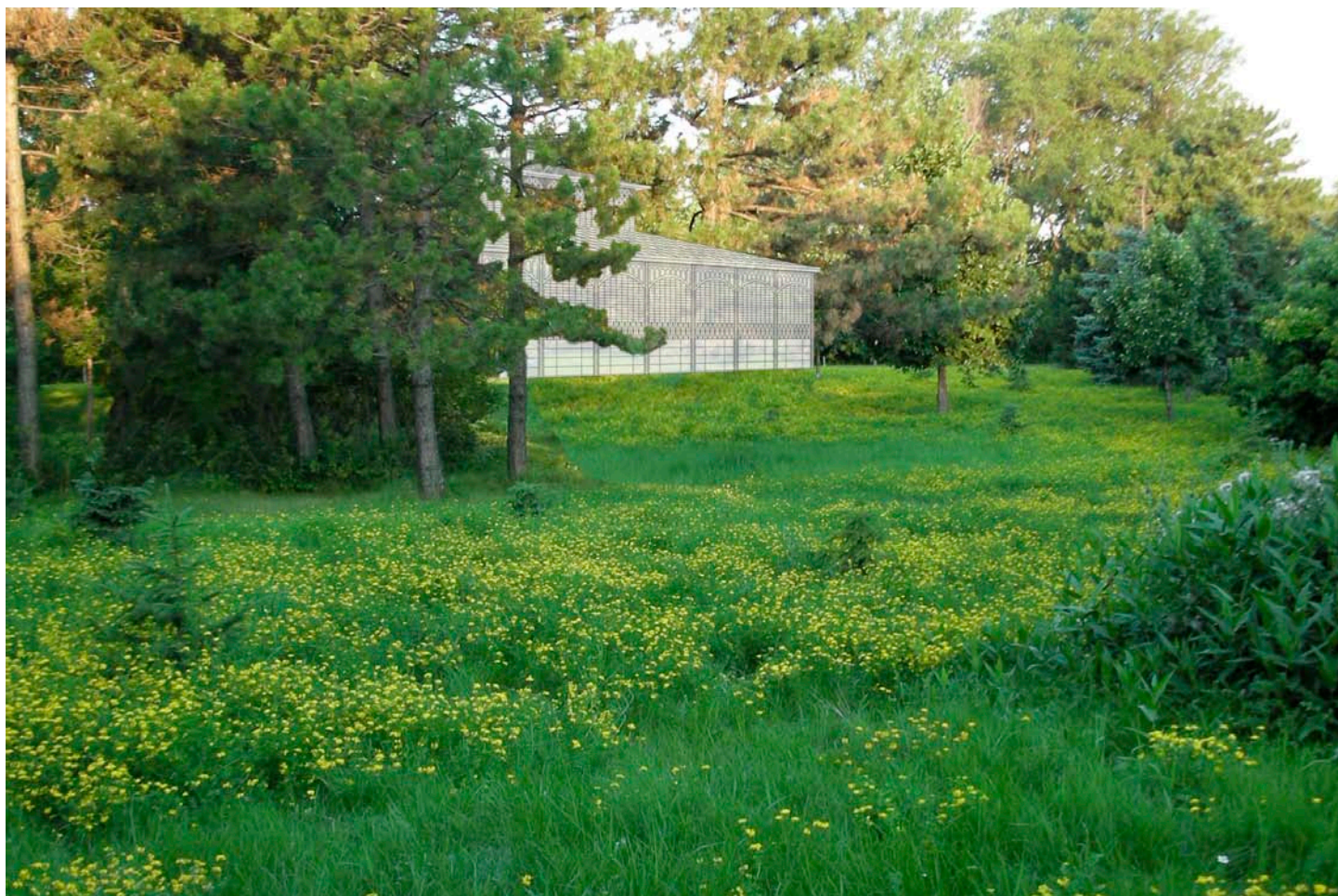


FIG. 219
A proposed pavilion from the east side of
the existing hill on Ile Sainte-Hélène.



FIG. 220
A proposed pavilion over the existing
metro station on Ile Sainte-Hélène.



FIG. 221
A proposed pavilion rising behind the
entrance plaza on Ile Sainte-Hélène.

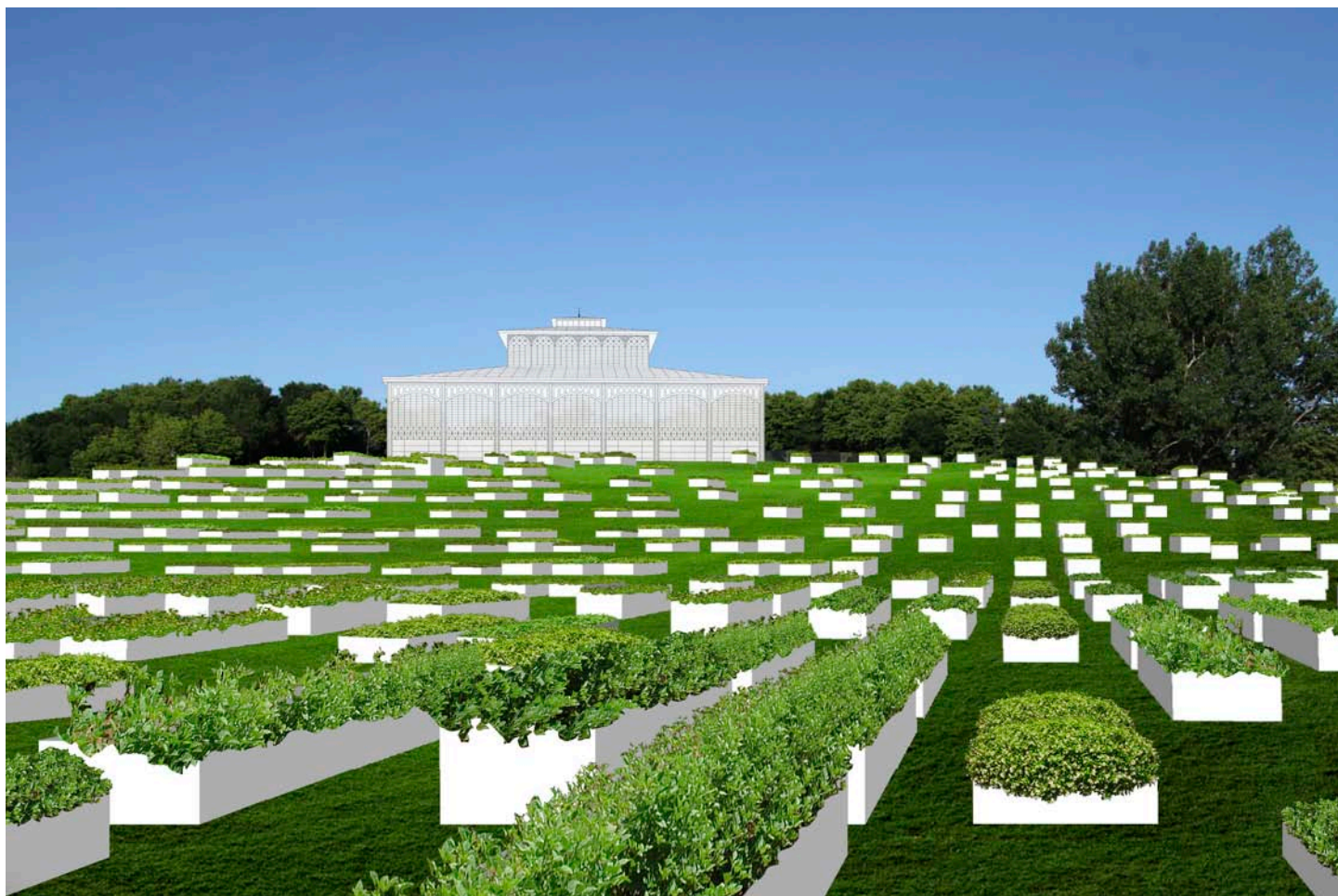


FIG. 222

A proposed pavilion and garden boxes
on the west side of the existing hill on Ile
Sainte-Hélène.

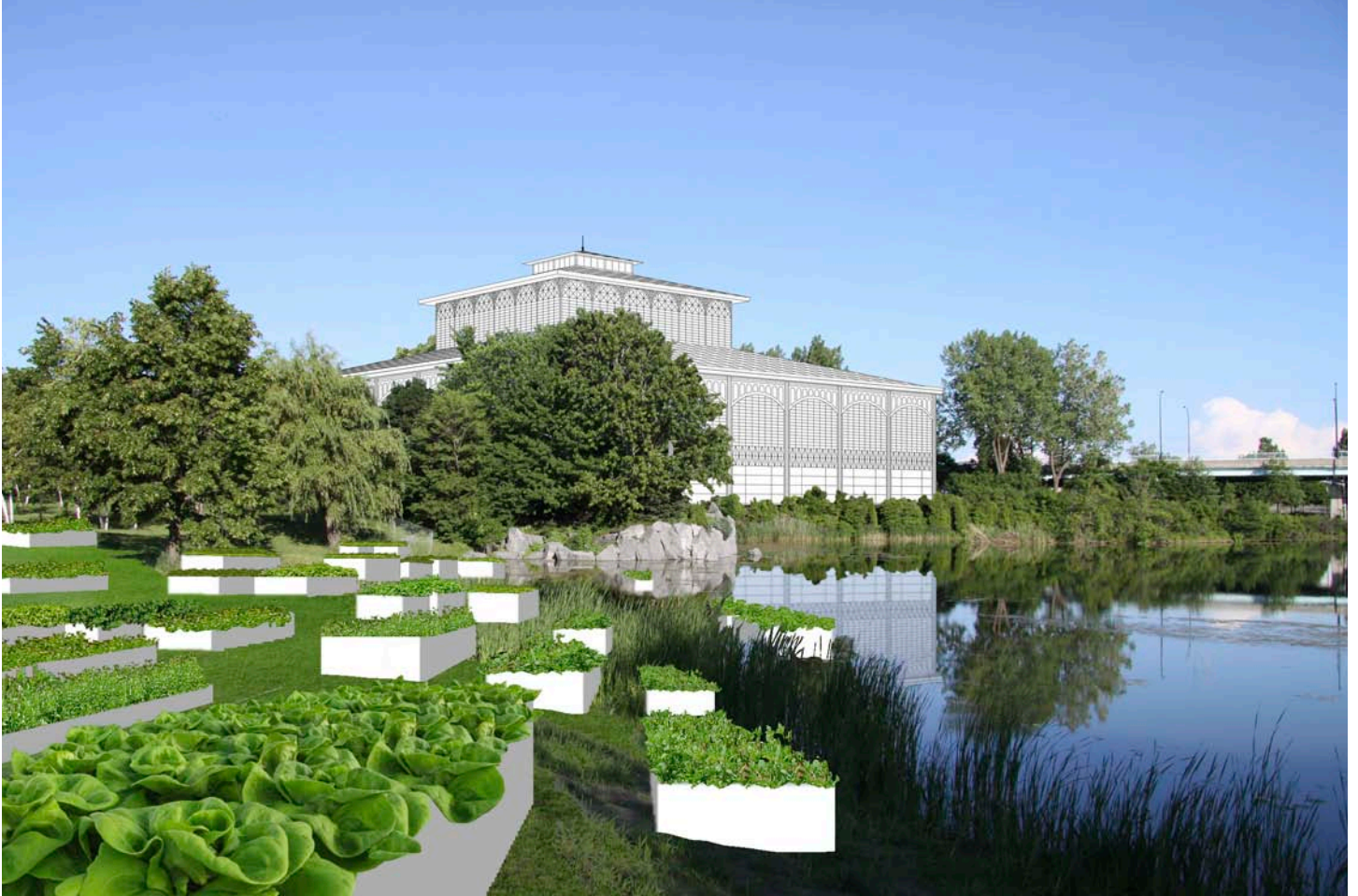


FIG. 223
A proposed pavilion and garden boxes
along the shore of Swan Lake on Ile
Sainte-Hélène.



FIG. 224

Proposed pavilions along the banks of
the existing stream on Ile Sainte-Hélène.



FIG. 225
Proposed pavilions along the shore of
Swan Lake on Ile Sainte-Hélène.



FIG. 226

A proposed pavilion on the banks of
the Saint Lawrence River on Ile Sainte-
Hélène.



FIG. 227
A proposed pavilion on the banks of the
Saint Lawrence River, next to Alexander
Calder's *Man*, on Ile Sainte-Hélène.



FIG. 228
The interior of a proposed pavilion along
the shore of Swan Lake on Ile Sainte-
Hélène.

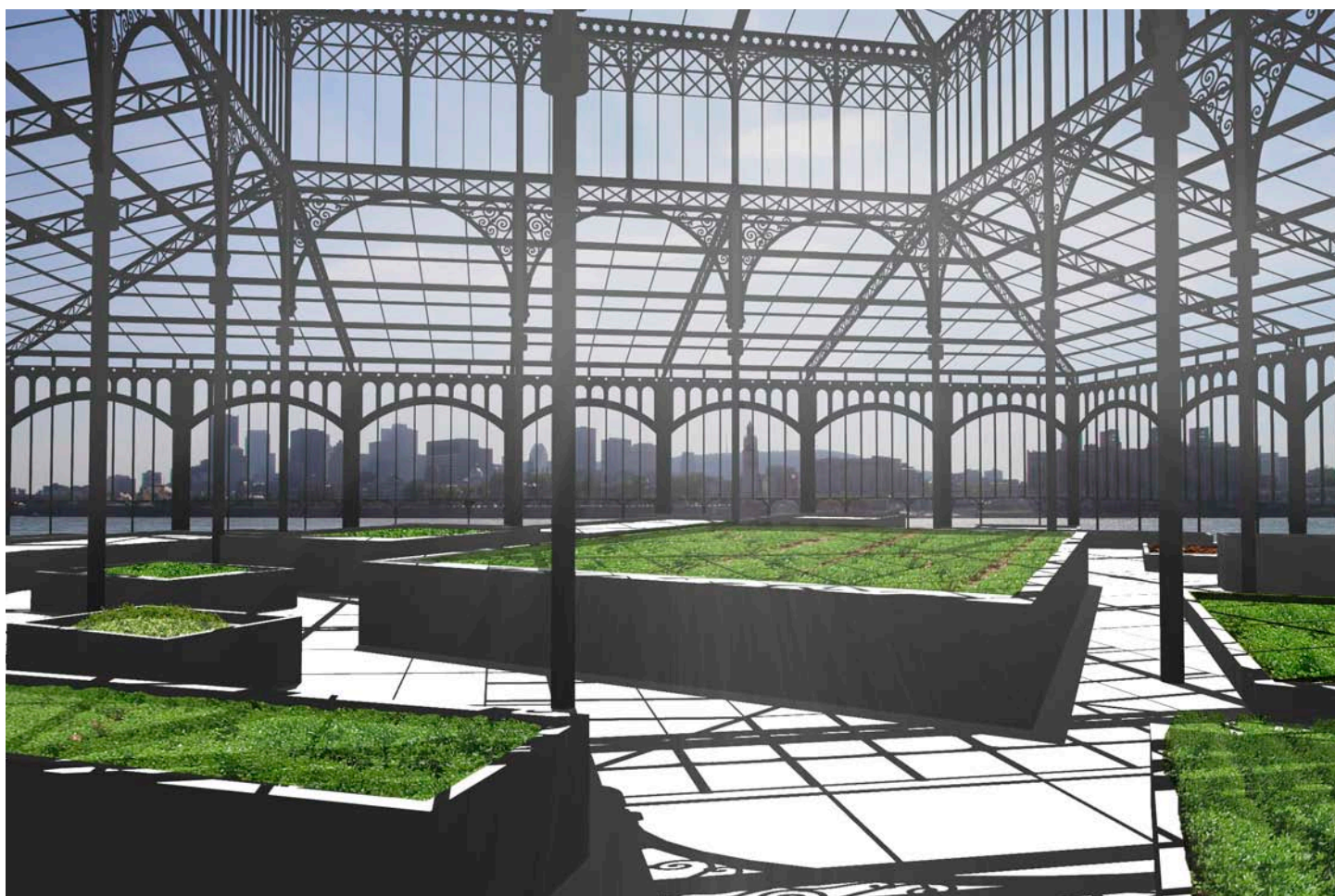


FIG. 229
The interior of a proposed pavilion on Ile
Sainte-Hélène, looking across the Saint
Lawrence River toward the skyline of
Montreal.

ENDNOTES

NOTES ON THE TITLE (AN INTRODUCTION)

- 1 An early version of the essay appeared in 1968 in the journal *Les Cahiers du chemin*. Fata Morgana published an expanded edition in book form in 1973. Michel Foucault, *This is not a pipe*, trans. James Harkness (Berkeley: UC Press, 1983), 3 (translator's notes)
- 2 Michel Foucault, *This is not a pipe*, trans. James Harkness (Berkeley: UC Press, 1983), 19.
- 3 *Ibid.*, 20.
- 4 Popular interest in Magritte's work rose considerably in the 1960s, and his imagery influenced the development of pop, minimalist and conceptual art. Richard Calvocoressi, *Magritte* (New York: Watson-Guptill, 1990), 26.
- 5 Michel Foucault, *The Order of Things*, a translation of *Les Mots et les choses* (New York: Pantheon, 1970) p.48
- 6 Heterotopias resist simple designations, as Foucault writes: "*Heterotopias* are disturbing... because they make it impossible to name this *and* that, because they shatter or tangle common names, because they destroy [the] syntax which causes words and things (next to but also opposite one another) to "hang together." *Ibid.*
- 7 The journal's full name is *G: Material zur elementaren Gestaltung* (G: Materials for Elemental Form-Creation)
- 8 Detlef Mertins and Michael William Jennings, *G: an avant-garde journal of art, architecture, design, and film, 1923-1926* (Los Angeles: Getty Research Institute, 2010), 3.
- 9 *Ibid.*, 72.
- 10 *Ibid.*, 73.
- 11 The movement declared itself anti-war, anti-bourgeois, anti-art. Tristan Tzara's Dadaist manifesto even made Dadaists of those who opposed it. "dadaist manifesto," 391.org/manifestos <www.391.org/manifestos/191804dadaist.htm>
- 12 Foucault might call it a "similitude," that is, a copy

without a referent. Foucault, *This is not a pipe*, 44.

- 13 "The Romantic Landscape" in Marian Moffet et al., *A world history of architecture* (London: Laurence King, 2008)
- 14 "Gold Medal," Architecture Canada, Honours and Awards <http://www.raic.org/honours_and_awards/honours_gold_medal/tor_e.htm>

MONTREAL WINS THE FAIR

- 1 Pierre Burton, *1967, the Last Good Year* (Toronto: Doubleday, 1997), 256. According to Burton, the Russians grew nervous about their ability to cope with the crowds over a six month period. He also suggests it was hinted that the secret police were wary of "tens of thousands of Westerners traipsing through the city, spreading the gospel of free enterprise."
- 2 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 21.
- 3 *Ibid.*, 23.
- 4 A. J. Patterson, *Montreal prepares for the world* (CBC radio broadcast July 9, 1964).
- 5 *Ibid.*
- 6 *Ibid.*
- 7 Stanley Burke, *Montreal to host Expo 67* (CBC radio broadcast November 13, 1962).
- 8 Alan Yeats, *Montreal to host Expo 67* (CBC radio broadcast November 13, 1962).
- 9 *Ibid.*
- 10 Burton, *1967, the Last Good Year*, 256.
- 11 "Expo 67 Montréal: Le Rêve Moderne," *L'express* (April 24-30, 1967), 27.
- 12 Robert Fulford, *This was Expo*. (Toronto: McClelland and Stewart, 1968), 9.
- 13 Robert Fulford, *Remember Expo: A Pictorial Record* (Toronto: McClelland and Stewart, 1968), 10.
- 14 "International Registered Exhibition," *Official Site of the Bureau International des Expositions* <<http://www.oala.on.ca/articles.aspx?catID=314>> (October 8, 2010).

- 15 Fulford, *Remember Expo: A Pictorial Record*, 9.
- 16 Ibid., 10.
- 17 Fulford, *This was Expo*, 10.

ÎLE SAINTE-HÉLÈNE

- 1 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 18.
- 2 "History: Important Dates," *Parc Jean Drapeau* <<http://www.parcjeandrapeau.com/history.html>> (October 2, 2010).
- 3 François-Gaston de Lévis, "Journal des Campagnes du Chevalier de Lévis," *Collection des manuscrits du maréchal de Lévis*, 1889. <<http://www.archive.org/stream/desmanuscritsmar00lbevrch#page/308/>> (October 5, 2010), 308.
- 4 "History: Important Dates," *Parc Jean Drapeau* (October 2, 2010).
- 5 Dupuy, *Expo 67, ou, la découverte de la fierté*, 12.
- 6 Ibid.
- 7 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 40.
- 8 Peter Jacobs, "Frederick G. Todd and the Creation of Canada's Urban Landscape," *Bulletin of the Association for the Preservation Technology*, vol.15, no.4, Landscape Preservation (1983), 27.
- 9 "OALA History: A Synopsis," *Ontario Association of Landscape Architects* <<http://www.oala.on.ca/articles.aspx?catID=314>> (September 12, 2010). From Frances Blue's unpublished manuscript, *History of the Canadian Society of Landscape Architects*.
- 10 Frederick G. Todd, "St. Helen's Island Park," *McGill News* (Summer, 1933), 25.
- 11 Charles C. Milne, ed. *Terre des hommes: Guide officiel – Man and His World: Official guide*. (Toronto: Maclean-Hunter, 1967), 84.
- 12 "Tour Lévis," *Grand Québec: Le Québec dévoile ses mystères* <<http://grandquebec.com/montreal-touristique/tour-levis/>> (October 2, 2010).
- 13 Jacobs, "Frederick G. Todd and the Creation of Canada's Urban Landscape," 32.
- 14 Dupuy, *Expo 67, ou, la découverte de la fierté*, 13.
- 15 Ibid.

- 16 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 53.
- 17 Robert Fulford, *This was Expo*. (Toronto: McClelland and Stewart, 1968), 9.
- 18 Pierre Burton, *1967, the Last Good Year* (Toronto: Doubleday, 1997), 260.
- 19 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 54.
- 21 Dupuy, *Expo 67, ou, la découverte de la fierté*, 24.
- 21 Burton, *1967, the Last Good Year*, 262.

THE EXPO SITE

- 1 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 53.
- 2 André Lortie, *The 60s: Montreal thinks big*, Olivo Barbieri, Marcel Fournier, eds. (Montreal: Canadian Center for Architecture, 2004), 142.
- 3 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 54.
- 4 Lortie et al., *The 60s: Montreal thinks big*, 142.
- 5 Ibid.
- 6 Lortie et al., *The 60s: Montreal thinks big*, 145.
- 7 Lortie et al., *The 60s: Montreal thinks big*, 142.
- 8 Ibid., 145.
- 9 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 54.
- 10 Benjamin Portis and Neil Harris, eds., *Civic Visions, World's Fairs* (Montreal: Canadian Centre for Architecture, 1993), exhibition brochure.
- 11 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 55.
- 12 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 25.
- 13 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 55.

THE MASTER PLAN

- 1 Pierre Burton, *1967, the Last Good Year* (Toronto: Doubleday, 1997), 256.
- 2 Robert Fulford, *Remember Expo: A Pictorial Record* (Toronto: McClelland and Stewart, 1968), 11.
- 3 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 72.
- 4 Burton, *1967, the Last Good Year*, 258.
- 5 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 35.
- 6 Burton, *1967, the Last Good Year*, 258.
- 7 Ibid.
- 8 Robert Fulford, *This was Expo*. (Toronto: McClelland and Stewart, 1968), 156.
- 9 Richard Mandell, *Paris 1900, The Great World's Fair* (Toronto: University of Toronto Press, 1967).
- 10 Fulford, *This was Expo*, 150.
- 11 Gabrielle Roy, "Man and His World: A Telling of the Theme," in *The Fragile Lights of Earth: Articles and Memories 1942-1970* (Toronto: McClelland and Stewart, 1982), 204.
- 12 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 40.
- 13 Dupuy, *Expo 67, ou, la découverte de la fierté*, 31.
- 14 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 44.
- 15 Ibid.
- 16 Ibid., 45.
- 17 Dupuy, *Expo 67, ou, la découverte de la fierté*, 39.
- 18 Ibid., 129.
- 19 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 40.
- 20 Ibid.
- 21 Gabrielle Roy, in *Terres des Hommes – Man and His World* (Ottawa: Canadian Corporation for the 1967 World Exhibition, 1967), 36.
- 22 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 44.
- 23 André Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, André Lortie. ed. (Montreal: Canadian Center for Architecture, 2004), 112.
- 24 Fulford, *This was Expo*, 38.
- 25 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*. (Montreal: Canadian Corporation for the 1967 World Exhibition, 1963), 4.
- 26 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 48.
- 27 Edouard Fiset, *Introduction of an Urban Concept in the Planning of the Exposition* (Montreal: The Canadian Corporation for the 1967 World Exhibition, 1965), 2.
- 28 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*, 4.
- 29 Ibid., 5.
- 30 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 62.
- 31 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 50.
- 32 Dupuy, *Expo 67, ou, la découverte de la fierté*, 44.
- 33 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 44.
- 34 Ibid., 45.
- 35 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*, 9.
- 36 Ibid.
- 37 Fiset, *Introduction of an Urban Concept in the Planning of the Exposition*, 1.
- 38 Ibid.
- 39 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 45.
- 40 Fiset, *Introduction of an Urban Concept in the Planning of the Exposition*, 2.
- 41 Burton, *1967, the Last Good Year*, 276.

DRAWING IN DIRT

- 1 Pierre Burton, *1967, the Last Good Year* (Toronto: Doubleday, 1997), 259.
- 2 Ibid.
- 3 Robert Fulford, *This was Expo*. (Toronto: McClelland and Stewart, 1968), 10.
- 4 Yves Jasmin, *La petite histoire d'Expo 67:*

- L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 55.
- 5 Burton, *1967, the Last Good Year*, 260.
 - 6 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 42.
 - 7 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 24.
 - 8 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 42.
 - 9 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 55.
 - 10 Kingsley Brown, *Building the World's Fair* (CBC television broadcast November 5, 1963).
 - 11 Ibid.
 - 12 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 55.
 - 13 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 42.
 - 14 Burton, *1967, the Last Good Year*, 260.
 - 15 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 56.
 - 16 Robert F. Shaw, "How Expo Was Built," in *Expo 67: the Memorial Album*, ed. Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 323.
 - 17 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 56.
 - 18 Shaw, "How Expo Was Built," in *Expo 67: the Memorial Album*, 323.
 - 19 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 56.
 - 20 Dupuy, *Expo 67, ou, la découverte de la fierté*, 24.
 - 21 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 56.
 - 22 Ibid., 58.
 - 23 Dupuy, *Expo 67, ou, la découverte de la fierté*, 24.
 - 24 Burton, *1967, the Last Good Year*, 263.
 - 25 Brown, *Building the World's Fair* (CBC television

broadcast November 5, 1963).

- 26 Dupuy, *Expo 67, ou, la découverte de la fierté*, 25.

- 27 Burton, *1967, the Last Good Year*, 263.

WATER FEATURES

- 1 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 97.
- 2 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 67.
- 3 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 42.
- 4 Kingsley Brown, *Building the World's Fair* (CBC television broadcast November 5, 1963) also Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 42.
- 5 Dupuy, *Expo 67, ou, la découverte de la fierté*, 132.
- 6 Ibid.
- 7 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 57.
- 8 Pierre Burton, *1967, the Last Good Year* (Toronto: Doubleday, 1997), 269.
- 9 Robert F. Shaw, "How Expo Was Built," in *Expo 67: the Memorial Album*, ed. Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 323.
- 10 Claude Beaulieu, "L'architecture," in *Expo 67: the Memorial Album*, ed. Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 339.
- 11 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 67.
- 12 Dupuy, *Expo 67, ou, la découverte de la fierté*, 131.
- 13 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*. (Montreal: Canadian Corporation for the 1967 World Exhibition, 1963), 7.
- 14 Glenn B. Wiggins, *Caddisflies: The Underwater Architects* (Toronto: University of Toronto Press, 2004), 265.
- 15 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme*

vous ne l'avez jamais vue, 99.

- 16 Wiggins, *Caddisflies: The Underwater Architects*, 265.
- 17 Ibid., 266.
- 18 Ibid.
- 19 Carson, Rachel. *Silent Spring* (Boston and New York: First Mariner, 2002), 49.
- 20 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 57.
- 21 Ibid., 91.

URBAN LANDSCAPE

- 1 "Territorial Expansion and Urban Laboratory" in *The 60s: Montreal Thinks Big*, ed. André Lortie (Montreal: Canadian Center for Architecture, 2004), 142.
- 2 Ibid., 143.
- 3 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 105.
- 4 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 46.
- 5 Ibid.
- 6 André Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, André Lortie. ed. (Montreal: Canadian Center for Architecture, 2004), 90.
- 7 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 72.
- 8 Guy Legault in *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* by Yves Jasmin (Montreal: Les Éditions Québec/Amérique, 1997), 74.
- 9 Ibid., 73.
- 10 Ibid., 75.
- 11 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 106.
- 12 Guy Legault in *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* by Yves Jasmin, 75. Only a large rock remains to commemorate what was once Victoriatown, a five by seven block

neighbourhood of Victorian housing stock that residents called Goose Village. Some say Drapeau razed it because it was the province of his arch rival, but many agree that Expo couldn't possibly have such a "slum" blocking its entrance. See "V is for Vanished: Not a trace survives of glorious Goose Village" in the *Montreal Gazette*, July 18, 2007.

- 13 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*. (Montreal: Canadian Corporation for the 1967 World Exhibition, 1963), 5.
- 14 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 106.
- 15 Ibid.

URBAN LABORATORY

- 1 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*. (Montreal: Canadian Corporation for the 1967 World Exhibition, 1963), 5.
- 2 Pierre Dupuy, *Expo 67, ou, la découverte de la fierté* (Montreal: Éditions La Presse, 1972), 106.
- 3 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 69.
- 4 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*, 5.
- 5 Dupuy, *Expo 67, ou, la découverte de la fierté*, 106. Expo's entry fee was increased from \$2,00 to \$2,50 to help defray the cost of the system and this contributed \$12.4 million to its \$18.3 million total (capital and operations) cost. (Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 70, 287).
- 6 Edouard Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 48.
- 7 Dupuy, *Expo 67, ou, la découverte de la fierté*, 107.
- 8 Ibid.
- 9 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 66.

- 10 Robert F. Shaw, "How Expo Was Built," in *Expo 67: the Memorial Album*, ed. Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 323.
- 11 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 65.
- 12 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*, 5.
- 13 Dupuy, *Expo 67, ou, la découverte de la fierté*, 107.
- 14 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 70.
- 15 Dupuy, *Expo 67, ou, la découverte de la fierté*, 107.
- 16 Ibid., 107.
- 17 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 48.
- 18 Ibid.
- 19 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 70.
- 20 Canadian Corporation for the 1967 World Exhibition, ed., *Expo 67: Master Plan Design Intent*, 5.
- 21 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 48.
- 22 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 70.
- 23 Fiset, "The Master Plan," in *Expo 67: the Memorial Album*, 48.
- 24 Jacques Folch-Ribas, "Urbanisme et architecture à l'exposition internationale," *Vie des arts*, no. 48 (Fall 1967), 16-17.
- 25 André Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, André Lortie. ed. (Montreal: Canadian Center for Architecture, 2004), 113. See, for example, Martin Meyerson and Edward C. Banfiel, *Boston: The Job Ahead* (Cambridge, MA: Harvard University Press, 1966).
- 26 Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, 113.
- 27 Ibid.
- 28 Guy Chartrand, "25 Years of the Montreal Metro," *La Presse*, March 19, 1991. see *Metro de Montreal* website <<http://www.metrodemontreal.com/history/index.html>> for translation by Matthew McLaughlin.
- 29 Guy Legault in *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* by Yves Jasmin (Montreal: Les Éditions Québec/Amérique, 1997), 75.
- 30 Guy Chartrand, "25 Years of the Montreal Metro," *La Presse*, March 19, 1991. see *Metro de Montreal* website <<http://www.metrodemontreal.com/history/index.html>> for translation by Matthew McLaughlin.
- 31 Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, 90 (emphasis mine). "Typically this represented the thinking of the urban planners of the Chicago Plan, Burnham and Bennet, to whom the study for the City of Ottawa was entrusted: Sir Herbert Holt (Chairman), *Report of the Federal Plan Commission on a General Plan for the Cities of Ottawa and Hull*, Sir Herbert Holt, A. Lacoste, H. Smith, F. Darling, Mayors of Ottawa and Hull, Commissioners, 1915." Also see "Proposed Subway Plan for Montreal," *Canadian Engineer* 59 (16 December 1930), 721.
- 32 Legault in *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* by Yves Jasmin, 74.
- 33 Ibid., 73.
- 34 Ibid., 74.
- 35 Dupuy, *Expo 67, ou, la découverte de la fierté*, 106.
- 36 Legault in *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* by Yves Jasmin, 75.
- 37 Michael Sorkin in "Learning from Montreal" in *The 60s: Montreal Thinks Big*, André Lortie. ed. (Montreal: Canadian Center for Architecture, 2004), 152.
- 38 Jean-Louis Cohen in "Learning from Montreal" in *The 60s: Montreal Thinks Big*, 152.
- 39 Sorkin in "Learning from Montreal" in *The 60s: Montreal Thinks Big*, 152.
- 40 Ibid., 153.
- 41 Ibid., 153.
- 42 Jean-Louis Cohen in "Learning from Montreal" in *The 60s: Montreal Thinks Big*, 154. (On place Ville-Marie and Place Bonaventure): "And then

there is a kind of utopia of public space in all these schemes, relating and integrating extremely diverse public facilities. A connective fabric of public space corresponding to the transportation infrastructure connects a series of shopping centres, some of which emerge above ground..."

43 Sorkin in "Learning from Montreal" in *The 60s: Montreal Thinks Big*, 154.

44 Lortie, "Montreal 1960: The Singularities of a Metropolitan Archetype," in *The 60s: Montreal Thinks Big*, 94.

46 Ibid., 114.

A PERMANENT EXHIBITION

1 "Farewell Expo 67," *Montreal 67*, vol.4, no.10 (October 1967), 4.

2 Pierre Dupuy, "Preface," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 7.

3 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 282. Jasmin quotes Alain Peyrefitte (in his book *C'était de Gaulle*) who remembers a meeting of French ministers on October 31, 1962 (this is even before Expo was awarded to Montreal) at which Giscard d'Estaing lamented France's poor showing at the recent Universal Exposition de Mexico (sic) and noted that the next one would be in Montreal, at which point de Gaulle urged that his offices should oversee France's contribution to the Montreal fair: "C'est capital!" said de Gaulle, "Drapeau, le maire de Montreal, voudrait que cette exposition universelle se transforme ensuite en exposition permanente, comme celle de Leipzig. Il faut que la France, au coeur du Canada Français, montre ce qu'elle est capable de faire..." (emphasis added).

4 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 283.

5 Ibid., 281.

6 Ibid.

7 "L'Expo permanente," *Le Soleil*, Quebec (October 27,

1967), 4.

8 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 65.

9 "This is Expo's Great Flaw," *The Telegraph Journal*, Saint John (October 13, 1967), 4.

10 "L'Expo permanente," *Le Soleil*, Quebec (October 27, 1967), 4.

11 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 283.

12 "L'Expo permanente," *Le Soleil*, Quebec (October 27, 1967), 4.

13 Jean Drapeau, "A new beginning," *Montreal 67*, vol.4, no.11 (November 1967), 2.

14 "Critics' verdict: beautiful... pulsating... exciting," *Montreal 68*, vol.5, no.5 (May/June 1968), 5.

15 Drapeau, "A new beginning," *Montreal 67*, (November 1967), 2.

16 "Critics' verdict: beautiful... pulsating... exciting," *Montreal 68*, (May/June 1968), 5.

17 Ibid.

18 Ibid., 6.

19 Leo MacGillivray, "The 20-storey birdcage," *Montreal 68*, vol.5, no.6 (July 1968), 24-26.

20 "Critics' verdict: beautiful... pulsating... exciting," *Montreal 68*, (May/June 1968), 6.

21 Ibid.

SUBTRACTIONS AND ADDITIONS

1 The total was 12 516 480. "The curtain falls," *Montreal 68*, vol.5, no.8 (October 1968), 24-27.

2 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 283.

3 "Man and His World," *Library and Archives Canada*. <http://www.collectionscanada.gc.ca/expo/0533020602_e.html> (October 6, 2010).

4 Mark Kelley, *A pavilion reborn* (CBC television broadcast June 5, 1995).

5 "Expo 67 on Battlestar Galactica," *World's Fair Photos*. <<http://www.worldsfairphotos.com/expo67/battlestar-galactica.htm>> (September 20, 2010).

6 "Man and His World," Expo 67, Man and His

World, Library and Archives Canada. <http://www.collectionscanada.gc.ca/expo/0533020602_e.html> (October 6, 2010).

- 7 "Olympic Basin, Notre Dame Island," *Official Report: Games of the XXI Olympiad, Montreal 1976*, Volume II, Facilities (Ottawa: COJO 76), 117.
- 8 Ibid., 115.
- 9 "Olympic Basin," *Parc Jean Drapeau* <http://www.parcjeandrapeau.com/5-Olympic_basin-montreal-attraction.html> (October 10, 2010).
- 10 "Montréal, F1 Holy Ground," *F1 Canada Grand Prix – Formula 1 Montreal | Circuit Gilles Villeneuve* <<http://www.circuitgillesvilleneuve.ca/formula-1.html>> (November 2, 2010).
- 11 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 283.
- 13 Paul Cusiak, "Now What?" (CBC television broadcast August 3, 1985).
- 13 "Jean Drapeau Park," Expo 67, Man and His World, Library and Archives Canada. <http://www.collectionscanada.gc.ca/expo/0533020604_e.html> (October 12, 2010).
- 14 Paul Cusiak, "Now What?" (CBC television broadcast August 3, 1985).
- 15 "Jean Drapeau Park," Expo 67, Man and His World, Library and Archives Canada. <http://www.collectionscanada.gc.ca/expo/0533020604_e.html> (October 12, 2010).
- 16 Christiane Desroches Noblecourt, *The great pharaoh Ramses II and his time: an exhibition of antiquities from the Egyptian Museum, Cairo, Palais de la Civilisation, Montréal, June 1-September 29, 1985* (Montreal: Palais de la Civilisation, 1985).
- 17 Denis Turcotte, dir., *Reflets du Québec: des faits, des dates, des personnalités* (Québec: Association Québec dans le monde, 1990).
- 18 "History," *Société des casinos du Québec* <<http://www.casinosduquebec.com/montreal/en/casinos-du-quebec#history>> (November 2, 2010).
- 19 Ibid.
- 20 Paul Cusiak, "Now What?" (CBC television broadcast August 3, 1985).

PARC DES ÎLES

- 1 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 283.
- 2 Ibid.
- 3 "The Participants: Jamaica," in *Expo 67: the Memorial Album*, edited by Jean-Louis de Lorimier (Toronto: Thomas Nelson and Sons, 1968), 197.
- 4 "Jamaica Pavilion," *Parc Jean Drapeau* <http://www.parcjeandrapeau.com/100-Jamaica_Pavilion-rental.html> (November 6, 2010).
- 5 Mark Kelley, *A pavilion reborn* (CBC television broadcast June 5, 1995).

MEMORIALS

- 1 Originally donated to Prince Edward Island's St. Dunstan's University, which then donated it to the city Montreal, the sculpture was restored a second time in 2007 for the 40th anniversary of Expo, but its body, which once rotated about its vertical axis like the lamp of a lighthouse, remains stationary. "Restauration de l'oeuvre Le Phare du Cosmos de l'artiste Yves Trudeau," *Ville de Montreal – Art Public – Le Phare du Cosmos* <http://ville.montreal.qc.ca/portal/page?_pageid=678,7653635&_dad=portal&_schema=PORTAL> (November 10, 2010).
- 2 Robert Fulford, *This was Expo* (Toronto: McClelland and Stewart, 1968), 189.
- 3 "Plazas and Squares" in *Man and His World: Official guide*, Charles C. Milne, ed. (Toronto: Maclean-Hunter, 1967), 164.
- 4 Fulford, *This was Expo*, 189. Multiple sources state that the sculpture is 67 feet tall, but are divided as to whether this was done on purpose. The Calder Foundation lists the dimensions of the piece as 65' x 83' x 53'. "Calder's Work: Monumental Sculpture," *Calder Foundation* <<http://calder.org/work/category/monumental/20>> (November 6, 2010).
- 5 Fulford, *This was Expo*, 190.
- 6 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 340.

- 7 The occasion of the 325th anniversary of the city's founding.
- 8 "The Expo 67 Time Capsule," *Expo 67 in Montreal, A photo collection about Canada's Centennial Celebration!* <http://expo67.ncf.ca/expo_67_time_capsule_p1.html> (November 5, 2010).
- 9 Calder invented the mobile in 1931 and Duchamp named it. Then Jean Arp, jealous, named Calder's stationary pieces *stables*. "Biography," *Calder Foundation* <<http://calder.org/life/page/biography.html>> (November 6, 2010).
- 10 Fulford, *This was Expo*, 189.
- 11 *Ibid.*, 190.
- 12 Rosalind E. Krauss, *The originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), 279.
- 13 *Ibid.*, 280.
- 14 *Ibid.*, 282.
- 15 *Ibid.*, 283.
- 16 *Ibid.*, 284.
- 17 *Ibid.*, 287.

THE MONTREAL-PARIS TOWER

- 1 Yves Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue* (Montreal: Les Éditions Québec/Amérique, 1997), 391.
- 2 Adrienne Clarkson, *A tale of towers* (The Fifth Estate television broadcast September 16, 1980).
- 3 *Ibid.*
- 4 "The Montreal-Paris Tower," *Montreal Expos – Legacy – Expo 67 – Library and Archives Canada* <http://www.collectionscanada.gc.ca/expo/0533020603_e.html> (November 2, 2010). When told that 325 metres was equivalent to 1066 feet, the Mayor denied knowing that the Battle of Hastings, the decisive victory in the Norman conquest of England, was fought in that year. (Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 393.)
- 5 *Ibid.*
- 6 Clarkson, *A tale of towers* (The Fifth Estate television broadcast September 16, 1980). "It was even to

be theological: 'In those days, everybody was infatuated with Theo Desjardins, the philosophy about love and power that... reach[es] God though a light and so on, which represents love. It was complicated. And this was very profound. And so the tower they designed in Paris had this in mind.'"

- 7 Jasmin, *La petite histoire d'Expo 67: L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue*, 392.
- 8 Clarkson, *A tale of towers* (The Fifth Estate television broadcast September 16, 1980).
- 9 "The Montreal-Paris Tower," *Montreal Expos – Legacy – Expo 67 – Library and Archives Canada* <http://www.collectionscanada.gc.ca/expo/0533020603_e.html> (November 2, 2010).
- 10 Clarkson, *A tale of towers* (The Fifth Estate television broadcast September 16, 1980).
- 11 "Important Dates," *History – Parc Jean Drapeau* <<http://www.parcjeandrapeau.com/history.html>> (November 5, 2010)

EARTHWORKS

- 1 Suzaan Boettger, *Earthworks: Art and the landscape of the sixties* (Berkeley and London: University of California Press, 2002), 2.
- 2 Oldenburg's notes on *Hole* are in: Barbara Haskell, *Claes Oldenburg: Object into Monument*, exhibition catalogue (Pasadena: Pasadena Art Museum, 1971), 60-62.
- 3 Boettger, *Earthworks: Art and the landscape of the sixties*, 7.
- 4 *Ibid.*, 2.
- 5 *Ibid.*, 21.
- 6 *Ibid.*, 45.
- 7 Smithson, Robert. "A Tour of the Monuments of Passaic New Jersey (1967)." in *Robert Smithson: The Collected Writings*, ed., Jack Flam (Berkeley: UC Press, 1996), 68-74.
- 8 Boettger, *Earthworks: Art and the landscape of the sixties*, 45.
- 9 *Ibid.*, 211.
- 10 Robert Smithson, "Towards the Development of an Air Terminal Site (1967)." in *Robert Smithson: The Collected Writings*, ed., Jack Flam (Berkeley: UC

- Press, 1996), 56.
- 11 Paul Wood, *Smithson and Serra: Beyond Modernism?* dir., GD Jayalakshmi, 25 minutes, The Roland Collection, Modern Art: Practices and Debates, Section 30, Film.
 - 12 Smithson, "Towards the Development of an Air Terminal Site (1967)," 56.
 - 13 Ron Graziani, *Robert Smithson and the American Landscape* (Cambridge, UK and New York: Cambridge University Press, 2004), 69.
 - 14 Boettger, *Earthworks: Art and the landscape of the sixties*, 151.
 - 15 Grace Glueck, "Moving Mother Earth," in the *New York Times*, May 19, 1968, sec. D, 35.
 - 16 Boettger, *Earthworks: Art and the landscape of the sixties*, 151.
 - 17 Ibid., 208.
 - 18 Eugenie Tsai, "Interview with Dan Graham," in *Zeichnungen aus des Nachlass – Drawings from the Estate*, exhibition catalogue (Münster, Germany: Westfälisches Landesmuseum für Kunst und Kulturgeschichte, 1989), 12. "Idealism, whether manifested in a verdant Tuscan hillside or in the classical perfection of beauty, harmony and grace, was a sensibility that throughout his oeuvre Smithson would contest and invert. Titles of several early paintings suggest near oxymoronic perversions of the pastoral idyll, such as *Dead Wood* (1959), *Black Grass* (1961), *Vile Flower* (1961), and *Petrified Wood* (1962; plate 1)." Boettger, *Earthworks: Art and the landscape of the sixties*, 47.
 - 19 Boettger, *Earthworks: Art and the landscape of the sixties*, 208.
 - 20 Wood, *Smithson and Serra: Beyond Modernism?*
 - 21 Boettger, *Earthworks: Art and the landscape of the sixties*, 223.
 - 22 Robert Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)." in *Robert Smithson: The Collected Writings*, ed., Jack Flam (Berkeley: UC Press, 1996), 161.
 - 23 Ibid., 160.
 - 24 Boettger, *Earthworks: Art and the landscape of the sixties*, 223.
 - 25 Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 160.
 - 26 Boettger, *Earthworks: Art and the landscape of the sixties*, 223.
 - 27 Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 162.
 - 28 Wood, *Smithson and Serra: Beyond Modernism?*
 - 29 "The Enemies of Art might be expected to publish such a book, but not the Friends of the Earth. 'One becomes irritated with the format from the start,' says John Wilmerding in his review of this 'pretentious nonbook' in *Art in America*, November-December, 1972." Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 163, 171.
 - 30 Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 163.
 - 31 Boettger, *Earthworks: Art and the landscape of the sixties*, 223.
 - 32 Ibid., 244. See also Michel Foucault's "Of Other Spaces, Heterotopias (1967)," translated by Jay Miskowiec in *Diacritics* 16, no.1 (spring 1986), 22-27.
 - 33 Boettger, *Earthworks: Art and the landscape of the sixties*, 224.
 - 34 Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 165.
 - 35 Graziani, *Robert Smithson and the American Landscape*, 112-118.
 - 36 Smithson, "Frederick Law Olmsted and the Dialectical Landscape (1973)," 165.
 - 37 Boettger, *Earthworks: Art and the landscape of the sixties*, 245.

A NEW GROUND

- 1 Suzan Campbell, "Interview with Agnes Martin," May 15, 1989, transcript, Archives of American Art, Smithsonian Institution, Washington, D.C., 10-11.
- 2 Anna C. Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty," in *Agnes Martin*, ed. Barbara Haskell (New York: Whitney Museum of American Art, 1992), 135.
- 3 "All the people were like those rectangles; they are just like grass. That's the way to freedom. If you can imagine you're a grain of sand... all your troubles fall away... In a big picture a blade of grass amounts to not very much. Worries fall off when you can

believe that." Agnes Martin, "The Untroubled Mind," in *Agnes Martin*, exhibition catalogue (Philadelphia: Institute of Contemporary Art, University of Pennsylvania, 1973), 17-24.

- 4 Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty," 151.
- 5 Agnes Martin quoted in John Gruen, "Agnes Martin: 'Everything, everything is about feeling... feeling and recognition,'" *Art News*, 75 (September 1976), 94.
- 6 Campbell, "Interview with Agnes Martin," 11.
- 7 Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty," 143.
- 8 Agnes Martin quoted in Ann Wilson, "Linear Webs," *Art & Artists*, 1 (October 1966), 48.
- 9 Martin, "The Untroubled Mind," 13. To support her assertions that she was a classicist and not a romantic, Martin would reference The Greeks' discovery "that in Nature there are no perfect circles or straight lines or equal spaces" – that they could see them in their minds but weren't able to make them: "They realized that the mind knows what the eye has not seen but that what the mind knows is perfection." Agnes Martin, "What We Do Not See If We Do Not See," in Dieter Schwarz, *Agnes Martin: Writings/Schriften*, (Winterthur, Switzerland: Kunstmuseum Winterthur, 1992), 117.
- 10 Barbara Haskell, "Agnes Martin: The Awareness of Perfection," in *Agnes Martin*, ed. Barbara Haskell (New York: Whitney Museum of American Art, 1992), 109.
- 11 Rosalind Krauss, "Grids," in her *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), 9.
- 12 Rosalind Krauss, "The / Cloud /," in *Agnes Martin*, ed. Barbara Haskell (New York: Whitney Museum of American Art, 1992), 157.
- 13 Lawrence Alloway, in *Agnes Martin*, exhibition catalogue (Philadelphia: Institute of Contemporary Art: University of Pennsylvania, 1973), 62.
- 14 Krauss, "The / Cloud /," 157. Carter Ratcliff noted that in Edmund Burke's *Inquiry on the Sublime*, Burke's description of "a perfect simplicity, an absolute uniformity in disposition, shape and coloring," his call for a succession "of uniform parts" which can permit "a comparatively small quantity

of matter to produce a grander effect than a much larger quantity disposed in another manner" seemed made for Martin's work, just as her work could be thought to smuggle within it diffused references to the repertory of natural "subjects" that followed from Burke's analysis: "the sea (Turner), the sky (Constable), foliage (Church) and simply, light." Carter Ratliff, "Agnes Martin and the 'Artificial Infinite,'" *Art News*, 72 (May 1973), 26-27.

- 15 Krauss, "The / Cloud /," 158.
- 16 Kasha Linville, "Agnes Martin: An Appreciation," *Artforum*, 9 (June 1971), 72.
- 17 Ibid., 72.
- 18 Krauss, "The / Cloud /," 159.
- 19 Ibid.

A PROPOSED GARDEN GRID

- 1 Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty," 145.
- 2 Krauss, "The / Cloud /," 162.
- 3 Ibid., 163.
- 4 Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty," 135.
- 5 Ibid., 146.
- 6 Ernest Mandel quoted in Frederick Jameson, "Periodizing the Sixties," *The 60s, Without Apology*, Sohnya Sayres et al., eds., (Minneapolis: University of Minnesota Press, 1984), 207.
- 7 Jameson, "Periodizing the Sixties," 207.

SELECTIVE DELETIONS

- 1 see Kenneth Frampton, "Territorial transformations: urban developments 1800-1909" in his *Modern Architecture: A Critical History* (London and New York: Thames & Hudson, 1992), 23 for the development of this influence.
- 2 Charles Moore et al., *The Poetics of Gardens* (Cambridge MA: MIT Press, 1988), 58-65.
- 3 William Hogarth, *The Analysis of Beauty*, ed. Ronald Paulson (New Haven and London: Yale University Press, 1997).
- 4 Suzaan Boettger, *Earthworks: Art and the landscape of the sixties* (Berkeley and London: University of

- California Press, 2002), 8.
- 5 Robert Smithson, "Towards the Development of an Air Terminal Site (1967)." in *Robert Smithson: The Collected Writings*, ed., Jack Flam (Berkeley: UC Press, 1996), 56.
 - 6 Boettger, *Earthworks: Art and the landscape of the sixties*, 8.
 - 7 Paul Wood, *Smithson and Serra: Beyond Modernism?* dir., GD Jayalakshmi, 25 minutes, The Roland Collection, Modern Art: Practices and Debates, Section 30, Film.
 - 8 Robert Smithson, interview by Willoughby Sharp published in Suzaan Boettger, "Degrees of Disorder," *Art in America* 86, no.12 (December 1998), 75-81.
 - 9 Rosalind Krauss, "Grids," in her *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), 18-21.
- SCATTER
- 1 "GeoTour 67: Canada's unique technological innovation," *Environment Canada* <<http://www.ec.gc.ca/biosphere/default.asp?lang=En&n=958FC5C4-1>> (March 28, 2011).
 - 2 Marcia Tucker, *Robert Morris* (New York: Praeger, 1970), 29.
 - 3 Ibid.
 - 4 Carter Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975* (New York: Allworth, 2000), 154.
 - 5 Tucker, *Robert Morris*, 33.
 - 6 Ibid., 29.
 - 7 Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975*, 86.
 - 8 Robert Morris, "American Quartet," *Art in America* 69/10 (December 1981), reprinted in Morris, *Continuous Project Altered Daily* (Cambridge, MA: MIT Press, 1994), 243.
 - 9 David Bourdon, "The Razed Sites of Carl Andre," in Gregory Battcock, *Minimal Art* (New York: Dutton, 1968), 103-104; originally published in *Artforum* (October 1966).
 - 10 Suzaan Boettger, *Earthworks: Art and the landscape of the sixties* (Berkeley and London: University of California Press, 2002), 77.
 - 11 David Antin, "Art and Information, I, Grey Paint, Robert Morris," *Art News* 65, no. 2 (April 1966): 24.
 - 12 Carl Andre, in David Bourdon, "A Redefinition of Sculpture," in *Carl Andre: Sculpture 1959-77*, Exh. Cat. (Austin: 1978), 19, 26.
 - 13 Lucy Lippard, ed., "Time: A Panel Discussion," *Art International* 13/9 (November 1969), 39.
 - 14 Glenn Adamson, *Thinking Through Craft* (Oxford and New York: Berg, 2007), 131.
 - 15 Ibid., 128.
 - 16 Boettger, *Earthworks: Art and the landscape of the sixties*, 77.
 - 17 Adamson, *Thinking Through Craft*, 129.
 - 18 Ibid., 132.
 - 19 Samuel Wagstaff Jr., "Talking with Tony Smith," *Artforum* 5/4 (December 1969), 19.
 - 20 Tony Smith, "Talking with Samuel Wagstaff," in Battcock, *Minimal Art*, 386; originally published in *Artforum* (December 1966).
 - 21 Adamson, *Thinking Through Craft*, 132.
 - 22 Ibid.
 - 23 Willoughby Sharp, 1968 Interview with Carl Andre, *Avalanche* 1 (Fall 1970), 18.
 - 24 Richard Serra, "Shift," in *Richard Serra: Interviews, etc.; 1970-1980* (Yonkers: The Hudson River Museum, 1980); originally published in *Arts Magazine* (April 1973).
 - 25 Ibid.
 - 26 Rosalind E. Krauss, *The originality of the Avant-Garde and Other Modernist Myths* (Cambridge, MA: MIT Press, 1985), 267.
 - 27 Andrea Gould, "Dialogues with Carl Andre," *Arts Magazine* (May 1974), 27.
 - 28 Ibid.
 - 29 "Andre may have been influenced by Martin in composing his gridlike "plains" – large squares made up of multiple, 1-foot-square, metal plates – which he began in 1967. The term "plain" emphasized at once the planar aspect of these virtually two-dimensional sculptures and their geographic identity as low, flat places – though Andre thought of his sculpture also in terms of a "road," a road or a plain without fixed vista that would offer 'an infinite point of view.'" Anna C. Chave, "Agnes Martin: Humility, the beautiful daughter, all of her ways are empty,"

- in *Agnes Martin*, ed. Barbara Haskell (New York: Whitney Museum of American Art, 1992), 143.
- 30 Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975*, 60.
- 31 Pamela M. Lee, "The Archaeology of Scatter/The Logic of the Clue," in *Accumulated Vision, Barry Le Va*, ed. Ingrid Schaffner (Philadelphia: Institute of Contemporary Art, 2005), 26.
- 32 Ibid.

A PROPOSED SCATTER PIECE

- 1 Adamson, *Thinking Through Craft*, 131.
- 2 Laurie Spurling, *Phenomenology and the Social World: the Philosophy of Merleau-Ponty and its Relation to the Social Sciences* (London: Routledge, 1977), 33-34.
- 3 Paul Wood, *Smithson and Serra: Beyond Modernism?* dir., GD Jayalakshmi, 25 minutes, The Roland Collection, Modern Art: Practices and Debates, Section 30, Film.
- 4 Krauss, *The originality of the Avant-Garde and Other Modernist Myths*, 267.
- 5 Ibid., 262.
- 6 Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge and Kegan Paul, 1962), 283.
- 7 Ibid., 68.
- 8 Krauss, *The originality of the Avant-Garde and Other Modernist Myths*, 268.
- 9 Ibid., 274. This is Rosalind Krauss recalling Marcel Proust's recollection of the "choreography of the appearances and disappearances" of the steeples of Martinville and Vieuxvicq and they moved in and out of his line of sight as he drove away from the town along a winding road. Marcel Proust, *Swann's Way*, trans. C. K. Scott Moncrieff (New York: Vintage Books, 1970).

DISTRIBUTIONS AND DEBRIS

- 1 Carter Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975* (New York: Allworth, 2000), 147.
- 2 Ingrid Schaffner, "Accumulated Vision and Violence, Barry Le Va," in *Accumulated Vision, Barry Le*
- Va*, ed. Ingrid Schaffner (Philadelphia: Institute of Contemporary Art, 2005), 56.
- 3 Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975*, 147.
- 4 Ibid.
- 5 Barry Le Va, "Notes," in *Barry Le Va* (Otterlo, Netherlands: Rijksmuseum Kröller-Müller, 1988), 4.
- 6 Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975*, 147.
- 7 Ibid.
- 8 Liza Béar and Willoughby Sharp, "...a continuous flow of fairly aimless movement," an interview with Barry Le Va, *Avalanche* (Fall 1971): 66.
- 9 Barry Le Va quoted in Marcus Pincus-Witten, "Barry Le Va: The Invisibility of Content," *Arts Magazine* 50, no.2 (October 1975): 60-61.
- 10 Ratcliff, *Out of the Box: the Reinvention of Art, 1965-1975*, 148.
- 11 Béar and Sharp, interview with Barry Le Va, 66.
- 12 Ibid.
- 13 Glenn Adamson, *Thinking Through Craft* (Oxford and New York: Berg, 2007), 127.
- 14 Béar and Sharp, interview with Barry Le Va, 66.
- 15 Pamela M. Lee, "The Archaeology of Scatter/The Logic of the Clue," in *Accumulated Vision, Barry Le Va*, ed. Ingrid Schaffner (Philadelphia: Institute of Contemporary Art, 2005), 32.
- 16 Schaffner, "Accumulated Vision and Violence, Barry Le Va," in *Accumulated Vision, Barry Le Va*, 74.
- 17 Rhea Anastas, "The Reconstruction Process: Barry Le Va, 1968-1975," in *Accumulated Vision, Barry Le Va*, ed. Ingrid Schaffner (Philadelphia: Institute of Contemporary Art, 2005), 37.
- 18 Lee, "The Archaeology of Scatter/The Logic of the Clue," in *Accumulated Vision, Barry Le Va*, 23.
- 19 Barbara Rose, "The Value of Didactic Art," *Artforum* 6 (April 1967): 32-36.
- 20 Schaffner, "Accumulated Vision and Violence, Barry Le Va," in *Accumulated Vision, Barry Le Va*, 61.
- 21 Ibid., 67.
- 22 Barry Le Va treasures his copy of the exhibition catalogue the Pasadena Art Museum's 1963 Duchamp retrospective: *Marcel Duchamp. Pasadena Art Museum. A Retrospective Exhibition, October 8 through November 3, 1963* / Preface Walter Hopps

(Pasadena Art Museum: Pasadena, 1963). Duchamp discusses the readymades in: Pierre Cabanne, *Dialogues with Marcel Duchamp*, trans. Ron Padgett (New York: Viking, 1971), 48.

- 23 Barbara Rose, "A Gallery Without Walls," *Art in America* 56 (March-April 1968): 60-71.

24 Ibid.

LES HALLES: A FICTIONAL CONCLUSION

- 1 While the buildings were new, the site itself had contained public market since 1138. 600 *Contreprojects pour Les Halles*, ed. Association pour la consultation internationale pour l'aménagement du quartier des Halles (Paris: Éditions du Moniteur, 1981), 47.
- 2 Baron Georges-Eugène Haussmann, *Mémoires*, Vol. III (Paris: Victor-Havard, 1890-1893) 478-489.
- 3 600 *Contreprojects pour Les Halles*, 48.
- 4 Ibid., 43.
- 5 Bertrand Lemoine, *Les Halles de Paris: L'histoire d'un lieu, les péripéties d'une reconstruction, la succession des projets, l'architecture d'un monument, l'enjeu d'une "cité"* (Paris: Equerre, 1980), 168.
- 6 Ibid., 205.
- 7 Ibid., 181.
- 8 Ibid., 174.
- 9 Haussmann, *Mémoires*, Vol. III, 478-489.
- 10 Bertrand Lemoine, "Viollet-le-Duc et l'architecture métallique," in *Viollet-le-Duc* (Paris: Réunion des Musées Nationaux, 1980), 248-259.
- 11 Eugène Viollet-le-Duc, *Entretiens sur l'architecture*, Vol. III, no.1 (Paris: Morel, 1972), 323.
- 12 Emile Zola, *Le Ventre de Paris*, Les Rougon-Macquart, Vol. III (Paris: Charpentier & Cie., 1873), 240.
- 13 "Ce Louvre du Peuple," in Lemoine, *Les Halles de Paris*, 205.
- 14 Emile Zola, *Le Ventre de Paris*, 23.
- 15 600 *Contreprojects pour Les Halles*, 43.
- 16 Ibid.
- 17 Lemoine, *Les Halles de Paris*, 212.
- 18 quoted in Pierre-Yves Ligen, "Urbanisme ou museographie," *Le Monde*, June 8, 1971.

- 19 600 *Contreprojects pour Les Halles*, 490.

20 these were: l'Association pour la protection des villes d'art; Commission des sites et des monuments du Touring-Club de France; Ligue urbaine et rurale; Comité d'initiative pour l'animation des Halles; Union des Champeaux. *Le Monde*, June 29, 1971.

- 21 Lemoine, *Les Halles de Paris*, 219. The jury considered the winning scheme for Beaubourg to be a direct descendant of the market buildings. The art critic André Fermigier later wrote that "the selection was equal parts prudence and remorse: because we were destroying Baltard's pavilions it was necessary to reconstruct them, in spirit at least, only steps from the crime, as a monumental atonement." André Fermigier, "Des maisons qui," in *Le Nouvel Observateur*, Sept. 6, 1971.

22 *Le Monde*, April 9, 1969.

- 23 In an appeal no doubt mindful of the French sensibility, Hein stated his hope that, "despite everything, it wasn't too late to stop the train to crazytown." *Combat*, June 20, 1971.

24 Lemoine, *Les Halles de Paris*, 220.

25 Ibid., 217.

26 Ibid., 219.

27 C. Guillemain et H. Dubourg, architectes quoted in *Architecture*, no. 401, (February 1977): 80-81.

28 Lemoine, *Les Halles de Paris*, 6.

29 Ibid., 7.

30 Adamson, *Thinking Through Craft*, 129.

31 see *Accumulated Vision*, Barry Le Va, ed. Ingrid Schaffner (Philadelphia: Institute of Contemporary Art, 2005), 96.

REFERENCES

600 *Contreprojects pour Les Halles*. Association pour la consultation international pour l'aménagement du quartier des Halles. Paris: Éditions du Moniteur, 1981.

Allen, Stan. "From Object to Field." *Architectural Design Profile 127 (Architecture after Geometry)* AD vol.67 no.5/6 (May/June 1997): 24-31.

Andrews, Max. *Land Art: A cultural ecology handbook*. London: RSA and Arts Council England, 2006.

Attitudes/sculptures: Gilbert & George, Barry Le Va, Robert Morris, Bruce Nauman, Reiner Ruthenbeck, Richard Serra, Robert Smithson, Franz Erhard Walther: Exposition du 17 mars au 14 mai 1995. CAPC Musée d'art contemporain de Bordeaux, ed. Bordeaux: CAPC Musée d'art contemporain, 1995.

Ballantyne, Michael, ed. *Expo 67 Art*. Montreal: Tundra Books, 1967.

Banham, Reyner. "Megacity Montreal." in *Megastructure: Urban futures of the recent past*, by Reyner Banham, 104-129. New York: Harper & Row, 1976.

Berger, Maurice, *Labyrinths: Robert Morris, Minimalism, and the 1960s*. New York: Harper & Row, 1989.

Berton, Pierre. *1967, the last good year*. Toronto: Doubleday, 1997.

Boettger, Suzaan. *Earthworks: Art and the landscape of the sixties*. Berkeley and London: University of California Press, 2002.

Boudon, Françoise. "A History of Les Halles, 1400-1950." *Architectural Design Profile 20 (Les Halles)*

AD vol.50 no.9/10 (Sept/Oct 1980): 4-10.

Boyer, Christine M. *The City of Collective Memory*. Cambridge: MIT Press, 1996.

Brillat-Savarin, Jean Anthelme (and M. F. K. Fisher, ed). *The Physiology of Taste: Or, Meditations on Transcendental Gastronomy*. New York: Knopf, 1971.

Canadian Broadcasting Corporation. "A pavilion reborn." Broadcast date: June 5, 1995. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-555/>

Canadian Broadcasting Corporation. "A tale of towers." Broadcast date: September 16, 1980. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-554/>

Canadian Broadcasting Corporation. "Building the World's Fair." Broadcast date: November 5, 1963. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-527/>

Canadian Broadcasting Corporation. "Montreal gets the call." Broadcast date: November 13, 1962. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-526/>

Canadian Broadcasting Corporation. "Montreal prepares for the world." Broadcast date: July 9, 1964. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-540/>

Canadian Broadcasting Corporation. "Now What?" Broadcast date: August 3, 1985. Last updated: August 14, 2009. <http://archives.cbc.ca/society/celebrations/topics/100-538/>

Canadian Corporation for the 1967 World Exhibition. *Introduction of an Urban Concept in the Planning*

of the Exposition - Expo 67. Montreal: Canadian Corporation for the 1967 World Exhibition and RBT Printing Limited, 1965.

Canadian Corporation for the 1967 World Exhibition and Fritz Gottschalk, eds. *Mobilier d'extérieur pour Expo 67 – Site Furniture at Expo 67*. Montreal: Canadian Corporation for the 1967 World Exhibition and RBT Printing Limited, 1963.

Canadian Corporation for the 1967 World Exhibition, ed. *Expo 67: les objectifs du plan directeur – Expo 67: master plan design intent*. Montreal: Canadian Corporation for the 1967 World Exhibition, 1963.

Carani, Marie. *Des lieux de mémoire: identité et culture modernes au Québec, 1930-1960*. Ottawa: Presses de l'Université d'Ottawa, 1995.

Carson, Rachel. *Silent Spring*. Boston and New York: First Mariner, 2002.

Civic Visions, World's Fairs. Benjamin Portis and Neil Harris, eds. Montreal: Canadian Centre for Architecture, 1993. Published in conjunction with the exhibition "Civic Visions, World's Fairs" shown at the CCA.

Conrads, Ulrich and Hans Günther Sperlich, eds. *Fantastic architecture*. London: Architectural Press, 1963.

Corner, James, ed. *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press, 1999.

Cowper, Charles and Charles Downes, eds. *The building erected in hyde park for the great exhibition of the works of industry of all nations, 1851: Illustrated by twenty-eight large plates*. London: Victoria & Albert Museum, 1972.

Crowley, David and June Pavitt. *Cold War Modern: Design 1945-1970*. London: V&A, 2008.

Cunningham, Anne S. *Crystal Palaces: Garden Conservatories of the United States*. New York: Princeton Architectural Press, 2000.

Curtis, William J. R. and RCR Arquitectes. *RCR Aranda Pigem Vilalta Arquitectes: entre la abstraccion y la naturaleza – Between abstraction and nature*. Barcelona: Editorial Gustavo Gili, 2004.

Dear, Michael J. *The Postmodern Urban Condition*. Oxford and Malden, MA: Blackwell, 2000.

Dompierre, Louise. *Walking Woman Works: Michael Snow, 1961-1967 – New Representational Art and its Uses*. Kingston, ON: Agnes Etherington Art Centre, Queen's University, 1983.

Dupuy, Pierre. *Expo 67, ou, la découverte de la fierté*. Montreal: Éditions La Presse, 1972.

Durant, Stuart and Ferdinand-Charles-Louis Dutert. *Palais des machines*. London: Phaidon, 1994.

Ferreri, Marco. "Movies in the 'Trou'." *Architectural Design Profile 20 (Les Halles)* AD vol.50 no.9/10 (Sept/Oct 1980): 16-17.

Fiset, Edouard. *Introduction d'un concept urbain dans la planification de l'exposition Expo67 – Introduction of an Urban Concept in the Planning of the Exposition Expo 67*. Montreal: The Canadian Corporation for the 1967 World Exhibition, 1965.

Foucault, Michel. "Of Other Spaces, Heterotopias (1967)." Translated by Jay Miskowiec. *Diacritics* 16, no.1 (spring 1986): 22-17.

Frampton, Kenneth. *Modern Architecture: A Critical History*. London and New York: Thames & Hudson, 1992.

Fulford, Robert. *Remember Expo: A Pictorial Record*. Toronto: McClelland and Stewart, 1968.

Fulford, Robert. *This was Expo*. Toronto: McClelland and Stewart, 1968.

Gessel, Michael van, Christian Bertram and Erik de Jong, eds. *Michael van Gessel: Landscape Architect*. Rotterdam: NAI, 2008.

Geyrhalter, Nikolaus. *Unser täglich Brot (Our Daily Bread)*. 92 minutes. Nikolaus Geyrhalter Filmproduktion, 2005. Documentary film.

Gold, John Robert and Margaret M. Gold. *Cities of Culture: staging international festivals and the urban agenda, 1851-2000*. Burlington, VT: Ashgate, 2005.

Graziani, Ron. *Robert Smithson and the American Landscape*. Cambridge, UK and New York: Cambridge University Press, 2004.

Grenier, Raymond. *Regards sur l'Expo 67*. Montreal: Éditions de l'Homme, 1965.

Haeg, Fritz and Diana Balmori, eds. *Edible estates: Attack on the front lawn*. New York: Metropolis Books, 2008.

Harvey, Sheila and Ken Fieldhouse. *The Cultured Landscape: Designing the environment in the 21st century*. New York: Routledge, 2005.

Haskell, Barbara, ed. *Agnes Martin*. New York: Whitney Museum of American Art, 1992.

Hix, John. *The Glasshouse*. London: Phaidon, 1996.

Hogg, Helen S. *Man and his world, Expo 67 – Terre des hommes, l'Expo 67*. Toronto: University Press, 1968.

Jacobs, Peter. "Frederick G. Todd and the Creation of Canada's Urban Landscape." *Bulletin of the Association for the Preservation Technology*, vol.15, no.4, Landscape Preservation (1983): 27-34.

Jameson, Frederick. "Postmodernism and the City." *New Left Review* no.146 (1984): 80-92.

Jasmin, Yves. *La petite histoire d'Expo 67*:

L'Exposition universelle et internationale de Montréal comme vous ne l'avez jamais vue. Montreal: Les Éditions Québec/Amérique, 1997.

Jones, Louisa. *Kitchen Gardens of France*. New York: Thames & Hudson, 1999.

Jong, Erik de, Michel Lafaille and Christian Bertram. *Landschappen van verbeelding – Landscapes of the Imagination 1600-2000*. Rotterdam: Nai, 2008.

Judd, Donald and Rudolf Herman Fuchs. *Donald Judd: Large-scale works*. New York: PaceWildenstein, 2004.

Kalin, Isadore. *Expo 67: survey of building materials, systems and techniques used at the Universal and International Exhibition of 1967, Montreal, Canada*. Ottawa: Materials Branch, Dept. of Industry, Trade and Commerce, 1969.

Kastner, Jeffrey and Brian Wallis. *Land and Environmental Art*. London: Phaidon, 2010.

Kenneally, Rhona Richman and Johanne Sloan, eds. *Expo 67: not just a souvenir*. Toronto: University of Toronto Press, 2010.

Kenner, Robert. *Food, Inc.* 94 minutes. Magnolia Pictures, 2008. Documentary film.

Klüver, Billy, Julie Martin, Barbara Rose and Experiments in Art and Technology, eds. *Pavilion*. New York: Dutton; Toronto: Clarke, Irwin, 1972.

Koolhaas, Rem. *Delirious New York*. New York: The Monacelli Press, 1994.

Koppelkamm, Stefan. *Glasshouses and wintergardens of the nineteenth century*. London, Toronto and New York: Rizzoli, 1981.

Krauel, Jacobo. *The Art of Landscape*. Barcelona: Carles Broto i Comerma, 2006.

Krauss, Rosalind E. *The originality of the Avant-Garde and Other Modernist Myths*. Cambridge, MA: MIT Press, 1985.

Kröller, Eva-Marie. "Expo 67: Canada's Camelot?" *Canadian Literature*, 152-153 (1997): 36-51.

Kuffert, Leonard B. "The Long Long Weekend: Centennial and Expo 67." in *A Great Duty: Canadian responses to modern life and mass culture in Canada, 1939-1967*, by Leonard B. Kuffert, 217-234. Montreal: McGill-Queen's University Press, 2003.

Lailach, Michael and Uta Grosenick. *Land Art*. Köln and London: Taschen, 2007.

Landscape Architecture Europe Foundation, ed. *On Site: Landscape Architecture Europe*. Basel, Boston and Berlin: Birkhäuser, 2009.

Le Va, Barry. *Accumulated Vision: Barry Le Va*. Ingrid Schaffner, Rhea Anastas and the University of Pennsylvania Institute of Contemporary Art, eds. Philadelphia: Institute of Contemporary Art, University of Pennsylvania, 2005.

Le Va, Barry, F. Carlo Schmid, Staatliche Graphische Sammlung München and Museum Morsbroich Leverkusen, eds. *Barry Le Va*. Stuttgart: Edition Cantz, 1993.

Lemoine, Bertrand. *Les Halles de Paris: L'histoire d'un lieu, les péripéties d'une reconstruction, la succession des projets, l'architecture d'un monument, l'enjeu d'une "cité"*. Paris: Equerre, 1980.

Lorimier, Jean-Louis de, ed. *Expo 67: The Memorial Album of the first category universal and international Exhibition held in Montreal from the twenty-seventh of April to the twenty-ninth of October, nineteen hundred and sixty-seven*. Toronto: Thomas Nelson and Sons, 1968.

Lortie, André, ed. *The 60s: Montreal Thinks Big*. Montreal: Canadian Center for Architecture;

Vancouver and Toronto: Douglas & McIntyre, 2004.

Lyotard, Jean-François. *The Postmodern Explained: Correspondence, 1982-1985*. Minneapolis: University of Minnesota Press, 1993.
Mandell, Richard. *Paris 1900, The Great World's Fair*. Toronto: University of Toronto Press, 1967.

Martin, Agnes. *Agnes Martin, Paintings and Drawings, 1957-1975*. Dore Ashton, Hayward Gallery and Arts Council of Great Britain, eds. London: Arts Council, 1977.

Martin, Agnes, and Richard Tuttle, eds. *Agnes Martin / Richard Tuttle*. Modern Art Museum of Fort Worth and SITE Santa Fe (Gallery). Fort Worth: Modern Art Museum of Fort Worth, 1998.

Martin, Agnes. *Agnes Martin*. University of Pennsylvania Institute of Contemporary Art, ed. Philadelphia: Falcon Press, 1976.

McKean, John. *Crystal Palace: Joseph Paxton and Charles Fox*. London: Phaidon, 1994.

Miedema, Gary Richard. *For Canada's Sake: Public Religion, Centennial Celebrations; the Re-making of Canada in the 1960s*. Montreal: McGill-Queen's University Press, 2005.

Miller, Megan. "Fresh Kills Landfill to Lifescape." *Praxis: Journal of Building and Writing* no.4 (2002): 56-57.

Milne, Charles C., ed. *Terre des hommes: Guide officiel – Man and His World: Official guide*. Toronto: Maclean-Hunter, 1967.

Miotto, Luciana, ed. *Les Halles*. London: Architectural Design, 1980.

Mitchell, Don and Richard Van Deusen. "Downsview Park: Open Space or Public Space?" Case: *Downsview Park Toronto*. Julia Czerniak, ed. New York: GSD, Prestel Verlag, 2001.

Part object part sculpture. Molesworth, Helen Anne and Wexner Center for the Arts, eds. Columbus, OH: Wexner Center for the Arts and The Ohio State University; University Park, PA: Pennsylvania State University Press, 2005.

Moore, Charles Willard, William J. Mitchell and William Turnbull. *The Poetics of Gardens*. Cambridge MA: MIT Press, 1988.

Morris, Robert. *Robert Morris*. Michael Compton, David Sylvester and Tate Gallery, eds. London: Tate Gallery, 1971.

Morris, Robert and Solomon R. Guggenheim Foundation, eds. *Robert Morris: The mind/body problem: Solomon R. Guggenheim Museum, Soho, January-April 1994*. New York: Guggenheim Museum Foundation, 1994.

Pawley, Martin. *Buckminster Fuller*. New York: Taplinger Publishing Co., 1990.

Pefanis, Julian. *Heterology and the Postmodern: Bataille, Baudrillard, and Lyotard*. Durham: Duke University Press, 1991.

Pollan, Michael. *In Defense of Food: An Eater's Manifesto*. New York: Penguin Press, 2008.

Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. New York: Penguin Press, 2006.

Ratcliff, Carter. *Out of the Box: the Reinvention of Art, 1965-1975*. New York: Allworth, 2000.

Rodgers, Timothy Robert. *In Pursuit of Perfection: The Art of Agnes Martin, Maria Martinez, and Florence Pierce*. Museum of New Mexico, ed. Santa Fe: Museum of New Mexico Press and the Museum of Fine Arts, 2004.

Rorimer, Anne. *New Art in the 60s and 70s: Redefining Reality*. London: Thames & Hudson, 2001.

Roy, Gabrielle, ed. *Terre des Hommes – Man and his World*. Ottawa: McLaren, Morris and Todd, 1967.

Saguaro, Shelley. *Garden Plots: The politics and poetics of gardens*. Aldershot, UK and Burlington, VT: Ashgate, 2006.

Saint-Exupéry, Antoine de. *Wind, Sand and Stars*. Translated by Lewis Galantière. New York: Harcourt, Brace & World, 1940.

Smithson, Robert. "A Museum on Language in the Vicinity of Art (1968)." in *Robert Smithson: The Collected Writings*, Jack Flam, ed., 78-94. Berkeley: UC Press, 1996.

Smithson, Robert. "Frederick Law Olmsted and the Dialectical Landscape (1973)." in *Robert Smithson: The Collected Writings*, Jack Flam, ed., 157-171. Berkeley: UC Press, 1996.

Swaffield, Simon. *Theory in Landscape Architecture*. Philadelphia: University of Pennsylvania Press, 2002.

Tucker, Marcia. *Robert Morris*. Whitney Museum of American Art, ed. New York: Praeger, 1970.

Tufnell, Ben. *Land Art*. London: Tate, 2007.

Villa, Luis and Frank Macioge & Associates. *Terre des Hommes: Esquisses de l'Expo 67 – Man and his World: Sketches of Expo 67*. Montreal: Simpson Press for The Canadian Corporation for the 1967 World Exhibition, 1963.

Waldheim, Charles, ed. *The Landscape Urbanism Reader*. New York: Princeton Architectural Press, 2006.

Weber, Karl, ed. *Food, Inc.: How Industrial Food is Making us Sicker, Fatter and Poorer – And What You Can Do About It*. New York: Public Affairs, 2009.

Weilacher, Udo. *Between Landscape Architecture and Land Art*. Basel: Birkhäuser, 1996.

Wilson, Alexander. *The Culture of Nature: The North American Landscape from Disney to the Exxon Valdez*. Toronto: Between the Lines, 1991.

Wood, Paul and GD Jayalakshmi. *Smithson and Serra: Beyond Modernism?* 25 minutes. The Roland Collection, Modern Art: Practices and Debates, Section 30. Film.

Woods, May. *Glass houses: A history of greenhouses, orangeries and conservatories*. Arete Swartz Warren, ed. New York: Rizzoli, 1988.

Young, Paul. *Globalization and the Great Exhibition: The Victorian New World Order*. New York and Basingstoke: Macmillan, 2009.

Zerbe, Jerome. *Les pavillons: French pavilions of the eighteenth century*. Cyril Connolly, ed. New York: Norton, 1979.

Expo 67. <http://expo67.morenciel>. 2011.

Expo Lounge. <http://expolounge.blogspot.com/>. 2011

Expo 67: Man and His World... A Virtual Experience. Library and Archives Canada. <http://www.collectionscanada.gc.ca/expo>. 2007.

Expo 67 - Montreal World's Fair. www.westland.net/expo67/. 2006.

Expo 67: on an island in a river 40 years ago. www.dchillier.com. 2011.

L'Exposition universelle de Montreal de 1967. Bibliotheque et Archives nationales de Quebec. http://www.banq.qc.ca/histoire_quebec/parcours_thematiques/Expo67/index.jsp. 2007.

Montreal by Metro <http://www.metrodemontreal.com/>. 2007.

"Novelty Monorails - Expo '67." David B. Simons

Jr. *The Monorail Society*. www.monorails.org/tMspages/Expo67.html. 2011.

Parc Jean-Drapeau. www.parcjeandrapeau.com. 2011.

Proudly Canadian: Expo 67 in Montreal. A photo collection about Canada's Centennial Celebration! <http://expo67.ncf.ca>. 2007.

Worldfairs: Les Expositions Universelles. www.worldfairs.info. 2011.