

Preface: The Details of the Discourse



POOR NARCISSUS: IRRESISTIBLY COMPELLED BY HIS OWN IMAGE, finally opting to be kept at bay rather than risk the prospect of imploding his beloved reflection. In this study of glass building, the Greek myth lends more than psychic phenomena associated with reflection. Architectural inquiry, particularly of any length and speculative dimension, is always a multivalent endeavor, but never moreso than when confronting the topic of glass. As one approaches this quicksilver subject, with every step forward, it grows, finally threatening to expand infinitely just as the final touch suggests possession.

At first glance the topic of this study seems, however ambitious, also finitely limited—the monumental glass buildings of contemporary Paris, most of which are in the program for the *Grands Projets* of François Mitterrand, president of France between 1981 and 1993. A factual recount of the conception and building of these immensely significant projects in the cultural and political spheres of Mitterrand's Paris is more than enough to endow an enormous study. However informative, this type of study would still be hardly adequate to addressing the proper scope of the subject matter. The imposition of transparent and technologically motivated monuments prominently within a public Parisian urban domain inevitably instigates multiple domains of history: vast physical histories of Paris and Parisian architecture as well as vast intellectual histories, in many different disciplines, that have addressed issues of transparency and technology.

But the danger of Narcissus immediately harkens: the amount and different types of literature devoted to glass attests to our propensity to be fascinated, seduced, and compelled by it. Technological studies of glass architecture typically represent it as the forefront of invention, the extreme edge of structural investigation and material innovation. This presumption is not an exaggeration. Since the Gothic cathedral, glass has been coupled with the birth of the structural frame,

arguably the most significant development in architecture in the last millennium. With the rise of the structural frame in the late nineteenth century, glass construction, particularly curtain wall assembly systems, have followed suit; together the two systems have dominated contemporary large-scale construction. Most recently, the association of glass with highly advanced technology was illustrated once again in Paris, where the structural properties of glass itself threw into imbalance all previously existing hierarchies between structure and cladding.

As the vanguard of technical progress, the use of glass has appropriately incited a number of historical studies. Numerous authors dwelled on the tremendous effect of glass architecture in the nineteenth century in provoking new building types such as train stations, arcades (Geist), and exposition structures (Giedion). In the modern era, issues of glass and transparency assumed a pivotal role in new heroic architecture. Developments in glass manufacture in the 1910s and 1920s made it possible to enlarge pane size and the degree of its transparency, advances that prompted modernist dissolution of the building's exterior envelope. Transparency also assumed a central metaphorical role for the modernists, serving as the guiding principle for generating the building form out of the expression of its structure, a system of legitimization for the new architecture that realized Renaissance ideals of centuries past (discussed at length in chapter 1). From the Gothic, to the modern, to the most contemporary of recent work, glass has transformed the most basic principles of architecture, from structural and formal morphologies, to programmatic types, to fundamental material, spatial, and philosophical conceptions.

Of all building materials, glass also incited the most provocative departures outside proscribed architectural discourse. It is frequently found, for example, as a central metaphor in the fine arts and art history. Remarkable in its capacity to be employed in diverse media, most striking is the fluid potential of glass to suggest and assume widely divergent meanings. An idiosyncratic few, for example: in film classics such as Jean Cocteau's *Orpheus*, the reflective surface of the mirror is used as a literal metaphor for the duality of psychic realms between life and death, a psychological exploration of the mirror. In an entirely different vein, in Jacques Tati's film *Playtime* the reflectivity of glass serves as a vehicle to critique the imposition of modern architecture onto everyday life. In sculpture, at one extreme, artists such as Christopher Wilmarth and James Carpenter employ different types of glass almost as a conventional material, although residing in the particular paradox of its physical properties. Wilmarth explores in his translucent cast glass and

steel structures of the 1970s and 1980s the contradictory impulses found in glass of weight and weightlessness. Carpenter's recent explorations using new technologies of diachroic coatings on glass emphasize its holographic potential. As the position of the viewer shifts, the spectrum of color and opacity at the surface changes radically, hyperbolizing the effect of glass reflection and its dependence on a particular point of view. On the other hand, in more conceptually oriented art, the physicality of glass (or lack thereof) has functioned to represent its very absence. Through the use of glass, Duchamp's seminal "definitively unfinished" *Bride Stripped Bare of Her Bachelors Even* (or *The Large Glass*) exhausts the question of pictorial temporality and its representation. Glass in contemporary artist Dan Graham's work serves as the vehicle to destabilize the context of the artistic work within and outside the museum proper; an ambition that synthesizes the direction of much contemporary artistic production since the 1960s. Graham uses glass to reframe contemporary social spaces by situating viewers unexpectedly against reflected environments (see chapter 3). Hovering between material and immaterial, glass is quintessentially an *open* medium, sustaining often paradigmatic shifts in structure and type, material and metaphor.

Philosophy and psychology have been especially unable to resist the provocative interpretations offered by glass. As an agent of vision and light, glass is encumbered by overarching discourses that begin in Greek philosophy. Tethered to systems of Greek idealization that imparted to light the authority to make form visible and therefore known, glass gave architecture the same pure light: glass architecture is known predominantly as rational architecture.¹ Equally, it granted architecture the capacity to view from inside to outside, but also to gaze, charged in various critiques with the capacity to control. The analogy between vision, as a system of order and control, and architecture, as absolute knowledge, became most explicit in Michel Foucault's discourse on punishment and Georges Bataille's writings on occularcentrism.²

In its reflective capacity, the topic of glass also absorbs psychoanalytical as well as philosophical questions instigated by the mirror. Allen Weiss recounted the essential properties that incited the provocation of Freud and Lacan: "Symbols of narcissism *and* alienation, of the self enrobed in its image and the self lost in the *other*, mirror images offer a vast series of poetic and rhetorical effects transposed onto the visual realm."³ In the medieval era, the mirror was considered either the reflection of God or an instrument of the devil.⁴ In seventeenth-century Baroque, the catoptric mirrored device, an aristocratic toy, served as the philosopher's muse

for such seminal figures such as René Descartes and Jean-François Niceron. Writings of Gilles Deleuze on the profound instability of the mirrored surface in Carroll's *Through the Looking Glass* have been enormously influential, not simply in philosophy, but across many fields of creative production.

In the field of architecture, the use of glass over the last few centuries has been equally diverse, also inspiring notable explorations in theoretical debates. These ranged from Paul Scheerbarth and Bruno Taut's call for crystalline social utopias (which provided, for this study, a potent history of ideological implications), to Frank Lloyd Wright's association of the mathematical perfection of glass to the idealized product of the "humanized machine."⁵ In more contemporary theory, Anthony Vidler invoked Freudian and Lacanian interpretations of mirrors to problematize the translucent surface in OMA's entry to the Paris Bibliothèque Nationale competition (see figure 5.2).⁶ To address the translucent surface, Terence Riley cited ideas of literary critic Jean Starobinski, who himself referred to writings of essayist Michel Montaigne and philosopher Jean-Jacques Rousseau.⁷

The study of glass is as elusive as the material itself, uncontrollably branching into speculations from many different directions, many different disciplines. Serious readers of external disciplines will possibly be disappointed by the cursory treatment of their respective interests in this book. This is admitted out of both necessity and design. A full historical, political, theoretical, and technical explication of the Grands Projets is exactly akin to the dilemma of Narcissus's reflection: although suggestively accessible as a finite set of buildings, when given the added weight of history and the multiplicity of tangential discourses, a full study is unattainable perhaps by definition. It is notable that given the enormous significance of the projects, a full discussion has never been attempted, and perhaps never will. I too retreat, both from the naiveté of attempting a totalizing depiction, as well as the dire inadequacy of only one type of description. Rather, a large part of my endeavor is to constitute a particular frame of reference from which the matrix of issues from different disciplines might emerge and be cultivated together.

For the glass buildings of Mitterrand's Paris, I chose the most local frame of reference possible. For whereas the buildings sit squarely enmeshed in complex issues of politics, urbanism, technology, material and figurative symbolism, phenomenology, psychology, philosophy, and the fine arts, manifestation of these issues is attempted with the most insubstantial of expressive means. With the exception of the Eiffel Tower, the buildings examined in this book are typically simple geometric forms, primary elemental volumes. In these buildings, the flirtation

of transparency with its host of incumbent associations is registered primarily by the nuance of the construction of the surface and the spaces disposed in front and behind. Architect Rafael Moneo, in reference to a range of contemporary transparent architecture that he similarly characterized as formless, noted: “Construction becomes the sole means of expression. The continuity between form and matter becomes the most important issue, and the transition from the material to the almost nonexistent form is the passage that these architects celebrate.”⁸

Intrinsic to the emergence of Mitterrand’s glass buildings in Paris is a political concept: that physical construction might be endowed with the potential, through the medium of transparent skins, simultaneously to heighten, transcend, and make literal a politically construed metaphor of accessibility; an agenda proposed anew by Mitterrand after earlier efforts in the 1960s to open previously closed cultural institutions to the general public. For Mitterrand, primary elemental forms lined in refined details of glass and steel symbolized the most grandiose aspirations of the French leftist state. Laden with subject matter questionably beyond their capacity to convey, the glass buildings of Mitterrand’s France pose an opportunity to observe the contradictory impulses of expressive intents and resources: in the very thinnest of surfaces, in the most nuanced configurations of glass to details of support, the most lavish of meanings were attempted. It is this stark dichotomy that compels this study. As the meanings incumbent in the glass accrue out of control, the physical elements are simultaneously pared down to their most minimal. Very centimeter between glass and support, every decision to weld rather than screw, every chemical additive to the surface coating of the glass becomes extravagantly significant.

As its primary goal, this book proposes the formation of a discourse of detail, where detail assumes a status typically accorded to other conventionally primary aspects—planimetric syntax, spatiality of the interior, or structural order, for example—in configuring and describing the entity of the architectural work. In this proposed discourse, the details of Mitterrand’s buildings become doubly tied to prevailing social orders, if one regards the process of building production itself as the culmination of negotiations at all levels, from political state to general public, from architect to engineer to local fabricator. As Rosalind Krauss put it, the facts of material building, especially in transparent construction, evidence the “technological and economic production that has structured the building’s social field,” giving them inherently political overtones.⁹ The detail, as the final outcome of this expanded definition of production, crystallizes into a physical manifesta-

tion the complex set of cultural conditions that surrounded the building's design and production. Marco Frascari tells us that in the detail one can see the process of signification, the attachment of meaning to man-made objects.¹⁰

The first evidence of this discursive structure is found in the organization of the chapters of this book. The first introductory chapter is the only exception, and attempts to place in context the urban component of the Grands Projets in Paris as well as the appearance of transparency as a resurgent expression in the city's history. Subsequent chapters are more closely configured along the lines of the main intention of the book; each is posed as a case study of a building or set of buildings relating a element of structure or detail to its political, theoretical, and urban contexts. Chapter 2 examines the precedent of the Pompidou Center, and its own precedent, the Eiffel Tower, as benchmarks of "ideological construction." As the exposed monumental frames and their method of fabrication and assembly are exaggerated and exposed, they generate a new spatial and occupational prototype for public space.

In chapter 3, Jean Nouvel's two Parisian institutions, the Institut du Monde Arabe and the Fondation Cartier, are examined for the potential of contemporary curtain wall construction to assume the mantle of cultural representation. Chapter 4 traces the development of a set of glass details designed by engineers Rice Francis Ritchie (RFR) across the most highly charged symbolic landscapes of contemporary Paris; from I. M. Pei's Grande Pyramide du Louvre, through the utopian park projects at La Villette and André Citroën (collaborations of RFR with architects Adrien Fainsilber and Patrick Berger, respectively), to the final Louvre inverted Petite Pyramide, all of which are Grands Projets. Finally in chapter 5, the last and most recent Grand Projet, Dominique Perrault's Bibliothèque Nationale de France, illustrates the counterpoint to the ideological construction of the Pompidou Center, foregrounding Mitterrand's role, ultimate ambition, and final achievements in the Grands Projets as a whole.

This book examines at length the often prosaic construction and constructional processes of the most prominent transparent buildings in Paris. They are considered from the moment of initial conception, through material and structural execution, to pertinent associations and histories of materials and structures, and finally, to the effects rendered by surfaces and their construction. It is this last point that is most salient to beginning the reading of this text, which is ethically committed to going beyond simply tracing historical and academic referents and the preconceived political intents, and engaging the actual effects of physical

structures when implanted prominently in the public domain; hence essential forays into commentary from popular sources. The implicit concept of the built surface in this study is that its effects perform with definitive social ramifications, as well as symbolize socially and politically inspired aspirations.

Given the multiplicity of domains that this topic encompasses, basing this frame of examination around the questions of material details may seem contrived and limited to some. Perhaps. Yet I chose the Grands Projets as a case study because they provide an extremely rare opportunity: to examine a finite set of buildings, all constructed of similar materials, all constructed in a specific urban landscape in the same period of time, all engendered with related ideologically expressive missions.

This quest to examine the multiple consequences of materiality and construction is positioned between two current vastly divided architectural climates. One on hand, the virtuality afforded by three-dimensional digital generation has fulfilled the avant-gardist pursuit of the immaterial, demoting all issues of material to the rank of hopelessly nostalgic.

At the other extreme, calls from a group I loosely term the “tectonists” for generation of form by the terms of construction alone also were tremendously influential, especially for the built sphere of architectural practice. In this quest, presumably to recuperate architecture from the ravages of poststructural excesses of the late 1980s and early 1990s, questions of theory and criticism have been relegated to near extinction. A discussion of these issues is broached in the epilogue, which addresses the discourse of the tectonic in the wake of discussions of the Grands Projets. Suffice for now to say that it is within the middle ground set up by these two seemingly irreconcilable discourses that this study proposes to occupy, outside rhetorical exclusions proposed by either extreme and within the possibilities of the acts, effects, and thoughts involved in building.