
(Volume 1)

Craig Buckley

A DISSERTATION PRESENTED TO THE FACULTY OF PRINCETON UNIVERSITY IN CANDIDACY FOR THE DEGREE OF DOCTOR OF PHILOSOPHY RECOMMENDED FOR ACCEPTANCE BY THE SCHOOL OF ARCHITECTURE

Supervisors: Beatriz Colomina and Spyridon Papapetres

November 2013
Abstract

This dissertation examines the work of a number of architects who sought to rethink the physical, visual, and historiographic problems of assembly at a moment when the discipline was being destabilized by changing cultural politics and the proliferation of new electronic media. Through a series of case studies, it analyzes buildings, images, publications, prototypes, and films made from the late 1950s to the early 1970s by architects in London (Theo Crosby and Edward Wright), Vienna (Hans Hollein, Gunther Feuerstein, Walter Pichler), Paris (the Utopie group), and Florence (the Superstudio group). I argue that during these years the making of composite images was intensely identified with imagining new forms of construction, a dynamic informed by concepts of montage pioneered by the historical avant-gardes. Rather than compare postwar experiments to those of the 1920s, the dissertation considers how emerging media practices responded to the absorption of montage into postwar mass culture. The rethinking of montage paralleled a changing attitude toward machines, in which an earlier twentieth-century ambition to master mechanization through design and prefabrication gave way to an attitude emphasizing a more flexible combination and rearrangement of parts, materials, and concepts drawn from a wide range of sources. Assembling an image out of disparate photomechanical elements graphically enacted the manner in which architects imagined appropriating technologies and materials from outside the domain of architecture in a bid to transform the discipline. During these years architects engaged montage as a mode of working both within and against the space of architectural publicity; one that was less illustrative than it was performative. If efforts to reinvent problems of assembly aimed to shift discourse within the discipline, they were also shaped by changes in the technological apparatuses of mechanical reproduction, notably the displacement of industrial letterpress by photo-offset lithography. In retrospect, grasping changing ideas of assembly helps to comprehend how during these years the status of building shifted within architectural culture, while also prefiguring how habits of “cut and paste,”—the continual combination and alteration of ready-made visual material—would become central to the operational culture of digital tools in our own time.
# Table of Contents

3

Abstract

5

Acknowledgments

7

List of Figures

15

Introduction:
Graphic Apparatuses and Techniques of Assembly

45

Chapter One: London c. 1956
The Conflicted Continuum: Edward Wright, Theo Crosby, and the Expansion of Collage

105

Chapter Two: Vienna c. 1964
Transformation and Instantaneous Reassembly: Hans Hollein, Walter Pichler, and the Remaking of Montage

163

Chapter Three: Paris c. 1968
The Rhetoric of Disassembly: The Utopie Group, May 1968, and the Pneumatic Image

223

Chapter Four: Florence c. 1972
Ruptured Temporality: Superstudio, Allegory, and the Surface of Media

291

Postscript

296

Bibliography

319

Figures
Acknowledgments

Writing a dissertation is a slow campaign, waged as much on one’s own limitations and assumptions as it is on the subject of the research. I am fortunate and extremely grateful to have had much help and guidance in this struggle—the dissertation would not be what it is without it. I am grateful first of all, to my advisor Beatriz Colomina, for trusting that I could swim when thrown in the deep end of a new discipline, and for the intelligence, guidance, and vision that she has shown at critical moments, from the initial tentative conversations right through to the final stages. I am incredibly thankful to have had Spyros Papapetres as co-advisor of the dissertation, whose extraordinary insight, advice, criticism, and thoroughness enriched the process and the text. I owe a huge debt of gratitude to my examiner Hal Foster, who helped convince me to come to Princeton, and as a writer and teacher, has continually challenged me to refine my thinking and to push it further. I owe great thanks to my examiner Brigid Doherty, whose generosity and insight as a teacher and scholar, have taught me more than she probably knows. I also wish to thank my external examiner Mark Wigley, for bringing so much to every work he analyzes, and for the trust and support he has shown me over the last few years at the Graduate School of Architecture, Planning, and Preservation, Columbia University.

The dissertation benefited from the generosity of many people who shared their recollections in interviews and conversations, and who opened their offices, houses, and archives to me. In London, Dennis Crompton shed light on Archigram and the minutiae of its making; Nayia Yiakoumaki’s generosity made working at the Whitechapel Gallery archives a pleasure; and Paul Stiff and Ann Pillar kindly guided me through the archives of Edward Wright at the University of Reading. In Paris, Isabelle Auricoste, Jean Aubert, Jean-Paul Jungmann, Antoine Stinco, and Hubert Tonka provided hospitality and spent many hours sharing their collections and recollections of AJS Aerolande and Utopie. Hans Hollein and Günther Feuerstein welcomed me to Vienna and provided numerous insights over the course of several conversations. The days I spent with Gian Piero Frassinelli and Cristiano Toraldo di Francia at the Superstudio Archive in Florence and in Filottrano were a pleasure and continue to be a source of reflection. I am incredibly grateful to each of you. In addition, I would like to thank the staffs at the Princeton
School of Architecture Library, the Avery Library Classics Collection at Columbia University, the Archives of the Graduate School of Design, Harvard, the Architecture and Design department at the Centre Pompidou, Paris, the Canadian Centre for Architecture, Montreal, the Architecture and Design Department at the Museum of Modern Art, and the Special Collections of the Tate Modern for providing access to documents and works in their collections.

The dissertation has benefitted from invitations to present or publish portions of the research over the years. In these contexts, the comments, responses, and conversations that I had with Kaira Cabañas, Jean-Louis Cohen, Esther Da Costa Meyer, Ed Eigen, Jesko Fezer, Kim Förster, Sarah Herda, Sylvère Lotringer, Anson Rabinbach, Nadja Rottner, Felicity D. Scott, Antonio Somaini, Martino Stierli, Anthony Vidler, Jean-Louis Violeau, Enrique Walker, and Sarah Whiting have helped to advance my own thinking. The climate created by colleagues at Princeton and Columbia has helped to both sharpen my focus and to provide the right measure of distraction when needed. As a friend and colleague, Alex Kitnick has been there to help move these thoughts forward from the very beginning. Over the years, ongoing conversations with Pep Aviles, Leonardo Diaz-Borioli, Jocelyn Froimovich, Urtzi Grau, Alicia Imperiale, Lydia Kallipoliti, Joaquim Moreno, Anna Puigjaner, Enrique Ramirez, Daria Ricchi, Daniel Talesnik, Irene Sunwoo, Molly Steenson, Federica Vannucchi, Meredith Tenhoor, and Mark Wasiuta have provided a mixture of doubt, precision, and cheer that I continue to cherish.

Generous support from several funding sources has crucially enabled me to complete the research over the years, including a Dissertation Fellowship from the Social Sciences and Humanities Research Council of Canada, a research fellowship at the Canadian Center for Architecture, as well as the Elizabeth Proctor Fellowship, and the Cramer and Shanley summer research fellowships from the Princeton School of Architecture.

Finally, I would like to thank Ruth and Michelle Buckley, for their unfailing love and support, Del Buckley, who even in his absence was an influence on this journey, and Rey Akdogan, whose patience and love has helped in writing and rewriting these pages over the years.
Figure List

Introduction

Figure i.1 Page Layout from Casabella 426, July 1968, featuring a collaborative work by the students Gherardi, Pacini, Poli, Spinelli, Russo.

Figure i.2 Page Layout from Casabella 426, July 1968, featuring a collaborative work by the students Bartolini, Bellini, Carletti, Micheli, Montanari, Moraja, and Pinagli

Figure i.3. Ludwig Mies van der Rohe, Friedrichstrasse Skyscraper, Photomontage, 1921

Figure i.4. Friedrich von Thiersch, Project for a New Casino, Graphite, gouache, and photographic print, 1902.

Figure i.5. Ludwig Mies van der Rohe, Museum for a Small City, Photocollage, 1942

Figure i.6. Sigfried Giedion, Rockefeller Center, Photomontage, published in Space, Time, Architecture: The Growth of a New Tradition, 1941

Figure i.7 Single color compact offset press, c. 1964.

Chapter 1:

Fig. 1.1 Catalogue for Collages and Objects, London, Institute for Contemporary Art, 1954

Fig. 1.2. John McHale viewing “Why I took to the washers in luxury flats” with the installation for Collages and Objects visible in the background.

Fig. 1.3 Installation View, A Parallel of Life and Art, ICA, London 1953

Fig. 1.4 Alison and Peter Smithson, Renovation of Ronald Jenkins Office, 1952

Fig. 1.5 Scraps of Paolozzi prints pasted to the walls of the Smithson’s bathroom, early 1950s.

Fig. 1.6 News clipping, Alison and Peter Smithson Collection, December 4, 1952
Fig. 1.7 Edward Wright, Nonsense Conversation, Collage, c.1956

Fig. 1.8 Edward Wright, invitation card for “Useful and Metaphorical Objects,” at the Mayor Gallery, 1948.

Fig. 1.9 Work by Central School Graphic Design students, reproduced in “Pattern, Sound, Motion,” *Typographica* 9, 1954.

Fig. 1.10 Detail of Chad from Edward Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” *Ark* 19, 1957.

Fig. 1.11 Page Spread of Edward Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” *Ark* 19, 1957

Fig. 1.12 Page Spread from Reyner Banham, “The New Brutalism” featuring Nigel Henderson’s photograph of London Graffiti, 1955

Fig. 1.13 Brassai, *Graffiti*, photograph from series *VIII The Magic*, c. 1935-1950

Fig. 1.14a Edward Wright, Photograph of the Graffiti in the rue Visconti, Paris, early 1950s.

Fig. 1.14b Detail of page from Edward Wright, “Writing and Environment,” *Architectural Design* (December 1956).

Fig. 1.15 Diagram of Werner Hachler’s St. Raphael system

Fig. 1.16 Detail of page spread from Edward Wright, “Writing and Environment,” *Architectural Design* (December 1956).

Fig. 1.17 Film Stills from *Nice Time*, Claude Goretta and Alain Tanner, 1956

Fig. 1.18 Gordon Cullen, Cover, *The Architectural Review*, December 1952

Fig. 1.19 Gordon Cullen, “Outdoor Publicity,” AR, May 1949
Fig. 1.20 Edward Wright, Arrangement of Lettering for Alison and Peter Smithsons’ House of the Future, Daily Mail Ideal Home Exhibition, London 1956

Fig. 1.21 Gordon Cullen, Cover of the AR, July 1955

Fig. 1.22 Edward Wright, Cover for Architectural Design, November 1955.

Fig. 1.23 Edward Wright and Theo Crosby, Views of the Exhibition Stand for Architectural Design and the Architects’ Standard Catalogue Company, at the Building Exhibition, Olympia, London, 1955. Photograph: Sam Lambert.

Fig. 1.24 Architectural Design, Cover, January 1950

Fig. 1.25 Theo Crosby, Architectural Design, Cover, August 1954, May 1955

Fig. 1.26 Theo Crosby, Architectural Design, Cover, November 1954

Fig. 1.27 Theo Crosby, Architectural Design, Cover, September 1955

Fig. 1.28a Theo Crosby and Edward Wright, *Uppercase* 2 (Cover)

Fig. 1.28b Theo Crosby and Edward Wright, *Uppercase* 2 Unfolded

Fig. 1.29 Edward Wright, Cover, Catalogue for This is Tomorrow, 1956

Fig. 1.30 Theo Crosby, Cover, *Architecture Design*, October 1956

Fig. 1.31 Installation view, Group One, This is Tomorrow, Whitechapel Gallery, 1956. Photograph: Sam Lambert

Fig. 1.32 Installation view, Group One, This is Tomorrow, Whitechapel Gallery, 1956. Photograph John Maltby.

Fig. 1.33 Edward Wright, Mural, South East Elevation of Exhibition Pavilion, Union Internationale des Architectes Congress, London, 1961.

Fig. 1.34 Edward Wright, Detail of Mural, South East Elevation of Exhibition Pavilion, UIA Congress, London, 1961.
Chapter 2:

Fig. 2.1 Page Layout from Achleitner, “Entwicklung,” and “Notizen,” Bauen + Wohnen, September 1965.

Fig. 2.2 Comparison of page from Hans Hollein, Plastic Space, Masters Thesis, College of Environmental Design, University of California, Berkeley, 1960, and Friedrich Kiesler, Endless House, 1959.

Fig. 2.3 Hans Hollein, Pages from Plastic Space, 1960

Fig. 2.4 Pages from Plastic Space, 1960

Fig. 2.5 Rainer and Carl Aubock, Veitingergasse Estate, 1953

Fig. 2.6 Wiener Gruppe, Second Vienna Cabaret, 1958

Fig. 2.7 Page from Gerhard Rühm, Anregungen zur Kirchenbau, 1961.

Fig. 2.8 Page spread from Spur 4, 1961

Fig. 2.9 Details from Hollein and Pichler, Architektur: Work in Progress, 1963

Fig. 2.10 Page spread from Hollein and Pichler, Architektur: Work in Progress, 1963

Fig. 2.11 Page spread from Arthur Drexler, Twentieth-Century Architecture, 1964, and Page spread from Bau 2, 1965

Fig. 2.12 Hans Hollein, Aircraft-Carrier in a Landscape, 1964.

Fig. 2.13 Hans Hollein, Highrise Building: Sparkplug, 1964

Fig. 2.14 Hans Hollein, Urban Renewal (Manhattan) (1964)

Fig. 2.15 Claes Oldenburg, Door Handle and Locks for Stockholm, 1966

Fig. 2.16 Installation View, Architectural Fantasies, Museum of Modern Art, New York, 1967

Fig. 2.17 Hans Hollein, Monument to Victims of the Holocaust, 1963

Fig. 2.18 Page spread “Zukunft der Architektur,” in Bau 1, 1965

Fig. 2.19 Hans Hollein, Photomontage studies for the development of Retti façade, 1964-1965

Fig. 2.20 Hans Hollein, Retti Boutique, Vienna
Fig. 2.21 Hans Hollein, Walter Pichler, Gunther Feuerstein, “Background USA,” *Bau* 6, 1965.

Fig. 2.22 Hans Hollein, Walter Pichler, Gunther Feuerstein, Page from “Background USA,” *Bau* 6, 1965

Fig. 2.23 Hans Hollein, Walter Pichler, Gunther Feuerstein, Page from “Background USA,” *Bau* 6, 1965

Fig. 2.24 Hans Hollein, Cover, *Bau* 1-2, 1968

Fig. 2.25 Hans Hollein, Page spreads from “Alles ist Architektur,” *Bau* 1-2, 1968

Fig. 2.26 Advertisement for Svobodair, *Bau* 1968; Svobodair included in table of content page layout, *L’Architecture d’aujourd’hui*, September 1968

Fig. 2.27 Hans Hollein, Entrance to Austriennale exhibit, Milan Triennale, 1968

Fig. 2.28 Walter Pichler, Prototype (TV Helmet), 1967

Fig. 2.29 Hans Hollein, Page from “Alles ist Architektur,” 1968

**Chapter 3:**

Fig. 3.1 Utopie, “Architecture Comme Problème Théorique,” *L’architecture d’aujourd’hui* (September 1968) 81.

Fig. 3.2 Edouard Albert, with Robert Boileau, Jacques-Henri Labourdette Tour Croulebarbe, Paris, 1961

Fig. 3.3 Jean Aubert, “Devenir Surannée,” *Utopie* 1, 1967

Fig. 3.4 Jean Aubert, “Devenir Surannée,” *Utopie* 1, 1967

Fig. 3.5 David-Georges Emmerich, “Deltomobiles into Houses,” *Architectural Design*, 1966

Fig. 3.6 “Cassons les Prix,” c. 1968

Fig. 3.7 Hubert Tonka and Rene Lourau, “La Répression,” *Utopie* 1, 1967

Fig. 3.8 Hubert Tonka and Rene Lourau, Paste up for “La Répression,” *Utopie* 1, 1967
Fig. 3.9, “La Répression,” *Utopie* 1, 1967, Detail of transfer lettering

Fig. 3.10 Page detail from from “Comment Vivent les Villes Inventées,” *Elle*, January 1966

Fig. 3.11 Page Spread from “La Répression,” *Utopie* 1, 1967.

Fig. 3.12 Poster for Jean Luc Godard, “2 ou 3 choses que je sais d’elle,” 1966

Fig. 3.13 Detail of Page from Antoine Stinco, “Art?...!,” *Utopie* 1, 1967

Fig. 3.14 Page Spread from Stinco “Art?...!,” *Utopie* 1, 1967

Fig. 3.15 Page from *Ulm: Zeitschrift der Hochschule für Gestaltung*, 1964

Fig. 3.16 Page Spread from *The Ford Guide to Styling*, 1964

Fig. 3.17 Page Spread from Stinco, “Art?...!,” *Utopie* 1, 1967

Fig. 3.19 Page Spread from Stinco, “Art?...!,” *Utopie* 1, 1967

Fig. 3.20 Paul Maymont, Photomontage, Ville Suspendue, 1962

Fig. 3.21 *Utopie*, Page layout from *Architecture Comme Problème Théorique*, 1968

Fig. 3.22 Detail of Real Estate Advertisements included *Architecture Comme Problème Théorique*, 1968

Fig. 3.23 Page Spread from Paris Match, July 1967,

Fig. 3.24 *Utopie*, “De Gaulle über Halles,” detail from *Architecture Comme Problème Théorique*, L’architecture d’aujourd’hui, 1968

Fig. 3.25 *Utopie*, “De Gaulle über Halles,” page from *Architecture Comme Problème Théorique*, 1968

Fig. 3.26 Jean-Paul Jungmann, Dyodon, Croquis pg. 61, #3, 1967

Fig. 3.27 Jean-Paul Jungmann, Dyodon, Thesis Presentation drawing, 1967

Fig. 3.28 Antoine Stinco, Thesis Project, Assembly Sequence Drawing, 1967

Fig. 3.29 *Utopie*, Poster for Structures Gonflables, March 1968, Paris

Fig. 3.30 *Structures Gonflables*, March 1968, Paris. Installation views
Fig. 3.31 Utopie, *Structures Gonflables*, Page Layout from Catalogue

Fig. 3.32 Promotional brochure, AJS Aerolande and SCIFA, 1968

Fig. 3.33 Aubert, Jungmann, Stinco, Temporary Exhibition Structure, ca. 1968

Chapter 4:

Fig. 4.1 Superstudio, System Diagram for Microevent/Microenvironment, Installation at Italy: The New Domestic Landscape, Museum of Modern Art, 1972.

Fig. 4.2 Page from Piero Frassinelli, Storyboard and Model for Center for Anthropological Studies, Applied to the Problems of Acculturation, Thesis Project, 1968

Fig. 4.3 Page from Piero Frassinelli, Storyboard and Model for Center for Anthropological Studies, Applied to the Problems of Acculturation, Thesis Project, 1968

Fig. 4.4 Cristiano Toraldo di Francia, Holiday Machine on the coast of Calabria, Thesis Project, 1967

Fig. 4.5 Leonardo Savioli, Housing Complex at Sorgane, 1962-1970

Fig. 4.6 Leonardo Savioli, Casa Piagentina, 1964

Fig. 4.7 Leonardo Savioli, Ricerca di Spazio, 1963

Fig. 4.8 Models from Savioli and Natalini course, reproduced in Adolfo Natalini, “Arti visive e spazio di coinvolgimento,” *Casabella* 436, 1968

Fig. 4.9 Pietro De Rossi, Interior of the Other World Club, Rimini, ca. 1968

Fig. 4.10 Superstudio, Tavola Synottica, drawing, c.1967

Fig. 4.11 Superstudio, Catalogue of Histograms, as published in *Domus* December 1972 [drawing dates from 1969]

Fig. 4.12 Plan of Trigon 69 Dreiländer Biennale, Graz 1969

Fig. 4.13 Superstudio, Installation view of Grazerzimmer, Trigon 69, Graz 1969

Fig. 4.14 Gianni Colombo, Installation view of Elastic Space, Trigon 67, Graz 1967

Fig. 4.15 Superstudio, “Coketown Revisited” photomontage, 1969
Fig. 4.16 “Discorsi per immagini,” Archizoom, *Domus* 1969

Fig. 4.17 “Discorsi per immagini,” Superstudio, Domus 1969

Fig. 4.18 Continuous Monument Storyboard, Superstudio, [dated 1969] first published 1971.

Fig. 4.19 “New New York,” Photomontage, Superstudio, 1969

Fig. 4.20 S-Space Manifesto, 9999 Group and Superstudio, 1971

Fig. 4.21 Film stills from first sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972

Fig. 4.22 Film stills from second sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972

Fig. 4.23 Film stills from fourth sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972

Fig. 4.24 Eero Sarrinen and Associates, View of Façade with One-Way Mirror Glass, Bell Labs, Holmdel, New Jersey 1962-1967

Fig. 4.25 Installation view, “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972. Photo: Cristiano Toraldo di Francia
Disorientation, transposition of scale, assemblage, montage, decomposition, repetition, iteration, and contamination are terms that have been continuously used, and above all have been the new stimuli that have given design the jolt it needed in order to pass from studio material and professional routine to activating and creative action. Through “disorientation,” the object is removed from its context and proposed again in another, adopting a new series of relationships, as when the “transposition of scale” (colossal enlargement) introduces a new perspective and vision of the world arrived at through the mediation of the machine. With “assemblage,” pieces that have been produced or recuperated are joined together by establishing new relationships and stimulating new mental associations; the mechanical logic at the root of “montage” reveals at once the parts and the formative process.¹

— Adolfo Natalini, Casabella, 1968

¹ Adolfo Natalini, “Arti visive e spazio di coinvolgimento,” Casabella 326 (July 1968), 35. All translations, unless otherwise noted, are my own.
In the summer of 1968 this description appeared in the pages of the magazine *Casabella*, framing for readers something of the thinking that had motivated eight groups of students from Florence’s Faculty of Architecture whose work was lavishly reproduced in the magazine’s July issue. The article prominently featured several large photographs of the students’ models. [Fig. 1 + 2] Shot at close range, taken from oblique angles, and starkly lit against a black, shadowless background, the photographs confounded any clear indication of scale just as they troubled any certainty about the boundary between interior and exterior. If the close up views intensified a feeling of spatial uncertainty, they also captured the sheer material heterogeneity of the constructions, which, flaunting their aversion to traditional academic materials such as wood, plaster, or clay, were conspicuously assembled from an astonishing array of domestic and industrial goods, ranging from gears, metal rods, mirrors, and bicycle wheels to flexible plastic hosing, plumbing conduits, Plexiglas sheeting, soda bottles, and much else besides. Turning away from the mastery and craftsmanship typically expected of student models, the results highlighted a more ambiguous condition, one in which images became more object-like just as objects were used to produce images. Such ambiguous image-objects were in keeping with the studio course from which the work had emerged. Lead by Leonardo Savioli and assisted by Adolfo Natalini and other recent graduates, the course hypothesized the emergence of a “spazio di coinvolgimento” (space of involvement).  

---

2 For a description, see Leonardo Savioli, “Per un nuovo rapport tra l’utente ed il suo spazio,” *Casabella* 326 (July 1968), 34-5. I have translated coinvolgimento as “involvement,” though it also connotes interpersonal engagement and participation. The English summary in *Casabella* translates “Spazio di coinvolgimento” as “Making One’s Own Space.” The term “hypothesis,” emphasizing the speculative character of the studio, was Savioli’s, appearing both in the *Casabella* article and in the later, more extensive account published as *Ipotesi di Spazio* (Florence: G&G Editrice, 1972). Over 250 students are listed as having been enrolled in the course, including Alessandro Poli and Alessandro Magris, who would soon join Superstudio, as well as number of others who would go on to found, or be involved in, other radical Florentine groups, from Archizoom, to UFO, and 9999.
more flexible and amorphous sense of space defined by moveable, physically reconfigurable elements, the “spazio di coinvolgimento” was equally heralded by the emergence of Piper clubs, proto-discotheques whose multimedia interiors were defined by even more immaterial and perceptual means, such as flashing light, amplified sound, projected images, reflections, and polychromatic surfaces.³ Natalini’s lexicon, with its emphasis on disorientation, decomposition, transposition, repetition, and montage sought to describe the processes through which such image-objects were conceived, but also the spatial and perceptual “involvement” demanded by such emerging multimedia environments. If Natalini confidently offered the list as part of a studio methodology, the proliferation of terms itself hinted at a deeper uncertainty, a desire to name the “nuovi stimuli” (new stimuli) or set of affects whose result was a certain “scatto”—a sudden fit, jolt, or outburst—that pushed architecture out of its familiar procedures and routines. If Natalini’s list looked to expand the terms architects could call on amid the profound cultural, political, and technological shifts taking place in the later 1960s, it did so, notably, by calling on a conceptual vocabulary tightly bound up with techniques of assembly. While neither systematic nor definitive, I would argue that Natalini’s inventory can be seen as part of a much broader effort to rethink and amplify the physical, visual, and historiographic problems of assembly within a condition that was being destabilized and remade by new electronic media. This dissertation looks to identify, compare, and analyze the role of such techniques of assembly within a range of experiments undertaken by architects active in Florence, London, Paris and Vienna from the mid 1950s to the early 1970s.

³A range of clubs came be known under this name, in the wake of a highly successful club named “Piper” in Rome. Examples included the Piper-Pluri Club in Turin and the L’altro mondo in Rimini. The role of such clubs in the development of Superstudio’s practice is discussed in more detail in Chapter 4.
The important place that Natalini’s lexicon reserves for *montage* deserves special attention, providing a clue to the historical lineage underpinning the effort to rethink assembly. The legacy of montage made a conspicuous return in postwar European architectural culture—in project after project, and in magazine after magazine, montage was not only key to the visualization of some of the most important projects during this period, it informed the ways in which problems of assembly in architecture were being reconceptualized. If it was influential, such a legacy was far from being uniform or stable. As Natalini’s statement indicates, as a visual-conceptual device montage was being expanded in scope just as it was linked to a broader, polyvalent set of operations. In what follows, I develop a reading of the legacy of montage that stresses the close relationship between theories of montage and ideas of construction, a lineage in which the composition of visual relationships out of photomechanically reproducible materials were understood as closely analogous to forms of industrialized assembly. In this sense, the longer history of montage can be seen to be intimately connected to architectural concerns. Yet just as importantly, the very rise of the historical avant-garde’s conceptions of montage have productively troubled the familiar opposition between image and

---

4 A partial list of influential montage images from these years would include Alison and Peter Smithson’s perspective and axonometric for their entry to the Golden Lane competition (1952); John McHale’s cover for the Architectural Review issue “Machine-Made America” (1957); Guy Debord and Asger Jorn’s detoured maps of Paris and Amsterdam, as well as their books *Fin de Copenhague* and *Mémoires*, (1957-8); Constant’s montages of sectors of New Babylon realized on various urban maps (1957-1968); Yona Friedman’s numerous projections of the Ville Spatiale (1960); Kisho Kurokawa’s Helix City project (1961), Arata Isozaki’s, “Cities in the Air,” (1964), “Reruined” Hiroshima (1964), and Electric Labyrinth (1968); Hans Hollein’s numerous transformations photomontages (1963-6); a very wide range of projects by Archigram—stretching from first issue in 1961, to the Living City exhibition (1963), and the Monte Carlo competition (1972); the inventories and montage panels produced by the Utopie group (1967-1971); a number of Superstudio projects, including the Continuous Monument, Reflected Architecture, and Supersurface, among others (1969-1973); Archizoom’s photomontages of No-Stop City (1968-9); the urban machines of Haus-Rucker Co. (1968-1973); Zund-Up’s Great Vienna AutoExpander (1969); Art Farm’s Enviro-Image slides (1969) and numerous mail-art projects; the satirical cut-ups of ARse magazine (1972); Venturi and Scott Brown’s cinematic visualizations of Las Vegas (1969-72); the panels produced by the Office for Metropolitan Architecture’s for Exodus (1974), among others.
building, pointing to a range of operations that concern exhibitions, pavilions, and structures as much as they do manifestos, magazines, and films. If a widespread interest in montage preoccupied architects working in very different cities during the postwar period, the manner in which they deployed and expanded this visual idiom diverged in significant ways. Such differences provide a point of comparison for examining distinctive architectural responses to changing technologies of mechanical reproduction, just as it speaks to the diversified media condition in which architects operated during these years. The dissertation offers a detailed material reading of the ways in which such composite images and structures were made, used, theorized, and circulated, just as it also puts pressure on the language architects used to describe these constructions, both to locate their specificity within the field of architecture, and to address the ongoing relevance of a central modernist concept like montage.

My use of the broader term montage, rather than the more restricted category of photomontage, reflects the fact that the dissertation covers a range of photomechanical media, from photomontages, magazine pages, paste-ups, films, and storyboards to exhibitions, environments, interiors, billboards, and buildings. In their diversity, such entities often drew on processes of juxtaposition and sequencing related to cinematic conventions as much as they do on the devices used to make singular, composite, reproducible images. The connotations of advanced industry and construction were important to early avant-garde formulations of montage in no small part because they

---

sought to distinguish the photomechanical basis of such compositions from those that had been developed under the rubric of Cubist collage. To examine practices of montage is thus to retrace in some sense the distinction’s extended afterlife, one about which there has been little historical consensus. My definition follows the conventional emphasis linking montage to composite images dominated by the use of photomechanical media—media whose importance for architecture has grown throughout the century—but stops short of separating collage and montage as two entirely distinct formal categories.

Rather than oppose collage and montage in terms of unity and fragmentation, the dissertation pays attention to an ambivalence within the history of montage itself; concepts of montage have been used both to critique the idea of organic unity as an artistic ideal, emphatically refusing the seamless integration of elements into visually unified wholes, but they have also been used to merge discrete and disparate elements into continuous ensembles in ways that render the perception of differences difficult.

---

6 Among the numerous overviews available on the subject, see Ades, Photomontage (op.cit); Robert Sobiesek, “Composite Imagery and the Origins of Photomontage, Pt. 1: The Naturalistic Strain,” Artforum (Sept. 1978), 58-65; “Pt. 2: The Formalist Strain” Artforum (October 1978), 40-45; Matthew Teitelbaum ed., Montage and Modern Life: 1919-1942 (Cambridge: MIT Press, 1992); and Adrian Sudhalter, Photomontage Between the Wars 1918-1939 (Madrid: Fundación Juan March, 2012) Making matters more tricky still, is the fact that concepts of montage have never been limited to photography and cinema. From the early 1920s one finds montage used to describe architecture, the typo-photographic page layouts of Laszlo Moholy-Nagy and El Lissitzky, as well as the literary experiments of writers like Walter Benjamin, Alexander Döblin and James Joyce.

7 This dichotomy has been particular marked in architectural scholarship on the work of Ludwig Mies van der Rohe. Andres Lepik, for instance, distinguishes between “collage, which aims to rupture pictorial unity, and montage which preserves a unified pictorial form.” Neil Levine similarly highlights the “…inherent ambiguities of collage, as opposed to the more unified and totalizing photomontage technique he [Mies] had explored in the 1920s…” Such sharp categorical distinctions confound more than they clarify. The assumption that processes of montage are “unified” and “totalized” ignores the emphatic manner in which montage concepts in the 1920s stressed rupture and disruption over and against ideals of organic unity. By the same token, the attempt to define collage as a rupturing of pictorial unity flies in the face of the classic modernist definition offered by Clement Greenberg, which saw the flattened, material-formal unity of collage as that which raised it above the “literary shock effects” of montage, which he dismissed as compositions of “…small pictures connected by no aesthetic necessity.” See respectively, Andres Lepik, Mies in Berlin, 379; Levine, “The Significance of Facts,” 87; and Clement Greenberg, “Review of the Exhibition Collage,” Clement Greenberg: The Collected Essays and Criticism: Vol. 2, ed. John O’Brien (Chicago: University of Chicago Press, 1986), 260.
With this ambivalence in mind, I propose several categories of assembly techniques, enactments that expand and transform the legacy of montage within the architectural experiments of these years. The first concerns modes of conflictual combination, combinations that valorize the disjunctions, contrasts, and discontinuities produced by physically conjoining or overlaying fragments from disparate sources to form a new entity. Marked by the persistence of concerns such as texture, outline, and figure, such a practice, more than other techniques of assembly, often remains closely linked to the preoccupations of collage. The second type concerns practices of visual juxtaposition and displacement. Assembly here can be understood less as the physical connection of multiple fragments, than as a gathering together of elements, and the creation of relationships that alter how each visual unit is perceived. With acts of displacement, the familiarity of a given element is estranged by being isolated from its ground, or by being inserted into a new, incongruous context. Distinct from conjunction, juxtaposition, and displacement are processes of subtraction and disassembly. In such cases, the central interest lays in the elimination of elements; the taking apart of conventions, or the decomposition of structures, processes that typically undermine figurative or formal stability in favor of more atomized and dehierarchized field-like arrangements. Finally, the collision of images has often been used to convey a sense of time that does not follow linear or narrative continuity. Closely linked to editing techniques associated with cinematic montage, such disjointed temporalities create relationships that are both visual and historiographic, short-circuiting, accelerating, reversing, or otherwise disrupting key ways in which modern architecture had been narrated as a logic of historical development.
While schematic, this spectrum of assembly techniques can be interpreted as a sign of the increasing pressure brought to bear on classic oppositions such as unity and fragmentation, continuous and discreet, seamless and composite. Tracing the mutation of montage in these instances provides a vivid record of how architects elided, or rendered perceptible, such relations of continuity and difference, in the construction of images, in the design of structures, and in defining lines of historical continuity and rupture. The architects and groups whose work I examine sought to expand and transform the legacy of montage as a means to both challenge and subvert, but also expand and extend the discipline’s mechanisms of representation. If montage returned to the foreground in the period I am considering, it was also enmeshed, I argue, in a particular contradiction, struggling to hold together the demands associated with an expanded range of flattened, graphic images, demands often in conflict with, if not antithetical to, the composite, physically conjoined problems of structure belonging to various traditions of construction. Paying notice to such a tension allows one to grasp how the problem of visualizing architecture during this period was an increasingly complex set of performative operations. Closely bound up with the production of a range of architectural media—from buildings, prototypes, and exhibitions, to little magazines and films—the expansion of montage does not only point to historical precedents, it reveals much about the ways in which architects imagined appropriating technologies, materials, media, and concepts from domains that lay outside their field.

In 1966 Reyner Banham pointed to such enactments in dissecting the recently launched London student magazine *Clip-Kit: Studies in Environmental Design*, which he
saw as representative of an emerging movement of “underground architectural protest.”

“Kit,” he explained, meant “…ideas, images, forms, documents, concepts raided from other disciplines and clip is how you put them together to make intellectual or physical structures.” The “clip” in the magazine’s title was literally a new type of plastic connector confected to meet the needs of bureaucratic administration, yet here it acquired a new significance, reconceptualized as a device of flexible, additive connection, emblematic of an attitude toward technological change and communication that valued spontaneity over fixed order, encouraging the reader to rearrange, combine, add, and dispose of pages as they saw fit. Long bound up with ideas of mechanical assembly, the legacy of montage loaned itself to such changeable combinations of ready-made parts, found elements, and materials gleaned from other domains. A privileged means of visual construction at a moment when the printed page was beginning to face an explosion of screens but had not yet been absorbed by them, montage engaged a condition in which the visual gravity and tactility of each component jumped into relief, registering the variable effects of scaling, the contrasting optical densities of different types of printing, the mobility of transfer lettering, and the effects of readymade patterns and colors. The building elements—such as cranes, tubes, frames, clips, masts, screens, and hoists—that recur in many projects, parallel the actions of lifting, sliding, cutting, clipping, joining, masking, and overlapping used to construct the image. Such conjunctions can be understood as graphic apparatuses, both in the sense that the mechanisms that assemble

---

9 Ibid.
10 The clip was listed on the journal’s back cover as the “MM model plastic binding,” produced by the Morris Brothers Office Supply Company, Aldershot. The editors, Peter Murray and Geoffrey Smythe, were inspired by Banham’s notion of a “Clip-On Architecture” published the previous year. See Reyner Banham, “A Clip-On Architecture,” Design Quarterly 63 (1965): 2-30.
and connect structures have become more conspicuously graphic, and in the sense that such graphic concerns have themselves become more flexible and ambiguous in their spatial instantiation, less a two-dimensional datum than an apparatus coordinated across a spectrum ranging from photomechanical surfaces, paste-ups, magazine pages, and film sequences, to prototypes, exhibitions, billboards, and buildings.

The expansion of the legacy of montage into a broader apparatus of assembly techniques provides one way of framing the difference between its return to prominence in the architectural culture of the postwar period and the formulations initially produced by the historical avant-gardes of the 1920s. For architectural historians, the pivotal case has long been that of Ludwig Mies van der Rohe, who conspicuously adopted ideas of montage in the early 1920s at a moment when he was seeking to radically redefine his practice.11 From the canonical photomontages for a Glass Skyscraper near Friedrichstrasse station (1921) to those for the urban renovation of Alexanderplatz (1929), Mies van der Rohe’s photomontages of the 1920s produce a sharp conflict between drawings and the space and texture of the photographs into which they have been embedded. Not unlike Dada photomontage of which he was aware, Mies’s photomontages for the glass skyscraper on Friedrichstrasse sought to reframe the industrial nature of the skyscraper, using the glass membrane to reveal the internal steel structure as a type of exposure, a gesture that simultaneously emphasized its stark clash

with the texture of the existing streetscape.\textsuperscript{12} [Fig. 3] The identification of montage with the historical avant-garde is, however, more complicated that it might first appear, given that composites of photography, drawing, and other materials significantly predate much avant-garde practice. Mies himself had used photomontage as early as 1911, and was likely aware of the combination of photography and drawing developed for turn of the century competition entries, such as those designed by the office of the Munich architect Friedrich von Thiersch.\textsuperscript{13} [Fig. 4] Scholarship on nineteenth-century experiments in combination photography and photocollage, or turn of the century advertising and comic postcards, has likewise served as an equally important corrective to the avant-garde’s own claims to the “invention” of montage.\textsuperscript{14} Importantly, however, neither turn-of-the-century commercial images, nor those created for architectural competitions were understood as montages. In this sense, the use of terms such as Monteur and montieren to describe the cutting up and reassembly of photographs, advertisements, and typographic

\begin{footnotesize}
\begin{itemize}
  \item On the importance of the contrast with urban texture, see Spyros Papapetros “Malicious Houses: Animation, Animism, Animosity in German Architecture and Film—From Mies to Murnau,” \textit{Grey Room} 20 (Summer 2005), 6-37. On the importance of the X-Ray to ideas of transparency in architecture, see Beatriz Colomina, “X-Ray Architecture: Illness as Metaphor,” in \textit{Positions} 0 (October 2008) 30-35.
  \item The Munich architect Friedrich von Thiersch had influentially developed such combinations of drawing and photography at the start of the century. See Horst Karl Marschall, \textit{Friedrich von Thiersch: Ein Münchner Architekt der Späthistorismus} (Munich: Prestel, 1982); and Winfried Nerdinger, \textit{Die Architekturzeichnung: Von Barocken Idealplan zur Axonometrie} (Munich: Prestel, 1986), pp. 142-43. One of the most well-documented examples, highlighted by Lepik and Stierli, are the numerous entries prepared for the Bismarck Monument in 1910, for which Mies van der Rohe also produced his earliest photomontage. See \textit{Hundert Entwürfe aus dem Wettbewerb für das Bismark-National-Denkmal auf der Elisenhöhe bei Bingerbrück-Bingen}, (Düsseldorf: Düsseldorfer Verlag, 1911). Such a genealogy could be pushed back even further, if one included the combination of multiple negatives in early photographic documentation and preservation practices pioneered by the photographer Edouard Baldus in the 1860s.\textsuperscript{14}
\end{itemize}
\end{footnotesize}
fragments by Georg Grosz, Raoul Hausmann, John Heartfield, and Hannah Höch, while not inventing montage, represented a pivotal conceptual shift. Equally transformative was the centrality of montage to the theoretical debates and film experiments of early Soviet cinema, where the assembly and juxtaposition of film frames was likened to new techniques of construction. In appropriating a term for industrial assembly to describe new processes of visual combination, the historical avant-gardes drew on an etymology that implicated architecture in a significant way. Eighteenth-century definitions of *montage*, such as can be found in Diderot and D’Alembert’s *Dictionnaire de l’académie Francaise*, define montage as the act of raising or elevating, pointing to the shipping of goods and the movement of boats—“Action de monter. Payer le montage du bois, des grains; terme batelier; l’action de celui qui remonte & facilite le montage de bateaux”—and to the laying out of materials in artisanal work—“le montage de métier, elle consiste à disposer toutes les parties du métier, de manière à exécuter l’etoffe dont le dessein est donné.” Through the course of the nineteenth century, the definition of the noun

---

15 In various retrospective accounts George Grosz, Raoul Haussmann, John Heartfield, and Hannah Höch, all laid claim to the invention montage between 1916 to 1918. The first published references in German are not to “montage,” however, but as works signed “monteur,” or described as “montiert,” the earliest surviving examples of which date from 1919. For a helpful overview of the discourse on montage in Germany during the 1920s see Adrian Sudhalter, “Fotomontage” in *Photomontage Between the Wars 1918-1939*, 9-22.

16 The alignment of cinematographic montage with the principles of technological construction—as opposed to the traditions of the theater—can be found in the writings of Sergei Eisenstein, Alexei Gan, Lev Kuleshov, and Dziga Vertov during these years. For a classic formulation see the August 1922 issue of *Kinosot*, in particular, Lev V. Kulesov, “Amerikanshina,” *Kino-Fot*, no.1 (August 1922) p. 14-15, translated in Richard Taylor and Ian Christie, eds., *The Film Factory: Russian and Soviet Cinema in Documents 1896-1939* (London: Routledge, 1988), p. 72-3. Equally important was the journal *LEF*, see in particular the contributions of Eisenstein, Gan, Vertov, and Alexander Rodchenko in *LEF*, no. 3 (June-July 1923). While the core statements of Soviet montage theory appear around 1922-1923, passing references to montage appear as early as 1917. See Lev Kuleshov, “O zadačach khudožnika v kinematografie,” in *Vestnik kinematografii*, no. 126, (1917) pp. 15; translated in *The Film Factory*, p. 41. While certain film historians trace montage back to the editing techniques of D.W. Griffith, it is only in the context of Soviet film that such techniques are theorized as *montage*, in no small part due to presence of the constructivist avant-garde in Russia.

17 See *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers, etc.*, eds. Denis Diderot and Jean le Rond D’Alembert, 1798, 5th edition, (University of Chicago: ARTFL Encyclopédie Project,
montage expanded, drawn nearer to the actions of construction, assembly, and building, as when the 1876 edition of the *Trésor de la langue Francaise* defines montage as

“L’action de porter ou de mettre quelque chose dans un endroit plus élevé. Le montage des pierres, des briques, moellons, pieces de bois, etc., se fait au moyen de cordes ou de chaines; de bourriquets, de grues, de chèvres, ou de treuils.” By the early twentieth century montage came to refer not only to building construction, but to all kinds of mechanized industrial assembly. This particular shift of meaning was crucial, enabling a range of figures—from Mies van der Rohe and László Moholy-Nagy to El Lissitzky and Sergei Eisenstein—to repurpose and extend concepts of montage, modeling the composition of new visual relationships on the type of work carried out by builders, technicians, engineers, and the fitters of machine parts. Once again, the case of Mies van der Rohe proves illuminating. If the photomontages that Mies had developed in the early 1920s broke with the meticulous integration of drawing and photography developed by Thiersch, the emphasis on disjunction and contrast begins to shift in the photocollages Mies developed following his emigration to the United States in the 1930s. In

---

18 "The act of carrying or placing something in a higher location. The elevation/assembly of stones, bricks, moldings, or wood pieces is achieved by means of cords, chains, cranes, hoists, and windlasses.” *Trésor de la langue Francaise*, Tome 2, 1876.

projects for the Resor house (1937-38) and his Museum for a Small City (1942) the site of conflict changes. [Fig. 5] Here the central tension no longer resides in the relation of a drawing to the photographic ground into which it is embedded, but rather has come to operate across voids and gaps between reproductions, spaces that both link and separate carefully juxtaposed and overlapped elements. In such a transformation, the shift concerns form but also medium, the shift of photographic reproductions from the status of background to become defining spatial elements in their own right can be seen as symptomatic of the way in which the mediality of the reproducible image was itself becoming an increasingly unavoidable element for architectural thought.20

The importance of such an expansion and transformation of montage for architects raises the question of its relationship to the historiography of the modern movement during the same years. In many respects, architects’ fascination with montage parallels, but also predates the historical effort to examine montage. While the dynamics of montage can be glimpsed within a number of the key texts that aimed to define the concept of the modern movement, an explicit attempt to reckon with the historical emergence of montage as a concept arrives only towards the end of the 1960s and the beginning of the 1970s. Sigfried Giedion was himself a maker of photomontages, and indeed his writing frequently relied on a montage-like juxtaposition of images.21 Yet if

---


21 Such techniques were particularly evident in the 1920s, notably in the small book *Befrietes Wohnen* (1929) and in his landmark *Bauen in Frankreich, Eisen, Eisenbeton* (1928) whose cover and layout were designed by Laszlo Moholy-Nagy. A student of Heinrich Wölflin, Giedion would also have been trained in a method of reading images that depended on the juxtaposed comparison of lantern slides. On Giedion’s active involvement in shooting, selecting, and laying the images in his books, see *Sigfried Giedion und die Fotografie: Bildinszenierungen der Moderne*, eds. Werner Oechslin und Gregor Harbusch (Zürich: GTA
Giedion mobilized montage—a notable example is the photomontage he made of Rockefeller Center for *Space, Time, and Architecture: The Growth of a New Tradition* (1941)—he nowhere reflects explicitly on it, a gap all the more conspicuous given the significant emphasis he placed on Cubist collage.22 [Fig. 6] Reyner Banham’s attentiveness to the primary documents of the 1910s and 1920s and to the influential role played by Futurism and Dada in shaping the idea of modern architecture makes it all the more curious why *Theory and Design in the First Machine Age* (1960) gives only passing mention to the legacy of collage and none at all to montage.23 Leonardo Benevolo’s *Storia dell’architettura moderna* (1960) returned carefully to the context of Berlin in the early 1920s, becoming the first history of modern architecture to reproduce one of Mies van der Rohe’s photomontages, yet he has nothing at all to say about the manner in which such now canonical images were made nor about their historical significance.24 If the importance of montage was not entirely overlooked by architectural historians during these years, it is only with the writing of Manfredo Tafuri that montage begins to be assessed historically.25 Montage not only figured in Tafuri’s writings, it was central to his...
broader reassessment of the role played by the historical avant-garde in the development of capitalism.  

In his landmark 1969 essay, “Towards a Critique of Architectural Ideology,” Tafuri states:

For all the avant-gardes—and not just for those concerned with painting—the law of montage is fundamental. Since the assembled objects belong to the real world, the canvas became the neutral field into which the experience of shock, suffered in the city, was projected. Indeed, the problem now became that of teaching not how one should “suffer” that shock, but how one should absorb and internalize it as an inevitable condition of existence.

Tafuri’s argument drew closely on the writings of Walter Benjamin, who had similarly emphasized shock as the link between avant-garde montage and mechanized labor, yet unlike Benjamin, he was less sanguine about the capacity of montage to transform culture. In contrast to Benjamin in the early 1930s, Tafuri’s view from the tail end of the 1960s saw the significance of montage in terms of the way it accommodated subjects

---

26 Tafuri’s efforts took place at a moment in which the avant-garde was itself being more thoroughly historicized. An early effort in this respect was Renato Poggioli, *Teoria dell’arte d’avanguardia* (Bologna: Il Mulino, 1962), which informed both Tafuri’s work and Peter Bürger’s roughly contemporaneous *Theorie der Avantgarde* (Frankfurt: Suhrkamp, 1974). Tafuri’s writing appeared at a moment in which the early history of film was also unearthed in greater historical detail, in such works such as Lotte H. Eisner’s *The Haunted Screen: Expressionism in the German Cinema and the Influence of Max Reinhardt* (Berkeley: University of California Press, 1969).


Per tutte le avanguardie—e non solo pittoriche—la legge del montaggio è fondamentale. E poiché gli oggetti montati appartengono al mondo reale, il quadro diviene il campo neutro in cui si proietta l’esperienze dello choc subita nella città. Anzi, ora il problema è di insegnare a non ‘subire’ quello choc, ma di assorbirlo, di introiettarlo come inevitabile condizione di esistenza.

Stephen Sartarelli translates *montaggio* as “assembly” and “assemblage,” but I will insist on the appropriateness of montage. Without montage one loses the semantic latency of *montaggio*, its capacity to simultaneously connote industrial assembly—as in a phrase like “catena di montaggio”—and as a principle of the avant-garde. The phrase, a likely echo of Tafuri, was also key to Archizoom’s critical analysis of the contemporary city and its absorption of the logic of the factory. See Archizoom, “Città: Catena di Montaggio del Sociale,” *Casabella* 350-51 (July-August 1970): 43-52.

to the everyday shocks of the metropolis, thus helping to naturalize and foresee industrial capital’s disruptive remaking of the city. It is a different facet of the montage problem that appears in Tafuri’s fascination with Sergei Eisenstein’s writings on architecture, particularly the director’s analysis of Giovanni Battista Piranesi’s eighteenth-century sequence of etchings of imaginary prisons, the Carceri d’invenzione. In Eisenstein’s elaborate scrutiny of Piranesi’s etchings, Tafuri saw montage not strictly as a mode through which subjects absorbed the shocks of life in a capitalist metropolis, but as a method of critical analysis. A means for “exploding” material analytically, montage was capable of revealing the latent tensions contained within the images by grasping them as conflicting frames within a larger historical sequence. Tafuri distinguishes between two linked moments in the analysis—reification and semantic distortion—that mirror two processes key to montage. Deliberately removed from their context and decomposed into component parts, Piranesi’s etchings became “an alphabet having no syntactic structure.” Such reification was necessary for a process of semantic distortion, where, through a “violent alteration” of the elements of the Carceri, Eisenstein made “...the etching itself speak, beyond the usual meanings attributed to it.”

Tafuri suggested, mirrored the director’s struggle to reconcile the shocking dynamism of the avant-garde’s “discontinuous montage of empty signs in opposition,” and the need to

---

29 Tafuri’s thinking about Eisenstein evolved through a number of revisions. The essay first published as “Piranesi, Eisenstein e la dialettica dell'avanguardia,” Rassegna Sovietica 1-2 (1972): 174-184, emerged from a 1969 conference organized by Giulio Carlo Argan, which examined debates on urbanism through the lens of cinema. See Lo spazio visivo della città urbanistica e cinematografo, Gli incontri di Verucchio (Bologna: Capelli, 1969). The article was then translated and reworked as “Piranesi and the Fluidity of Forms,” in Oppositions 11, (Winter 1977): 72-80. The text was further expanded and included as a chapter of La sfera e il labirinto: avanguardie e architettura da Piranesi agli anni '70 (Torino: Einaudi, 1980).

30 Tafuri, The Sphere and the Labyrinth: Avant-Gardes and Architecture from Piranesi to the 1970s, trans. Pellegrino d'Acienro and Robert Connolly (Cambridge: MIT Press, 1987), p. 56. “…Eisenstein sees in the entire series of the Carceri a totality composed of disconnected fragments belonging to a single sequence, based on the technique of “intellectual montage,” that is, according to his own definition, on a ‘juxtaposition-conflict of intellectual stimuli which confront each other.’”

31 Ibid., 57.
communicate with a broader public, to “…make the spectator participate in the dynamic process of constructing the image.”32 Such a promise of synthesis, he concluded, appeared unfulfilled, operating only within the “closed circle” of Eisenstein’s analysis. Indeed, the turn back to Piranesi confirmed such a historical failure, exemplifying how “…the avant-garde, bereft of its utopian potential…can only fall back on itself…only explore the stages of its own development.”33 While Eisenstein’s montage-analysis exploded the shifting spaces of the Carcere Oscura, for Tafuri the legacy of the avant-garde remained a prison nonetheless—one from which there was no release or exit, only an interminable, historical self-analysis.34

Aspects of Tafuri’s problematic have since been echoed, extended, and challenged by a number of historians and architects. Already in the 1970s, a younger generation of architect-theorists such as Diana Agrest and Bernard Tschumi, revisited the relationship between modern architecture and cinema theory in ways both directly and indirectly concerned with Tafuri’s reading of Eisenstein.35 In the 1980s, Beatriz Colomina influentially opened up the Tafurian problematic by formulating it in terms of the larger relationship of architectural modernity to forms of mass media and mechanical

---

33 Ibid., 63.
34 The task of such critical self-analysis arguably resembles that which Tafuri wished to outline for a writing of history resistant to any “operative” relationship to architectural practice. Tafuri suggests the historical relationship between Eisenstein’s method and the analytical approaches of Russian formalism, notably the work of Viktor Shklovsky. An implicit claim is that the elements of such critical analysis survived not within the avant-garde, but within criticism—notably structuralist analysis of the type practiced by Roland Barthes and Serge Doubrovsky. See The Sphere and the Labyrinth, 58-9.
reproduction. And in the ensuing years, scholars and architects from K. Michael Hays to Yve-Alain Bois, Anthony Vidler, and Giuliana Bruno have continued to revisit Tafuri’s writings on montage. The dissertation seeks to build on this constellation of scholarship but also to move beyond Tafuri’s framework, arguing that the endurance of forms of montage remain more complex, differentiated, and resilient than his schema might allow us to believe.

On the one hand this means recognizing that the acts of appropriation, combination, decomposition, juxtaposition, and collision linked to the cutting and reassembly of images were performed on materials, buildings, subjects, and spaces that were themselves increasingly understood as designed for and subjected to mechanical reproduction. In this sense, the legacy of montage appears as a mode through which the effects of reification were extended, part of an effort to level distinctions between the discipline and broader areas of culture and technology. Responding to the evolving visual landscape of the culture industry as well as to rapid changes in media and advanced technology, the experimentation with new architectural and graphic assembly techniques can be seen as its own particular “art of being off center,” serving to deliberately breach the inward-looking tendencies of the discipline. On the other hand, experimentation with such assembly techniques did not blithely mirror this larger cultural leveling, but

36 See Beatriz Colomina, ed. ArchitectureProduction (New York: Princeton Architectural Press, 1988). While never the explicit subject, montage recurs as a concern in a number of the essays, in particular those of Colomina, Jean-Louis Cohen, K. Michael Hays, and Josep Quetglas.
38 See, for instance, Alison and Peter Smithson’s statement on collecting advertisements and their enthusiastic engagement of prefabricated curtain walls as emblematic of a moment in which the superiority attached to the fine arts was understood to be fatally eroded. Alison and Peter Smithson, “But Today We Collect Ads,” ARK 18 (1956): 49-51.
also subjected it to critical distortions. Enacting forms of analysis at odds with the messages of postwar consumer culture by means of the apparatuses through which this culture was reproduced, the legacy of montage served as a mechanism for altering meanings that had become frozen. In this sense, the absorption of montage into a broader field of mass culture did not solely serve to neutralize the shocks of modernity, but played an important role in fueling ongoing changes, shifts, and counter-articulations in the form. The work analyzed here, together with the texts that accompany them, reveal a host of undispelled anxieties—from the domination of an increasingly technocratic state, to the effects of a vastly expanded consumer society, to deep-seated concerns about the marginalization of architecture as a body of knowledge. Recurring at a series of moments in which architects sought to test the limits of architectural conventions, as well as the boundaries of the discipline, the legacy of montage served to trigger communication between what was understood to be the inherited knowledge of tradition and that which had no place within it. Montage was also a mode of analysis, connected to efforts to reconceptualize the significance of construction in an era acutely conscious of rapid technical and social changes, ranging from the accelerated obsolescence of commodities to massive urban expansion, and from the emergence of space programs to the rise of global telecommunications. In such moments of political upheaval, disciplinary uncertainty, and technological change, montage appeared as an important

mode through which architects reflected on the spaces, conventions, and media through which their acts of appropriation, combination, and reassembly were taking place.

To describe such a relationship, the dissertation shifts away from an emphasis on the historical fate of the avant-garde, to consider how such assembly techniques point towards architecture’s entanglement with an emerging set of apparatuses of visualization and reproduction through the twentieth century—from the increasing accessibility of various types of recording, transmission, and projection equipment to the growing availability of printing technologies from the mimeograph to offset lithography, and Xerox. If forms of montage were intimately bound up with changes in technological reproducibility, it was also an aesthetic concept with an enduring power to grapple with and reflect on these apparatuses. The impetus towards such a framework comes from the material under consideration, which turns away from the traditional signs of architectural solidity in favor of an entire gamut of apparatus-like entities, ranging from displaced fragments of military hardware, demountable construction systems, and prosthetic extensions, to more discreetly environmental phenomena, such as pneumatic environments, electronically embedded surfaces, and audio-visual transmission circuits. Such apparatuses differed from machines, extending beyond the individual device to encompass the broader disposition of elements through which a mechanical ensemble functions, providing a sympathetic lens for considering how architects interpreted increasingly complex shifts in industrial production at a moment when received ideas concerning mechanization no longer provided a sure framework for understanding the postwar evolution of machines. In identifying techniques of assembly at play within the graphic apparatuses of postwar architecture, I aim to trace both how the discipline
assimilated and adapted montage concepts and forms, but equally, how architecture
already appears within the legacy of montage as it was the articulated in the domains of
avant-garde art and film.

In calling on the notion of an apparatus, the dissertation calls on a term
formulated contemporaneously with much of the work it examines. The term has been
used to translate a number of distinct concepts, ranging from the diffuse, relational
dispositifs through which Michel Foucault theorized strategic networks of power to the
more concrete appareils ideologiques that Louis Althusser used to describe the
interpellation of individuals as subjects by the state.\(^4\) Despite the significant differences
between such concepts, they both turn away from an idealist conception of ideology, to
emphasize how the delimitation of thought occurs not in the content of an image or a
narrative, but in the relationships between subjects and the apparatuses through which
signs circulate. Both senses of the term appeared in cinema criticism’s invocation of the
apparatus during the 1970s. For Jean-Louis Baudry, Christian Metz, and others, the
ideological effects of cinema resided in the technical and social apparatuses through
which film was produced and experienced, a conjunction of technical instruments—
cameras, editing tools, lenses, and projectors—and the spatial conditions of spectatorship,

\(^4\) Foucault, famously, never defined the concept of the dispositif in his writings. His most direct discussion
of it is found in the interview “The Confession of the Flesh,” Power/Knowledge: Selected Interviews and
recently, others have sought to do so, such as Gilles Deleuze “What is a Dispositif?,” in Timothy J.
Armstrong, ed., Michel Foucault: Philosopher (New York: Routledge, 1992), 159-168, and Giorgio
Agamben “What is an Apparatus?” in What is an Apparatus and Other Essays, trans. David Kishik and
Stefan Pedatella (Stanford: Stanford University Press, 2009), 1-24. For Althusser’s distinction between
repressive and ideological state apparatuses see “Ideology and Ideological State Apparatuses (Notes
towards an Investigation),” in Lenin and Philosophy, and Other Essays, trans. Ben Brewster (New York:
such as screens, seats, atmospheres, and lighting conditions.\textsuperscript{41} For Baudry, the basis of such an apparatus was the projector’s repression of differences between individual frames of film, a repression that supported the illusion of cinematic continuity with which subject-spectators identified, producing a locus of meaning that obscured an awareness of the operation of cinema qua apparatus.\textsuperscript{42} Montage thus plays a decisive role in such a theory of the apparatus, capable of reinforcing the continuity that sustains the illusion of movement and the imaginary unity of time and place within a film, it can, by the same token, equally disrupt narrative and insert material difference, drawing attention to the functioning of the apparatus.\textsuperscript{43}

It is not insignificant that the expansion of montage examined here corresponds with a moment when a particular set of technologies became increasingly central to the way in which architecture’s image was assembled, reproduced, and disseminated. Many


\textsuperscript{42} The role of critique as demystification, as advanced in Baudry’s formulation, has itself been the subject to intense debate in recent years. For a theorist like Bruno Latour, such a model of critique has “run out of steam,” superseded by the more urgent requirement to assemble and protect objects of common concern. See Latour, “Why Critique Has Run Out of Steam?” Critical Inquiry 30:2 (Winter 2004), 225-248. For an account that acknowledges Latour, while defending traditions of critique, see Hal Foster, “Post-Critical,” October 139 (Winter 2012) 3–8. While acknowledging their limitations, concepts of apparatus nonetheless offer a relevant mediating framework for considering the physical operations that support the increasingly diverse ways that moving images both circulate through, and increasingly have come to define the conception of physical spaces today. The classical apparatus of cinema is but one modality at play today. For helpful early anthologies see Theresa Hak Kyung Cha, ed., Apparatus (New York: Tanam Press, 1981) and Philip Rosen, ed., Narrative, Apparatus, Ideology (New York: Columbia University Press, 1986). Motivated in part by Baudry’s cinema theory, Hubert Damisch provided an early critical revision of what he termed the “dispositif perspectif.” See The Origin of Perspective, trans. John Goodman (Cambridge: MIT Press, 1994). More recently, Raymond Bellour has returned to notions of the apparatus to distinguish between cinema and the proliferating range of moving images of other types. See Querelle des dispositifs: cinéma, installations, expositions (Paris: Editions P.O.L., 2012).

\textsuperscript{43} Ibid., 42, 44. In this sense, my framing runs counter to Baudry’s rather schematic and partial description, which associated montage with the production of continuity, and thus illusion, tout court. Quoting Pudovkin’s definition of montage as “the art of assembling pieces of film, shot separately, in such a way as to give the spectator the impression of continuous movement,” Baudry overlooks competing theories of montage, which, from Eisenstein to Vertov, deliberately sought to disrupt mechanisms of continuity precisely to draw attention to the filmic apparatus.
of the projects studied here circulated through printed matter that was produced by means of Offset Lithographic printing, a technique that became increasingly accessible as a retail service from the mid-to-late 1950s onwards, offering a cheap and rapid alternative to more traditional industrial letterpress.\textsuperscript{44} [Fig. 7] Whereas the production of illustrated graphic layouts in industrial letterpress relied on a complex division of labor—selected drawings or photographs needed to be copied, prepared, and etched by a team of process engravers, the resulting image plate would then be compositied, or “made-up,” with blocks of type set by typesetters, and the final assembled page printed by still another group—the prepress process for Offset Lithography, by contrast, was greatly reduced.\textsuperscript{45} The relative deskilling of Offset Lithography meant that architects could combine text, clippings, photos, drawings, screen-tone, and ink directly on a cardboard “paste-up,” at a drawing board. Such paste-ups were photo-mechanically captured by the printer, who used the negatives to make lightweight plates, which could be run off alongside supermarket flyers and other short-lived, disposable communications typically produced on compact retail offset presses. With the paste-up, the process of designing the page depended on cutting, combining, gluing, and drawing, processes far closer to practices of montage and collage than they were to traditional typography.


Along with the greater accessibility of techniques like Offset Lithography, architects looked to grasp the implications of even newer audio-visual communication media, from portable televisions and slide projectors, to video recorders and multimedia projection environments. As the sophistication and portability of recording and projection equipment in the 1960s grew, the problem of structuring sequences of moving images came to rival more traditional modes of architectural representation, such as drawing and modeling. Yet the problematic of montage was also extended beyond the confines of the frame and the filmstrip. Such expanded spaces of image projection were closely tied to an emerging awareness of global communications networks, from transatlantic Telstar satellite broadcasts and the early computer networks developed by DARPA, to the rise of alternative free press networks as well as film and video distribution systems. Such a condition of accelerated and decentralized communication was influentially described by Marshall McLuhan in explicitly spatial terms, as a new condition in which distance was collapsed and recombined into a new mosaic-like form of instantaneous awareness.46

While some embraced such multi-media apparatuses as an opportunity to extend the discipline’s thinking, others, suspicious of the challenge represented by the increasing sophistication of image projection technologies as means of environmental determination, remained deeply wary of the threat they posed to the architect’s traditional authority in defining spaces.47

46 Marshall McLuhan developed the notion of television as a form of low-definition mosaic image that invited viewer participation at the beginning of the 1960s. See Understanding Media: The Extensions of Man, (New York: Signet, 1964)
47 See, for example, the fears succinctly expressed by Martin Pawley after his experience of the numerous audio-visual pavilions at the World’s Fair in Osaka in 1970. “Architects who cannot manipulate sound and projection systems and their associated optics and electronics will be about as much use as demonologists in a cancer research hospital. “Architecture Versus the Movies,” Architectural Design (June 1970), 292.
The dissertation proceeds through four chapters each devoted to the example of particular architect or group. While a range of assembly techniques come into play in each case, each chapter nonetheless stresses the important role played by a particular assembly technique. The first chapter points to a moment of transition, revisiting the context of London’s Independent Group through the collaborations of the largely overlooked architect and graphic designer Edward Wright and the architect Theo Crosby. Here the conflictual combination of physical elements was of prime importance, a legacy drawn in equal measure from Wright’s interest in Dada photomontage and Soviet cinema as well as from the problems of texture, shape, material, and composition explored in collages, typographic assemblages, building envelopes, and exhibitions. Wright and Crosby’s thinking about architecture’s place in the postwar city echoed the growing importance of concepts of image in conversations between artists, historians, and architects in the mid-1950s. Wright outlined a theory of the postwar city as a communications environment, one that can be felt in his collaboration with Alison and Peter Smithson on their House of the Future (1956), in his work for the UIA congress pavilions (1961), and perhaps most famously, in his exhibition and catalogue design for the landmark 1956 exhibition This is Tomorrow. An influential user of Offset Lithographic printing, Wright devised a form capable of exploiting and structuring the medium’s new range of possibilities while simultaneously translating the heterogeneous, even antagonistic ideological commitments of the exhibition’s participants into a single graphic and spatial continuum, creating a significant precedent that would be picked up by younger architects in the 1960s.48

---

48 This development is discussed further in chapter one. See pages 57-58.
The second chapter turns to Vienna and examines the work of Hans Hollein, Walter Pichler, and Gunther Feuerstein. Shifting away from an overtly constructive approach to montage, Hollein formulates more ambiguous principles of displacement, juxtaposition, and sudden transformation, principles that went hand in hand with his attempt to estrange the reading of familiar icons within architectural culture while simultaneously repositioning architecture as a communication medium in the broadest sense of the term. Appearing first in a series of exhibitions, and subsequently in the magazine Bau: Schrift für Architektur und Städtebau, such collaborations initially sought to turn against any notion of function to define what they termed an “absolute architecture.” This extreme position was progressively inverted through a vision of an increasingly total fusion of the seams between architecture, new media, and information theory, which were assembled in Hollein’s notorious 1968 manifesto “Alles ist Architektur.” Here the manifesto’s use of montage serves no longer to extract and isolate architecture, but to formulate architecture as an utterly connective concept, an unstable associative link holding together a vastly expanded field of objects and references.

Chapter three examines the work of the Paris-based group Utopie, who combined a semiotic analysis of fields such as advertising and industrial design, together with a critique of urban planning and a fascination with demountable construction. Operating amidst the crisis in architectural education and practice lead up to the dissolution of the Beaux-Arts system during the events of May-June 1968, Utopie developed a rhetoric of disassembly that theorized architecture as an object susceptible to transformation through ideological dismantling, simultaneously feeding a fascination with the radical potentials latent in the appropriation of lightweight pneumatic technologies. Such a concern for
technology and design was but one aspect of the group’s theoretical project, which aimed
to critique the techniques of projection through which architects and planners sought to
remake the existing city into a new type of fluid urban space.

The final chapter examines the introduction of film and projected images into
thesis projects at the Faculty of Architecture in Florence in the mid-to-late 1960s, a
context that gave rise to the work of groups such as Superstudio and Archizoom. In
installations, interiors, objects, films, prints, storyboards, articles, and magazine covers
the group mobilized montage in a way that produced a sense of disjointed temporality,
one that served as a crucial example to the broader cultural strategy mounted by the
“Radical Architecture” movement in Italy.49 What begins as an interest in immersive,
multimedia interiors shifts drastically towards a media tactic articulated through filmic
sequences. Deploying assembly and cutting techniques that combined architecture,
cinema, advertising, and television genres, the group developed “image-guides” that
worked to allegorically reposition key terms—from monument, to surface and
information—in an effort to disrupt and disseminate counter-narratives, both within the
discipline and in culture more broadly.

Tracing the transformed deployments of montage within architectural culture
amid such technological change and intellectual ferment represents a considerable
challenge. In what follows, I have not attempted to assemble a broadly comprehensive
survey, nor tried to unfold a chronology of influence and derivation. Rather than attempt
to produce a synthetic narrative of historical development, the methodology mirrors its
subject, juxtaposing episodes arising in disparate places, closely scrutinizing the

49 The term “Radical Architecture” was first proposed by the critic Germano Celant in 1972. See “Radical
development of particular assembly techniques by reading their internal consistencies and shifts. I have deliberately chosen to focus on the production of architects and groups based in different cities—London, Vienna, Paris, and Florence—during a relatively short period of time. Such an approach effectively juxtaposes the breadth of interest in montage with the differing practices and discourses that inform its interpretation in these milieus. The work studied here ranges from simple glued paper to full-scale pavilions, yet all of it was created at some level for reproduction. My approach has been to pay close attention to these media, but also to the physical artifacts used to compose them—notebooks, paste-ups, tear sheets, and clipping archives—material whose survival is always incomplete. The notion of graphic construction emphasizes the physical processes of making, the heterogeneous material character of which documents how architects responded to the flood of visual material reshaping public and private life in the postwar period. Yet the work analyzed here also harbored ambitions that were often profoundly theoretical, in a very real sense many of these projects were designed as much to be read as they were to be seen. In this sense, the dissertation also rereads relationships between images and texts that have often been severed in subsequent histories. Taken as arguments about architecture’s place amidst the changing visual and technical apparatuses of postwar consumer culture, such graphic constructions appear as intersections between disciplinary debates and broader theorizations about the changing nature of communication and media that continue to reverberate today.
Collages are on view daily. There was a recent case in the courts about a motorist whose windscreen was a collage of tourist labels, to the detriment of his view forward.50

— John Hodges, “Collage” 1956

The anecdote of a driver taken to court for having a “collage of tourist labels” plastered to his windshield comes from the opening lines of a brief article published in the Royal College of Art’s magazine Ark. The article is little remembered in histories of the period, but nonetheless provides an intriguing glimpse into how a student in London at this moment sought to frame the question of collage. For Hodges, collage was “on view daily,” implying that it was closer to changing urban attractions—newspaper kiosks, advertising billboards, neon signs, and film posters—found on the city’s streets than it was to a specialized artistic medium. This shift is echoed by the fact that collage was used to describe the space of a windscreen, not a flat paper surface but a dense graphic overlay positioned between a viewing subject and the world beyond. Both a thing to be looked at and something to be looked through, in Hodges’s anecdote collage is

synonymous with occluded vision, disturbing clear perception of the way forward. The windscreen anecdote was arguably less concerned with the road than with collage’s status in the present, as Hodges’s conclusion makes evident. As much interested in tenth-century Japanese poems, Victorian postcards, and current methods of commercial design as it was in Georges Braque, Kurt Schwitters, or Hans Arp—Hodges’s expansive take on collage ultimately aimed to rebut “[t]he argument that collage can no longer be a vital medium, that it lived for a while but is likely to remain a curiosity….51” If the passing anecdote was offered without explanation, it nonetheless pointed to a situation in which the status of collage appeared particularly charged: was it a nostalgic revival of an avant-garde technique or an enduring problem for modern culture whose implications remained unsettled?

Such a concern was not far removed from those artists, historians, and architects active in London’s Independent Group (IG), a milieu of which Hodges was very likely aware. From the mythic epidiascope lecture of scrapbook pages delivered by Eduardo Paolozzi at an early IG meeting in 1954, to Richard Hamilton’s iconic 1956 collage “Just what is it that makes today's homes so different, so appealing?,” to John McHale’s cover for the Architectural Review’s “Machine-Made America” issue, the assembly of composite images from found objects and mass-media sources has been crucial to the ways in which the transformative role of the Independent Group in postwar Britain has been narrated. Much of the scholarship to date has emphasized both the mass media sources that served as the raw material for such composite images and the connections of

such practices to the avant-garde legacies of Surrealism and Dada. What follows explores a somewhat different line of inquiry, examining how an expanded discourse of collage in London—and the diverse range of assembly techniques that it sought to describe—was concerned with thinking about, and responding to, the shifting cultural hierarchies, changing theories of communication, and technological transformations reshaping the postwar city. In this sense, the chapter can be seen as a hinge, concerned with a historical turning point in which prewar discourses of collage and montage are detached from their avant-garde legacy and mobilized to contend with new types of urban conditions, assembly problems, and media apparatuses, and serving to open the door to further analysis of the ongoing reformulations of the legacies of collage and montage that appear in the following chapters. If the analysis stresses contemporary debates regarding the city rather than the lineage of the historical avant-gardes, it also draws attention to architects and projects that have largely been overlooked in existing accounts of the


53 This constellation of concerns made for a very different reading of collage than that which Colin Rowe developed in the mid-1970s, whose article “Collage City” formulated a more transhistorical argument about the collage-like problems urban morphology. See Colin Rowe and Fred Koetter, “Collage City,” The Architectural Review 158:942 (August 1975) 66-91. Later published as Collage City (Cambridge: MIT Press, 1978)
Independent Group. Of central concern are the collaborations of Edward Wright and Theo Crosby, which resulted in covers, layouts, books, exhibitions, and pavilions for magazines such as *Architectural Design* and *Uppercase*, for the landmark exhibition *This is Tomorrow* (1956), and for the 1961 congress of the Union International des Architectes congress in London.

To appreciate the contributions of Wright and Crosby within the larger milieu of the IG during these years, it will help to establish something of the expanded rubric of collage that circulated amongst artists, architects, and critics at this moment. One of the best glimpses into this discourse can be found in the 1954 exhibition *Collages and Objects*, curated by Lawrence Alloway and designed by John McHale. What we know of *Collages and Objects* comes largely from its small catalogue, whose checklist indicates that a surprisingly broad range of composite image techniques were gathered together under the rubric of collage, including everything from early Cubist *papiers collées* to Dada photomontages, Surrealist books, frottages, décalomanie, rayograms, Constructivist reliefs, and readymades. [Fig. 1.1] The exhibition moreover did not seek to draw a firm line between pre and postwar work, but mingled past with present, including works by Picasso, Braque, Schwitters, and Ernst alongside those of Paolozzi, Passmore, Henderson, and McHale. Yet this did not indicate that collage was free from larger concerns about the status of the practice in the present. In a manner that anticipates the

---

54 Lawrence Alloway, *Collages and Objects*, (London: Institute of Contemporary Art, 1954); n.p. The exhibition took place from October 13th to November 20th, 1954. The expanded definition of collage was echoed by a sense of the expanded scale at which collage operated: the press release trumpeted the inclusion of Edouardo Paollozi’s sixteen-foot-wide collage mural—realized for the offices of Jane Drew and Maxwell Fry—as “maybe the biggest collage in the world.” ICA Archive, Tate Gallery: TGA 955.1.1.12.61 (2/32)
later comments of Hodges, Reyner Banham offered the following observation about the contemporary relevance of collage in his review of the exhibition:

If collage were only a matter of using pasted paper instead of paint, there would be as much, and as little, point in having an exhibition of that, specifically, as of any other mere medium, and the present “revival” of collage would be of no more interest than the craze for vintage cars, twentyish musical-comedy, or other half-timbered fancies. Collage cuts deeper, because it is a matter of using something instead of the illusionistic overtones of painting…. Collage, anti-illusionistic and anti-aesthetic, is one of the basic gestures by which the modern movement was initiated.55

Such a distinction was less motivated by a desire to elevate collage above vintage cars or musical comedy, than with a concern for the problem of historical revival. Spurred by the Festival of Britain in 1951, the early 1950s had seen a conspicuous effort to revive the visual culture of Victorian England, including an interest in collage as a popular pastime.56 Banham, like his dissertation advisor Nikolaus Pesver, was deeply wary not only of such nineteenth-century revivals, but of forms of neo-modern historicism that had arisen following the war, repetitions that threatened to betray a commitment to a forward-looking vision of modern architecture.57 Rather than a revival of collage, Banham sought a reckoning with what he calls a “basic gesture” of the modern movement, a fundamental

56 Representative of the latter was an artist such as Barbara Jones, who sought to recuperate a wide range of Victoriana, including collage, through exhibitions like Black Eyes and Lemonade at the Whitechapel Gallery in 1951, and the book The Unsophisticated Arts of the same year. In a retrospective note, Alison and Peter Smithson opposed their interest in the techniques of Charles and Rey Eames to these types of practices in England at the time. The Eameses’ eclectic “selection and juxtaposition” techniques—linked in Peter Smithson’s mind to the world of American illustrated magazines—was contrasted to the “neo-Victorian screen-making and pop art forms of either the Barbara Jones or Peter Blake sorts.” See Peter Smithson, “Just a Few Chairs and a House: An Essay on the Eames Aesthetic,” Architectural Design (September 1966): 443-46; and Alison Smithson, “And Now the Dhamas are Dying Out in Japan,” Architectural Design (September 1966): 447-48.
rupture in the conception of picture whose implications were still unfolding. For a historian carefully attuned to the different discourses of “the first machine age,” Banham has surprisingly little quarrel with the application of the term collage to a wide range of material drawn from movements as different as Cubism, Dada, and Surrealism. In this, Banham’s discourse, like that of the exhibition, differs from contemporaneous accounts emerging in New York or Paris, where critics and artists alike tended to draw sharper historical and formal distinctions. Clement Greenberg, as noted already in the introduction, vehemently opposed the “literary shock effects” of Dada montage to what he judged to be the more advanced formal unity of collage, a unity grounded in a self-reflexive exploration of the illusory relationships between shallow, optical-tactile surfaces and the larger flatness of their support. Artists in Paris at this moment also looked to the legacies of collage and montage, yet they were also more self-conscious, developing new terms to distinguish their work from prewar practices. Thus Jean Dubuffet—a figure well known among members of the IG—used the term assemblage to differentiate his works from the lineage of cubist collage, just as Raymond Hains and Jacques Villeglé developed a notion of “décollage” to emphasize the subtractive procedures that attracted them to anonymously torn posters and billboards.

A parallel interest in the urban environment appeared within Collages and Objects, with references to the surfaces of the city and forms of mass communication

---

58 Oddly, for a historian so preoccupied with issues of mechanization, Banham’s writings express no concern for the machinic vocabulary of montage developed by Dada artists to distinguish their work from earlier notions of collage.
60 In 1961, William Seitz would point to Dubuffet’s use of the term as one of the key points of departure for his landmark exhibition The Art of Assemblage. See The Art of Assemblage (New York: Museum of Modern Art, 1961), 93.
found throughout the exhibition’s small catalogue, at once a checklist and a thumbnail compendium compiling short citations excerpted from artists’ writings. A line from Tristan Tzara evokes collage as “[a] tattered wall on which posters are pasted, one upon the other,” while another emphatically declares that “collages are urban: the contents of the artist’s waste paper basket or the debris of a whole town,” images that, in London in the early 1950s, would have conjured up as much the lingering aftereffects of wartime bombardment as the years in which such quotes were initially penned. If collage was drawn from the historical record in such quotations, its was pressed into service as a lens on the everyday landscape. Something similar can be heard in Alison and Peter Smithson’s contemporaneous assertions about the New Brutalism. Writing just over a month after Collages and Objects closed, the Smithsons noted that 1954 had been “a key year,” one marked by the arrival of the Cadillac convertible, the reevaluation of Walter Gropius, the emergence of a new ideas within CIAM, and “which has seen American advertising equal Dada in its impact of overlaid imagery.” Here too it is less a question of historical return, or revival, but of seeing an equivalent in the present of Dada’s “overlaid imagery.” Such an equivalence signaled less a return of the avant-garde than a recognition of how once avant-garde principles had been absorbed into a broader spectrum of postwar life. Such an insight was accompanied by the thought that any attempt to lead opinion was increasingly displaced from artists and architects to a broad mass of consumer-subjects, a leveling of cultural hierarchies that would radically

---

61 ICA Archive, Tate Gallery: TGA 955.1.1.12.61 (2/32).
62 Collages and Objects, n.p.
63 The observation about Dada appears in Alison and Peter Smithson, “The New Brutalism,” Architectural Design (January 1955): 1. Assembling disparate events into a single sentence, the writing itself appears as a type of literary montage.
challenge the artistic biases of the architectural profession. Something of this cultural leveling informed the permissive definition of collage present in *Collages and Objects*. Such a definition, I would argue, can be regarded less as a failure to discriminate, than as an effort to assimilate and juxtapose a broad, diverse, and overlooked range of composite image techniques from the past and present, to complicate modern architecture’s institutionalization in the mid-1950s and to rethink its relationship to the city.

The link between collage and the urban environment was also reinforced by McHale’s exhibition design. While no images of the installation have survived in the ICA’s archives, a small portion of what is likely the installation appears in the background of a photograph of McHale looking at his collage book “*Why I took to the washers in luxury flats*” (c.1954). In the photograph one can see a series of works arrayed on a wall, in front of which a metallic grid is suspended, upon which other works may have been hanging. In addition to this fragmentary visual document, something of the materiality of McHale’s installation can be gleaned from Alloway’s correspondence. Writing to the engineer Ove Arup a few weeks before the exhibition’s opening, Alloway described McHale’s desire to use “ready-made materials” and sought help obtaining “fencing mesh,” “grids such as are used for reinforcing concrete,” and “perforated bricks.” Explicitly looking for the kind of thing one could find “on a

---


65 I am grateful to Mark Wigley for directing me to the background of this photograph.

building site...for minimum outlay,” Alloway and McHale further specified that the fencing mesh, “should be clean” while the reinforcing grids “should be rusty and picturesque.” The stress on construction materials, evident seams, and distinct parts distinguished the installation from a more Surrealist understanding of collage, which, in the hands of figures such as Max Ernst or E.L.T. Mesens, emphasized the merger of disparate parts into a seamless unity, one modeled on forms of hallucinatory vision, dreaming, and the activity of the unconscious. The deliberate search for reinforcing mesh that was marked by the traces of the worksite suggests that McHale and Alloway’s idea of collage also differed from the constructivist inspired line of British abstraction found in the contemporaneous work of Victor Passmore, Anthony Hill, or Kenneth and Mary Martin, which favored clear shapes, machine-finished surfaces, and new synthetic plastics such as acrylic and Perspex. A deliberate, aggressive reframing, the installation disrupted the expected viewing context, simultaneously placing collage into a relationship with the contemporary reconstruction activities happening in the city beyond. If McHale’s installation was a type of collage, it was a deliberately down-market version. Sitting somewhere between a display armature and a common fence, it insisted on disrupting the viewer’s relationship to works on the wall. Not unlike Hodges’s windshield, the metallic grids were simultaneously an apparatus that collage could be affixed to and a screen to be looked through. Placing works by Picasso, Ernst, or Magritte in close proximity to raw construction materials was certainly a bold risk aesthetically,

---

67 Ibid.
one that gallery records indicate also proved physically hazardous to at least one of the works on display.\(^68\)

In many ways, McHale’s display apparatus for *Collages and Objects* can be seen as a response to the previous year’s landmark exhibition *A Parallel of Life and Art*, curated by the Smithsons, Paolozzi, and Henderson, which was itself a type of three-dimensional collage environment that aimed to entirely redefine the interior of the ICA by means of the coarse and grainy textures of hundreds of photographic enlargements.

[Fig. 1.3] While significant precedents for such spatialized, multi-dimensional exhibition strategies existed—from Gyorgy Kepes’s *The New Landscape* (1951) to Herbert Bayer’s design for the Bauhaus exhibition at the Museum of Modern Art in 1938—in the IG context such exhibitions were particularly linked to a preoccupation with redefining interiors through the textures and patterns of printed matter. The year before *A Parallel of Life and Art*, Paolozzi, Henderson, and the Smithsons had collaborated on the redesign of Ronald Jenkins’ office at the engineering firm Ove Arup and Partners in 1952, which included a ceiling collage made from Paolozzi’s wallpaper prints as well as a collaged housing for the office’s epidiascope projector, realized by Henderson and Alison Smithson.\(^69\) [Fig. 1.4] Printed surfaces were simultaneously being used to cover and alter

---

\(^68\) A letter from Herbert Read, the director of the ICA, to E.L.T. Mesens dated 13 December 1954 notes that a work by René Magritte that Mesens had loaned for the exhibition was damaged while being taken down from the metal screen on which it was installed. Institute of Contemporary Art Papers, Tate Gallery Archive, 955.1.12.61 24/32

\(^69\) Paolozzi developed endlessly variable abstract linear motifs by creating silkscreens which combined and overlapped a number of his drawings. These screens were further overprinted according to chance. Paolozzi was assisted in these experiments by the theorist Anton Ehrenzweig, who was developing his own theory of a similarly patternless, deifferentiated vision during these years. See: Anton Ehrenzweig, *The Psychoanalysis of Artistic Vision and Hearing* (New York: Braziller, 1953). A description of the making of Paolozzi’s screenprints appears in Ehrenzweig’s *The Hidden Order of Art: A Study in the Psychology of Artistic Imagination* (London, Weidenfeld & Nicolson, 1967) p. 100. Alison Smithson recalls the “contrapuntal fragments in collage” which she and Nigel Henderson used to cover an epidiascope projector
walls and ceilings in domestic spaces as well. Alison Smithson recalled that the walls of their house on Limerston street were covered with paper surfaces that contained a heteroclite field of references, including a “collage of Greek newspapers cut polygonally and stuck on the basement stairwall (after much repair in plaster)” as well as “food pages from American magazines” on the walls of their kitchen. While the fascination with American magazines has been well established in accounts of the IG, the reference to Delphi is particularly evocative, suggesting a link between collage and prophetic utterances, just as it indicates the Smithsons’ playful way of linking the graphic and the tectonic—the newspapers carried back from Greece were cut into polygonal shapes to mimic the distinctive masonry of Delphi’s ancient retaining walls. Nor was any place too mundane for such activity. The only known photograph of the collages affixed to the walls of the Smithson’s Limerston street house is a shot of scraps of Paolozzi wallpaper they had collaged into the bathroom, producing an optically charged backdrop that set off in relief the plumbing chain hanging down from above.  

In such graphic interiors the commitment to the anti-illusory and anti-aesthetic immediacy of the “thing itself,” such as could be found in McHale’s installation or in Banham’s contemporaneous criticism, appears bound up with a fascination with forms of materiality that were much...
The documents that describe the emerging New Brutalist movement are filled with references to the surfaces of graphic reproductions, from photographic enlargements and advertisements to newspapers and paperbacks. If the texture and facture of print moved the New Brutalist, it is perhaps because the tension between image and material found its most heightened expression in such graphic surfaces, surfaces that were neither strictly optical nor purely physical but represented the manipulable intermingling of material and information—the unstable interaction of human decision, photomechanical optics, chemical processing, and imprinted substrate. In subtle contrast to Banham’s insistence that New Brutalism be defined by a “clear exhibition of structure,” these early experiments seem equally preoccupied with instability, surface, and damage. Just as the prewar legacies of collage and montage were being expanded and detached from a fine arts framework and applied to a wider range of tasks, they also came to operate in ways that were increasingly spatial, whether in the design of exhibition environments, interiors, and buildings, or even more expansively, as a conceptual lens for addressing the assembly problems associated with industrialized architecture or with reading urban contexts as “visual environments.”

Debates over the significance of unregulated and rapidly changing fields of visual communication in the city registered a larger tension, one that was not strictly visual, but implicitly linked to the conflicts between a market economy reemerging after years of wartime austerity and the values of uniformity, integration, and control, which had been a hallmark of state and municipal efforts to plan the postwar economy, rationalize urban reconstruction, and building techniques. An important, if overlooked, figure in the effort

---

to define ideas of the postwar city as a visual environment was Edward Wright. Having trained as an architect and practiced as an artist, in the early 1950s he turned to the emerging profession of graphic design and became a friend to, and frequent collaborator with, many of the artists and architects who participated in the IG meetings. Through the course of these collaborations, Wright would literally shape many of the decisive words and images that oriented architectural culture in Britain during the 1950s, while nonetheless remaining largely out of the spotlight.

Born in 1912, and thus almost a generation older than most of his IG colleagues, Wright’s involvement with prewar avant-garde work was more established but also more catholic, his interests ranging from Constructivist architecture, Soviet cinema, and Dada, to commercial signage, urban graffiti, and the work of the Dutch artist and printer H. N. Werkman. Wright filtered and reinterpreted this range of sources in his teaching at the Central School of Arts and Crafts in London in the early 1950s, where he came into contact with Eduardo Paolozzi and Peter Smithson, who were also teaching there at the time. Wright’s evening courses were attended by a number of figures who went on to prominent careers in architecture and graphic design—including Ken Garland, Germano Facetti, and Joseph Rykwert. It was also at the Central School that the architect and editor Theo Crosby learned of Wright’s work, laying the groundwork for future collaborations that helped inform the design of the influential magazines the Crosby went on to edit during the latter half of the 1950s, such as Architectural Design and Uppercase.72

Moving to the Royal College of Art in 1956-7, Wright further influenced the students

72 Theo Crosby, who met Wright via the Central School, notes Wright’s influence upon Architectural Design in “The Painter as Designer,” Edward Wright: Graphic Work and Painting (London: Arts Council, 1985), 49-51. From 1953-1961 Crosby was technical editor at AD, working under editor Monica Pidgeon. Equally important was Wright’s influence upon the RCA magazine Ark, where many figures of the Independent Group began to be published following Wright’s arrival at the school.
who produced *ARK* magazine, which hosted a number of key statements by former members of the Independent Group, and which was an important venue for the emerging definition of Pop.⁷³ During these years Wright developed a series of articles that drew heavily on his own interests in montage and collage to theorize a changing urban environment, looking to comprehend both the increasing scale of graphic media in the city while continuing to emphasize problems of material and construction. It is not insignificant that Wright turned to typography and graphic design after having studied architecture; from the late 1940s to the early 1960s, his most influential work was developed in close collaboration with architects, from Alison and Peter Smithson’s House of the Future in 1956 to the massive murals, letters, and icons developed for the 1961 Union Internationale des Architectes congress, realized with Theo Crosby. Wright participated in, and designed the catalogue for the influential 1956 exhibition *This is Tomorrow*. A key early experiment with the emerging printing technology of Offset Lithography, Wright’s design drew on his own interests in montage to exploit and structure the medium’s new range of possibilities in an enduring manner. Wright’s form translated the exhibition’s heterogeneous ideological commitments into a single continuum, and in so doing, created a significant precedent that would be picked up by subsequent generations of architects and artists in the 1960s, who further embraced offset lithographic printing to produce little magazines such as *Archigram* and *Clip-Kit*.⁷⁴

---


⁷⁴ Dennis Crompton has emphasized the importance of both *This is Tomorrow* and offset lithography in the history of *Archigram*. See “Interview with Dennis Crompton,” *Clip/Stamp/Fold: The Radical Architecture of Little Magazines 196X-197X*, ed. Beatriz Colomina and Craig Buckley (Barcelona: ACTAR, 2010) p. 313-319. A host of little magazines printed by offset lithography appeared in the 1960s in London, the most influential of which was *Archigram*. Introducing the exhibition “Living City,” organized by *Archigram*’s editors, Peter Cook aligned it with *This is Tomorrow*. See: “Introduction,” *Living Arts* 2 (1963) p. 68.
Wright’s broad interest in the shaping of letters and their space of appearance fit neither within the Swiss-inspired, internationally oriented modernism developed by figures like Herbert Spencer or Anthony Froshaug, yet nor did fit within the countervailing revival of nineteenth-century vernacular traditions that sought to anchor British graphic design in Victorian typographical culture. Wright saw in the letter a broader, less immediately identifiable set of forces; to understand changes in the techniques of graphic communication he looked to the deployment of signs and symbols in the city, a visual environment whose material substrate and rules of construction were undergoing drastic change.

Looking more closely at the collaborations of Wright and Crosby sheds light on how the design of graphic material was increasingly inextricable from architectural and urban questions, and vice versa. Like the architects and artists he was close to, Wright valued immediacy and tangibility, exploring printed matter through the medium of collage and through typographic experiments created by directly manipulating elements of type on the bed of hand-operated printing presses [Fig. 1.7]. Taking place against the background of significant changes in technologies of reproduction, Wright’s experiments also engage a larger discursive shift, a moment in which established notions such as calligraphy, typography, and lettering were being subsumed within a more encompassing meta-discourse of communication. In his work and writings, Wright contends with such shifts by drawing on a broad range of references, moving comfortably between the

---

75 Froshaug would influentially shape the first curriculum and publications at the Hochschule für Gestaltung at Ulm in the late 1950s. For an overview, see “Foundation course, Ulm 1953–61” and “Typography is a Grid,” from Robin Kinross, ed., Anthony Froshaug. (London: Hyphen Press, 2000) 122-146, 187-190. Spencer was the founding editor of the influential magazine Typographica. The interest in Victorian print culture was influence by Nicolete Gray, who, together with the AR’s art editor Gordon Cullen, had been a typographical consultant to the 1951 Festival of Britain and subsequently went on to contribute regularly to the Architectural Review. See for instance, Nicolete Gray, “Lettering: Theory of the Classical,” Architectural Review 114 (November 1953), 295-301.
constraints of the print bed and the page to phenomena as diverse as graffiti, cinema, posters, bas-relief, newspaper displays, and architectural facades. This diverse range of references arguably reflected the twisting paths that had brought Wright to graphic design. Wright had studied architecture at the Bartlett School in the 1930s at a moment when a number of European modernists were arriving in London. He harbored a parallel passion for cinema, which he followed in London and on visits to Paris. With war looming in Europe, Wright left with his family for South America. Following the death of his parents, he practiced architecture briefly in Chile. By 1942, however, he had decided to return to Britain, and volunteered for service. Suffering from epilepsy, he was soon discharged as medically unfit for duty; after a period of convalescence he eventually returned to service deciphering code for the Royal Engineers. It was during this period that he began to study typography as an assistant to the former Bauhausler George Adams. In the years following the war Wright practiced as an artist while frequenting the Anglo-French Art Centre in St. John’s Wood—developing friendships with Paolozzi and Anthony Froshaug—while continuing with odd jobs crafting window displays and designing newsreel titles.  

Wright’s sensitivity to both graphic shape and physical structure can be seen in his first solo exhibition, held at London’s Mayor Gallery in 1948. The drawing reproduced on the exhibition’s invitation card was composed from the stark contrasts between a series of simplified bold shapes and more delicately rendered rings and

---

76 These details are taken from Wright’s account of his work life in “The Elm Tree,” Edward Wright: Graphic Work and Painting, p. 40-8, and from the biographical outline in Edward Wright: Readings, Writings, ed. Petra Cerne Oven (Department of Typography: University of Reading, 2007).
radiating lines.\textsuperscript{77} While the off-kilter geometry of Wright’s drawing contained an abstract logic of its own, it was familiar enough to be read as a common component in postwar Britain’s precarious, makeshift domesticity: a cast-iron gas ring. The exhibition’s title—\textit{Useful and Metaphorical Objects}—suggests that Wright’s abstraction did not refuse reference, but sought to transform the emotional investment in such basic utilitarian objects. The gas ring was a piece of equipment that would have been a particularly potent reminder of the strains of postwar austerity; the record-breaking cold winter of 1947 had prompted a severe crisis, leaving people shivering in the dark as the flow of gas to homes was sharply reduced.\textsuperscript{78}

Wright’s bold reassembly of such familiar mechanical equipment stood in stark contrast to a lingering postwar insecurity, and caught the attention of the architectural journal \textit{Plan}, which became the first magazine to publish his work. Edited by a large editorial group during the years 1949-50, many of whom had resumed their studies after wartime service, \textit{Plan} espoused a techno-scientific vision of the architect’s role in the replanning of postwar Britain.\textsuperscript{79} One of the key terms for this vision was that of “integration,” which first appeared in the magazine in an article by Walter Gropius, and was quickly applied to questions of industrial prefabrication and planning. If there was any hope of making a “disrupted world...an integrated whole again,” Gropius argued, the “synthetic action of the artistic mind” had to be placed at the core of architectural and...
design training. Along with technical teamwork, Gropius saw integration as the mental capacity to envision a whole from various parts, a skill that depended on a fundamental visual reeducation, in line with the “language of vision” developed by his former Bauhaus colleague Laszlo Moholy-Nagy. Gropius’s poetics of integration provided a language for describing perhaps the most central concern of Plan’s editors: the large-scale prefabrication of school buildings by the Hertfordshire County Council taking place under the direction of C.H. Aslin. A project like the Hertfordshire schools program represented the aspiration to unify and organize individual, community, industry, and environment around a single goal. Echoing the discourse of integration, the editors opposed such purposiveness to the “chaos” of current reconstruction efforts, marked by the “disintegration of the whole,” and the “isolation of the part.” The plan to reorganize children’s education together with the integrated design and mass production of prefabricated building systems represented more than utility; it symbolized a type of coordinated social purposiveness mirroring the editors’ vision of Welfare State planning—a capacity to coordinate relations between technics, manufacturing, design, and education. It was in such a context that Wright’s work came to be first published: a reproduction of a painting together with a brief text. Rather than speak about his own work, however, Wright provided a brief statement on the relationship of art and technology within such a prefabricated building program. He described it as embedded within a larger logic of science and industry, a reflection of “the knowledge that each

---

82 Issue 6 of Plan in 1949 was devoted entirely to the Hertfordshire County Council schools building program, a was conceived as a manifesto of sorts for what such a project represented. On the Hertfordshire Schools prefecturbation program see: Nicholas Bullock, Building the Post-War World: Modern Architecture and Reconstruction in Britain (London ; New York: Routledge, 2002).
science, each activity, is part of all the others,” and which called for its own poetics of construction:

Iron rods, sheet metal, even nuts and bolts are the standard elements from which a mobile is assembled; rubbed surfaces, printed images are the materials from which a montage is made. In either case the approach is technological rather than aesthetic; the process is—idea, breakdown to elements, discovery of elements and assembly.  

The comparison of montage to the mobile suggests a vision of prefabrication less as a static frame, than as a movable apparatus. A mixed message, Wright invokes the equilibrium of the mobile while simultaneously seeking to separate the aesthetic from the technological. In such a brief description, Wright’s vision of montage was itself apparatus-like, beginning with actual components, it proceeded to a logical dynamism implicit in processes of analytical breakdown and reassembly.

Following the article in Plan, Wright began to transfer his attention increasingly from painting toward problems of typography and print, finding work in the early 1950s in the rapidly expanding fields of graphic design and advertising. This shift to printed matter brought about a transformation in both the form and subject matter of Wright’s work; Michael Harrison has argued that Wright’s move away from the depiction of hardware in painting to more graphic media like print reflected an attempt to address the more elusive domain of human communication. Yet if the nature of communication appears elusive in Wright’s work, it is never fully immaterial—the preoccupation with hardware is less discarded than displaced. As Wright shifted from gas rings, nuts, and

---

85 Wright worked first at the London firm Colman, Prentis & Varley, and then later at Rathbone books.
86 Michael Harrison, “Painting, Graphic Work, and an Absent Book,” Edward Wright: Graphic Work and Painting, p. 11.
bolts, to letters, signs, and words, he continued to conceive of the problem in terms of the assembly of standard units.

Wright’s surviving notebook entries regarding the evening courses in experimental typography that he taught at London’s Central School beginning in 1952 provide something of a record to his approach to communication. If Wright had stressed the link between prefabrication and montage as a process of analysis, breakdown and reassembly, his approach to typography was analogous: exercises began not with the book or the page, nor even with the paragraph or the sentence, but with the letter as a “element of structure and movement,” and as a “unit in a logical pattern.” This was achieved through the direct manipulation of various sizes and weights of a single typeface (Gill Sans), which Wright and his students arranged, rearranged, and overprinted on the beds of hand-operated Albion presses. Wright’s notebooks reveal that such direct manipulation of typographic material also reached back to a range of references, from Cubist techniques for breaking down forms through the overlapping and omitting of parts to the Duchampian insistence that “every sign be used ‘readymade.’” In experimenting directly with the elements of the type case and print bed, Wright’s courses also looked back to the Dutch artist and printer H.N. Werkman, who had used similar processes to create simplified, quasi-architectural compositions of blocks, ornaments, and type for his...

---

87 Wright described the courses at the Central School as a mixture of students and friends who joined to keep enrollment up. The group included graphic designers (Derek Birdsall, Germano Facetti, and Ken Garland), architects (including Patrick Crooke, who had been a member of the Plan group), photographers (Don Hunstein), as well as historians (Joseph Rykwert). See: Edward Wright, “The Elm Tree,” 47.
88 “Typography Course, Central School, Sept. 52, Synopsis part 1,” in Notebook A (January 10, 1953-November 1954), page 86. Edward Wright Collection, Department of Typography and Graphic Communication, University of Reading.
89 Edward Wright, “The Elm Tree,” p. 47
90 Notebook A (January 10, 1953-November 1954), 86-89.
magazine *The Last Call* in the twenties.\(^1\) Something of the results of Wright’s classes can be gleaned from a sampling of work published in the journal *Typographica* in 1954.\(^2\) [Fig. 1.9] The prints explore the ambiguous visual significance that letters, punctuation marks, and printer’s rule acquired when disengaged from linguistic syntax. Seeking neither the clarity of a linguistic message nor the obscurity of pure noise, they cultivated an ambiguous iconicity, capable of being read alternately as objects, as the visual equivalent of sound patterns, or as simple assemblages of arbitrary linguistic symbols.

Wright’s articles during these years take up a related ambivalence, theorizing graphic signs that, if largely familiar, had a significance that remained unclear. Published in 1956–57, the writings address an eclectic array of phenomena, including graffiti, readymades, film, cave paintings, archaic architecture and contemporary illuminated signage. It is perhaps not entirely surprising to find that someone who spent most of the war trying to decipher code would be drawn to signs ambiguous and cryptic in nature, resistant to the binary schema of signal and noise characteristic of the period’s positivist, mathematically derived theories of communication.\(^3\) The interest may well have informed an unrealized exhibition project entitled “Signs and Symbols” to be held at the ICA, that Wright had begun to conceive together with Crosby, William Turnbull, and

---

\(^1\) See Edward Wright, “The Elm Tree,” p. 47. In the August 1955, the editors of *AD* noted the influence of Werkman, which included the design of their own covers, tracing it back to Wright’s class at the Central School. See “Miscellania,” *Architectural Design* (August 1955) 266. Theo Crosby noted the following month that his cover design was “cribbed” from Werkman.

\(^2\) “Pattern, Sound, Motion,” *Typographica* 9 (1954) 15-17

\(^3\) If the emerging notion of communication was a central topic of interest amongst members of the Independent Group, it spanned often incompatible notions, ranging from linguistics, to semiotics, to the mathematical models of information theory. The latter, often derived from secondary popularizing scientific literature, appeared most clearly in the writings of a figure like Lawrence Alloway. Alloway, together with Geoffrey Holroyd and Toni del Renzio, redrew Claude Shannon’s source-receiver diagrams, as part of their contribution to the catalogue of *This is Tomorrow*. Wright’s 1953 notebook includes numerous pages devoted solely to sketching with phonetic symbols, suggesting his interest lay closer to linguistics than to information theory.
Geoffrey Holroyd. Wright’s article “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa” began by taking note of phenomena that were disappearing in mid-1950s Britain—“Chad” and “Kilroy” being British and American names for the anonymous popular graffiti that had “mushroomed on walls overnight” during WWII. Mingling a sensibility as much cryptographic as typographic, Wright speculated on the formation of Chad as a type of popular graphic code, a particular combination of the sign for alternating current used in wartime electronics factories with conventions drawn from the repertoire of the strip cartoonist. Not unlike Wright’s experimental typography exercises, Chad was assembled from conventional, unmotivated, and “readymade” symbols that, when combined, acquired an ambiguous iconic significance. If Wright was interested in the formation of such graphic symbols, he was equally interested in how such signs could mark out territory in urban environments: “Chad and Kilroy,” he noted, “were used to claim places during a time of danger and conflict; after the war they gradually disappeared, although defiant and protesting messages are still written on walls in towns, as this is an activity older than writing on paper.” [Fig. 1.10] The disappearance struck an ominous note; appearing at a moment when Britain had emerged from postwar austerity and was awash in printed matter, Wright’s article pondered the fate of such defiant gestures. The article went on to associate Chad with a broad range of traces and marks, from the Dadaist appropriation of bourgeois cultural icons—in

95 Edward Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” Ark 19 (1957) 4. Wright begins “We have recently lost track of Chad and Kilroy...”
96 Wright noted: “The positive and negative sine curves which make the symbol for an alternating current are the beginnings of Chad. The plus signs are his eyes, (an old strip-cartoonist’s convention for the eyes of someone who has been hit on the head).” “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” 4.
97 Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” p. 7. An enlargement of Duchamp’s L.H.O.O.Q. in three-color overlay appeared on the cover of Ark 19, underscoring the importance of Wright’s article.
Wright’s article the mustache scrawled on Duchamp’s L.H.O.O.Q. (1919) appeared as a strangely inverted Chad—to something as ephemeral as a footprint in the sand, the disturbing sign that announces the end of Robinson Crusoe’s insular existence in Luis Bunuel’s 1952 film version of the tale.\(^98\) [Fig. 1.11]

Wright’s attention to the formation and subsequent disappearance of such symbols was also an attention to the urban surfaces on which they appeared, environments so familiar that they often failed to register. The fascination was something Wright shared with Henderson, Paolozzi, and the Smithsons, who also turned their attention during these years to fragments of signage, hoardings layered with torn posters, and graffiti.\(^99\) It is worth recalling that such markings played a role in the definition of the New Brutalist conception of “image;” among the most prominent illustrations included in Banham’s landmark 1955 article was a Nigel Henderson photograph of graffiti, which Banham described as an “image of human as well as formal value.”\(^100\) [Fig. 1.12] A fascination with urban graffiti had already been established within Surrealism in the 1930s, a legacy of which Henderson, and perhaps Banham, was aware. Perhaps the best-known examples are Brassai’s closely framed, high contrast photographs of Parisian walls published in the journal *Minotaure*. [Fig. 1.13] Emphasizing the photographic referent, Brassai claimed the crudely scratched figures as evidence of a lingering,

\(^{98}\) The reference to a continental movement like Dada and to the narrative of Crusoe could be read allegorically in terms of the break up of the British Empire following WWII, a period that saw intensive migration from former colonies to England. *Ark* 19’s editorial explicitly criticized the *AR*’s “Outrage” issue of June 1955, which had decried the visual “steamrolling” of English towns. By contrast, *Ark* took aim at *AR*’s failure to recognize that critic and public were thinking in “different visual languages.” See: “Comment,” *Ark* 19 (1957) 3.


unconscious vitality inscribed in the working-class districts of Paris.\footnote{Brassai’s photographs were first published in the pages of Minotaure in the 1930s, but the work came to wider attention when they were exhibited in Paris in 1947, where Henderson encountered them. See: Walsh, Nigel Henderson: Parallel of Life and Art, p. 53, and Brassai, “Du mur des cavernes au mur d’usine,” Minotaure, 3-4 (December 1933): 6-7.} By contrast, Banham’s description of graffiti as “image” shifted attention to photographic reproducibility itself. A degraded and rigorously flat field of inscription, Henderson’s photo provided Banham with an image of photography’s capacity to reduce its referent to two-dimensional outline and graphic texture, information etched into a negative not unlike the lines scratched into window glass in Henderson’s photo.\footnote{Banham had already used the term image in his review of “Parallel of Life and Art” two years previously, to describe the power of photograph’s to fabricate illusions of likeness solely from the “community of outlines and surface texture... in photographic reproduction.” Reyner Banham, “Parallel of Life and Art,” The Architectural Review 114:682 (October 1953): 260.} Banham hinted at the image’s brutal indifference to its referent by comparing it to the study of topology, in which a teacup was the same mathematical shape as a record, and a brick identical to a billiard ball.\footnote{Banham, “The New Brutalism,” 361.} Such a liquidation of the referent’s identity left behind any notion of photographic realism, such potent illegibility took on a new significance, a graphic mutability allowing one thing to be seen as something else.

Where Banham theorized such graphic inscription under the broader category of image, Wright—who was himself photographing graffiti during these years—framed it through the lens of writing. Wright reproduced two of his graffiti photographs in “Writing and Environment,” published in Architectural Design in 1956.\footnote{Edward Wright, “Writing and Environment,” Architectural Design (December 1956): 389-392.} The photographs were part of a larger sequence he had taken of walls along the rue Visconti in Paris. The difference between the photograph published in the article and a related photograph in the archive raises the possibility that Wright was using photography to
track the appearance and disappearance of writing on walls over time. In the first photo, only the word “HENRI” remains legible, eclipsed by the competing urgency of the slogan “non au réarmement” and a dense tangle of scrawled lines. [Fig. 1.14a] In the photograph published in *Architectural Design*, the overdrawn letters “HENRI” appear again, but as part of the more intact phrase “–EZ HENRI MARTIN.” [Fig. 1.14b] For a brief period of time in the early 1950s, the slogan “LIBEREZ HENRI MARTIN” appeared on walls in Paris as part of a campaign for the release of the former soldier and Communist party activist Henri Martin, who had himself recently been convicted of sabotage for writing graffiti slogans and pamphleteering in opposition to French military action in Indochina.105 The details of the Henri Martin affair went unremarked in Wright’s text, but nonetheless offers a potentially different interpretation of the article. Grasped as an instance of anti-war graffiti—of the type that was deliberately suppressed during the early 1950s in Paris—the juxtaposition with other large-scale urban advertisements, such as those developed by Werner Hächler for St. Raphael Apéritif in the late 1940s, takes on different reading. The wall comes to appear as a space in which defiant messages competed with graphic advertisements of growing scale and sophistication. If Hächler’s fragmented script emulated the idiosyncratic qualities of writing in opposition to the standardized nature of type, this apparent eccentricity concealed a new form of environmental graphic, a consistent modular system allowing the design to be adapted

---

105 Martin began a campaign to end French involvement in Indochina after returning from service there in the late 1940s. In 1950, he was sentenced to five years in prison by the French Government, at which time a number of “comités de defense” were set up. His conviction was eventually overturned in 1953. See: *L’Affaire Henri Martin*, ed. Jean-Paul Sartre, et. al., (Paris: Gallimard, 1953).
and reproduced at any scale, from printed labels and drink mats to paintings on walls and trains.\textsuperscript{106} [Fig. 1.15]

Wright’s fascination with the contested legibility of writing in public space can also be seen as an insistence on reading, both as a process of deciphering partly illegible messages, but also of how the shifts in forms of communication themselves revealed changes in the postwar metropolis.\textsuperscript{107} Graffiti played an important role in Wright’s effort to develop a materialist typology of writing’s relationship to urban environments. Wright identified graffiti with “calligraphic” writing, a form of drawn or painted writing that was only superficially integrated with its architectural support, as distinct from “glyptic” writing—signs incised or pressed directly into the material—and “tectonic” writing, in which letters served as independent units attached to, or supporting, a frame.\textsuperscript{108} In claiming graffiti as calligraphy, Wright departed from a well-established discourse of calligraphic writing within the Central School, dating back to Edward Johnston’s landmark \textit{Writing & Illuminating & Lettering} of 1906.\textsuperscript{109} Tracing the historical and technical development of writing from monumental Roman inscription through to modern letterforms, Johnston argued that understanding historical changes in the craft of writing provided “insight into the construction of letters,” a foundation for the reform not


\textsuperscript{107} The capacity for ephemeral graphic material to transform urban environments continued to preoccupy Wright, as can be seen in later writings, such as “Conversation, Handwriting, and the Poster,” a text presented in Warsaw in 1970 at the international poster biennale; rpt. \textit{Edward Wright: Graphic Work and Painting}, 75-8; and in “The Idiom of the Revolutionary Poster,” in \textit{Art in Revolution: Soviet Art and Design since 1917} (London: Arts Council of Great Britain, 1971).

\textsuperscript{108} Edward Wright, “Writing and Environment,” 389-90.

only of calligraphy but of typographical standards as well.\textsuperscript{110} If Wright’s identification of calligraphy with graffiti marked a radical departure from Johnston’s commitment to sensitive line, refined draftsmanship, and the culture of the book, he nonetheless shared Johnston’s emphasis on the historical and technical formation of letters, but shifted this emphasis squarely towards the city. Writing reflected its environment, Wright argued, “not only in the form and style of letters, but more profoundly in the technical process used to make them an integral part of their surroundings.”\textsuperscript{111} If calligraphic writing was the most superficial of Wright’s types, it was also the one that appeared to be invading the environment on a more massive scale. For Wright, reading writing’s degree of integration with its environment was a means of reading a given social context, which determined “the extent to which writing can become a part of its environment, break into it as a protest, or flourish as a parasitic growth.”\textsuperscript{112}

Where Johnston’s history took as its origin point Imperial Roman inscription, Wright looked to a broad range of non-alphabetic scripts, from Egyptian hieroglyphs to Japanese and Chinese ideograms. While Wright may have been familiar with the invocation of calligraphy and picture-writing in the late 1940s to describe the flattened, sign-like character of postwar abstract painting, his immediate sources were closer to linguistics, notably the emerging study of grammatology, a term coined in 1952 by Ignace Gelb to describe the study of writing in its broadest forms, from archaic

\textsuperscript{110} Edward Johnston, “Authors Preface,” \textit{Writing & Illuminating & Lettering}, Sixth Edition, (New York: Macmillan, 1915) p. xiii. Johnston’s phrasing is noteworthy, the letter is not so much drawn, cast, or carved, but rather “constructed.” It would be worth pursuing the idea of the “constructed” letters within typographic theory to see how it parallels or diverges from definitions of construction within architecture.  
\textsuperscript{111} Wright, “Writing and Environment,” 392. 
\textsuperscript{112} Ibid., 391.
pictograms to the alphabet. Gelb’s broad typological and comparative method theorized the emergence of the alphabet as a slow abstraction of writing from icon; in Wright’s hands this divorce of icon from writing, and of vision from speech, was described as a progression through architectural environments. “Writing forms in antiquity,” he noted, “evolved to the same extent on a building surface as they did on the surface of a prepared writing material. The clay brick was a writing material for cuneiform.” Architecture was thus not only a support for writing, but a material imprinted with and built from writing. Wright went on to contrast the private bas-reliefs overlaid with cuneiform script within the ancient palace at Nimrud—used to record the “despotic triumphs of the Assyrians”—to the emergence of the alphabet in Ancient Greece and Rome, a period in which “writing became public, slaves could read.” This change in the form of writing and in the balance of literacy had its own particular architectural symptom, the new centrality of inscribed urban monuments such as Trajan’s column: “the focal point of the Roman environment.”

For Wright, the changing relationship between writing and architecture was symptomatic of the changing political organization traced across different epochs. The

113 See: Ignace J. Gelb, “The Evolution of Writing,” A Study of Writing: The Foundations of Grammatology (Chicago: University of Chicago Press, 1952) p. 190-198. While Wright does not cite Gelb explicitly in “Writing and Environment,” he was certainly aware of it, as he reproduced an illustration of the earliest-known Greek alphabet from Gelb’s book. A similar consideration of non-alphabetic writing systems was invoked in these years by David Sylvester to describe the late paintings of Paul Klee. See “Auguries of Experience,” Tiger’s Eye, no. 6 (December 1948) rpt. as “Late Klee,” in About Modern Art (New Haven: Yale University Press, 2001) 35-8.
114 Wright, “Writing and Environment,” 391.
115 Wright underscores the historical separation of word and image in terms of public and private: “The walls,” Wright noted, contained “two methods of recording... almost in opposition, the one public, the other private. The low-relief figuration is a narrative, the cuneiform is a system for filing events.” Wright, “Writing and Environment,” 391.
117 Jacques Derrida’s theorization of the term grammatology in 1967 has had a more enduring influence than that of Gelb. While Derrida acknowledged Gelb’s “remarkable enterprise,” he moved sharply away
layout of Wright’s article emphasized such shifts in its juxtaposition of an Assyrian bas-relief with a neon café sign, and the Vesnin brothers’ 1924 design for the Pravda building, whose facade was “a screen onto which newspaper pages would be projected.”\(^{118}\) In this, Wright’s analysis was not unlike that of Walter Benjamin, who, thirty years earlier, had drawn a similar comparison, seeing the increasing verticalization of reading and writing as symptomatic of the end of the book, and the nearly four centuries of “refuge” and “autonomy” it had provided for writing, or \textit{schrift}.\(^{119}\)

Benjamin’s literary montage conjured up a similarly compressed history—in passing from the “upright inscription” of Imperial monuments, to medieval scriptoria, and the invention of movable type, writing had gradually “laid down,” yet modernity witnessed a subsequent return to the vertical, as “film and advertising billboards, force the printed word into the dictatorial perpendicular….” Written in 1926, Benjamin’s reflection on the dictatorial perpendicular reacted to the billboards and signs of Weimar-era Berlin, in which he saw writing “pitelessly dragged out into the street by advertisements and subjected to the brutal heteronomies of economic chaos.”\(^{120}\) Yet Benjamin’s account of writing’s domination by commerce also contained a dialectical potential; the uprightness from Gelb’s scientific ambition, towards a deconstruction of the very opposition of speech and writing within Western metaphysics. See: “Of Grammatology as a Positive Science,” Jacques Derrida, \textit{Of Grammatology}, 1st American ed. (Baltimore: Johns Hopkins University Press, 1976).

\(^{118}\) It is unclear from where Wright would have taken this image, as images of Constructivist architecture were not in wide circulation at the time. Camilla Gray’s landmark \textit{The Russian Experiment in Art 1863-1922} was not published until 1962.


\(^{120}\) Benjamin, “Attested Auditor of Books,” 171.
that signaled the demise of the book was also a precondition for a new and different possibility for signification. As urban writing advanced into “the graphic regions of its eccentric figurativeness,” Benjamin described the potential for a “qualitative leap,”—the appearance of a revolutionary, universal type of “picture-writing,” and an “international moving script,” which would enable poets to “renew their authority in the life of peoples.”

While Wright would most likely not have been aware of Benjamin’s text—whose notion of a revolutionary “picture writing” was more attuned to the constructivist experiments of the 1920s rather than to commercial centers of the postwar metropolis—his contrast between the authority of verticalized, environmental writing and the printed word was similarly dialectical, hinting at a different type of literacy called for by such accelerated and upright forms of public reading, acts occurring amidst the fabric of the city, and dominated by competing powers of public inscription. Wright concluded his article by invoking such an intensified condition, juxtaposing nighttime photographs of New York’s Times Square with a close-up of tags and signs affixed to a gatepost [Fig. 1.16]:

Often the first appearance of a message gives the clue to some social tension or process of transformation no more obvious than the collection of little cards pinned and taped onto the budding doorbells of a respectable mansion. When letters become separate structural units, they can be made of any material, including electric light bulbs and neon tube. With this technique writing invades the environment until a surprising symbiosis is reached: The environment built

---

121 Ibid., 172.
out of visual communications. Times Square and Piccadilly Circus become heaven to those who can’t read and at least a playground to those who can.\textsuperscript{123}

The comment would have had a particular resonance for Wright’s London readers, its last line playing off of a familiar London quip that the commercial illumination of Piccadilly Circus was “wonderful, so long as you don’t know how to read.”\textsuperscript{124} For Londoners, the lights of Piccadilly Circus connoted more than the sum of their letters—they were associated with youth culture, cruising, drugs, and prostitution [Fig. 1.17].\textsuperscript{125} In alluding to such a charged site, Wright touched on larger anxieties surrounding commercial signage and illuminated letters within postwar British architectural criticism. Immediately after the war, architects such as Ernö Goldfinger and E.J. Carter, in their 1945 \textit{County of London Plan}, pointed to Piccadilly Circus as emblematic of the negative effects of unplanned commercial growth, captioning a photograph of the Circus “architectural squalor.”\textsuperscript{126} At once visually powerful yet materially insubstantial, the application of electricity to typography was an increasingly potent, yet largely unplanned force in shaping the architecture of the postwar city. It was a supplement that threatened to overpower buildings and streetscapes, and thus represented a key element that needed to be mastered if the visual planning of towns was to be controlled.\textsuperscript{127} Anticipating the

\begin{itemize}
\item \textsuperscript{123} Wright, “Writing and Environment,” 392. Images of Times Square signage at night were already a part of architectural debate in the 1920s. Le Corbusier used an image of Times Square in the article “Formation de l’optique modern,” included in \textit{La Peinture Moderne} (Paris: Georges Crès, 1925) 62-71. Originally published in \textit{L’esprit Nouveau} 21 (Paris, March 1924) n.p.. Erich Mendelsohn’s \textit{Amerika: Bilderbuch eines Architekten} (1925) includes a double exposure of Times Square captioned “Broadway bei nacht.”
\item \textsuperscript{124} Cited in Peter Ackroyd, \textit{London: The Biography}, (London: Chatto & Windus, 2000), 189. Unfortunately, Ackroyd does not provide the source of the citation.
\item \textsuperscript{125} The illuminated signage and the nightlife around Piccadilly Circus were of interest to avant-garde filmmakers around Karel Reisz at the British Film Institute at this moment, notably Claude Goretta and Alain Tanner’s short film \textit{Nice Time}, which was shot entirely at night over several weeks at Picadilly Circus in 1956.
\item \textsuperscript{126} E. J. Carter and Ernö Goldfinger, \textit{The County of London Plan} (West Drayton: Penguin books, 1945).
\item \textsuperscript{127} Visual Planning was the title of unpublished manuscript by Nikolaus Pevsner containing a number of the key examples and ideas through which the theory of “townscape” came to be articulated in the pages of
\end{itemize}
conflicts addressed in coming decades by Peter Blake’s *God’s Own Junkyard* (1964), and Robert Venturi and Denise Scott Brown’s *Learning from Las Vegas* (1972), the editors of the *Architectural Review* had sought to define a position on the role of advertisement and signage in urban planning.\(^\text{128}\)

The *Architectural Review*’s criticism of urban signage and advertisements proved more nuanced than Goldfinger and Carter’s, rebutting existing criticisms of publicity as a form of squalor, the editors sought to assess the British situation by juxtaposing it with American laissez-faire approaches to planning.\(^\text{129}\) Gordon Cullen, the magazine’s art editor, set out to provide approaches for exerting degrees of aesthetic control over posters, marquees, and advertising signs. While he advocated banning signage entirely in what he termed “sensitive areas,” he also considered the value of publicity in producing “the unexpected—even outright shock,” in “areas of town which are commercial or cater for amusement.”\(^\text{130}\) Here Cullen drew on a key theme of montage—the production of shock through visual collision—a sensibility that was further echoed by the editors of the magazine. As part of a debate on the question of advertising in the city, the editors had invited Richard Guyatt, Director of the Publicity Design Department at the Royal College of Art.


of Art to weigh in on the subject. Guyatt took the opportunity to make a plea for “aesthetic integrity,” decrying the ugliness and mediocrity of posters “fighting each other to claim one’s attention [on] the forlorn hoardings round a bombed site.”\footnote{Richard Guyatt, “Truth of a Kind: Advertising in Art and Townscape,” The Architectural Review 112:672 (December 1952), 354.} In deep disagreement with Guyatt, The Architectural Review published a rebuttal, affirming an interest in what they called the “vulgar, but vital” qualities of urban advertising. They did so precisely by validating the visually disruptive effects of advertising within the urban scene. In doing so they pointed to the issue’s cover, which carried a retouched photograph of Dubonnet advertisement, whose oversize, colored letters clashed with the surrounding gray streetscape. [Fig. 1.18] “Whatever its internal demerits as a work of art,” they noted, “the familiar Dubonnet slogan brings to the urban scene qualities which only advertising can contribute to Townscape—colour, surprise, rupture of scale, visual and psychological incongruity, which can serve to punctuate and enliven otherwise undistinguished masses of buildings.”\footnote{Editors, The Architectural Review, 112:672 (December 1952), 1. The place of street advertisements had been a key issue for several years at this point in The Architectural Review. In the “Man-Made America” issue of 1950, the editors used a photograph by Walker Evans to describe what they called the “crazy jigsaw” of the American streetscape as a foil for their own project, namely to “redesign and reassemble” the details of such urban environments into what they optimistically described as a “functional, beautiful, and specifically twentieth-century townscape.” See “Case Study: Detail,” The Architectural Review 110:648 (December 1950), 376.} The editors stopped short, however, of asserting the free play of such violent juxtapositions as something that could be generalized without qualification. Such contrasts were to be harnessed, controlled, and remade—
folded back into a theory that could serve as a plausible basis for urban design. The
drawings of Gordon Cullen provided an image of what controlled publicity would look
like. Contrasted with a photograph of New York’s Times Square—a proliferation of
commercial signage sanctioned precisely by the relaxation of municipal zoning
controls—Cullen’s sketches delineated an “art of townscape” in which the vulgarity of
publicity was sublimated and composed, its surprising juxtapositions brought into
sympathetic relation with the outlines of existing buildings and squares. [Fig. 1.19] Such
attempts to reconcile and assimilate commercial communication with the local urban
fabric served as potent instances of the clash between The Architectural Review’s
investment in ideas of Englishness and the emergence of a new rootless growth of signs
and symbols associated with the international movements of commerce.¹³³

What Wright proposed, by contrast, was not so much suggestions for
improvement and control but a symptomatological reading; illuminated signs, like the
“budding doorbells” added to once respectable London mansions, were clues to
transformations that the external appearance of buildings failed to reveal. Invoking
ignorance and play, Wright’s comments were less normative than those of the
Architectural Review, and more ambivalent than the embrace of laissez-faire urbanism

¹³³ The international movement of mass media, science, film, and popular culture already recognized in the
early 1950s, served as the backdrop against which The Architectural Review’s editor Nikolaus Pevsner
positioned his return to a national conception of Englishness a few years later. Pevsner’s Englishness of
English Art—first broadcast as the Reith Lectures on the BBC in 1955—stated: “Those who are against
stressing nationality in art argue that in an age of such rapid communications as ours, with such an
international force as science in command, with daily press and illustrated journals, with wireless, film, and
television keeping everyone all the time in touch with all other parts of the world, everything ought to be
avoided that glorifies obsolete national divisions.” Nikolaus Pevsner, The Englishness of English Art: An
Expanded and Annotated Version of the Reith Lectures Broadcast in October and November 1955
developed by figures such as Lawrence Alloway and Reyner Banham a few years later. The nighttime photographs of Times Square are framed neither within a logic of taste nor as an aesthetic of plenty, but rather as a view to those forces of dematerialization revealed by writing, an architectural trajectory that had evolved from an amalgam of brick and word to abstract alphabetic signs and finally to units of light. In the high-contrast black and white photos—taken by the American photographer Don Hunstein, a student in Wright’s experimental typography class at the time—a new hybrid of symbol and icon appears to stand upright, the buildings little more than spectral scaffolding for a relentlessly communicating environment, a montage composed no longer of rods and panels but of discontinuous, pulsing icons, shapes, and letters [Fig. 1.16]. If such environments were often dismissed as mere noise, Wright implied that they needed to be read more seriously for signals, evidence of the need for a different kind of literacy capable of parsing writing’s increasingly environmental character. Insisting on the concept of writing—rather than the more neutral notion of “image” or the more specific rubric of lettering—Wright linked the definition of “visual environment” to the control over inscription in public space. In so doing, Wright reframes the dematerialization of writing as a new type of building problem, an “environment built from visual communication,” a “symbiosis” in which the discreet elements of linguistic structure were understood as units of construction, with the city reconceived as an experiment in three-dimensional writing.


135 While in London on the G.I. Bill in the mid-1950s, Hunstein studied briefly with Wright before going on to work with Columbia Records, where he produced many of the most iconic photographs of its recording artists from the 1960s, from Bob Dylan to Miles Davis. I am grateful to Ann Pilar at Reading University for pointing out Hunstein’s involvement in Wright’s classes.
Wright’s theorization of an environment built from visual communications mirrors the increasingly expanded, environmental character of his own work during these years. While calligraphic writing was the most superficial within Wright’s typology, it was the form he linked most intensely to a series of projects that integrated writing more completely with architecture. The condition of possibility for such environmental writing was a series of highly temporary exhibition structures realized in collaboration with architects. If he embraced this opportunity by occupying the full dimension of the architectural envelope, this graphic expansion also threw into question the construction of the letter itself, whose direct relation to the mechanisms, materials, and technologies of print had been severed.

It was in the context of Alison and Peter Smithson’s “House of the Future,” conceived for the Daily Mail’s 1956 Ideal Home Exhibition that Wright designed perhaps his most dematerialized experiment in writing. The elongated, horizontal strokes of the alphabet that Wright designed for the “House of the Future” echoed the blank, horizontal box that contained the Smithsons’s house. [Fig. 1.20] The letters were to be projected in light upon the exterior, a type of calligraphic script even more insubstantial than graffiti on city walls. Its impermanence was further highlighted by the fact that the projection was designed to regularly flash on and off, soliciting attention at one moment and disappearing the next.136 While the intended projection was not realized as planned in 1956, the connection of the letters to the medium of light endured. The alphabet was

136 As noted on the drawing, HF 5526 General Arrangement of Outer Case,” Folder A019, Alison & Peter Smithson Archive, Graduate School of Design, Harvard University. For an analysis of the encounter with the House, see Beatriz Colomina, “Unbreathed Air,” in Alison and Peter Smithson : From the House of the Future to a House of Today, (Rotterdam: 010 Pub., 2004).
taken up in the early 1960s by producers at the BBC, and Wright’s script flickered onto
British screens in the form of titles for the newly launched television program Horizon.\footnote{Bernard Lodge designed a title for Horizon using Wright’s alphabet. See: Edward Wright: Painting and Graphic Work, 52.}

Wright seized upon such a new condition of superficiality as an opportunity to
more completely integrate architecture, painting, and typography, developing during
these years what he termed the “calligraphic envelope.”\footnote{Edward Wright, “When we were Young,” Art & Design 1, 6 (July 1985), 40. First tested in 1955 for the MARS Group exhibition Turn Again.} At the end of 1955, Wright
developed a scheme with Theo Crosby for a small exhibition pavilion for Architectural
design’s 25\textsuperscript{th} Anniversary at Britain’s National Building Exhibition, one that aimed to
integrate a logic of construction and a graphic system into single spatial statement.
Developed on the basis of collages and typographic experiments, the pavilion for
Architectural Design anticipates the future direction of Wright’s work. The close
collaboration between Wright and Crosby, then technical editor of Architectural Design,
also sheds light on how the magazine sought to intervene in British architectural culture
in late 1955 took place at a moment when both magazines were actively reflecting on
their identity amidst the period’s rapidly shifting graphic landscape, producing covers
that solely foregrounded their respective acronyms. The two covers, designed by Gordon
Cullen and Edward Wright respectively, reveal the contrasting commitments of the...
periodicals, and in so doing, reveal something larger: a different claim about the relationship between materiality and meaning, a central issue in architectural discourse during these years. *Architectural Review’s* July 1955 cover featured a starkly lit black and white photograph of a tablet. That spring, the magazine’s editors had hired a stone carver to inscribe the lowercase letters of its acronym—which Gordon Cullen had drawn especially for the magazine’s cover—into the stone.140 [Fig. 1.21] Following the magazine’s own interest in the revival of Victorian typefaces Cullen had based his letters on the English nineteenth-century typeface Clarendon, whose blocky, sharp-cornered slab serifs were designed to create emphasis in posters and handbills while simultaneously being suited to the demands of wood fabrication commonly used for Victorian poster type.141 Cullen’s ink-drawn letters considerably unstiffened Clarendon’s emphatically square edges, a move lauded by *AR’s* editors for providing idiosyncrasy while remaining anchored in firmness and stability. Lacking the “dead rule-and-compass regularity which is normally regarded as proper to lapidary lettering,” they noted, the letters remained “perfectly apt to stone, and thus to architectural usage, without subservience to Trajanic tyranny,” alluding to the Roman model commonly used for the lettering found on significant state buildings in London.142 The sober photography of the stone tablet quietly

141 On the development of Clarendon, see Robin Kinross, *Modern Typography*, 29. Cullen’s interest in Victorian typefaces had been nourished by the work of Nicolete Grey, who was also a regular contributor on matters of lettering and typography for the *Architectural Review*. Together with the poet and early *AR* contributor John Betjeman, she had influentially revived the legacy of Victorian typefaces, a number of which found their way into the magazine from the 1930s onwards. On the history of the layout of the *AR*, see Richard Hollis, “Building a Graphic Language,” *Eye* 7:28 (Summer 1998), 36-45.
142 *The Architectural Review* 118:703 (July 1955) n.p.. Nicolete Gray had introduced the notion of “Trajanic tyranny” in her critique of classicism two years earlier. “Lettering: Theory of the Classical,” *The Architectural Review* 114 (November 1953) 295-301. Gray had roundly criticized the lettering derived from the Trajanic model commonly used on British public buildings, on the grounds that it represented a rather rote form of classicism. The use of the term “tyranny” to describe the lettering on building’s favored
represents what is in fact a remarkable material translation, from Victorian wooden type, to drawing, to stone carving, to photograph, to printed page. In the process, AR’s cover monumentalized a stock element of Victorian ephemera; what was designed to be temporarily posted on walls and hoardings had been transformed into a weighty inscription “perfectly suited” to becoming a permanent part of the walls themselves.

For the AR, the key test of a letter’s architecture was its capacity to become what Wright had called “glyptic,” that is, suited to deep inscription into a permanent material substrate like stone. For Wright and Crosby, the relationship between graphic material and architecture was driven by a contrasting set of concerns, less with material inscription than with testing the legibility of an optical-linguistic assemblage of letters and colors overlaid within a shallow space of mechanical reproduction. Such concerns can be seen in the November 1955 cover that Wright designed for AD’s 25th Anniversary. Using only readymade type—Haas Kompakt Grotesk, the immediate forerunner of Helvetica—and color separation, Wright’s design offsets the outlines of the letters A and D.\footnote{The cover significantly marks the first instance that the initials AD appeared on the cover of the magazine, a move that would become entrenched later in the 1960s. Intriguingly, the very first use of the acronym “AD” appears to have been part of an early discussion between Crosby and Wright. The lowercase “ad” appears for the first time in the magazine as part of a redesigned masthead in Crosby’s second issue as editor in January 1954. In Wright’s notebooks from 1953-4, there are a number of sketches that experiment with a logo using variations on lowercase letters A and D. EWC, University of Reading, Notebook A (1953-54) page 124.}

The choice of a Swiss typeface underscored the issue’s subtitle: “special international number.” This emphasis on looking internationally was perhaps an attempt to mark a difference from the AR’s editorial line, which, despite occasional surveys of work abroad, remained closely by the British state, takes on a heightened importance at a moment when the Britain was itself retreating from its status as Empire, and searching for a new mode of self-definition.
invested in the category of “Englishness.” An article by the Swiss artist, designer, and architect Max Bill further vouchsafed the internationalism of AD’s November issue, as a key theorist of Concrete Art, a staunch defender of the New Typography, and the first rector of the Hochschule für Gestaltung at Ulm, Bill represented the continued evolution of design principles first developed at the Bauhaus. If Wright’s typography was built from Swiss parts, it was assembled in a way that departed from the dogmatic clarity advocated by Bill—the bold legibility of the oversize type was broken down and rendered visually ambiguous through the shifting of position and the optical interaction of overlaid colors. The letters consequently shift from positive figures to read as the residual silhouettes of unprinted shapes within a three-color overlay [Fig. 1.22]. The residual letters appeared as part of a more complex combination of red and blue printing that also contained the other elements of the issue’s title. While the initials were layered in a shallow space, the tightly spaced ascenders and descenders of “special international number” are positioned vertically, progressively drifting leftward in contrast to the perpendicular clarity of “xxv anniversary.” The clarity of these larger words are superimposed by the shapes of the letters AD, an ambiguous optical depth that complicates the carefully stacked architecture of readymade typographical elements. The cover’s precariously balanced structure echoes the sentiments of the issue’s editorial, which addressed itself to the “difficult, transitional state” of the modern movement. The present situation, the editors noted, faced the twin dangers of “a confused groundswell of revolt against [the modern masters’] dogmatisms,” and the equally strong threat that the

144 The AD’s choice of an English typeface was but the more visible sign of its continued preoccupation with ideas of “Englishness” in relation to the development of the modern movement in particular and urban development more generally.
personal styles of such masters had “crystallised into modern academies, which stand in
the way of further development.”

Wright and Crosby extended this precarious balancing effort in the form of the
temporary exhibition pavilion at the 1955 National Building Exhibition. The combination
of painted letters and colors applied to the structural support similarly aimed to rethink
the relationship between surface and structure, visual and physical, image and material. The small pavilion was a cube housing an exhibition area on the ground level and a small office above. The structure was composed of wooden beams “left rough from the saw” and held together with exposed bolts, an effect coyly described as following the “brutality of the packing case tradition.” The stand was identified less with materials on display than with the apparatus of shipment, rough crates whose surfaces were covered with stencils, stamps, and marks of all kinds. It was from this material information that Wright’s calligraphic envelope took its cue. The interior ceiling was described as a “collage of letters and photoprints,” part of an overall composition painted in primary colors, and which covered every surface, overlaying a different visual structure on the cubic form of the physical structure’s interlocking wooden beams. [Fig. 1.23] If the ephemeral painted letters of Wright’s calligraphic envelope were an opportunity to depart from the material constraints and readymade structures of the type case, Wright’s

---

147 Edward Wright, “When we were Young,” Art & Design 1, (6 July 1985), 40. Wright had first tested the idea of using letters at the scale of a building in his painted letters for the 1955 MARS Group exhibition Turn Again. A number of pavilions prominently featuring letters might have been known to Wright, such as Herbert Bayer’s designs at the Bauhaus for cigarette and newspaper kiosks, 1924, Fortunato Depero’s Pavilions of extruded letters for the Biennale of Decorative Arts in Monza, 1927, or Le Corbusier’s Nestle Pavilion of 1928.
149 Visible in period photographs was a large mirror on one side, which created the illusion that the pattern extended beyond the closed, rear wall of the cube.
calligraphic envelope nonetheless retained an existing sans-serif typeface as model. Rather than reshape the letter, Wright sought instead to break up its outlines through processes of overlay, drawing on the resources of collage and on his own earlier experiments in moving blocks of type on a press bed, fragmenting the typographic outline of letters through overprinting. If the calligraphic envelope unified the surface of the cube, the structure of the painted letters did the opposite—their outlines were disrupted both by a horizontal pattern of the painted beams and by changes in color that marked the continuation of one letterform within an adjacent one. Wright’s calligraphic envelope deployed a mixture of literal and virtual structure, “interlocking” the antithetical registers of the graphic and the tectonic in a manner that both echoed and undermined the cube’s rough timber structure.

The small pavilion epitomizes in many ways the graphic and editorial transformation underway at AD following Crosby’s arrival in 1953. Crosby’s arrival accelerated the shift initiated by editor Monica Pidgeon, transforming AD from a magazine principally concerned with the building industry to one that aimed to lead cultural debate. Following his training as an architect, Crosby had studied sculpture in the evenings at the Central School, where he learned of Wright’s experimental typography course, and eventually sought Wright’s advice in laying out the magazine and designing

---

150 Wright may have retained the typographic model in order to ensure continuity between the stand and the cover of the November 1955 anniversary issue.
151 “Architectural Design Stand at the Building Exhibition,” Architectural Design, 371. The reviewer noted that the “letters are intricately interlocked and related to the design on the ceiling.” When Wright and Crosby published the stand extensively in the second issue of Uppercase in 1959 it was again related to a mixture of collage and typographical experiment, appearing alongside a large selection of Wright’s collages, a draft of Richard Hamilton’s typographic rendering of Duchamp’s Green Box, and Kurt Schwitters’ i-drawings, scraps of testprints which Schwitters collected from press rooms and exhibited as a type of printed readymade.
its covers. Until 1952 AD’s covers were exclusively photographs of building products—cribbed from the advertisements within the magazine itself—reflecting the close links between AD and its parent company, the Architects’ Standard Catalogue Company (ASCC), the key catalogue used by British architects to specify products for construction [Fig. 1.24]. While the ASCC continued to own AD until the mid-1970s, the magazine was thoroughly repositioned through the course of the 1950s by drawing on a circle of friends and colleagues associated with the Independent Group, including Alison and Peter Smithson, John McHale, Edouardo Paolozzi, Edward Wright, and Maxwell Fry and Jane Drew. The new editorial direction introduced genres of writing not seen before in the magazine; historical articles written by architects on topics such as Dutch Modernism, Constructivism, and Cubism, extensive reviews of contemporary exhibitions, notes on architectural photography, a new section on technical information written by engineers for students, as well as special tear-out prints commissioned from artists such as Eduardo Paolozzi and Josef Albers, among others. The magazine continued its tradition of surveying recent built work, merging this into thematic concerns it aimed to provoke debate by taking positions, such as providing a key platform for the term New Brutalism, debating the implications of industrial transformations, such as prefabricated cladding systems and dimensional coordination.

---

152 See Crosby “The Painter as Designer,” in Edward Wright, 49. Crosby mentions Wright’s evening classes at the Central School and notes “receiving instruction in magazine layout” from Wright around 1955. The different scope of AD and AR can be grasped from the fact that Crosby was both editing much of the magazine’s content, designing covers and laying out issues. The AR, by contrast, had Gordon Cullen, a full-time specialized art editor who would oversee all aspects of design for the editorial committee.

153 The final building product cover appears in June of 1952. From July 1952 to November 1953, the magazine—edited by Monica Pidgeon and Barbara Randell—featured a sober layout with a single black and white photograph and contents listing printed on a changing colored background.
Crosby was not only the magazine’s technical editor, but also the designer of most of the magazine’s covers during these years. In replacing photographs of building products on the cover, his designs turned frequently to collage and photomontage, ranging from simple cut paper to the use of multiple photographs overlaid with graphic patterns reminiscent of the calligraphic envelope developed by Wright. At *Architectural Design*, composite images became a device for evoking the issue’s theme, which was itself, in turn, understood to be less a single thing than a collision of elements. A collage composition in simple torn paper announced an issue containing Peter Smithson’s review of the modern movement in Holland [Fig. 1.25]; a “fantasy on curtain walling”—a mixture of clippings, letters, and printed textures overlaid with photographs—announced a special issue examining prefabricated cladding systems [Fig. 1.26]; and a precariously stacked columns of letters—a technique cribbed from the prints of H.N. Werkman—presciently evoked the precariousness of CIAM in advance of the ruptures that would emerge at its tenth congress in 1956 [Fig. 1.27]. The use of separately printed colors to overlay line art and photographic imagery produced a subtle interpenetration, a conceptual device enabling different dimensions of a single issue to be perceived simultaneously. *AD* alluded to its matters of concern and the cultural ambitions at stake by questioning the directness of the photographic referent, echoing the more ambiguous status of the “image” highlighted by New Brutalism, an entity whose legibility depended upon subtle manipulations of the printed surface. Such a direction also informed the covers he developed for *Uppercase* magazine at the end of the decade, the short-lived magazine that Crosby designed and edited between 1958 and 1961 [Fig. 1.28a]. Collage was one of the recurrent concerns of *Uppercase*, which can be found in Paolozzi,
McHale, Henderson, Turnbull, Wright, and Schwitters’s contributions to the magazine.  

Not unlike the small pavilion for *AD*, the interior structure with its diverse set of contents was covered by a colorful, interlocking geometric pattern—a screen-printed paper wrapper with a motif of offset bars whose color scheme changed with each issue. When removed from the magazine and fully unfolded, the cover was revealed to be only a fragment of a larger overall pattern [Fig. 1.28b]. If the cover served as a type of graphic envelope—creating a measure of uniformity for a journal whose contents and contributors ranged considerably—the same could be said of *Uppercase* itself. More than any periodical of its time, *Uppercase* collected and documented the work of those diverse figures who for a short period of time had been a part the Independent Group, graphically encapsulating it in a manner that would only be picked up again decades later.  

Crosby and Wright’s collaboration can arguably seen as a turning point, affirming a still lingering rhetoric of integration present in British architectural discourse in the 1940s, while formulating a mode of integration that turned away from that earlier aspiration to wholeness and unity. If the question of the integration of the arts remained a central one in mid-1950s Britain, it was clear that it butted sharply up against strong resistance to ideological consensus or a shared set of principles. The key site for such a debate was the 1956 exhibition *This is Tomorrow (TIT)*, a project in which Crosby and Wright were key participants. The initial spur for the exhibition was provided by a

---

*154* Paolozzi and McHale were featured in the first issue (1958), Wright and Schwitters were in the second (1959), Henderson in issue 3 (1960), and Turnbull in issue 4 (1960).

*155* In addition to the contributions of Paolozzi, McHale, Henderson, and Turnbull, issue 3 (1960) served as one of the most comprehensive documentations of the work of Alison and Peter Smithson. Issues one and two also included important contributions by Magda Cordell and Richard Hamilton.

*156* Not unlike the UIA, the exhibits in *This is Tomorrow* were assembled from materials donated from a wide range of industries, ranging from aluminum, wood, rubber, and plastics producers, to electronics firms, publicity companies, and photographic suppliers. Crosby’s connection, via *Architectural Design*, to
proposal from Paule Vezelay, the English representative of the Paris-based Groupe Espace, an organization headed by André Bloc and which sought to resuscitate and extend the long-standing modernist dream of architecture as an integrating framework for the arts.  

Vezelay’s proposal, for an exhibition at London’s Royal Festival Hall, was rejected by the younger architects and artists involved, leading to a series of meetings in which an alternate project for a group exhibition at the Whitechapel gallery was envisioned. Vezelay’s original overture had been to a circle of artists and architects whose interests in constructivism and De Stijl aligned with those of Groupe Espace, including Victor Passmore, Kenneth and Mary Martin, Anthony Hill, Adrian Heath, John Weeks, and Colin St. John Wilson. According to Kenneth Martin, it was Crosby who expanded this initial grouping to include members of the Independent Group, whose interests were at odds with this Constructivist-oriented circle.  

While rejecting the idea of a single structure and the need for shared principles, the exhibition concept continued to affirm working across disciplines: each group was supposed to include an architect, painter, and sculptor. The difficulty of framing such a shared endeavor can be gleaned from Reyner Banham’s letter to Whitechapel’s director, Bryan Robertson, sent just before he handed over the job of coordinating the exhibition to Crosby. In it, Banham described the “most delicate negotiations between the various groups… as you can imagine, the labour involved in getting any kind of agreement out of forty highly independent free-standing geniuses has been quite something,” and noted the ongoing concerns of certain groups who were “afraid they may find themselves packed into

the Architects’ Standard Catalogue Company—a key resource used by architects in specifying products for construction—likely played an important role in brokering such donations.  

157 For the most detailed account of the exhibition’s formation, see Alastair Grieve, “‘This Is Tomorrow’, a Remarkable Exhibition Born from Contention,” *The Burlington Magazine*, 136:1093 (April 1994): 225-232  

158 As cited in Grieve, p. 236.
corners by a large body of unanimous Abstractionists.” ¹⁵⁹ Wright’s contribution to the exhibition and his design for the catalogue provided examples of how he sought to translate such discontinuity and difference within *This is Tomorrow*, finding its analogous expression in the space of print and in the space of exhibition. It was a situation in which ideological and formal divisions between various positions were sharply marked, while the boundaries between material and information, image and word, were becoming increasingly blurred.

Fittingly for an exhibition devoted to the future, the catalogue for *TIT* was printed by an emerging process of reproduction: offset lithographic printing. The mechanization of offset lithographic printing, together with innovations in the photomechanical setting of plates, made offset lithography a viable challenge to industrial letterpress printing, which was still the norm for producing books and magazines in Britain at the time. ¹⁶⁰ The new photomechanical composition process drastically changed the manner in which print was produced and designed; where the industrial model of letterpress was based around the “make up”—the calculation and assembly of separately produced units of type and image into fixed matrices—offset lithography shifted to the “paste up,” in which a diverse combination of material, including type, drawing, clipped photographs, and handwriting, could be cut out and glued fixed to a support for photomechanical capture, and transferred to thin, flexible printing plates. The shift from letterpress to offset lithography unmade the separation of image and type both at the level of typographic labor and mechanical reproduction, producing a condition in which formerly distinct

aspects of production were absorbed within a photomechanical process that was more homogenous but could also be more directly manipulated in layout. The print production process was more akin than ever to the techniques of montage, which in turn came to orient how the space of print was reconceptualized and structured.

Offset lithography offered a rougher quality of reproduction than letterpress, a deficiency whose merits were not necessarily a great savings in cost. It is remarkable that the costs associated with printing the small catalogue amounted to nearly double the construction and material budget for the physical installation of the exhibition itself, resulting in significant debt, which eventually had to be defrayed by the artists and architects who had participated in the exhibition.\textsuperscript{161} The appeal of offset lithography cannot be chalked up to economic expediency—what it offered was a more direct involvement in shaping the relation of text and image, as well as flexibility in the range and type of material that could be included on the page. The material diversity alone is striking, ranging from oversize images of woodblock letterforms to typewriter text of different sizes to stenciled lettering, blueprint plans, ink brush drawings, pen sketches, notebook pages, collages, photographs, diagrams, handwriting, and drawn capitals. The process may have appealed to Wright precisely because it offered a framework allowing the various groups to paste up this diversity of material in a different manner.\textsuperscript{162} His design takes advantage of the medium’s ability to absorb a diffuse, heterogeneous range

\textsuperscript{161} Whitechapel Gallery Archive Exhibition Files: WAG/EXH/2/45/3. The exhibition expense report specifies the total catalogue cost as 951 pounds and 10 shillings, compared to 518 pounds for the exhibition. On 25 January, 1957 the Whitechapel Gallery received notice from the Solicitors Kenneth Brown Baker Baker of impending legal action if the debt to Print Partners Ltd. was not immediately resolved. A large portion of the archival correspondence remaining in the Whitechapel files relates to negotiations over the liquidation of the debt.

\textsuperscript{162} The catalogue states: “Each group is responsible for its own contribution and manner of presentation.” This is Tomorrow (London: Whitechapel Gallery, 1956) n.p.
of material, while developing a structure and rhythm capable of signaling and reinforcing differences. In this sense, the catalogue seized on the means of offset lithographic reproduction in a manner that was analogous to the organizers’ conflicted mandate, namely, rejecting any idea of “universal design principles” while remaining committed to an experiment in collaboration. If Wright integrated a heterogeneous field of work into a single visual sequence, it was not to establish a common aesthetic but rather to emphasize a complementarity that emerged from differences between and within groups, akin to the “antagonistic cooperation” that Lawrence Alloway described in the catalogue’s introduction.

For Wright the conflicting demands for integration and separation, for collaboration and differentiation, would be resolved by articulating a horizontal structure. A first cue to such horizontality appears on This is Tomorrow’s cardboard cover. [Fig. 1.29] Wright used the same condensed, sans-serif type as he had for AD’s 25th anniversary cover the previous year, but in place of the effect of interlocking and vertical stacking, This is Tomorrow’s title text ran in parallel, slightly overlapping horizontal bands that bleed to the edges of the cover, creating the impression of a single frame within a lateral continuum. This is Tomorrow appeared not as definitive title, but is singled out in stark white within a larger sequence of permutations of the three words.

163 See Alloway’s introduction to the catalogue, “Design as Human Activity,” This is Tomorrow (London: Whitechapel Gallery, 1956) n.p. As several scholars have pointed out, This is Tomorrow emerged in part out of a rejected proposal from the Paris-based Groupe Espace, to hold a large exhibition in London devoted to the “synthesis of the arts.” See Anne Massey, The Independent Group: Modernism and Mass Culture in Britain, 1945-59, 97-8.
The field of permutations, like the implied lateral scanning, continued on the interior of the catalogue, which opened with enlarged letters reminiscent of Wright’s previous experiments with movable type. The phrase “This is Tomorrow” could not be read all at once, but was broken up over three separate spreads. Shifting from white letters on a black ground to black letters on a white ground, the positive-negative reversal was a subtle declaration of a page created by photomechanical and chemical transfer rather than by pressure applied to metal relief. Wright’s layout aligned the photomechanical nature of the medium with a type of lateral sliding, an experience more akin to the temporal rhythms of illuminated signs or film credits than with the established conventions of the book, such as title pages, colophons, and tables of contents. Following the opening title sequence, in place of a conventional table of contents, was a plan of the exhibition, which conveyed the horizontal distribution of the separate groups in the Whitechapel gallery and indicated how to move numerically through the exhibition in a sequence that followed that of the catalogue. In response to the overwhelming number of visitors who found the exhibition bewildering, the gallery made copies of the catalogue available at the front desk, making it into a de facto guidebook.\(^{165}\) The rhythmic structure of the catalogue also appears in the form of nearly empty spreads containing simply a stenciled number and a plan, a consistent beat of near blankness marking the differences between graphically diverse sections on each group, and simultaneously enabling that diversity of information to be compared in terms of a single mode of representation: the plan. Wright

\(^{165}\) The Whitechapel archives reveal how important this orienting function of the catalogue turned out to be. Immediately after the opening the Whitechapel contacted to Crosby requesting that each exhibit be numbered and a cheaper set of catalogues printed. Crosby refused on both counts, fearing didacticism and potential loss of revenue from catalogues sales. It was agreed that a set of catalogues be made available to visitors for use as an exhibition guide. See Whitechapel Gallery Archive Exhibition Files WAG/EXH/2/45/1: “Memorandum This is Tomorrow,” August 10, 1956, and Theo Crosby to Mrs. Forsdyke, August 10, 1956.
further structured the episodes with three consistent elements, with each group being asked to contribute a statement, a diagram, and photographs with biographical information.\textsuperscript{166} It is within the space of this constraint that further differences become legible, both in the types of diagrams included—which range from spectrum analyses to organizational charts—and in the way that each group crafted its self-image—from the Smithsons, Paolozzi, and Henderson, who eliminated bios in favor of a full-bleed double-page group portrait, to the studied independence of Kenneth and Mary Martin and John Weeks, whose images are carefully separated onto different pages.

The sense of a horizontal continuum was further reinforced by the fact that Wright’s unit was not the individual page but the double-page spread. Each spread was laid out and printed as a single horizontal unit and subsequently cut, punched, and spiral bound. The use of spiral binding to hold together such diverse material marked a significant departure from the folded and bound signatures of book printing. A device tied to the world of product catalogues, manuals, and reports, spiral binding was used to cheaply hold together information in need of constant updating. Such ephemeral binding, like the process of offset lithography, alluded to the breakdown of cultural hierarchies, a new domain in which art could no longer be isolated from diverse forms of information. \textit{This is Tomorrow} might be seen less as a book, or even a catalogue of exhibited works, than as a guide allowing visitors to navigate the spatial heterogeneity of the deliberately fragmented exhibition. The catalogue mobilized an attention to the differences in the texture, relationship, and facture of graphic information to structure the differences within offset lithographic printing, while simultaneously allowing such material to be

\footnotesize{\textsuperscript{166} See Graham Witham, “This is Tomorrow,” in \textit{The Independent Group : Postwar Britain and the Aesthetics of Plenty}, (Cambridge, Mass.: MIT Press, 1990).}
understood in spatial terms, linking the navigation of a three-dimensional field to the parsing of a two-dimensional continuum of information.

In the installation realized at *This is Tomorrow* by Wright, Crosby, Germano Facetti, and William Turnbull, the tension between collaboration and differentiation was similarly translated into a problem of structuring a horizontal continuum. As conveyed by Crosby’s August 1956 cover for *AD*, such a horizontal space was populated by the outlines of diverse objects laid down in the shallow space of print without concern for typological or hierarchical difference, appearing as an optically uniform layer hovering above the lines of a hand drawn grid. [Fig. 1.30] If the grid could appear typographical, reminiscent of proportional guides for page layout, it was in fact the plan of a ready-made roof system procured by Crosby from the firm Space Deck Limited. The space deck can be seen as an inconspicuous apparatus, yet one that holds together the graphic and the tectonic, simultaneously, “symboliz[ing] the mechanical environment” while functioning as the surrounding and armature for Group One’s exhibit in the Whitechapel Gallery’s entryway.\(^{167}\)

At the center of the installation was Turnbull’s sculpture *Sungazer* (1956), its solid and scarred plaster exterior a foil to the lightweight metal framework hovering above. “The space deck roof,” the catalogue noted, “is a prefabricated system, every strut is interdependent, and loads are resolved and distributed over the whole area.”\(^{168}\) The equilibrium and weightlessness of such structural principles were identified less with literal images of joints and struts than with a type of natural order, evoked by a Photostat

\(^{168}\) “Group One Statement,” *This is Tomorrow*, n.p.
of a leaf skeleton suspended within the exhibition space.\textsuperscript{169} The machine, no longer identified with its hardware, not even the abstractly metaphorical hardware of Wright’s drawings of the late 1940s, appears as a brutal confrontation between the primitive density and rough texture of the humanoid form and the diffuse efficiency of an environmental apparatus. If such an apparatus was seen to symbolize structural principles modeled on nature, the result was a form of space that was neutral, horizontal, and isotropic, open to seemingly any manipulation or deployment. Crosby and Wright were no doubt aware that they were updating ideas already explored by Mies van der Rohe in the 1940s. Mies’s well-known photocollages for his Museum for a Small City (1941-3) envisioned the museum as a horizontal, “universal” space open to continual reconfiguration. The implied limitlessness of such an organization had been important to the reception of Mies in British architectural culture in the 1950s, an important point of departure for which was Richard Llewelyn Davies’s concept of an “endless architecture” that mirrored the indeterminacy, lack of hierarchy, and unlimited extensibility of postwar technological rationality.\textsuperscript{170} Like the space deck hovering above the heads of visitors at \textit{This is Tomorrow}, the implicit endlessness of such frame structures recast the problem of the wall, placing a new importance on unfixed vertical elements that came to articulate and define space within the horizontal plane. As Beatriz Colomina has argued, for Mies, such spatial definition became a task performed by the interplay of freestanding

\textsuperscript{169} Ibid.. Analogies between biological and crystalline structures and architectural structures were well known to Independent Group members through D’Arcy Wentworth Thompson’s \textit{On Growth and Form}. The book had been the departure point for Richard Hamilton’s influential 1951 exhibition \textit{Growth and Form} at the ICA, juxtaposing enlargements and projections of such visual material.

\textsuperscript{170} The interpretation of technologically advanced metal frame structures as the basis of an “endless architecture” was formulated in a lecture delivered Llewelen Davies in the early 1950s at the Architectural Association. The importance of Llewelen Davies’s thinking in the development of ideas of indeterminacy in British architectural culture in the 1950s was highlighted by Reyner Banham in “A Clip-On Architecture,” \textit{Design Quarterly}, no. 63 (1965), 4–6.
artworks. While ostensibly similar, in the Group One installation, the place of artworks remains less certain, superseded by panels of industrial materials to which were applied “photographic techniques or a collage of printed elements.” A Sam Lambert photograph of the installation—used in every instance where Group one’s contribution has been published—shows that it included a calligraphic ink drawing, the title of the exhibit, and an abstract geometrical motif affixed to a transparent Plexiglas panel. [Fig. 1.31] In another photograph by John Maltby, the Group one exhibit appears from a slightly different angle, capturing the reflections of Plexiglas sheeting hung parallel with the ceiling. [Fig. 1.32] Suspended from space deck in various orientations, the panels are more literally dependent upon the apparatus of exhibition, reconfigurable elements within an overall system, they appear suspended in significance—uncertain whether they should be read as painterly mark or written word, artwork or information, directional indicator or geometric composition. As architecture cedes the fixity of the vertical plane in defining boundaries and composing spaces, the logic of spatial delimitation merges with that of communication, but the opposite also appears true: the deciphering of symbols and signs appears more aligned with the physical navigation of space. Such a condition appears in a context in which architecture was shedding its long-standing aspiration to orchestrate a merger of the different arts into coherent formal-technical whole. What This is Tomorrow offered instead was a framework in which to observe their differences, even their clash.

172 Group One Statement, This is Tomorrow, n.p.
173 The photograph appears in Architectural Design, (October 1956), 334, and Robbins, Aesthetics of Plenty, 137. The catalogue pages for Group One included further indexical signs suggesting spatial and graphic indicators, including a printer’s fist and a one-way street sign. A photograph by John Maltby, in the collection of the RIBA, shows a slightly different angle, in which another panel may be visible, as well as plexiglass sheeting hung parallel with the ceiling. The leaf skeleton may have appeared in this horizontal orientation.
Echoing Alloway, Crosby noted that “the approach to integration was that of antagonistic collaboration, a set of images and an object were placed in a context and left to fight it out.”\(^{174}\) If the discourse of integration had aspired to reconcile disparate parts into a new formal totality, here it is the explicit lack of synthesis that has become the key principle of the environmental apparatus. Staged quite literally as the threshold to an exhibition about the future, Group One’s installation attempted to symbolize the mechanical environment as a space defined no longer by the physics of material, force, and energy associated with the first machine age, but an environment defined by movable visual signs, in which a theoretically endless extension of space was met by the equally endless semiotic and spatial reconfigurability demanded by an “environment built entirely from visual communications.”

This analysis of Group One’s contribution to *This is Tomorrow* could be formulated in terms of a larger hypothesis; namely, that the increasing importance placed on graphic communication of all sorts at this moment occupied the void left by the historical failure to achieve a significant integration of the arts by means of a shared approach to form. Despite this failure and skepticism, the preoccupation with integration did not disappear, indeed through a dialectical reversal, elements from the apparatuses of graphic communication which had served to patch up a failed project of integration came increasingly to function as a generator of forms that were shared across the various arts. Something of this sort can be observed in the largest and last collaboration taken on by Crosby and Wright in 1961, for the Union Internationale des Architectes (UIA) congress in London. Promoted as “an experiment in integration,” the exhibition drew on elements

\(^{174}\) Crosby, “This is Tomorrow,” *Architectural Design* (October 1956): 334.
they had developed in the *AD* pavilion and in *This is Tomorrow*. Crosby and Wright realized their largest collaboration to date, a multi-building pavilion complex and graphic identity that aimed to comment on the congress’s theme: “The Architecture of Technology.” Crosby designed two main buildings from materials donated by key firms in Britain’s building materials industry: a congress building, realized in metal, glass, and plastics, and an exhibition hall, which deployed a space frame similar to the one used at This is Tomorrow, contained within a rough wooden envelope, an echo of the packing case Brutalism developed for the National Building Exhibition in 1955. Many of the artists who had been involved in *This is Tomorrow* were invited to develop work for the congress, in a reflection of the persistence of the divisions that had animated the 1956 exhibition, at the UIA congress they were spatially separated. The congress building included works by constructivist oriented artists—Kenneth and Mary Martin, Anthony Hill, and John Ernest—while the exhibition hall hosted works associated with the Independent Group, including panels by McHale and Hamilton, as well as sculptures by Paolozzi and Turnbull, among others. Wright was tasked with developing a graphic scheme capable of synthesizing the entire site—which included a new alphabet, logos, signage, and flags. The scheme he developed for the exhibition hall proved to be one of his most significant works; an enormous calligraphic envelope—12 feet high by 240 feet long—covering the rough wooden planks that made up the long elevations of Crosby’s top-lit exhibition hall. Located on a former Festival of Britain site, Wright’s calligraphic envelope operated at the scale of the surrounding city. [Fig. 1.33] The bold

---

175 The buildings were sponsored by construction and materials firms such as Taylor Woodrow, British Aluminum, Cape Building Products, and Pilkington Bros. Ltd, with whom Crosby worked closely. See: “Experiment in Integration,” *Architectural Design* (November 1961) p. 382-3.

and colorful letters unified the rough wood planking into a single graphic surface that could function as a massive billboard, calling out to river and bridge traffic. Wright’s complex, multi-color script aimed to distinguish itself from the dominant features of the site, and can be read as a foil to the looming, relentlessly repeating gray façade of the adjacent Shell Tower, which was still under construction at the time.  

Wright developed the mural by translating the slogan “Architecture of Technology” into the conference’s four official languages — English, French, Spanish, and Russian. [Fig. 1.34] The characters shared between all the languages were painted in white and enlarged to occupy the full height of the wall, while the variant characters were painted at one-quarter scale, with a different primary color used for each different language. In order to decipher the message, the viewer had to coordinate between the large letters and the smaller letters stacked vertically like blocks, in effect translating between linguistic and typographic codes. These blocks not only marked the differences between the languages, but also drew attention to the importance of the spaces between the letters. As with the 1955 AD pavilion, Wright fully exploited the painted nature of the commission to create an unstable relationship between letters, which appeared at certain times to overlap and at others to interpenetrate. The calligraphic envelope at UIA leaves type behind more boldly, shaping the letters in the contrast between their severely rectilinear counters and their rounded, curved exteriors. Interlocking not only letters but also languages, Wright’s mural gave a particular shape to arbitrary structures of linguistic difference; the letters assumed the guise of interlocking hardware in a manner that complicated the communicative imperative of the conference’s confidently universal.

177 In describing the project, Wright noted how the pavilion risked being subsumed by “the undistinguished bulk of the Shell Tower.” Edward Wright cited in Crosby, “International Union of Architects Buildings, South Bank,” 489.
technological slogan. Cutting against the period trend towards neutrality and transparency, Wright returned to an ambivalent mixture of cipher and sign, signal and noise. As he noted at the time, “many people found the result easy to see but difficult to decipher.”\(^{178}\)

Wright’s calligraphic envelope for the UIA congress refashioned the letter as a type of arbitrary mechanism, a communicative cladding for architecture’s aspirations to shape the technologies of mass production. This move appeared not as a narrow preoccupation with technique but as part of an attempt to forge a system that could accommodate and integrate increasingly divided and specialized domains of work. At the same time, the extreme importance of graphic cladding at UIA was an example of how the desire for the integration of the arts was simultaneously an apparatus for mediating contradictory demands, voicing architecture’s continued aspiration towards a coherent formal language on the one hand, while on the other being increasingly absorbed by the need to distinguish itself according to the ever-changing demands for communication at an urban scale.\(^{179}\)

If the aspiration towards integration at UIA was realized more completely and on a greater scale than anything Wright and Crosby had achieved previously, paradoxically, it was voiced with more uncertainty about architecture’s capacity to symbolize new forms of cultural and aesthetic coherence in the postwar period. Crosby described the exhibition pavilion not as a demonstration of a confident command of technology, but of “the plight


of the architect in an increasingly mechanized building industry.”\textsuperscript{180} The architect, Crosby continued, “becomes a manipulator of prefabricated parts; his building a collage of bits and pieces, and he shows his inventiveness by taking some parts from technologies that are not his own—in this case, scaffolding and polyethylene.”\textsuperscript{181} Where the rhetoric of integration in the pages of Plan a decade earlier ambitiously situated prefabrication as an attempt to shape the process of mechanization itself, at UIA meaning was sought in the manner that architects appropriated, manipulated, and combined existing technological elements. Crosby’s formulation is noteworthy—envisioning integration through the lens of collage inverted the meaning of integration, which came to mark the very opposite of a seamless, unified, and synthetic whole. Redefining the architect as one who appropriated and manipulated parts of technologies not his own, affirmed a new positive value to be sought in the combination of visibly discontinuous, and industrially heterogeneous independent parts, akin to the disrupted coherence that Wright pursued through strategies of visual fragmentation and overlay.

Wright and Crosby’s experiments in using architectural concepts to structure graphic material and to deploy graphic surfaces architecturally lasted for only a brief time: the 1961 UIA congress marked the end of an intense period of collaboration and was the last of Wright’s calligraphic envelopes.\textsuperscript{182} A transitional phenomenon, their experiments appear, not insignificantly, just as graphic design was expanding its frame of reference beyond the design of books and magazines to encompass broader swathes of everyday experience, from exhibitions to urban signage, television titles, and corporate

\textsuperscript{182} Crosby and Wright’s final collaboration was for an exhibition of British Design at the Musée des Arts Décoratifs in Paris in 1969.
identity programs. During these same years, British architects were acutely conscious that they were called on to operate in an environment increasingly defined by graphic signs and symbols. Wright’s work strains to hold a middle ground; neither rejecting nor simply embracing this communicative surrounding, he seeks structures with a capacity to mediate it. Wright’s particular manner of combining architectural and graphic concepts allowed him to read the overlay of flickering symbols and icons in the postwar city as a new type of environmental writing, whose implication he continued to read in material and structural terms. His collaborations with Crosby helped frame a shift in the rhetoric of integration, from an aspiration toward the complete integration and control of mechanization to a practice that valorized, via the aesthetic framework of collage, inventive, piecemeal appropriation and recombination. This reorientation in the meaning of both collage and integration would go on to influence a younger generation of architects and graphic designers. Such a transition was fraught with ambivalence, if it was feared as a foreclosure and reduction of the architect’s sphere of action, it also spurred the development of new strategies for distinguishing and communicating a language of component parts, together with an expanded sense of what constituted architecture’s material.
Chapter Two: Vienna c. 1964

Transformation and Instantaneous Reassembly: Hans Hollein, Walter Pichler, and the Remaking of Montage

Our speed-up today is not a slow explosion outwards from center to margins, but an instant implosion and an interfusion of space and functions. Our specialist and fragmented civilization of center-margin structure is suddenly experiencing an instantaneous reassembling of all its mechanized bits into an organic whole.\textsuperscript{183}

— Marshall McLuhan (1964)

In his survey of post-war architecture in Austria published in 1965 in Bauen + Wohnen, the architectural critic Friedrich Achleitner painted a bleak picture of Vienna in the aftermath of World War Two.\textsuperscript{184} From having been the pre-eminent central European capital before the war, the city had become a terminus at the margins of Western Europe. As the centers of power re-aligned with the onset of the Cold War, Vienna found itself doubly isolated: cut off by the iron curtain from its closest cultural and economic neighbors—Prague, Brno, Krakow, Budapest—and deprived of an entire generation of architects, builders, businessmen, critics, and intellectuals, who had emigrated or perished in the war. The critic’s gloomy assessment of the Viennese situation used the

\textsuperscript{184} Friedrich Achleitner, “Entwicklung und Situation der österreichischen Architektur seit 1945,” \textit{Bauen + Wohnen} 19 (September 1965), 339.
dark shadows of the post-war city as an effective backdrop against which to unveil a rational and progressive tableau, a slow but steady return to order in the form of a sober and refined catalogue of stadia, churches, shopping complexes, concert halls, museums, and schools produced by a new generation since the early 1950s. Tucked in behind Achleitner’s catalog of new construction was a brief, four-page article titled Notizen zur Geschichte einer neuen Strömung (Notes on the History of a New Trend) [Fig. 2.1]. Printed on cheap canary paper it included a series of models, drawings, and photomontages by a younger generation of architects and artists; including Wilhelm Holzbauer’s Office Building for Helicopters, Gartler and Rieder’s Vertical City, Hans Hollein’s Aircraft Carrier in a Landscape, and a design by Walter Pichler for a church. Together these projects provided an entirely less sober and rational image, a trend that appeared to have little in common with the main lines of postwar development sketched by Achleitner. “Notes on the History of a New Trend” also contained the earliest critical account of Hans Hollein’s montages, which would soon become some of the most reproduced images of the experimental architecture emerging from Vienna.

The Viennese work is a literary trail of its own. Hollein’s transpositions are montages that can be performed in part only on paper, but also in reality. Thus a railroad car—planted on a base and starkly altered in scale—becomes a monument. An aircraft carrier in the landscape becomes a city. It belongs to the nature of montage that the production (Herstellung) of unfamiliar relations not only results in the existence of something new, but also that things, or words, are themselves transformed.185

The question of Vienna’s marginality creeps subtly into Achleitner’s reading of the new trend: describing the Viennese work as “trail of its own,” suggests that Hollein’s montages were products of isolation not likely to be understood elsewhere. Yet if the Transformations did indeed produce confused reactions, this was not because they were isolated or marginal, nor drastically unlike others produced elsewhere at the time. Much of their iconography was clipped from illustrated magazines with a global reach, and their author, far from being bound to Vienna, traveled almost obsessively in Europe and in North American during these years. Achleitner did not assimilate the images’ unlikely combination of simplicity and mysteriousness to the realm of visionary fantasy, but rather stressed their difficulty, recognizing the montages as a process of Verwandlung (transformation) lodged partway between the world of paper and that of contemporary reality. Beyond the repurposing of an object, Verwandlung, evokes metamorphosis, a total change in character. Indeed, Achleitner takes pains to distinguish between Herstellung, a process of production, assembly, or manufacture rooted in human work, and the reflexive Verwandlung, a process in which things appear to spontaneously transform themselves—a change in character whose causes remained unexplained. Achleitner was not alone in stressing transformation, indeed it was one of Hollein’s preferred terms. Wanting to focus upon the ambiguous associations elicited by such

---

186 For German-speaking intellectuals, one of Verwandlung’s first associations would be Franz Kafka’s short story Die Verwandlung (1917). Originating from the German Wandel (change), the substantive Verwandlung also carries more archaic links to words like Bewegung (movement, action) and Verkehr (transit, communication), linking transformation to movement, association and displacement. See: Deutsches Wörterbuch von Jacob und Wilhelm Grimm. 16 Bde. [in 32 Teilbänden]. Leipzig: S. Hirzel 1854-1960. Implications of movement recur in many of the objects that Hollein cut out for the transformations, which included aircraft carriers, railroad cars, and Rolls Royce grills, as well as engines, turbines, sparkplugs.

187 The term was stressed as early as 1962 in Hollein’s early lecture “Zurück zu Architektur,” read at the Gallerie St. Stefan: “Architektur als Formgebung einer materiellen Funktion sieht anstelle als Transformation einer Idee durch Bauen.” The larger series of montages were being referred to as
images rather than on the procedures used to construct them, Hollein used the term transformation for a group of photomontages he produced between 1963 and 1967, assembled from an iconography of machines and machine parts that had been appropriated from a range of American magazines including LIFE, National Geographic, Scientific American, and Vogue. Transformation, or rather self-transformation (selbst Verwandlung) as Achleitner describes it, departs sharply from the earlier Bauhaus-influenced conceptions of Gestaltung. Where Gestaltung implied a gradual process of shaping through which new form creation was achieved, Verwandlung, by contrast, evoked a continuous capacity for metamorphosis marked by sudden, unexplained changes.

Hollein’s Transformations emerged at a moment in which procedures of cutting, masking, displacing, and pasting associated with montage were being actively reinterpreted and redeployed in Vienna, yet in a letter to written to the Museum of Modern Art in 1966, Hollein suggested that the concepts found in the Transformations montages could be traced back to some of his earliest works, in drawings for an open-air church made of railroad cars and another for a house constructed from old car parts. Such drawings, he noted, dated from 1958 to 1960, a period when Hollein traveled in the United States on a Harkness fellowship, studying briefly at the Illinois Institute of


188 Interview with the author, July 25, 2007. When the montages were first published in America, Hollein chose to reprint this passage on montage and Verwandlung from Achleitner’s article. See Hans Hollein, “Transformations,” Arts and Architecture, 83:4 (May 1966) 24-5.

189 Hollein cites a drawing for an open-air church made of railroad cars and a house assembled from old car parts. See Hans Hollein, Letter to Stephen Kurtz, 12/30/1966, MoMA, Department of Architecture and Design Correspondence files.
Technology in Chicago before going on to complete a master’s thesis at the University of California, Berkeley. Having already completed a degree in Austria, Hollein claimed he was attracted to Berkeley because of its West coast location and because the relative openness of the new curriculum. At the time, Berkeley was merging the formerly separate departments of Architecture, City and Regional Planning, and Landscape Architecture into a single entity: the College of Environmental Design. Lead by William Wurster, with Catherine Bauer, Vernon De Mars, Joseph Esherick, and others, the broadly defined notion of environment allowed for student projects that would not likely have been possible at schools with more traditional architectural programs. Hollein’s thesis indeed pushed the notion of environment to extremes, entitled Plastic Space, it reads less like a thesis than an extended, 85-page visual-verbal manifesto. The document juxtaposes short poetic and programmatic statements with ink drawings, landscape photographs, views of clay models, as well as photographs of a temporary exhibition of wooden, metal, and plaster structures erected in a vacant lot in Berkeley. Hollein’s conception of space as a plastic entity was part of his broader turn away from Gestaltung to explore other processes of formation. This interest appeared in Hollein’s choice of materials—the modeling of clay, the shaping of wire-mesh, as well as in ink drawings that combine suggestive, ideographic brush marks. Both formally, and in the work’s emphasis upon spatial continuities at various scales, Plastic Space appears reminiscent of

---

190 Interview with the author, July 25, 2007.
192 Hans Hollein, Plastic Space, Masters Thesis, University of California, Berkeley, 1960. The thesis supervisors were Esherick and James Prestini.
the contemporaneous work of Frederick Kiesler.\textsuperscript{193} [Fig. 2.2] The various kinds of transformation were pursued not only in material objects, but also in Hollein’s language, which was marked by neologisms formed out of conjoined words and sequential variations:

Horizontal spacecontinuity
From space to space.
or, world and moon, land and land, region and region, city and city, house and house, room and room, chair and chair, cup and cup.
cup and world, cup and chair, cup and room, cup and house,
cup and city, cup and world.
or, at random; house and city, room and city, city and region.\textsuperscript{194}

Using a from/to structure, the textual sequence ambiguously suggests shifts that are spatial, but also evokes transformations between objects. Exceeding the most confident formulations of modernist design—such as Ernesto Nathan Roger’s famous call for architects to design “dal cucchio alla città,” (“from the spoon to the city,”)—the juxtapositions and transformations in Hollein’s text leap from the micro scale of the cup to the macro scale of the earth and the moon, appearing to vastly expand architecture’s scope. [Fig. 2.3] Yet Hollein did not refer to the drawings, structures, models, and landscapes in the thesis as architecture, nor as \textit{Gestaltung}, but rather as \textit{Gebilde}. A term more commonly used in geology and medicine, \textit{Gebilde} denotes a formation composed less through planning and design, than through processes of accumulation, sedimentation, and accretion.\textsuperscript{195} The term had a wider association of which Hollein may also have been

\textsuperscript{193} Hollein claims to have produced this work independent of any knowledge of Kiesler, not becoming aware of the architect’s work until the early 1960s. Interview with the author, July 25, 2007. Hollein would later be in contact some of the European figures who had been interested in Kiesler’s work, such as André Bloc, who promoted a sculptural, “plastic” architecture in the pages of \textit{Aujourd’hui: Art et Architecture}. See for instance “Hans Hollein et Walter Pichler,” \textit{Aujourd’hui: Art et Architecture} 53 (May/June 1966): 54-67.

\textsuperscript{194} Hollein, \textit{Plastic Space}, 38.

\textsuperscript{195} In his own translation Hollein used the term “Thing,” yet \textit{Gebilde}’s more common translations include formation, structure, and pattern, creation, creature. Hollein, \textit{Plastic Space}, 38.
aware; the Vienna-School economist Friederich Hayek called upon the geological associations of the term during these years to describe “social formations”—his central examples being money and language—phenomena that exhibited purposiveness and order but which were the result of spontaneous, unplanned human actions.\textsuperscript{196} Containing the term \textit{Bild} (image), \textit{Gebilde} can convey the configured, organized qualities of an image or picture, without being strictly visual. Capable of describing mineral deposits or fluctuations in currency, \textit{Gebilde} suggest the image of sedimentary form, whose shape is indeterminate, unplanned, and changeable.

This expansive notion of \textit{Gebilde} appears in \textit{Plastic Space} in the relationship Hollein sets up between his own drawings, models, and images and other references, such as a pair of ancient ruined towers photographed in the American Southwest or a plate taken from Piranesi’s \textit{Carceri d’ Invenzione}. [Fig. 2.4] As formations, the ruin and the prison suggest a vision of architecture’s past that is not solely a sequence of historically circumscribed objects, but as something shaped by, and capable in turn of shaping, raw material and human imagination. Hollein’s \textit{Gebilde} might equally be seen as a particular manner of interpreting the acute memory gap facing the Austrian cultural scene following World War Two, a broad project of historical excavation.\textsuperscript{197} Indeed, while he was completing \textit{Plastic Space} at Berkeley, Hollein was also traveling to Los Angeles to

\textsuperscript{196} See \textit{The Counter-Revolution of Science: Studies on the Abuse of Reason} (Glencoe, Illinois: The Free Press, 1952), 83. Hayek writes: “The term institution itself is rather misleading in this respect, as it suggests something deliberately instituted. It would probably be better if a more neutral term like “formations” (in a similar sense to that which the geologists use it, and corresponding to the German \textit{Gebilde}) could be used for those phenomena, which, like money or language, have not been so created.” An economist and scholar with a strong interest in the history of liberalism, Hayek rejected the idea that free markets or language could be fully comprehended from a scientific viewpoint, arguing instead that they were spontaneous, unpredictable social formations. Hayek counterposed such formations to what he saw as a prejudiced culture of “scientism” rooted in the Enlightenment, which he ultimately saw as leading to an abuse of reason associated with the emergence of Totalitarianism in the twentieth-century, from Italian and German Fascism to Soviet Communism.

\textsuperscript{197} Hans Hollein, interview with Author, August 18\textsuperscript{th}, 2006. A failure of historical transmission was also underscored in my conversation with Günther Feuerstein.
contact Rudolf M. Schindler’s widow, in order to visit the houses and collect the architect’s writings—a body of work that had been completely forgotten by European architects at the time. The emphatically material forms of *Plastic Space* might be seen as an echo and a contradiction of Schindler’s own rhetoric of plasticity, in which a lightweight, luminous translucence was heralded as overcoming the material solidity that dominated architecture and sculpture. \(^{199}\) In this sense, Hollein’s *Gebilde* can be seen not only as an ambiguous mixture of social and material formations, but a strategic ambiguity managing contradictory impulses: on the one hand a confident vanguardism looking to shift the definition of architecture altogether, and on the other a desire to excavate a historical memory gap, through a free amalgamation of a diverse range of historical reference points.

Such a strategy of ambiguity can be read against the architectural culture of Vienna at the end of the 1950s. If the historical memory gap described by Hollein and by Feuerstein was pervasive, it was by no means total. \(^{200}\) The architect Roland Rainer, who had links before the war to architects such as Josef Frank or Grete Lihotzsky, stressed continuity with aspects of this modernist legacy in his teaching at the Akademie der Bildende Kunste. Rainer’s *Weiner Stadthalle* (1958), one of the largest projects in Vienna in the 1950s, deployed innovative form and advanced pre-stressed concrete engineering,

\(^{198}\) The first person to draw public attention to Schindler’s work following his death in 1953 was Esther McCoy, whose *Five California Architects* was published in 1960 and may have influenced Hollein. Upon his return to Vienna in 1961, Hollein published an article on Schindler, “Rudolph M. Schindler: ein Wiener Architekt in Kalifornien,” *Aufbau* 16:3 (March 1961): 102-104. This was quickly followed by J.B. Bakema’s, “Schindler's spel met de ruimte,” *Forum* 16:8 (August 1961) 253-63. According to Hollein, he first met Bakema in Los Angeles in 1960, and spent several days driving him around to see the Schindler houses. Hans Hollein, interview with the author, August 18th, 2006.


\(^{200}\) Hollein, Interview with the author, August 18, 2006; Gunther Feuerstein, Interview with the author, August 16, 2006.
while his subsequent master plan for Vienna (1958-1962), affirmed a decentralization of the city that drew on aspects of the garden city tradition.\textsuperscript{201} [Fig. 2.5] Hollein, along with a number of other members of the emerging generation studied not with Rainer, however, but with Clemens Holzmeister who had recently returned to teach at the Akademie following a nearly twenty year exile in Turkey.\textsuperscript{202} Less committed to a particular interpretation of prewar developments, Holzmeister’s pedagogy was eclectic, intuitive, and site-oriented, encouraging students to openly engage with a range of approaches. By contrast, a more technologically ambitious strain of modernism was found in the teachings of Konrad Wachsmann, who visited Austria to lead seminars at the International Summer Academy in Salzburg between 1956 and 1960.\textsuperscript{203}

In contrast to this pedagogical landscape, the rediscovery of the montage practices associated with the historical avant-gardes took place largely outside the schools. A key engine of such a rediscovery was the work of the \textit{Weiner Gruppe}, which included the critic Friedrich Achleitner, as well as H.C. Artmann, Konrad Bayer, Gerhard Rühm, and Oswald Wiener. Together the \textit{Weiner Gruppe} produced experimental poetry, illustrated books, typography, manifestos, demonstrations, and cabaret performances during the


\textsuperscript{202} Holzmeister had been removed from his teaching post in 1938 by the Nazis during the \textit{Anschluss}. Working in Turkey at the time, he remained there until the early postwar years. Other students of Holzmeister included Achleitner, Wilhelm Holzbauer, Viktor Hufnagel, Friedrich Kurrent, Gustav Peichl, and Johannes Spalt. See Maria Welzig and Gerhard Steixner, \textit{Die Architektur und ich: eine Bilanz der Österreichischen Architektur seit 1945 vermittelt durch ihre Protagonisten} (Vienna: Bohlau Verlag, 2003), 9-10; Achleitner, “Motifs and Motivations,” 14.

\textsuperscript{203} Wachsmann was influential for a number of figures on the Viennese scene, including Ottokar Uhl, Georg Gsteu, Friedrich Kurrent. See for instance Ottokar Uhl’s Pfarrkirche, St. Raphael, on Siemens Strasse Vienna (1964) constructed from a steel space frame, and known as the “\textit{demontable Kirche}.”
later 1950s. Skeptical of subjectivism, the group favored anonymous, collaborative, and absurdist forms of writing, which was printed, read aloud, and used in performances. The various members all developed visual and textual montage works, selecting and rearranging phrases and photographs cut from literature, newspapers, popular illustrated magazines, advertisements, pornography, and medical journals. If the cabaret performances and demonstrations organized by the *Wiener Gruppe* echoed the transgressive and provocative strategies of Dada cabaret, the visual and linguistic montages produced by members of the group hewed towards a more reduced and sober visual format, closer to postwar experiments in concrete poetry than to the more visually disjunctive aspects of Dada and Surrealism. [Figs. 2.6 and 2.7]

While overlaps between the *Wiener Gruppe* and the circle of Hollein and Pichler did exist—the writer Oswald Wiener took a strong interest in the work of Pichler in the 1960s—Hollein and Pichler remained distinct from this milieu, to the extent that they were identified as a subgroup with their own particular name: *die Englische Flötte* (the English Fleet). Between the activities of the Wiener Gruppe and Vienna’s decision to commission Roland Rainer to develop a new expansion plan for the city, it is perhaps not surprising that the end of the 1950s witnessed the emergence of a range of manifestos

---


205 In works such as *Aufregung zum Kirchen Bau* and *Kind und Welt*, words and images are carefully disposed within the blank space of the several successive pages; evoking the importance of position, relation, and repetition in contemporaneous experiments with concrete poetry, but also the layout of images in banal, everyday formats, such as newspapers, magazines, and books.

206 See Sabine Bretweister, “A Conversation with Walter Pichler,” in Pichler: Prototypen/Prototypes 1966-69 (Vienna: Residenz Verlag, 1998), 27-34. According to Pichler the name reflected Hollein and Pichler’s preference for English-style tailoring, a detail that calls to mind the obsessions of Adolf Loos two generations earlier. It may have also referenced Hollein and Pichler’s interest in the English-speaking world, as both had traveled extensively in the United States and had developed contacts in the UK.
aimed at architecture and urban planning. Manifestos such as Friedensreich Hundertwasser’s *Verschimmelungs-manifest* (Mold Manifesto) or Markus Prachensky and Arnulf Rainer’s *Architektur mit den Händen* (Architecture with one’s hands) were aggressively critical of what they saw as the narrowly conceived functionalism Vienna’s postwar planning, and affirmed, by contrast, a return to raw materiality and spontaneous, anti-formal procedures. If the emphasis on raw materials and cumulative processes echoed Hollein’s interest in *Gebilde*, such manifestos were equally conscious of broader European developments in abstract painting, such as Informel and Tachisme. In the Viennese manifestos, however, a more extreme contrast between individualism and mass housing appears; Hundertwasser’s *Verschimmelungs-manifest* described liquids poured over glass walls and concrete surfaces in order to accelerate corrosion and decay, while Prachensky and Rainer affirmed a primeval architecture scratched, bitten, and clawed together from feathers, trees, grass, paper, and earth. Having seen Hundertwasser present the manifesto, the critic Ulrich Conrads recalls less being surprised—“even at this time it was impossible to close one’s ears to the voices raised against functionalist architecture…”—than being “…staggered by the crass subjectivity with which the buildings of two generations were condemned to wholesale destruction and dismissed as

---

207 Such manifestos were developed at the same moment that Rainer was tasked with developing a new plan for extension of Vienna, which was eventually published as *Planungskonzept Wien* (Vienna: Verlag für Jugend und Volck, 1962).

208 Developed close to the milieu of abstract painting and performance in Vienna, both manifestos were delivered at *Situation-Konfrontation: Internationale Kunstgespräch*, an event bringing Austrian architects, poets, painters, and critics together with intellectuals, critics, and artists from France and Germany. The event was organized by Otto Mauer, a catholic monsignor, who supported an emerging gestural abstract painting, and had founded the Galerie St. Stephen in Vienna four year previously. Both the event and the gallery would be an important cultural forum within Vienna and serve as hub for contacts with influential artists critics in Western Europe. See Robert Fleck, *Avantgarde in Wien: Die Geschichte der Galerie Nächste St. Stephan, Wien, 1954-1982* (Wien: Locker 1982).
uninhabitable.”\footnote{Ulrich Conrads, \textit{Programme und Manifeste zur Architektur des 20. Jahrhunderts}, (Berlin, Ullstein Verlag, 1964) 11. Conrads notes that the experience of Hundertwasser’s manifesto prompted him to compile his landmark compilation.} It was also at that moment that Günther Feuerstein wrote his “\textit{Thesen zur Inzidenten Architektur}” (Theses on Incidental Architecture). Less preoccupied by a neoprimitivist return to primal energies, yet equally interested in searching for alternatives to terms like \textit{Gestaltung}, the manifesto affirmed spontaneous procedures of assembly, counterposing these to architecture as an applied science, whose methods of were derived from techniques of industrial management. Feuerstein’s critique of such “superplanning” resonated with the editors of the Situationist-affiliated \textit{Spur} group in Munich, who included Feuerstein’s text in a 1961 issue of their eponymous magazine devoted to unitary urbanism.\footnote{\textit{Spur} 5, (Spezialnummer über der unitären Urbanismus) (June 1961), n.p.} With its continually shifting references, and its affirmation of poor, unpremeditated procedures that allowed for spontaneous “emotional recall,” the text was milder than the aggressive collages that surrounded it in the pages of \textit{Spur}. \textit{Spur} collapsed such urban references into a more extensive and unwieldy range of material, from color drips, to ink blots, to neo-primitivist figures, sexually explicit doodles, and scrawled handwriting, all of which was layered onto another field of references taken from of newspaper clippings, comic book frames, press photographs, and passages from theoretical tracts.\footnote{\textit{Spur} 4 (Die Verfolgung der Künstler) (January 1961),n.p.} If architecture was critiqued for its assimilation to military-industrial planning apparatus that sought to structure postwar life in its new totality—its opposite condition appears through a practice of collage in extremis, a condition of radically de-hierarchized, spontaneous, seemingly accidental accumulation.\footnote{Following \textit{Spur}’s Unitary Urbanism issue and the Fifth congress of the Situationist International in Gotheborg, Sweden in August of 1961, the members of SPUR, who made up the German section of the SI,}
sex, and politics that aimed both to mock the more polite painterly automatisms of movements like Tachisme or Art Informel and to provoke German society more generally, the success of which can be seen in the obscenity charges which were filed against the group in the early 1960s. [Fig. 2.8]

Hollein would retrospectively note the catalyzing effect of this upsurge of manifestos. Unlike Conrads, however, it was not the crassness of their subjectivity or their attempts to destroy the legacy of the preceding generation of architects that was highlighted, but rather their capacity to open up the discussion of architecture. It was in the wake of such events that a transition in Hollein’s interests becomes apparent. The position that Hollein carved out sought in its own way to drive a wedge between architecture and gestaltung, moving the discipline away from theories of shaping and form making. In an early lecture, entitled Zuruck zur Architektur (“Back to architecture”) and delivered in 1962 at Vienna’s Galerie St. Stephan, Hollein opposed the philosophy of “architecture as the shaping (formgebung) of a material function” to “architecture as the transformation of an idea through building.” The conceptual distinction between

---

were expelled from the movement. The tumultuous break was bound up with the larger rejection of art and architecture by the SI during these years. The congress and subsequent exclusions were chronicled in Internationale Situationniste 7 (April 1962). For a rereading of the significance of Spur, see: Diedrich Diedrichsen, “Persecution and Self-Persecution: The SPUR Group and Its Texts: The Neo-Avant-Garde in the Province of Postfascism,” Grey Room 26 (Winter 2007): 56–71.

213 Hans Hollein, “Fragmentarische Anmerkungen eines Beteiligten,” Bau 2-3 (1969), 2. Hollein saw this in terms of a shift from architecture to the wider concept of Umweltgestaltung (environmental design), terminology reminiscent of his time at Berkeley.


It [the lecture] will not concern itself with practical matters, but rather with an explanation of the importance of the meaning of architecture. A meaning, which, in my opinion, is about to be forgotten by many architects. It is a provision that threatens to be lost by the onset of a philosophy
architecture as the materialization of an idea and architecture as the shaping of function appears at the same moment in which Hollein introduced photomontage into his work. In contrast to the slow, sedimentary accumulation of Gebilde that characterized the earlier phase of Hollein’s practice, the cutting of images from the pages of magazines and their transposition into entirely new contexts was part and parcel of a rejection of Formgebung (shaping), a position that accepted material as pre-existing and sought to explore the intellectual transformations that could be wrought from its displacement.

The turn to montage in 1962 also coincided with Hollein’s meeting Walter Pichler, with whom he would frequently collaborate in the coming years. Pichler, who also worked between architecture, graphic design, and art, had amassed a wide range of photographs from popular magazines such as Scientific American and National Geographic during his travels to the United States in the early 1960s. Together with the artist Alfons Schilling, Pichler used the images to develop a visual book that they referred to as their “Kinderbuch” (Children’s Book). Combining the simplified visual structures of a children’s book with a menacing paranoia about advanced technical and military developments, the Kinderbuch was never published, but was given the working title We are the First Slaves of the Machines. Residual aspects of the Kinderbuchs’s iconography can be glimpsed in Hollein and Pichler’s first collaboration: the exhibition Architektur: Work in Progress at the Galerie St. Stephan in 1963.

Reducing text to a

that sees architecture as the shaping/design of a material function, rather than as the transformation of an idea through building.

minimum, the catalogue presents relationships between groups of photographs and
drawings to suggest a diffuse field of resemblances. The abstract sketches, drawings, and
models carefully resist explaining themselves. Acquiring a minimal legibility via
captions, these fragments of text link the abstract forms to the most general of referents:
Haus (house), Gebäu(de), (buildings), Sakrale Gebäude, (religious buildings),
Unterirdische Stadt, (underground city). [Fig. 2.9] The legibility of these minimally
identified drawings, which could be read as sculptures, models, buildings, or ideograms,
was most strongly established by a carefully crafted field of pseudomorphic resemblances
within the catalogue: a grid of photographs showing various types of machinery, military
vessels, defensive structures, buildings linked to heavy industry or space exploration, as
well as ancient monuments from North America and the Far-East. [Fig. 2.10] A vaguely
pyramidal form with thin, cantilevered protrusions appearing in a drawing labeled
Sakrale Gebäude (Sacred Buildings) echoes both Mayan stepped pyramids and the
carefully cropped images of a radar array from a contemporary warship. On another page,
drawings by Hollein—simply titled “Gebäude” (Buildings)—rise out of the earth on tall
stems, rhyming with images of oil exploration platforms standing above the water on thin
supports or the nose cone of a missile emerging from its silo. The exaggerated, gravity-
defying cantilever in a drawing labeled “Haus” and in the untitled forms that appear
alongside Hollein’s text, resembles the outstretched deck of an aircraft carrier or the
enormous, near perfect horizontality of a mushroom cloud.

Juxtaposed without captions, the grid of photographs pits formal resemblances
between present and the past, machine and monument, against any notion of historical or
typological specificity, a visual strategy that was deliberately open to contrasting
interpretations. In the catalogue’s introduction, Joseph Esherick—who had supervised Hollein’s thesis at Berkeley—interpreted the work as a call for “absolute architecture,” one that sought to establish a “kinship of spirituality with the ‘anonymous builder.’”

Such a reading drew Hollein and Pichler closer to Esherick’s own interest in the traditions of the San Francisco Bay area, or to contemporaneous interests in non-Western architecture, from Aldo Van Eyck and Herman Haan’s interest in the Dogon villages of West Africa to Jørn Utzon’s celebration of Precolumbian monuments. By contrast, an opposite reading, emphasizing the fascination for contemporary engineering and military construction, would align Pichler and Hollein’s work with other technophilic projects during these years, such as Peter Cook’s Plug-in City (1964) or Arata Isozaki’s Clusters in the Air (1962). Assimilable to neither reading completely, Hollein and Pichler’s grid articulated a diffuse field of links between objects as different as ancient temples and contemporary missile launch platforms, producing an impression less of overall identity than of unstable, ambivalent resemblances. Such ambivalence related to a contradiction which surfaced elsewhere in Hollein and Pichler’s catalogue, in which drawings were placed amidst products of the military-industrial complex while the architects simultaneously claimed complete detachment from any subordination to the demands of function, program, or technology. As Hollein wrote, “Today, for the first time in human history, in this moment in which scientific knowledge has made astounding progress and technological perfection can achieve anything, let’s make an architecture which is not

determined by technology but an architecture which is pure and absolute.” In a similar fashion, the forms of Pichler’s models, in particular Unterirdische Stadt (Subterranean City), closely resemble the spherical underground volumes of subterranean missile launch facilities appearing in the catalogue’s central grid of images. As Pichler’s brief, pessimistic manifesto declared, such “absolute” architecture was one of nearly complete domination by power: “Human beings are now merely tolerated in [architecture’s] domain….”

Appearing at the roughly same moment as Chris Marker’s La Jetée (1962), with its underground world populated by survivors of a nuclear war, and amid the sudden attention to fallout shelters following the Cuban Missile Crisis, Hollein and Pichler’s discourse of the “Absolute” can be seen as a canny, even cynical, reframing of Cold War anxieties about nuclear annihilation. Their fascination with such subterranean architectural visions was itself fueled by the extreme plans found in the writing of an economist like Oskar Morgenstern, the cofounder of game theory. Morgenstern’s The Question of National Defense (1959) was harshly critical of American planning for civilian defense, and advocated for massive shelter building with the aim of placing a significant portion of the United States economic infrastructure permanently underground. In terms that echo Pichler’s, Morgenstern recognized that planning such underground architecture involved a commitment to facing the necessary transformation

\[\text{References}\]

220 Hollein, “Architektur,” Architektur n.p. Once again, there are parallels with the Wiener Gruppe, for whom reduction to elemental aspects of poetry—letters and their relationships on the page—were conceived in terms of an “absolute” poetry. Gerhard Rühm’s Absolute Poems (1954) consisted of vowels whose positions were diagrammed within geometrical shapes.


222 Hans Hollein, Interview with the author, August 18th, 2006.
of human life in the face of potential nuclear annihilation. In the visual rhymes that link Hollein and Pichler’s sketches and models to the images of missile silos and bunkers, the recovery of an “absolute architecture” appeared in the image of an armored indestructibility, whether in the hardbases of the United States Missile Command, or the three-meter-thick walls of the World War Two anti-aircraft towers still standing in Vienna. Equivocating between planetary destruction and new realms of spatial expansion, “absolute architecture” collapsed the distance between a new technological age and the monuments of civilizations long dead, linking the unknown builders of pre-Columbian Mexico with the equally anonymous technocratic planners designing the enormous infrastructures of the space age. In such diffuse resemblances the demand to recover an absolute autonomy from function and technology could appear both as a confident renewal of architecture’s power, or as an endgame, a dystopic side-effect of the radical detachment from the world expressed by such military engineering.

The interest in such advanced engineering and military construction took place at the same time as a broader change within the discipline regarding the implications of advanced technology, one that prompted a broader reconsideration of the modern movement’s own rhetoric of the machine. A key instance was Arthur Drexler’s 1964

---

223 Foreseeing the necessity of such planning, Morgenstern argued, populations would “gradually become accustomed to forms of existence that would otherwise be hard to bear….” The Question of National Defense (New York: Random House, 1959), 110.

224 Six Flakturme were constructed in Vienna as part of the Nazi war effort. With concrete walls up to 5 meters thick the towers were designed to house anti-aircraft artillery but also functioned as bomb shelters for military and for civilian populations. Given their enormous mass, demolition after the war was considered unfeasible, their indestructibility giving them an ambiguous monumentality.

225 Reyner Banham had made such a reassessment central in his Theory and Design in the First Machine Age (1960), critiquing the symbolic manner in which figures like Le Corbusier and Mies van der Rohe had appropriated “machine age” technology while leaving its actual technological lessons neither harnessed nor understood. Alan Colquhoun’s review of Banham’s Theory and Design in the First Machine Age argued that Banham had simplified the degree to which problems of technology within architecture could be simply divided between literal and symbolic aspects. See “The Modern Movement in Architecture,” The
exhibition *Twentieth-Century Engineering* at the Museum of Modern Art, of which Hollein and Pichler were likely aware.\(^\text{226}\) Drexler’s exhibition sought to reassess the importance of the iconography of large-scale engineering construction to the formation of early twentieth-century modernist polemic, by bringing together a vastly expanded iconography of postwar engineering structures. Invoking Walter Gropius’s 1913 comparison of American grain elevators to the pyramids of ancient Egypt, Drexler differentiated between the early twentieth century architect’s praise of engineering’s lack of superficial artistry and the postwar situation, in which “the craft of the engineer has become in its own way ‘artistic,’ and structural complications disproportionate to the actual problem are often praised for their ‘imaginative’ daring.”\(^\text{227}\) Against the contemporary trend “toward the elaboration of form for its own sake,” Drexler was concerned to recover a vision of engineering as “an art grounded in social responsibility.” Yet even as he called for such responsibility, he was compelled to concede that engineers lacked control over “the political or economic apparatus that would facilitate a truly responsible use of our technology.”\(^\text{228}\) Throughout the brief text, Drexler’s optimism struggles to contain such deep contradictions. If the “purposeful grandeur,” “graceful curves,” and “heroic scale” of engineering constructions were readily admired by architects and the public alike, their scale could not be easily reconciled with that of the contemporary city. When such awkward juxtapositions crept into the images, he

\(^\text{226}\) Hollein had been in contact with Drexler as early as 1960, sending him a copy of his Berkeley thesis. Hans Hollein letter, October 10, 1960. MoMA, Department of Architecture and Design, Correspondence Files. Pichler would be in contact in 1963, during a visit to New York. Drexler and Philip Johnson purchased several of their works for the MoMA collection in 1967 just prior to the exhibition. See MoMA, Architectural Drawings Collection, Worksheet, 436.67


\(^\text{228}\) Ibid., 6.
remarked, it was easier to restore the landscape’s equilibrium not by imagining the removal of dams, bridges, or towers, but by eliminating “petty distractions” such as houses and cars. Drexler’s catalogue for *Twentieth-Century Engineering* composed such an equilibrium solely through the juxtaposition of photographs featuring dams, bridges, hangars, stadia, cooling towers, highways, and artificial islands, and did so by mobilizing a technique of visual rhyming pioneered by a figure like Laszlo Moholy-Nagy at the Bauhaus, and further developed in the United States by his pupil Gyorgy Kepes. The carefully cropped images render the differences between landscapes largely invisible, providing a format in which vastly dispersed projects could be evaluated in terms of “similarities of form”, such as open and closed, smooth and faceted, convex and concave, elevated and subterranean. A similar iconography of engineering construction would figure prominently in the articles published in 1965 when Hollein, Pichler, and Feuerstein took over the direction of the Viennese magazine *Bau: Schrift für Architektur und Städtebau*. The subtle shift in how such images were combined highlights the difference between the practices of visual rhyming developed by Kepes and Drexler and the disjunctive collisions in *Bau*. The article “Technik” (Technology) was developed out of images

---

229 A key document in this respect was Kepes’s *New Landscape in Art and Science*, which held that the similarities between juxtaposed images was not haphazard, but revealed similarities between the referents, a level of awareness made accessible by new imaging technologies. He writes: “Seen together, aerial maps of river estuaries and road systems, feathers, fern leaves, branching blood vessels, nerve ganglia, electron micrographs of crystals and tree patterns of electrical discharge-figures are connected, although they are vastly different in place, origin, and scale. *The similarity of form is by no means accidental. As patterns of energy-gathering and energy-distribution, they are similar graphs generated by similar processes.*” Emphasis in original. Kepes, *New Landscape in Art and Science*, (Chicago: Theobald, 1956), 260.

230 Arthur Drexler, *Twentieth Century Engineering* (New York: MoMA, 1964). Though there is no mention of any indebtedness to Drexler’s exhibition, several images in *Bau* were also used by Drexler.

initially collected for Hollein and Pichler’s 1963 exhibition, some of which had been reproduced along with Hollein and Pichler’s drawings. The images bear a strong affinity to Drexler’s *Twentieth-Century Engineering*—identical images appear in both publications—yet Hollein and Pichler significantly redirect the visual rhyming used by Drexler: roadways dug out from the earth at an underground missile launch complex in Colorado and are paired with an elevated highway in southern California, the concave basin of a radio telescope in Puerto Rico is compared with the convex, stepped terraces of an iron-ore extraction facility in southern Austria. Hollein and Pichler even further exacerbate the device of formal comparisons, they are less rhymes than humorous, polemical collisions, as when the reinforced spherical compartments of a cement truck appear alongside images of lightweight inflatable radomes, or when a 1917 sketch for an optical factory by Erich Mendelsohn appears next to a concrete observation tower from the Second World War. Here the assertion of resemblance operates as an empty shell stripped of any claim to the deeper “similarity of form” that had motivated the comparisons of Kepes and Drexler. Resemblance, understood as something superficial, paradoxically, becomes a means for asserting differences. In juxtaposing a superhighway with a rocket launch facility, a radome with a concrete truck, an eyeglass factory with a wartime observation tower, one cannot say whether Bau was trying to forge a link to, or mark its distance from, the utopian technological aspirations of the 1920s and 30s.  

Where Drexler had sought to contain the contradictions surrounding such an iconography, Hollein and Pichler looked to amplify them. The “new scales ruling the landscape,” they argued, were seen less as statements of rational and responsible design,

---

than as “monstrous possibilities for projection.” By exacerbating the formal continuities found in Drexler’s photographic survey, Hollein and Pichler’s unorthodox resemblances even more radically detach such structures from their technological purpose and their situation. If this detachment was ideological, expressing a disengagement from Drexler’s unrepentant belief in engineering as an art grounded in social responsibility, it was also material—tied to a practice of publication in which images were treated not as faithful representations, but as suspect substitutes manipulated by and manipulable within a photomechanical apparatus.

The gap that emerges between visual rhyming and the dissonant resemblances that appear in the pages of Bau is arguably the site of much of the ambiguity that appears in Hollein’s Transformations photomontages, which circulated largely by means of magazines before Drexler came to exhibit them at MoMA. For readers of Hollein’s early work, it was this ambiguity—neither clearly critical nor clearly affirmative of the technologies it repositioned—that was troubling. For others, like Drexler, the appeal of the work lay precisely in this uncertainty. Writing to colleagues at MoMA, he noted that the Transformations had “an ambiguous but vaguely menacing overtone—the alienation produces a symbol equally applicable to the present urban situation or [to] the ultimate domination by the machine.” In works such as Aircraft Carrier in a Landscape (1964), [Fig. 2.12] High-rise Building: Sparkplug (1964) [Fig. 2.13], or Urban Renewal (Manhattan) (1964) [Fig. 2.14] the agency and the effect of the transformation remain mysterious. The cut out element does not undergo any visible alteration in form, the

---

233 Hollein, “Technik,” Bau 2 (1965), 42. The phrase is “ungeheuren Projektionsmöglichkeiten.”
234 Joseph Rykwert recalls the frequent misunderstanding of Hollein’s early works, which were read as “unsuccesfully ironic.” See Joseph Rykwert, “Irony: Hollein’s General Approach,” Architecture and Urbanism (Special Issue on Hans Hollein) 2 (Feb.1985), 189-96.
235 Transcription follows Drexler’s hand-annotations. Typescript, MoMA Archive, Exhibition Files, #836
transformation occurs simply via an alteration of its relationship to the photomechanical context. Drexler noted this changed attitude to the machine as a sign of a trans-generational shift: “While Sant’Elia or Le Corbusier sought to incorporate machine-age details into conventional architecture, Hollein and Abraham propose architecture made out of the machines themselves.”

One of the most frequent interpretations was to read the works in terms of fantasy, one in which the montage process served as a technique of enlargement, a shock effect associated with photography’s ability to manipulate the perception of size. Such was the power of this interpretation, that Hollein’s image literally grew larger as it circulated intensively in exhibitions and press during the course of 1966-67. In the exhibition *Macrostructures* in 1966, Richard Feigen exhibited Hollein’s *Aircraft Carrier* along with some of Claes Oldenburg’s early projects for domestic objects enlarged into monuments, setting up what would be an enduring parallel between the *Aircraft Carrier* and the Pop monumentality of Oldenburg’s enlarged everyday objects. [Fig. 2.15] That same year *Architectural Design* heralded the upcoming International Dialogue on Experimental Architecture in Folkestone by publishing a full page of Hollein’s works, which they described as emblematic of “visionary designs suitably blown up to larger than life

---

236 Several versions of the *Aircraft Carrier in Landscape* montage were developed beginning in 1964, using images of both the U.S.S. Enterprise and the U.S.S. Forrestal. Four are currently in The Museum of Modern Art collection.


238 See Dan Graham, “Models and Monuments: The Plague of Architecture,” *Arts Magazine* 41:5 (March 1967), 32. For a contemporary reading see “Blow up,” in Dominique Rouillard, *Superarchitecture: le futur de l’architecture 1950-1970* (Paris: Editions de la Villette, 2004), 191-202. While Hollein’s Transformations pre-date Oldenburg’s enlargements by a few years, both bodies of work seem to have been generated independently. According to Hollein, the exhibition at Feigen was the first time the two artists became aware of each other’s work. An extensive interview with Oldenburg was published in *Bau* 4 later that year.
Surviving images of the event show conference goers wandering through a landscape of oversized enlargements, somewhere between an exhibition and a fair for outsize ideas. Not surprisingly, when the montages were purchased and exhibited at the MoMA under the title “Architectural Fantasies,” they grew larger still; the museum prepared a twelve-foot-wide enlargement of Aircraft Carrier in a Landscape, which greeted visitors to the exhibition. The emphasis on physical enlargement was not haphazard. For Drexler the key link between Hollein, Raimund Abraham, and Pichler was a “preoccupation with machines and their transformation into colossal buildings.” Picking up on visual comparisons initially developed by Hollein and Pichler themselves, Drexler likened the unsettling effects of the montages to the experience of enormous World War Two anti-aircraft towers still standing in Vienna, whose “terrifying scale imposes a surrealist threat to the otherwise placid street.” Indeed, Drexler went so far as to obtain several photographs of the towers from their architect Friedrich Tamms, and included four of them as a part of the exhibition’s introductory didactic panel. Despite this direct incorporation of remnants associated with Austria’s Nazi past, the history of such structures was not addressed directly, but rather was simultaneously asserted and suspended by the reading of the work as architectural fantasy.

240 MoMA Archives, Correspondence, Exh #836.
241 MoMA Archives, Wall Text, Exh #836.
243 Drexler and Ludwig Gläser requested several images from the architect Friedrich Tamms directly. Tamms, working as a part of the German Todt Organization during WWII, designed a total of eight anti-aircraft towers for Berlin, Hamburg, and Vienna. The Nazi legacy of the structures was nowhere mentioned in the exhibition text.
The persistent inflation of the Transformations, both at the level of interpretation and in physical enlargements, is all the more intriguing since it is an inaccurate description of the montage process used in the works. The multiple versions of *Aircraft Carrier in a Landscape* (1964) were created by carefully avoiding any enlargement of the cut and pasted fragment. The procedure was less enlargement than one of repositioning—a demonstration of how the seemingly simple act of cutting, transferring, and inserting an alien element into a new photographic frame drastically alters how that element is perceived. Reviewing the exhibition, the New York Times architecture critic Ada Louise Huxtable took issue with the question of fantasy, remarking: “Today even before the ink on the vision is dry, imagination has been outrun by technology, which is prepared to execute anything the mind can conceive. Reality passes fantasy’s most ambitious visions.”244 While written as a critique, Huxtable’s description captures a dynamic essential to the numerous montages within the show. If architectural imagination appeared outrun by technology, Hollein’s Transformations photomontages insist that the deceptively simple act of repositioning a charged fragment into a new context, without enacting any significant alteration of its form, can produce an effect that vastly exceeds the initial operation. In this sense, it was less a question of “catching up to reality,” than of framing the significance of such “reality” in architectural terms.

The most familiar images from the series exhibited as MoMA, such as *Aircraft Carrier in a Landscape*, differed from an early Transformation montage like *Monument to Victims of the Holocaust* (1963) precisely in that they were not imaginary landscapes but sites Hollein had sought out and deliberately photographed with the images he had

cut from various magazines in mind.\textsuperscript{245} [Fig. 2.17] Here transformation can be read as metaphorical transportation, not only in the use of photomontage to implant the U.S.S. Forrestal into the landscape, but equally in the process of seeking out the landscape into which the vessel could be displaced. The landscape is itself a photomontage—stitched together from four distinct photographs, creating a vista whose exaggerated horizontality works to dwarf the immensity of the ship. The horizontal landscape montage constructs a form of panoramic continuity that echoes enormous frames of early 1960s cinema technologies like Cinemascope.\textsuperscript{246} This attention to the site reveals that the abrupt displacement of American military hardware entered not just any generic landscape, but specifically into a vision of rural Austria. It is the manner in which montage works in two contrasting directions simultaneously—both constructing continuity at the level of the landscape and creating disruption through insertion of American military hardware—that produces the tension internal to the image. Set in the midst of rolling farmland skirted by still unpaved roads, the U.S.S. Forrestal appears to rise from behind the low hill as if cresting a wave at sea, as if on patrol at the edge of the Iron Curtain. Yet even as it draws on the charge associated with such a fragment of Cold War geopolitics, the vastly expanded panorama holds the ship safely at the horizon, allowing the disjunctive insertion of the warship to be managed at a distance, paradoxically integrating it into a pastoral vision of landscape.\textsuperscript{247} Lurking behind such a combination of technology and

\textsuperscript{245} Hollein, Letter, 12/30/1966, MoMA, Department of Architecture and Design Correspondence files.

\textsuperscript{246} Cinemascope was itself a conjoining of multiple projections, which used anamorphic lenses to create an image twice as wide as conventional 35mm film. Whereas the aspect ratio of CinemaScope was 2:66:1, the largest image of the Aircraft Carrier series was 40 inches wide by 8.75 inches tall, a ratio of roughly 5:1.

\textsuperscript{247} The role of technological changes in changing perceptions of the landscape was a broader concern during these years. While there is no evidence of any direct link, it was also in 1964 that Leo Marx would influentially argue that technological disruptions such as trains, clattering cars, and noisy farm equipment were fully a part of the pastoral as a genre. Leo Marx, \textit{The Machine in the Garden: Technology and the Pastoral Ideal in America} (New York: Oxford University Press, 1964).
underdevelopment, was Austria’s own belated entry into larger processes of industrial modernization spurred by the Marshall plan. In contrast to other Western European nations such as France or Germany, in the early 1960s Austria remained marked by a sharp disparity between city and country, one that the sudden appearance of the aircraft carrier throws into sharp relief. In this sense montage provided a means for highlighting a number of tensions simultaneously, but perhaps even more important than change of scale, was the way the image underscored the detachability of form and idea, how the connotations associated with a war machine could be completely transformed not by altering its form, but simply by repositioning it. If such a maneuver opened onto a potentially frightening set of metamorphoses, the image equally worked to keep these at a comfortable distance.

If one set of ambiguities surrounding *Aircraft Carrier in a Landscape* can be located in relation to displacement and repositioning—the uncertainty about the relationship of a fragment to its environment—another appears through processes of substitution, the capacity to evoke related images within the iconography of modern architecture in the twentieth century. Aircraft carriers such as the Forrestal and the Enterprise were vaunted in contemporary press articles as cutting-edge, nuclear-powered machines, whose tactical value was their autonomy from land-based command, capable

---

248 The importance of these particular rural landscapes were reaffirmed in a different context, several years later as several photographs used to make the montages were included in the 1969 MoMA exhibition *In[form]ation*. In this context, they were described as “sites” selected with the intention of preservation. Hollein, letter to Kynaston McShine, May 5, 1970; MoMA Archive, Information Exhibition Files, 4:3. Indeed, the technological fascinations that run across the practice of younger Viennese architects never seems far from a seemingly opposite awareness of marginality and disappearing forms of life. One of Raimund Abraham’s earliest works was *Elementare Architektur* (1963). A detailed photographic study of stone construction techniques found in remote Austrian villages, it was published just as he was beginning to work on a series of montages devoted to vast urban machines. On the significance of such marginality in cultural and political terms see Anton Pelinka, *Austria: Out of the Shadow of the Past* (New Brunswick: Rutgers University Press, 1998), 130-1.
of supporting the lives of thousands inhabitants for years at sea without needing to return
to port.\textsuperscript{249} The displacement from one printed context to another instantaneously
transformed the autonomy of the aircraft carrier into something else: a self-contained life-
support system whose level of technological sophistication far outstripped the most
advanced contemporary buildings. Here the question is not strictly the transformation of
the meaning of the aircraft carrier, but a reciprocal transformation regarding inherited
ideas about architecture and the city. It was in this sense that Reyner Banham, read
Hollein’s \textit{Aircraft Carrier} as a key to the emerging concepts of megastructure:

The overhanging silhouette of the flight deck suggests shelter to what is below,
but the top-heavy effect was clearly the mode of the day. Furthermore, the
asymmetrical arrangement of the main elements, with the bridge structure at the
side of the flight deck instead of axially astride the hull as in Le Corbusier’s
‘ocean greyhounds,’ seems to have had consonances with the relationship of
public buildings to public places…In either case the residual silhouette above
ground is clearly what rang a bell for the megastructuralists.\textsuperscript{250}

It is both odd and fitting that Banham should emphasize the significance of Hollein’s
\textit{Aircraft Carrier} to megastructuralist discourse not in terms of its technological
sophistication or its programmatic complexity, but in terms of the implications of the
ship’s suggestive silhouette for thinking about the relation of buildings to places.\textsuperscript{251} The
silhouette was a technique with a well-established nautical and military history,
systematically developed at the end of the nineteenth century for the identification of

this article were used by Hollein in “Städte: Brennpunkte des Leben,” \textit{Der Aufbau} 3-4 (April 1963) 114-
118.
\textsuperscript{250} Reyner Banham, \textit{Megastructure: Urban Futures of the Recent Past} (London: Thames and Hudson,
1976), 20.
\textsuperscript{251} Banham’s reading does not mention the shift from ships designed for civilian travel and tourism to
machines designed for global warfare. Yet it was arguably the programmatic complexity of the latter which
interested Hollein. An analysis of the U.S.S. Forrestal, along with a very preliminary sketch for the Aircraft
Carrier series and several images of life on board the U.S.S. Forrestal appear in Hollein’s “Städte:
Brennpunkte des Lebens,” 116.
A technique related to military vision, the silhouette proceeds through visual isolation and flattening, identifying the relevant aspects of a given object by defining the line that marks its edge. This outlining enacts its own profound transformation, one that, in this case, also matches the cutting involved in Hollein’s Transformations. The silhouette detaches the image from a continuum of information, such as the surrounding pictorial surface or the sequence of pages in a publication, and at the same time, allows for a further, semiotic detachment between the outline and the photographic information it contains, creating an internal difference open to further manipulation.

As Banham’s reading aptly suggests, the silhouette is the hinge point between warship and abstract shape, the relation between referent and gestalt sufficiently dislocated that it could be repositioned in relation to a different set of ideas concerning buildings and public places. This two-fold cutting, at once literal and semiotic, that crystallizes around the aircraft carrier is poised at the center of a larger discursive realignment becoming evident in Hollein’s work, one in which the problem of architecture’s relationship to the city shifts from an emphasis upon machines for defense and containment to machines for communication. The idea of the city as a communication machine was explicitly articulated in the pages of Bau at this time, in an article-manifesto—“Zukunft der Architektur” (Future of Architecture)—that prominently featured the Aircraft Carrier in a Landscape montage. Describing the ascendance of communication and supply over more traditional defensive infrastructure, Hollein writes:

---

252 The first comprehensive catalog of silhouettes of military ships used for identification was published by John F. T. Jane as All the World's Fighting Ships in 1898. Expanded through the early 20th century into a series of military publications, Jane’s information group exists today as the world’s largest commercial intelligence firm serving the defense, security, and transportation sectors.
The contemporary city is less walls and towers than a monstrous communication machine, a manifestation of the opening and domination of space and the connection of humanity. It is dynamic, not static. Its symbols are different, its plastic expression is defined through the elements of this communication, through signs of spatial order and organization, through the three-dimensional manifestations of its supply systems… The monstrous technical constructions that are necessary to make these cities function, themselves contain a latent monumentality, and it is the task of architects to discover it and bring it forth.  

If Hollein emphasizes the contemporary city as an enormous machine for communication and supply, the examples he points to in the montages and the illustrations converge not around anything recognizable as a city, but rather around structures in isolation: aircraft carriers, oil platforms, walking cities, and space stations. It is as if the euphoria about connectivity and communication were haunted by an opposite pole, an autonomous sphere capable of being closed off from a life-threatening world outside. After a lengthy description of the focal points (Brennpunkte) of the city of the future, Hollein describes the arrival of such spaces:

And so we are nearing the time of totally closed environments, aerial or subterranean, above water, below water, as they are seen foreshadowed already today in polar stations, artificial islands at sea, aircraft carriers, the Norad Command center, and the like, autarchic units, that lead to the Station, the city in space. (Here in the totally man-made environment lies the greatest possibility for architecture to show what it can and should do—when no changing heavens, no sun, nor change of seasonal color can throw its merciful shadows upon our failures.)

---

253 Hollein, “Zukunft der Architektur,” Bau 1 (1965), 9. The original passage reads:  
Die heutige Stadt ist weniger Mauer und Turm als eine ungeheure Maschine der Kommunikation, Manifestation der Eroberung und Beherrschung des Raumes und der Verbindung der Ganzen Menschheit. Sie ist dynamisch, nicht statisch. Ihre Symbole sind anders, ihr plastischer Ausdruck wird bestimmt durch die Elemente dieser Kommunikation, durch Zeichen der räumlichen Ordnung und Organisation, durch die dreidimensionalen Manifestationen ihrer Versorgung….Die ungeheuren Bauten der Technik, die notwendig sind, diese Städte zum Funktionieren zu bringen, haben eine latente Monumentalität, und die Aufgabe des Architekten ist es, sie zu entdecken und hervorzubringen.

254 Ibid, 11. The original passage reads:  
So nähern wir uns der Zeit der vollkommen geschlossenen Umgebungen (enclosed environments), oberirdisch, unterirdisch, ober Wasser und unter Wasser, wie sie heute schon in Polarstationen, künstlichen Inseln im Meere, Flugzeugträgern, NORAD Command Center u. dgl. vorausgeahnt sind, autarke Einheiten, die überleiten zur Station, zur Stadt im Weltraum. (Hier in dieser vollkommenen vom Menschen geschaffenen Umwelt liegt die große Möglichkeit für Architektur,
In such totally “closed environments,” Hollein saw not the end of architecture, but “its greatest possibility,” the object in which the architect’s ambitions could be most honestly subjected to scrutiny. Hollein’s insistence on communication, connection, and supply appeared entwined with a preoccupation with closed worlds, autarchic units, and the isolated control rooms of contemporaneous decentralized, defense networks like NORAD. It was a reading that connected images through the silhouettes of their armored shells, and by same token provided them with new titles; an image of one of Pichler’s models—presented as a subterranean city in the 1963 exhibition Architektur—acquires a new caption: Kommunikationen einer Stadt (Communications of a City). [Fig. 2.18] Appearing no longer in relation to underground missile launch facilities but paired with the circular landing pad atop an oil-drilling platform, it is described as an Autarke isolierte Umgebung (Isolated Autarchic Environment).

Such self-contained, autarchic structures might also be seen in relation to discourses of total design, a concept with strong historical roots in Vienna. As Mark Wigley has argued, if the dream of a totally designed coherence continued to preoccupy the architectural imagination at this moment, it tapped into a latent desire for control, one that operated simultaneously through two opposing vectors: “…the focusing of design inward upon an singular intense point [and] what might be called the explosion of design, the expansion of design out to touch every possible point in the world.” 255 Such a desire for control was at the same time profoundly challenged, faced with a seemingly impossible scale of operation that stretched from enormous engineering works.

zu zeigen, was sie tun kann und soll—wenn kein wechselnder Himmel, keine Sonne, keine sich ändernden Farben der Jahreszeiten ihre gnädigen Schatten auf unsere Fehler werfen.

encompassing entire regions and territories to environments conditioned by highly miniaturized electronic circuits. In the face of such an impasse, the work of Hollein and Pichler produces a swerve; if total design required a form of detachment from the vagaries of the everyday life world, the contemporary image of such detachment appeared in equipment related to the military, industrial exploitation, and space exploration. Yet the physical isolation of such installations was itself redoubled and complicated by montage, which appropriated such images by further detaching them from their surroundings. As found in the Transformations montages, physical detachment and repositioning produced a deeper forms of semiotic transposition, allowing Hollein to manipulate the associations between a particular outline and the significance of the information contained within it. If such techniques recalled the way in which silhouettes had served as a means of military identification, in this context it was more closely connected to contemporary methods masking and flattening used in printing to separate elements, allowing them to be differentiated in processes of reproduction. Hollein’s cuts, tied both to the tradition of the silhouette and to the technique of the mask, was significant both in his montages and in the conception of a project such as Hollein’s Retti boutique (1965), and in related designs for exhibitions such as Selection 66 (1966) and the Austriennale exhibition at the Milan Triennale in 1968.

The sharp separation between the façade of the Retti boutique, the sidewalk, and the surrounding facades on the Kohlmarkt, were conceptualized by literally cutting into

256 Jakob Bakema also espoused a return to themes of “total design” at this moment. Hollein was in contact with Bakema as early as 1960, inviting him to publish an article in the first issue of Bau. See Bakema’s Van stoel tot stad; een verhaal over mensen en ruimte (Zeist: W. de Haan, 1964).
the surface of photographs to produce a series of preparatory montages. [Fig. 2.19] This physical cut with its rounded-corners, evoked the marine vessels and spacecraft that had captured the imagination of Hollein and Pichler, a discontinuity reinforced by the use of aluminum, whose dull reflectivity and reduced openings appeared equally detached from the surrounding street. The flat, graphic appearance of this physical cut supported the ambiguous condensation of multiple figures within the silhouette, an echo of the machined symmetries found in Hollein’s models, the shape could also be interpreted as an abstract image of a candle, a Pop column with a grossly extended capital, or the negative space of two back-to-back letter “Rs” evoking the client’s name. [Fig. 2.20] Here the supposedly immaterial graphic qualities of the shape depended on a very particular material expression; the “sharp” optical cut produced by the frameless aluminum corner and deep recessing of the portal. The resulting portal “overlays” the silhouette-like condensation of the range of possible readings of the façade with the changing visual events that appear within the interior.\textsuperscript{258} The tiny interior itself, realized in the same materials as the façade, becomes the container for a type of total design, and was meticulously detailed down to displays of the wares and the bags customers would receive. This implosive vector was exploded to visually infinite dimensions through the use of mirrors on the cross-axes, visually multiplying the closed environment from within.\textsuperscript{259}


\textsuperscript{259} One might see here a nod to Adolf Loos’s Kartner Bar (1903), which influentially used mirrors to produce the illusion of being in a small portion of a larger space.
From the *Transformations* to the Retti boutique, the device of montage appears as a strategy of containment and detachment that emerges out of the parallel fascination with articulating diffuse relations of resemblance, likenesses without any guarantee of similarity. Such a procedure bears affinities to the manner in which Roman Jakobson has analyzed the production of language under conditions of aphasia. Jakobson emphasizes that the production of signification involves two primary operations occurring in relation to one another: combination (creating a relation to other units in a context) and selection (choosing a specific unit in relation to other possible units that could be substituted for it).\(^{260}\) Combination refers to the connection of elements contiguously while selection implies a choice between alternatives within a matrix of potential synonyms and antonyms that themselves remain absent.\(^{261}\) Jacobson’s analysis of aphasia goes on to link these operations with two rhetorical figures: metaphor (as a device for affirming likeness) and metonymy (as a device for articulating relations of contiguity). Aphasia, he postulates, reveals that these two apparently antithetical poles of expression are linked: the dominance of one function can be seen as the effect of and compensation for an impairment in the other. The visual strategies used in Hollein and Pichler’s collaborations and early articles in *Bau*—from the preoccupation with an absolute architecture to the emphasis on new types of symbolism—operate through devices that continually short-circuit the metonymic pole: photomontages that cut out one context to replace it with another, models that resist any reference to scale, drawings that carry nothing but the most cursory indication of what they refer to, facades that emphatically reject their immediate vicinity, withdrawing into their interior. Images are captioned and


\(^{261}\) Ibid., 99.
recaptioned, their identity established by a mutable field of potential substitutes and resemblances. The provocation in these works functioned in a manner analogous to what Jakobson identifies as the operation of the contiguity disorder: a visual strategy that short-circuits propositions and refuses to connect individual words into phrases. Conjunctions fall away, and words operate independently of other words. Is it fortuitous that Pichler and Hollein’s complex machines and devices for creating similarity are captioned only as “architecture”, “house”, “building”? Or that they are visually aligned with “autarchic isolated environments” or a “piece of a city?”

If the visual and semiotic work of the silhouette was key to Hollein’s Transformations, it was also compatible with the design of singularly intense points and controlled, closed environments. From 1965 onwards, a gradual shift towards the explosive vector begins to take over the practice of appropriation, changing the associated demand for control. This shift appears not only in the terms of provocation used in Hollein and Pichler’s writing, but also in the manner in which they reconceived the practice of montage. This shift can be detected in a turn away from photomontage, in which a single image served to condense a larger field of disjunctive resemblances, towards forms of sequential montage, organizing relationships amongst a diachronic sequence of visually dissimilar images. The breakup of one visual order and the appearance of another was not a sudden and decisive event. The temporary, silhouette-like alignment between an iconography of machines and machine parts and an iconography of a compact, urban monumentality achieved in the Transformations, begins to give way to an emerging consideration—the question of what constituted centrality in an era defined by the rise of new forms of electronic transmission and communication.
The shift from symbolism and monumentality towards emergent communications media was not seamless, but implied an intensified breakdown and re-organization of the definition of architecture. A year after he published the aircraft carrier montage in *Bau*, Hollein would write: “Limited conceptual determinations and traditional definitions about what architecture is and what its means are, have today largely lost their validity. Today virtually everything becomes architecture.” Once again, Hollein insists on a “return” to architecture, yet it is a paradoxical one in which architecture is redefined by its very lack of definition. Recognizing that the entirety of the environment, from clothing to artificial climate controls, to television broadcasts and housing, were “virtually” architecture, the problems of these expanded domains, Hollein reasoned, could no longer be solved through architecture understood solely as building. In reframing architecture as an expanded practice, Hollein drew on the expanded definition of media provided by the contemporaneous writings of Marshall McLuhan.

“According to McLuhan’s definition,” he noted, “housing is a medium for the control of bodily temperature, a medium building has sought for thousands of years to perfect.”

---

264 In addition to “Vorstoß und Rückstoß,” see “Neue Medien der Architektur: Fragmentarische Anmerkungen zu neuen Entwicklungen und Möglichkeiten,” *Wort und Wahrheit*, 23:2 (March/April 1968): 174-176. Though published in 1968, the text is dated 1967. McLuhan’s centrality to debates over the nature of media during these years was due in no small part to his own ubiquitous presence in the era’s popular media, appearing in magazines like the *New Yorker*, the *Atlantic Monthly*, and *Playboy*, as well as in cheap pocket editions published by Signet press. In 1967, the *Architectural Record* would note that nearly “every architect who came into the office had the paperback edition of McLuhan’s *Understanding Media* tucked into an overcoat pocket, or nestling among the model photos in his briefcase.” *Architectural Record*, (March 1967) 151-52.
Taken as a shared garment, architecture’s significance no longer appears necessarily tectonic, symbolic, nor even visual, but as a medium for controlling a wide range of bodily sensations, including temperature. Such a definition echoed McLuhan’s own rhetoric of temperatures—which differentiated between a subject’s involvement in various media by invoking the difference between “hot” and “cold”, “warm” and “cool”—while simultaneously echoing and updating the deeper tradition of architectural Bekleidung (clothing), running from Gottfried Semper to Adolf Loos and Bernard Rudofsky.\textsuperscript{266} In McLuhan’s formulation, the characteristically “cool” media of electronic age such as television, computers, and satellites expanded on older extensions of the senses, such as cinema, newspapers, and telegraphs, which were themselves resting on earlier extensions of human organs, such as the wheel, the clock, and the alphabet.\textsuperscript{267} If each new medium extended human organs and senses, it also intensified and altered the relationships between them. For McLuhan, the accelerated, dematerialized, and decentralized characteristics of electronic media involved what he called “the final phase of the extensions of man,” one in which invisible, intensive, and “organic” electronic environment reversed the parcellization, fragmentation and dispersion characteristic of early eras of mechanization. “Our speed-up today,” McLuhan writes, “is not a slow explosion outwards from center to margins, but an instant implosion and an interfusion of space and functions. Our specialist and fragmented civilization of center-margin structure is suddenly experiencing an instantaneous reassembling of all its mechanized bits into an


\textsuperscript{267} Ibid., vii-xi.
The dynamics of McLuhan’s description appear analogous to the manner in which Hollein renovated architecture’s difference from building: appearing as a media apparatus extended to encompass “virtually” everything, an expanded field of dematerialized information, in which the primacy of vision was displaced by invisible, multi-sensory atmospherics of new media, a diffusion that was at the same time organically integrated by new forms of spatial compression and simultaneity, one in which “mechanized bits” were instantaneously reassembled into a new whole.

The seemingly contradictory vectors, of explosion and dispersal on the one hand and of simultaneity and reassembly on the other, through which Hollein and McLuhan situated architecture as medium, also interested Hollein’s friend: the American architect John Johansen. Johansen published an extended examination of McLuhan’s theories in the American Scholar in 1966. Proposing what he calls the architecture of the “simul-station” Johansen writes:

Not only is the fixed axial reference point of the Renaissance out-of-date, but so also is the “Space-Time,” or moving station point conceived by Sigfried Giedion,

---

268 Ibid., 93.
which might be said to represent the mechanical age of the wheel. Now I would make the observation that we will have a new station point of the electronic age: one that is multiple and simultaneous, a “simul-station.” Obviously we don’t change our physical position within a building as instantaneously as we follow an intercontinental discussion by Telstar. However, we may now be trained to project ourselves into positions, to identify ourselves with many other stations and circumstances.

The “simul-station” was a relay point of dispersed simultaneity within a broadcast network, more akin to the television station than to the multiple viewpoints Giedion had used to describe the fragmented, faceted spaces of Cubist painting. Johansen’s “simul-station” implied not only a projection of the subject into simultaneous “positions,” “stations,” or “circumstances,” but an optimistic emphasis on projection as a form of virtual yet intensified involvement demanded by electronic images, of which Telstar satellite transmissions were taken to be a prototype. “The images of the electronic world,” he wrote:

are continuous, simultaneous, nonclassified, noncodified. … They represent a continual flow of data, not measured or measurable. This process has been described as a “mosaic” effect of composite impressions producing total comprehension. Many effects and impressions are absorbed by the viewer instantaneously, involving a fusion of the senses. The spectator becomes part of the system or process and must supply the connections. He is the screen upon which images are projected. Images, as on TV, are low definition, therefore require high participation.

The simul-station provided a vision of a subject as intimately bound up with the image as with the new apparatuses that transmitted and projected that image into the world, at once the projection screen for this “mosaic” and the connective relay between images.

Paraphrasing McLuhan’s distinction between hot and cool media, the low definition images characteristic of such telecommunication were not a barrier or lack, but a field of

information that the subject reassembled into a new whole. As the mosaic analogy suggests, the architecture of this electronic, multi-sensory involvement depended more radically on a logic of metonymy, the ability to decipher and sustain multiple connections between fragments, reassembling a lateral, low-resolution, multi-sensory drift between dissimilar elements into a larger form of coherence.

The performance of such reassembly amidst a lateral, multi-sensory flow is arguably what is at stake in the issue “Background USA,” a multi-page sequence of photographs created by Günther Feuerstein, Hans Hollein, and Walter Pichler for an issue of Bau devoted to the work of American architects, including Johansen.\(^{274}\) The motif of the landscape panorama reappears here in a different guise, in the juxtaposition of a photo of the Grand Canyon with a model of a room full of computers. [Fig. 2.21] Open to multiple readings, the image could be read as a synecdoche standing for America, or as a composite configuration evoking the idea of an “information landscape.” Following this initial collision, a horizontal grid of images, similar in structure to those used in Hollein and Pichler’s Architektur catalog, crosses the double page spread, suggesting a type of atlas, or family portrait of American architecture, in which buildings and architects from the 1890s to the 1960s appear juxtaposed, their names and dates carried in the grid’s blank structure. This grid structure is preserved on the following spread but the use of images alters radically. Buildings and architects disappear, names and dates are evacuated from the interstices: the grid as a structure for containing individual illustrations itself gives way as images of billboards and signage run continuously.

\(^{274}\) *Bau* 5/6 (1965). Over the years, the magazine paid close attention to developments in the US, dedicating issues to Kiesler (1/2, 1966), Schindler (4, 1966), an interview along with the first publication of Oldenburg’s drawings for monumental everyday objects (3, 4, 1966), a report upon a conference at Columbia (3, 1966) in New York, as well as excerpts from talks by Buckminster Fuller and Oskar Morgenstern (4/5 1967).
beneath the grid, and the same image of Marilyn Monroe repeats serially across the page in a manner reminiscent of Andy Warhol’s contemporaneous silkscreen paintings. [Fig. 2.22] A jukebox, an air conditioner, a headlight, and a coke bottle have become detached from their surroundings, carriers of the multi-sensory experiences of sound, light, temperature, and taste. Whatever vestigial resemblance the grid enabled in the preceding page similarly give way, the grid having become less a container than a scaffold laid over the visual field, one in which relations of contiguity have become more important than resemblance. On the following page-spread a cropped view of the façade of Mies van der Rohe’s Lakeshore Drive Apartments bleeds to the edge of the page, a substitute grid contrasting with the diminutive image of the laughing architect. In small type, his celebrated phrase “Less is more,” sits fittingly stranded within the blankness of the page, ambivalently poised between a modernist reduction to essence and the dematerialization of the physical grid altogether. The blankness of the page continues onto the last spread, in which objects extricate themselves from the grid altogether. The frame of a geodesic dome spills across the gutter, its triangulated armature containing several iconic images of America: a highway overpass in California, a submarine, the Guggenheim museum, an inflatable pavilion from the 1964 World’s Fair in New York.²⁷⁵ [Fig. 2.23] The geodesic frame operates a residual silhouette, one in the process of being transformed into a new type of apparatus. The process of masking, displacing, and remounting a photographic fragment no longer operates according to a logic of figure and ground but in the configuration and incorporation of a disparate range of photographic elements—from the

²⁷⁵ The importance of the new manner of structuring the relationship between images is emphasized by the fact that almost all of them had been used before, whether in Pichler and Schilling’s Kinderbuch, in previous articles in Bau. The image of small clusters of houses tucked inside the cloverleaf of a highway in Crockett California was featured in Bau 2. The same image would later reused by Superstudio in 1969 for a photomontage of the Continuous Monument.
visible patterns of a half-tone dot screen to high-definition clipped photographs—within a geodesic armature. Still other images—a rocket, an astronaut, and a capsule, float off as in a sidereal drift, suggesting that the armature cannot contain everything. If the article began with the collision of information and landscape it ended with the suggestion of satellites extending the human environment beyond the confines of the planet. The tension between various resolutions of reproduction within the lateral drift of “Background USA,” pinpoints the anachronistic function of a notion like “landscape” within such an expanded rubric of environment. Images of familiar landscapes were precisely the kind of content used for the first transatlantic Telstar broadcasts, the legibility of iconic sites providing a familiar reference against which the shifting low-resolution electronic medium could be deciphered. The title “Background USA” itself suggests the destination of this lateral drift, one in which the familiar genre of the landscape was being replaced by a more ambiguous field; no longer a unified, visual space into which an object could be stably embedded, but a shifting background of information, sensation, and resolution that needed to be actively connected and configured by the subject of the electronic age in order to become an image.

The shift from one mirage of coherence to another during these years was related not only to the changing manner in which Hollein, Feuerstein, and Pichler theorized architecture as media, but to conflicting interpretations of the nature of this mediation. This latent tension is expressed succinctly in one of the most notorious articles published

---

276 This tension might also be read as an alignment of McLuhan’s emphasis on the heightened participation demanded by low-definition media and the participatory, do-it-yourself ethos associated with geodesic building systems.

in Bau, Hollein’s 1968 manifesto: “Alles ist Architektur” (Everything is Architecture). Appearing as a double issue in January of 1968, the cover declared “Alles ist Architektur” with a photomontage in which an exaggeratedly yellow cube of Emmenthal dwarfs Vienna’s skyline [Fig. 2.24]. If the cubic yet globular structure of the cheese might appear strangely contemporary from our own point of view, the selection of Emmenthal—literalizing a local expression used to describe “bad” architecture—was deliberate.278 Significantly, the photomontage offers not a seamless merger with Vienna’s skyline, but creates a subtle, even comic disparity between the city and the fragment of cheese, whose yellow tone contrasts acidly with the enlarged, optically fluctuating halftone dots of the sky. This excessive invocation of photomontage humorously captures a device reaching a turning point, a moment in which the stakes and composition of the argument will shift. The interior of the magazine opens onto this shift, a lateral montage even more extended than “Background USA,” organized entirely around drifting associations between images over an extended sequence of pages. The text of the manifesto is entirely sequestered from the realm of images, which are now free to bleed to the edges of the page, enabling them to be read as an unbroken continuum [Fig. 2.25]. The lateral montage operative in “Alles ist Architektur,” in its restless movement from one thing to another, sets up a sequence no longer organized around visual resemblance, but through the repetition of the slogan “Alles ist Architektur” across a field of shifting, disjunctive referents, bound together by bare contiguity. The injunction that returns at several points in the text—that “architects must cease thinking only in terms of building,”—finds its analogue not only in the montage’s ban upon showing buildings, but also in the move to eliminate the devices for emphasizing visual likenesses. Such

278 Hollein, interview August 18, 2006.
likenesses do not disappear entirely, however, but subsist in a subordinate manner, flaring up occasionally in the form of jokes. Jakobson’s insight into the relationship between the metonymic and metaphoric operations again proves useful for reading Hollein’s montages, drawing attention to a pronounced uncertainty saturating even the most confident claims to expand the bounds of architecture. The organization of “Alles ist Architektur” has affinities with Jakobson’s description of a subject who, having lost the ability to conceptualize similarity, turns to relationships of contiguity.

If one of the synonymic signs is present (for instance…pointing to the pencil) then the other sign (such as…the word pencil) becomes redundant and consequently superfluous…[If] one is performed by the examiner, the patient will avoid its synonym: “I understand everything” or “Ich weiss es schon” will be his typical reaction…Likewise, the picture of an object will cause the suppression of its name: a verbal sign is supplanted by a pictorial sign…Such patients fail to shift, as Pierce would say, from an index or an icon to a corresponding verbal symbol.

“Everything” appears as a stopgap repeated in place of a shift from an image to its proper name. The lateral montage developed in Alles carefully orchestrates a similar disturbance, interrupting the shift from image to proper name, and systematically inserting the word “Architektur” where this link might have been established. It is less that architecture has become synonymous with the image, than it has come to function as a term for stabilizing relations of spatial and temporal contiguity, that is, between images. If the provocation of Alles kept returning to the statement “architects must cease to think only in terms of buildings,” its lateral montage insisted that other things keep taking its place, and that architecture come to serve a connective function rather than a symbolic one. This new mode of organization calls for a different manner of reading, one centered less on the

---


280 Jakobson, “Two Aspects of Language,” 103.
securing and deciphering of meaning in the image—determining what it is like—than by establishing the points of connection between images, following the paratactic set of linkages they set up. 281

The lateral montage found in “Alles ist Architektur” engages two distinctly different sets of possibilities in regards to the dual movement of extension and dispersal on the one hand, and implosion and reassembly on the other. Reading them, I will draw on the marked difference between image and text, taking the visual argument with and against the grain of the text, a tension in which the conflicting interpretations of the nature of mediation come into the foreground. This shift to lateral, paratactic montage, in which images are treated as pieces of information within a horizontal field, goes hand in hand with a shift from a concern with the latent monumentality of structures of communication and supply to a stress upon the problem of framing and appropriating the information channeled by such systems. Hollein writes: “There is also a shift of importance from meaning to impact. Architecture has an effect (Wirkung). The way I take possession of an object, how I use it, becomes important. A building can become entirely information—its message might be experienced entirely through informational

281 There are considerable parallels between the lateral form of montage used in Alles ist Architektur and contemporaneous strategies in graphic design, notably Quentin Fiore’s design for popular and cheap mass-market pocket books done collaboratively with McLuhan, such as The Medium is the Massage (1967), and War and Peace in the Global Village (1967), or Buckminster Fuller’s I Seem to be a Verb (1969). McLuhan termed these publications “non-books,” emphasizing the attempt to capture the transformed “sense-ratios” characteristic of the electronic age within the outmoded format of print. Fiore developed a number of graphic devices for many of the arguments about vision in McLuhan’s writings: the lateral montage organizing the entire pocket book sought to break down the hierarchy of text over image by processing images in readerly sequences. Conversely, the books enlarged and broke up text, asserting the formal, visual aspects of letters to a degree that they functioned like images. On Fiore see Ellen Lupton and Abbott Miller, Design Writing Research: Writing on Graphic Design (New York: Phaidon, 1996), 91-102; and Jeffrey T. Schnapp and Adam Michaels, The Electric Information Age Book: McLuhan/Agel/Fiore and the Experimental Paperback (New York: Princeton Architectural Press, 2012).
media (press, TV, etc).”  

*Alles* can be read as a new manner of “taking possession” of various objects for the purposes of the manifesto, one envisioned as a *Wirkung* (effect, operation, impact). *Alles* aligns the role of information with activity, something that can be considered through the lens of construction.

One of the initial sequences of the montage, a page labeled “ARCHITECTS EX-ARCHITECTS” assembles photos of celebrities, artists, and politicians, all former architects, including fashion designer Paco Rabanne, artist Roberto Matta-Echaurren, the mayor of Warsaw Marian Spychalski, and the film-maker Sergei Eisenstein. A blank spot is reserved for a photo to be pasted to the page, suggesting the manifesto’s ability to incorporate an endless field of cultural producers, echoing Hollein’s slogan: “Everyone is an Architect.”

“Taking possession of objects” also accrues a consumerist sense in the montage, which contains an overwhelming number of commodities: lipstick, sunglasses, spark plugs, wing nuts, combs, glasses, pills, spray cans, balloons, chairs, postage stamps, and bubbles. If taking possession implied learning from objects not deemed traditionally architectural, the flip-side of this enumeration of goods evokes again the total design of the environment as a kind of package running from medical supplements to complex life-support systems. The inclusion of the image of a Svobodair spray can provides more than just a passing allusion to such a phantasmagoria, it enacts a comically literal image of architecture’s dispersal into atmospherics. A *Raumspray für Buros* (space spray for

---

282 Hollein, “Alles ist Architektur,” 2. My translation differs slightly from the version in Ockman, where *Wirkung* is rendered as affect.
283 Bau would to lay claim to another “found architect,” devoting a landmark issue (1/1969) to Ludwig Wittgenstein and publicizing the permit documents that verified Wittgenstein shared authorship of the house at Kundmangasse 19 in Vienna with Paul Engelmann. The strategy of the issue was also to intervene in the planned demolition of the house. Wittgenstein was not recognized at the time as the architect of the house, despite the fact it had been recognized in print previously, notably, in Feuerstein’s guide to the Viennese architecture, *Weiner Bauten: 1900 Heute.* (Vienna: 1964) 24.
284 The former possibility is stressed in Liane Lefaivre, “Everything is Architecture: Multiple Hans Hollein and the Art of Crossing Over,” *Harvard Design Magazine* 18 (Spring 2003) 68.
offices) Svobodair was a product designed by Hollein in collaboration with Peter Noever, and marketed by the furniture firm R.Svoboda & Co.. In an advertisement that appeared in Bau, the spray appeared much like a comic book hero exploding onto the scene to interrupt a chain of depressive speech: “unable to concentrate, overworked, irritable, down, tired…idea-less, insecure, unsuccessful, out: PFFF!, ooh, ahh, good, good, delicious, comfy, refreshing, again, again, again, more, over and over.”

Aerosol sprays were not only emblematic of the ephemeral, they were a new type of commodity, the vehicle for a parody of architecture’s expansion into a logic of commodification increasingly extended to the more immaterial, atmospheric, and psychologized regions of design. The connective function becomes here nearly identical to a relentless process of seizing hold of any-object-whatever “again and again, over and over” a process of re-inventing it each time so as to shore up waning interest and investment. A strategy of information connecting a physical object, an advertisement for Hollein and Noever, an advertisement for the company Svoboda (itself a key advertiser within Bau), and a concept regarding the dematerialization of architecture, Svoboair ultimately parodied a heroic vision of design as problem solver.

The icon of Svobodair appeared a few months later in the pages of l’Architecture d’Aujourd’hui, its aerosol blast an icon for the most recent and ephemeral trends (a field that included Archigram, Cedric Price, Utopie, and Paolo Soleri, amongst others). [Fig. 2.26] Hollein was also engaged at this time to produce the exhibition design for the 1968 Austrian section of the Milan Triennale, a commission that required an even more direct

---

285 Bau 3 (1968) rear cover. “Boss in schlechter Laune, muffige Büroatmosphäre, unkonzentriert, überarbeitet, gereizt, down, müde, verdrossen, deprimiert, gehemmt, drückende Hitze, keine Arbeitsfreude, keine Courage, nervös, unglücklich, Ideenlos, unsicher, erforglos, out [PFFF!] ooh, ahh , gut, gut, herlich, angenehm, erfrischend, noch, noch, noch, mehr, immer wieder, SVOBODAIR.”

engagement with the problem of display. The exhibition concept, following the lateral, paratactic logic of *Alles ist Architektur*, took the form of an extended row of identical doors that opened onto a series of parallel corridors, an apparatus of obstruction that the visitor had to pass through to access to the Austrian section, but also a filter containing various forms of information with only a passing association with the products on display: from mass production to population explosion, to the folders evoking the untold contents of state archives [Fig. 2.27]. From the entrance, this pseudo-bureaucratic system appeared entirely uniform, yet within the character of the corridors varied drastically, from claustrophobic spaces, such as a micro-supermarket with a window onto a pile of refuse, a barely passable opening whose contour was the shape of a three-dimensional population diagram, to a series of file-drawers containing nothing but numbers. On the other end of the spectrum was emptiness and blockage—an artificial snow storm, a door that wouldn’t open, and a darkened chamber with a small point of light. In this elaborate system, the products of Austrian industry—the purported content of the exhibition—were nowhere to found. They were discreetly hidden behind the opposite wall, visible through the glass silhouette of a door, arranged within their own totally closed environment. The icon of the exhibition was another mass-produced product for changing perception: small white-and-red spectacles that were produced every 15 seconds by a plastic-forming machine, free for visitors to wear, take with them, or throw away, littering the floors like so many advertisements. Taking possession here echoed the logic of “Alles ist Architektur,” a series of discontinuous experiences were linked metonymically as a series of parallel passageways, a set of adjacent concepts associated with a sign for “Austria,” that nonetheless continually deferred an encounter with the Austrian product.
Taking possession of the object meets at this point with another reading of the same sequence, one couched by Hollein in loosely psychoanalytic terms, one that spoke less to the problem of information and more to the manifesto’s ambition to grasp the immersive environment as a kind architectural desublimation. The introduction to the *Alles ist Architektur* issue was brief:

Some of our readers think that the Unger issue has been too dry, others found in the issue on the occasion of the central association’s anniversary too much text and too little illustration. This time there is less to read and more pictures to contemplate. Immersed in observation, let your fantasies [Phantasien] work and your associations run free. Wherever you look, it is all architecture and all are architects.²⁸⁷

The invocation of fantasy at work touches on the role of the imaginary in sustaining the coherence of the subject, suggesting that “Alles ist Architektur” itself can be read as an attempt to produce new mirages of coherence at a moment when a stable identity for architecture had begun to give way. The text envisions an even more total claim, placing the horizon of architecture so wide that the practice of architecture would have to become infinitely connective and associative in order to sustain it. This provocation circles around the motif of extension as release, implying the on-rush of content that had been previously sublimated. The text again invokes the collapse of “traditional definitions,” proposing a release from the definition of “architecture” as an “artificial transformation …accomplished by means of building.”²⁸⁸ The means of determining the environment had changed radically, as demonstrated most conspicuously by developments in military strategy, space exploration, and communications technologies. “Today the environment as a whole is the goal of our activities—and all the media of its determination: TV or

²⁸⁸ Hollein, “Everything is Architecture,” 238.
artificial climate, transportation or clothing, telecommunication or shelter.”  

Architecture secures its difference from building by creating an image of itself through new means of “environmental determination,” becoming an armature for the “extension of the human sphere.”

This extension accompanies the repetition of bodies at various points in the image sequence, almost exclusively female: a Bridgestone advertisement in which a giant woman reaches down to caress a car, the enormous sculpture Hon (She) by Niki de Saint-Phalle, Friedensreich Hundertwasser’s naked torso during a “demonstration against contemporary architecture,” Tom Wesselman’s “Great American Nude (number 81),” another scantily clad woman out of whose laughing mouth come the words “alles ist architektur,” the conical silhouette of a woman covered in fur taken from painting by Max Ernst, and a computer-generated image of a nude, developed for Bell Laboratories by Leon D. Harmon and Ken C. Knowlton. The rhyming of photographs and drawings in Hollein and Pichler’s early work manipulated a sense of vastly indeterminate scale that suppressed any indication of human presence. The desumblimating argument in “Alles” invokes a shift toward this absent subject: as the built object loses its central position, “Man” invades its space. “These far developed possibilities lead us to think about the psychic possibilities of determinations of environments. After shedding the need of any necessity of a physical shelter at all, a new freedom can be sensed. Man will now be at the center of the creation of an individual environment.”

289 Hollein, “Everything is Architecture,” 239.
290 Ibid.
291 These were some of the earliest computer generated images. See Jasja Reichardt, The Computer in Art (New York: Van Nostrand Reinhold, 1971).
292 Hollein, “Everything is Architecture,” 239.
space. This new freedom erupts from the disappearance of building, a disappearance that is not inevitable, but a negative injunction formulated and staged by means of montage, by repeating the word *architecture* in relation to a series of objects and images that would appear to have nothing to do with building. Just as “Alles” triumphanty called for the point at which architecture was freed of its relationship to shelter in order to leave behind the stubborn need for protection, the body reasserted itself in a charged manner. And yet, as the subject “Man” returns to the center, the images that allow themselves to be read as buildings come to circle around a repetition of female bodies.\(^{293}\)

Between these images one begins to pick up an alternate repetition present in the issue, one that shifts from the image of the body to those apparatuses the enable its extension. Citing the “telephone booth,” the “helmets of jet pilots,” and the “development of space capsules and space suits,” the expansion of the human environment paradoxically proceeds by becoming smaller, departing from a “building of minimal size extended into global dimensions” to approach the contours of the subject.\(^{294}\) The dynamic of extension and contraction stretches the paradoxically inclusive logic of the manifesto, which expands architecture to be identified with all things while regrounding this manifold in one thing: architecture. This movement can be tracked though an ambivalent set of collisions within the montage. The portrait of Lyndon B. Johnson assembled as an oil refinery—taken from the American activist magazine *Ramparts*—harks back to the

---

293 This is most conspicuous in Hollein’s inclusion of Nikki de Saint-Phalle’s *Hon* (She), a construction realized in collaboration with Jean Tinguely, at the Moderna Museet in Stockholm in 1966, and represented in the montage with a sectional diagram showing the disposition of its internal spaces. Saint-Phalle’s ambiguous play between the registers of sculpture, building, and installation, figured the return to a maternal space of the womb in comically literal terms. Inside the darkened spaces one found a complex mixture of possibilities: a children’s slide, a “lover’s nest,” an exhibition of forged masterpieces, a cinema, a bar (complete with a machine for destroying the bottles it produced), an aquarium, a planetarium, and a panoramic viewing platform (equipped with working telephones housed in the navel).

preoccupation with the symbolization of structures for Kommunikationen and Versorgung.\textsuperscript{295} Normally translated as “supply,” in German Versorgung can refer to physical infrastructure or aspects of it, such as electrical wiring, but also to support, maintenance, feeding, and care. The grotesque physiognomy of Johnson as refinery was followed by a series of fashion models wearing sunglasses, the most extreme of their implacable mirrored exteriors recalling the visored helmets of jet pilots. Expansion and contraction also informs the rhythm of the montage, where a small image of Che Guevara is followed by a full-page sketch of an upraised fist as “skyscraper,” itself followed by a pill reproduced at its own diminutive scale and a full-page image of a woman reclining in laughter on an ornate settee. One of the final sequences shows a set of commemorative stamps bearing an astronaut tethered to his capsule, along with a NASA diagram of the supply systems that support his life, and a field of binary code passed back to earth from a satellite mission to Mars. Gone are the aircraft carriers, drilling platforms, and rockets. The more total desire to define the environment implies the shift to a paradoxical sense of scale, one that expands to encompass more and more as it physically gets smaller.\textsuperscript{296} Described as “the most perfect architecture,” the space suit “supplies a more complete control over climatisation, food supply, feces-recycling, in extreme conditions.”\textsuperscript{297} The “totally enclosed environment” is reconceived: barely space at all, but the most complex of support apparatuses protecting the subject from a hostile world only inches away.

\textsuperscript{295} Adding a further touch of dark humor to the sequence in the caricature Johnson’s nose is lifted into place by Brown & Root, a important military-industrial contractor and key campaign contributor to Johnson’s election campaigns. The image was taken from the American little magazine Ramparts, known for its politically radical publishing in the context of the civil rights movement and the Vietnam War, indicating that Hollein and Pichler were alert to a spectrum the spanned popular magazines, the fashion press, and alternative, free-press periodicals.

\textsuperscript{296} Following the schema outlined by Wigley in “Whatever Happened to Total Design,” here the claim for explosion appears to operate through implosion. See note 249.

\textsuperscript{297} Hollein, “Alles ist Architektur,” 24.
The montage also linked the capsule diagram in a continuum with other liminal envelopes, its dilating rhythm manifest in an image of a soft crumpled form emerging from a window to expand into a sphere. The same form reappears on the next page as if it had emerged ready-made from a Svobodair spray can, a slightly flaccid sphere sitting out in the space of the street without any apparent support. Both images document Haus-Rucker Co.’s 1967 project “Ballon für Zwei,” a pneumatically and electrically supported “capsule” that made public display of its sudden extrusion from a hidden interior. Like the capsule, its energy supply or Versorgung was hidden behind its back, drawing the interior of the building out onto the façade. Ballon für Zwei appears to literalize the simul-station described by Johansen, the projection of the subject into and through the satellite image appears as an apparatus for literally projecting the subject out of the building, at once altering the experience of the occupants—who perceive the world through the low-definition translucent, patterned, plastic membrane—and functioning as an urban signal to passers by, starkly announcing the transformation of energies formerly hidden within.298 If such a projection aligned architecture with the extension of the human sphere, the subject at the center of these ephemeral and bodily scaled spaces was a more literally dependent one, relying on the flows of air, nutrition, and electricity that kept such apparatuses functioning. Isolation has been rendered as intimacy between two, and support has been transferred to the altered atmospheric, acoustic, and haptic qualities of the isolation chamber itself.299 This more total dependence is paradoxically hailed as

298 In this case the literal support was a tubular metal structure on wheels to which was attached a vacuum cleaner whose energy kept the bubble inflated. The mechanism required eight people to operate it from within the apartment, also serving as its counterweight. For a description see: Heinrich Klotz, Haus-Rucker-Co.: 1967 bis 1983 (Braunschweig, Germany: Vierweg, 1984), 66.
299 “Spaces will more consciously have haptic, optic, and acoustic properties, and contain informational effects while directly expressing emotional needs.” Hollein, “Everything Is Architecture,” 239.
liberation. Hollein goes on to envisage architecture’s disappearance even further, imagining “nonmaterial means” of environmental determination including the use of lasers, temperature, smell, chemicals, and drugs to control everything from bodily temperature and psychological perception.\textsuperscript{300} Here supply shifts registers, from the literal dependence on the \textit{Versorgung} of life-supporting functions to the psychological and emotional \textit{Versorgung}, a support system that allows a subject to navigate the world via the medium of his or her senses.\textsuperscript{301} Architecture, consequently, merges with the subject’s psychic independence, testing one’s ability to maintain a distance from the assaults that the nervous system must repel in order to maintain coherence in relation to the onslaught of the external world.

Somewhere between the vectors of explosive extension and instantaneous reassembly were a series of other apparatuses explored by Hollein and Pichler. Associated with immobilization and paralysis, this darker, recurring motif appears in Hollein and Pichler’s proposal for a \textit{Minimalumwelt} (Minimal Environment) at the 1965 Paris Biennial. Rethinking the typology of the telephone booth, they proposed it as “the representation of a new architecture, enormously extended through communications media” and proposed that “the existing telephone booth should be transformed into an autarchic unit, through the installation of various furnishings necessary to physical and psychic life.”\textsuperscript{302} The booth was to provide nutrition, feces removal, bodily function

\textsuperscript{300} Ibid.
\textsuperscript{301} Hollein described his “Environment Pill” in terms of those medications taken to control agoraphobia or claustrophobia. Recognizing that such phobias made as powerful an impact on the experience of space as more traditionally tectonic factors, the pill came to represent a means of controlling architectural experience through the chemical alteration of perception. Interview with Hollein, August 18, 2006. For an examination of the architectural interest in LSD during these years, see Felicity D. Scott, “Acid Visions,” \textit{Grey Room} 23 (April 2006), 22-39.
\textsuperscript{302} Hans Hollein, “Neue Konzeptionen aus Wien; Fragmentarische Anmerkungen eines Beteiligen,” \textit{Bau} 2/3 (1969) 15.
controls, air conditioning, as well as light, sound, Television, taste, smell, mood conditioning, simulated situations, and connections with other units. Here, the apparatus appears with extreme ambivalence, the promise of projection and extension accorded to the subject was itself highly reminiscent of the operant conditioning chambers developed by the experimental psychologist B.F. Skinner, in which immobilized human and animal subjects served as a screen for the projection of a range of sensory stimuli. Pichler’s Prototypes (1966-67) further developed such an unsettling vision of such “extensions of man,” in which the mediatic supplementation of consciousness was rendered as a prosthetic merger of object and human body, whether in the form of a head-mounted telecommunications apparatus (Kleiner Raum, 1967), or as a transparent, pneumatic chamber recycling its own air in endless cycles of inflation and deflation [Fig. 2.28].

Hand crafted, yet appearing to be made of mass-produced Pop materials such as vacuum formed plastic, stainless steel, and transparent PVC, the fascination with autarchic independence appeared as a kind of terminal condition, seductively camouflaged with the look and feel of futuristic mass-produced commodities. Toward the end of the decade, Pichler’s friend and former Wiener Gruppe member Oswald Wiener developed a gruesome scenario around precisely such dynamics of extension and immobilization. In contrast to the optimistic “instantaneous reassembly” into an “organic whole,” envisioned by McLuhan, Wiener elaborated a scenario that cast Pichler’s prototypes as mechanisms of captivation, initiating a process in which a prosthetic feedback apparatus known as the “bio-adapter,” progressively anaesthetized and amputated the limbs of subject.303

If nothing quite as extreme as Wiener’s “bio-adapter” appears in Hollein’s manifesto, echoes of such a scenario appear towards the end of “Alles ist Architektur.” The sudden expansion of Balloon für Zwei is followed by the illusory, endless extension of a mirrored interior by Lucas Samaras, followed by Arnulf Rainer’s image of dark scribbles, obliterating the stable outline of Vienna’s Votivkirche (1879). This disappearance of architecture continues on the next page into a messy field in which the littered streets of New York City, paralyzed by a garbage strike, appear above the littered surfaces of an unspecified 1965 Materialaktion performance by Otto Mühl, through which the limbs of immobile, supine performers protrude [Fig. 2.29]. Here, the ecstatic possibilities foreseen in the ability to make architecture more perfect and total by becoming more miniature, ephemeral, or disappearing suggests a link to impulses that are destructive, even self-destructive. This ambivalent relation is suggested by a vestigial linguistic rhyme that connects structures that maintain the subject to wider mechanisms of social integration: the Materialaktion of Mühl and the “Streik der Mullabfuhr” (garbage strike). Here the mirage of individual liberation comes unhinged, as desublimation threatens a symbolic structure of containment and coherence with disintegration and collapse.

The declaration that “everything is architecture,” may be indelibly associated with Hollein, but as a rhetorical maneuver it echoed similar formulations during these years, from Joseph Beuys’s slogan Jedes Mensch ein Kunstler in 1972 to Jean-Paul Sartre’s short-lived broadsheet Tout!. What distinguishes “Alles ist Architektur” is the

---

304 Beuys’ Slogan is hard to date precisely, but was widely disseminated in the context of his participation in Documenta V in 1972. The broadsheet Tout!, sponsored by Sartre, was launched in 1970 and lasted until 1971. Scholars have noted that this formula has appeared before in architectural culture, notably Le Corbusier’s 1931 claim that “Tout est Architecture.” Le Corbusier, “Esprit et Verité” (1931), in French
manner in which this expansive claim was formulated through a logic of montage, serving both as a provocation to the discipline’s self-certainty and as a strategy for claiming a wide range of media for architectural thinking. Paying attention to the verbal and graphic arguments of “Alles ist Architektur” allows one to grasp this outburst as a moment of transition, a change in the very terms that could provoke debate: from a concern with the architect’s role as articulator of symbolic legibility towards a fascination for media and its attendant apparatuses, whether devices for “taking possession” of objects and media in a polemical fashion, or for projecting the subject into expanded domains, from long distance communication to interspace travel. The meaning of architecture in such a condition could not longer be envisioned through a single image, but by means of a paratactic, lateral montage—a capability implicitly framed as the creation of significance by linking the dissimilar. Such a condition was one that disrupted previously stable oppositions, one which was paradoxically expanded, but not larger, immediate, yet at a distance, physically intense, yet dematerialized, and sensible, yet invisible. If the series of metonymic linkages through which “Everything” was articulated formulated a new project for architecture, it also traced a set of cracks that threatened its integrity. If for some, the collapse of inherited hierarchies, such as word over image, vision over touch, structure over surface, or center over periphery was experienced as a symptom of cultural degradation, for others it appeared as one of the promising potentials associated with “instantaneous reassembly” instigated by electronic media. Seen from Vienna, a city whose former centrality had been rendered peripheral in the course of the

Film Theory and Criticism 1917–1939, Richard Abel, ed. (Princeton: Princeton University Press, 1996). Yet it might also be noted that the scope of “everything” itself changes with history, not only because the very things that architecture aims to address inevitably change, but because claims to totality themselves differ at different historical moments.
twentieth-century first by the breakdown of empire and then by the violent emergence of Fascism, the dialectic of expansion and collapse must have held a particularly ambiguous resonance. In its oscillation between expansion and extension on the one hand, and paralysis and dependence on the other, “Alles” suggests the ambivalent nature of the Hollein and Pichler’s obsession with such new techno-communicative apparatuses.
Chapter Three: Paris c. 1968

The Rhetoric of Disassembly: The Utopie Group, May 1968, and the Pneumatic Image

In the first instance, we must disassemble the economic, political, social and cultural manifestations of architecture without making a show of it, and in a second movement attempt to penetrate subjective appearances and ideological illusions in order to comprehend architecture’s role and status as the result and product of a society.  

— Utopie, (1968)

“Architecture as a Theoretical Problem” appeared in the pages of *L’architecture d’aujourd’hui* in September of 1968. Spread out over ten pages, the article occupied a surprising amount of space for a group whose output at the time consisted of a pamphlet on contemporary urbanism, an issue of their eponymous magazine, an exhibition on pneumatic architecture, and a handful of designs realized by the architects in the group. The article itself was unusual for *L’architecture d’aujourd’hui*—the largest circulation

---

305 Hubert Tonka, Jean-Paul Jungmann, Jean Aubert (Signed Utopie), “Architecture comme problème théorique,” in *L’Architecture d’aujourd’hui* 139 (September 1968): 81-92. “Architecture comme problème théorique” was an expanded version of “Architecture as a theoretical problem,” published in *Architectural Design* (June 1968) 255. The appearance of the text in *Architectural Design* prior to its expanded form in *L’Architecture d’aujourd’hui* testifies to the important connections between groups in different cities at this moment. The text would be reprinted in pamphlet form as *Des raisons de l’architecture* in early 1969, to address the milieu of the ex-École des Beaux-Arts in the midst of its reorganization. Jean Aubert, Interview with Author, June 25, 2007. Unless otherwise noted all translations are my own. The passage reads:

Nous devrons, dans un premier moment, démonter les manifestations économiques, politiques, sociales et culturelles, de l’architecture sans faire manifeste, dans un deuxième mouvement tenter de pénétrer les apparences subjectives et les illusions idéologiques, dans le but de connaître le rôle et le statut de l’architecture comme issue d’une société ou produit par une société.
commercial architectural magazine of its time—whose editorial stance prided itself on neutrality, seeking more to report on new buildings than to take sides in highly politicized disciplinary debates. The group’s article did not fit that mold. Not only did it avoid including design work by members of the group, it was sharply critical of French architectural culture, densely theoretical, and at 16,000 words, painfully long. The text responded in part to the intellectual climate surrounding Paris’s ex-École National Supérieure des Beaux-Arts (ENSBA), which had been formally dissolved by a vote of the students during the occupation of May and June earlier that year. Emboldened by the success of their action, the students continued to push throughout 1968 and 1969 to bring architectural education under the purview of university, producing a stalemate that was broken only when then Minister of Culture, André Malraux, declared the foundation of a new system composed five Unités Pédagogiques, dividing the school into five groups that were scattered from the traditional center of the Quai Malaquais to the Grand Palais across the river, and to Versailles, south east of Paris.

306 The appearance of Utopie in L’architecture d’aujourd’hui, briefly in the December 1967 and then again in September 1968, occurred during the editorship of Pierre Emery, a period of instability at the magazine following the departure of long-time editor Alexandre Persitz in 1964, and in the wake of the death of founder André Bloc in 1966. On Emery’s short tenure, see: Rémi Baudoui, “D’hier à aujourd’hui,” L’architecture d’aujourd’hui 262 (December 1990), 74.

307 The text notes that, while not a part of the working commissions that formed during the occupations, the writing responded to the tracts published at the time. They note: “étant retenus ailleurs pendant ces mois, nous n’avons donc malheureusement pas pu tenir compte des thèses discutés en ces lieux. Nous avons simplement retenu ici que le contenu de quelques tracts et slogans.” Utopie, “Architecture comme problème théorique,” 81.

308 The Unités Pédagogiques were announced by ministerial decree on December 6, 1968. Architectural education remained under the purview of the ministry of culture rather than under the university system. The initial five created in Paris and its surroundings, would quickly grow to eight, driven by resistance amongst students and teachers to join the initial structure created by the ministry. While no longer extant, these formations laid the groundwork for the present schools of architecture in Paris. The best period overview in English remains Martin Pawley and Bernard Tschumi’s “The Beaux-Arts since 1968,” Architectural Design (September 1971) 533-566. More recently Jean-Louis Violeau has charted the period that lead to the closure of the school and the re-organization of its pedagogy in Les Architectes et mai 68 (Paris: Editions Recherche, 2005).
It is against the background of the struggles surrounding the end of the Beaux-Arts, a context in which institutions were suspended between dissolution and re-foundation, that I will locate the group’s theoretical work and the role that a reformulated montage practice played within it. Utopie had begun to coalesce in 1966-67 within the Tony Garnier seminar on urbanism—a course organized between the ENSBA and the Institut d’Urbanisme de Paris—where the architects Jean Aubert, Jean-Paul Jungmann, and Antoine Stinco come into contact with Hubert Tonka. Yet Utopie was never fully within any one school, nor composed of members with a common educational background. Rather the group formed between disciplines, drawing together architects, landscape architects, sociologists, urban planners. In addition to Aubert, Jungmann, Tonka, and Stinco, the group included Isabelle Auricoste, a landscape architect from the Ecole Nationale Supérieure du Paysage de Versailles; Jean Baudrillard and René Lourau, assistants to Lefebvre in the department of sociology at Nanterre, and the Parisian journalist Catherine Cot. The article was part of the group’s effort to work out what a “theoretical practice” might mean for architects at such a moment—a formulation drawn from the writings of Louis Althusser—a project that aimed to hold together intellectual work on contemporary media, experiments with architectural structures, and the development of a different theoretical vocabulary for architecture and urbanism. Laid out in parallel columns of text and image, the article was both theoretically dense and

---

309 The result of this initial encounter between Hubert Tonka, Jean Aubert, and Antoine Stinco was *Propos sur le Logis* (Paris: ENSBA, 1966). Tonka, an assistant to Henri Lefebvre at the Institut d’Urbanisme, had been drawn into the orbit of the ENSBA in part by Lefebvre’s participation in the meetings of the school’s *Comités de reforme* in the mid-1960s. Tonka also joined the editorial group that radicalized the ENSBA’s student journal *Melpomène*—rebaptized as *Melp!*—for two issues in 1966. Organized by Max Querrien, the Comités de reforme were meetings of faculty, students, and intellectuals which began in the mid 1960s to develop ideas for the reform of Beaux-Arts education. See Max Querrien, *Pour une politique de l’architecture: témoignage d’un acteur, 1960-1990*, ed. Jean-Louis Violeau, (Paris: Moniteur, 2008).

310 The group was drawing concepts such as social practice and theoretical practice from Althusser’s *Pour Marx*, (Paris: Maspéro, 1965).
surprisingly visual, a structure in which writing collided with a sequence of montages, whose elements were drawn from advertising and satirical newspapers, science magazines and the real estate press [Fig. 3.1]. The article provides a point of entry into the longer development of the group’s theoretical work and its close relationship to the making of such visual-verbal montages during these years. What appears particularly important to the way in which montage was reframed, was the shift highlighted by the group’s recourse to the verb *démonter* in “Architecture as a Theoretical Problem.”

Describing the challenges faced by a new theorization of architecture, they wrote:

> We must, in the first instance… dismantle the economic, political, social and cultural manifestations of architecture, and in a second movement attempt to penetrate subjective appearances and ideological illusions in order to comprehend architecture’s role and status as the result and product of a society.⁴¹¹

The verb *démonter* lends itself to a range of potential readings. Something that is *démonté* has been taken down, like an object removed from its case, or even more violently, like a rider suddenly dismounted from a horse. *Démontage* equally recalls the broader circulation of the prefix dé in artistic and intellectual culture in France at this moment, such as Raymond Hains’s use of *décollage* to describe his practice of exhibiting torn billboards and advertisements from Parisian hoardings, or the Situationist International’s use of the term *détournement* to theorize the strategic misappropriation of everyday materials. Yet *démonter* appears distinct from these senses. Neither a conspicuous tearing of image’s surface, nor a deliberate program of misuse, it concerns the intricate task of dismantling and disassembly, suggesting ideology itself as a type of mechanism or structure that could be arrested and understood by taking it apart. Such a

---

concept was also implicit in the group’s preoccupation with forms of demountable pneumatic architecture, processes that allowed them to think construction in reverse.

The effort to dismantle what they called “the manifestations of architecture” was also an effort to theorize architecture differently, one that required dislodging certain definitions established within the lexicon of the former Beaux-Arts school. Architecture, they argued, could be seen neither as “oeuvre” (work of art), as “creation,” nor as “synthesis.” Yet nor did it suffice, as certain militant ex-Beaux-Arts slogans would have it, to define architecture as “a service to the people” or simply as “a political act.”

Disassembling the “manifestations” of architecture meant understanding architecture’s status as a “product,” whether more generally, as a privileged type of social production, or more narrowly, as a specific commodity. What they proposed was a “conceptual apparatus” (*appareil conceptuel*) that sought to comprehend “the moments of transformation of a commodity called architecture in the course of its production at the heart of French society.”

Production referred not only to the physical fabrication of objects, but to a more complex process in which architecture was itself increasingly “mediatized by systems of value, culture, and aesthetic economy.” Deciphering mass imagery and mass discourse by taking them apart was an important aspect of this theoretical process, one that sought to come to grips with a changing practice of

---

312 Utopie, “L’architecture comme problème théorique,” 83.
313 Ibid., 83. The reference to mediatization can be read in terms of mass media, but also in term of Althusser’s notion mediation. Being neither fully independent of economic and political forces, nor entirely determined by these, cultural production was framed as an important relay among the ideological apparatuses ensuring the reproduction of productive forces.
314 The reference to mediatization can be read in terms of mass media, but also in term of Althusser’s notion mediation. Being neither fully independent of economic and political forces, nor entirely determined by these, cultural production was framed as an important relay among the ideological apparatuses ensuring the reproduction of productive forces. Utopie, “L’architecture comme problème théorique,” 81. The passage reads:

L’architecture et son produit ne réfèrent pas directement ou immédiatement du mode de production, elle est médiatisée par les systèmes de valeurs, par la culture, par l'économie esthétique qui eux sont resultants directes du mode de production…
architecture in a postwar consumer society that was itself increasingly ephemeral and uncertain. At the same time, a rhetoric of disassembly supported an architectural interpretation of lightweight, demountable construction as appropriate to the advanced mechanization and accelerated urban transformations that also characterized the age.

The group’s interest in forms of disassembly had close ties to a particular segment of the Ecole de Beaux Arts: the studio of Edouard Albert, where Aubert, Jungmann, and Stinco met as students. A pioneer in steel construction, Albert’s teaching drew together a particular twentieth-century lineage of lightweight architecture, including unorthodox structures like the Tour Croulebarbe (1961), a tower constructed from an innovative, lightweight tubular steel structure, which was the first skyscraper devoted to housing in Paris. [Fig. 3.2] The Albert atelier included hundreds of students, and commonly invited guests, including such well-known figures such as Jean Prouvé. One of the more liberal aspects of the Beaux-Arts system was that it allowed students to elect outside professors, an opportunity that Aubert, Jungmann, and Stinco took to invite David-Georges Emmerich—a specialist in tensile construction and demountable building systems—to help advise their thesis projects.315 Engaging the technical rationality of mass production, the rhetoric of disassembly also expressed a reticence regarding foundation, looking to retool architecture in the face of an uncertainty about its permanence, making temporal limitation and a logic of disassembly into central features of the architectural design.

problem. If Aubert, Jungmann, and Stinco designed systems for building with textiles, steel, and air, it was a project that also looked to decipher architecture’s place amid the changing urban landscape of Paris. In this sense, the rhetoric of démontage provides a new turn on the longstanding theme of the ephemeral, which, from the criticism of Charles Baudelaire through to Surrealism and Situationism, represented modernity as an encounter with the radical uncertainty of the future, an uncertainty perceived both in the commodity and in the transformation of urban space. If Utopie worked this legacy further, they also did so by engaging in a more concrete scrutiny of the suburban policies put in place by the French state following WWII, an attempt to grasp in their “totality” the strategies motivating new discourses and practices of urbanism.316

An echo of the tensions surrounding such lightweight technical construction appeared in the first issue of *Utopie*, in Jean Aubert’s image-text “Devenir Surannée” (Becoming Outmoded). Cutting and pasting photographs and text fragments from a variety of magazines and books, Aubert configured a series of visual “tables” that aimed to map out the opposition between the ephemeral and the durable in contemporary architecture. Aubert assembled something of a visual history of architectural processes of ephemeralization, one that indirectly picked up—via the work of figures such as Cedric Price and Archigram, clippings of whose work appeared prominently—on the Independent Group’s theorization of expendability a decade earlier.317 Alongside this architectural lineage was another source of thinking about expendability, in the form of a

---


text by Jean Baudrillard, whose own analyses of consumer society were informed by theories of obsolescence developed by sociologists such as Vance Packard and David Riesman. Aubert diagrammatically aligns such obsolescence with ideas of ephemeral architecture by cutting and pasting image and text so as to form a series of tables, charting a thumbnail visual history of the relationship between demountable construction and mass-produced commodities. Next to a diagram of the decreasing lifespan of consumer goods, the Crystal Palace appears to undergo a parallel dismantling, passing from a view of the completed exhibition hall, to an image of its “montage,” to a detail of the attachment system used in its beams [Fig. 3.3]. From the Crystal Palace, to the Galleries des Machines and the Eiffel Tower of the 1889 World’s Fair, these incubators of nineteenth-century mass culture were for Aubert a case of architecture exploiting “techniques of iron construction that had attained a degree of perfection since lost.” From the nineteenth century, Aubert shifts to Cedric Price’s Fun Palace and Warren Chalk’s Plug-In capsules, situating these alongside the temporary pavilions of contemporary World’s Fairs, hoardings covering Parisian fashion boutiques, and Buckminster Fuller’s emergency shelters. Aubert’s image collection radically edits out the 1920s, moving directly from late nineteenth century iron construction to the latest in temporary buildings, a series of linkages that narrated a different history of architecture’s relationship to modernization.

Aubert’s series of historical tables were contrasted with a series of contemporary Brutalist buildings then at the height of fashion, from Henri Bernard’s recently completed

---


Maison de la Radio in Paris (1963), to Ahrends, Burton, and Koralek’s Chichester Theological College (1967), and the textured Brutalist concrete of Paul Rudolph’s recently completed Endo Laboratories (1964) and Yale Art and Architecture Building (1963). [Fig. 3.4] Marked out under the heading “durable,” this collection of emphatically Brutalist buildings was arrayed around a very different type of reference, a grainy image of the recently demolished Gare Montparnasse. The sharp contrast was surrounded by texts in the margins that formed an echo chamber of more ephemeral cities—not only Emmerich’s vision in “ Immutable Obstacles,” but Fernand Léger’s plans for polychromatic projections in Moscow and Paris, and Jean Baraute’s science fiction city of Phoebis. Here ephemeral, demountable mass architecture appeared as an alternative to the New Brutalism’s aesthetics of material and mass—a strategically placed fragment of text insinuated that such heaviness in architecture was but a prelude to “the long and difficult demolition of buildings built for eternity.” Facing this field of demolition was an icon of ancient pyramids at Chéfren together with clippings from the magazine *L’Immobilier* about a looming Parisian real estate crisis. Speculating about the surplus of suburban apartments remaining on the market, the author warns not of demolition but of the danger of becoming démodé.\(^{320}\) The fragments were juxtaposed with Jean-Claude Bernard’s 1964 *Design for a Total-City*, bringing speculative real estate development into collision with a project that epitomized the height of recent fashions within the Ecole des Beaux-Arts.\(^{321}\) The monumentality of Bernard’s *Design for a Total City*...
City appears entirely out of step with the accelerating changes of urban consumer society, whether functional obsolescence and replanning, as in the case of the Gare Montparnasse, or the stylistic obsolescence imputed in the real estate advertisements. In such a context, disassembly appeared less as a flight from mass society than as a desire to escape from weight and bulk, one that looked to incorporate temporal limitation and disassembly as mechanisms for determining architecture within a society dominated by increasingly accelerated cycles of outmodedness. Aubert’s collection suggests the rise of demountable systems as a potential control mechanism in relation to the changes in consumer society; captioning his images of the Crystal Palace “a demountable construction, consequently ephemeral: its obsolescence can be determined.”

The theme of the ephemeral had also been central to the writings of David-Georges Emmerich, a fragment of whose 1966 manifesto “Immutable Obstacles,” (“Obstacles Immuables”) appeared on the same page. The tension between demolition and disassembly animated Emmerich’s conception of “construction éphémère” (ephemeral construction), which advocated lightweight, industrialized components modeled on the rapid production and shortened lifespan of consumer goods, a model which, he argued, applied to architecture, could provide faster, more economical, and more flexible housing for the greatest number. The manifesto contains Emmerich’s call for the “free development” of ephemeral construction; unconstrained by “rules or norms.” “Ephemerical Construction” combined not only structures that were light and easy to disassemble

---

322 Aubert, “Devenir Suranné,” 93.  
(“légères et facilement démontables”) but a grander vision of transformation.\textsuperscript{324} The scope of Emmerich’s vision can be seen in an article he published in Architectural Design the same year.\textsuperscript{325} [Fig. 3.5] Tackling the problem of the automobile city, Emmerich laid out his vision for the “macadam civilization” not by redesigning the city but by redesigning the car. Contrasting the chassis of a traditional automobile to the lightweight strut system of his “Deltomobile,” Emmerich claimed the advantage of a design that was not only “silent, odorless, and light” but of an exceptional variability. “By removing one strut,” he wrote, “the configuration can be changed…forming a smaller deltagon. The operation can be repeated, continuing until the polyhedron disappears completely.”\textsuperscript{326} The rhetoric of disassembly here appears in something like a quasi-cinematic mode, a sequence of frames in which Emmerich’s apparatus performs its own disassembly into a set of component parts. With the Deltomobile, demountability appeared as a disappearing act, as Emmerich himself stated: “it is easier to conjure away the car than a building.”\textsuperscript{327}

Disassembly was not limited to taking apart, however. As the title “Deltomobiles into Houses” implied, the vehicle’s struts could equally be used for the construction of space frames and dome structures of varying dimensions. The demountable and transformable Deltomobile, Emmerich claimed, was not only a remedy for the city, but a product that ultimately aimed to retool industrial production itself, a demonstration of how “the conflict between the automobile and building industries could be replaced by a

\textsuperscript{326} Emmerich, “Deltomobiles into Houses,” 412.
\textsuperscript{327} Ibid.
harmony of purpose.” In the fragment clipped by Aubert, Emmerich went so far as to humorously propose the creation of a “Centre Scientifique de la Démolition des Bâtiments”—a play on the Centre Scientifique et Technique du Bâtiment. In contrast to the latter—the French organization devoted to the research, development, and approval of new materials for use in construction—the task of the Centre Scientifique de la Démolition des Batiments would be to render “ephemeral” buildings constructed under “the regime of durability.”

A counter-system in nuce, for Emmerich ephemeral construction opposed the “decrepit durability” of buildings, but even more so of the bureaucratic processes of “agrément,” through which construction materials were normalized for use in construction. Emmerich was intimately familiar with such a system, having patented numerous lightweight structural systems that were denied approval for general use in construction. Not content with the object alone, the discourse of ephemeral construction aimed to dismantle and overthrow the apparatus that governed durability itself.

Issues of expendability and lightweight industrialized construction were not untouched by the “explosion” of the ENSBA that manifested itself in 1968, indeed they occupied a precarious and even controversial position at the time. The events marked a rift not only between older and younger generations, nor solely between left and right, but

328 Ibid.
330 Emmerich’s experience with the Centre Technique Industriel de Construction Métallique is described in Laurence Senéchal, “Biographie,” 78. Emmerich’s “Immutable Obstacles” contains an explicit attack that equated the process of “agrément” with Fascism, highlighting the politically charged subtext of technical arguments during these years. Emmerich had had direct experience with the rise of Fascist regimes during WWII, having been deported to a concentration camp during the Second World War.

“Les techniciens qui l’ont les fonctions et les moyens de chercher des techniques nouvelles répondant en priorité au problème pour le plus grand nombre ne trouvent rien d’autre que de normaliser ce qui est déjà fondamentalement mauvais: de rendre durable dans un fatras de règles ce qui pourrait être ramasser des divers “Mein Kampf” d’un architecte périmée. L’agrément c’est la caducée des caducs.”
also among the various leftist factions within the school, a climate in which the tensions between architectural experimentation and militant politics surfaced violently. The architects of Utopie found themselves with a foot in both camps. Jean Aubert recalled being targeted by a Maoist student group espousing direct action, who organized a general assembly at the ex-ENSBA with the mocking title: “Are we fighting for inflatables?” Jungmann recalled that books by David-Georges Emmerich were burned in the school’s courtyard. Whether apocryphal or not, a tract from the period, signed by the “Comité Vide Ordures” (Garbage Removal Committee) and entitled “Smash the Prizes; Shit on the Utopias,” captures even more succinctly the violent bodily rhetoric of the period’s militant discourse. [Fig. 3.6] It was precisely this grand industrial vision that raised the ire of the Garbage Removal Committee following the wake of the Beaux-Arts collapse. Juxtaposing an image of Emmerich’s experimental constructions with detourned comics of captains of industry, the pamphlet declared: “We shit on the content… we puke on the reasoning. This reasoning that … seeks to make us the guard dogs of capitalism, useful to [Emmerich]…as soon as he is able to manufacture housing as if it were hair curlers.”

331 While a more extensive history of these tensions is beyond the scope of this chapter, it is worth noting that student protests can be traced back to the early 1960s. The first “éclatement,” or break up, of the school occurred in 1966, resulting in the division of the school into three separate pedagogical groups. The third, known as “Groupe C,” was dominated by leftist student groupings of various political leanings, groups that were at the time distinct from the Communist professors and students within the school. This political disassembly was also spatial, as Groupe C moved from the ENSBA building at the Quai Malaquais to the Grand Palais on the right bank. Protagonists within Groupe C transformed the student magazine Melpomène into the short-lived broadsheet Melp!. Printed on stapled newsprints sheets, Melp!’s open format and wide-range of contents sought to bring together a wide cross-section of “gauchistes” at the school. See Jean-Louis Violeau, Les Architectes et mai 68, and “Utopie in Acts,” The Inflatable Moment.
334 “Cassons les Prix; Chions sur les Utopies” undated leaflet, Utopie Archive, Theil-Rabier.
335 Ibid.
Hair curlers, like plastic sunglasses and vinyl rain coats, were precisely the type of commodities flooding French markets during these years, anything but neutral, they emblematized the disposable values associated with the consumer-focused economy of France’s postwar boom. Such objects turn up with considerable frequency in the montages of *Utopie*, in particular within Hubert Tonka and René Lourau’s contribution to the first issue “La Répression.”\(^{336}\) Tonka and Lourau’s contribution takes an entirely different form than that of Aubert, the sheer density of material on the page challenges any conventional separation of text and illustration. Operating between the registers of reading and seeing, démontage appears as part of an effort to dismantle and reassemble forms of legibility found in architectural and mass culture publications of the time. The spreads were assembled from the contrasts between several different types of material: advertisements, slogans, headlines and fragments clipped from popular magazines and newspapers, photographs of housing complexes and sparsely populated streets, as well as more regular blocks reserved for columns of text. The columns of text were the only thing on the page whose indication of origin was cited, they came from an obscure journal edited by the Parisian municipal police named *Liaisons*, which detailed a range of new initiatives in urban policing at the time.\(^{337}\) [Fig. 3.7] The group described the dense combination of word and image as a type of “écriture.”\(^{338}\) The invocation of *écriture* was key to structuralist criticism during these years, and suggests that the various fragments of text and image were assembled with an eye to their semiotic status.\(^{339}\) Démontage

---

\(^{337}\) The texts were taken from *Liaisons: bulletin d’information de la préfecture de la Police*.
\(^{338}\) Hubert Tonka, “Court essai reflexe sur les fragments d’un urbanisme,” *Utopie* 1 (1967): 64-90; and Isabelle Auricoste, Interview with the author October, 7 2007.
\(^{339}\) Members of the group were attending the seminars of Roland Barthes at the École des Hautes Études en Sciences Sociales during these years. Hubert Tonka and Isabelle Auricoste; interviews with the author June
appears here as a type of hybrid image-writing, defying the logic of a unified “author,” such pages were literally realized by more than one person at a time, and were congruent with Utopie’s emphasis on group production. More profoundly, they implied a process of meaning production skeptical of individual creation, and which explored, by contrast, the effects produced by creating new relationships between pre-existing elements of mass communication.

Before further interrogating how such démontage might be read in relation to contemporaneous semiological theories of the image, it is also important to emphasize how the organization of such spreads related to the artifact’s particular mode of manufacture. It is not insignificant that the rise of such layered montages in architectural culture appeared at a moment when a new set of technological apparatuses became increasingly central to the way in which architecture’s image was assembled, reproduced, and disseminated. Utopie was produced by means of Offset Lithographic printing, a technique that became increasingly accessible as a retail service from the mid-to-late 1950s onwards, offering a cheap and rapid alternative to more traditional industrial letterpress. The group assembled each page in paste-up form, delivering these to the printer for reproduction. Interpreting the paste-up through the lens of montage offers a way of interpreting how Utopie sought to produce meaning by giving a particular order to the more flexible and deskilled apparatus characteristic of offset lithographic production. The few surviving paste-ups provide an intriguing window onto the construction of the

---

*20, 2007 and October 7, 2007, respectively. The point was also stressed by Jean-Paul Jungmann, Interview with author, June 22, 2007.*

*340 When asked where the paste-ups for the magazine were actually prepared, group members provided differing answers. Jean-Paul Jungmann recalls that the first issue was prepared in the publisher’s basement. Jean-Paul Jungmann, Interview with the author, June 2006. Isabelle Auricoste recalls that they were prepared in the different apartments in which they were living at the time. Isabelle Auricoste, Interview with author, October 7, 2007.*
image. [Fig. 3.8] The cutting and pasting of images into strips was organized in two layers. Material to be reproduced in black and white was captured on one screen and material to include the gradations of gray captured on a separate half tone screen. The form of the separation was coordinated around a series of negative spaces in the paste-ups. On the one hand, a strong practical motivation was evident here: separating out and ganging up halftones on a single film that could be composited manually by the printer, was highly economical. Yet there is an important semantic dimension that also informs this difference—the halftone process was reserved for photographs the group had taken in housing complexes on the outskirts of Paris where they were living at the time. Tonka and Lourau used the layering of offset reproduction to create a friction and contrast between the texture of the advertisements, slogans, and logos (in black and white) and the empty spaces reserved for the city, which were printed in positive or negative, and placed in different orientations.

This consciousness of the different optical layers within offset lithography might be further considered in relation to semiotically informed theories of the image as an internally layered field that were developed during the same period. In his landmark 1964 essay, “The Rhetoric of the Image,” Roland Barthes proposed to use structuralist methods to decompose the ideological structure of advertising images.\(^{341}\) Such images, he argued, operated through a series of layered messages, defined by a particular interaction of denotative and connotative signs.\(^{342}\) The connotative, polysemic density of the image, he

---


\(^{342}\) Barthes, “The Rhetoric of the Image,” 35–7. Barthes’s term “spectral analysis” aligned the structural analysis of units of meaning with the scientific decomposition of light into separate wavelengths. The reference also conjures up the idea of a color spectrum at a moment marked by a greater prominence of full-color advertisements in French mass-market periodicals. The alignment of structuralism with optics equally evokes Saussure’s description of semiology as a “general science.” Barthes’s friend Henri Lefebvre
argued, was like “an architecture of signs drawn from a variable depth of lexicons.” Such an “architecture of signs,” he noted, was composed of the interaction of discontinuous connotators—shapes, colors, and surface textures—which were like “erratic blocks (blocs erratiques), at once isolated and mounted into a general scene” by the apparatus of denotation. Barthes’s reference to architecture was not entirely haphazard, his description of connotation and denotation reworked a distinction that Ferdinand de Saussure’s earlier semiology had also explained via an architectural analogy. The essential relationship between syntagmatic combination—signs isolated and mounted into a given sequence,—and paradigmatic selection—the possible substitution of similar, yet absent terms,—was analogous to the way the classical façade assembled contiguous relations, such as those between base, column, capital, and architrave, and principles of selection, the manner in which the choice of a particular order evoked the possible substitution of related orders. With Barthes’ structural analysis something as banal as a tomato sauce advertisement comes to appear as an instance of a more general ideological edifice, a structure in which the dispersive, discontinuous, and erratic connotative density of the image was made to perform denotatively, by being fixed and mounted in place like a façade.

La Répression, by contrast, scrambles such a polarized structure. If the page conveys “démontage” as a falling apart of things, a collapse that challenges our capacity also used the phrase, describing the “analyse spectrale de la réalité urbaine,” as a mode of assessing the changing composition of the new working class in the new towns invented in the 1950s. See: “Les nouveaux ensembles urbains: Un cas concret: Lacq-Mourenx et les problèmes urbains de la nouvelle classe ouvrière,” Revue Française de Sociologie, 1:2 (April-June, 1960): 186-201.
344 Ibid., 50.
345 Barthes published Saussure’s architectural analogy for the syntagmatic/paradigmatic distinction in the same 1964 issue of Communications where “The Rhetoric of the Image” appeared. As Barthes points out, Saussure used the term associative series, which postwar semiologists tended to replace with the term paradigm. Barthes favored the term “system.” Éléments de la sémiologie,” Communications 4, (1964): 115.
to sustain relationships of meaning, it also intensifies the connotative energy of all manner of “liaisons,” from the information chains of urban policing, to images of suspenders, and clip bras, to the patterned facades of industrial buildings, highway clover-leaves, and the cables of movable cranes.

The field of image and text seeks to avoid both the perspectival coherence of the photograph, or the articulation of a figure out of the conjoining and overlapping of fragments of images. Signs are not isolated and mounted so as to reliably denote a particular referent, but rather images detached from disparate sources join together to form block-like arrangements. Language no longer holds the image, “like a vice,” in Barthes’ words, but has become discontinuous, so many “erratic blocks” forming a part of the image’s surface. The frames work to keep image fragments carefully separate but also suture them into contiguous sequences whose sense must be teased out connotatively, by moving between adjacent parts. [Fig. 3.9] A logo of links in a chain, dubbed a “chaîne magique” (magic chain), appears next to the abstract image of a knot—the Woolmark logotype designed in 1966—whose contrasting curves in turn appear next to the black and white silhouette of a woman with a new commodity at the time: aerosol deodorant spray.

This aerosol link carries over in the reference to “combinés,” a term that can refer to the two-piece corselet pictured above, but also to devices such as telephone handsets and receivers. The contiguous circuit continues in the form of arrows pointing in opposite directions, indicating “how to transform the fashions of 65 into 66.” Further down the page, the word “ville,” straddles the seam between

---


347 Designed by Italian graphic designer Francesco Saroglia in Milan in 1964, the logotype reworked the graphic contrasts of op art, and served as an early attempt to globally brand a particular material.
“suspenders that won’t slacken” and the industrial winch of a movable gantry crane, a technology that had been central to the work of Cedric Price during these years. While the visual blocks remain side-by-side, their seams are traversed by another layer: transfer lettering. Unlike the images and the text fragments cut from other sources, these transfer letters use imperative verbs: “placez et retirez” (to stick and remove), “frottez” (to rub), “facile à manipuler,” (easy to manipulate), “à décalquer,” (to transfer) and “lissez,” (a word that can be read as the verb “to smooth,” but also suggests “lisez,” the injunction used by magazines and newspapers). Such floating imperatives echoes the incitements attached to new products, but also point to the bodily movements through which the page was constructed. Throughout a connotative and associative reading links industrialized mass housing to a range of social bonds, as well as to industrial materials in accessories and mass-produced ready to wear clothing, itself a new relatively phenomenon in 1967.348

Tonka and Lourau took much of their material from the popular fashion magazine *Elle*, which at the time featured a year-long reportage on new towns constructed around Paris’ suburbs. An important trace of this reportage, in form of *Elle*’s recurring tag-line—“Découvrez comment vivent les villes inventées” (Discover how one lives in invented cities)—appeared at the center of the page, cast amidst entirely different slogans—“a class struggle?,” “easy to use or manipulate,” “Break your word, or “break speech”, and amongst fragments of news reports of the short-lived anarchist “Provo” movement erupting amongst Amsterdam’s teenagers. Just as the connotation of its tagline get dispersed, so too does *Elle’s* attempt to neutralize and direct the associations surrounding

348 The “chaîne magique” was a logo used for a weekly mutual-aid service in the back pages of *Elle*, regularly publishing appeals from young mothers seeking apartments, couples appealing for donated strollers, or seniors looking for companionship, an anonymous cross-section of the city and its wants.
such suburban development, most notably by replacing the stigmatized bureaucratic term “grandes ensembles” with the more desirable “invented cities.” In the pages of Elle, undergarments and suburban towers regularly appeared within the same visual field, yet here they were kept safely segregated by a vertical bar, in fact just the thinnest of lines, marking off advertisement from editorial content. It is this line, I would propose, that Répression dismantles, collapsing the artificial distance between these extraneous elements into a new, more unstable connotative density. [Fig. 3.10] In the new configurations, the repeating lines of a façade echo the parallel slits appearing in a pair of disposable plastic sunglasses, itself part of a chain that includes the letters “PâP,” Elle’s logo for “prêt-à-porter” designs which regularly incorporated new, cheap, and light, materials such as vinyl, lycra, and PVC. A fragment of an advertisement in which a woman fastens her new “Youthcraft Americana Clip”—juxtaposed in the pages of Elle with a high-rise tower in Rosny-sous-Bois—appears in Utopie between a suburban high-rise tower, the faces of a model couple, a child grasping for a desired object, and a façade by their teacher Edouard Albert [Fig. 3.11]. Such a “clip” resonates with the contemporaneous fascination with “Clip-On Architecture,” yet also indicates that the clip was not strictly a component, but more importantly a promiscuous connotator, as capable of being attached to undergarments as it was to outboard motors and engines. Dismantling the clear separation between advertising and urban reportage created a image of the city in which classic mechanisms of repression could no longer be identified in quite the same way. On the one hand, such a collapsed condition could appear as one

in which a building or street was no more important than the disposable collision of sprays, clips, logos, and fashions that closed in around them. In La Repression, the city is glimpsed fleetingly, structurally subsumed within a field of signs, products, and advertisements. The effect recalls Jean-Luc Godard’s contemporaneous 2 or 3 Things I Know About Her (1966), where the feminine pronoun elle comes to absorb a shifting set of connotations, from the “city” (la ville) and with its new suburban housing complexes, to the women who take up prostitution to pay the rent, to the commodities (la merchandise) with which the film concludes [Fig. 3.12]. Yet, as if to contest this implication, the montage reasserts a significant, if subtle, difference; the visual friction between black and white and tones of gray continues to mark a difference between conflicting conceptual and optical registers, in which the city and this new world of products remained at an uncertain distance from each other, even as they appeared to sit within a single continuous surface.

At other moments in Utopie, disassembly appears less directed towards the city and its structure of advertising and more towards the contemporary aesthetics of industrial objects. Antoine Stinco’s “Art?” assembled images cut from the pages of journals of industrial aesthetics, art reviews like Domus and Art International, furniture exhibition catalogues, fashion magazines, and popular culture weeklies, embedding them with blocks of text extracted from the writings of historians such as Giulio Carlo Argan, Pierre Francastel, and Arnold Hauser.\(^{351}\) Stinco’s contribution begins with a composite figure dominated by two images—the profile of Marcel Duchamp and a cropped view of Walter Gropius and Joost Schmidt’s exhibition design for the 1934 Non-Ferrous Metals section of the Deutsches Volk, Deutsche Arbeit exhibition [Fig. 3.13]. The composite figure

figure can be read as a moment of visual condensation, conjoining the two poles, or two faces, that recur within the larger photographic field assembled by Stinco. On the one hand, there was the legacy of the readymade and the process of selection, on the other, that of the Bauhaus with its emphasis on design as *Gestaltung*, a project of shaping the industrial object’s essential, typical form. In the first pages, the legacy of the readymade in the work of Roy Lichtenstein, Andy Warhol, and Alain Jacquet, squared off with the industrially fabricated forms of Donald Judd, Kenneth Snelson, and Sol Lewitt, while at other moments the curves of industrial styling confronted the pared down forms of canonical modernist design. The opposition becomes less clear, however, when it comes to the recurring presence of automobiles, from the 1964 Ford Thunderbird and the Citroën D/S, to the crushed cars in the work the artist César, to an image of bumpers receding to the horizon, tires stacked in front of repair shops, and chassis moving along an assembly line.

The automobile held a central place in the theorization of mechanization by an earlier generation of architects and historians of modern architecture, though the key statements in this area appear curiously absent from Stinco’s image-text. Already in

---

352 Stinco was attentive to the different position of the artist implied by the turn towards the professional manufacturing within minimalism. “Aujourd’hui plus que jamais, l’artiste se trouve hors de cette réalité sociale qui l’obsède, il est plus que jamais fasciné par la technique à laquelle il est lié et en particulier par l’industrie créatrice des formes qui, pour la première fois se sont faites sans lui.” See also, Françoise Choay’s comparison of the crisis of modernist urbanism with the crisis of functional objects within industrial design. Françoise Choay, *L’urbanisme : utopies et réalités* (Paris: Éditions du Seuil, 1965), 77.

353 In the case of Duchamp the process was inverted: originally mass-produced ready-mades were being artisanally re-manufactured in the early 1960s. In the repetition of Duchamp’s readymade “Hat Rack,” which recurs at several points in the sequence, there is something of a mise-en-abyme surrounding reproduction itself. The graphic of reproduction points to the artisanal reproduction of a originally mass produced object. The particular image of Duchamp’s readymade “Hat Rack,” was reproduced from an issue of *Domus*. See Pierre Restany, “L’esprit du XXème siècle,” *Domus* 444 (1966). As Alison Smithson similarly noted regarding the Eames in 1966, “reproduction modern is a 1960s phenomenon.”

354 The work of figures like Mumford or Giedion was likely known only indirectly to Stinco. Indeed, there are no references to Giedion’s work to be found anywhere in the journal. *Mechanization Takes Command*
the 1940s, Sigfried Giedion’s *Mechanization Takes Command* pointed to the automobile as exemplary of the decomposition and reassembly central to mechanized work processes:

Mechanizing production means dissecting work into its component operations—a fact that has not changed since Adam Smith outlined his principle of mechanization in a famous passage of his *Wealth of Nations* in 1776… It need only be added that in manufacturing complex products such as the automobile, this division goes together with a reassembly. By the 1960s the nature of such reassembly had grown only more complex, and appeared to be driven less by technological innovation and increasingly by forms of aesthetic calculation associated with industrial styling. At a number of points, Stinco’s image-text alludes to the 1960s culture of styling, in the domain of the car, and across an ambiguous range of objects, from art works to design objects to appliances. A 1964 Ford Thunderbird appears on a double page-spread, surrounded by images, including Constantin Brancusi’s *Bird in Space*, massProduced handles, advertisements for Telefunken portable radios, Phillishave razors, an image of women at an assembly line, furniture by Joe Colombo and Raymond Loewy, as well as the “space race” inspired fashions of Pierre Cardin. [Fig. 3.14] Debates over the significance of industrial styling were shifting in the 1950s and 1960s, the stakes of which can be gauged by the

---


Brancusi’s Bird in Space carries a historical relevance beyond its formal similarity to the mass-produced handles. Having been declared by United States customs agents in 1927 to be “a manufacture of metal” rather than a work of art, the subsequent legal proceedings successfully established *Bird in Space’s* status as a work of abstract sculpture. See *L’oiseau dans l’espace*, (Paris: Centre Pompidou, 2001). For a report from the period see: *TIME*, March 7, 1927.
exchanges between Reyner Banham and Tomàs Maldonado. Banham, like many of his IG colleagues, saw styling as a phenomenon from which the continued development of modern architecture could learn. Central to the “pop art” of the twentieth century, the rapidly changing design symbolism of the automobile suited its growing mass cultural penetration and increasingly rapid rates of obsolescence. 

In the pages of the journal of the Hochschule für Gestaltung Ulm in 1958, Maldonado pointed to an “abundantly illustrated prospectus” produced by General Motors “in which the words ‘beauty’ and ‘art’ recur every two lines…”

For Maldonado, the fact that the largest automobile corporations defined their styling programs through an expanded definition of art, signaled that aesthetic considerations “had ceased to be a solid conceptual basis for industrial design.”

Rather than art, the field of design, he argued, needed to take its cue from modes of scientific analysis.

The various lines of text which populate the interstices of Stinco’s image grids allude to the “forgetting of purpose,” and to “unity that is only formal,” phrases that could be read as closer to Maldonado’s rejection of styling than to Banham’s embrace of it. Yet it is hard to discern anything like Maldonado’s positivist faith in scientific methodology in Stinco’s image fields, their juxtapositions and loose organization stood in marked contrast to the strict grid, calculated asymmetry, and rhetoric of neutrality favored by Ulm’s publications [Fig. 3.15]. Stinco, like Maldonado, was also examining the prospectuses emerging from Detroit: the 1964 Thunderbird at the center of his image-

---


360 Ibid.
text was one of three pages that Stinco extracted from *The Ford Book of Styling*.361 The document laid out the corporation’s styling principles in the form of a visual essay that ran from prehistorical chariots to the latest models on Ford’s drafting boards, portraying this transformation of automotive form as an evolutionary overcoming of the opposition between the deficiencies of standardized mass-production and the uniqueness of the art object. Having long since left behind the standard Model-T, the Ford brand evolved into an association to be sustained across a wide range of images and objects, a changing legibility to be parsed at the level of automotive form. The styling guide appears as a primer for such visual literacy. Scanning the pages, Ford cars are compared to IBM Selectric typewriters, the Eameses’ 670 Lounge Chair, Reed and Barton’s Silverware, as well as Renaissance carriages, eighteenth-century clocks, and nineteenth-century dresses. The spreads emphasize relationships between juxtaposed images that are anchored by means of text, foregrounding resemblances that are taken to reflect deeper similarities of form and aesthetic intention, connecting otherwise unrelated objects. The page layouts of the Ford Guide directed the idea of a convergence of art and industrial styling through carefully calculated visual rhymes, harnessing modernist ideas of a universal visual language—influentially introduced to America by figures like Gyorgy Kepes—to narrate the styling programs that automakers had initiated in the 1930s to spur consumption and differentiate their markets.362 Ford’s own diagrams reveal how the intensification of styling programs increasingly targeted the automobile’s seams, smoothing over the

---

362 The principles of visual rhyming in the visual techniques of Moholy-Nagy and Kepes as a means of articulating “similarities of form” between radically disparate referents are discussed in more detail in Chapter 2.
differences between components such as bumpers, headlights, wheel-wells, and engine
compartments, so as to replacing the assembled, mechanical appearance of prewar cars
with a single overall shape that Ford called a “unity of design.” The “dream machines”
of the 1950s had changed not only the car, but very the look of assembly. This effort to
smooth the transitions between formerly separate parts found its complement in a visual
rhetoric that drew together a disparate range of image references, and it was these
comparisons that Stinco selected and reproduced in Utopie. The guide diagrammatically
outlined Caravaggio’s use of color and line to direct the eye of the viewer, juxtaposing
these with the Thunderbird’s sculptured body panels; noting that “similarly, the stylist
directs the eye through organized placement of the design elements.”

A figure sketch by Michelangelo was juxtaposed with a drawing of the front quarter of the Thunderbird,
with the suggestion that “The fender area of the car posed an art problem not unlike that
of the shoulder of the Michelangelo sketch at left. The shape of both is influenced by the
forces acting upon them” [Fig. 3.16]. Such directed juxtapositions suggested that a
repertoire of enduring artistic values guided the continually changing models of the
automotive industry. The result was neither quite art object nor quite an automobile, but a

364 As related point is made by Roland Barthes regarding the newly released Citroen D/S in 1957, which he
saw as “the beginning of a new phenomenology of assemblage, as if we are passing from a world of welded
elements, to a world in which they are juxtaposed, held together solely by virtue of their marvelous form.”
this comment on the DS was part of Utopie’s conversation at the time. Interview with author, October 7,
2007.
new aesthetic code that assembled quotations drawn from wide swaths of art and design history to narrate the emergence of new seamless forms of visual and formal unity.\textsuperscript{366}

With its juxtapositions of automobiles, household goods, furniture, and works of art, Stinco’s visual universe parallels such styling books, yet takes apart and short-circuits the techniques of visual rhyming and verbal direction organizing such guides. The automobiles, chairs, and appliances found themselves juxtaposed not only to other objects, but with views onto larger apparatuses of production, including schools and factories, kiosks and cinemas, vacation resorts, and suburban “grandes ensembles”\textsuperscript{367} [Fig. 3.17]. In such moments of collision, the question appears to shift from the industrial object or industrial design to the larger problematic of “industrial society.”\textsuperscript{368} Whereas the juxtapositions within the Ford Guide evoked the broad sweep of history, Stinco’s images deliberately announce their sources as the shifting world of printed matter, attached to fragments of headlines and journal citations, appearing as so many clippings laid out on a table. The provisional appearance of such clippings connects with what in the 1950s came to be called the “tack-board” aesthetic, a provisional placement of elements that equally evokes the variable arrangement of material prior to its being glued and fixed in place during the preparation of offset lithographic paste-ups. If the table-like organization of Stinco’s pages brings to mind other tabular images appearing within artistic practices during these years, it neither joined its components into pictorial tableau,

\textsuperscript{366} The technique was also transferred to Ford’s vision of its own corporate bureaucracy. Diagrammatically rendered as a flow diagram using the same color codes and arrows, the image of the corporation is of a new synthetic flow between artistic training and engineering know-how.

\textsuperscript{367} For an account of the political status of the automobile in post-war France see Kristen Ross, \emph{Fast Cars, Clean Bodies: Decolonization and the Reordering of French Culture} (Cambridge: MIT Press, 1995).

\textsuperscript{368} The notion of “industrial society” was key to sociologists of labor, such as Georges Friedmann and to political philosophers, such as Raymond Aron. See Friedmann, \emph{Où va le travail humain?} (Paris: Gallimard, 1960) and Aron, \emph{18 Lectures on Industrial Society}, trans. M. K. Bottomore (London, Weidenfeld & Nicolson 1967).
nor did it seek a dispassionate atlas-like arrangement, recalling the bureaucratic administration of information.\footnote{Richard Hamilton described his collage \textit{Just What Is It That Makes Today’s Homes So Different, So Appealing?} (1956) as being a “tabular” image, constructed from an inventory of the conceptual genres deployed by advertising within mass media imagery. Hal Foster distinguishes between the retention of spatial illusion in the tabular images of Hamilton and the parallel notion of the “flat-bed picture plane” developed by Leo Steinberg to account for Rauschenberg’s use of media imagery during roughly the same years. See Hal Foster, \textit{The First Pop Age: Painting and Subjectivity in the Art of Hamilton, Lichtenstein, Warhol, Richter, and Ruscha}, op.cit.; and William R. Kaizen, “Richard Hamilton’s Tabular Image,” op.cit.}

If Stinco’s pages were not quite like other tabular images of the period, they nonetheless carefully sought to dismantle the emphasis, hierarchy, and directional indicators used to direct reading in the Ford Guide. Leaving the collisions between images deliberately unresolved; the words populating the pages drew attention as much to the blank spaces of the grid as to the images, an intersection of language and space in which entities became comparable.\footnote{The tables could be compared to Michel Foucault’s archaeological account of classical systems of knowledge \textit{Les Mots et les Choses} (1966), in which pointed to two “superimposed senses” of the table, the \textit{tabula} of knowledge developed in the 17\textsuperscript{th} century and the infamous operating table of Lautréamont upon which the sewing machine encountered the umbrella. The table represented the epistemological relativity revealed by the disparate range of ways in which knowledge was organized. See Michel Foucault, \textit{The Order of Things: An Archaeology of the Human Sciences} (New York: Vintage Books, 1973), xvii.} Yet unlike Tonka and Lourau, who had sought to collapse the space between images into an overall texture of continuous blocks, Stinco’s démontage insists on blank spaces, gaps that prevent superposition or the coalescing of images into composite figures. In place of the words the \textit{Ford Guide} used to anchor broader visual connotations—such as composition, color, drawing, sculpture, and motion—the blank spaces of Stinco’s grid are populated by different types of discourse. Lower case text appears pinned to the images like captions, while bold upper case text delivers fragmentary phrases that do not refer to any image directly, but must be re-composed by a lateral scanning across the field of the page. It is not insignificant that such fragmentary phrases frequently point to the provisional significance of the object.

Taken as a phrase, the link between the transformation of the object and the postwar culture of advertising no longer appears as a question of form or image, but of forgetting, whether of the object’s immediate function, of the automobile’s status as a machine, or of an earlier presumption of physical durability. Such phrases inhabit the neutrality of grid’s blankness, subtly subverting its expression of order, they draw attention to the visual gap between images as the site where disjunction or suture will be articulated.

On the final page of Stinco’s image-text, the grids that juxtaposed automobiles, design objects, furniture, and interiors abruptly disappear. The idealized world of automotive form collides abruptly with the city, encountering an accumulation of automobiles in a traffic-clogged Parisian street [Fig. 3.19]. In a text that serves as a closing statement, Stinco contrasts the mobility and ephemerality of objects to the stability of architecture and urbanism.

One can hardly speak of the problems that technology and industrialization pose within architecture and urbanism. Taken out of the object and its mobile, ephemeral aspect, the problem presents itself completely upside down: how is it that despite the techniques available to us, and despite strong architectural successes, in this domain we remain at the stage of coarse productions and distant prospects.372

Looked at closely, the image is not of a single street, but a combination of ten different photographs. Stinco’s image of Paris contrasts sharply with other uses of montage to highlight Paris’ technological transformation during these years, such as were produced by a someone like Yona Friedman or Paul Maymont. [Fig. 3.20] The city appears neither

372 Stinco, “Art?” 53.
as a ground on, or over which, an image of technological coherence was projected, nor were a series of discontinuous photographic segments reconciled by an architectural framework. Instead, the reader is confronted with what at first appears to be a single street scene, but which on closer inspection can be seen to be composed from two large photographs, distinct views of dense urban traffic. Several smaller photographs are overlaid onto the larger images interrupting the impression of a singular scene and provide a set of fleeting glimpses into discontinuous, yet not dissimilar spaces, ranging from automobile repair shops, to store fronts, billboard advertisements, and the view from a bus. Once again, though in a different manner, the relationship between the circulation of commodities and signs and the physical circulation of people and objects is signified. In Stinco’s statement, the concern was articulated in terms of closeness and distance, an opposition that appears outside of any stable perspectival space, as a set of disjunctive views overlaid onto a dense photomechanical surface, and linked to a statement about lack. The technological advances of industrial society promised to combine mass production with new forms of mobilité—a term whose connotation runs from literal movement to class mobility, changeability and versatility. In the domains of architecture and urban space, however, these qualities appeared “upside down;” less

373 See for instance the well-known images of “Paris Spatiale” produced Yona Friedman in 1959-60; along with his “Demonstration of a Spatial City allowing for different styles,” (1962) or Paul Maymont’s “Ville Verticale” (1962-3). For analysis of these prospectivist discourse associated with the notion of “spatial urbanism” see Larry Busbea, *Topologies: The Urban Utopia in France 1960-1970* (Cambridge: MIT Press, 2007). Such prospectivist utopias was rejected in the first issue of *Utopie* as “a planner’s utopia—utopia divided into five year menu fragments that continue to twist themselves, designating the limit of what the liberal economy can allow itself in its current phase.” René Lourau, “Contour d’une pensée critique nommé urbanisme,” *Utopie* 1, 14.
movement and versatility than stoppage and inflexibility, a visual and literal traffic jam of cars, billboards, hoardings, newspaper kiosks, and repair shops.\footnote{Stinco’s reference to the “upside down” appearance of the ephemeral might further be read in terms of the trope of inversion within Marx’s account of ideology, itself associated with the inverted appearance of images within a \textit{camera oscura}.
}{\footnote{Ibid.}}

Stinco’s abrupt shift from the world of art and design objects to the collision of cars, buses, billboards, and streets points towards the group’s larger effort to use démontage to work on images of the city during these years. The techniques of disassembly that preoccupied the group reappear in “Architecture as a Theoretical Problem,” where they addressed architecture’s entanglement with a broader media apparatus, examining “[n]ewspapers, general interest magazines, trade journals, official and institutional texts,” which they saw as the “most usable of the media indicative of social phenomena.”\footnote{In this sense, the tactic was not unlike the \textit{Internationale Situationniste}’s attempt to reinvent the historic avant-garde’s legacy of montage through practices like \textit{détournement}, an activity where the manipulation of appropriated elements aimed to be “as simplified as possible” to enable a recall of the context from they
appearance and language of advertisements while exacerbating and drawing attention to the urban contradictions they contained. Urban congestion reappears as fragments of a traffic jam share the frame with a new suburban high-rise, a team of architects and planners, and a man finishing with a coffee at a cluttered table, who declares himself a “citizen of consumption.” The composition appears together with two conflicting fragments of clipped text: on the one hand, we read, “Urbanism: 88% of suburbanites congratulate themselves on leaving the city,” while below “our two secret itineraries: avoid traffic jams and gain time on your way to work in Paris.” The contradiction between leaving the city and trying to get back into it, sits just above a set of advertisements with young and old couples in front of suburban towers and bungalows, as well as “Made to measure” “Immobilia” credit, appearing in the form of two hands holding up miniature models of a tower block and a small bungalow [Fig. 3.21]. On the following spread, a brochure advertising a new suburban development is positioned above the geometrical parterre of a French garden, and below frames containing promotional copy from a series of similar developments around Paris, including the slogan “all the comforts of the XXth century in a rediscovered corner of the XVIIth.” Another fragment within the same frame, from an advertisement for “Paris 2,” provides an extreme instance of such new developments. One of the earliest mall projects in France, “Paris 2” combined a shopping center with the development of a private new town, with the resulting ensemble marketed as a “Paris” outside of Paris, with the slogan

were taken. The group went beyond the IS’s more restricted use of recombination of individual images, which continued to function within the conventions of illustration. See Guy Debord and Gil Wolman, Déviation: Mode d’Emploi,” Les Levres Nues 8 (May 1956). Translated as “Methods of Detournement,” Situationist International Anthology, ed. Ken Knabb, (Berkeley: Bureau of Public Secrets, 1981), 9.
“one more step toward integrated luxury” [Fig. 3.22]. Combined into a new field, such advertisements no longer referred securely back to their referents, but operated as a destabilized connotative field, combining not only fragments from the real estate press, but also including advertisements for food, home organization systems, apartments and entire cities. The image sequence concluded with a quote from Baudrillard, which argued that the mass-produced, serial object was “experienced as a world of luxury and prestige from which it [remains] inexorably separated by wealth, but from which it is no longer separated by any legal class status, or any de jure social transcendence. This is psychologically of the essence, for, in spite of the frustration, in spite of the material impossibility of ever reaching it, the use of mass-produced objects never comes without the implicit postulation of a model…” The explosion of suburban development surrounding postwar Paris appeared here a field marked by a continual confusion between the model and the mass produced commodity, at once a copy and a projection, an object of desire grasped in the hand and a more encompassing, less tangible social logic, in which the endless availability of mass produced goods remained bound to emulate models that were still restricted.

The effort to produce a different image of the explosion of the city was also an intervention directed at the format, and by extension the intellectual position, of a journal like L’Architecture d’aujourd’hui. The parallel vertical column format was not a convention native to this magazine, but was characteristic of mass-market illustrated

377 The other major example they pointed to was that of “Paris 2,” on the outskirts of Paris. One of the earliest shopping mall projects in France, it was conceived not strictly as a site of consumption but as an emerging mode of urban development. Marketed as a “second Paris,” the integration of mass retailing with housing was key to the development logic of such privatized “new towns.” The importance of “Paris 2” was described in more detail in Utopie, Logique de l’urbanisme, 1967.

magazines such as *Paris-Match* or *Elle*, which commonly used a vertical division of the page to separate editorial content from advertising images. [Fig. 62] Here the group’s efforts to dismantle and collapse the directed connotation that structured the rhetoric of advertising images was paradoxically reinserted into the space of architectural discourse through the conventions of advertising. In the case of *L’Architecture d’aujourd’hui*, this was once again an effort to undermine what the group saw as an illusory separation, the manner in which architecture had been isolated, editorially and ideologically, from contemporary urbanism and its political economies. *L’Architecture d’aujourd’hui* was physically organized around such a separation: all advertisement appeared in a single front section to clearly segregate it from editorial content. Such a separation, they argued, was part and parcel of the way in which a magazine like *L’Architecture d’aujourd’hui* specifically, and the French architectural press more broadly, produced an image of architecture as a strictly artistic and technological practice:

Open any architectural magazine published in France… The problematic raised empirically and at the lowest level by the real estate journals does not appear. There are no explanations whatsoever of real actions (property, pressure groups, decisions of the State)…. The message is clear: spatialization and the structural shaping of space, the specific object of architectonic activity (professional institutions) is signified ideologically as a thing-in-itself, referring to two groups of activities devoid of any political or social implications: Art and Technology. 379

If démontage served here to dismantle a particular image of architectonic practice, it also served as a mechanism for appropriating and reinserting all that had appeared extraneous,


Ouvrons une quelconque revue d'architecture publiée en France. La problématique soulevée empiriquement et à ras de terre par les revues immobilières n'apparaît pas ici. L'explication des actions réelles (foncières groupes de pression, décisions étatiques) est totalement absente. Le message est clair: la spatialisation, la mise en forme structurelle de l'espace est l'objet spécifique de l'activité architectonique (institutions professionnelles) idéologiquement signifiée comme un en-soi, renvoyant à deux groupes d'activités purs de toute implication politique et sociale: l'Art et la Technique.
repressed, or camouflaged within the discourse of dominant periodical like *l’Architecture d’aujourd’hui*.

If grasping architectural production meant comprehending the material manufacture of buildings and their component parts, it also meant grasping the larger urban strategies at play, what they saw as the imagined forms of coherence through which new images of an emerging urban society were projected. Absent in the city as it was experienced, such coherence, they argued, was produced in the domain of representation, a coherence “outside the direct apprehension of the senses, outside of the built world that forms the references of the social imaginary for architectural production.”

The fact that such coherence was imaginary did not mean it was inconsequential, rather such an imaginary crucially supported the enactment of the urban demolition and rebuilding taking place in Paris during these years, perhaps the most contested site of which was the planned demolition and renovation of the market at Les Halles and its surrounding district. It was Les Halles that appeared at the center of one of the key montages within the article, one that came to be one of the most widely reproduced of the group’s images at the time. Utopie responded as much to the publicity efforts surrounding the development as to the plans themselves, in particular to a large exhibition organized by the city and the resulting media coverage. [Fig. 3.23] The most prominent element within the montage was a clipping from the satirical newspaper.

---

380 In this sense, one might think of similar work done in the space of magazines by artists such as Daniel Buren and Dan Graham. The terms “extraneous, repressed, and camouflaged” are those used by Benjamin Buchloh to describe the work of Buren and Graham. See “Moments of History in the Work of Dan Graham” *Neo-Avantguard and the Culture Industry* (Cambridge: MIT Press, 2003), 191.

381 Utopie, “Architecture comme problème théorique,” 89.

382 Utopie, “Architecture comme problème théorique,” 89. In such publicity initiatives, they argued, “the content (program) is generally abandoned in favor of the formal values of a container referring to art or to technology: drawings, images, photomontages, and models, showing the forms of the future city, of the neighborhood, of projected construction.”
*Le Canard Enchaînée*, in which a tower from the new “Quartier des Halles” was stamped with the profile of Charles De Gaulle and parodied with the Franco-German rhyme “*De Gaulle über Halles,*” caustically satirizing the heavy-handedness of Gaullist urban planning during these years. [Fig. 3.24] Alongside it was a similarly controversial 1966 project for the National Ministry of Education, a building designed by Jean Faugeron, a professor at the ex-Ecole des Beaux-Arts, and which had become a symbol attacked by striking architecture students during May 1968. Between the two, in effect suturing them together, was Nicolas Schöffer’s *Cybernetic Tower*, which had been conceived in the early 1960s as an enormous electronic, illuminated urban signal, a feedback mechanism communicating various types of urban information.

The monumental project was imagined by its creator as the central focal point for yet another node in the State’s plans for Parisian development: the then nascent bureaucratic center of La Défense. Drawing on the satirical lead of *Le Canard Enchaînée*, the collision of towers in Utopie’s frame assembles an architectural physiognomy of the tower as a key motif of Gaullist State planning. The collection visually surmounted a more diffuse field of references. In drastic contrast to the imaginary coherence projected by the towers above, an emphatically discontinuous and degraded heap of image fragments pile up below, combining and confusing a range of recent references within architectural culture. Projections of the future city are awkwardly conjoined with visual and programmatic collapse, a moment of monumental dedifferentiation, which comes to encompass everything from the Statue of Liberty and the Seagram Building, to Le Corbusier’s Unité d’Habitation, Archigram’s Montreal Tower, Moshe Safdie’s Habitat 67.

---

In the article’s layout, this collapsed field was placed between an image of the public—in the form of an image of somewhat puzzled onlookers viewing an exhibit about Les Halles—and an image of the architect, who appears below in the act of shaping a clay model [Fig. 3.25]. While each image can be read individually, their reading takes on a particular sense when deciphered as a sequence, soliciting a different form of montage literacy, one tied to the reading of filmic storyboards and comic strips. If the montage dismantled the coherence projected by State planning, revealing a more fundamental uncertainty, its proximity to the images of the public and the architect, suggested that these roles were similarly rendered unsure. This uncertainty crystalizes in the image of the hand at the bottom of the page, whose caption confidently claims: “five millimeters makes all the difference.” Photographs of the hand of the architect would have been well known to the readers of the magazine, a key visual cliché developed in the twentieth century, enacting the trope of the architect as demiurge—control as the power to shape or form—but also as planner, the creator of models whose realization will productively reorganize society. Yet here, the very impression that the hand shaping the model belongs to an architect is itself orchestrated by a subtle form of montage, by the fact that it is placed next to an image of the Greek-French architect, and former teacher at the Ecole des Beaux-Arts, Georges Candilis. As in cinema, the images effect each other solely by reason of their proximity, accruing a combined reading independent of their entirely disparate origin. In this case the linkage was both posited and simultaneously eroded; in a subtle joke that attentive readers at the time may have decoded, the image of the hand was drawn not from architecture, but from a widely circulated period advertisement extolling the formal perfection of a particular brand of cigarette lighter.”

---

384 Hubert Tonka, Interview with the Author, October 3, 2011. The article contains other examples of such
If there was comic potential in juxtaposing something as trivial as a lighter with a problem as large as Les Halles, it also pointed to the larger task implied by the rhetoric of disassembly. At the very same time, the dissimulated coherence of such fake advertisements were built with deliberately weak bonds, soliciting the reader to disassemble the invisible seams holding them together, and with it a type of humor generated as their meanings fell apart. In a context defined on the one hand by the policy of editorial neutrality sought after by a dominant magazine like *L’Architecture d’aujourd’hui*, and on the other by the militant speech within the ex-École des Beaux Arts, démontage looked to take apart key aspects of architectural and popular culture, but also sought to hold together the parodic and the serious as a space of operation for a theoretical project. Dragged from the pages of real estate and lifestyle magazines into an architecture journal, these scrambled advertisements struck a dissonant note, simultaneously evoking the contradiction between the freedom of choice promised by consumer society and the state’s enduring command in determining the future development of the city. In this sense, the article sought to articulate architecture’s predicament when faced with postwar urban development, a condition theorized by Lefebvre as the outcome of an “urban revolution,” which he defined as “the trajectory of a society heading towards total urbanization.”

For Lefebvre, *urban society* no longer referred to the particularity of historical cities, but to a much more encompassing ironic pairings, one could also cite the inclusion of a fragment of Le Corbusier’s 1925 text “Destin de Paris,” within an ad for the imaginary firm “L’Industriearchitecte.” *Utopie*, “Architecture comme problème théorique,” 86.


386 Debord and Wolman used the term “parodic-serious” to describe *détournement* as a mode in “Dépouillement: Mode d’Emploi,” op.cit. The mixture of parody, absurdism, and seriousness was characteristic of the Collège de la Pataphysique, a source known to Debord. Baudrillard was a member of the Collège during the years he collaborated with *Utopie*.

transformation that resulted from what he saw as the simultaneous implosion and explosion of older models of the city, a urbanity that was both more distributed and generalized yet less integrated and stable. Such a condition was marked by the rise of new “urban practices” and new typologies, such as dormitory suburbs, factories, university campuses, and “grandes ensembles,” which were themselves new sites of struggle and transformation, zones where urban, regional, and economic planning entered into conflict with practices that failed to conform to, or actively resisted, such management and control. The role that architecture and urban planning were expected to play in such a scenario, Utopie argued, was too narrowly cast as a strategy of integration, expected to function as an apparatus for reabsorbing and managing the contradictions and tensions latent in urban society.\textsuperscript{388} The dominant ideological terms deployed to direct such integration were on the one hand, a neo-humanist appeal to city building as an “art” of composition, on the other, a technocratic emphasis on the most advanced forms of planning derived from economics and industry.\textsuperscript{389} The result, they noted, was that:

\begin{quote}
The contradictions of capitalism, which, according to Marx, were supposed to cause it to collapse, cannot be annihilated, and so must be integrated into the solidification of the society of capital. But is it true that what is integrated cannot be disintegrated? Or what is structured cannot be destructured?... This is where the strategy must be dismantled (démonté).\textsuperscript{390}
\end{quote}

What was to be dismantled in this scenario was not strictly architecture, but the larger strategy of closure and cohesion to which it was connected, taking apart the mechanisms


\textsuperscript{389} See the passage, “L’ordre, art, technique,” in “Architecture Comme Problème Theorique,” 90-91.

\textsuperscript{390} Utopie, “Architecture comme problème théorique,” 85. The original reads:

Les contradictions du capitalism par lesquelles devait s’écrouler celui-ci, selon MARX, ne sont pas annihilables, alors elles sont intégrées à la solidification de la société du capital. Mais ce qui est intégré n’est-il pas désintégrable? Ce qui est structuré déstructurable?... C’est ici qu’il faut démonter la stratégie.
of integration so as to grasp the still unresolved contradictions within. This called for formulating architecture neither as art, nor as service, nor as a technical instrument, but as a “theoretical problem.” In this moment Utopie refused to project an architecture for urban society, while nonetheless utilizing architecture to project a type of critical desire, a desire to hold onto contradiction and render it legible as enmeshed in mechanisms of integration. If such a complex structure called for an analytical disassembly that could reveal still unintegrated contradictions, it was not accessible through traditional questions of function or typology, what they called “the architecture of cultural edifices, of labor, of housing, or of leisure…”, nor did it follow from a more classically Marxian emphasis on the analysis of “architecture in relationship to the economic or the ‘social…’”391 The text provides a vivid description of such an architecture calling to mind the disjunctive coherence of a site like Les Halles, a site in which the absorption and disappearance of contradiction could be perceived in the form of a disorienting, labyrinthine production of space.

In the midst of a labyrinthine world of real and imaginary facts, of ideas more concrete than matter, and matter impregnated with ideas, where the deforming mirrors of ideology transform and send back unrecognizable images of beings and events, we must grasp the coherence that in our object, architecture, absorbs the insurmountable contradictions veiled by the brilliance of capitalist society’s great Luna park.392 The group’s referent to the distorted reflections and illuminated signs of Luna Park anticipates Rem Koolhaas’s landmark analysis of Coney Island in Delirious New York (1976), a theme which had also appeared fleetingly in the writings of Benjamin and the

392 Utopie, “Architecture comme problème théorique,” 82. The passage reads: Et c’est au milieu du monde labyrinthique de faits réels et imaginaires, d’idées plus concrètes que la matière, de matière imprégnée d’idées, où les miroirs déformants de l’idéologie transforment et renvoient les images méconnaissables d’êtres et des événements, que nous devons saisir la cohérence qui, en notre objet, l’architecture, absorbe les insurmontables contradictions voilées par la brillance du grand Lunapark de la société du Capital.
Situationists. Yet here this space of disorientation, movement, and excess was understood as architecture, a complex effort to produce coherence that seeks to absorb contradiction and make it disappear. Beyond the assertion of visual distortion or of constructed illusion, the effort is to position architecture in a way that resisted two of the most dominant arguments of the period, neither as a problem of form, autonomous from the social and its forces of production, nor as a subservient instrument, determined by economic factors. What démontage accomplishes in this case is to assemble an image of architecture as a product of contradictory forces, an instance within a larger apparatus of overdetermination, at the intersection of culture, economics, technology, urban expansion, and mass media imagery.

The group’s project of ideological dismantling operated in parallel with their fascination for an emerging material technology such as pneumatics. The theoretical concern for continuity and discontinuity, and for coherence and rupture, was thoroughly architectural, and provides a means for rereading the particular manner in which the group turned towards pneumatic technologies during these years. Pneumatics were arguably as mediatic as printed images, conceived for rapid reproducibility in potentially...
unlimited copies, they could also be directly assembled, taken apart, and disposed of by users themselves. The confusion of these two registers—on the one hand the endlessly manipulable plasticity of the image and on the other the mass-produced plastics that literally contained volumes of air—is crucial for rereading the popular explosion of pneumatics taking place in the late 1960s.

The tension between image and material can be seen in the manner that Aubert, Jungmann, and Stinco’s negotiated the introduction of pneumatics to their diploma projects on the eve of the collapse of the ENSBA. Each project was articulated within the highly normalized graphic requirements of the diploma—which stipulated the production of roughly ten square meters of drawings realized on standard 1.25 x 1.8 meter sheets of paper backed with wooden supports. While techniques of montage were not permitted in such presentations, the concern for assembly and disassembly operated at a deeper level: in the encounter between the unfixed technological capabilities of pneumatics and a Beaux-Arts emphasis on mastery through drawing. Closely linked with the teaching of Emmerich, all three of the diploma projects insist on drawing pneumatics according to the logic of different structural geometries, collisions that laid the groundwork for distinctly hybrid pneumatic apparatuses. Each design insisted on being entirely pneumatic, from walls to floors, windows, enclosures, beams, and joints, endowing the potentially formless and fluid aspect of pneumatics with a rationality of parts and seams. In such a context, the group’s emphasis on demountability redirected the

396 At a conference held on the occasion of the exhibition Structures Gonflables, Jean-Paul Jungmann recalls Cedric Price’s criticism of the group’s attempt to utilize a geometrical rationality for inflatables, a set of constraints which he saw as being at odds with the material technology of pneumatics. Interview with author, June 22, 2006.
formally amorphous potentials of pneumatics making them serve a geometric logic of
structure. Jean-Paul Jungmann Dyodon’s was an air-inflated system developed on the
basis of a complex rhombicuboctahedral geometry that differentiated between the
vertices of structural members and faces of pneumatic panels, a separation allowing for
interchangeable relations between panel and frame [Fig. 3.26]. Nor were the structural
members filled only with air, they were receptacles for a range of contents, from gases of
various densities, to water, earth, or even concrete, contents that altered the overall mass
and stability of the structure [Fig. 3.27]. Just as such pneumatic mechanisms conjoined
radically disparate materials, so too the project forced together seemingly incompatible
typologies, combining the tradition of the reconfigurable, prefabricated, mobile vacation
house with aspects of a classical bourgeois villa. In Aubert’s project, pneumatic
technique is harnessed to the geometry of dome structures drawn from the work of
Buckminster Fuller and David-Georges Emmerich. While the dome was already
commonly used for air-supported structures, Aubert’s typology was the air-inflated type,
a tensile system composed of high-pressure pneumatic tubes. The pneumatic members
were a system that could be used to create an ensemble of varying dimensions, a
lightweight frame suited for large-scale, temporary public gatherings.397 Less polyhedric
than Jungmann and Aubert, Antoine Stinco’s project sought to rethink the way
pneumatics were used in temporary, mobile exhibition pavilions, perhaps the most
familiar typology in which pneumatics were deployed. Drawing on images of soap
bubbles published in Frei Otto’s 1964 book Zugbeanspruchte Konstruktionen, several

397 Photographs from the period reveal that several scale members of the projected tensegrity structure were
produced as prototypes, and were assembled and tested by Aubert, Stinco, and Jungmann in 1967. The
images were published in Architectural Design in June 1968, and in a more extended form in David-
Georges Emmerich, Exercices de géométrie constructive; travaux d’étudiants (Paris: École nationale
irregularly formed pneumatic “bubbles” served as anchors for a textile and cable skin that was stretched over them [Fig. 3.28]. Not unlike the members of Jungmann’s Dyodon, these inflatable supports for the exhibition pavilion also served as empty frames, spaces to be filled with exhibitions on the “sociology of the everyday object,” a program strongly reminiscent of the grids of objects he was simultaneously assembling in the pages of Utopie. In each case, the elements of the structural system could be logically and literally disassembled, at once a support, a structural armature, and a system for the insertion of contents taken from different sources.

The confusion between pneumatics as material and pneumatics as environmental medium was itself highly symptomatic of the moment; made from PVC, Vinyl, Mylar, Lycra and other new materials, pneumatics were both at the forefront of material technologies used in military, heavy industry, and space exploration applications and simultaneously linked with international spectacles, from Victor Lundy and Birdair’s early United States Atomic Energy Pavilion (1960), to music concerts, art festivals, and most visibly, the numerous pneumatic pavilions deployed at the 1970 World’s Fair in Osaka. The shift from designs realized on drawing boards at the ENSBA to the domain of prototyping and fabrication was likewise facilitated by the exhibition value of pneumatics during these years. François Mathey and François Barré visited the architects in their studio in search of material for a contemporary design exhibition at the Galeries Lafayette, encouraging them to develop mass producible furniture prototypes, and

---

399 If they were aware of pneumatic projects by Victor Lundy or Frei Otto, they were also becoming aware of a more distant constructivist tradition aiming to merge scientific and aesthetic experimentation. The first issue of Utopie included an advertisement for Anatole Kopp’s forthcoming Ville et révolution: architectes et urbanistes soviétiques des années vingt, one of the first works to provide a historical survey of the architecture of the 1920s in Russia. The advertisement features a low-angle view of Ivan Leonidov’s 1927 model for the Lenin Bibliographic Institute, foregrounding the model’s spherical, transparent auditorium. Held taut with tension cables, the globe-like auditorium evokes the form and lightness of a hot air balloon.
placing them in contact with fabricators. Some of the earliest articles on the pneumatics of Aubert, Jungmann, and Stinco, moreover, appeared not within architectural magazines but in the pages of fashion and lifestyle publications. Such a conjunction was not entirely fortuitous—the greater accessibility of cheap, expendable, synthetic textiles was equally key to the contemporaneous development of disposable packaging and prêt-a-porter clothing. The latter, in particular, sought to undermine couture’s aspiration towards timelessness by drawing fashion closer to a cheap, standardized, and changeable system in an effort to make fashion more accessible to a mass audience. If the double status of pneumatics as both media and material suggests a condition that was fluid, it can be seen in retrospect as a site that was sharply marked by contradiction for the group.

Unlike many other groups during this period, Aubert, Jungmann, and Stinco were careful to keep the pneumatic designs that they were developing at a distance from the work they reproduced in Utopie, not including any of their pneumatic work in the journal

---

400 Jean-Paul Jungmann, interview with author, June 22, 2007. Mathey would go on to become director of the Musée des Arts Décoratifs, while Barré would become the first Director of the Centre du Création Industrielle at the Centre Pompidou, the first institution in France devoted to collecting, exhibiting and theorizing industrial design.

401 Jean-Paul Jungmann, interview with the author, June 2007; Antoine Stinco, interview with the author May 2008. This was in part due to personal connections to the world of fashion; Antoine Stinco’s partner was the pioneering prêt-à-porter designer Christiane Bailly. The group also appeared as extras in William Klein’s 1966 send up of the fashion world “Qui-êtes Vous Polly Maggoo?” partly shot in the sculptural habitacle constructed by André Bloc on his property in Meudon.

itself.\textsuperscript{403} Utopie’s reception in the architectural press indicates that such a distinction was rarely respected—the designs of Aubert, Jungmann, and Stinco were featured alongside, and read in terms of, statements authored by the group.\textsuperscript{404} Yet, at the same time, the very preoccupation with theorizing technology and architectural production as a form of practice, cannot be read in isolation from these pneumatic experiments. A key instance of this simultaneous overlap and tension was the exhibition \textit{Structures Gonflables}, an exhibition and set of meetings that took place at Paris’s Museum of Modern Art for four weeks starting in March of 1968. [Fig. 3.29] The exhibition’s title—\textit{International Exhibition of Inflatable Structures; vehicles, machines terrestrial, marine, aerial, and spatial, systems, tools, works of art (“travaux d’art”), constructions, architecture, furniture, toys, beach accessories, advertising objects, works by artists (“œuvres d’artistes,”) and arrangements for games and parties}—emphasized the discontinuous, heteroclite material assembled for the occasion.\textsuperscript{405} Photographs of the installation show an exhibition that sought to overwhelm the visitor, with interiors as densely packed as the elements arranged on Utopie’s pages, including everything from hovercrafts to aircraft tires, emergency life rafts, weather balloons, inflatable kinetic sculptures, decompression chambers, dirigibles, Andy Warhol’s mylar clouds, high-altitude pressure suits, and more. [Fig. 3.30] It was on the heels of Utopie’s exhibition that architectural historian Reyner Banham decided to weigh in on the subject of pneumatics, proposing an

\textsuperscript{403} This uneasiness has continued to mark the reception of the group. The 1998 exhibition catalogue \textit{The Inflatable Moment: Pneumatics and Protest}, omitted any consideration of the magazine. The pneumatic furnishing systems that were Aubert, Jungmann, and Stinco designed and produced from 1968 until roughly the mid-1970s, were issued not as Utopie, but under the identity \textit{AJS Aerolande}.

\textsuperscript{404} “Utopie,” \textit{Architectural Design} (June 1968): 256.

\textsuperscript{405} The exhibition was noteworthy for being the first time that the Musee d’art Moderne de la Ville de Paris had been filled with technical objects rather than art works. The full title reads: Exposition international structures gonflables: véhicules et engins terrestres, marins, aériens, spatiaux, dispositifs, appareils, outils, travaux d’art, constructions, architecture, meubles, jouets, accessoires de plage, œuvres d’artistes, objets publicitaires, arrangements pour jeux et fêtes.
interpretation of this moment of intense pneumatic fascination in the April 1968 article, “Monumental Windbags.” The sudden mania for inflatables, he argued, reflected a collision between advances in plastics technologies and the sensibilities of a generation “turned off by the regular, rectangular format of official modern architecture … and turned on by the apparent do-it-yourself potential of low-pressure inflatable technology.” Banham’s interpretation has proved remarkably enduring, yet it missed something important in the case of Utopie, which offers an opportunity to re-read the pneumatic episode of the late 1960s somewhat differently. The exhibition, I would argue, was an effort to think about pneumatics as part of a larger apparatus, to grasp the relationship between individual technical objects and the larger cultural system in which they operated.

In this sense, the exhibition, the seminars, and the publication can be read as an effort to understand the plasticity of form in postwar culture and their changing relationship to technology and production. One key source for this intellectual endeavor was the work of the art historian Pierre Francastel, whose work served as an important reference for the group. Another was Jean Baudrillard’s The System of Objects, a book developed during the period he collaborated with Utopie and published the same year as the exhibition. While both figures addressed the emerging sociology of consumer culture,

---

407 Significant references appear in the articles “Architecture as a Theoretical Problem,” Architectural Design (June 1968) 255, and “Architecture Comme Problème Théorique” in L’Architecture d’aujourd’hui. Amid the juxtapositions of images and fragments in Stinco’s contribution to the first issue, were numerous fragments from Francastel’s Art et technique au XIXe et XXe siècles (1956), as well as from historians such as Giulio Carlo Argan’s Progetto e destino (1965), and Arnold Hauser’s The Social History of Art. The dominant thread running through such quotations was the changing relationship of technology and art as revealed by the rise of mass-produced industrial objects. The quotations from Étienne Souriau suggest that Stinco was also familiar with discourses of “L’aesthetique industrielle” during these years. Francastel had a personal connection to the group, as supervisor to Isabelle Auricoste’s dissertation on the image of the city in Renaissance painting. Interview with the author; November 2007.
they also drew on a strain of thinking about mechanization in architectural history, including the writings of Lewis Mumford and Siegfried Giedion. Francastel’s *Art and Technology in the 19th and 20th Centuries* (1956) methodically set works of art and architecture in relation with everyday tools in an attempt to understand technical transformations through what he called *objets plastiques* (plastic objects).  

In Francastel’s account, the decompositions and recompositions of form visible in such plastic objects were not simply determined by changes in modes of fabrication and production, rather the *objet plastique* was evidence of what he termed *pensée plastique* (“plastic thought”), a shaping power of the human mind, that mediated between the emergence of new technological possibilities and the transformation of the human neurophysical apparatus.  

With the disappearance of certain physical skills related to an earlier age of machines, Francastel argued, newer intellectual skills emerged, such as the transformation of the “mechanism interconnecting images within [the] mind,” and a greater rapidity in decision-making. If the worker of the 1950s was no longer capable of producing “thousands of increasingly complex and intricate machine parts,” he or she was nonetheless reoriented to new types of mental work. It is in this context that

---


409 In elaborating his notion of “plastic thought,” Francastel drew on the work of labor sociologist Georges Friedmann, who had linked changes in technology and the division of labor to the mode in which energy was procured and controlled, from the harnessing of wind and water power, to the industrial exploitation of steam and coal during the eighteenth and nineteenth-centuries, to the mid-twentieth century’s development of artificial energy through nuclear fission. What he called “abstract energy,” detached from human and animal labor power, entailed not only a corresponding transformation in the refinement and expansion of mechanization, but a more complete rationalization of work processes, leading Friedmann to postulate the post-war era’s unprecedented technological leap into what he called “l’environnement technologique.” Georges Friedmann, *Où va le travail humaine*, (Paris: Gallimard, 1960). Francastel drew in particular on a special issue of UNESCO’s *International Social Science Bulletin*, entitled “The Social Consequences of Technological Progress” edited by Friedmann in 1952.

410 Francastel, 158.
Francastel cites montage, one of the rare cases during these years in which it figures in a historian’s writing about modern architecture. Montage and serial combination, he noted, were fundamental to the contemporary retraining of the subject:

[O]ur eyes and minds are daily trained to record and interpret rapidly changing relationships. Thus montages and serial combinations have become fundamental for understanding contemporary painting, sculpture, and architecture….This decomposition into constituent parts and rearrangement of isolated elements to evoke a new realm of experience directs the development of mechanization and the figurative arts.411

Montage appears here less as a technique of disruption or shock, than as a method of analytic disassembly and rearrangement, a type of mechanical skill transferred to a range of intellectual activities.412 While Francastel does not use the term post-industrial, the framework he lays out—the shift from labor based around physical mechanization to one that proceeds through the manipulation of images, symbols and signs—anticipates theories of post-industrial society that emerge in the 1960s. In such passages, Francastel’s mediating vision of technique appears at its most optimistic. As key features of “a new realm of experience,” montage and serial combination are not simply a by-product of an earlier phase of mechanization, they internalize and recast decomposition and rearrangement into a new type of intellectual operation. As a key set of intellectual resources—an element of Francastel’s “plastic thought,”—they were not strictly

---

411 Francastel, 166.
412 While Francastel does not use the term “post-industrial” the terms he lays out—the shift from mechanization to the manipulation of symbols and signs—anticipates theories of “post-industrial society” that emerge in the 1960s. One of the influential figures to develop the term, Alain Touraine, also emerged from the milieu surrounding Georges Friedmann. See: La société post-industrielle (Paris: Denoël, 1969).
determined by the relationships of production, but promised to further restructure the tools of work, and even direct “the development of mechanization and the figurative arts.”

Baudrillard, writing a decade after Francastel, was less sanguine about the potentials of such decomposition and rearrangement. If the early twentieth-century had witnessed a potentially emancipatory reshaping of relationships between technology, mechanization, and art, these remained frustrated, having become subsumed within what he called “the system of objects.” In contrast to historians like Francastel and Giedion, Baudrillard sought to account less for the longer historical evolution of the relationships between mechanization and design, than to provide a theory of the systematic way in which meanings were increasingly systematized by the production process. Drawing together the structuralist semiology that Roland Barthes had used to decompose advertising and fashion, with strains of Western Marxism devoted to a critique of the culture industry and everyday life, Baudrillard looked to understand the dialectical interaction between a dynamic and unpredictable structure of technological development on the one hand, and a cultural structure that arrested, organized, and codified such technics into systems of form.

413 Jean Baudrillard, Le système des objets (Paris: Gallimard, 1968); The System of Objects, trans. James Benedict (London: Verso, 1996). See “The Modern Object Liberated in its Function,” 16. Here Baudrillard invokes the Marxian distinction between emancipation and freedom, which held that while the industrial revolution initiated an emancipation of the subject from the structures of religion, morality, and family, such a liberation was not actual freedom, but simply the liberty to sell oneself as labor-power. He offers an analogous distinction between the functional object as “emancipated” from the symbolic “theatricality” of an early era, while not being “liberated” in any proper sense.


415 Baudrillard, The System of Objects, 6. The book was notably developed as a dissertation for a committee composed of Henri Lefebvre, Roland Barthes, and Pierre Bourdieu. As a teacher and translator of German literature, Baudrillard engaged the Frankfurt School’s theorization of a culture industry more directly than most others French thinkers during these years. Relatively neglected in postwar France, the writings of the Adorno, Benjamin, and others were imported by the intellectuals surrounding the journal Arguments, edited
One of the key characteristics of such a system of objects was the increasing systematization of marginal stylistic differences within the production process, a consequence of the expanded productive capacities of mechanization and industrialization. The complement of a new regime of “abstract power,” the system of objects testified to a deeper dismantling, on the one hand what he termed the “destructuring,” of an earlier symbolic order and on the other, the supplanting of older regimes of manual labor by mechanization. “Man’s abstract relationship to his (technical) objects,” he writes, “is thus less a matter of his gestures having been replaced than of the abstractness of the very way in which functions have been split up (l’abstraction du découpage fonctionnel).” Rather than replacing an organ or extending its capacities in the manner of a prosthesis, technical objects enact a “découpage,” both cutting up and distributing the subject into a series of new functions. If the effect of such découpage on culture and work was one of increasing fragmentation and abstraction, the proliferation of new forms for technical objects sought to produce forms of coherence.

Fluid, transitive, enveloping, it [form] unifies appearances by transcending the alarming discontinuity of the various mechanisms involved and replacing it with a coherent whole. …our technological civilization tries to use the universal transitivity of form as a means of compensating for the disappearance of the symbolic relationship associated with the traditional gestural system of work, as a way of making up for the unreality, the symbolic void of our power.

---

by Lefebvre, Edgar Morin, and Kostas Axelos. For an account of Baudrillard’s position in the intellectual nebulae of Paris at the time see, Sylvère Lotringer, “Remember Foucault,” *October* 126 (Fall 2008): 3-22.

416 Baudrillard, *System of Objects*, 7-10. The notion of “combinant variations” developed in Barthes’ distinction between denotation and connotation in “Éléments de sémiologie” was a key source for Baudrillard, who recast it as “marginal difference.”

417 Ibid., 15. The destructuring of the symbolic order is a recurrent theme in *The System of Objects*. The opposition also appears in other works from the period, notably *The Mirror of Production* (1973) and *For a Political Economy of the Sign* (1972). Baudrillard’s analysis of the passage from a “gestural system of labor” to abstract power, see 49-54.

418 Baudrillard, *System of Objects*, 52; *Système des Objets*, 70. Emphasis in the original.

419 Ibid., 49-55.

420 Ibid., 56.
Adding a new dimension to Marx’s concept of commodity fetishism, Baudrillard posited an object internally divided, whose external surfaces performed in a manner largely determined by the signifying agendas of advertisement and communication rather than according to logic of an internal mechanism or structure. If the outsides of objects were alarmingly discontinuous from their internal workings, their increasingly minute design enunciated a compensatory rhetoric of control, promising an ability to manipulate forms of abstract power that could no longer be symbolized nor physically grasped. Such a social authority solicited the subject through the systematic coordination linking signifying structures and physical objects; a malleable, forgiving, formal transitivity and an expanded, psychologized communicational coherence held out the promise of wholeness for a subject whose relationship to objects had been profoundly cut up, redistributed, and rendered abstract.

In theorizing the dialectic between signifying practices and technical structures, Baudrillard was interested not only in “the abstract consistency of the system of objects, but, rather, its directly experienced contradictions.” If the system of objects theorized a vastly expanded role for design and architecture, it was also a field more radically

---


422 Ibid. 58-9. While he does not cite Friedmann directly, Baudrillard’s reference to abstract power recall Friedmann’s theorization of the nuclear fission as a regime of “abstract energy.” In such a regime, he argues, the investment in form seeks to mediate a gap that cannot be mediated, there being no longer any tangible relationship between the human labor and the forms of energy supporting society. He writes: “Man’s technical power can no longer be mediated, for it has no common measure with the human being and the human body. Nor, by extension, can it any longer be symbolized: functional forms can do no more than connote it….they are formal expressions of the void that separates us from our power; in a sense they are the ritual that accompanies the miracle-working of the modern world. They are the signs of our power, then, but also testimony to our irresponsibility with respect to that power.”

423 Ibid., 9.
detached from, and indeed impeding, substantive technical development.\footnote{See \textit{System of Objects}, 196-7 as well as the reading of Simondon, p. 204} Compatible with an emerging rubric of flexibility and indeterminacy, pneumatics were seen as simple to put up and take down, responsive to changes in climate and light, and requiring no permanent foundation. Yet with a few exceptions, architects remained largely disconnected from the most sophisticated contemporary appropriations of pneumatic techniques, the bulk of which remained confined to the fields of defense, aerospace, science, and industry. The installation of \textit{Structures Gonflables} configured a field of pneumatic objects within an apparatus of demountable scaffolding, within this system the pneumatic objects appear almost compelled to perform their lightness, at times appearing in mid air. The literal apparatus supported such seemingly random encounters between objects, but it also supported an effort to grasp something of the larger dispositif associated with the production of pneumatics. Subtly lining the exhibition was a layer of technical information—in collecting objects for the exhibition the group contacted fabricators and suppliers, asking them to respond to a detailed questionnaire, compiling an extensive array of information about each pneumatic technology, including materials, operating pressures, manufacturers, dimensions, and availability [Fig. 3.31].\footnote{This information is compiled in Utopie, eds. \textit{Structures Gonflables} (Paris: Musée d’Art Moderne de la ville de Paris, 1968). The ambition, according to Tonka, was to assemble for pneumatics the equivalent of the \textit{Manufacture française d’armes et cycles de Saint-Etienne}, a product catalogue not unlike the Sears-Roebuck catalogue in the United States.} Full of unresolved collisions, such pneumatic apparatuses were likely captivating for precisely this reason, belonging to a domain of “pure technique” the field appeared as one whose disposition had not been entirely determined, a still heterogeneous set of technical possibilities laying at the limits of architectural culture, and thus lacking anything like a
coherent code. In this sense it was less an example of a system of objects, than a breach or blind spot, within it. Capable of assuming a vast range of forms and of performing different functions, pneumatic technologies could appear perilously close to automobile styling, whose changing surface evolved continually without any necessary improvement in underlying mechanics. Yet pneumatics also promised a more radical link, a continuity even, between structure and surface—responsive to forces exerted upon it and in turn eliciting a response from the body, the pneumatic imaginary implied a surface where object and subject pushed back against each other. Laying claim to their teacher Henri Lefebvre’s slogan “all technology at the service of everyday life,” the group sought to envision other uses for such technics, which carried the promise of disrupting the reigning order of things.

Not unlike the contemporaneous emergence of forms of cheap and changeable standardization in Pop music or fashion, for a brief moment pneumatics promised a similarly radical instability, a vector for accelerating the decomposition of inherited cultural codes by connecting them to the unpredictable effects of an emerging technology.

Reaching outside of architecture to other technical fields was also a means of challenging the symbolic frontiers that marked the edges of the discipline. The pneumatic designs developed during the same years by Aubert, Jungmann, and Stinco provide a glimpse of how the architects struggled to negotiate this liminal zone. Emphasizing low-cost, mass-production units, their designs were neither the low-pressure membranes mentioned by Banham, nor were they quite inflatable substitutes for existing furniture.

---

426 Baudrillard, The System of Objects, 5. “[T]echnological products of the aeronautics, astronautics, shipbuilding, heavy-vehicle, or heavy-machinery industries...are precisely the areas where technical pressures maximize structural constraints, where the collective and impersonal nature of the product reduces the effects of fashion to a minimum.”

427 Antoine Stinco, “Boredom, School, Utopie,” The Inflatable Moment, 70.
types. Designed as low-cost, mass-production units with the plastics manufacturer SCIFA, the ensemble formed an entirely pneumatic environment, described as a system of “furnishing elements” (éléments du mobilier). Sets of standard components were designed in a range of different colors and surfaces, favoring a translucent PVC that displayed the emptiness of the air-filled volumes within. A component-based system, it offered the user the ability to blow up or deflate at will, but also the flexibility to interchange and re-arrange the parts in order to form different objects, from a wall partition, to a divan, bed, or a seat [Fig. 3.32]. Designed to be decomposed and rearranged, the furnishing appears as a temporary conjunction of elements that can be taken apart again at any time, less a “system of objects” than an object as system. The link between pneumatic technology and disassembly imagined destructuring domestic life by reducing structure, weight, and permanence, but also by altering the attachment to objects themselves. The object, on the threshold of its disappearance, becomes an ephemeral environmental medium offering the possibility of continual disassembly and reassembly, transforming itself into the mastery of a flexible, indeterminate, and highly temporary inhabitation.

Utopie’s rhetoric of démontage sought to disperse and dismantle the forms of coherence structuring the media image, and with pneumatics such a project confronted an object that was both seemingly open to appropriation yet also strangely resistant to it. Composed of welded sheets of plastic or rubber, pneumatic structures depended on the minute integrity of every single inch of their seams, a pressurized system in which even the minutest discontinuity carried the threat of leakage, deformation, and collapse. In Aubert, Jungmann, and Stinco’s designs for furnishing systems, and even more so in their
contemporaneous design for a temporary exhibition environment, such discontinuities were multiplied, albeit in a different form. [Fig. 3.33] Here a single high-pressure tube was repeated, both to allow for demountability but even more importantly to create a system whose overall structure could continue to be self-supporting even when subject to potential deformations. Here, the group’s particular insistence on dismantling redirected the more amorphous plasticity of pneumatics towards a taut geometrical logic of structure; at once drawing on and exacerbating the constructive tradition of figures like Emmerich and Albert. What Banham had summarized as a combination of disaffection for “official modern architecture” and an enthusiasm for DIY technology, can be seen in these cases as the site of deeper contradictions. If such pneumatic structures appeared as a means for more radically dismantling architecture’s attachment to values of durability and permanence—becoming an apparatus subject to flexible, open ended disassembly—they also drew architecture closer to a logic of the commodity that emphasized ever greater disposability.\footnote{Jean Baudrillard’s \textit{System of Objects} implicitly targeted this problem, by elaborating a distinction between models and series. Such a contradiction indeed strained the group, but it also participated in a larger reconsideration within Marxist theory, where existing notions of base and superstructure appeared insufficient for adequately theorizing the importance of information, media, and culture within relations of production. The role of media would become more directly analyzed by Baudrillard in issues of \textit{Utopie} from the early 1970s: “The Mirror of Production,” \textit{Utopie} 5 (May 1972): 43-57, and “Requiem pour les medias,” \textit{Utopie} 4 (1972): 31-55.} Disposability can be understood here in the familiar sense of something designed to be used up and thrown out, but also as something more thoroughly conceived as adaptable to multiple and changing dispositions, more like the logic of a dispositif than an object.

In their insistence on openness and disassembly, such structures could be seen as counter-images to a cultural system which members of the group saw as increasingly closed in on itself. Baudrillard’s effort to theorize the system of objects, and with it the
rise of a sign exchange value that coordinated differences amongst inessential features of mass-production was one effort to describe this more total closure. If the systematization of semiotic differences amongst mass-produced goods was by the late 1960s becoming integral to ways those goods were marketed, it was equally crucial to the psychic reproduction of subjects, individuals who distinguished themselves by carving out forms of literacy within this semiotic universe. The system of objects, coordinated through new sites of consumption central to the urban redevelopment examined by Utopie, such Les Halles to Parly 2, appeared central to the reshaping of Paris itself. In such a scenario, the demand for coherence amongst systems of differences appeared ever more total and the same time increasingly opaque and arbitrary. If the “system of objects” that Baudrillard sought to theorize appeared as such a new totality, it was never fully secure, but rather could be seen as “a systematization of fragility.”

Citing the ephemerality of fashion, the febrility of objects designed to fall apart, the repetition compulsions incited by serial production and the ever more rapid passages between satisfaction and disillusion, a specter of disassembly haunts Baudrillard’s system of objects.

Once assembled and mounted the components of the technical object imply a certain coherence. But such a structure is always vulnerable to the human mind… The hierarchy of elements can be dismantled at any time, and those elements made interchangeable within a paradigmatic system that the subject uses for his self-narration. The object is discontinuous already—and certainly easy for thought to disassemble.

Articulated at a moment that problematized architecture from nearly every angle—from its teaching and history to individual practice and the legitimacy of the profession—the rhetoric of disassembly served as a media practice, a means for conceptualizing new materials and technologies, but also as an attempt to dismantle the structures of

---

The magazine, pamphlets, posters, and exhibitions produced by *Utopie* and the small-scale, independent, flexible production explored by AJS Aerolande aimed to refuse the norms of “la profession libéral.” The collaborative effort to theorize architecture as a form of production depended crucially on developing ways of intervening in and reconfiguring the space of print, the matrix in which word and image came together. Both in print and in the designing of pneumatic prototypes, the procedures enacted through images of clipping, inflating, hoisting, and dismantling, were attempts to redefine technologies whose status appeared open, whose “social possibility” lay in the degree to which they were not yet definitively imprinted by the dominant cultural imaginary. Offset lithography likewise provided a means for transforming an inexpensive, self-directed, and hand-made product into a mass medium. Fueled by a

---

431 The collaboration appeared at a moment when many architects refused to engage in competitions for state commissions and were deeply skeptical of salaried work in an architectural office. While beyond the scope of this chapter, the case of *Utopie* also provides an opportunity to think about how such group formations related to larger efforts on the left to break down the conditions of work during the 1960s and early 1970s. In their analysis of the reorganization of work in postwar France, Eve Chiapello and Luc Boltanski have noted how the demand for reorganizing work around small, creative, self-managing groups, initially as a critique of alienated forms of salaried, industrial work, set the stage for what they call the “dismantling of the world of work.” This dismantling of work, they argue, was one of the unintended consequences brought about following May 1968, in which a radical critique of work came to be incorporated by an emerging neo-liberal phase of capitalism, where autonomy, flexibility, mobility, and continual reinvention would become new norms demanded of the labor force. See Boltanski and Chiapello, *The New Spirit of Capitalism*, (London: Verso, 2005) 217-245.

432 Jean-Paul Jungmann stressed the difference between designing objects for manufacture and independent architectural practice. Interview with the author, June 2007. The position of the architects was also described in a letter of 19 October, 1967, which notes the contradiction between practicing the “métier d’architecte” and “entering into the social and economic category of the employee.” *Utopie* Archives, Theil-Rabier.

433 The practical knowledge of print techniques gathered in making *Utopie* would remain important to a number of the group members in their later careers. Shortly after 1968 Jean-Paul Jungmann organized a printing workshop modeled on the American Free Press network as a part of his contribution to the short-lived L’Instritut de l’environnement, established in the then empty Les Halles just prior to their demolition. As a part of UP6 in the early 1970s he established another open printing workshop called atelier ZZZ, which produced its own eponymous magazine, and later the magazine *L’Ivre de Pierres*. Jean Aubert, who taught for a short while in the faculty of Urbanism at the newly formed Université de Vincennes organized courses in which the goal was the production of a magazine. After leaving Anthropos editions, Hubert Tonka and Isabelle Auricoste established the commercial printing house *L’imprimerie quotidienne* in the Parisian suburb of Antony, which printed *Utopie* during the 1970s as well as a number of other magazines, including the first issues of *Semiotext(e).*
simultaneous interest in an architecture that was ephemeral and reconfigurable, and in pushing demountable technologies to their limits, the group’s effort to link pneumatics and disassembly was caught between the hard and the soft: a salient figure of transition. If their critique of the profession was developed in the name of utopia, unlike many other groups at the time, they refused to project an image of the future. Introducing the magazine in 1967, the group offered two blank rectangles. If the emptiness of these rectangles evoked the ephemerality of air, they can also been seen as an effort to point to what was lacking in the present. Returning to the etymology of the term utopia, they stressed less the good place (eu-topos) than the no place (u-topos), or in their words, “the uncrossed interval between praxis and theory.”434 Determined to exceed their individual disciplinary specializations, they described Utopie itself as a type of anticipatory passage, “a phase of theoretical construction.”435 If the rhetoric of disassembly took images apart in an effort to read both the contemporary system of objects and the transformation of architecture amidst the emergence of a totally urbanized society, it also sought forms of practice which could exceed and thus question the various professional identities through which the members of the group had been defined, not simply a new form of collaboration but a more radical desire to shed the certainty of what an architect, a sociologist, an urban planner, or philosopher, was. It was a risky intellectual wager. Just as the object is taken apart, so too is the subject. Articulated amidst the political and theoretical turbulence of the end of the 1960s, the rhetoric of disassembly was something of an impossible balancing act, refusing both the traditional fixity demanded of architecture and the programmed fungibility of styling, wagering on a more profoundly

434 “Utopie Dialectique,” Utopie 1 (May 1967), 54.
435 Ibid..
unstable interaction between technics and culture. Not insignificantly, this more radically dismantled architecture was tied to a faith in theoretical construction. In this sense, the literal instability of pneumatic structure was an indispensable vehicle for the larger intellectual project of démontage, one that sought to render architecture’s disciplinary identity unstable by taking it apart. Architecture was understood neither as an art, a service, or a technical instrument, but as a “theoretical problem,” one that sought to reflect on the workings of architecture’s production in order to question how disciplinary limits were drawn.
Chapter Four: Florence c. 1972

Ruptured Temporality: Superstudio, Allegory, and the Surface of Media

We live in an age of hyperawareness, our senses extended around the globe, but it’s a case of aesthetic overload: our technological zeal has outstripped our psychic capacity to cope with the influx of information. We are adrift on the surface of radical evolution unable to plumb the depths of its swift and turbulent current.


When design as an inducement to consume ceases to exist, an empty area is created, in which slowly, as on a surface of a mirror, such things as the need to act, mold, transform, give, conserve, modify, come to light.

— Superstudio, The New Domestic Landscape, (1972)

A visitor entering Superstudio’s “microenvironment” installed at the Museum of Modern Art’s landmark 1972 exhibition Italy: The New Domestic Landscape encountered a darkened room entirely lined in black felt inside of which was a softly glowing mirrored cube. Within the cube lay a sheet of laminated plastic upon whose surface were several devices of uncertain purpose connected to a metallic plug in the corner, together with what look to be a bunch of radishes. This ambiguous interior was reflected by the cube’s
one-way polarized surfaces, producing the illusion of a plane extending to infinity in the uncertain darkness.\textsuperscript{436} [Fig. 4.1] Adjacent to this ambiguous object was a brief film that looped endlessly on a small projection apparatus. The environment was one of several that the exhibition’s curator, Emilio Ambasz, had included as a counterpoint to the larger survey of Italian architecture and design, engaging practices such as Superstudio under the rubric of what he called “counterdesign;” a position that rejected the idea of design as a problem-solving activity and instead “…emphasized the need for a renewal of philosophical discourse and for social and political involvement as a way of bringing about structural changes in our society.”\textsuperscript{437} If architecture and design sought to engage in a renewal of philosophical discourse, the exhibition also highlighted their expansion to include a range of electronic and audio-visual media. Not only did the curator create his own film to introduce the exhibition, he commissioned films to accompany each environment, acknowledging both that film was an essential medium for such counterdesign practices, but also that questions of media were key to understanding the discursive ambitions of “counterdesign” practices.\textsuperscript{438} Superstudio’s film, entitled

\begin{flushright}
Superstudio presents, in a larger dark area, a small cubic space made up of one-way mirrors on four sides. The public, which may walk around this cube, sees through the one-way mirror a space infinitely reflected. The space, symbolizing a benign environment void of any constructions presents, when one looks up, a continuing passage of clouds. Looking down, one sees the earth transformed into a continuous infrastructure of energy systems. Connected to that floor infrastructure, emerge a number of tubes purporting to be life-supporting elements: air, heat, water, food, communications.
\end{flushright}


\textsuperscript{437} Ambasz, \textit{Italy: The New Domestic Landscape}, 137.

\textsuperscript{438} For an analysis of Ambasz’s curatorial strategy and the importance of media in \textit{Italy: The New Domestic Landscape}, see Felicity D. Scott, “Italian Design and the New Political Landscape,” \textit{Architecture of Techno-Utopia}, 117-150. More recently, the environments and films have been unearthed in greater detail for the exhibition \textit{Environments and Counter-Environments: Italy the New Domestic Landscape} at Columbia University’s Arthur Ross Architecture Gallery, in 2009 curated by Mark Wasiuta, Peter Lang, and Luca Molinari.
“Supersurface: An Alternate Model of Life on Earth,” was an allegorical narration concerning a hyper-sophisticated technological surface that promised to provide, air, water, heat, video, audio, nutrition, nature, light, and even memory, whose effect would be to render any form of three-dimensional architecture outmoded. Perhaps more than any of the other architects and designers included in the exhibition, Superstudio had already mobilized a widespread and sophisticated use of film and photographic media, having realized over 100 photomontages and planned several films by 1972.\textsuperscript{439} In both static and moving images, a range of montage techniques were central to their practice—a key mode through which the group conceived and circulated projects designed to operate within the space of the mass media. From the late 1960s onwards, the group’s projects were designed specifically for reproducibility, to be disseminated via little magazines and commercial periodicals, to appear in architectural exhibitions and as prints circulated through the art market, to serve as the material for lectures and to be distributed through alternative film and video networks. Montage was central, not only as a technique but to the ambiguous conceptual position the group formulated, a discourse that was inextricable from images, and which was constructed so as to provoke antithetical readings. The group’s best-known projects, such as the \textit{Continuous Monument} (1969) or \textit{Supersurface} (1972), can be read as promises of liberation—from the encumbrances of objects and the attachments of place—but also as vehicles for a more pervasive “technological imperialism.” If they visualize a condition in which

\textsuperscript{439} The group had already produced a first film, \textit{Interplanetary Architecture}, in 1969, and had developed a complete storyboard for the “Continuous Monument.” “Supersurface” was their third film project. Three films were completed out of a total of seven that were planned. These include \textit{Interplanetary Architecture} (1969), \textit{Supersurface} (1972), and \textit{Ceremony}, (1973). Storyboards, scripts, and photomontages exist for \textit{The Continuous Monument}, (1969-71), as well as the films \textit{Education}, \textit{Love}, and \textit{Death} (all 1973).
architecture was vastly amplified and extended, the films simultaneously assert scenarios in which architecture is radically reduced, pushed towards its own disappearance.\textsuperscript{440}

It was precisely this type of ambivalence that troubled a historian like Manfredo Tafuri, who dismissed Superstudio’s \textit{Continuous Monument} (1969) as a cynical “marketing operation,” one that “turned the project [of modern architecture] into dream material transcribed with an irony ‘that made nobody laugh.’”\textsuperscript{441} From a very different perspective, Colin Rowe arrived at a related conclusion, interpreting the project as a excessive and naïve translation of the ideas of Herbert Marcuse, one that, he concluded “can only operate as some sort of green light for the Disney-like entrepreneurs of the future.”\textsuperscript{442} If the judgment of other historians, such as Kenneth Frampton, was more measured, they nonetheless struggled to reconcile the coexistence of a critical attitude towards advanced technology and the “metaphysical” images the group used to circulate their ideas—images “as fleeting and as cryptic as the Suprematist monuments of Malevich or the ‘wrapped’ buildings of Christo.”\textsuperscript{443} The ambiguities surrounding Superstudio’s work, both at the level of the group’s position and in the way they formulated projects that operated strictly via their own dissemination, appealed to other

\textsuperscript{440} On the one hand they evoked the physical disappearance of architecture, noting that “The membrane dividing exterior and interior becomes ever less substantial: the next step will be the disappearance of this membrane and the control of the environment through energy (air-cushions, artificial air currents, barriers, of hot or cold air, heat-radiating plates, radiation surfaces, etc.).” On the other they noted that design was going through a paradoxical disappearance, as “everyday life” itself came to be more designed. “Thus designing coincides more and more with existence: no longer existence under the protection of design objects, but existence as a design.” “Statement by Adolfo Natalini of Superstudio,” Museum of Modern Art Press release 053-46, (May 26, 1972), 4, 10.


\textsuperscript{442} Colin Rowe and Fred Koetter, “Collage City” \textit{Architectural Review} 158:942 (August 1975), 76.

figures at the time, propelling the group from the insular confines of Florence to an international reception—drawing the attention of students and teachers such as Rem Koolhaas, Zaha Hadid, and Bernard Tschumi at London’s Architectural Association, coming to be widely reproduced in Japan, and finding sympathetic reception in numerous quarters in the United States. Superstudio’s deployment of montage was tied to their attempt to reach the broadest possible public, but it was also an attempt to use audio-visual media to address the discipline otherwise, by acting allegorically on some of its key discourses and images. Montage, I will argue, did not simply express ambivalence, but was a device for working on contradictions surrounding questions of technology, at once critical of existing discourses circulating within the field and simultaneously drawn to mobilize potentials latent within emerging forms of electronic communication. At a moment in which the field faced a “crisis of the object,” the practice of montage provided a model for reconceptualizing terms such as surface and information, challenging more dominant terms such as structure and space. The excessive claims made for surface within Supersurface point up the fact that the group’s strategy was less to contest architecture’s inundation by new media, nor to reconcile conflicting positions, but rather to push the implications of such a condition to an extreme, exacerbating mediatic conventions in an effort to redirect their effects. To assess this practice of montage more carefully requires taking a distance from what critics described as the “dreamlike,” or “metaphysical” qualities of the group’s images, and to look more closely at how such

---

montages were physically constructed, from the parts appropriated and assembled to make them, to the formal techniques employed, to the channels through which they were disseminated and reproduced.

Existing accounts of the group have typically associated their use of montage with the more general influence of Pop in the mid-1960s, linked to the group’s awareness of the work of Archigram or Hans Hollein. Even if such a theory of influence were accepted, it would fail to capture the manner in which Superstudio digested such developments; their concerns emerging both at a distance from the key centers of Pop discourse and being tied to distinctly different experiences. Of importance here is less the similarity of such montages to other period images, than the manner in which members of Superstudio used the construction of both individual photomontages and of montage sequences in film, to condense diverse and often conflicting internal interests—ranging from theories of technology to contemporary anthropology, from cinema to industrial design, and from the legacy of Italian rationalism to contemporary political theories of *autonomia*. The earliest uses of photomontage and film by members of the group appear not in relation to such an international network, but in response to the politicized milieu of architectural pedagogy at the Florence Faculty of Architecture in mid-1960s, which, like many other schools in Italy, had seen significant protests for half

---


446 Helpful for my own research, has been Hal Foster’s suggestion of a *x* differentiation between Superstudio’s practice and the main lines of Pop in architecture, one that staked a fascination with the expression of technology against its interest in languages of consumerism. See *The Art-Architecture Complex* (New York: Verso, 2011) 8-10.
a decade by 1968. If the formative milieu was different, so too was the manner in which
the group deployed montage. Superstudio’s montages both radically intervene in and
rearrange the space of photography, while nonetheless scrupulously maintaining a
perspectival disposition, mobilizing a thorough knowledge of projective geometry that
group members absorbed during their study in Florence. Within this manifest concern for
norms of projection, I will argue, lay a latent desire for aberration, to recast the
discipline’s recurring iconography in ways that subverted their accepted use. If the group
used montage to effect such iconographic deviations, they simultaneously effected a
radical shift in the conceptualization and practice of the perspective; no longer strictly a
view of a given project, perspectives were conceived as elements within expanded quasi-
cinematic montage sequences, whether in actual films, or as elements of storyboards,
lecture slides, prints, and magazine illustrations. The montages were continually inserted
and repositioned within discourse—whether by means of voice over, extended captions,
articles, and images overprinted with type, articulating alternative emplotments for
narratives within the field. It is this discursive aspect of the group’s image sequences that
has most often been effaced in the group’s subsequent reception, not only are
Superstudio’s projects commonly referred to as isolated images, they are frequently
published in ways that have severed them from their accompanying texts. Seen from this
perspective, the montage form appears as a device for expanding the range of tactics
through which architectural concepts could be formulated and presented, a mode for
intervening in ongoing debates in regarding the impact of mass culture upon more
traditional cultural domains.
Tracing the course of the group’s evolution, from its formative stages to the most well known projects, reveals significant changes in Superstudio’s practice of montage. Existing accounts of the group have both pointed to the 1966 Superarchitettura exhibition in Pistoia as the site of the group’s emergence, and situated Superstudio’s formation against the backdrop of protests and occupations that gripped the entire Italian university system through much of the 1960s, events that also marked the Florence Faculty of Architecture. Both the decision to identify as a group and the privileging of the montage form can be read in relation to the experiments taking place in this milieu. A key impetus towards the definition of such groups were the occupations themselves, beginning as early as 1963-64, these actions that marked a turn away from models of political participation through elected student bodies in favor of directly targeting of Faculty Councils, composed of tenured professors who retained authority over the content of instruction. Alongside such direct action tactics, a central demand of the students was to work in semi-autonomous research and study groups, rather than on individual student assignments, which were previously the norm. Writing on behalf of the occupation in Casabella Continuità in 1964, two Florentine students—identified only as Pizziolo and Di Cristina—stressed the instrumental role of such “gruppi di studio” (studio groups) in rupturing “the old balance of relations between authoritarians and the

---

447 The first project to carry the name Superstudio was the exhibition Superarchitettura at the Gallery Jolly from 4–17 December, 1966. References to this unrest can be found in Paula Navona and Bruno Orlandoni, Architettura Radicale, (Milan: Segrate 1974). The importance of educational reforms are particularly emphasized in Peter Lang, “Suicidal Desires,” Superstudio: Life Without Objects, (Milan: Skira, 2003), 31-51; and in Marie Therés Stauffer, “Utopian Reflections, Reflected Utopias.” For a chronology of a range of university occupations in 1968 including those in Florence, together with related primary documents, see Documenti della rivolta universitaria, ed. Movimento Studentesco (Bari: Laterza, 1968).

448 According to Guido Martinotti, the architecture faculties were some of the earliest to adopt this direct tactic. See “The Positive Marginality: Notes on Italian Students in Periods of Political Mobilization,” Students in Revolt, (Boston: Houghton Mifflin, 1969): 167-201. In particular, he stresses the breakdown of the Italian student union (UNURI), which had formed immediately following WWII. See also, Giorgio Galli, “The Student Movement in Italy,” Human Context 2:3 (December 1970): 494-505.
cultural agnosticism of comfort, giving a glimpse of a different form of school.” Yet the emphasis the group placed on hyperbole, allegory, and ambiguity can also be seen as a break with the oppositional terms of militant speech during these years. In this sense, the connections with student unrest are, if anything, highly indirect, and can be sought less in immediate goals for pedagogical reform than in a broader concern for altering the praxis though which the role of the architect was performed, and the ways in which architectural concepts were developed, represented, and disseminated.

The earliest evidence of direct links between such group formations and the members of Superstudio remains sparsely documented. Shortly after the occupations in the fall of 1964, Toraldo di Francia formed a group together with Andrea Branzi, Gilberto Corretti, Massimo Morrozzi, and Ali Navai, in the context of Eduardo Detti’s studio regarding the design of a new university for Florence. The subject of a new university was a highly overdetermined one, and the group’s collaborative project responded by exacerbating the scale of the studio brief, and correspondingly the scope of the problem, immensely. The project proposed an “urban structure” stretching from Florence to Pistoia, some 40 kilometers distant, of which the university would be but a small part.

If such a project appeared in tune with the contemporaneous international emergence of

---

449 Pizziolo and Di Cristina, “Motivi di Crisi e Discorsi ai Nuovi Studenti,” Casabella Continuità 287 (May 1964): 40, and Bacciardi, “Prospettive,” 41. The issue, devoted to “Debates about Schools of Architecture,” compiles a wide range of documents related to occupations at various architecture faculties and congresses in Italy during 1963–64. The importance of such studio groups to the architectural groups that would later emerge in Florence was noted by the critic Lara Vinca Masini, who argued that “the definition of groups assumed a political meaning inside of the school, calling for the reorganization of the school itself.” (“Già in quel momento, però, la definizione dei gruppi assumeva, all’interno della facoltà, significato politico e si chiedeva il riassetto della facoltà stessa.”) “Archifirenze,” Domus 509 (April 1972): 40.

450 Theres-Stauffer suggests that Branzi, Degannello, Morrozzi, and Toraldo di Francia were also part of the 1964 occupation. See “Utopian Reflections, Reflected Utopias,” 35.

451 Gilberto Coretti recalled that the group approached the topic of the university in a “wholly metaphorical and utopian key, proposing a linear city from Florence to Pistoia that would include the architecture school.” Cited in Theres Stauffer, Figurationen des Utopischen, 126. The project is also noted in Cristina Ratazzi, Andrea Branzi; Militanze tra teoria e prassi, (Milan: Francoangeli, 1997) 65.
megastructure discourse, the inter-urban scale of the project also engaged more immediate Italian responses to issues of urban expansion, framed at the time through terms such as the “new dimension” or the “city-territory.” While such a project would appear to affirm the greatest technological and social ambitions associated with the megastructure discourse that was ascendant during these years, the students described it less as an extension of advanced, technologically minded urban planning efforts, than as “an allegorical narration” of the “definitive overcoming of functionalist discourse.”

The territory-scaled structure was not proposed as a solution to urban problems, but rather as an attempt to question the terms of the discussion by pushing its implications to an extreme. In retrospect, the emphasis on allegory is noteworthy, signaling an intellectual shift, one that was equally evident in the group’s unorthodox manner of presenting the project. Toraldo di Francia recalls that for the final presentation, the group organized an open-ended performance, in which large cardboard models were overlaid with projected images and accompanied by recorded music. The decision to use of poor and temporary materials such cardboard, ephemeral light, and sound to talk about a massive scale of architectural and urban intervention was a statement in itself, a claim that privileged concept over material finish, particularly important at a moment when

---

452 See, for instance, *Casabella continuità* 264 (1962) devoted to “Nuova Centri Direzonali,” and *Casabella continuità* 270 (1962) devoted to the I.N.U. meeting of that year. For a discussion, of the concept of “City-Territory” see Aureli, *The Project of Autonomy*, 53-69.

453 The Strutture urbana Firenze-Pistoia” was described in the following terms on the verso of the poster realized for the second Superarchitettura exhibition, a joint Archizoom and Superstudio project at the Galeria del Commune di Modena from the March 19 to April 12, 1967. The inclusion of the models in this visual chronicle indicates their importance to the formation of the two groups.

454 Cristiano Toraldo di Francia, Interview with Author, August 19, 2011.
students fought to make their final models out of materials other than wood.\textsuperscript{455} Not surprisingly, the enormous scale of the project and the polemical questioning of “functionalist discourse,” combined with its experimental staging, tested the limits of discourse within the school and provoked a conflict with the faculty.\textsuperscript{456} The turn toward an allegorical mode, commented not only on the studio brief, but reflexively addressed the discipline, an effort that sought to simultaneously reconsider and question both the materials of architectural conception and the ideology of urban expansion within which architecture and planning were called to function.

A related combination of architectural models, “allegorical narration,” and multimedia techniques can be seen in the thesis projects realized by members of Superstudio between 1965 and 1968. Gian Piero Frassinelli’s thesis, defended in the spring of 1968, took the form of a large model for a “Center for Anthropological Studies, Applied to the Problems of Acculturation.”\textsuperscript{457} [Fig. 4.2] The model served to communicate the project, but also as the site for two short films. The first served to establish the anthropological concept of acculturation through an essayistic montage of texts, diagrams, and images, drawn from sources ranging from Rousseau and Machiavelli, to pages from illustrated weeklies such as \textit{Oggi}, and contemporary footage shot in Nigeria [Fig. 4.3].\textsuperscript{458} A second film, screened along with the first, was composed of footage shot on a 16mm dolly-

\textsuperscript{455} According to Lang, overcoming the stipulation that final projects include a wooden model was one of the “hard-won victories” of the student movement. Lang, “Suicidal Desires,” 40.
\textsuperscript{456} According to Toraldo di Francia, faculty debated the question during a prolonged, closed-door deliberation, the result of which was ultimately an acceptance of the project for course credit. Toraldo di Francia, Interview with Author, August 19, 2011
\textsuperscript{458} The films themselves have been lost. A detailed storyboard, together with notes for voice over and camera movements is preserved in the Notebook, Tesi di Laurea, Archivio Superstudio, Florence. The footage from Nigeria was obtained from Frassinelli’s sister, whose husband worked in Nigeria on the construction of dam projects at the time.
mounted camera that was physically maneuvered inside the model. Film was instrumental in establishing a visual relationship between movement through the model’s interior and the larger intellectual milieu assembled by means of filmic montage. Frassinelli and Toraldo di Francia had a shared love of film, and during the same period Toraldo di Francia developed a related experiment for presenting his final thesis. The project, defended in 1967, was for a temporary “Holiday Machine” to be installed on the coast of Calabria, near Tropea, a project whose centerpiece consisted of elaborate section drawings and a set of photomontages of the “machine” abruptly inserted within the existing topography [Fig. 4.4]. For the final presentation, rather than present the drawings and montages, Toraldo di Francia had them reproduced as large-format slides that were displayed for the professors as a looping projection. Replacing the physical drawings with their reproductions produced a conceptual distance from the project, which could only be perceived only as a type of quasi-filmic image sequence. The very choice of a looping slide projection echoed the image technologies popularized during these years for home slide projections; not unlike a vacation slide show, the convention of presentation drew a link between the apparatus of visualization and the program addressed in Toraldo di Francia’s thesis.

The use of such popular technologies to create moving, mediated image sequences was part of a larger effort to counter-balance and extend the means of

459 While in the school of architecture together, the two had begun working toward a film version of The Gospel According to Matthew, a project that was cut short with the release of Pier Paolo Pasolini’s film on the same subject in 1964. Frassinelli, Interview with Author, August 17, 2011.

460 Toraldo di Francia, Interview with author, August 19, 2011. The photograph of the Calabrian coast used for the photomontage was not a readymade image, but one specifically photographed by his father. Toraldo di Francia’s father worked as an engineer for Ducati, specializing in the optics of lenses used for miniature cameras. In 1953, he moved temporarily with his family to Rochester, New York, where his father was invited to work at a research division of Eastman-Kodak.

461 Ibid.
representation within the school, marking a rupture with the techniques of modeling and drawing traditionally required for assessment. The role of such montage sequences could also be seen to perform a different function—within a still rigid framework of evaluation they served as important devices for introducing the larger intellectual concerns that Toraldo di Francia and Frassinelli brought to bear on their chosen programs. Such tactics were particularly important in a context that students described as “strangely contradictory,” one in which the freedom to “…pursue ‘unlimited’ research opportunities, (sometimes bordering on free will and vague desire) coexists singularly with a structure of individual courses that remains monocentric…a teaching structure that (because of the transfer of a few “enlightened” teachers to other posts) tends clearly to become more rigid.” 462 The use of such montage techniques were not unlike the “allegorical narration” announced in the group research of 1964, and served as a device for mediating a “strangely contradictory” combination of openness and rigidity, a set of representational devices and media apparatuses that served to link the required models and drawings to an expanded array of contemporary discourses and technologies, from cultural anthropology to debates over the impacts mass tourism. 463

If the pedagogical environment in Florence provided one impetus for such combinations of projected images, films, and models during these years, another was the

462 Pizziolo and Di Cristina, 40. The passage reads:

Ne è nato così un modo di essere stranamente contraddittorio—e per certi versi magari interessante—in cui l’apertura per gli studenti di possibilità di ricerca «illimitate» (a volte confinanti con l’arbitrio e la velleità) convive singolarmente con la struttura ancora monocentrica dei singoli corsi e dove l’allentamento dei vecchi ordinamenti rende possibile la coesistenza delle posizioni più polematicamente eversive di alcuni gruppi di studenti con una struttura di Facoltà che (anche per il trasferimento di alcuni docenti «illuminati» in altra sede) tende chiaramente a irradiidirs.

463 Frassinelli originally intended present only the films and models, but later produced drawings at the request of his advisor, Giuseppe Gori, who was concerned that the committee would not pass the thesis otherwise. Email interview with Frassinelli, July 22nd, 2011.
broader emergence of multimedia experiments in the mid-1960s, from the work of visual artists in Italy, from the kinetic work of Gruppo T to the experiments of Gruppo 63, and the controversial audio-visual environments realized for the Milan Triennale in 1964, to contemporaneous American developments such as Stan Vanderbeek’s Moviedrome and Andy Warhol’s Exploding Plastic Inevitable. Of particular importance was a related mass cultural phenomenon that Toraldo di Francia and Natalini were in touch with at the time: the emergence of spaces known as “Piper” clubs, which combined music, projections, photo enlargements, theater, exhibitions, dancing, and happenings in various cities across Italy. In 1965, together with Branzi and Morrozzi they convinced the proprietor of a local hall used for bingo games and occasional dances to let them temporarily convert the interior by means of slide projections, wall paintings, mobile partitions and pedestals, creating a temporary, Piper-inspired music and performance venue in Florence. The project was short-lived—the interior was destroyed in the flood of 1966—yet Natalini and Toraldo di Francia’s overlooked involvement in such a project appears significant in retrospect. The following year Natalini would become a teaching assistant for Leonardo Savioli, whose studio adopted the multimedia architecture of the Piper phenomenon as its subject. In the studio, two strands of experiment emerging from the Florence Architecture Faculty come together—on the one hand experiments with sound, light, film, and photographic projections, and on the other the demand that architectural study take the form of group work (the course stipulated that students work in groups, which were

465 According to Toraldo di Francia, the space was associated with the local branch of the PCI (Italian Communist Party) and was primarily a bingo hall, that occasionally hosted dances. Interview with Toraldo di Francia, August 19, 2011.
composed of between five and eight people). The retrospective importance of the course can be judged from the large number of participating students who went on to found groups associated with what would later be dubbed the “Architettura Radicale” movement, including future members of Superstudio and Archizoom, as well as groups such as 9999, UFO, and Zzigurat.466

For Savioli, the important aspect of the research was not the Piper per se, but rather the studio’s larger goal: to develop a thesis regarding what he termed a “spazio di coinvolgimento,” or space of involvement.467 Through a search for a “new possible relationship between the user and his space,” Savioli sought means that could support the physical appropriation and reconfiguration of a more responsive, varied, and flexible architecture.468 Savioli’s interest in flexible spaces stemmed less from a preoccupation with the viewer’s relationship to new types of visual or electronic media, than from his involvement in the design of mass housing complexes in the early 1960s, most notably at Sorgane on the outskirts of Florence (1962-1970) [Fig. 4.5]. The “key task for contemporary architects,” he wrote, was to enable individuals to “act directly” on building components, to “unblock the fixity, the schematicity, and the peremptory nature of contemporary urbanistico-architectonic space.”469 Savioli had experimented with initial steps in this direction for the 1965 exhibition La Casa Abitata in Florence,

466 Over 250 students are listed as having been enrolled in the course, including Alessandro Poli and Alessandro Magris, who would soon join Superstudio. A selection of the projects from the course, together with a list of participants, was published as Ipotesi di Spazio (Florence: G&G Editrice, 1972). See also Orlandone, 25.
467 Savioli, Ipotesi di Spazio, 1. Savioli notes that the Piper “…era più che altro un pretesto… per una ricerca “alle spalle” più ampia che permettesse a sua volta di affrontare i problemi generali inerenti ad un nuovo possibile rapporto tra l’utente ed il suo spazio.”
468 Leonardo Savioli, “Per un nuovo rapport tra l’utente ed il suo spazio,” Casabella 326 (July 1968): 34-5. Rather than “involvement” or “participation” the English summary in Casabella translates Savioli’s title as “Making one’s own space.” In the various texts on the studio, it is noteworthy that Savioli no longer refers to “man,” nor to the “inhabitant,” but rather to the utente, the “user” or even “consumer” of space.
469 Ibid., 34.
developing a cast of elements whose arrangement could be determined by the user within an overall system.\textsuperscript{470} Invoking “a different idea of the duration of structures” brought about by the emergence of consumer society, Savioli’s statement echoed theories of expendability and change that had begun to circulate in European architectural culture in the later 1950s, from the work of John McHale, Cedric Price, and Archigram in England, to that of Yona Friedman and the Groupe Experimental pour Architecture Mobile (GEAM) in France. If Savioli solicited an architecture whose elements could be manipulated by the user, his own work appeared unmoved by the advanced technological and mechanical preoccupations that characterized such larger discourses on expendability and mobility, turning instead toward the plasticity of poured concrete and rough exposed materials reminiscent of the late work of Le Corbusier. Savioli’s emphasis on irregular forms, textures, and materials in a contemporaneous building like the apartments on Via Piagentina (1964-67) was intimately tied to his search for a different type of image, one no longer secured by the “authority” of typology, and lacking “the indisputability of an image that imprints itself definitively in the memory.”\textsuperscript{471} [Fig. 4.6] The loss of fixed and stable reference points for architectural space can also be felt in the graphic fluidity of Savioli’s drawings during these years. Resulting from the combination of abstract gestural lines, ink stains, and heavily frottaged textures, the elaborate images could be read as quasi-architectural plan views and as reminiscent of process-driven Informale painting in Italy at the time.\textsuperscript{472} [Fig. 4.7]

\textsuperscript{470} Casa abitata: biennale degli interni di oggi (Florence: Arti Grafiche Meroni, 1965).
\textsuperscript{471} Savioli, “Per un nuovo rapport tra l’utente ed il suo spazio,” 34. He writes: “Lo spazio mi sembra debba perdere del significato simbolico tradizionale; debba perdere del significato di convinzione di una immagine definitiva costituita, della normatività di un messaggio il cui cifrario è conosciuto fin dall’inizio, della indiscutibilità di una immagine da imprimeri definitivamente nella memoria, dell’autorità, infine, di una immagine tipologica.”
\textsuperscript{472} Ibid. “Lo spazio non è immagine definitiva, simbolica, tipologica, ma diviene immagine allusiva,
By contrast, for Natalini the key issue was not that architecture’s image had become allusive, fluid, and informal, but that consumer society had produced new and more intensified forms of identification between objects and images.\textsuperscript{473} “The new objects” Natalini declared in a 1966 text that would later be regarded as Superstudio’s first manifesto, “are at once things and images of things.”\textsuperscript{474} The program of the Piper Club was ambiguous enough to contain both interests, on the one hand the desire for a flexible, changeable, and open relationship to the user, on the other, a fertile space for processes of reification, one in which images both became more object-like and objects were used to produce images. Natalini’s pedagogy looked less to the amorphous textured materiality of Savioli than to mechanistic procedures associated with a vocabulary of montage and assemblage. Describing the pedagogy of the studio in \textit{Casabella}, he identified these as key aspects of a “Pop-process:”

Disorientation, transposition of scale, assemblage, montage, decomposition, repetition and iteration, contamination, are terms that have been continuously used…Through "disorientation," the object is removed from its context and proposed again in another, adopting a new series of relationships….With “assemblage,” pieces that have been produced or recovered are joined together by establishing new relationships, stimulating new mental associations; the

evocativa, pretestuale…..” See also Leonardo Savioli, \textit{Leonardo Savioli} (Firenze: Edizioni centro proposte, 1966). Savioli’s position was distinct from much postwar Italian architectural theory, whether Ernesto Nathan Rogers’ search for contextual and historicist symbols in \textit{Casabella Continuità}, or the neo-rationalist research into the endurance urban typologies, in the work of Ludovico Quaroni, Aldo Rossi, and others.\textsuperscript{473} Natalini described the course as responding to “la crisi dell’informale,” an uncited quotation of a 1964 article by Gillo Dorfles that had sought to position the interest in Pop art in Italy as fueled by the collapse of the earlier aesthetics of \textit{arte informale}. Adolfo Natalini, “Arti visive e spazio di coinvolgimento,” \textit{Casabella} 326, (July 1968): 35-6. See, Gillo Dorfles, “La Crisi Dell’informale e le Nuove Tendenze,” \textit{Marcatrè} 9 (1964): 264-70.\textsuperscript{474} “Il nuovi oggetti sono insieme cose e immagini delle cose: il dream car è il auto e il proiezione di un’auto; il nuovo monumento è l’immagine del monumento.” (The new objects are at once things and images of things: the drear car is an automobile and the projection of an automobile; the new monument is the image of the monument.) The text, printed as a poster for the “Superarchitettura” exhibition, was a joint Archizoom and Superstudio endeavor at the Galeria del Commune di Modena from the March 19 to April 12, 1967. Here again one finds an echo of Dorfles, who associated Pop with a process of oggettualizzazione, one that valorized techniques of reproducibility drawn from the mass production of commodities, while also seeking to translate all artistic concepts into discreet “visual objects.”
mechanical logic at the root of “montage” reveals at once the parts and the formative process. In the studio, such terms were applied to the collaborative creation of large physical models, several of which illustrated Savioli and Natalini’s article. Photographed at very close range, traditional materials such as wood, plaster, and clay are conspicuously absent. Instead the viewer recognizes a heterogeneous array of industrial metals, machine parts, Plexiglas, plastic sheeting, plumbing and electrical supplies, as well as domestic objects and common consumer goods [Fig. 4.8]. Identified as the work of student teams, they range from the Bartolini group’s “reticular complex,” composed out of metal rods and gears, clear and colored plastic tubing, copper conduits, and plumbing elements; the Alderighi group’s “contemporary monument,” devised from a single Coca-Cola bottle positioned within a mirrored cube; the Gherardi group’s parking structure-Ferris Wheel, created from bicycle wheels, fabric scrim, a bird cage, metal tubing, industrial mesh, and toy cars; or the Caveada group’s complex spiral circulation system, made up of a combination of colored Plexiglas sheeting, metal rods, plastic bowls, and flexible plastic hoses. Throughout there is a heightened concern for conspicuously visible parts that echoes Natalini’s description; the effort to create new physical and mental relationships between disparate pieces highlights the architecture as the result of a conspicuous process.

---

Spaesamento, trasposizione di scala, assemblaggio, montaggio, scomposizione, ripetizione e iterazione, contaminazione, sono termini che sono stati continuamente usati, e soprattutto sono stati i nuovi stimoli che hanno dato alla progettazione lo scatto necessario a passare da materia di studio o da routine professionale ad azione creativa ed attiva. Attraverso lo ‘spaesamento,’ l’oggetto tolto dal suo contesto e riproposto in un altro assumeva una nuova serie di relazioni, come attraverso la ‘trasposizione di scala’ (ingrandimento, kolossal) si introduceva una nuova ottica e la visione del mondo avveniva attraverso la mediazione della macchina. Con l’’assemblaggio,’ i pezzi prodotti o recuperati venivano uniti tra loro instaurando nuove relazioni e stimolando nuove associazioni mentali ; la logica macchinista alla base del ‘montaggio’ rivelava insieme i pezzi e il processo formativo.”

476 The groups members are listed in Savioli and Natalini, “Spazio di Coinvolgimento,” 37-44. A list of all course participants is published in Savioli, Ipotesi di Spazio, op. cit.
of assemblaggio, one not unrelated to notions of assemblage sculpture popularized in the early 1960s.\textsuperscript{477} At the same time, Natalini’s attention to the distinctness of montaggio from assemblaggio suggests that an architecture devised from the selection and fitting together of disparate objects and parts retained a “mechanical logic,” a trace of the enduring linkage between montage and machinic processes as a means for thinking about an industrial condition that was itself fragmentary, changeable, and indeterminate.\textsuperscript{478}

In the program of the Piper Club such mechanistic connotations found themselves combined with terms that were both increasingly psychologized and more closely bound up with the visual, acoustic, and perceptual effects of new types of electronic media. The models themselves convey something of this ambiguity, at once efforts to use various objects to spatially define a projected construction, and efforts to diagrammatically render the complex environmental, electronic, and mechanical apparatus that supported the psychologized “involvement” of a Piper environment. A similar effort to reckon with an apparatus that was neither fully mechanical nor fully psychological can be found in contemporaneous writings about Piper Clubs at the time. In the pages of Domus, the critic Tomasso Trini described the Other World Club in Rimini as “half airplane hanger for

\textsuperscript{477} Natalini may have been drawing on the umbrella term of assemblage codified by William Seitz in MoMA’s 1961 exhibition The Art of Assemblage. There it was defined as “includ[ing] all forms of composite art and modes of juxtaposition,” stressing the “actuality,” of physical objects taken from the everyday world over their two-dimensional representations. The exhibition drew on everything from the papiers collés of Picasso and Braque, to aspects of Dada, Surrealism, up to the “combines” of Rauschenberg and the kinetic sculptures of Tinguely. William Seitz, The Art of Assemblage (New York: Museum of Modern Art, 1961) 83-4.

\textsuperscript{478} The critic Lara Vinca Masini noted the importance of “technological montage” within the studio, associating it with a more open and indefinite type of work, in which basic elements were “juxtaposed or composed...almost indefinitely.” Such open-endedness implied an understanding of progetto (projection/design) that was “no longer the determining and constraining phase of architecture.” Lara Vinca Masini, “Ipotesi di Spazio Alternativo,” Ipotesi di Spazio, (Florence: G&G Editrice, 1972), 5. The importance of ideas of openness and indeterminacy—also echoed in a number of the texts authored by students—were linked to the influential essays of Umberto Eco. See Opera aperta: Forma e Indeterminazione nelle Poetiche Contemporanee (Milan: Bompiani, 1962).
acrobatic amusement and half assembly line for psychic circuits.” The club, designed by the Turin architect Pietro Derossi, who would later go on to found the Strumm group, was situated in a large-span windowless container not unlike a hangar or factory, its unobstructed interior crucial to the flexible arrangement of the Piper’s elements, which included partitions, screens, lighting, stages, seats, bars, and sound equipment [Fig. 4.9]. Trini’s deliberate invocation of the industrial aspect of such a flexible space linked it to a more ambiguous interiority, one in which the “catena di montaggio” (assembly line) no longer assembled machine parts, but rather “psychic circuits,” the wiring of a new and ambiguous interiority associated with a cybernetically intensified culture industry.

In Natalini’s description, the Piper program similarly hinges on an ambiguous new status for the “space of involvement,” a zone in which new “operations” both expanded the interiority of the subject and recast the multi-media interior as a microcosm of a greater whole:

To the revision of the traditional repertoire brought about by new technological achievements there is added the absorption [l’assunzione] of images from the mass-media: we have, in this way, a large field of choices and we are able adopt [assumere] a new, free, and constructive behavior (through criticism, play, irony, and the recovery of reality)…. All the operations converge in the construction of

---

479 Tommaso Trini, “Divertimentifici,” Domus 458 (January 1968), 9. “Ma il locale che ha fatto seguito, è già L’Altro Mondo: mezzo hangar del divertimento acrobatico e mezzo catena di montaggio dei circuiti psichici, si pone in equilibrio con la presenza dell'uomo.” See also “Le Ragioni di un Arredamento: Piper Club,” Marcatrè 16-18 (1965) 114. Trini’s invocation of a “hangar” calls to mind Mies van der Rohe’s iconic 1942 montage for a concert hall created from an enlarged photograph of Albert Kahn’s Martin bomber plant, transforming the wide-span spaces of wartime factory-hangar into a space of culture. The Piper was less a space of contemplative detachment, than one of intensive immersion and absorption. Nor were such clubs strictly discothèques—the played host to a wide range of music, as well as experimental lighting systems designed by Bruno Munari, performances by the Living Theater and by Andy Warhol’s assistant Gerard Malanga, as well asexhibitions by artists such as Michelangelo Pistoletto and Marisa Merz.

480 In Trini’s description, the movement through such flexible, multimedia interiors was likened to circuitry, each person created “their own bodily environment according to the changing circumstances” in a way that disrupted routinized movement from “one straight-jacketed and integrated environment to another.”
the “internal landscape” and the human microcosm truly becomes a model of the total reality.\textsuperscript{481}

The verb \textit{assumere} recurs twice in Natalini’s description suggesting a subject who \textit{absorbs} media but who also \textit{adopts} its behaviors. The new relationship is not one of passively interiorizing stimuli, but provokes a new type of “constructive behavior,” resulting in the architecture of an “internal landscape,” one in which the human microcosm becomes a model of a “total reality.” Natalini’s reference to “\textit{realtà totale}” echoes other references to notions of a “total environment” that recurred in the critical writing surrounding such multimedia experiments during these years, a point on which critics were sharply divided. For some, totality was associated with a new fullness, a \textit{Gesamtkunstwerk}-like convergence of architecture, film, abstraction, performance, and music into the ultimate work of art. For others, this synthesis appeared as a menacing portent of the subject’s more complete immersion in, and domination by, a totalizing media apparatus.\textsuperscript{482} For Natalini, this ambiguous “internal landscape” disturbed familiar architectural distinctions; as a “totality” it implied that the interior could no longer be “the ‘negative’ of architecture, an inside opposed to an outside, but its own type of spatial object and generator of experience.”\textsuperscript{483} In this account of interiority there appears a

\begin{flushright}
\footnotesize
\textsuperscript{481} Ibid., 34.
\end{flushright}

\begin{flushright}
\footnotesize
\textsuperscript{482} Trini’s description wavers between the capacity of such multimedia environments to unsettle and disorient routinized perceptions and behaviors, and the potential for a regenerative, immersive involvement with “electro-acoustic energy.” For an analysis of the divided critical responses to overwhelming the affective dimensions of Warhol’s Exploding Plastic Inevitable, see Branden Joseph, “My Mind Split Open: Andy Warhol’s Exploding Plastic Inevitable,” \textit{Grey Room} 8 (Summer 2002), 80–107.
\end{flushright}

\begin{flushright}
\footnotesize
\textsuperscript{483} Ibid., 36. “Annullando la contrapposizione diallettica tra pieno e vuoto, lo spazio interno acquista una nuova dimensione esistenziale capace di coinvolgere totalmente il suo fruitore ponendosi come “campo” di
\end{flushright}
complex maneuver of both retreat and mastery—faced with a condition characterized by a deluge of more impermanent yet powerful consumer messages, images, and media, the architect withdraws to an internal landscape, yet it is precisely from this interior that such media are seized and reconfigured, reasserting the architect’s capacity to model a condition that exceeded encapsulation, to grasp the “total reality” in microcosm. That assemblage and montage were called on to play such a prominent role in the effort to construct such models points to a larger contradiction, a vocabulary composed of objects, elements, parts, and joints was invoked to articulate and model forces that increasingly understood to be psychological, electronic, fluid, and transitory.

The concern for contemporary techniques of multimedia immersion were also connected to an interest in architecture’s relationship to technologies that had themselves been thoroughly mediated by images. In the 1969 article “Dall’Industria al tecnomorfismo,” (From Industry to Technomorphism), Natalini and Toraldo di Francia theorized architecture’s shift away from a concern with industrial society to a more ambiguous condition which they described as “technomorphous.” Perhaps more than any other writing by the group, the article reveals their keen awareness of the historical debates over the role of technology in the development of modern architecture, tracing architecture’s evolving relationship to mechanized assemblies from the Crystal Palace, through the key avant-garde movements of the early twentieth-century, to more recent formulations, such as Reyner Banham’s “Clip-On Architecture.” Their account revealed a

esperienza.” (Nullifying the dialectical opposition between the full and empty, interior space acquires a new existential dimension capable of fully involving its user, who is himself taken as a ‘field’ experience.)

Adolfo Natalini and Cristiano Toraldo di Francia “Dall’industria al technomorphismo” *Necropoli* 6-7 (December 1969 - February 1970): 13-26. While coauthored, the line of reflection around “technomorphism” was initially developed in close association with the Toraldo di Francia’s Holiday Machine thesis project. See also “Journey to the Region of Reason,” in which they summarized their concerns succinctly as being the “architecture of monuments,” the “architecture of images,” and “technomorphous architecture.”
debt to the writings of historians such as Leonardo Benevolo and Giulio Carlo Argan. In particular, they cited Argan’s argument that the prominent role accorded to technology in architectural culture during the 1960s was less as an extension of the technological aspirations of early twentieth-century avant-gardes, than a new form of what such technological discourse once opposed: monumentality. “Modern civilization,” he wrote, “expressing pride in its own functionalism, makes technique into a form of power rather than an instrument; an other monumentality is reborn and celebrates function as if it were a ritual, mythologizing it into a symbol…” If such technological monumentality was a new representation of power, it operated, they argued, through a language of assembly. Here the terms initially used by Natalini to describe the “Pop-process” are reworked to extend Argan’s observation:

The new monumentality mentioned by Argan is not only specific to engineering architecture: the most striking attributes…are compositional processes such as montage, assemblage, repetition, and the transposition of scale. Architecture absorbs methods of composition from industrial processes and in turn exhibits these. The machine that produces objects is replaced by the object in the image of the machine.

The repositioning of problems of assembly and montage is revealing. On the one hand, Natalini and Toraldo di Francia pointed to architects’ interest in the flexible combinability of joints and parts in the “open cycle” prefabrication within the automobile

---

485 Ibid., 19. The article reproduces images and quotes directly from the works of the historians. Benevolo taught in the Florence Faculty of Architecture during the 1960s when members of Superstudio studied there. His Storia dell'architettura moderna (1960) emphasized the Crystal Palace and the emergence of the industrial city as key precursors to modern architecture. His inclusion of Dickens’ Coketown in his account of the English industrial city is echoed in the Superstudio’s article and will reappear in some of the group’s earliest montages for the Continuous Monument.

486 Ibid., 20. The source for the citation was Argan’s introduction to the Italian translation of Konrad Wachsmann’s Wendepunkt im Bauen [1959], published as Una Svolta nella Costruzioni (Milano: Il Saggiatore, 1965).

487 Ibid, 20. “La monumentalità, la nuova monumentalità di cui parla Argan, non è l'unico specifico dell'architettura macchinista: gli attributi più vistosi quelli che ci portano a definire così un'architettura, sono i processi compositivi come il montaggio, l'assemblaggio, la ripetizione, la trasposizione di scala. L'architettura assume dai processi industriali dei metodi di composizione e li esibisce. Alla macchina che produce oggetti si sostituisce l'oggetto a immagine della macchina.”
industry, and on the other, to buildings assembled from the compositional and figurative elements drawn from images of machines, such as Arata Isozaki’s Fukuoka Bank Building (1967) and James Stirling’s Leicester University Engineering Building (1963). The search for more flexible forms of mass production, they argued, “tended to glorify the problem of assembly, while separating it from production and from the presence of more humble components, extraneous to the industrial sphere.”

In the machinic references of Isozaki and Stirling, by contrast, “the engineering image (immagine meccanicistica) is rendered not so much from the most advanced technical means, as from the conscious employment of the world of mechanical images already entered into the common vocabulary.” When it came to the most advanced technologies of the period—such as the Chinon Nuclear Reactor in France, or at the Vertical Assembly Building at the Kennedy Space Center, buildings which had been central to the discussion of technology in the writings of Banham, Hollein, and Archigram—what struck Superstudio was that such vast apparatuses no longer appeared to be machines, but rather displayed monumental geometries “worthy of Boullée.” The critique of technomorphism was a critique of a more encompassing condition, in which advanced technology was deployed through a play of resemblances: “a process of ambiguity…between buildings that look like machines and machines that look like buildings.” Such a development appeared less like a direction for advanced practice than a “sign of crisis in the ‘figurative’ values of architecture.”

---

488 Ibid., 21.
489 Ibid, 21.
490 Ibid. 21. “…si veda il Vertical Assembly Building della NASA a Cap Kennedy dove un complesso meccanismo è “carozzato” a forma di cubo o la centrale nucleare di Chinon perfettamente sferica: due pezzi degni di Boullée.”
491 Ibid. 21.
492 Ibid. 22.
economic or technical than disciplinary; a moment of decision when faced with an exhaustion at the recombination of “images already entered into the common vocabulary” and a growing a skepticism regarding architecture’s participation in continually renewing models for industrial production.\textsuperscript{493}

The description of such a crisis of figurative values provides a clue to a larger rupture in Superstudio’s practice that appears around 1969, and which marks a break from the group’s earlier engagement with what Natalini had dubbed the “Pop-process,” and a turn toward works such as the Continuous Monument and Supersurface, projects articulated through a particular combination of drawing, writing, photomontage, and film.\textsuperscript{494} From the Superarchitettura exhibitions of 1966–67 through to late 1968, the group designed projects, interiors, and furniture by assembling and reassembling a deliberately restricted set of geometrical elements to produce a varying range of results. Outlined in a key early drawing described as a “synoptic table,” the elements consisted of the cube, the rainbow, the cloud, the ziggurat, and the wave, a set of elements that could appear as a Pop restaging of Purism’s theorization of primary forms five decades earlier.\textsuperscript{495} [Fig. 4.10] In 1969, such polychromatic forms and objects from the group’s early designs are abruptly displaced by a single grid pattern. Deliberately generic and seemingly neutral, the grid was formulated as a set of serial permutations entitled the

\begin{footnotesize}
\begin{enumerate}
\item[493] Ibid. 26. The conclusion of the article noted a self-critical approach to the iconography of technology, and called for using historical material as part of a “continuous process of self-clarification.” “La costituzione di un sistema iconico della tecnologia rivela non tanto la fiducia e l'adesione incondizionata nella tecnica, quanto l'esistenza di un'idea d'architettura che procede per modelli successivi (sistemi, strutture) elaborando i materiali della storia in un continuo processo di autochiarificazione.”
\end{enumerate}
\end{footnotesize}
“Catalogue of Histograms.”[496] The group’s shift from a table of object-elements to a catalogue of forms extruded from a single graphic surface, can be seen as part and parcel of a desire to distance themselves from the design of individual objects towards the articulation of larger systems, a shift away from an preoccupation with the recombination of figurative elements toward a preoccupation with the abstract space of the grid. And yet this shift did not leave behind the group’s interest in questions of assembly but rather corresponds with a far more intensive investment in montage in photography and film, deployed in exhibitions, prints, storyboards, articles, and lectures.

The search for greater uniformity implicit in the group’s interest in a single grid ostensibly unified the exterior appearance of a series of permutational forms, but it can also be seen as a device for producing continuity within the space of the media, the articulation of a sign capable of assembling and unifying an increasingly varied set activities, yet one whose meaning was also open to continual reinterpretation.

“The surface of these histograms,” they wrote, “is homogeneous and isotropic: every spatial problem and every problem of perception being carefully removed. The histograms are also called ‘The Architects’ Tombs.’”[497] The turn towards surface and system was framed as an effort to purge any reference to problems of space or perception, yet such a claim cannot be taken at face value. To begin with, such a grid-surface was not ready-made, but was itself the trace of another apparatus, having been drawn by Superstudio using cartographic drafting equipment at the geographical institute of the

---


University of Florence. The particular apparatus in question was a drafting machine that configured multiple rapidograph pens, enabling cartographers to specify a range of grid patterns. At once generic and particular, the significance of this technique—which to date has been overlooked in every account of group—further highlights Superstudio’s ongoing investment in employing tools and technologies drawn from outside the field. It was a deeply divided gesture, at once seeking to expand the means of architectural representation while simultaneously rejecting of the idea of architectural creation in favor of a systematic, permutational, and repetitive series. Such a grid can be seen to express of one of the most antiquated forms of spatial representation—orthographic projection—a form that stretches all the way back to Ptolemaic grids of latitude and longitude, conceived by as a means for projecting order onto the world by translating the spherical shape of the globe into a regular system of intersecting lines. On this reading, the problem of space was not in fact “removed,” so much as displaced to another level, that of the theoretically all-encompassing, global extensibility of the cartographic grid.

The group’s statements persistently alluded to such a cartographic dimension. In the brief text introducing the Continuous Monument project, they noted that “The Great Wall of China, Hadrian’s Wall, and motorways, like parallels and meridians, are the tangible signs of our comprehension of the Earth.” In the film’s storyboard, they described the Continuous Monument, as a “singular form of architecture capable of giving shape to the earth, measuring it like latitude and longitude…” Describing their

498 Interview with Toraldo di Francia, August 19, 2011.
499 Superstudio, “Discorsi per immagini,” Domus 481 (December 1969): 44. The passage reads: “La grande muraglia cinese, il vallo d’Adriano, le autostrade, come i paralleli e i meridiani, sono i segni tangibili della nostra comprensione della terra.”
contribution to the Trigon exhibition, where the photomontages of the Continuous Monument first appeared in public, they similarly described a “…singular architecture extended to the entire earth, an architecture capable of giving shape to the whole earth, or to a small part of it, an architecture recognizable (even to aliens) as a product of civilization.” Such descriptions leap from archaic territorial divisions marked on the earth by empires to an obsession broadly shared during this period: the planet as viewed from outer space. As an architecture visible from outer space, the Continuous Monument was a mode of comprehending the earth, that is, an effort to represent it, or more precisely, to identify architecture with the surface of the earth. If, on the one hand, this was a topography, a surface of lakes, cities, coasts, and plains, more profoundly it was the single, “homogenous and isotropic” surface of the map, a surface upon which the earth could be plotted as information. It is perhaps more accurate to say that with the grid of the Histograms and the Continuous Monument, Superstudio shifts not from an architecture of figures to one of abstract grids, but that the abstraction of the grid is itself cast as a figure. If, in the Histograms, the grid became a mutable figure, a “catalogue” of formal permutations, in the Continuous Monument, the grid was a figure for a theoretically endless form of architecture, one measured at the scale of the planet rather than in terms of the city or of “Man.”

The first public use of Superstudio’s laminate was as surfacing for their installation, known as the Grazerzimmer or Graz Room, realized for the Trigon biennial in Graz in 1969. While most accounts of the Continuous Monument stress the article

“Discorsi per immagini” published in Domus in December 1969, the first published images of the project appeared a few months earlier in the catalogue for the biennial. The project was submitted as a competition entry for the biennial—which brief was to conceptualize “small scale utopias” for the year 2000, and was dubbed “An Architectonic Model of Total Urbanization.” The Graz Room was a 1.8m x 2.4m rectangular volume that extended the full six-meter height of the exhibition hall, standing at a point in Graz’s Kunstlerhaus, where the sightlines of three temporary, multimedia corridors that were used to access the building converged. [Fig. 4.12] The Graz Room cut through the artificial inclined plane that the curators had used to present the range of projects included in the biennial. Photographs of the installation show the Graz Room starkly contrasting with these polychromatic contributions, standing conceptually and physically apart from the rest of the biennial. [Fig. 4.13] If the Graz Room was in conversation with another project, it was not any of those included in Trigon 69, but rather with a project that had been included in the same event two years earlier. On that occasion the artist Gianni Colombo realized another gridded room. Titled “Elastic Space,” a three-dimensional grid network of glowing lines stretched across a dark interior, and was animated by a hidden mechanism that slowly stretched and moved the rectilinear matrix of lines, distorting their pattern and with it the viewer’s perception of the space. [Fig. 4.14] While notionally similar, the two gridded rooms could not be more different, the first a moving, three-dimensional grid within a darkened interior space, the second a set of stark black lines on an inanimate, inert white surface. The difference between the two

504 Ibid.
also marks a shift in Superstudio’s ambitions, which moved away from their earlier interest in a physically and psychologically “involved” conception of space toward neutrality, distanced reflection, and reason. “The Graz room,” they wrote, “is an artificial object, an object that references only itself and the use of reason. The Graz room is not an object for exhibition, but an object exposed, one which refers neither to the past of design, nor to a constructible future. It is a room for mediating on measure.”

The shift from psychologized perception to reason, and from space to surface, claimed to “expose” the object by reducing it to its measure, inviting visitors to gauge the physical dimensions of exhibition. If Superstudio sought to identify the figure of the grid as a sign of reason and reflection, its vehicle was not strictly the autonomous, reasoning subject, but a very particular economy of plastics in postwar architecture and design. From the outset, the Histogram drawing was a plan for a mass-production laminate surface, a design undertaken in collaboration with the Italian firm Abet-Print laminati.

The implicitly infinite extensibility of Superstudio’s grid was thus also oriented to the endlessness of technological reproducibility, the laminate being a printed surface that could be produced in theoretically unlimited quantities. The grid of the histograms can be read as a conflicted attempt to engage the exhibition value that was being created for printed laminates at the time, one that sought to appropriate a deliberately ersatz and cheap mass production surface—a design destined to be applied to a theoretically unlimited number of different objects and interiors—while simultaneously seeking to

507 The commission was part of a wider range of such commissions that the firm sought out with architects and designers during these years, including with figures such as Ettore Sottsass Jr, Archizoom, George Sowden, and Clino Trini Castelli. According to Toraldo di Francia, the connection with Print was organized through the director of Poltronova at the time, Sergio Camilli. The rise of such new economies and technologies of plastic surfacing during these years and the role of architects and designers in shaping them warrants further study.
What they called the “search for a neutral surface,” aimed to interrupt the “discourse” of domestic objects and interiors by drawing on a set of techniques embedded in the making of maps. If this injected the outside world of cartographic rationality into the space of the interior, it also anticipated the spread of postwar plastics into more and more environments. It is at the confluence of these two vectors that the expansive, global vision articulated in the group’s Continuous Monument project appears. As Svetlana Alpers has argued about the pictorial status of maps, the grid associated with mapping projections was unlike that codified in Alberti’s theory of perspectival construction. The cartographic grid operated less as a window through which the viewer looked, than as “a flat working surface,” and a projection “viewed from nowhere.” It is precisely such a condition, defined on the one hand by the flat working surface, and on the other, by a view detached from any groundedness, that Superstudio’s Continuous Monument theorizes and allegorically narrates. The group’s decision to “reduce” their design vocabulary to a single surface pattern was, at the same time, accompanied by expansion in a different sense: the grid appears at the same moment that Superstudio’s production of articles, films, and prints begins to grow drastically, as the group fully embraces the domain of mass media as a site of production in its own right.

From the Histograms, to the Graz Room, to the Continuous Monument, a flat working surface is not only mapped onto a range of forms, but is insistently placed within the vertical plane of vision, cast simultaneously as a generic surface for objects and as a

508 Superstudio, “Invenzione della Superficie Neutra: 5 proposte di environments,” Rassegna: Moda di Abitare (January-February 1973): 74-79. Such laminates, Superstudio wrote at the time, were interesting insofar as they offered the prospect of an “ahistorical” material, capable of “breaking with the old discourse of objects and furnishings,” while also serving as a “point of departure for a different use of the house.”

figure within a cinematic series of vistas. This corresponds to a shift from a mode of three-dimensional assemblage to a logic more akin to cinematic montage; photomontages, storyboards, and films served as the key device for these insertions, conceptualizing the banal ubiquity of such a grid-surface by embedding it within sequences of images that articulated an architectural narrative for this “view from nowhere.”

If the montage form was crucial to conceptualizing the project, the making of the photomontages themselves played an equally important role as a mode of collaboration within the group. The photomontages produced by Frassinelli, Natalini, and Toraldo di Francia did not conclude a project, but served as a means of conceptual development: the Continuous Monument alone involved the creation of not less than 32 photomontages during a period of little over year.\textsuperscript{510} While the images were assembled at individual drawing boards, they were fueled by a shared practice of collecting and archiving material extracted from a wide range of printed sources. The collected material was filed in a set of wooden drawers within the office, a structure that organized the material into five categories: People, Machines, Landscapes, Architecture, Arts.\textsuperscript{511} It is tempting to see here an almost literal substitution; from the “synoptic table” with five basic forms to a filing system with five iconographic categories whose contents were recombined to within the group’s photomontages in the coming years. The contents themselves reveal a bias towards large format mass-market magazines with color illustrations, and include material from \textit{Epoca, L'Espresso, Esquire, LIFE, National Geographic, Panorama,} and

---

\textsuperscript{510} The material is currently in several collections including the Museum of Modern Art, New York, the Centre Pompidou, Paris, and the Superstudio Archive, in Florence.

\textsuperscript{511} The drawers are currently at the Superstudio archive in Florence, and still contain material present when the office was closed in 1982. The exterior of the box had been painted in bright Pop colors by Natalini reminiscent of the use of color in his early models.
Scientific American. Following a period trend within magazines themselves, the material favors full bleed photographs on single or double-page spreads. If the practice of collecting clippings has an iconographic and contextual importance, it also reflects the group’s concern that the photomontages conform meticulously to the rules of projective geometry. The creation, structure, and maintenance of the clipping archive was motivated by the desire to have a large quantity of variations—in size, color, angle, and lighting—for those recurring elements within the montages; testing out differences between similar elements was essential for the efficient construction of a rigorously consistent perspectival image. The perspectival coherence of Superstudio’s montages was central to their ambiguous quality; if the group spoke of “removing” problems of space and perception by adopting a homogenous, isotropic grid system they also aggressively inserted this grid-figure into a series of ready-made perspectival views cut from the world of mass culture. A deeply assimilated disciplinary knowledge, such as projective geometry, paradoxically fueled an intensive scavenging of mass cultural material.

The Trigon biennial provides the earliest evidence of this new photomontage practice. Developed in sketch form in the spring and summer of 1969, the Continuous Monument quickly shifted into a series of photomontages that embedded gridded paper within reproductions drawn from magazines. Such photomontages were key to how the figure of the grid was visualized and embedded within the space of mass photography, but they also allow one to consider how Superstudio framed the concept of continuity.

512 While the drawers categorized as People, Landscapes, Machines, and Art still retain many visual clippings, the vast majority of clippings in the “Architecture” drawer do not appear to have been collected for use in photomontages. The bulk of the material consists of numerous clippings of Bruno Zevi’s architecture column for the center-left newspaper L’Espresso, from the mid-1960s to the late 1970s.
513 Piero Frassinelli, Interview with author, August 17, 2011.
514 The early sketches for a “viadotto d’architettura” appear in Roberto and Beatrice Lampariello Gargiani, Superstudio (Rome: Laterza, 2010).
The photomontages and catalogue text reveal a latent tension surrounding the very term continuity, one that sits on top of oppositions and collisions already operating within the group concerning technology. In their text for the catalogue, the group described “an architecture that entirely arises as a single, continuous environment: the earth, though technology, culture, and all other inevitable forces, will be rendered homogenous.”

Here continuity was synonymous with the realization of a completely unified environment, a scenario of technological modernization in which any residual regional, national, or cultural difference was eliminated. The invocation of a “continuous environment” was contradicted by a second reference in the text, this time to a continuous monument: “In one of the ‘continuous monuments’ of an orderly world, technology will again find its place as a useful technique.” The collision between these antithetical senses of continuity arguably orients the selection of the two photomontages reproduced in the catalogue. The first image—of children playing in a street of row houses typical of the nineteenth-century British industrial city—was made from a street photograph taken by Roger Mayne at the end of the 1950s. [Fig. 4.15] Part of series entitled “Coketown Revisited,” it was reminiscent of the street photographs of Nigel Henderson that Alison and Peter Smithson used in the 1950s to critique CIAM’s

515 Superstudio, “Architektonisches Modell einer Totalen Urbanisation,” Dreiländerbiennale Trigon ’69: Architektur und Freiheit, n.p. The text (set all in lower case in the catalogue) reads:
indem wir täuschungen und fata morganas spontaner architekturen, gefühlsmäßiger architekturen und architekturen ohne architekten, biologischer und phantastischer architekturen ausschließen, bewegen wir uns in richtung auf das “totale monument”: eine architektur, welche zur gänze in gleicher weise in einer einzigen kontinuierlichen umgebung aufragt: die erde, welche durch die technik, die kultur und alle anderen unumgänglichen gewalten homogen gemacht wird.

516 Superstudio, “Architektonisches Modell einer Totalen Urbanisation,” n.p. The conceptualization of the project appears to still be in flux at this moment, as the reference to such “Continuous Monuments” was associated not with the linear, viaduct-like photomontages but with Toraldo di Francia’s Holiday Machine.
approach to the city. Yet unlike these photographs, or the Smithson’s Golden Lane photocollages of 1952, there is no effort to link architecture to its surroundings, nor any concern for integrating and reformulating the street life threatened by the tower-block housing favored by postwar reconstruction. Superstudio’s grid, by contrast, appears deliberately blank and unconcerned with the immediate urban condition, admitting nothing but its own order. In the second image the stark gridded structure makes an equally laconic reappearance, this time not in a dense urban center, but in the midst of a bucolic, alpine lake. Viewed by a smattering of motionless spectators, the image calls to mind a hospital or sanatorium, evoking the hygienic obsessions of early modernist architecture. Extending beyond the frame at the top and the sides, in both cases the structure appears as but a fragment of a much larger complex. The simple repetition of the same form and grid pattern in two sequential images implied a single, continuous structure stretching from the city to the country, yet one that refused any attempt to transform and synthesize the opposition of nature and city into a new type of unity, nor one that sought to adapt itself to its surroundings. If the sequence of images suggested their linkage, it also brought them into collision, allowing antithetical visions of

---

517 The most likely source for the image was a full-page illustration in a 1963 article in Casabella Continuità about the development of the enormous Park Hill complex in Sheffield, a project whose continuous, irregular plan and broad external accessways was inspired by the “street-decks” of Alison and Peter Smithson’s 1951 Golden Lane Housing scheme. See David Lewis and Peter Stead, “La Riconstruzione delle Città Industriali Inglese,” Casabella Continuità 280 (October 1963): 5-10.  
518 While the photo was uncaptioned in the Casabella article, the members of Superstudio may well have been familiar with the photographer Roger Mayne’s work, which had been featured in Uppercase no. 5, (1961) and in an exhibited as part of the 1964 Milan Triennale.  
519 In this sense, the photomontages appear much like the two “opposed images” that Natalini and Toraldo di Francia used to describe industrial modernization. The catalogue also included an enlargement of a photograph of a desert landscape stretched across two double-page spreads and a loose, perforated sheet of gridded card stock, which the reader was encouraged to cut out, fold, and stick together. The literal paper model emphasizes the humble material tools of architectural representation, appearing as a fragile, even toy-like act of projection that undercuts the “total urbanization” evoked in the project’s title.
modernization to remain separate while simultaneously suggesting that they belonged to the same project.

When the same photomontages were republished a couple of months later in the pages of *Domus* the cinematic logic of the collision became more evident. It is at this moment that the project acquired the title Continuous Monument, reinforcing both the idea of a single, continuous building, but also a type of continuity with roots in cinematic montage. In *Domus*, multiple images arranged in linear sequences surround and dominate text, displacing the full-bleed images and more extensive theoretical framing of Trigon. Superstudio’s contribution appeared alongside a set of photomontages by Archizoom, pointing to the photomontage form as a particularly important medium through which both groups defined their position at this moment. Both articles, moreover, appeared with the same title, “Discorsi per immagini,” evidence that the photomontage was conceived not strictly as image, but as a type of discourse through and about images. And while the two sets of photomontages bear a superficial resemblance—each features distinct geometrical shapes framed within contexts ranging from historical European cities, to rural landscapes, to North American deserts—the differences between them are more relevant than the similarities. With Archizoom, the separateness of each image is driven home by the accompanying caption identifying it as a view of a particular project. [Fig. 4.16] Superstudio’s photomontages, by contrast, remain captionless, their

---

520 Superstudio, “Discorsi per immagini,” Domus 481 (December 1969), 44. A sentence nearly identical to the one in the Trigon catalogue reappears with “continuous monument” in place of “total monument.”

Eliminando miraggi e fate morgane di architetture spontanee, architetture della sensibilità, architetture-senza architetti, architetture biologiche e fantastiche, ci dirigiamo verso il “monumento continuo:” una architettura tutta egualmente emergente in un unico ambiente continuo: la terra resa omogenea dalla tecnica, dalla cultura e a tutti gli inevitabili imperialismi.

521 According to Gargiani and Lampariello, Natalini and Frassinelli’s glimpse of a photomontage drawn onto an aerial view of Manhattan in Archizoom’s studio, played a key role in the birth of the Continuous Monument. See *Superstudio*, 115.
side-by-side placement emphasizing the repetition of a single form within a diversity of sites and angles of view. [Fig. 4.17] Such a configuration suggests that these images are no longer strictly perspectives, but belong to a larger, quasi-cinematic sequence. This impression is ratified by the sole caption in Superstudio’s article, which identifies a full-page reproduction of the Continuous Monument crossing lower Manhattan as “an image from a film by Superstudio currently in production.”

While neither the film nor the storyboard were realized at this point, the layout of the page already anticipates the problems of cinematic continuity. All five of the photomontages published in Domus would be reconfigured as part of different sequences within the Continuous Monument storyboard, and display a remarkable formal consistency; each of the cut and pasted elements embedded into the photographs traverse its space from one edge of the frame to another. This “edge-to-edge” compositional strategy is amplified by the careful and consistent adjustment of the grid to the scale of the photographic landscape, creating a sense of congruity across the four different images, a subtle cue allowing photographs appropriated from four entirely different mass cultural contexts to appear to belong to the same sequence and project. The careful symmetry organizing the page suggests another type a cinematic reading; the transition from the top half—made up of photographs ranging from Stonehenge to the Vertical Assembly Building—to the bottom half—composed of four of Superstudio’s own

---

522 Ibid., 45. See Superstudio, “Lettera da Graz,” Domus 481 (December 1969), 53. The project was commissioned, the group claimed, by an American television company. The American television company may have been a ruse on the part of Superstudio—neither Frassinelli nor Toraldo di Francia recall any discussions with such a company—but nonetheless underscores the important point that the Continuous Monument was a project designed for distribution, not only in architectural journals, but through the channels of mass media. They note: “Su questo lavoro, continuato e ampliato, stiamo preparando un film per una società televisiva americana.”

523 The images were largely those that had been included in the Trigon catalogue, where they had been associated with the ambiguous “technomorphous” similarity between machines and buildings first announced in “Dall’industria al tecnomorfismo.”
photomontages—functions in a manner analogous to the editing technique known as a “graphic match” or “match cut.” In a match cut, the collision between entirely different content is rendered congruous by using a similar graphic form on either side of the cut, the match establishing visual continuity across an otherwise abrupt break. In cinema, the technique is frequently used to suggest a paradoxical continuation between entirely distant moments in narrative time, and in “Discorsi per immagini” the effect is analogous—the separation between top and bottom, monument and machine, and past and future collapses the long duration of historical time into an abrupt passage between images.524 In such a scenario, the pre-historical and the “space age” not only appear next to one another, but as strangely contemporaneous.525 What this implies is that the continuity of the Continuous Monument was not limited to that of physical extension, smoothing over a history that had been radically edited out and replacing the contiguous space and time of narrative cinema, it more closely resembled the disjointed, associative continuity of a match cut. The shifting tenses within “Discorsi per immagini” further echo the peculiar temporal collapse suggested in the layout. The text prophetically announced an “architecture rediscovered,” pointing to a future moment when architecture “will regain its full power and abandon its ambiguous designation…”526 A wish for

524 One of the best-known match-cuts in cinema appeared in 1968 in Stanley Kubrick’s 2001: A Space Odyssey, in which an image of an airborne bone cuts to the image of satellite orbiting earth.  
525 The abrupt juxtaposition of prehistory and the space age was a key theme of Kubrick’s 2001: A Space Odyssey. The group saw the film when it was released in Italy in 1968 and elements from the film entered their work, being spliced together with moon landing footage in the group’s first short film Architettura Interplanetaria in 1970. Images from 2001: A Space Odyssey also appear in their second film, Supersurface (1972). Architettura Interplanetaria was recently revisited in Giovanna Borasi and Mirko Zardini, eds., Other Space Odysseys: Greg Lynn, Michael Maltzan, Alessandro Poli (Montreal: CCA, 2010).  
526 Superstudio, “Discorsi per immagini” Domus 481 (December 1969). “Crediamo in un futuro di "architettura ritrovata", in un futuro in cui l'architettura riprenda i suoi pieni poteri abbandonando ogni sua ambigua designazione e ponendosi come unica alternativa alla natura.”
certainty incompatible with the present, the “rediscovery” of architecture was projected forwards and backwards simultaneously, the future encountered like a long-lost artifact.

A similarly disjointed continuity can be traced in the film’s storyboard, which was first published in 1971. Rather than follow a single story line or protagonist, the film develops a loose narrative through a series of seven sequences, ranging between 8 to 24 storyboard frames in length. Here the logic of the match cut sets up a larger tension that will be central to the film—on the one hand there is a recurring concern for narrating a historical or teleological development of form—at one point the voice over refers to the film as a “parable of formalization,”—yet such development is continually broken up by a logic of montage, in the form of cuts that interrupt and redirect any narrative progress. A series of narratives concerning the development of form follow one another in rapid succession, from a rapid-fire inventory of systems of order—from models of the cosmos to the proportions of the human body—to the series of monuments featured in “Discorsi per immagini,” from the cubic form of the Kaaba at Mecca to the Vertical Assembly Building in Florida, and from the linearity of Roman aqueduct to a highway cloverleaf in Southern California. This is followed by a pseudo-biblical “genesis” of geometrical solids—in which forms emerge from the desert and transform themselves, hovering in the air like a mirage—a “drive-in museum of architecture,”—in which architectural elements, from the pyramid, to the cube, the arch, and the truss, are displayed—and a sequence entitled “How to Illuminate the Desert,”—in which an enlarged version of one of Superstudio’s own lamps produces “images of dream architecture,” a film within a film, or infra-montage, tracing a history of the “heroic

---

527 While the storyboard was developed in 1969, it was not published until a year later, first in Japan and subsequently in Italy. See: Superstudio, “The Continuous Monument Series,” Japan Interior Design 140 (November 1970). Superstudio “Deserti Naturali e Artificiali,” Casabella 358 (November 1971) 18-22.
buildings of the age of rationalism,” from Le Corbusier’s “Ville Radieuse” to Joseph Paxton’s Crystal Palace, to Boullée’s Cenotaph for Newton. The concluding frame of the sequence ends on an ambiguous note, a crowd passed beneath a “triumphal arch” composed of glowing neon tubes, less a unified public than an incongruous multitude, which the voice over describes as “nomads, white-collar workers on holiday, and peace demonstrators.” Such shifts produce a temporality that is never secure, an uncertainty reinforced by the following cut, which shows a simple black rectangle on a white ground, suggesting a movement from illumination to mysterious darkness. The accompanying voiceover states: “All we have loved is lost, we are now in the desert. Before us is but a square.” The passage was a citation from Kasimir Malevich, who invoked the metaphor of the desert in his description of the Moscow public’s reaction to the abstraction of his Black Square in 1915, but can also be read in this context as a comment on the squares within the Histogram grid. A series of traveling shots reveal a further set of quasi-architectural “apparitions” within this desert—a door, a corridor, a floating stone, and walls, evoking the floating solids of Suprematist compositions as much as contemporaneous earthworks published during the late 1960s in the pages of Domus. The sequence of apparitions concludes with a view through a dark tunnel, at the end of which the Continuous Monument glimmers. The tunnel frames the end of an uncertain passage in space, which can be read allegorically as the culmination of disjointed a

528 The passage from Le Corbusier to Ledoux echoes the thesis of Emil Kaufmann’s Von Ledoux bis Le Corbusier (1933). Kaufmann’s work on the such “revolutionary” Neo-Classical architects had been importantly highlighted by Aldo Rossi, in his landmark The Architecture of the City (1966), and earlier, in “Emil Kaufmann e l’architettura dell’illuminismo,” Casabella Continuità 222 (November 1958): 42-47.
529 The quote, taken from Kasimir Malevich’s Non-Objective World (1926).
530 The connection to Land Art has been noted by Frampton, Theres-Stauffer, and Gargiani and Lampariello, op. cit.. De Maria’s work was featured at this moment in Italian journals, including article such as Germano Celant, “Walter De Maria,” Casabella 334 (March 1969): 42-43 and TommasoTrini, “Imagination Takes Command,” Domus 471 (February 1969), 43.
movement though moments in history—from models of order, to archaic monuments, to geometry, the rise of modernist architecture and the ruptures of the historical avant-garde. If such moments appear as linear sequence, their temporality is never secure. Throughout there is both a persistent desire for illumination—an association reinforced by the proximity of the Italian terms *illuminare* and *Illuminismo*—present in references to lamps, cinematic projections, glimmers and mirages, and a deep uncertainty about the Enlightenment narrative of progress.

It is at the end of the tunnel sequence that the group positioned the series of photomontages that have been most commonly used to represent the Continuous Monument project. The sequence begins with a cut from the tunnel to a view of Earth from outer space. The cut marks a shift from the grounded perspective of the viewer in the desert sequence to a view that has been thoroughly deterritorialized—the ultimate “view from nowhere,” which establishes the frame of reference for the montage sequence that concluded the film. From an initial pan upwards across the lakeshore photomontage, the sequence’s rhythm accelerates into a rapid, staccato sequence, passing from deserts and alpine landscapes, to ancient monuments and cities. If first three-quarters of the film narrated the development of a range of abstract forms, the final section abandons any narrative progression, the montage places one image after another without connection. It was an effect they described as “random images, disquieting as every postcard bearing ‘greetings from.’”

The only feature stabilizing such “random images” was the disjointed continuity of the Continuous Monument itself, a type of universal landmark recurring in each frame, notionally linking them together. The sequence ends with a slow

---

zoom into the Continuous Monument as it recedes into the distance across a large aerial panorama of lower Manhattan, a photomontage the group named “New New York.” [Fig. 4.19]. The sequence of images captured both the global scope of the Continuous Monument and its indifference to its surroundings. The latter aspect was important to Superstudio, who wrote of their search for “a design that when transported remains identical to itself, changing scale or meaning without trauma or incident. This immutability interests us: the search for an image that is ‘impassible and inalterable, whose static perfection moves the world through the love that it creates for itself.’”

The project’s ability to celebrate its resistance to movement, its ability to remain immutable and “identical to itself,” a “…closed, immobile object that leads nowhere but to itself and the use of reason,” is paradoxically produced by its relentless transport, its “identity” grasped only as a figure contrasting against a series of grounds, virtually displaced by means of montage into a disparate range of sites.

The extreme wide-angle lens used for the aerial photograph of Manhattan creates a simultaneous impression of proximity and distance, in which the view is close enough

---

532 Superstudio, “Lettera da Graz,” 53. “Un disegno cioè che si trasporta rimanendo uguale a se stesso, cambiando scala o area semantica senza traumi o inconvenienti. Quest'immutabilità c’interessa: la ricerca di un'immagine ‘impassibile e inalterabile la cui statica perfezione muove il mondo attraverso l'amore che fa nascere per sé.’”


“Ogni tanto troviamo un tuo progetto più o meno misterioso, un tempo su "Casabella" ora altrove su libretti o libri. Ogni volta è come un miracolo che rafforza la nostra fede in un'architettura serena e immobile la cui immagine è la nostra più lucida speranza. I tuoi enunciati d'architettura ci hanno molto aiutato nella ricerca di una calma ragione, dove gli atti sono misurati e precisi, dove anche l'ambiguità sia priva di sbavature e i grigi siano colore.”

Each time it is like a miracle that strengthens our faith in a serene and immobile architecture whose image is our most lucid hope. Your architectural statements have greatly helped us in the search of a calm reason, where acts are measured and precise, where ambiguity would be free of smudges and even the grays would be colored.
to make out individual, historic skyscrapers, and yet far enough to include the horizon, towards which the linear monument converges as disappears into the image’s vanishing point. It is such an elevated vantage point that became the most common framing for the Continuous Monument photomontages—and it is this gaze that describes and surveys from above, rather than any of the physical locations shown within the photographs, which arguably provides the project with its most consistent “site.” The materiality of the montages reveals a tension essential to the entire series—the self-referential, autonomous architecture of closed geometries and gridded surfaces described by Superstudio was fabricated from its opposite, a series of heteronomous views produced by the culture industry, from mass cultural advertisements and article clippings, to travel posters and postcards, material overlaid with heliographic paper, colored pencil, graphite, and airbrush ink. In the case of the New New York montage that concluded the film, the aerial view was taken from a large format travel poster produced by Pan-Am airlines. The selection of such oversize material as the ground for constructing the particular photomontage was in part motivated by the desire for images with high-definition—the scale of the poster allowed for images to be reduced rather than enlarged for reproduction. In appropriating this highly specific aerial panorama, the Continuous Monument absorbed an advertising rhetoric of visual immediacy—a bias for high-resolution color photography combined with minimal copy—specific to the advertising culture of the moment. The image both conforms to the compositional norms of the series and subtly breaks with them; seen from an even greater distance and from the

534 Copyright is given in the margin in Casabella. Confirmed during interview with Frassinelli, June 2011.
535 Posters from just a few years earlier would not have been suited to the making of a photomontage like that created by Superstudio, being composed not of large scale photographs, but often a combination of commercial illustration and advertising copy.
elevated vantage point of a distance aerial view, “New New York” eschews the gridded flatness of paper found in most of the Continuous Monument images, in favor of a more mirror-like surface. The paper used to create the image was carefully modulated with graphite and colored pencil, the suggestion of shadows and reflections optically binding it to the photographic surrounding. This effort to render the insertion visually seamless actually proceeded through a more aggressive intervention into the materiality of the photographic support. In the foreground, the section of skyscrapers in lower Manhattan—to be “preserved in memory of a time when cities were built with no single plan,”—are safeguarded by literally being cut out, folded up, and tucked through the paper of the monument in a manner that protects and violates, enacting the destruction-preservation through which the Continuous Monument asserted its self-identity.536

If the relentless transport effectuated by means of montage was essential to portraying the Continuous Monument as “identical to itself” and resistant to change, the Pan Am poster suggests that the transport in question was not only that of montage, but also of global travel and visual communication. In this sense, the paratactic sequence of photomontages that concludes the film can be seen as part of Superstudio’s ambition to locate their projects within a global architectural network, a network that was itself being catalyzed through an increase in transcontinental travel and the growth of intercontinental telecommunication at this moment.537 Such a tension internal to the work accompanies a

536 From frame 79 of the storyboard for the Continuous Monument. In English in original. See: “Deserti Naturali e Artificiali,” 22. The interior edges were carefully retouched in black to create an optically crisp edge when rephotographed.
larger conceptual shift; in contrast to the early preoccupation with the reconfigurable, multimedia interior, the Continuous Monument is strictly described from the outside, appearing in stark contrast with a changing set of conditions, from the flat expanse of the desert to Alpine lakes, and from the historic city to the dense congestion of the metropolis. The disjunctive continuity of montage was the means for constructing such an image of the outside, and marked a turn to a new set of problems, both within the image—a search for greater resolution, the progressive elimination of visual gaps and noise, and the introduction of the atmospheric effects of shading and airbrushing—and between images—the creation of a narrative out of the conflicts and discontinuities in a series of still images. Contrasts and differences were progressively absorbed into a greater visual uniformity, one that no longer sought to emphasize the assembly of disparate parts, but an incongruity internal to an apparently seamless set of images. Superstudio sought to align the Continuous Monument, like the grid of the Histograms, with the exercise of reason, yet the sequence of photomontages, crafted so as to imply the endless repetition of the same grid-figure, implied a form of reason driven to excess, an architecture of aberrant rationalism.

The uncertainty and ambiguity attached to the aberrant aspects of the Continuous Monument was noted by Giovanni Klaus Koenig when he introduced the storyboard in *Casabella* in 1971. Koenig deflected charges that such an approach was “obscure,” “snobbish,” or “a brilliant ploy to disengage oneself from the angst of urbanism,” and compared Superstudio’s storyboard to the work that earlier twentieth-century avant-gardes had similarly carried out in little magazines and other small publications.538 He

538 Superstudio “Deserti Naturali e Artificiali,” 18. Koenig’s position as a senior intellectual figure on the editorial board of Alessandro Mendini’s Casabella, together with his broader role as a writer for a wider
notably compared the Continuous Monument to an obscure 1920 pamphlet by Bruno Taut: *Der Weltbaumeister* an “architecture-spectacle for symphonic music.” Both projects consisted of sequences of images linked by continuous narrative captions, and both took on the theme of the architect as world builder. Yet Koenig saw in such a grand theme of world mastery less an expression of confidence, than “a clear and disturbing symptom of the alienated condition of the architect today.”

In other words, the misery and inaction of chaotic Berlin in 1919–1920 caused the same reactions provoked today by our frenetic affluence. The architect feels equally marginalized and deprived of a real decision-making power, so that the anxiety of Gropius and Taut equals the anxiety that gnaws at us today: The two extremes have come to touch each other.

The alienation symptomatized by such graphic production, he asserted, was not simply a compensatory turn toward paper due to a lack of building work—as Taut would himself later suggest—but was a form of “theoretic-graphic activity,” whose influence, retrospectively, appeared considerable. Koenig emphasized the important link between gamut of newspapers and cultural magazines, lent a particular importance to his affirmation of Superstudio’s work. The relationship with Koenig had already begun some years before, when, as a professor at the School of Architecture in Florence, Koenig had supported students such as Frassinelli, who were introducing experiments with film into their thesis projects. Not insignificantly, Koenig also wrote film criticism for Italian newspapers. Gian Piero Frassinelli, Interview with author, July 22, 2011.

Taut subsequently minimized his fantasies of 1920, as if this conceptual architecture was a temporary expedient due to the lack of work, and not a real creative activity. The opinion of historians, however, is different: recent critical revisions, from Borsi to Tafuri, have highlighted the importance of this theoretic-graphical activity that certainly influenced Le Corbusier above all.
such historical moments of crisis and anxiety, pointing to episodes of acute insecurity as those that generated a thorough questioning and reconceptualization of practice.\textsuperscript{543} The group’s “theoretic-graphic activity” had a similarly conflicted and marginal posture, neither critical nor affirmative, they both spoke of the elimination of architects while enormously amplifying the scale and role in which architecture was envisioned. It was a posture that enunciated a critique of the profession, while not abandoning the discipline altogether. In a 1971 lecture at London’s Architectural Association, Natalini formulated the group’s position in the following terms: “If design is merely an inducement to consume, then we must reject design; if architecture is merely the codifying of bourgeois models of ownership and society, then we must reject architecture…until all design activities are aimed towards meeting primary needs.”\textsuperscript{544} Yet, in the same talk Natalini went on to affirm that “[o]ur work involves the continuous production, elaboration, and transmission of ideas.”\textsuperscript{545} In retrospect, the group’s position hinges on a key, if not overtly articulated, distinction regarding the architect’s intellectual work. The group’s turn toward serial production and an all-encompassing grid system was less a project of formal autonomy than an effort to reduce the labor invested in the creation of form, what

\textsuperscript{543} Anxiety had been central to Koenig’s most famous essay—“L’Invecchiamento dell’Architettura Moderna” (The Aging of Modern Architecture)—where he argued that the persistence of anxiety allowed modern architecture to resist the danger of senescence that came with its advanced age. Koenig explicitly took Adorno’s 1959 essay “The Aging of the New Music” as a model, transferring the terms of Adorno’s oppositional terms—between the rigor of early modernism and its gradual absorption by the expanding culture industry—to the situation of postwar architecture. See Giovanni Klaus Koenig, L’invecchiamento Dell’architettura Moderna Ed Altre Dodici Note (Florence: Libreria editrice fiorentina, 1967). Anxiety was an important term more generally for Italian criticism at this moment, it was notably the term Tafuri highlighted in “Toward a Critique of Architectural Ideology,” whose first line is: “To dispel anxiety by understanding and internalizing its causes: this would seem to be one of the principal ethical imperatives of bourgeois art.”


\textsuperscript{545} Ibid., 167.
they called a “technique of minimum effort in a general process of reduction.”546 The grid-surface of the histograms were emblematic of how such a “reduced” design could also function as an abstract system capable of “effortlessly generating objects, furniture, environments, architecture.”547 On the other hand, Natalini continued to speak of an expanded production of “ideas,” understood as a less alienated form of intellectual production circulating independently of physical objects, and disseminated through a broad range of media channels. From late 1969 to 1973, the production of films was central to their practice—it was precisely because filmic montage did not appear to be an object, that it could support the group’s effort to frame their architectural work in terms of the formulation and dissemination of “ideas,” a practice that nonetheless continued to operate in complex tension with a continued realization of physical objects.548 In doing so, the importance of montage shifted from that of physical assembly and environmental determination to take on the status of a communicative model; one that served both to construct a discourse on architecture and as a medium for its dissemination.

That the group sought to take advantage of film as a medium for the formulation and transmission of ideas was tied in no small part to film’s capacity to circulate through a different communicative apparatus, a network that included alternative film and video distribution channels, exhibitions, as well as public events and pedagogical experiments.549 An early manifestation of this communicative apparatus appears in the

547 Ibid.
548 See note 432 for a list of films and dates.
549 For instance, they described the cycle of five films that the group embarked upon in 1971-2 as “propaganda for ideas outside of the typical channels of the architectural discipline.” Superstudio, “Summary: Five Acts,” quoted in Lang and Menking, 176. Pages in the S-Space catalogue devoted to the Raindance Plug-In Videotape network and to AntFarm also reveal that by 1971 the group had connections to Underground Film and Distribution networks in the United States. Menking notes that the group’s films were distributed by Environmental Communications in Los Angeles.
A mixture of school, festival, and communication network, dubbed “S-Space,”—Scuola Separata per l’Architettura Conceptuale Espansa (Separate School for Expanded Conceptual Architecture)—that Superstudio organized with the group 9999 in 1971.\(^{550}\) The project was notionally headquartered at the 9999 group’s discotheque-cum-experimental theater and media environment “Space Electronic”—an environment that had originated as a project for Savioli and Natalini’s “spazio di coinvolgimento” studio. Yet S-Space was described in manner quite different from Space Electronic, less a multi-media interior than a “non-physical center of production, elaboration, and transmission of ideas, processes, events, apparitions, prophecies, memories, situations, existences.”\(^{551}\) [Fig. 4.20] The overlapping yet separate existence of Space Electronic and S-Space points to the significant way in which the relationship between architecture and media had begun to shift by 1971. While the flexible, immersive multi-media interior remained in operation, it was no longer sufficient; rather it was the “non-physical center of production” which now appeared paramount, combining production directly with channels for transmission and dissemination. The overall ambition was to produce a school that mirrored networks of information exchange, whether alternative channels of film and video distribution or the emergence of larger, computerized information networks.\(^ {552}\) In this reorientation, the very processes and infrastructures of information dissemination come to be understood as a site, or perhaps more accurately, as the linkage of many sites at once. S-Space understood itself not within the confines of a single interior, but as a set of events taking place in multiple sites, from the Fort Belvedere, to

---


\(^{551}\) Ibid.

\(^{552}\) The project was roughly contemporaneous with Superstudio’s competition entry for a new university in Florence. The emphasis upon experimental pedagogy can also be discerned in the film devote to education in 1973.
the Straw Market, to the Boboli Gardens.\textsuperscript{553} Describing the operation of S-Space, they noted that “the physical place in which these events are formed, composed, and realized is the gamut of information channels which are used globally for their transmission.”\textsuperscript{554}

The decentered, technological network proposed for S-Space anticipates the group’s best-known film: \textit{Supersurface: An Alternate Model of Life on Earth} (1972) developed for the Museum of Modern Art’s landmark exhibition \textit{Italy: The New Domestic Landscape} (1972).\textsuperscript{555} The group framed their contribution in a particular way, arguing that it was not strictly a “film,” but “…a model of a mental attitude…not a three-dimensional model of a reality that can be given concrete form by a mere transposition of scale, but a visual rendition of a critical attitude toward (or a hope for) the activity of designing, understood as philosophical speculation, as a means to knowledge, as critical existence.”\textsuperscript{556} While they insisted that such a “mental attitude” remained independent from the design of physical objects, they also described ideas as having a new, tool-like instrumentality: “[t]he times being over when tools generated ideas, and when ideas generated tools, now ideas are tools.”\textsuperscript{557} Here the practice of montage which had been developed in projects like the Continuous Monument was asserted as a type of tool, an

\textsuperscript{553} Ibid. English in the original. Space Electronic was developed by Fiumi and Caldini of 9999 as part of their thesis project in 1969, a direct extension of Savioli and Natalini’s seminar on the Spazio di Coinvolgimento in which they both participated in 1966-7. See \textit{Ipotesi di Spazio}, 1972.

\textsuperscript{554} Ibid. np.

\textsuperscript{555} In using the term \textit{landscape} to describe the exhibition, Ambasz highlighted a term already circulation and associated with the flexible interiors of Piper clubs, domains that had been central not only to Savioli and Natalini’s discourse on “spaces of involvement,” but to other participants in the exhibition, such as the 9999 group, who had realized their “Space Electronic” in 1969, and Piero DeRossi, a member of the Strum group, who had previously designed the Piper Pluri-Club in Turin, as well as the Altro Mondo Club in Rimini.

\textsuperscript{556} \textit{Italy: The New Domestic Landscape}, 242. The continued reference to “models” throughout Superstudio’s practice is noteworthy and deserves further analysis. On the one hand, the language of the model echoed the rise of hypothetico-deductivist methods in postwar social-science research, which stressed the development of theoretical models that were to be verified through empirical testing. Superstudio’s models hardly conformed to such a scientific logic, but rather continually employed “ad absurdum” reasoning, pushing speculation into domains that eluded verifiability.

\textsuperscript{557} Ibid. 242.
“image-guide,” that “develop[ed] connections between data taken from the various
humanistic and scientific disciplines,” and inserted these within a chain of reproduction
and dissemination, via catalogues, magazine articles, storyboards and films.\textsuperscript{558}

In proposing such cinematic “image-guides” as an architectural tool, Superstudio
echoed concepts circulating in contemporaneous film and media discourses, particularly
those of expanded cinema. As influentially codified by Gene Youngblood in a book by
same name in 1970, expanded cinema synthesized a polymorphous set of interests,
ranging from underground cinema to computer graphics and cybernetic theory.\textsuperscript{559} If the
expansion implied in Youngblood’s “expanded cinema” was an enlarged definition of the
medium, it was also a sense of film’s spatiality, one that was informed by the thinking of
Buckminster Fuller and John McHale, as well as the large-scale environmental
projections tested out at international events such at Expo 67, or by artists such as Stan
van der Beek. If this spatiality included increasingly three-dimensional projection
environments, it was also attuned to the spatiality of energy and information networks
operating at the scale of the planet. Youngblood’s term for this network was the
\textit{noosphere}, a concept that he drew from the Jesuit philosopher Teilhard de Chardin.\textsuperscript{560}
The noosphere, he explained, could be understood as “a film of organized intelligence
that encircles the planet….The minds of three-and-a-half billion humans—twenty-five
percent of all humans who ever lived—currently nourish the noosphere; distributed
around the globe by the intermedia network, it becomes a new ‘technology’ that may

\textsuperscript{558} Ibid.
\textsuperscript{559} Gene Youngblood, \textit{Expanded Cinema} (New York: E.P. Dutton, 1970). The relationship to Fuller can be
seen not only in the numerous references throughout the text, but in the fact that Youngblood persuaded
Fuller to write an extended introduction to the book, extolling its merits.
\textsuperscript{560} See Pierre Teilhard de Chardin, \textit{The Phenomenon of Man} (New York: Harper, 1959)
prove to be one of the most powerful tools in man’s history.”

For Youngblood, the noosphere was both a “tool” and a “film,” a communication medium and a membrane-like barrier, one that appeared caught between the era’s seemingly boundless “technological zeal” and the limited capacity of individuals to “cope with the influx of information.”

Evoking the metaphor of the flood of information prominent in the period’s media theory, Youngblood warned that without such a tool, mankind would remain “adrift upon the surface of radical evolution, unable to plumb the depths of its swift and turbulent current.”

For Youngblood, “expanded cinema” was precisely the tool for penetrating the depths of emerging global communication networks. He identified this penetration with what he called synesthetic cinema, a key characteristic of which was a rupture with cinematic languages rooted in montage. Unlike classic montage, which hinged on the collision and linkage of frames in sequences to articulate a syntax that directed a linear viewing experience, synesthetic cinema depended on more fluid forms of optical and sensory simultaneity, collage-like superimpositions that continually “metaphorphosed” from one image to another. The resulting “continuous perceptual experience” represented a new type of “syncretic” vision, whose “universal unity” and “cosmic simultaneity,” he argued, were “the logical result of the psychological effects of the global communications network.”

The collapse of narrative, sensory, and spatial stability in synesthetic film exceeded the cognitive mastery of filmic syntax, producing an overwhelming affective condition that Youngblood likened to Freud’s account of the “oceanic feeling,” in which

---

561 Ibid., 57.
562 Ibid., 58.
563 Ibid.
564 Ibid., 75-77.
565 See the section “Syncretism and Metamorphosis: Montage as Collage,” Expanded Cinema, 84-87.
the ego’s detachment from the external world was suspended, prompting an experience of “limitlessness and oneness with the universe.” For Youngblood, such euphoric dissolution of the ego was analogous to immersion in the “global communications network,” a vast, a shared mental space to be found on the far side of information overload.

Aspects of this affective, techno-mystical discourse appear in *Supersurface*, which similarly took up the theme of the global communications network as a type of mental tool. Yet Superstudio framed the problem of communication differently, and called on a very different architectural and cinematic vocabulary. Where Youngblood emphasized synesthetic collage and a metamorphosis of images, Superstudio continued to work within a language of montage and collision. If it was a device that linked image closely with discourse, it was also one that was bound up with other commercial conventions of the period. A shot-by-shot analysis of the film reveals a structure composed of several rapidly paced sequences—each running between 2 and 2:40 minutes in length. The bulk of *Supersurface* is nothing but montage, composed from nearly one hundred still shots, culled from sources that included illustrated weeklies such as *LIFE* and *Epoca*, as well as journals of architecture and science, and even posters and calendars. Photographed using an animation stand, the stills were combined into sequences with the addition of voice over and electronic music. In this, *Supersurface* can be seen to take up the legacy of Charles and Ray Eames, who, in films such as *House: After Five Years of Living* (1954), or the more elaborate multiscreen films produced for international exhibitions—*Glimpses of the USA* (created for the American National Exhibition in Moscow, 1959) and *Think* (created for the 1964 World’s Fair in New

---

York)—made extensive use of sequences composed solely from still photographs. And yet, the relationship was not exactly a deliberate one, indeed members of the group claim that they were unaware of the Eameses works at the time. By the late-1960s and early 1970s, the influence of such filmmaking techniques had pervaded the culture more broadly, the combination of stills and readymade imagery was no longer a signature device but had become a more broadly codified technique. The “graphic film,” or “grafilm” as it was dubbed in period handbooks, aligned such an approach to montage with a low-budget, do-it-yourself film making ethos, stressing the reuse of preexisting images as a means for producing effects extraneous from their original meanings.

Along with such do-it-yourself film manuals, Superstudio was also drawn to a television genre particular to Italy: Carosello. A regular program of short films that began appearing on RAI in the evenings beginning in 1958, Carosello was the only permitted form of advertisement on Italian public television through the 1960s. In exchange for a brief sponsorship message, advertisers were required to produce short films of “educational or artistic merit.” As Paul Ginsborg notes, while Carosello was

---

567 Cristiano Toraldo di Francia, Interview with Author, August 19, 2011. Frassinelli, Interview with Author, August 17, 2011 Other relevant precedents from the previous decade include Le Corbusier’s Poème Électronique for the Phillips Pavilion in 1958, which was composed of stills and overlaid projected color. Yet this too the group had apparently not seen. In addition, the group might have seen two short films by Tinto Brass composed solely from printed images and paper animations, one on work and the other on leisure, which were commissioned by Vittorio Gregotti and Umberto Eco for the thirteenth Milan Triennale in 1964.


569 Toraldo di Francia, Interview with Author, August 18, 2011.

570 RAI imposed strict rules about the content of the short films, which could not endorse the sponsor’s product. A number of the Caroselli were realized by different writers and directors, including some of the most celebrated figures of the Italian neo-avant-garde, from Bruno Munari to Pier Paolo Pasolini. See: Laura Bailio, Carosello Story: La Via Italiana alla Publicità Televisiva (Rome: RAI, 2009)
originally motivated by a desire to restrict and control the influence of American-style advertising on Italian society, it quickly became the most popular program on Italian television, particularly with children, and thus ended up concentrating the visual universe of postwar consumerism for the younger generation.\textsuperscript{571} Not only is Supersurface’s structure—which was composed of an initial six-minute montage sequence followed by a brief segment with live actors—analogous to Carosello’s separation of short film and sponsor’s message, the group used the funding from the New Domestic Landscape commission to hire a firm that specialized in such television spots to help shoot, assemble, and sound-synchronize the film.\textsuperscript{572} As a result, the film has a foot in two different worlds, a do-it-yourself image guide made from pages cut from everyday, mundane sources that was assembled with the sophisticated tracking, zooming, and crosscutting that were more characteristic of commercial productions.

The appeal of a genre like Carosello were perhaps tied to the social contradictions it embodied, the well-known structure of the television commercial was used for a film that advocated a “life without objects,” just as a singularly Italian television genre was used against itself within an exhibition about postwar Italian design. Such tensions were further carried over into the film’s scenario, which is structured around the collision between references to expansion—of sensory awareness, of technical capacities, and of a “network of energy and information extending to every properly inhabitable area,”—and references to fragmentation and constraint—in terms of economic means, spatial


\textsuperscript{572} Frassinelli, Interview with the Author, July 18, 2011. The editing process was closely supervised by Toraldo di Francia at Marchi studio in Florence. It was the only moment that the group worked with a professional studio for their films. As noted in the catalogue, the sponsorship was provided by the Assoziazione Nazionale dell’Industria Chimica (ANIC).
limitations, and behavioral norms.\textsuperscript{573} The images appearing in the first few minutes proceed outwards from the human body to take in the operation of machines, technologies of communication and enclosure, to architecture, the city, and ultimately to a vision of the Supersurface as supporting a new form of nomadic existence at a planetary scale. In positing its hypothetical, technologically sophisticated \textit{Supersurface}, the film refers to an even broader range of surfaces, from the crust of the earth and the surface of a lake, to human skin, to capsules, architectural envelopes, crash helmets, and electrodes. In place of Youngblood’s synesthetic confusion of the senses, Supersurface opens by zooming into an anatomical cross-section of human sense organs. Close ups of fingers, eyes, ears, and the brain, are followed by images of scientific testing equipment, computerized circuits, and satellites. [Fig. 4.21] The montage of surfaces shifts from the scale of tissue and the technologies operating there to interplanetary travel, a collision of images that plays virtual expansion against physical restriction, with the human appearing torn between what the voiceover calls “a new symbiosis of tools as an extension of senses” and “complex mechanisms [that] fragment behavioral models into rigid patterns.”\textsuperscript{574}

The second sequence shifts from bodily surfaces and mental energy to the physical energy needed to maintain various lightweight environmental enclosures. From opening images of torch-wielding cavemen, the film passes in less than 20 seconds though the glass canopies of nineteenth-century winter gardens, to Reyner Banham and Francois Dallegret’s power membrane house and Frei Otto’s lightweight roofs, ending with an image of a queue of visitors waiting to enter the dome of the United States

\textsuperscript{574} Superstudio, \textit{Supersurface}, 1:08-1:14.
pavilion at the 1967 World Exhibition. [Fig. 4.22] Linked by dissolves, the sequence suggests an evolution towards ever more efficient environmental control, yet such a development is narrated not in terms of technological progress, but rather as a form of design that had produced “a complexity of new needs and a new kind of poverty.”575 A final dissolve introduces a close up view of Manhattan’s skyline, and as the camera tracks left and slowly zooms out, it reveals that the buildings belong to Superstudio’s photomontage “New New York,” originally produced for the Continuous Monument film. Embedded in this new sequence, the image takes on a radically different meaning: previously framed as the end point of a homogenous and total urbanization, it appears now as a marker of transition from a history of environmental enclosures to a more radically unfixed, nomadic existence, evoked through a rapid series of cuts between masses at the Isle of Wight festival, a pioneer wagon, a family on camelback, and ending with a shot of a vast pilgrimage under a blinding desert sun.

The shot fades to white and as the lens refocuses a starburst pattern appears; the camera pulls back, revealing a photomontage of a grassy field traversed by two gridded planes emanating from a now distant light flare, above which a spacecraft hovers improbably. The figure of the grid appears between the earth and outer space, initiating an extended sequence that positions it as a shift from the city towards a new, trans-urban network of information and energy, one that extends from images of the irregular lines of farmers fields, to suburban plans, to Manhattan’s gridiron, to an interconnected map of European capitals. In the film’s animated depiction of the Supersurface, the network appears first as a linear, orthogonal grid before the lines slowly disappear, leaving only a

575 Superstudio, Supersurface, 2:30–37, “Presently design, relating man to the environment produces a complexity of new needs and a new kind of poverty.”
point grid. The points appear as micro surfaces, distant blinking lights that the voiceover describes as the connection nodes of a new nomadic existence. The tension between literal and figural aspects of the grid-surface is caught up with the film’s larger theme of dematerialization, evoked across a range of grid images, from computer circuits, to lightweight architectural envelopes, to urban patterns, culminating in the group’s photomontages. It is tempting to see in these images an iconographic analogue of Youngblood’s noosphere—as so many vignettes of a society “adrift on the surface of radical evolution.” Leaving behind objects, houses, and cities, the grid is identified with a network of energy and information, a new support for a communal life, or what the voice over calls “a visual-verbal metaphor for an ordered and rational distribution of resources”.

Once again, the construction of the photomontages and their conceptual dimension appears entwined; whereas the Continuous Monument had appealed to the cartographic grid and the view from nowhere, the dematerialized network of Supersurface was constructed from images whose vantage point appears solidly on the ground. Where the Continuous Monument had emphasized the grid’s capacity to effortlessly generate an architecture of “total urbanization” at a global scale by mentally assembling a disparate range of sites in a single continuity, the Supersurface montages emphasize cutting out and elimination; emptying any trace of the previous environment or architectural surrounding. The more radical exteriority of Supersurface turns the relationship between photograph and grid inside out; whereas the Continuous Monument meticulously adapted its grid to the surface of a figure, embedding these within the space of the selected photograph, the Supersurface photomontages insist on making the infrastructure of one-point perspectival construction explicit, as a surface onto and around

---

which various cut out photographic fragments are placed. Isolated on the grid’s surface, the figures are decontextualized in a manner that allows them to be read in terms of a possible future—in line with the voiceover’s evocation of a new, technologically supported society—while simultaneously undermining such futurity; extracted from the illustrated commercial magazines of their day, they serve as estranged reminders of their present.

While it is possible to read particular figures in the sequence as “models” for Superstudio’s practices at this moment, I will argue that the conflicts between the photomontages—a tension produced by the filmic montage—outweighs the importance of any individual image. The sequence ranges from images of nomadic mobility—a hippy family camped out in a tent—to images of isolation amidst the abundance of consumer society—a “Mrs. Jones” surrounded by the trappings of suburban well being. It evokes ideas of freedom—a countercultural group reclining in abandon—against more disquieting images of exposure and desolation—as that of a young girl sweeping up detritus.[Fig. 4.23] Such conflicts between mobility and isolation, abundance and poverty, echo the contrasting assessments hinted at in Superstudio’s writings. If the grid could appear as a “visual-verbal metaphor” for the egalitarian distribution of resources and energy, it can also appear as a relentless system for domesticating nearly any environment whatsoever, akin to the “maximum extension and efficiency of imperialist processes” required by the postwar “society of superproduction and superconsumption.”577 Such conflicts suggest a deep-seated ambivalence regarding the

media discourses essential to such a “society of superconsumption.” At one extreme this information and energy network was pictured as a form of “sensory extension” reminiscent of McLuhan and Youngblood’s quasi-mystical embrace of the global communications network; a transpersonal, dematerialized space of human interaction associated with a “life free from work and a new ‘potentialized’ humanity.”

The montage of *Supersurface*, realized at a moment when new waves of critique and protest had overtaken whatever remained of Italy’s economic miracle, brings these sentiments into collision with equally pronounced forms of skepticism. Citing Situationist critiques of the Society of the Spectacle, the implacable, mirrored surfaces of Superstudio’s images could be interpreted as images of an illusory liberation, occurring on the surface of modes of economic domination whose fundamentals had become less visible.

If Superstudio cited Debord, their engagement with media was practiced in a manner substantially different from that of Situationist film. While the photomontages render the supersurface as a support for human life, the collisions internal to the film cast it as an allegory for an all-encompassing condition, one in which information and energy assumed an unprecedented importance for the field. The important role assumed by film, and by extension montage, was in part its capacity to provide a different model for thinking about architecture at a moment in which the group had put the design of objects into crisis. What Superstudio’s film asserts, I will argue, is a reading of surface as an allegory for information. In doing so, they took a deliberate risk, valorizing a term that historians and theorists of the modern movement had subordinated to the more dominant,

---

(sfruttamento delle risorse) nei paesi esterni e imperialism culturale (assuefazione all’immagine ideale alla società in atto e suo sostegno) nelle regioni interne.”

578 Ibid.

579 Superstudio, “Description of the Microevent/Microenvironment,” 245.
“heroic” values of space and structure. Yet Supersurface is less an attempt to recuperate an authentic surface, than to radically reposition it, pushing surface to a theoretical extreme, it became not simply the equal of structure and space, but displaced them. Contra Superstudio’s own rhetoric, surface here is anything but neutral, caught up within an expanding economy of superficiality that extended from glossy magazines to plastic laminates, it was closely tied to the industrial sponsorship crucial to the New Domestic Landscape exhibition. The turn to surface takes on specific resonance within the context of the exhibition; at a moment when plastics were at their most technically and volumetrically inventive—cast, formed, and extruded in an unprecedented range of shapes, finishes, and colors—Supersurface looked not to plastic as form but to plastic as film—the surface of photographic media as much as it was that of common adhesive laminates. The two surfaces were some of the most basic and prevalent ingredients of postwar life, a condition that Superstudio’s “micro-environment” both amplified and subverted. The group installed their work in a contextless, black, felt-lined room, one that doubled the black box exhibition hall in which Ambasz installed the interior portion of the New Domestic Landscape. The ambient and shifting glow of the mirrored cube inside this dark space evoked the artificial traces of the outside, with hints of changing weather. Reflected by the cube’s one-way polarized surfaces, the cube mirrored its contents, but

580 This would be one way to distinguish Superstudio’s discourse on surface from the “rough poetry” of raw surfaces favored by mid-century Brutalist architecture. The strangely smooth and reflective Supersurface was the opposite of the rawness sought by that earlier theory, yet it extended in an even more extreme fashion that movement’s interest in the relationship between building materials and mass media images.

581 The project’s financing was provided by ANIC-Lanerossi, an entity created by the partnership between the Assosiazione Nazionale dell’Industria Chimica (ANIC) and Lanerossi, a Roman textile manufacturer. ANIC was the chemical arm of Italy's state-owned oil firm Ente Nazionale Idrocarburi (ENI). See: “Concentrates,” Chemical & Engineering News 48:34 (1970) p. 23
also captured the reflected image of viewing subject in its interior.\textsuperscript{582} The group’s exhibition apparatus described a surface that was expanded by the play of reflections just as it was understood to be expanded by a connection to new networks of energy and information, yet such a vision of surface remained distinct from the spatiality of Youngblood’s noosphere. For Youngblood surface was what frustrated a desire to “plumb the depths” of the global network’s “swift and turbulent current.” Supersurface polemically refused depth, shifting attention away from the problem of enclosure and volume, towards the gridded planes of film, both relentlessly superficial and highly impenetrable.

Such flatness was perhaps akin to the perspective of a viewer gazing across the surface of a completely inundated environment, one in which echoes of the physical catastrophe wrought by the Florence flood of 1966 and the metaphors of flooding that were a central trope for notions of information overload during these same years.\textsuperscript{583} In such a context, Superstudio’s attitude was to work with and on the surface of information

\textsuperscript{582} For Superstudio, the potential of film was not didactic, but served to conceptualize a particular alternative to the rubric of “environment” under which the exhibition had placed them. See for instance, axonometric published in \textit{Italy: The New Domestic Landscape}; 241. The photomontaged drawing the group submitted to MoMA earlier that year conveys the illusory extension of the Supersurface; the cut and pasted paper and half-tone screen patterns define an axonometric projection which appears less as a container, than as a frame highlighting a small segment of a much larger grid, a continuous surface, upon which the exhibit is situated. It is worth noting that both the Continuous Monument and Supersurface were developed not for competitions, but for exhibitions whose curatorial frameworks involved highly articulated audio-visual communications environments.

\textsuperscript{583} See references to the flood in Cristiano Toraldo di Francia, “Memories of Superstudio,” in \textit{Superstudio: Life Without Objects}, 65; and Adolfo Natalini, “Superstudio in Middelburg: Avant-Garde and Resistance,” Valentijn By vanck, ed. \textit{Superstudio: The Middelburg Lectures} (Middelburg: Vleeshaal, 2005) 25. For an incisive account of the importance of such disasters for Superstudio’s approach to preservation see Lucia Allais, “Disaster as Experiment: Superstudio's Radical Preservation,” \textit{Log} 22 (Spring 2011): 124-29. In addition to the actual flood and its mythical place in Superstudio lore, one might also consider the metaphorical importance of floods in the mid-1960s media theory, which were crucial in formulating an image of the late twentieth-century subject as persistently inundated, afloat amidst new stimuli, information, and media. In 1964 McLuhan would note: “Submerging natives with floods of concepts for which nothing has prepared them is the normal action of all of our technology. But with electric media Western man himself experiences exactly the same inundation as the remote native.” \textit{Understanding Media}, 16.
rather than seeing it as a barrier to be transcended in search of a higher state of being.

Where Youngblood had stressed film as a trigger for an “oceanic” experience of dissolution, the key term for Superstudio was destruction; the aim was less to alter the individual ego than to transform the architectural “object” and the meanings placed upon it. While the destruction of the object is often taken to mean an elimination of commodities, the group makes it clear that they had a different conception of the “object” in mind. Such an understanding appears in their 1971 article the “Destruction, Metamorphosis, and Reconstruction of Objects,” parts of which they excerpted for the *New Domestic Landscape* catalogue:

> The system on which to act by means of design is architectural culture, understood as a communicable field of values, and as a means (tool) for social transformations. This ‘system’ is the only ‘object’ that interests us. An object, therefore, that coincides neither with the product nor with its ‘parts:’ an object-structure, a mechanism of multiple-reactions, a tangible object, homogeneous and isotropic, consistent with the social system that produces and sustains it.\(^{584}\)

Taking the system as object confirms how far Superstudio had drifted from the mecanomorphic and pop assemblages that had been their earliest concern. Neither a consumer product, nor a thing composed of parts, to destroy such an expanded, intangible, intellectual “object” could not be only a matter of eliminating a physical thing; at stake was the “destruction of the syntactic links binding objects to the system, the destruction of meanings superimposed by power.”\(^{585}\) The elimination of the architectural


\(^{585}\) Ibid., 21. Their own reference point for such systems thinking was the work of J. Christopher Jones, whose 1970 primer *Design Methods* compiled examples from science, architecture, and advanced manufacturing to codify the uses of systems theory in design. The article’s epigraph included a passage from the book, in which supermarkets, airlines, and missile sighting systems are given as examples of
object here operated by altering how it was perceived, affirming the architect’s capacity
to act on his or her own discipline. Seen from this perspective, the seductive lure of
Superstudio’s images of exteriority cannot be read solely as a wish to exit from discipline
or even the “society of superproduction and superconsumption.” Disseminated via
magazines, exhibitions, films, and lectures, the ultimate target was the visual and
intellectual discourse of the discipline itself.

That Superstudio continually employed montage to reframe the grid, a figure that
was supposedly neutral and concerned only with itself, reveals something crucial about
the group’s mode of operation. The desire to “reduce” design to a single material and grid
system was accompanied by a countervailing operation that continually reframed the
narrative of this material-system within larger media apparatuses, in exhibitions,
magazines, films, and events. Their deployment of montage was linked to a mode of
allegorical repetition, an effort to work self-consciously on the image repertoire of the
discipline. Cinematic montage was the means for orchestrating and disseminating this
repetition, by inserting materials, projects, and images into filmic sequences Superstudio
continually altered the legibility and meaning of the “same” element. Such reframing
mediated between the grid as physical laminate, belonging to a specific economy of
surfaces in mass production, and its expanded discursive function within Superstudio’s
critique of contemporary architecture. While they targeted the domain of architecture as a

“flow systems.” The text noted that the role of the architect was not to design the components, but rather to
“specify” and “place” the components necessary for a desired function. Jones also referred to such flow
systems as “assemblages.” Here the assemblage was no longer a conspicuously composite set of physical
components, but rather refers to the overall organizational logic. In such a perspective architecture again
appeared marginalized, at once called upon to design some of the most powerful systems of the postwar
economy, and simultaneously interpellated and confined into a methodology whose role is to optimize
predetermined functions. On this reading, the destruction of the architectural object appears less as an act of
individual will, than as a side effect of design’s absorption into an larger organizational model for the
design of overall systems.
form of intellectual work, the decision to use photographic and filmic image sequences also aimed at architecture’s circulation amidst a broader public. The role of postwar architecture and design, they argued, were intimately linked to processes of *assuefazione*, (habituation or acclimatization) through which publics adapted themselves to the period’s social transformations.

If the process of habituation to current society is replaced by a series of aberrant images, capable of postulating another scale of values and behaviors, the system will see its public image placed in doubt; the induced collective desires come to be replaced with other desires, equally attractive but more just and true. To satisfy these new desires the system will be placed in crisis.\(^{586}\)

If architecture had the power to habituate, it also had the capacity to aberrate, closely tied to modes of exaggeration and exacerbation, aberration laid hold of a familiar, even banal element and pushed it beyond its expected use. If the excessive global scope of continuity in the Continuous Monument was one instance of such aberration, in *Supersurface* the concern turns toward a different instance, namely the reflective surfaces that had emerged in architectural culture through the 1960s, particularly the rise of mirror glass as external cladding for corporate and information technology buildings. The exterior use of one-way mirror glass was influentially introduced by Eero Saarinen and Associates’ Bell Labs building in Holmdel New Jersey in 1962, picking up on a longstanding ambiguity surrounding glass within architectural modernism, which had been alternately hailed for its refractory and transparent qualities, and for its reflectiveness and its clarity.\(^{587}\) The use of mirror glass was here literally the cladding deemed most suited to the advanced

---

\(^{586}\) Ibid., 18. “Se al processo di assuefazione alla società in atto si sostituisce una serie di immagini aberranti capace di postulare un’altra scala di valori e di comportamenti, il sistema vede messa in dubbio la sua immagine pubblica: i desideri collettivi indotti vengono sostituiti con altri desideri egualmente appetibili ma più giusti e veri; e per soddisfare questi nuovi desideri il sistema viene messo in crisi.”

information technology research, a surface neither fully reflective nor transparent, reducing heat gain from the glass surface while also turning away any outside gaze, reflected less back toward the viewer than it was deflected toward the surrounding environment. [Fig. 4.24] A similar deflection appears in Supersurface, through submitted to a physical and conceptual reorientation—the mirrored grid has slipped from the vertical to the horizontal, from the plane of vision to the plane of an imagined commons supporting a theoretically endless drifting movement [Fig. 4.25]. The shift from vertical to horizontal, from enclosure to support, produces a subtle filmic aberration that also suggests a new meaning; surface no longer belongs to the plane of vision but comes to appear as a new type of joint, a plug connecting one to information, a function akin to an interval between images.

The polarized surfaces of the cube on display at MoMA echoed the spread of mirror glass in postwar offices at the very moment they were spreading into Manhattan, a mirror-effect also noted in a passage from Superstudio’s 1971 article the “Destruction, Metamorphosis, and Reconstruction of Objects:” “When design as an inducement to consume ceases to exist, an empty area is created, in which slowly, as on the surface of a mirror, such things as the need to act, mold, transform, give, conserve, modify, come to light.”588 In the Italian, surface is evoked both as superficie—an flat area, emptied of meaning, a tabula rasa—as well as the verb affiorare, a process whereby something emerges, appears, or surfaces. The strangely smooth and reflective Supersurface was the opposite of the “rough poetry” of raw surfaces favored by mid-century Brutalist

---

588 Superstudio, “Distruzione, metamorfosi e ricostruzione degli oggetti,” 21. The text was excerpted and republished as part of Superstudio’s statement in the catalogue for Italy: The New Domestic Landscape, 246. “Quando il design come al consumo cessa di esistere, si crea un’area vuota in cui lentamente affiorano, come sulla superficie dello specchio, il bisogno di fare, plasmare, trasformare, donare, conservare, modificare.”
architecture, yet it continued that earlier movement’s interest in the relationship between building materials and mass media images. The grids in the film were composed by appropriating commercial illustration techniques; drawings transferred to diazotype paper were overlaid with delicate touches of airbrushed ink, a subtle combination suggesting an ephemeral play of light and shadow. If the polarized panels of the three-dimensional model in the exhibition reflected the laminate grid to infinity, in the photomontages the infinite depth of atmosphere appears momentarily caught within the mirror grid’s surface. In this alternative vision of surface, depth appears as a reflection of a distance, hinted at in the shifting glimpses of cloud and sky. The filmic surface calls up a depth that continually remains inaccessible—just as the neoromantic wish for a return to primary, unalienated human needs paradoxically appears inseparable from the artificial surface of information upon which it appears. Throughout the film, the wish to “reduce operations,” to “eliminate formal structures,” or to envision a “life free of work,” is punctuated by such unstable, ephemeral movements of light. The wavering glimpses of sky are but one instance of a motif that includes the flickering of testing equipment, the auratic glow emanating from bodies, and lens flares that cast off scotomizing flashes of brightness. It was a motif that appeared elsewhere in the group’s practice, from the rhythmic projections of the “Space of Involvement” to the lamps that “illuminated” desert in the Continuous Monument, a reminder that artificial, flickering light was key to the

589 In the film’s final seconds two actors descend towards a mysterious light source in a green valley while the voice over intones: “The mind will fall back on itself to read its own history. We’ll carry out astonishing mental operations. Perhaps we’ll be able to transmit thoughts and images. Then one happy day our minds will be in communication with that of the whole world.” If the sentiment was not unlike Youngblood’s emphasis upon the Noosphere, the tone of the film’s conclusion is less affirmative than canny. Structurally analogous to the position of the sponsor’s message in the Carosello format, its upbeat description appropriates the dematerialized network discourse just as it exacerbates that theme by means of a series of exaggerated commercial clichés, including soft focus, an organ crescendo, and a series of spiraling lens flares.
materiality of montage. Such flashes were tied to a different vision of architecture’s relationship to information, one that could not be captured in the form of a microcosmic model, nor in the idealized mental community of the electronic noosphere. Rather, the continually shifting domain of information and data are expressed as material surface, yet one that was never stable, nor solid. As extensive and central as it was elusive and fleeting, information shifted continually from the printed surface of the laminate to the polarized mirror, and from the grain of the mass media image to the plane of the projection screen—the surfaces of everyday life coming to appear as traces of largely unseen apparatuses whose implications architecture still struggles to grasp.
Postscript

If the environment of the future is to be created according to the principles governing perception rather than those of construction; if the exhausting tramp over acres of concrete is to be avoided; if the monster space frame or geodesic dome is soon to master acres of previously open exhibition or townscape; then the design of that environment, with its accompanying software, is going to become the de facto province of systems and media men, electronics and computer experts, film directors and editors, photographers and shopfitters. Architects who cannot manipulate sound and projection systems and their associated optics and electronics will be about as much use as demonologists in a cancer research hospital. 590

— Martin Pawley (1970)

Martin Pawley’s description of the “environment of the future” sounds like an enormous electro-cinematic apparatus, where systems analysts and computer technicians program the technology, photographers and filmmakers direct the visual sequences, and a few shopfitters are kept on hand to build out whatever provisional structures are required. The discipline was confronted with its untimeliness: architects either learned to appropriate and use such electronic audio-visual media or give up on the built environment and let the directors, programmers, image specialists and other “media men” take over. Pawley

published these lines upon returning from the 1970 World Expo in Osaka, where sophisticated combinations of computer programming, robotics, and projection technology dominated the architecture of the Expo. Pawley’s alarm was not essentially new—the threatening implications of new forms of mechanical reproduction for architecture have been a recurring anxiety for much of the last century and a half. The contradictions he described echo many themes that have recurred in the previous pages—the clash between laws of perception and those of mass, weight, and construction; the rise of the space frame and the endless isotropic continuum it implied versus the particularities of the city; the demands of mobile, ephemeral, kinetic image oppose enduring stability of form; the networks of computing and software operate beneath the surface of a residual visible environment. The effort to appropriate technology, media, materials, and histories from other fields responded to similarly overdetermined contradictions, tensions that were exacerbated or concealed, defused or mediated through the ways in which they were subjected to reassembly within the field of architecture. While each chapter remains distinct, the centrality problem of assembly in each case indicates refusal of the apocalyptic separation announced by Pawley.

Pawley’s letter from Osaka is worth bearing in mind when considering the recent explosion of interest in the architectural culture and subculture of the long 1960s. The intense historiographic interest of the last decade has developed during a moment that itself witnessed a shift from an era of photographic and electronic media to one dominated by the interplay of diverse digital media. By highlighting an array of assembly techniques that emerged out of the legacy of montage, the dissertation examines architectural responses to the earlier shifts in media apparatuses, but also looks to address
contemporary debates surrounding visualization. Such debates often break down into dichotomies not unlike those formulated by Pawley; with some stressing how digital technologies have fundamentally ruptured our capacity to conceive of form and experience space, and counter-arguments that assert the rootedness of our visual habits in representational mechanisms belonging to older strata of modernity.\footnote{For arguments that stress a rupture associated with rise of digital technologies, see Patrik Schumacher, \textit{The Autopoiesis of Architecture}, (Chichester: J. Wiley, 2011) and Greg Lynn, \textit{Animate Form} (New York: Princeton Architectural Press, 1999). For a counterargument that stresses distortion and warping of existing paradigms rather than rupture see Anthony Vidler, \textit{Warped Space: Art, Architecture, and Anxiety in Modern Culture} (Cambridge: MIT Press, 2000), 6-7.} If newer technological media have indeed internalized older representational mechanisms, it is equally clear that visualization and conceptualization are performed differently in the present, operating across a broader spectrum of apparatuses, departing from pencils, paper, zip-a-tone, glue, film, and photography, to encompass CAD, illustration and cinema editing software, internet search engines, image databases, as well as 3D modeling programs. The combination of images and materials into composite assemblages performs in a field saturated with a new range of algorithmic commands, the structures of which are not immediately apparent.

Revisiting the historical conjunction linking architecture and montage allows one to grasp how operations of “cut and paste” have become an increasingly naturalized and ubiquitous aspect of computer-based design and communication tools, while also belonging to a much longer and fraught historical process. Reconsidering the forms, materials, and technologies through which images were constructed at an earlier moment allows one to perceive how they differ from the logic of today’s media, where the specificities of weight, texture, transparency, color, or adhesiveness are mapped onto a uniform optical matrix whose tactile manipulation has been absorbed into a common
interface. By the same token, recent changes in the ways architecture is made visual may be a stimulus prompting historians to examine such earlier processes of graphic construction more carefully; the processes through which images assembled and taken apart engaged their conditions of reproducibility and the larger structures of power they carried. From the vantage point of the present, architecture’s intense engagement with forms of montage may appear as something outmoded, superseded by newer media languages whose syntax, informed by sophisticated digital compositing processes, replaces cutting and interruption with new forms of connectivity, seamlessness, and continuity.  

A longer historical and interdisciplinary perspective argues against such a simplified breakdown between old and new media. Emphasizing the enduring transformations of montage across the evolution of media apparatuses draws attention to forms of fragmentation lurking within apparent continuity, just as it allows one to consider the sophisticated processes of optical interpolation that now operate on cuts and ruptures. Whereas at one historical moment, the selection, combination, and reproduction of ready-made elements was a tactic deployed to undermine the privileged concept of originality associated with the architect or author, in our own moment, the meaning of such processes has been inverted, and recast as a mode of authorship in its own right. Understanding how architects have responded to past shifts in the technologies and practices of mechanical reproduction remains a salient legacy for thinking about architecture’s place within the changing regimes of visualization and communication. Attending to the enduring ambivalence of montage, its capacity to both rupture unity and reveal discontinuity, as well as to render the disparate seamless and the discreet

For an influential account that stresses how forms of compositing and interpolation related to the special effects industry can be seen as integral to a “language” of new media that has superseded an older language of montage, see Lev Manovich, The Language of New Media (Cambridge: MIT Press, 2001).
continuous, provides a measure of critical distance at a moment when architecture’s combinations of media grow ever more complex.
ARCHIVES and COLLECTIONS Consulted

Allison and Peter Smithson Papers, Graduate School of Design, Harvard University
Archigram Archive, University of Westminster, London
Jean Aubert, Personal Collection, Paris.
Architecture and Design Department, Correspondence files, Museum of Modern Art, New York.
Architecture and Design Collection, Centre Pompidou, Paris.
Friedrich Achleitner Papers, Architecture and Design Collections, Architekturzentrum, Vienna.
Gunther Feuerstein, Personal Collection, Vienna.
Hans Hollein, Personal Collection, Vienna.
Institute of Contemporary Art Papers. Tate Gallery Archive, Tate Britain. London.
Jean-Paul Jungmann, Personal Collection, Paris.
Superstudio Archive, Florence.
Hubert Tonka, Personal collection, Paris.
Cristiano Toraldo di Francia, Personal Collection, Filottrano.
Utopie Archive, Theil-Rabier, France.
Edward Wright Collection, Department of Typography and Graphic Communication, University of Reading.
BIBLIOGRAPHY


———. Interview with Author. June 25, 2007


di Francia, Toraldo. Interview with Author. August 19, 2011.


Edward Wright Collection, Department of Typography and Graphic Communication, University of Reading.


———. Interview with Author. August 16, 2006.


———. Email interview with Author. July 22nd, 2011.
———. Interview with Author. August 17, 2011.


———. Interview with Author, August 18, 2006.


LEF 3 (June-July 1923).


———. “Per un nuovo rapport tra l’utente ed il suo spazio.” Casabella 326 (July 1968): 34-5.


Spur 5 (Spezialnummer über der unitären Urbanismus) (June 1961).


———. “Discorsi per immagini.” Domus 481 (December 1969): 44.


———. Interview with the Author. October 3, 2011.


Toraldo di Francia, Cristiano. Interview with Author. August 19, 2011.


———. “Cassons les Prix; Chions sur les Utopies” undated leaflet, Utopie Archive, Theil-Rabier.


———. “When we were Young.” *Art & Design* 1, 6 (July 1985): 40.

GRAPHIC APPARATUSES: ARCHITECTURE, MEDIA, AND THE
REINVENTION OF ASSEMBLY 1956-1973
(Volume 2)

Craig Buckley

A DISSERTATION
PRESENTED TO THE FACULTY
OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

RECOMMENDED FOR ACCEPTANCE
BY THE SCHOOL OF ARCHITECTURE

Supervisors: Beatriz Colomina and Spyridon Papapetros

November 2013
Page Layout from Casabella 426, July 1968, featuring a collaborative work by the students Gherardi, Pacini, Poli, Spinelli, Russo.
organismo è pensato inserito in un tessuto urbano come punta estre di una maglia, elemento avverso a p.i. solo o più livelli, a l'ug- gina e a montaggio e assemblaggio. Diversità delle opere e la relazione con il contesto dell'organo più vicino inteso.
Ludwig Mies van der Rohe, Friedrichstrasse Skyscraper, Photomontage, 1921
Friedrich von Thiersch, Project for a New Casino, Graphite, gouache, and photographic print, 1902.
Ludwig Mies van der Rohe, Museum for a Small City, Photocollage, 1942
Single color compact offset press, c. 1964
1.1

COLLAGES AND OBJECTS

John McHale viewing “Why I took to the washers in luxury flats” with the installation for Collages and Objects visible in the background. c. 1954
Installation View, A Parallel of Life and Art, ICA, London 1953
Alison and Peter Smithson, Renovation of Ronald Jenkins Office, 1952; Invitation for opening of Jenkins Office
Scrap of Paolozzi prints pasted to the walls of the Smithson's bathroom, early 1950s.
“RADIANT CITY” LAWSUIT

PLAINT OF BRUTAL REALISM

OUR OWN CORRESPONDENT

PARIS, DEC. 3

Le Corbusier, the architect of the controversial “Radiant City” at Marseille described in The Times of October 9, was being sued for 20m. francs to-day, before the Tribunal Correctionnel of Marseilles, by the “Society for the General Aestheticism of France.” The case against him is that he erected the 17-storey block of flats without the necessary permits, and that his building “has drawbacks of a moral order and is contrary to French style and aestheticism.”

M. Le Corbusier is at present at Dundjalone in India, where he has been asked to rebuild the town in accordance with his revolutionary ideas. The first witness called enumerated the drawbacks of the “Radiant City”: narrow stairs, lack of intimacy, absence of furniture, half-lit kitchens, and attic bedrooms. The only innovation, he said, was the shopping centre, but this caused people to become cloistered in their buildings.

Another witness, a former president of the Paris municipal council, and an architect, stated that Frenchmen preferred individual houses to collective dwellings. “We are faced,” he said, “with an official attempt to control housing, and I do not think the Frenchman wants to be told how he must...
Edward Wright, Nonsense Conversation, Collage, c.1956
Edward Wright, invitation card for “Useful and Metaphorical Objects,” at the Mayor Gallery, 1948.
Work by Central School Graphic Design students, reproduced in “Pattern, Sound, Motion,” Typographica 9, 1954.
Detail of Chad from Edward Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” Ark 19, 1957.
Page Spread of Edward Wright, “Chad, Kilroy, the Cannibal’s Footprint, and the Mona Lisa,” Ark 19, 1957
Brassaï, Graffiti, photograph from series VIII The Magic, c. 1935-1950
(Left) Edward Wright, Photograph of the Graffiti in the rue Visconti, Paris, early 1950s.
Diagram of Werner Hachler's St. Raphael system
Calligraphic writing is drawn or painted over its support. Graffiti are sometimes a hybrid of these two categories. Today's writing appears to be a nineteenth century invention.

It is writing composed from letters which are independent structural units attached to a support or more typically attached to an almost invisible frame which allows the letters to be suspended over the facade. Writing reflects its environment not only in the form and style of letters, but more profoundly in the technical process used to make them an integral part of their surroundings. Often the first appearance of a message gives the clue to some social tension or process of transformation no more obvious than the collection of little cards pinned and taped onto the budding door bells of a still respectable mansion. When letters become separate structural units, they can be made of any material including electric light bulbs and neon tube. With this technique writing invades the environment until a surprising symbiosis is reached. The environment built out of visual communications. Times Square and Piccadilly Circus become known to those who can’t read and at least a playground for those who can.
Film Stills from Nice Time, Claude Goretta and Alain Tanner, 1956
Gordon Cullen, Photo of Times Square and Townscape Drawing, from “Outdoor Publicity,” AR, May 1949
Edward Wright, Arrangement of Lettering for Alison and Peter Smithsons’ House of the Future, Daily Mail Ideal Home Exhibition, London 1956
Gordon Cullen, Cover of the AR, July 1955
Edward Wright, Cover for Architectural Design, November 1955
1.25

Theo Crosby, Architectural Design, Cover, September 1955
Theo Crosby and Edward Wright, Uppercase 2 (Cover)
Edward Wright, Cover, Catalogue for This is Tomorrow, 1956
Installation view, Group One, This is Tomorrow, Whitechapel Gallery, 1956.
Photograph: Sam Lambert
Installation view, Group One, This is Tomorrow, Whitechapel Gallery, 1956. Photograph John Maltby.
Edward Wright, Mural, South East Elevation of Exhibition Pavilion, Union Internationale des Architectes Congress, London, 1961
Edward Wright, Detail of Mural, South East Elevation of Exhibition Pavilion, UIA Congress, London, 1961
Center of space.

Vertical discontinuity.

Horizontal discontinuity.

Horizontal discontinuity.

Centrifugal discontinuity.

Hans Hollein, Pages from Plastic Space, 1960
Rainer and Carl Aubock, Veitingergasse Estate, 1953
Wiener Gruppe, Second Vienna Cabaret, 1958
Modern bauen

... warum ausgerechnet zu Weihnachten? Ihre Jesus-Geschichte hätte ehemals irgendwann im Jahr erscheinen können, bald wir unser Lüsterbau invent облаchen. Jesus sei historisch nicht nachgewiesen, bedeutet eine überflüssige Herausforderung.

Page from Gerhard Rühm, Anregungen zur Kirchenbau, 1961
2.9

Figure 3. Visual Rhymes from Architektur, (exhibition catalogue) 1963

Details from Hollein and Pichler, Architektur: Work in Progress, 1963
Hans Hollein, Aircraft-Carrier in a Landscape, 1964
Hans Hollein, Highrise Building: Sparkplug, 1964
Hans Hollein, Urban Renewal (Manhattan) (1964)
Claes Oldenburg, Wingnut for Stockholm, 1966
Hans Hollein, Monument to Victims of the Holocaust, 1963
ZUKUNFT
DER
ARCHITEKTUR

Architektur ist die Wille des Menschen, sein Umfeld als ein bestimmtes, göttliches und überwaltigtes Medium zu gestalten. Sie ist die Wissensgrundlage für den Bau von Gebäude, Stadt und Landesgrund. Die Architektur ist die Kunstform, die uns den Weg zeigt, wie wir unsere Umwelt gestalten können.


Page spread “Zukunft der Architektur,” in Bau 1, 1965
Hans Hollein, Photomontage studies for the development of Retti façade, 1964-1965
Hans Hollein, Retti Boutique, Vienna, 1965
Hans Hollein, Walter Pichler, Gunther Feuerstein, “Background USA,” Bau 6, 1965
Hans Hollein, Walter Pichler, Gunther Feuerstein, Page from “Background USA,”
Hans Hollein, Walter Pichler, Gunther Feuerstein, Page from “Background USA,”
Hans Hollein, Cover, Bau 1-2, 1968
Advertisement for Svobodair, Bau 1968;
Svobodair included in table of content page layout, L'Architecture d'aujourd'hui, September 1968
Hans Hollein, Entrance to Austriennale exhibit, Milan Triennale, 1968
Walter Pichler, Prototype (TV Helmet), 1967
Hans Hollein, Page from “Alles ist Architektur,” 1968
La partie la plus remarquable des actions de la pratique architecturale est que l'attention portée à l'architecture les infructueuses, et les constatations les plus importantes de la pratique architecturale sont liées à l'architecture des années 1960 et 1970. Pour une approche plus détaillée de la construction des années 1960 et 1970, voir les ouvrages suivants:

- "Architecture comme problème théorique," L'architecture d'aujourd'hui, septembre 1968.
- "Architecture comme problème théorique," L'architecture d'aujourd'hui, septembre 1968.
- "Architecture comme problème théorique," L'architecture d'aujourd'hui, septembre 1968.

3.1
Edouard Albert, with Robert Boileau, Jacques-Henri Labourdette
Tour Croulebarbe, Paris, 1961
Jean Aubert, “Devenir Surannée,” Utopie 1, 1967
Jean Aubert, “Devenir Surannée,” Utopie 1, 1967
Deltomobiles into Houses

D. G. Emmerich

Town carriages were once stages on roads. Travelling, one looked at the bridges and roads; stationary, one enjoyed architecture. So long as building was related to the pedestrian's scale, the general aim was towards fine roads and beautiful towns. But, in growing towns, gave rise to internal routes of communication—streets—and single specialists were unable to cope with the growing problem. Finally, with the advent of the car, the master designer of the town changed: the architect was replaced by the road engineer. Clearly, the traffic engineers' solution is to increase the roadway. Their habit of making a clean sweep of the countryside has turned into a clean sweep of the town. So, losing its density, the town has increased in dimension, and thus, in roadways... it has shrunk and spread at the same time. The town has stopped being a stage, it has become part of the highway.

Thus, in expanding, the town has negated itself and become nothing: precisely because traveling to work takes more energy than work itself, which becomes all directed towards means of communication. This imbalance has emptied the countryside in favour of the ever-expanding city concentration which, the bigger it gets is less of a town.

All attempts at improving urban roadways are proved futile by statistics. Whatever one does, the moving car requires an area of at least 10m² against the proportional 10m² of a block of flats built on 10 floors high. And the higher one goes, the more is this proportion aggravated. In addition, taking into account the space it occupies and our numbers, the time taken in driving and parking a car, its actual weight and its useful weight, the infrastructure required, consumption, pollution, noise, nerves... there are a thousand reasons for returning to the architectural concept of a town, and ending our macadam civilization. The more so as it is easier to conjure away the car than a building.

Built on a chassis, body or fixed frame, the car—on a object of cult in modern life—is traditional: its weight, its size, its shape are derived from the coach and are not dictated by modern techniques. These, however, allow for a town vehicle that is not only healthy—silent, odourless, light—but is also of variable with equilateral triangles—rounded, deltahedrons are quite rigid. By removing a strut, the configuration can be changed at only to a limited extent, for as soon as the load is increased, the whole becomes again, forming a smaller deltahedron. This operation can be repeated, continuing until the polyhedron disappears completely.

The geometric stability of these configurations allows a great reduction in weight of the vehicle, which approximates to that of a bicycle rather than the coach, making it possible to use electromotors or batteries, which, while having greater energy output, give off neither carbon nor fumes. The separate parts are then standard length and flexible joints. The covers and seats are stretched membranes of space or transparent sheets.

Since there are numerous deltahedrons, the only problem of the folding car solved is that everybody can construct their own, modify or enlarge it. These parts can also be used for the bodies of marine or even aerodynamic transports—circular, oval, oblong... Even building frames can be made from them; capsules, space frames, domes. For instance, among the constructions illustrated here (subject to patent), the parts of 41 deltahedrons each of 18 bars, can be combined to form an isosceles dome of 180 bars. One can imagine the effect of such combinations on the ability of the automobile and building industries could be replaced by a harmony of purpose.

Although the stock of cars is renewed every five years, the ravaging of towns, parks and towns in the name of technical progress continues. Technological solutions are only means, and they are being modified all the time, their aim being, if not an improvement of life, at least its preservation.

The advent of Technique in nature is a popular myth, one of the twentieth century prophecies which need have no relevance. It is conditioning our lives; and in the face of stark reality, born of error, mistakenly believed in, the failure of technology gives rise to serious and dangerous problems.

But nothing would be more agreeable than to accept the accomplished facts as facts, without making some attempt to improve life—suggestion on architecture and the fine art of which belongs disease and not sickness—a place where healthy life is no longer impossible. 
Cassons les Prix !
Chicos sur les utopies...

"Nous aurions pu brûler tes livres, EMERICH, ce n’était pas l’envie qui nous manquait..." Mais ce sadomasochiste se serait aussi devenir un nouveau Violet Le Duc (la mystification éculorit sur leurs cadavres). Nous avons préféré les voler, puis les distribuer (économie de 35 F) afin que chacun puisse se rendre compte, par lui-même, du contenu débilis de ce recueil, objet de perpétuation du savoir bourgeois.

Pissons sur le contenu

C’est une recherche ludique d’abstraction, hors de la réalité par l’absence de technologie pouvant satisfaire aux problèmes d’enveloppes, de viabilité, de mise en œuvre de ces structures ; hors de la réalité dans l’infrastructures industrielle déjà en place et en contradiction avec le choix capitaliste actuel en vue de profits immédiats (spéculation foncière, urbanisme, bidonville, etc...) et la meilleure rentabilisation de la construction (main-d’œuvre étrangère - le béton).

Vomissons sur la démarche

La démarche pédago-collaboratrice de cette pute du ‘superman’ vise, en fait, à faire de nous les nouveaux chiens de garde du capital ; démarche utile à celui-ci, lorsqu’il sera capable (et c’est pour bientôt, messieurs les architectes technocrates !) de fabriquer du logement comme on fabrique du bigoudis, c’est-à-dire la conquête industrielle du cadre bâti.

“Cassons les Prix,” c.1968, Tract
Hubert Tonka and Rene Lourau, “La Répression,” Utopie 1, 1967
Hubert Tonka and Rene Lourau, Paste up for “La Répression,” Utopie 1, 1967
“La Répression,” Utopie 1, 1967, Detail of transfer lettering
GRANDS ENSEMBLES (suite)

Le texte est trop coupé pour être compris en entier.

LE RETOUR AUX TRADITIONS. « Il est impossible, disait Jean de Malin de concevoir humain sans se référer à la tradition ; cette tradition pour nous, c’est la Renaissance. Nos deux époques se ressemblent en cela : même renouvellement dans les formes, même amour pour une esthétique nouvelle, même transformation de la vie, même goût de l’inconnu. Voilà pourquoi j’ai cherché à ce qu’une certaine beauté, mais aussi une réelle gentillesse, émerge ici ; pourquoi j’ai voulu que les lieux soient des petits lieux sans voûte, des immeubles en longueur ou étroites, même des tours, mais tout blanc et tout candide ; et aussi des cités car aucune architecture n’est complète sans œuvre d’art... »

PLUS DE NUSSE, DES STATUES DANS LA RUE. Dix artistes ont travaillé sur ce thème en collaboration avec l’architecte. « Tout près du centre social, au cœur vivant de la cité, nous dit Guy Lamotte, j’ai eu une suite page 47

Dans le mael de la tour U, un peintre de la toile, de Coulomb.
Page from “La Répression,” Utopie 1, 1967
Poster for Jean Luc Godard, “2 ou 3 choses que je sais d’elle,” 1966
Indeed, even Michelangelo’s solution is only an escape.

What Medieval artist would have been led by a religious experience to quit his artistic activity? In the Middle Ages, the greater the faith, the greater was the artist’s source of inspiration: and not just because he really was a Christian, but because he was really a creator. By giving up his artistic productivity, he would have lost his reason for being.

On the contrary, after having dropped art, Michelangelo kept his prestige and importance, not only in the eyes of the world but in his own eyes as well.

Arnold Hauser
Eierkopf (Eggcup)
Kartonschachtel (Cardboard sleeve)
Trinkglas (Drinking glass)

Bordgeschirr (In various types of airplane tableware).

Auch das Bordgeschirr wurde neu gestaltet. Die einzelnen Teile sind so gestaltet, dass sie auf dem Tablett gut halten, weil alle Teile ein gemeinsames Kartonmaß haben, sind als vielfach verwendbare Teile und können aus Polypropylen hergestellt werden. Die Tasse und die Gläser haben eine quadratische Form. Die Tasse auf der rechten Seite hat auch eine Kartonschachtel als Mantel gestaltet. Der Kegelstumpf, der über die Tasse gestellt ist, ist zur einmaligen Verwendung bestimmt.

The aircraft crockery was also redesigned. The various items are so shaped that they provide mutual support on the tray and may be conveniently stacked (economical use of transportation and storage space). Because all items have common edge measurements, they may be combined in many ways. Plates and saucers are rectangular or square, and cups made of polypropylene. Cups and glasses are circular in one-piece. As a handle a cardboard sleeve is slipped over the cup. The egg cup, resembling a truncated cone, is also made of cardboard. Like the sleeve it is intended for use once.
Page Spread from Stinco, “Art?...!,” Utopie 1, 1967
Paul Maymont, Photomontage, Ville Suspendue, 1962
Au nom de l'intérêt général on nous dit que notre société, son amoureu développement accéléré, son expansion industrielle dans démographique ont besoin d'un nombre toujours croissant d'acheteurs et de détaillants. L'excédent dans tous les domaines de la production est le garant idéologique de l'abondance. Cet excédent se consomme par la consommation magnifiée dans la publicité !

**Nos 2 itinéraires secrets**

**D'un soi de constructeur à la production de la réalité, à l'emploi, à la société, à l'économie du travail...**

---

3.21

_Utopie, Page layout from Architecture Comme Problème Théorique, 1968_
La majorité vit sur des objets de série qui renvoient formellement et psychologiquement à des modèles sur lesquels vit une minorité.

Detail of Real Estate Advertisements included Architecture Comme Problème Théorique, 1968
3.23

Les Halles : le général de Gaulle a étudié deux projets confidentiels. Les voici.
Jean-Paul Jungmann, Dyodon, Croquis pg. 61, #3, 1967
Jean-Paul Jungmann, Dyodon, Thesis Presentation drawing, 1967
1. Axes of the hall are marked on the ground and flooring laid; ballast balloons and base ribs are positioned and inflated.

2. Sections of the tent cover are laid out and joined.

3. Tent cover is rolled aside while supporting spheres and domes are inflated and fixed to the floor. Guide lines set for cable positions.

4. Ballast balloons are filled with water, trucks are positioned, and tent is set in place and affixed to supporting spheres and domes.

5. Supporting spheres are fully inflated, tension is adjusted, and final position of supporting cables fixed.

6. Entire structure is inflated high pressure.

Antoine Stinco, Thesis Project, Assembly Sequence Drawing, 1967
Utopie, Poster for Structures Gonflables, March 1968, Paris
Utopie, Structures Gonflables, Page Layout from Catalogue
Promotional brochure, AJS Aeroland and SCIFA, 1968
Aubert, Jungmann, Stinco, Temporary Exhibition Structure, ca. 1968
4.2
Cristiano Toraldo di Francia, Holiday Machine on the coast of Calabria, Thesis Project, 1967
Leonardo Savioli, Housing Complex at Sorgane, 1962-1970
Leonardo Savioli, Casa Piagentina, Florence (1964)
Leonardo Savioli, Ricerca di Spazio, Ink and graphite on paper, 1963
Una specie di culto scavato nel terreno con una serie di interventi diversi (statici, percorsi, pedana) continuamente trasformabili. In questo progetto è stata data grande importanza ai fattori luminici: l'iluminazione (tutta artificiale e «ostentativa») ha il compito di variare continuamente la percezione spaziale dell’organismo architettonico, e di suggerire volte per volta le sue differenti utilizzazioni.

Pietro De Rossi, Interior of the Other World Club, Rimini, ca. 1968
Supersudio, Tavola Synottica, drawing, c.1967
Superstudio, Catalogue of Histograms, as published in Domus December 1972
[drawing dates from 1969]
Plan of Trigon 69 Dreiländer Biennale, Graz 1969
Superstudio, Installation view of Grazerzimmer, Trigon 69, Graz 1969
Gianni Colombo, Installation view of Elastic Space, Trigon 67, Graz 1967
Superstudio, “Coketown Revisited” photomontage, 1969
“Discorsi per immagini,” Archizoom, Domus 1969
“Discorsi per immagini,” Superstudio, Domus 1969
"Total subject and environment container, wash up! This environment is a entity, where capacity is growing, your reality realities, your environment does not stand. This environment creates a new, new combination of man, man, man who is taking a part of the environment. A new becoming is observing, a new becoming is taking place. In this observation, in this becoming, in this becoming, you are entering the world of new architecture, new space, new community, new reality, new environment."

S-Space is a new space not fixed, not limited, that is becoming, that is evolving, that is taking place. This process is not finished, it is not completed, it is not done. It is a process of becoming, of evolving, of taking place. This process is a process of new architecture, new space, new community, new reality, new environment. This process is not finished, it is not completed, it is not done. It is a process of becoming, of evolving, of taking place. This process is a process of new architecture, new space, new community, new reality, new environment.
Film stills from first sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972
Film stills from second sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972
Film stills from fourth sequence of “Supersurface: An Alternate Model of Life on Earth,” by Superstudio, 1972