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Forms of Attachment: Additions to Postwar Icons

Abstract

In the ongoing project of adding to the *recently* built, or more specifically the problem of additions to postwar icons, the issues have proven more slippery. (In this context, I use "project" to mean a larger theoretical endeavor or task of investigation rather than an architectural proposal.) First, what, in this context, is postwar? To focus this thesis, I define it as the period in American architecture from the end of World War II to the dissolution of the modern movement into the splintered 'isms' of the late 1970's and early 1980's that were bubbling up in the decades before. And why icons? Rather than the "low road" buildings of recent heritage – the dysfunctions of which are most often happily mitigated by additions – postwar icons would seem to pose a distinct set of challenges. This premise is born out even anecdotally by the evidence: numerous additions by high profile design talents with sincere intentions that amount to ambiguous results. The particular provocations of the task, in most cases, remain unacknowledged and unmet.

In this thesis I mean to investigate the challenges and parameters posed through these types of projects, and the degree to which the circumstances are unique to 'their' (modern) movement and 'our' contemporary moment. (While Modernism is an admittedly loaded and imprecise term, I will use it as shorthand for the various ideologies in mainstream architectural practice in the midtwentieth century.) First, how does the consideration of the "recent past" as short temporal distance play a role, and second, how might this be complicated further by modernism's own ambivalent relationship with history? And then what of our own ambivalent relationship with modernism as history? What are the specific theoretical questions at hand as regards changing conceptions of time, author, and artifact? The working thesis of this paper is that, indeed, in the broader spectrum of additions to significant historic buildings, the project of adding to a postwar icon is unique on two levels. The first is that these icons necessitate a sophisticated approach, distinct from the broader addition paradigm as it is now understood in conservation and preservation design. By virtue of the moderns' era, our era, and the relationship therein, postwar icons stipulate an 'ethic' that may prove to have some surprising tolerances but nonetheless demands a unique approach and demonstrable design rationale. The second argument is that a requisite ethic largely remains out of sight, discourse, and widespread use. The paradigms of current practice, through their failures and ambiguities, make the case for a critical reconsideration of this project within our complementary and combined fields of architecture and preservation design.

Disciplines

Historic Preservation and Conservation

Comments

Suggested Citation:

Rogers, Nathan F. R. (2011). Forms of Attachment: Additions to Postwar Icons. (Masters Thesis). University of Pennsylvania, Philadelphia, PA.

FORMS OF ATTACHMENT: ADDITIONS TO POSTWAR ICONS

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in

Historic Preservation

Presented to the Faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements of the Degree of

MASTER OF SCIENCE IN HISTORIC PRESERVATION

2011

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ACKNOWLEDGEMENTS

David G. De Long

Randy Mason Frank Matero

Robert Gatje Josh Uhl Antonia Devine

Victoria Newhouse,

with appreciation for permission to quote from her unpublished manuscript, *Site and Sound: New Opera Houses and Concert Halls*, scheduled for 2011 publication by Monacelli Press, New York.

My family and friends

Gionata Rizzi Giovanni Galli

Michael Sorkin¹

¹ Several years ago, Michael Sorkin wrote an article for *Lotus International* (no. 72 (1992): 90-95) with a title similar to that of this thesis.

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INTRODUCTION

The notion that the act of adding to a historic building is a specific type of preservation response within a broad spectrum of interventions, and an architectural statement in its own right, is both established and evident. Indeed, if we place any faith in preservation's mythological roots, then the coalescing of the movement into a critical discipline – with policy and legal implications affirmed by the country's highest courts – was bolstered by the prospect of Marcel Breuer's proposed addition to Grand Central Terminal as much as the oft-cited demolition of Penn Station five years prior. Irreversible loss or distortion of meaning through an alteration or addition is analogous to loss of physical fabric itself; both are fundamental issues of applied conservation ethics.

To a large degree, architects, their critics, and the public have generally come to grips with the prospect of modern and contemporary additions to pre-modern monuments. After all, the challenge has been under refinement for more than seventy years.¹ By simple virtue of their own longevity, surviving neoclassical and other historicist monuments have already shepherded themselves into the pantheon of history. Their materials and methods of building are different enough from our own to distill the particulate of theory, fabric, and history into the distant past and the *now*. Undoubtedly, there have been successes, failures, regrettable losses and these have generated plenty of heated debate. There may be continental differences; perhaps the general approach to adapting heritage to present concerns in Europe is comparatively more sophisticated

¹ Gunnar Asplund's 1937 Law Courts addition to the 1692 original courthouse in Göteborg, Sweden, which evolved from a 1913 competition in part along the lines of larger concurrent stylistic developments themselves, is cited by Paul Byard as one of the first instances of 20th Century Modernism critically employed in an addition to a historic monument. Paul Byard, *The Architecture of Additions* (New York: Norton, 1998), 32.

than the U.S. But by virtue of the *time* we have had to get comfortable with the problem, there exists today a relatively robust framework for evaluation and critique.

In the ongoing project of adding to the *recently* built, or more specifically the problem of additions to postwar icons, the issues have proven more slippery. (In this context, I use "project" to mean a larger theoretical endeavor or task of investigation rather than an architectural proposal.)

First, what, in this context, is postwar? To focus this thesis, I define it as the period in American architecture from the end of World War II to the dissolution of the modern movement into the splintered 'isms' of the late 1970's and early 1980's that were bubbling up in the decades before. And why icons? Rather than the "low road" buildings of recent heritage – the dysfunctions of which are most often happily mitigated by additions – postwar icons would seem to pose a distinct set of challenges. This premise is born out even anecdotally by the evidence: numerous additions by high profile design talents with sincere intentions that amount to ambiguous results. The particular provocations of the task, in most cases, remain unacknowledged and unmet.

In this thesis I mean to investigate the challenges and parameters posed through these types of projects, and the degree to which the circumstances are unique to 'their' (modern) movement and 'our' contemporary moment. (While Modernism is an admittedly loaded and imprecise term, I will use it as shorthand for the various ideologies in mainstream architectural practice in the midtwentieth century.) First, how does the consideration of the "recent past" as short temporal distance play a role, and second, how might this be complicated further by modernism's own ambivalent relationship with history? And then what of our own ambivalent relationship with modernism as history? What are the specific theoretical questions at hand as regards changing conceptions of time, author, and artifact? The working thesis of this paper is that, indeed, in the broader spectrum of additions to significant historic buildings, the project of adding to a postwar icon is unique on two levels. The first is that these icons necessitate a sophisticated approach, distinct from the broader addition paradigm as it is now understood in conservation and preservation design. By virtue of the

moderns' era, our era, and the relationship therein, postwar icons stipulate an 'ethic' that may prove to have some surprising tolerances but nonetheless demands a unique approach and demonstrable design rationale. The second argument is that a requisite ethic largely remains out of sight, discourse, and widespread use. The paradigms of current practice, through their failures and ambiguities, make the case for a critical reconsideration of this project within our complementary and combined fields of architecture and preservation design.

Justification

Paul Byard's well-known text, The Architecture of Additions, is valuable in bringing the addition - defined as adaptation in its clearest outward form - to the forefront as a central topic in preservation theory. Regrettably, the text fails to cohere around an articulated framework for analysis. It can be speculated that this is because the book developed out of student research projects in Byard's Columbia preservation seminar on additions, which he taught over several years. Byard's text notwithstanding, the breadth of critical scholarship on the topic is even thinner. This is likely due to the fact that additions transgress typological categories while straddling the disciplines of preservation and architectural design, yet on the margins of both. This is a pity, as the impacts of architecture on architecture – not just at the urban scale but as direct addenda – have proven to be both sweeping and complex. New identities and meanings constantly germinate in these combinations, deliberate and accidental, meritorious and meretricious. And when one considers additions to *modern* buildings as a specific subset of the broader problem (which Byard does not), even fewer words have been written. Meanwhile a great amount of work has been carried out, with the promise of only more in the future. This poses a risk to heritage. The present moment for postwar monuments, four or five decades since their construction, is decisive. The course of their eventual fate as heritage is being set emphatically, if not irrevocably. Whether intended or not, the addition is an act of preservation. The risk is that without appropriate terms of debate, it is being

poorly conducted. Partisan criticism and worn ideological lines often prevent constructive discussion; honing incisive cross-disciplinary critique always presents a challenge.

The topic of this thesis must also acknowledge the sadly ambivalent relationship between preservation and mainstream architectural practices. This condition is also closely intertwined with our subject. One of the modern movement's central legacies was the "segmentation of the built environment into new and old," and historic preservation, as an academic pursuit, owes its emergence in part to this division and the resulting "mutual repression." More recently, increased specialization and theoretical development across the disciplines in the last four decades has led to both fields' further reluctance to engage in open and overtly transdisciplinary theorizing. The two fields' priorities and philosophical objectives are different. But this is to our and the built environment's detriment. Jorge Otero-Pailos notes that "the aesthetic and intellectual costs of this split discipline are visible in the absurd taboos of current practices. Architects are embarrassed by the word historic, and preservationists prefer to act in response rather than provoke." Critique from within preservation has been weakened by either indifference or a lack of confidence in confronting the addition directly, as an act of architectural expression with its own theory and praxis baggage. Especially as it concerns heritage from the twentieth century, presumably (as the thinking might go) this job is better left to architectural theorists, comfortable with architecture's confusing array of modalities and discourses that stretch from the early twentieth century avant garde to now. After all, the modern movement's history and historiography had been contentiously written, rewritten, and revised many times over long before mainstream preservationists arrived at the conclusion that postwar heritage was worthy of attention. Typical additions critique from within preservation confines itself to the "hard" material details (the 'seam', the material palette, the survival of original fabric, etc) and does not extend its purview much beyond the domain of the original, whose sanctity is taken for granted as a matter of course. There have been occasions when we have come forward

² Jorge Otero-Pailos, "Historic Provocation: Thinking Past Architecture and Preservation," Future Anterior 2 (N2, Winter 2005), iii, Editorial.

³ Ibid.

to register protest at the specter of the truly or obviously threatening, but it has not been often. This disciplinary retreat neglects the reality that "softer" metaphysical statements and expressions of new work play a fundamental role in the manner and degree to which the original is 'preserved.' Never more than now, preservation must not be content to measure success merely in terms of aggregate fabric rescued. Delegation of our expansive role to a capricious set of thinkers, with preoccupations and objectives incidental to preservation's own, abrogates our discipline's primary obligation. That is a duty not toward past artifacts, but to their untrammeled access for future generations.

Organization

This thesis is structured with a theoretical framework developed in the second and third chapters that may then be used as a lens through which three case studies are examined. However, from the set of issues that are unique to the 'postwar icon addition dilemma,' three conceptual notions (and myths) may be briefly introduced here. The first considers the historical self-consciousness and sometimes-strident iconoclasm that characterized the modernist era. In this context, shoehorning postwar masterworks into the role of extant historical fabric in some one-two synthesis would appear to have some thorny implications. Certainly, the very act of adding to a 'modern' monument – now itself history – speaks intrinsically to a 'postmodern' condition. However, the postmodern myth of modernist ideology as both anti-historical and anti-permanent is not borne out by the evidence, especially at the level of individual buildings. Such thinking is lazy rationale for careless treatment: casual, eye-for-an-eye Old Testament iconoclasm for iconoclasts. Postwar modernism in its current and future role as historical fabric is not a clear-cut matter.

The second, related notion is how additions to works of the recent past can intimate temporal and psychological shifts in a sophisticated way while sidestepping treatment that is precious or oppressive in its execution. Undoubtedly, the act of adding to 'recent' heritage is a phenomenon as old as the history of construction itself. As a problematized critical issue, however, adding to the

recent past is unique to today's postmodern era. In the particular context of subsequent additions to postwar icons, we might call it a continuity/discontinuity paradox. Mid-century positivism has been forsaken for a Niebuhrian post-modern conscientiousness that is relativist and contingent.⁴ Yet even casual examination tells us that modernism's *tectonic* language is considered an open-ended endeavor and vital idiom still.

A third concern is the issue of shifting programmatic demands – and the will of clients – set against an architectural movement that has been essentially defined (along with its technological preoccupations) by its privileging of programmatic and formal determinism. Without generalizing, it is safe to say that such determinism, from International Style boxes of the 1920's to the willful expressionism of the 1960's, was usually chosen over open-ended or hierarchical flexibility.

Adaptability, when included, was often misjudged or appropriated as a utopian concept, and came at some other cost. It is no accident that two specific programs play starring roles in the history of additions. Airports and museums sprang up across the country in the postwar years, and often as high-profile commissions; they have been subjected, sometimes cruelly, to innumerable additions and expansions since. These two building types exemplified the mass-culture of the postwar era and saw sweeping programmatic changes in the intervening years. The question of what constitutes success in additions of this type – in the face of so many real constraints – has few obvious answers.

Indeed, how do we judge additions as both preservation *and* architecture at once? Those are distinct philosophical allegiances. Aside from the ever-present historicist route for additions in general, a more enlightened paradigm has achieved increasingly widespread cultural familiarity and acceptance: the contrasting adjunct to a classical landmark with its contextual deference in materials or massing. Since Eric Asplund first grappled with an addition to the Göteborg Law Courts in

while sidestepping the oscillation between naïve idealism and cynical realism.

⁴ American theologian (1892-1971) Reinhold Niebuhr's strand of anti-utopian philosophy was based on man's fundamental imperfection of pride: the hubris of utopianism was shown to be consequently dangerous while essentially irrelevant to that task of confronting modern reality. The implications for architecture, which has hosted a number of utopian preoccupations over centuries, is that the art is an essentially social endeavor which has a moral duty to maximize the good with due modesty in the face of difficult global-scale problems

Sweden in 1937, the capacity of modernist abstraction to serve as satisfying counterpoint to the classical, neoclassical, or otherwise ornamented has driven a vast body of additions work over the better part of a century. When it is practiced today, the visual reading is that modernism, its edges now softened by postmodern theory, functions as the means of juxtaposition that is readable and palatable -a "non-architecture" that does not seek to compete over ornament. Practitioners and public alike evaluate the success of the joint between the two parts, the deference paid by the new toward the old, and the inventiveness of the new within the framework of "context." We value legibility and respect. When the original is 'modern' in its era and idiom, all bets are off. At the least, how do we approach tectonic vocabulary so as not to muddle? Whether we mean to, how can we not intimate a specific attitude and narrative on the recent past, critical or otherwise? The prevailing 'addition' model, while helpful, cannot address these challenges. Must old and new always be made obviously distinct? If so, the 'how' is no longer so obvious. Is the gleaming restoration of original fabric (a typical treatment) always appropriate for postwar architecture? And do the scenographic effects matter as much? The modernist notion of programmatic and formal determinism, or at least its poetic substitute, directing tectonic relationships was a hallmark of postwar architecture. Evaluating an addition's success would therefore seem to hinge as much upon the interior spatial and circulatory relationships in forming a basis of critique.

Currently, practitioners such as Diller Scofidio + Renfro are broadening and renegotiating the definition of what adding means, as in the firm's recent expansion and renovation to Pietro Belluschi's 1969 Juilliard Building at Lincoln Center. They are, maybe subversively, privileging "a conception of time and history that is embedded rather than discrete," and as a corollary, shifting the language from 'addition' to 'morphing.' One alternative reading of this work is 'revision': giving form to a critical narrative on the ideology of the original. A critique of the recent past – as it relates to monumentality, iconology, audience, and public-ness – is effectually woven into the original fabric.

⁵ Elizabeth Diller and Ricardo Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center." Future Anterior 6 no. 1 (Summer 2009): 85.

Facades are altered; the joints between old and new smudged by a thumb. The blurring of chronological lines is enabled by the architects' contended license to access the open memory of the recent past and edit its production. By what means can we evaluate success or 'appropriateness' in this context? Making additions to postwar icons is a tightrope walk where temporal proximity is an obstacle toward critical distance – as if the bramble thicket of ideology, ethics, and disjunction amidst the various strands of modernist discourse and practice were not enough. At the same time, for the preservation discipline, there is a tremendous opportunity to once again broaden interests and reengage the rest of the allied arts.

Methodology

There is no question that there is still a great deal of room for potential scholarship on additions as a preservation treatment in general. However, focusing on a specific chronological context for the original part of a combined architectural work – the mid-twentieth century – limited the scope to one more achievable in a master's thesis and exposed a set of unique parameters that could drive a principal research question.⁶ Reducing this to an overarching argument followed several steps. The first was the recognition that limiting scrutiny to the United States offered the decades of the postwar period as an exceptionally prolific era of architectural production. As Nina Rappaport has written from within conservation theory, "it is much easier to come to an agreement concerning the significance of the prewar, 'white' modern buildings [in the US], often designed by European immigrants, which are not, however, the totality that makes up American modern architectural heritage. Postwar architecture is really where the challenge and philosophical questions

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⁶ Interest in modern originals as a specialized topic stemmed from previous research and a third-year architectural design studio proposing additions to Philip Johnson's New York State Pavilion from the 1964-65 World's Fair in Flushing, Queens, New York

lie."⁷ Of course, the other advantage was geographic; site visits and in-depth research would be made easier.

The second step was linking a pair of notions: first, that a number of proposed additions to postwar icons since the early 1980's have, at least anecdotally, been matters of heated controversy. Second, that the incidence of additions and alterations to postwar landmarks under the banners of expansion or renewal has only seemed to accelerate in recent years, and the critical reception and discourse these projects have received and engendered has been disjointed and fragmentary. The methodology of this thesis - after background research on additions theory, additions in the context of applied conservation ethics, and shifting conceptions of time, history, and architecture's ethical role – was the formulation of an argument. This argument would be introduced in the introduction and would be supported by theoretical background and a framework in the second and third chapters, followed by three case studies, located in the US, where the original "portion" of the combined work dates from the 1950's to the 1970's (a period defined in the US by the ascendancy of an establishment modernism and its subjection to various reforms.) The addition would date anytime thereafter up to the present. The goal was to conduct the case studies as a focused analysis from which conclusions may be drawn. An initial list of combined architectural works was drawn up through consultations and searches through past journal issues and various databases. The total list of compiled 'combined works' forms a survey in the appendix, but it does not make any claim of completeness. Only a few residential projects (seen as incidental to the main thrust of the thesis) are listed, and while the focus is only larger public, cultural, and institutional buildings, what constitutes the drop-off between the lesser icons and a non-icon altogether is an open question.

Selected groups of combined works not chosen as case studies are addressed in the third chapter in more limited scope. Taken together, these affirm the act of adding to postwar icons as a critical 'problem' while also exposing the endeavor's broad range of challenges. By setting out the

Nina Rappaport, "Preserving Modern Architecture in the US," in Modern Movement Heritage, ed. Allen Cunningham (New York: Routledge, 1998), 60.

clear successes and failures along a theoretical structure, this third chapter aims to frame the debate. The chapter concludes with the rationale for choosing case studies, which was driven by a host of factors including accessibility to information and a representative diversity of approaches. Case study research was carried out in February and March 2011 through interviews and research of primary source material. Graphic analysis was used to dig deeper in the case studies. How do the additions work in plan and section? How is the original's *parti* reinforced or weakened? As well, it aims to overcome the latent bias we all share in focusing on the scenographic effects of architectural work. In a thesis that attempts to deal with a movement wherein artistic production concerned itself with issues beyond exterior, contingent appearance, this is especially crucial. The primary goal in the end is to work towards a set of design principles or guidelines for how to add to postwar heritage.

This thesis does not presume to offer a series of comprehensive statements on what various buildings mean to all people throughout time. Just as there is a diversity of contexts (physical, canonical, historical, functional, and typological) that operate at a variety of scales in a work, a multivalent, self-organizing construct of meanings defies complete comprehension or clarification. In the realm of primary source material, for instance, it is vital to maintain critical distance towards reviews and designers' own words and thoughts: these comprise just a few of many layers of meaning in an architectural work. Distilling and clarifying meaning in the context of an addition, and evaluating the addition on those terms, will help draw out lessons in developing a broader understanding of the specific challenges of additions to postwar icons.

1. REVIEW OF LITERATURE

It may come as no surprise that an extensive body of literature on additions to postwar heritage, critically examined as a *specific* treatment, is essentially nonexistent. There is a small amount of work on additions more generally. This ranges from a general academic survey (as with Byard) to more practice-oriented, pedestrian "how-to" professional manuals. Because additions traverse a variety of typological categories, are rarely considered to be a type of their own, and occupy the margins of both architectural and preservation discourse, this body of written work, too, is not large. It is the goal of the chapter following this one to broaden the investigative scope of the postwar icon addition and situate the addition endeavor within larger preservation and design theory, especially as it concerns the applied ethics of both conservation and architectural disciplines. As an unavoidably political act, the project of addition-making must also confront its relationship to modernist historiography, as well as the shifting patterns in conception of time, temporality, and authorship from the 1950's and '60's to today.

In this literature review, we may limit ourselves to reviewing work where the addition challenge is mentioned explicitly, along with relevant scholarship on the specific challenges of the preservation of the recent past. Typologically- or architect-specific scholarship, such as that of Victoria Newhouse and Meredith Clausen, highly relevant to this thesis, is referenced later where the topic calls for it. In work on additions, several authors have proposed various frameworks for analysis that, while inadequate in addressing our specific topic, offer robust structural fragments for evaluation that can be applied to specific work in later chapters. Likewise, critical propositions on the exceptional qualities and challenges of the recent past as it concerns historic preservation – from

the realm of the preservation discipline itself – suggest a number of compelling and useful concepts in constructing a theoretical basis for additions to postwar icons.

Relevant Work in the Theory of Additions

While the principle shortcoming of Paul Byard's 1998 text, *The Architecture of Additions*, has been noted, it should be restated that the work is one of the most significant on the subject. The text remains a solid first attempt in framing the problem and capturing its scope. Byard, onetime chair of the Historic Preservation Program at Columbia, offers measured, albeit limited, analysis throughout the majority of the cases reviewed in the work, which explores more than 60 combinations of old and new(er) architecture across time, from St. Peter's in Rome to combined works of the near-past. In Byard's eyes, additions are not merely an inevitable exigency of change. As artistic undertakings, they offer the continually renewed promise of societal enrichment through its environment. However these combined works may arise, he writes, "they represent in the best instances the work of successive intelligences taking advantage of and adding to existing expressive material and generated in the process valuable new combined meanings."

The common thread, if there is one, is that Byard – accepting of a wide variety of solutions – consistently takes the side of design values that promote "a more humane public environment." Humane, for Byard, describes equity for buildings in their freedom of self-expression. An expressive architecture that metaphorically 'speaks' is invoked throughout, driven by the initial problem, a legal conundrum that was rooted in the 'speech' of buildings. The Penn Central landmarks decision of 1968, blocking the Marcel Breuer-designed tower over Grand Central Terminal (Fig. 1), "stands for the proposition that an addition that says the wrong thing to a protected neighbor can be forbidden, a serious consequence indeed. When in fairness is that consequence the right consequence? How

¹ Paul Byard, The Architecture of Additions (New York: Norton, 1998), 14.

² Martin Filler, "Holiday Books 1998: Architecture," New York Times, December 6, 1998.



Fig. I. Photomontage - Marcel Breuer's 1968 Addition Proposal for Grand Central Terminal. Pietro Belluschi and Walter Gropius's Pan Am Building (completed 1963) is visible in the background to the left.

can it be avoided?"³ When it is problematized, the expressive identity of a building – what buildings 'say' – is for Byard "the meaning offered by the building to any interested observer taking in the various impacts of its form and ornamentation and integrating them into an understanding of the proposal the building as a whole makes to the observer's intelligence."⁴ Of course, the relationship is neither static nor unidirectional and thus makes weighty demands on the public as arbiter of ethical appropriateness:

Understanding how identities change starts with an acknowledgement that because buildings serve in the real world, they inevitably acquire... new and different proposals of meaning all the time. Protecting their expression requires a capacity to appreciate the interaction of the successive proposals buildings inevitably make about themselves and about each other over time—the impacts of architecture on architecture—and to make principled judgments about the way they should change in light of the public's enduring need to have access to particular protected meanings. The judgments must be principled, not just expressions of likes and dislikes, so that they can be arguable, predictable, and otherwise entitled to the force of law.⁵

Byard clarifies further, stating that the emphasis "is not on the protection of expression per se but on the protection of the meaning conveyed by expression." ⁶

In total, the text offers some very promising concepts: both originals and their additions make numerous expressive proposals steeped in meaning, and particular *meanings* are protected (or therefore ought to be) for their value as heritage as well as public access into the future. Considering additions in the terms of what one element of a combined work says to – or about – another, and positing that a hierarchy of elements – or at least of meanings – exists, will prove valuable as one particular mode of analysis in the following chapters. However, while Byard includes a number of combined works with postwar originals, unlike this thesis, he makes no distinction between these and the larger group as this runs counter to his larger argument, which aspires to systematize the act of

³ Byard, *Additions*, 9. Grand Central, completed in 1913, had originally been designed with the possibility of later expansion upwards. However, the New York City Landmarks Commission ruled against the Breuer scheme as unsympathetic to the original. Penn Central sued, arguing that their inability to use the air rights constituted a regulatory taking and they were due just compensation. The Supreme Court found in the city's favor in 1978, affirming the police power of preservation policy.

⁴ Ibid., 12.

⁵ Ibid.

⁶ Ibid., 14, 159.

evaluating additions. His overall goal is utility from a policy or legal perspective.⁷ It should be noted that these aims are distinct from our own. Byard writes that *Additions* "suggests a framework… to help interested private and public persons understand their work and arrive at judgments about success and failure that are rational, satisfying, and enforceable." While his introductory arguments are compelling, the bulk of the case analysis is at once too specific, and, in its effort to abstract, too far removed as to cohere and be fully useful.

Nothing else approaches the scope or ambitions of Byard's text, and in a number of works there is a conflation of two scales that should be distinct. In additions literature, several authors frame the challenges posed by new architecture in historic districts as indistinguishable from those presented in adding to landmark buildings. While professional journals recognized the "addition" as a specialized problem within preservation theory at least as early as a 1971 special issue of *Historic Preservation* magazine, the contributors framed context at a scale larger than the individual building. They concerned themselves with strategies for introducing new architecture into historic districts "without violating the integrity of either the present-day architect or the established character of historic surroundings." Of course, this era coincides with the national rise of historic districts as a primary preservation policy tool. One author summarily noted that the criteria for good urban design "also apply to the special case of new buildings in old districts": mass, color, scale, and style; in his view, style was "the least important of the criteria." Admittedly, the urban context is a mature place to begin, given that humanity has been corralling "additions" into some semblance of

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⁷ This subgroup in Byard's text includes 500 Park Avenue, New York (1960, addition 1985); The Kimbell Art Museum (1972, proposed 1989); Salk Institute (1965, 1996); The Guggenheim (1960, 1992); The Whitney Museum (1966, proposed 1979, proposed 1989, 1995, proposed 2002, proposed 2005); The Wexner Center, Columbus, Ohio (1957/1979, 1989); Greene Hall, Columbia Law School (1961, 1997).

⁸ Byard, Additions, 9.

⁹ Harmon Goldstone, "The Marriage of New Buildings with Old," Historic Preservation 23 (Jan-Mar 1971): 19. Goldstone, a practicing architect, was concurrently Chair of the New York City Landmarks Preservation Commission.

¹⁰ Goldstone, "The Marriage," 19, 22.

urban order for millennia. Working at this scale also inherently privileges "the integrity of the present-day architect."¹¹

While such language did not appear in preservation literature until the 1970's, this was because the preservation discipline was young, not the approach it was espousing. Richard Longstreth, in his keynote address to the 2010 Frank Lloyd Wright Building Conservancy Conference, notes that "the practice of designing new work in a manner that clearly differentiates new from old... also carried a preference for modernist solutions." The Secretary of the Interior's Standards for Rehabilitation, developed by the National Park Service in the early 1970's, reflexively drew on an established mainstream design tradition; preservation, while rejecting modernism's urbanscale solutions, could not divorce itself in the end from the twentieth-century reading of history that exalted the notion of *zeitgeist*. "Tapping into years of European practice and international manifestos such as the Venice Charter," Longstreth writes,

the approach embodied in the Standards is premised on the *historicist* perspective that the material culture of each era has clearly defined characteristics, and hence work done in the present should reflect our time, not some portion of the past. That perspective, of course, has formed a basic premise for modernisms of various kinds since the nineteenth century, and it never would have occurred to an avant-garde architect to design an addition to a vintage building or district that did not stand in marked contrast.¹³

Another author in the 1971 special issue enthusiastically proclaimed that year as the moment when "modern architecture is now sufficiently mature to revisit the past with security," ¹⁴ but surely this was a rearguard declaration – we may merely consider Louis Kahn's 1953 University Art Gallery addition at Yale (Fig. 2) or Gordon Bunshaft's 1958-61 addition to the Albright-Knox Art Gallery in Buffalo (Fig. 3.) Granted, no generalized 'preservation' approach was explicitly articulated or observed in these earlier years, and like Asplund in Göteborg three decades before, the struggles appear to have been specific and personal.

¹¹ Ibid.

¹² Richard Longstreth, "The Dilemma of Adding," Keynote Address, Annual Conference, Frank Lloyd Wright Building Conservancy, Cincinnati, Ohio, 23 September 2010, unpublished manuscript.

¹³ Ibid.

¹⁴ John Lawrence, "Contemporary Design in a Historic Context" Historic Preservation 23 (Jan-Mar 1971): 25.
Lawrence was then dean of Architecture School at Tulane University.



Fig. 2. Louis Kahn's Yale University Art Gallery, 1953. Egerton Swartwout's 1928 building is to the right.



Fig. 3. Albright-Knox Gallery and Addition, Buffalo, New York. Gordon Bunshaft's 1962 addition, with the 1905 original Beaux Arts building to the left.

Substantiating his claim, the second author cites Pei Cobb Freed's design for the Hancock Tower in Boston, suggesting that in the hands of "a gifted architect, such bold ventures are not inappropriate... a building that draws its animation from its historic setting can be the ultimate form of flattery." In the context of addition theory, both 1971 articles affirm virtuosic talent and the primacy of design that is of its time; a high-contrast stylistic approach is allowable when the necessary concessions are made to certain contextual tropes. In framing the problem with four criteria, there is also the early effort to systematize the approach to historic context, whatever the scale. But for us, scale does matter. As Michael Sorkin wrote in 1992, "the questions of [architectural] possibility are most architecturally acute in conditions of literally stitching on. While any renovation of the city begs the issue generically, the most emblematic production taken up in architecture's public discourse is the issue of adding to cultural monuments."

Within the bounds of this 'scientific' endeavor to systematize and objectify the evaluation of design within historical contexts, Linda Groat's 1983 article, "Measuring the Fit of New to Old," makes some significant advances. Recognizing the subjectivity and misappropriation (willful or otherwise) of terms like 'suitable,' 'compatible,' and 'contextual,' Groat attempts to move beyond the varying claims that architects make about their own work and the claims critics make to disparage it. She proposes a 'checklist,' divided into three segments superimposed upon a series of spectra. The first segment delineates "three major contextual issues that are commonly beyond the architect's immediate control": site location, building type, and size of project. These, according to Groat, "constitute the conditions that an architect must usually accept as givens" at the project outset. This notion is an insightful point of departure, as it is critical (as Groat acknowledges) "to recognize basic limitations & confront extent to which these will ultimately affect success of design." 17

¹⁵ Ibid., 27.

¹⁶ Michael Sorkin, "Forms of Attachment: Additions to Modern American Monuments," Lotus International no. 72 (1992): 90.

¹⁷ Linda Groat, "Measuring the Fit of New to Old," Architecture (Nov 1983): 58.

The second segment is defined by two significant issues over which the architect may typically exert more control: "prominence" and "definition of context." Of course, these are not without their dilemmas. Prominence is largely determined by the first segment's three factors, and as Groat notes, "the definition of 'context' in many published examples remains ambiguous," a term often used to suit other ends. "Defining the scope of the context is a critical question that should be conscientiously addressed." A critical and comprehensive exploration of 'context' is beyond the scope of this thesis, the term having driven far-reaching debates over critical – and other – regionalisms. Here, it is sufficient to say that the deployment of "contextuality" in the service of bolstering a particular proposition should be approached critically.

The third and most important of Groat's segments arrays the issues "at the core of any contextual design problem, over which the architect has "primary control." Here, she helpfully bifurcates the list of design decisions into abstracted strategies versus specific tactics. One strategic range, "exterior volumetric composition," offers the various tactics of "roofline; vertical projections; articulation of base, body, top, etc." The six major strategic elements of this segment, set upon a spectrum of high contrast to close replication, are categorized by space, massing, and style, and range from "exterior site organization" to "interior surface treatment" with their respective tactical options. ²¹

Groat's framework arises out of a venerable taxonomic tendency in its attempt to systematize both the process and evaluation of design-in-context, whether at the scale of individual building, block, or district. Her framework is notable for the degree to which it clarifies the degree of control an architect is likely to exert on the range of variables. After all, clients compose the brief, pick the architect, and set the budget. By describing design decisions hierarchically, and by ranging

18 Ibid.

¹⁹ Ibid., 59.

²⁰ Ibid., 61.

²¹ Groat's six strategies are: (1) Space: Exterior site organization, (2) Space: Interior spatial organization, (3) Massing: Exterior volumetric composition, (4) Massing: Interior semi-fixed arrangements, (5) Style: Exterior surface composition, (6) Interior surface treatment.

between strategy and tactics, the framework facilitates a meta-discussion at a level above the details of specific approaches. As a mode of thinking, it is helpful, but there are some drawbacks. While Groat notes that the organizational structure is not meant to imply a rigid sequencing of decisions, the reductionary nature of the checklist is exactly what this thesis means to avoid. In the end, while Groat's framework is neither exclusive to additions nor new design in historic districts, local municipalities in the process of formulating design guidelines may find this framework more relevant than design practioners. For designers, the process of developing schemes includes a degree of intuition Groat fails to acknowledge. It should be noted that municipal design guidelines themselves – governing new design in a larger-scale context that is also often vernacular – are tangential to the thrust of this review and are not discussed here.

As for work directed towards design practitioners more directly, there are two sources in so-called additions theory: a 1985 text by David Dibner, *Building Additions Design*, published as part of the McGraw-Hill Building Types series, and *Old & New Architecture: Design Relationship*, a 1980 publication of the National Trust for Historic Preservation. Dibner's work adequately captures the parameters of the issue, situating the endeavor historically as "representing a special challenge," in its responsibility to two sets of criteria: "the new functional requirements to be housed," and "the existing conditions of the 'host' building." But the overall approach, geared toward broader, service-oriented design practice and its clients, is a prosaic one: "to demonstrate the state of the art of building additions" and promote additions on the basis of energy conservation and costs savings. These creditable efforts are put on equal footing with the benefit of saving "our heritage." As the author avows, the text, interwoven with anecdotally referenced specific projects, is "not a collection of award-winning buildings" and the author emphasizes only those aspects of architectural and engineering practice "different from the usual approach to building design." While he discusses a variety of larger concepts and types, Dibner affords equal space to mechanical and structural

²² David Dibner, Building Additions Design (New York: McGraw-Hill, 1985), xi.

²³ Ibid.

²⁴ Ibid., xii.

considerations and typical joint detailing for connections to existing fabric. Essentially a technical manual and another exercise in systematized abstraction, the work falls short in abstaining from qualitative analysis of the examples it offers, and only implicitly notates the central and fraught relationship between additions and heritage by affording a separate chapter to "historic" buildings for the purpose of pursuing the Federal Historic Rehabilitation Tax Credit.²⁵

The report of the National Trust's 1977 conference, Old & New Architecture: Design

Relationship (published in 1980), is a prominent and significant contribution to the topic. The book's authors address the topic in terms of new design in historic neighborhoods, blocks and other environs, as well as direct additions to historic monuments. While the quality of the work is varied overall, articles by Osmund Overby and Jean Paul Carlhian ground the specialized problem of conscientious design in historic context within a broad historical frame, offering a discussion of the shifting role of adaptation and enlargement upon monuments over centuries of architectural history. Carlhian also argues that a need to make a sensitive determination of an existing building's essential characteristics is central to endeavor. However, obvious answers or general conclusions were few, as the title of Giorgio Cavaglieri's contribution, "The Harmony That Can't be Dictated," underscores only too well. In Cavaglieri's view, "the problem of what is harmonious, what is artistically effective [in the present condition of modernity], is so variable that it is not possible to draw up guidelines and still favor creativity."

With the exception of Byard's text (which suffers from the shortfalls already mentioned), most of the slim published work on additions reveals a variety of conceptual inadequacies, or the conflation of two distinct scales into the same endeavor. Regarding scale, the challenges are unique for buildings versus districts, and especially for landmark buildings. Making additions to icons, as

²⁵ Ibid., 11-12. Such classification would imply that the other originals discussed in the work are somehow ahistorical.

Osmund Overby, "Old and New Architecture: A History," in Old & New Architecture: Design Relationship, ed. Diane Maddex (Washington, D.C.: The Preservation Press, 1980), 18-36; Jean Paul Carlhian, "Guides, Guideposts and Guidelines," in Old & New Architecture: Design Relationship, 49-68.

²⁷ Giorgio Cavaglieri, "The Harmony That Can't Be Dictated," in Old and New Architecture: Design Relationship, 40

Ross Miller observed in 1990, is challenged by a unique phenomenon: "The architectural masterpiece achieves autonomy in context. It is both apart from and a part of the environment in which it exists." And across the board, there is absolutely no reference, implicit or explicit, to the treatment of the recent past as an idiosyncratic undertaking. Framing the project only as a reductionary checklist or a technical endeavor belies its theoretical complexity and implies a misreading of the role of design.

Problematics in Preservation of the Recent Past

The phenomenon of postwar heritage as a specific topic within the realm of preservation has been the subject of a rapidly growing body of recent work. The phenomena that such interest in the topic is still relatively new, and that the work of DO.CO.MO.MO continues to fulfill a leading role in this discourse through papers and conferences since its 1988 founding, has been addressed in previous departmental theses.²⁹ Brendan Beier, in his 2006 thesis on Mitchell/Giurgola Associates, distinguishes between the recent past as a literalism (say, a generic descriptor of the present minus thirty years) and postwar heritage, noting that "the two are regularly conflated."³⁰ However, as shorthand this thesis will use 'recent past' to denote chronological proximity to 2010-2011 rather than an ahistorical or floating bracket (as in the recent past relative to the 1890's being the 1860's, for instance.) Beier also clearly explains some of the exceptional theoretical and material conservation challenges presented in the preservation of postwar architecture.³¹ These include Alice Jurow's speculation that "a modernist building that looks old may represent a 'conceptual failure' to the public, Susan Macdonald's theory on delusory claims of futuristic 'maintenance-free' materials rendering upkeep unnecessary, and the innumerable challenges of reproducing outdated machine-

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²⁸ Ross Miller, "Commentary: Adding to Icons," Progressive Architecture 71, no. 6 (June 1990), 125.

²⁹ Specifically Brendan Beier, ""Preserving the Work of Mitchell/Giurgola Associates" (M.S. Hist. Preservation thesis, University of Pennsylvania, 2006). DO.CO.MO.MO's full name is the International Working Party for the Documentation and Conservation of Buildings, Sites, and Neighborhoods of the Modern Movement.
³⁰ Beier. 9.

³¹ Ibid., 9-16.

produced material elements that are no longer in manufacture.³² DO.CO.MO.MO's 1998 compilation of scholarly criticisms, *Modern Movement Heritage*, edited by Allen Cunningham, provides a comprehensive distillation of a number of key related themes that are directly relevant to this thesis. While many of these topics will be addressed again in the following chapters, they are introduced first in literature review to establish a context of existing scholarship.

Historian Robert Maxwell notes the paradox (now also an aphorism) in the project of documenting and conserving historical artifacts produced during the apogee of the modern movement. Indeed, a mode of production that "celebrates the new while rejecting the old... does not envisage the moment when the new itself becomes the old, still less that it may then be in need of support."³³ Certainly, this paradoxical aspect has been widely recognized and acknowledged, but we might agree that to wield it in opposing conservation of modern artifacts is to fall into the trap of cheap irony. Instead, as Allen Cunningham discusses in the introduction following Maxwell, neither modernism's myths nor its critiques themselves should be accepted as objectified givens:

Where there continues an assault on the Modern Movement, it may be divided between professional criticism, the propaganda leeched from this source which feeds public prejudice and the more direct response of a visually uneducated public to an admittedly unfamiliar, experiential world. Criticism has fed on misunderstanding of its intentions derived from the very propaganda issued to publicize the cause [i.e. *The International Style*, 1932]...

First is the false inference that a monolithic, coordinated, international movement existed and second, that it could be adequately described in terms of its outward, contingent appearance.³⁴

A measured discussion of modern heritage – key to the utility of this thesis - must begin with the deconstruction of the variety of derisory narratives that pervade professional and popular culture. First, as Cunningham notes, the various positions and cultural tendencies contained under the umbrella of the modern movement were not subject to one totalizing approach despite the efforts

³² Susan Macdonald, "Defining an Approach," Preserving post-War Heritage: The Care and Conservation of Mid-Twentieth-Century Architecture, ed. Susan Macdonald (Dorset: Donhead Publishing, 2001) 32-40, quoted in Beier, 10.

³³ Robert Maxwell, Preface, in Modern Movement Heritage, ed. Allen Cunningham (New York: Routledge, 1998): xiii.

³⁴ Allen Cunningham, Introduction, in *Modern Movement Heritage*, 3.

and agendas of its historiographers, and the suspiciously elegant packaging of a period by a consistent and dynamic argument belies the reality.

This leads us briefly to a related, no less fundamental issue that should be discussed here, which is the "problem" of style, as historian Richard Longstreth would have it. Style, according to Longstreth, has "infiltrated the working sector of preservation, becoming a stock-too-of-the-trade." Style, he rightly argues, "comprises more than conventions of form," as Meyer Shapiro revealed in reviewing seven different approaches to stylistic classification. This risk lies not just in describing and analyzing the original portions of combined works later in the thesis, whereby the moderns "imagined they had jettisoned the existence of style itself." Tontemporary architecture in all its heterogeneity and theoretical confusion is at least as challenging. David De Long and others have incisively framed architectural work as necessarily belonging to a period: contemporary and recent work falls into the postmodern period (with 1975 as a hinge point) wherein design vocabularies draw on near and far sources in the continuation of various critical and artistic endeavors.

First, a set of legends must be dispelled. Cunningham observes as well that "among other myths which have perverted much of the discourse around modernism and have been presented as imperatives...

may be included functionalism and economy of means as ends in themselves, total detachment from precedent and exclusively resort to modern technologies... The attempts to portray Modernism as a failed, new orthodoxy have been ill-founded, a critical deception.³⁹

Cunningham exposes two central, related myths concerning modernism's relationship to history and its relationship to permanency: both bear on the treatment of modernism as history itself. While the popular and pervasive narrative is that the modern movement rejected history in favor of ahistorical

³⁵ Richard Longstreth, "The Problem with 'Style'," *The Forum*, Bulletin of the Committee of Preservation, SAH, 6 (December 1984): 1.

³⁶ Meyer Schapiro, "Style" (1962), reprinted in *Theory and Philosophy of Art: Style, Artist, and Society* (New York: George Braziller, 1994).

³⁷ Quote from Longstreth, 1.

³⁸ David De Long, "Points of View in American Architecture," in *US Design 1975-2000*, ed. R. Craig Miller. (New York: Prestel Verlag with the Denver Art Museum, 2001): 75.

³⁹ Cunningham, Introduction, in Modern Movement Heritage, 3,8.

abstraction, Marshall Berman and Anthony Vidler have both noted the ambivalent, complex relationship between modernism and historical precedent. "Modernism," wrote Berman,

can never be done with the past... If Modernism ever managed to throw off its scraps and tatters and the uneasy joints that bind it to the past, it would lose all its weight and depth, and the maelstrom of modern life would carry it helplessly away. It is only by keeping alive the bonds that tie it to the modernities of the past – bonds that are at once intimate and antagonistic – that it can help the moderns of the present and the future to be free.⁴⁰

As one indicator, however anecdotal, Sigfried Giedion averred in the preface to his 1967 edition of *Space, Time, and Architecture* that he had "always regarded the past as something not dead but an integral part of existence, coming to understand more and more the wisdom of the Bergsonian saying that the past knaws incessantly into the future." Instead, in the simplistic prevailing myth, modernism refused historical continuity. Vidler summarizes this fiction, that modernism's "its functional promises and technological fetishism were nothing but failed utopias of progress; its ideology was out of touch with the people, if not anti-humanistic. Its formal vocabularies were sterile and uncommunicative." Within the postmodern strain of historicism, from which this critique originates, functional pragmatics and material construction returned. "History was welcomed back as a counter to abstraction." The willingness of postmodern historicism "to ransack history revealed [itself] in its vocabulary as fundamentally disrespectful of history, and even more disrespectful of the present."

Modernism, far from rejecting "history" as such, perhaps respected it too much... the modernist avant-gardes in fact understood history as a fundamental force, an engine of the social world... it would be true to say that never was history more alive than in its so-called modernist rejection... In this vein, however, postmodernism [postmodern historicism] might be said to have demonstrated a profound disdain for history in favor of an ahistorical "myth"... To think as a postmodernist, by contract, would be to ignore everything that

⁴⁵ Ibid., 192.

⁴⁰ Marshall Berman, All That is Solid Melts into Air: The Experience of Modernity (London, Verso, 1985): 346.

⁴¹ Sigfried Giedion, Space, Time and Architecture, (Cambridge, Mass: Harvard University Press, 1967): xliii.

⁴² Anthony Vidler, Histories of the Immediate Present: Inventing Architectural Modernism (Cambridge, Mass: MIT, 2008): 191.

⁴³ This 'postmodern historicism' is very different from the "historicist perspective" Longstreth defines, the mode of thinking "wherein the material culture of each era has clearly defined characteristics, and hence work done in the present should reflect our time, not some portion of the past." Richard Longstreth, "The Dilemma of Adding."

⁴⁴ Ibid.

makes history history, and selectively to pick and choose whatever authorizing sign fits the moment.

As compelling responses to one prevailing and conceptually inadequate critique of modernism, these works affirm the notion that modernism only understood history too well. It is then possible to dispense with the bromide that modernism was ahistorical in its approach. Likewise, the notion that by virtue of ahistorical iconoclasm (itself contradictory), the introduction of a modernist artifact into an explicit relationship with history through a combined architectural work can never overcome theoretical crisis or conceptual failure is equally specious.

It is also necessary to deconstruct the related myth of ephemerality as an opposition to modernism's conservation. As Hilde Heynen argues in another chapter of Cunningham's reader, the notion of 'transitoriness' in twentieth century architecture is equally thorny. Even in the work of the Italian Futurists, whose outspoken manifesto on an ephemeral architecture is often invoked on behalf of some mythical singular modernist ideology, the answer is not the obvious one. Heynen notes that Italian Futurist Antonio Sant'Elia's own renderings, which belie any trace of deconstructability, support the idea that Sant'Elia "did not really wish to extend the condemnation of monuments to his own creations." ⁴⁷ Ephemerality was ambiguously deployed as an analogue, a response to the *zeitgeist*. Heynen notes that "the ambivalent position of modern architects vis-à-vis the issue of transitoriness can be traced elsewhere, too," as illustrated in Marcel Breuer's coy response on the matter from the International Style's early days of the 1930's:

The solutions embodied in the forms of the New Architecture should endure for ten, twenty or a hundred years as circumstances may demand... Though we have no fear of what is new, novelty is not our aim. We see what is definite and real, whether old or new.⁴⁸

As Heynen notes, it would be a gross misreading to refer to the modern movement's "presumed preference for one-generation buildings" so that the abandonment or destruction of modern heritage

⁴⁷ Hilde Heynen, "Transitoriness of Modern Architecture," in *Modern Movement Heritage*, 33.

⁴⁶ Ibid., 192, 193.

⁴⁸ Marcel Breuer, 'Where do we stand?' (1934), in Form and Function: A Source Book for the History of Architecture

and Design 1890-1939 ed. Tim and Charlotte Benton, et. al. (London, Crosby Lockwood Stapler, 1975), 180. quoted in Heynen, in Modern Movement Heritage, 33.

might be legitimated.⁴⁹ As a corollary, sacrificing the ability of postwar icons to express specific critical or 'protected' meanings in a larger expansion or addition effort is equally unethical. But let us return to Jurow's 'conceptual failure' theory, which certainly drives the existing paradigm of modernist restoration as a careful reproduction of the constituent elements to realize building-asnew. Is a "truthful reproduction," in Heynen's words, faithful to the spirit of the modern movement? Instead, she posits that

an honorable attitude towards the inheritance of the Modern Movement implies a position balancing between a truthful reproduction of the original design and a dynamic renovation which accepts new functions and thus honestly reflects the buildings' primary conceptions.⁵⁰

This is a difficult position to pin down in practice. The status quo restoration paradigm, as described, is gleaming reproduction for only the 'best' modern monuments, superimposed upon on a much larger backdrop of heritage relegated to the margins of study and scholarship. In this dichotomy – while keeping Byard's dictum on the expression of protected meanings in mind – can we consider the concept of ephemerality (or transitoriness per Heynen) to offer a third means: one which approaches the *right* addition not just as historical happenstance but as potential revitalization and fulfillment of the original's modernist principles? Architect Theodore Prudon concurs with Heynen a chapter later, writing that "to rely, for the preservation of modern architecture, on current preservation principles and philosophies presents a fundamental dilemma... likely to be irreconcilable."51

A new and appropriate preservation philosophy has to be based, therefore, on the very ideals that have given these buildings their meaning and form... In other words, the preservation of the design intent must be one of the central tenets for any new preservation philosophy... Design must therefore be a true partner in the preservation of the modern monument, and working together to enhance the design intent is the true opportunity for architects and preservationists.⁵²

Sensitive, appropriate additions and expansions to postwar icons, ones which both enhance and protect, which add meaning while letting the original state its own expressions clearly, may offer a

⁴⁹ Heynen, in Modern Movement Heritage, 33.

⁵⁰ Heynen, in *Modern Movement Heritage*, 34.

⁵¹ Theodore H.M. Prudon, "Great Expectations," in Modern Movement Heritage, 95.

⁵² Ibid.

glimpse of Heynen's balanced position between truthful reproduction and of-the-moment pragmatism. And prioritizing the preservation of "design intent," in Prudon's words – rather than fastidious obsession with original fabric or its facsimile – posits a new, relevant, and more flexible framework for the preservation of postwar heritage. Indeed, as Prudon himself notes, "design must therefore be a true partner."53

Overall, the theoretical framework for additions is in disarray while dissatisfaction with existing paradigms of preservation treatment are emanating from within at least one segment of the preservation discipline. Some of the alternative conservation proposals from this area have direct import in redefining the role of additions in postwar heritage. A critical look at the addition as an instance of inherently political preservation treatment for postwar icons – a look that considers all of this promising but disparate work holistically – is demonstrably required.

53 Ibid.

2. MODERNISMS: THEORETICAL AND ETHICAL LEGACIES

The Modernism of Living Memory

Historically, it appears that two related dilemmas have typically dominated the particular addition endeavor examined in this thesis. The first is that when the original building is postwar heritage and ostensibly considered an icon of the era, we are dealing with what we might call "the modernism of living memory." A hallmark of the modernist mindset was not a break from history itself, as I have discussed in the previous chapter, but certainly a conscious revolution in modes of artistic production. The modernist determination to "achieve purity of form" naturally informed the way that midcentury architects approached the endeavor of making additions to pre-modernist landmarks, neoclassical, Richardsonian or otherwise.1 While there were some exceptions, older landmarks were largely interpreted within the midcentury as "distinct and unchangeable fragments, distanced in time from the present and rendered lifeless," as David De Long has noted.² Today, half a century later, the parallel relationship is quite dissimilar. Despite the postmodern reformation and its parlous debate that continues, today's architectural discipline would generally claim to hold the previous generation's work in much higher esteem than those same modernists may ever have done for the Beaux Arts relics that were recently-built in their own time. This is an important distinction, because today (and over the last few decades) architectural practice has presented us with two opposing poles on a spectrum of possible artistic response to the modernists' own postwar landmarks that constitute this 'modernism of living memory.'

¹ David De Long, "The Design of History," Fine Arts 1998, (Rome: American Academy in Rome, 1998): 39.

² Ibid.

One pole stems from a sort of veneration: a loving restoration of an icon's material heritage and the faithful fulfillment of its designer's alleged intentions. The other extreme is a disregard of intent that in practice has amounted to indifferent, aloof additions, wherein the original fabric may well be protected but is otherwise ignored. Perhaps we should expect this, a modernist legacy with its own validated lineage. But somewhere in between, situated in the tangled intimacy between the 'then' and the 'now,' we may ideally discover in a project a palpable recognition and engagement of a sensitive context combined with the artistic obligations of what it means to operate in a present moment. However, also between these poles is what I have described as the contended artistic license to access the open memory of the recent past and revise its legacy. It is, in a sense, permitted by what we might call 'a leap of familiarity.' Rem Koolhaas and his Office for Metropolitan Architecture (OMA) have mockingly headlined it as "When Buildings Attack!", (Fig. 4) which proves to be germane to the discussion of the proposals for additions to Marcel Breuer's Whitney (case study following.)³

The second and closely related dilemma (as I mentioned in the introduction) comes down to an explicit acknowledgement of time. Emerging out of the aim for legibility in conservation ethics, a central proposition in the practice of alteration or addition is the articulation of some relationship to temporality: are past, present, and future confronted in the project as chronological and psychological issues? Where contemporary additions to postwar icons are concerned, illustrating or framing this psychological distance is fraught with what I have termed the continuity/ discontinuity paradox. On a philosophical plane, midcentury positivism gave way to a panoply of postmodern ambivalences and ethical snares for practitioners. But in architectural idiom, there is undeniably a large degree of continuity in the architectural or tectonic language of many practitioners: a continuation and refinement of modernism's investigations and experiments. At least informally, literal and phenomenal transparency, glass curtain walls, and articulations of program and technology

³ Rem Koolhaas, Content (New York: Taschen, 2004), 540.



Fig. 4. Drawing - Rem Koolhaas's cartoon of OMA's Whitney addition proposal (2003). Part of a series caricaturing some of OMA's recent projects in Koolhaas's book *Content* (New York: Taschen, 2004.)

are all ongoing preoccupations. This gives rise to some critical questions about the legibility of intent and even authenticity (itself a baggage-laden but critical conservation term) that are taken for granted in the preservation field. Moreover, the abiding faith in rationality and socio-technological progress that exemplified a modernist outlook in some respects had only taken a hiatus, to be reinterpreted and rehabilitated with increasing frequency in recent decades. For the purposes of this thesis, we can agree that the current *era* is postmodern, but this has meant neither annihilation nor abandonment of various unfinished modernist projects. We are led to ask what modernism's ethical legacy and vital signs are today, as two central topics with respect to additions – *architectural* responses to the recent past from within current practice. And how then does postmodern theory come to bear? How has an ethical framework for practice developed, and how might this confront authenticity? And what *is* authenticity in the specific postwar context?

Modernism(s)

Even as Philip Johnson was realizing his large-scale aspirations for the International Style in facilitating Mies van der Rohe's Seagram Tower, the immediate postwar era of the fifties and sixties was a paradoxically a strange moment for American architectural practice. The heady idealism and rhetoric of the Bauhaus and the European avant-garde had arrived on economically resurgent Western shores, but did not quite usher in the age of artistic hegemony that was expected. "A certain confusion exists in contemporary architecture, as in painting; a kind of pause, even a kind of exhaustion. Everyone is aware of it," Sigfried Giedion wrote in 1967.4 He averred, "Many architects are disturbed by the sculptural tendencies evinced in much of today's architecture," referring to Le Corbusier's chapel at Ronchamp and Jörn Utzon's design for the Sydney Opera House. However, he confidently maintained that this trend "is no deviation from the development of contemporary architecture... through this, volumes have reacquired the significance they possessed at the dawn of

⁴ Sigfried Giedion, Space, Time and Architecture, (Cambridge, Mass: Harvard University Press, 1967): xxxii.

⁵ Ibid., xlv.

civilization." Indeed, it was an oddly self-conscious moment for a cultural tendency that had been forging confidently ahead since its consolidation of various avant-garde positions. It is not coincidental that this was the moment at which its own historical narrative was being written and the movement itself gradually historicized. In 1955, Reyner Banham underscored that "historians" – not practitioners – "have created the idea of a Modern Movement... And beyond that they have offered a rough classification of the 'isms' which are the thumb-print of Modernity." As such, this "gradual historicization," not to mention the movement's eventual "characterization as 'style," notes Vidler, has resulted in "a wide range of hypotheses as to its origins and consequences, all bound up with the critical reassessment of the effects of modernity and modernization since the 1940's." This ambiguous turn of events leads Vidler to ask what the architectural historian does, "not qua historian, but for architects and architecture?" Or, to put it more theoretically, what kind of work "should architectural history perform for architecture, and especially for contemporary architecture?" We might well ask what work preservation theory should perform for design in the context of its own recent legends.

While these remain open questions, the postwar era was the springboard for an emerging set of 'modernisms' that were, to varying extents, responses (self-conscious or not) to the burgeoning historiography of modern movement narratives. The dangers of easy categorization or a lapse into the careless deployment of "style" are real, but for the purposes of this thesis, we might consider a series of loose categories defined by idiom and particular philosophy during this transitional, theoretically tricky period. Such a task is complicated further by categorical variation in the oeuvre of a single author – think of Breuer, Belluschi, or Le Corbusier from their early to late work – or even

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⁶ Ibid., xlviii.

⁷Banham, "The New Brutalism," Architectural Review 118, no. 708 (December 1955): 355., quoted in Anthony Vidler, *Histories of the Immediate Present*, 5. Anthony Vidler affirms Fredric Jameson's claim that "modernism' itself as a concept and ideology – modernism as we tend to know it today – was largely a product of those postwar years." (Fredric Jameson, *A Singular Modernity: Essay on the Ontology of the Present* (London: Verso, 2002), 169; quoted in Vidler, 5).

⁸ Vidler, preface, xiii

⁹ Ibid., 3. Italics are my own.

within a single architectural project. We might submit, however, that each 'modernism' would suggest, to an architect making an addition, a specific attitude or design approach, while advancing the overarching argument for a different ethic overall.

This array of postwar modernisms includes a mainstream modernist idiom that is the most direct successor to the Bauhaus, largely defined in the U.S. by Ludwig Mies van der Rohe and the midcentury work of Skidmore Owings and Merrill. Using orthogonal geometries, repetition, and minimalist surface effects, it also loosely characterizes Pietro Belluschi's work at Lincoln Center (case study). A muscular, expressionistic mode of production is exemplified by Eero Saarinen's more sculptural postwar work. The rise of the brutalist aesthetic (from béton brut, the French term for raw concrete in which wooden form boards left traces of grain texture) is perhaps a third category, although the term has a much narrower critical application than its common usage would imply. There is further confusion over brutalism versus the "new" brutalism, and only a limited number of works in the United States are truly 'brutalist.' Rather, we might consider a third category to be a hybrid 'brutalist expressionism,' as demonstrated in Paul Rudolph's Art and Architecture Building at Yale (case study). A fourth category is one we might call hinge postmodernism, which is largely preoccupied with the work of Louis Kahn. This type also situates some of the later projects by Marcel Breuer and others in their effort to keep pace with Kahn's realignment of architectural production in his own work.¹⁰ Many buildings do not fit neatly into these categories; the Whitney is perhaps an expressionistic example of this hinge moment. Then of course, there are a number of more recent modernisms that fall, paradoxically, under the rubric of the postmodern period. While the following survey of combined works and then the case studies are not ordered according to these modernisms, such classifications are highly useful in both relating and distinguishing works of the postwar period.

¹⁰ This set of categories was developed in consultation with David De Long, the faculty advisor for this thesis.

What united these strands, preoccupied as they were with various materials, languages, and formal effects, was an essential if loosely applied ethic of the period. "The values that gird a modernist outlook," Tom Spector writes, "might be characterized as

an emphasis on maintaining a critical stance toward the styles that preceded it, a belief in the transcendent power of the creative design solution, distrust of bourgeois conventions, an embrace of the new, a preference for the universal and immutable over the local and contingent, and a predilection for regarding everything from a functionalist standpoint."¹¹

Of course, as the historical narrative goes, 'universal' and 'immutable' were progressively exposed to be culturally hostile while the influence of – and emphasis on – 'local' and 'contingent' (self-critical or not) grew. While this transition was, like many historical shifts, gradual and overlapping, the arrival of the postmodern era was reduced into an consumable image in the demolition of Minoru Yamasaki's Pruitt-Igoe housing project in St. Louis in 1972, less than two decades after it was built. It was condemned for a series of reasons beyond Yamasaki's control, but this was not a housing project designed by an anonymous hack; Yamasaki was an internationally recognized designer. The photograph that caught the moment "came to be seen as a symbol of the vanishing confidence of a generation of architects that no longer believed that they could construct a more civilized version of the world as they found it." It was a palpable emblem of the tremendous shift, contingent upon the postmodern period, in the way architectural practice was viewed as a moral or ethical endeavor. Additions, when they are a critical project, are an exercise in ethical behavior that must operate within this legacy's framework. Advertently or not, the addition endeavor necessarily confronts a near-term historical context that is fraught with its own mythical fall from grace and host of moral uncertainties.

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¹¹ Tom Spector, *The Ethical Architect: The Dilemma of Contemporary Practice* (New York: Princeton Architectural Press, 2001):

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¹² Deyan Sudjic, *The Edifice Complex* (New York: Penguin, 2005): 349.

¹³ I also include it here as indicative of the "meta-narrative" of the postmodern era. Today we can consume documentaries on Pruitt-Igoe, and the arresting image lives on as a popular reminder of the modern era's self-infatuated utopian claims and its so-called failed promises. Whether or not it really signaled a decisive moment in the postmodern era, it is today a cultural touchstone of the moment, similar to New York's Pan Am building.

Postmodernism, in its own view, "represents a phenomenon of modernity's bad conscience, of its self-doubt," as Karsten Harries put it.¹⁴ Such self-doubt, writes Harries, "has long centered on the hegemony that we have allowed scientific rationality and technological thinking." But, as Harries asks, "Why charge modernism with moral failure? Were the founders of the modern movement not very much aware of the way architecture helps shape the world we live in and conscious of the architect's moral responsibility?" If intention matters for anything, we might well note that architectural designers, "when they sit down at the drafting table," as Tom Spector suggests, "intend to maximize the good." Then again, we might also keep Robert Stern's confident appraisal in mind that Philip Johnson, (who was regarded as the International Style's *de facto* curator) "never took seriously the claims that modernism was an ethical or moral crusade." ¹⁸

At the same time, while postmodern *historicism* is itself in tatters, the larger legacy of postmodern theory on architectural practice today – and its role in adjudicating the appropriate approach for additions to modern or contemporary icons – is ambiguous but no less powerful. For instance, multivalent, nonlinear conceptions of time necessarily affect how we view, comprehend, and treat history and heritage. The postmodern notion of time, as Elizabeth Ermarth has proposed, "is coextensive with the event, not a medium for recollecting it in tranquility." The central Enlightenment assumption that one can "know history," from a position of objectivity, has been thrown into doubt. This has coincided with the rise of phenomenology in the postwar decades: a fundamental realignment of the philosophical bases from which we both project the future

¹⁴ Karsten Harries, The Ethical Function of Architecture (Cambridge, Mass: MIT Press, 1997): 7.

¹⁵ Ibid.

¹⁶ Ibid., 9.

¹⁷ Spector, 81.

¹⁸ Philip Johnson, *The Philip Johnson Tapes: Interviews by Robert A.M. Stern* (New York: The Monacelli Press, 2008),
12. Johnson and historian Henry Russell Hitchcock curated the titled exhibition at the Museum of Modern Art in 1932 and authored a book of the same name. Hitchcock, a true historian who was far less given to style propaganda, never enjoyed Johnson's later influence as a consummate tastemaker nor his celebrity. Johnson was infamous as a designer who opportunistically positioned himself on the crests of various architectural trends.

¹⁹ Elizabeth Ermarth, Sequel to History: Postmodernism and the Crisis of Representational Time (Princeton: Princeton University Press, 1992): 21.

development of artistic production and understand its past. "Out went the conviction that technology drove history," Jorge Otero-Pailos writes, "and in came the sense that architectural history was driven by the search for authentic, original human experiences."²⁰ "Firm believers in the primacy of lived experience," phenomenologists "... replaced the belief that architecture would become more sophisticated as technology moved toward the future teleologically, with the notion that architecture would become more advanced as human experience returned to its origins ontologically."²¹ But as Otero-Pailos also notes, phenomenology also permitted a second reappraisal of modernism, not as a failed and futile historical break but rather a "new understanding" of history "that had yet to find full expression."²²

In the end, modernism and its underpinning perspectives were not successfully swept aside by Vidler's antimodern "posthistoire" visigoths. Rather, there was a growing recognition, as Vidler put it, "that modernity [or a 'new' modernism] [was and] is a continuing project of reevaluation and innovation, based on experiment and internal investigation."²³ The task of "construing historically and dynamically a sense of our own modernity... would involve an approach to modern history that refuses closure and neofinalism, and rather sees all questions posed by modernity as still open."²⁴ Vidler and other theorists proffer that to deny the same central ethic that exemplified modernism — namely, confronting those problems that define the modern condition in a forthright fashion — is to bury one's head in the sand amidst a maelstrom. The wheels of modernity continue on, regardless. "We are still not done with modernism," Harries notes, "And how could we be?... 'Modernism' names an ideology that affirms what is thought to be in tune with the spirit or essence of our own

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²⁰ Jorge Otero-Pailos, Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern (Minneapolis: University of Minnesota Press, 2010): xi.

²¹ Ibid., xi, xxi.

²² Ibid., xxi.

²³ Vidler, 198.

²⁴ Ibid., 198-199.

period, in tune with science and technology, with modernity; it defines itself in opposition to what went before, to traditions that retained their hold even as they had become anachronisms."²⁵

Even from the center of a 1980's neo-expressionist movement ironically known as

Deconstructivism, Elia Zenghelis, a founding partner of OMA and Rem Koolhaas' mentor – in a

special *Architectural Design* issue on Deconstructivism itself in 1988 – agreed:

Modernism was a heroic attempt to come to terms with this new reality and predict its course. It was the experiment of an emerging consciousness that set about to respond to the vicissitudes of history, to image its field of action and capture the public imagination, that was eager to make sense of its present. The experiment was aborted... We would try to examine the landscape that surrounds us, what happens in it, in order to respond to it and make it work. This is the unrealized ambition of Modernism, a chapter that is not yet closed. For in the end it alone deals with what architecture is about: to make reality work.²⁶

This language of 'an aborted experiment' recalls the rhetoric of late-nineteenth and early twentieth centuries' revivalisms, but it is in fact a rejoinder to an antimodern tendency. Kenneth Frampton, in advocating for 'critical regionalism,' an early 1980's phenomenological approach to design that he saw as the only foreseeable path out of the debate between 'neo-modernism' and postmodern historicism, likewise agreed that "there remains a solid and liberative heritage lying within the complex culture that we generally subsume under the term the Modern Movement." What became the dominant way forward, it turned out, was the mode of thinking Frampton termed 'Neo-Avant-Gardist.' These actors, "while repudiating global utopias, seem to welcome nonetheless the continuing escalation of modernization as an inevitable process. They see this process positively as one which, despite its predominantly technical character, contains within its nature the liberative and 'creative' forms of the future." Of the two groups – Neo- (or postmodern) Historicists and Neo-Avant-Gardists – "it may be claimed that the second is the more realistic and consistent in that

²⁵ Harries, 7.

²⁶ Elia Zenghelis, "The Aesthetics of the Present," *Deconstruction in Architecture (Architectural Design* Special Issue, ed. Andreas C Papadakis, 1988), p. 26. Conceived by Charles Jencks, the issue was a follow-up to a Deconstructivism Symposium at the Tate Gallery earlier that year. Deconstructivism, as a term, was conceived in somewhat ironic relation to the 1920's avant-garde movement called Constructivism, which originated in Russia.

²⁷ Kenneth Frampton, "Ten Points on an Architecture of Regionalism: A Provisional Polemic," written in 1987, reprinted in Architectural Regionalism, Vincent B. Canizaro, ed. New York: Princeton Architectural Press, 2007): 378.

modernization continues in any case... Where the Neo-Historicists are anti-modern in every respect, the Neo-Avant-Gardists are perhaps more strictly Post-Modern in that by repudiating the utopian legacy of the Enlightenment they proclaim the end of 'master narratives' in all fields, including that of science itself."²⁸

This last statement presciently and adequately captures the perplexing moment of today's practice, where answers are few, questions are many, and self-conscious eleverness has become a *de rigueur* virtue.²⁹ After all, the blistering pace of current global development, driven by unrelenting forces far greater than the remaining influence of the profession, has left many practitioners understandably bewildered. We have been left at the current moment with a momentarily chastened, more pragmatic modernism: a modernism for a postmodern era (with all its attendant ethical ambivalences) that has since restlessly shifted its attention to other questions and preoccupations. In theorist Wes Jones' view, these are currently dominated by the theoretic dilemmas between (1) the traditionally authored and the automatic, and (2) the fixed and variable in production and practice, especially where each of these issues interface with digital technology and increasing digital agency.³⁰ If we consider the best postwar work to be at the progressive, envelope-pushing end of the spectrum in its own time, the state of progressive practice *today* has important implications for the addition endeavor.

Ethics, Architecture, and Conservation

But where did the heroic era's fall from grace leave modernist ethics in relation to architectural praxis? Harries offers an abstracted definition of architecture's 'ethical function,' namely, "its task to help articulate a common ethos... [referring here to] the way human beings exist in the [modern] world."³¹ Yet today's architects, according to Tom Spector, "live and work in a

²⁸ Frampton, in Canizaro, 385.

²⁹ See Wes Jones, "Big Forking Dilemma," Harvard Design Magazine 32 (Spring/Summer 2010), 8-17.

³⁰ Ibid., 8.

³¹ Harries, 4.

functioning but weakened profession that *lacks* a dominant design ethic."³² Here I am not speaking of generic, liability-driven professional ethics but a larger value-related understanding of design approach and particularly the allegiances that designers might owe a building's users, their own profession, and specific sensitive physical contexts. In his work *The Ethical Architect: the Dilemma of Contemporary Practice,* Spector proposes an investigation into moral philosophy as a means of situating and reinvigorating the practice of architecture within an ethical framework. Spector introduces the challenging relationship between use-value and aesthetic value as a means of investigating the ethical paradoxes presented by architecture in its hybrid-objective of *Baukunst*, or 'building-art.' When buildings are deficient in both use-value and aesthetic-value, it is easy to agree on their cumulative ethical failure. But as Spector asks, "What of other situations, in which aesthetic decisions result in a significant challenge to conventional expectations of a building's utility?

The history of modern architecture is rife with aesthetic experiments that made for uncomfortable living, never worked as promised, or weathered poorly... In these works, a tension between use value and aesthetic value of the building has to be acknowledged... In hailing [these] works aesthetic masterpieces, we are encouraged to discount the very real hardships that they caused their users.³³

Some of the best projects of the period are unique, "if not in the fact that its use and aesthetic values conflict, then in [their] degree of aesthetic success."³⁴ How do we reconcile an imbalance between functional and aesthetic judgments in architectural ethics? First, there are the unlikely dilemmas for Spector's hypothetical aesthete (who faces the difficulty of comparing and relating aesthetic experience to other goods) and his strict moralist (whose platform is weakened by Nietzsche's "morality as timidity," the "dilution of some valuable, if less congenial, goods of life for morality's sake," in which art is necessarily compromised.)³⁵ The weakness of a strict pluralist approach (which seeks to reconcile the previous two by considering aesthetic and functional concerns in equal measure) is its equating of the two values while simultaneously hinging on the failure of either one.

³² Spector, ix. Italics are my own.

³³Ibid., 91-92.

³⁴ Ibid.

³⁵ Ibid., 96-97.

Synthesis, as a fourth response, entails "recognition that one is dealing with impure mixtures that must somehow be given order and considered rationally," but is weakened by the synthetically irrational, overwhelming affection we often have for buildings that are remarkably dysfunctional.³⁶ Universalist moral theories, such as those provided by utilitarianism or by "Kantian deontological thinking," are also hamstrung by internal failures.³⁷ Spector introduces a commitment to "Thick" (versus "Thin") Moral Concepts as a relativist, anti-universalist means of escape. Thin moral concepts impoverish debate, 'thinning out' ethical thinking in two ways. First, writes Spector,

They isolate the evaluative component of moral thinking from the factual by employing words like 'good,' 'bad,' 'right,' 'wrong,' 'ought' – words that express a broad, universal evaluation... The second way in which thin concepts thin out ethical thinking is to try and reduce it to one ultimate concept, whether it be human happiness... or some other ultimate good. 'Thick' concepts, on the other hand, do not depend upon claims of universality. In any given situation, a number of thick concepts might apply. They are not mutually exclusive in the way that good and bad are, nor are they redundant in the way that are good and right.³⁸

When carefully deployed, this can be an important tool for the evaluation of buildings and additions as artistic production with inescapable moral dimensions. Expansionary qualifiers open debate while reductionist identifiers generally shut the door on it.

"That evaluative words such as 'generosity' and 'parsimonious' invite reflection upon their applicability to a given situation, whereas words like 'right' and 'wrong' invite a more removed consideration, also counts in favor of thicker expressions," he writes. "Not only is the immediacy of thick words a benefit, but these concepts lean toward richer, and thus more satisfying, language for the expression and evaluation of aesthetic motives.³⁹

But what of ethics and conservation? Spector's invocation of use-value and aesthetic value only implicitly incorporate the building as an artifact in time. Alois Riegl defined a broader and ultimately deeper set of values. There is "historical value," which, as Randolph Starn writes, is time-specific; "age value," which we might understand as patina or the more attractive traces of aging; "art-value," which we may equate to Spector's aesthetic value and is dynamic; "use-value" (the ability

³⁶ Ibid., 103.

³⁷ Ibid., 124. "Kant's theory of the analogy between the aesthetically pleasing and the good," while noble, offers a weak and unreliable link between "aesthetic worth and moral value." Utilitarianism operates under the myth of universalism ad impartiality.

³⁸ Ibid., 118-119.

³⁹ Ibid., 121

to meet functional requirements); and "newness-value," the sheen of the brand-new thing.⁴⁰ Starn notes that both 'historical value' and 'age value' "defer explicitly to time in one way or another... 'Art value' is not timeless; every age appreciates monuments from the past in light of its own aesthetic preferences." Such value concepts (especially historical, age, and art) are closely tied to the notion of "authenticity." Especially for the art and architecture of the modern and contemporary period, authenticity has been exchanged for the more diaphanous, consciously artistic notion of "aura," Walter Benjamin's conception of an irreducible, unselfconsciously complete quality of character in a work that is impossible to reproduce but could be infringed upon.⁴² What constitutes the 'aura' of an architectural work and its radius (or rate of diminishment across a site) is a question that is directly relevant to the question of additions.

Whose Artistic License?

When the museums, churches, airports, memorials, libraries, or other public buildings of modernism's heroic period are allegedly due for some kind of renovation, expansion, or alteration to satisfy some new identified function of the current era, who gets to add – to leave their imprint on the existing work – is almost as important a question as how. At least one strand of thinking values deferring to the original designer when he or she is still living. The implicit assumption is that they are best qualified to work in adjacent to the original, because they alone can intimately 'know' it. Consciously or not, they are cognizant of its aura and as original authors can operate within those bounds. As an exclusive logic for repeat performances, this presupposes an unrealistically altruistic client. An additional and necessary factor is that the original design or the experience of collaboration must also meet some threshold of value for the client for them to rehire an architect to add to their own work.

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⁴⁰ Randolph Starn, "Authenticity and Historic Preservation: Towards an Authentic History," *History of the Human Sciences* 15: 1 (February 2002): 4.

⁴¹ Ibid

⁴² Walter Benjamin, 'The Work of Art in an Age of Mechanical Reproduction', in *Illuminations*, ed. H. Arendt, trans. H. Zohn. (New York: Schocken Books, 1988),p. 4; quoted in Randolph Starn, 3.

This scenario appears to be borne out in the case of the Dallas Museum of Art, designed by Edward Larrabee Barnes and built in 1984 as the first phase of a planned 60-acre Arts District.⁴³ The firm was invited back to build a new wing in 1985 and returned again for another addition, built in 1993.44 The original building, a sprawling set of austere galleries "tied together into flowing spaces that stepped half a floor at a time," received generally positive reviews that imply a fruitful relationship between the architect and the client. The museum committee, "eschewing monumentality," chose Barnes "for what they saw in his previous museums... a commitment to environment for art and its viewers."45 Barnes' firm had chosen to emphasize "supporting the art collection rather than competing with it" with a minimalist approach serving as "an ideal backdrop." But from the outside, according to Progressive Architecture's reviewer, "the additive forms and multiple entrances also make it hard to form a coherent image of the museum."46 Barnes' second addition, completed 1993, while formally "blending in well" with the existing complex ("just another in the 'group of background structures"), was also credited with restructuring the way the museum "relates to its physical and social roles in the city," updating it for a new era.⁴⁷ The choice of Barnes to design two additions to his own work likely rested on the loose, accommodating nature of his original design and the museum being at least 'happy enough' with the firm's fulfillment of its desires.

Of course, the primacy of the original architect in altering their work is not universally agreed upon, nor may they assume open license to revise work without critical accountability. If in its ideal sense architecture is a public offering (no matter the program), then posterity has a stake in the work that is independent of the designer's own. In 2007, New York Times architectural critic Nicolai Ouroussoff voiced his ambivalence over the artistic privilege that Brazilian architect Oscar Niemeyer (1907-) had been exercising in revising and adding to his own monuments. Reviewing the

⁴³ John Morris Dixon, "Art Oasis: Dallas Museum of Art," *Progressive Architecture* 65, no. 4 (April 1984): 127.

⁴⁴ Barnes died in 2004; as part of a rebranding effort, Gluckman Mayner was contracted to redesign the main entrance in 2003 and renovate the contemporary gallery in 2004.

⁴⁵ John Morris Dixon, 127.

⁴⁶ Ibid., 136.

⁴⁷ Joel Warren Barna, "Dallas Museum Addition marks Reorganization," *Progressive Architecture* 74, no. 12 (Dec 1993), 12.

Axis and their marring of both original fabric and experience, Ouroussoff argues that "the greatest threat to Mr. Niemeyer's remarkable legacy may not be the developer's bulldozer or insensitive city planners, but Mr. Niemeyer himself."⁴⁸ Ouroussoff wondered if even posing the notion was an act of "superbly bad taste" given Niemeyer's venerable stature.⁴⁹ But in matters of preservation, the question remains: Is our allegiance to the work, or its author? The answer, especially when one considers a masterpiece in the larger frame of the designer's oeuvre, may be "both." Undeniably, icons are valued on their own terms *and* as part a larger of body of work. What if a living architect is not given the first option in alteration of his or her own original?

Richard Meier's High Museum is discussed later, but consider here the case of Robert Venturi and Denise Scott Brown's 1976 masterpiece "Ghost House," an abstracted frame silhouette of Ben Franklin's shop and home in Philadelphia. The project included an adjacent museum that, by 2010, was reportedly long due for updating. The National Park Service solicited a rehabilitation scheme from a different preservation architecture firm, who proposed an entirely new glass entry pavilion with gift shop, staircase, and elevator leading to the underground museum. In the proposed scheme, Ghost House remains untouched but the museum itself is dramatically altered in a way that, to the original designers, misreads the character of the site and willfully obscures overall legibility. "The Neomodern aesthetic" of the proposal, Venturi and Scott Brown informed the agency, "seems confusingly close in character to the Ghost structure and out of keeping with the mellow brick, stone, and wood of the site elements." The original designers' notion of confusion

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⁴⁸ Nicolai Ourousoff, "Even If His Own Work Isn't Broken, a Brazilian Architect Fixes It," *New York Times*, December 26, 2007, E1. Ourousoff notes that the landmarks designation of the precinct prohibits any modification save that from Neimeyer's own hand.

⁴⁹ Ibid.

⁵⁰ Editors, "Haunting Franklin's House," Architect's Newspaper, May 7, 2010, http://www.archpaper.com/e-board_rev.asp?News_ID=4519 (accessed February 3, 2011.) The replacement firm was Quinn Evans Architects. Venturi Scott Brown and Associates was not approached for the project because, the Park Service explained, the project was being fast-tracked and the agency was limited to a pre-approved list of firms.

⁵¹ Robert Venturi and Denise Scott Brown, "Letter of Comment to Cynthia MacLeod, Superintendent, Independence National Historical Park," March 16, 2010,

arising from a 'Neomodern' aesthetic intimates, at least generically, to the difficulty in adding to landmarks of the postwar era and the recent past. How do we reconcile the complaint with the fact that the pared-down glass curtain wall idiom is lingua franca of design practice today, as well as a widely accepted paradigm for additions to non-modernist landmarks (neoclassical or otherwise)? The Park Service was likely set on lightening the rather opaque entrance as part of the rehabilitation. Would VSB have responded very differently if given the project? And if not, would the outcome – as an act of self-revision – have been therefore permissible?

If we consider the cases of Dallas Museum, Niemeyer's Brasília, and Franklin Court, unquestioned primacy of authorship is by no means evident. Moreover, original intention, whether *implicitly* 'emergent' in the work itself, 'discovered' in archival materials, or *explicitly* stated by the designer (through a masterplan or otherwise), has also proven to rest on wobbly ground.

Institutions, agencies, cultural bodies, and other 'stewards' change, alter, update, and append to icons (postwar or otherwise) for a whole variety of different motives, desires, and functional requirements. These actors place a variety of values on their historic resources and assess them in different ways.

The following, open-ended survey of projects is an introduction to the large breadth of work and some of the central issues at the heart of the postwar icon addition as a means for setting the context for the case studies following. The order is meant to be as fluid as possible. On the one hand, while the 'modernism' matters, it is unclear that a successful ethic of approach is met by only tailoring the solution to a particular "type." On the other hand, a number of "how-to" analyses and approaches to additions have been organized by formal (i.e. scenographic) effects, measured at a gross-scale and driven by ersatz Gestalt psychology.⁵² This is inadequate to the task. The aim is not to reify this thinking but examine it critically in the course of the larger discussion.

http://parkplanning.nps.gov/document.cfm?parkId=245&projectId=30580&documentID=33343 (accessed February 3, 2011).

⁵² I am speaking here of the type of categorization that describes additions as 'overwhelming because they are above,' 'deferential because they are below,' or effecting 'quiet backgrounding' because they make use of a setback. This type of response, while broadly valid, oversimplifies the addition project to one of generic typology. (See Johanna Lofstrom, "Beneficial Additions: Addressing Brutalist Architecture to Create a



3. FRAMING THE PROBLEM: A SURVEY

Adding to a Modern Icon

The purpose of this chapter is to introduce the remarkable breadth of projects that fall under the heading of 'additions to postwar icons,' and to help situate current approaches to addition making. The endeavor is specialized whether or not it is recognized as such. In an ideal situation, engaging a high-profile architect to design an addition to an icon from the postwar era offers the opportunity for some of the best creative minds from each period to engage in an interesting and satisfactory conversation across barriers of time and space: Byard's "successive intelligences" generating new and enriching combined meanings. But this is not in itself a pure motive for adding or it would amount to folly – architecture without functional purpose. Rather, the urge to commission an internationally famous designer or engage in a high-profile expansion campaign may emerge, apart from program or space considerations, from an institution's mandate or desire to enhance or update its image – to put itself "on the map."

While at least as old as art-patronage itself, this motivation only became more concentrated in the twentieth century, with the emergence of specialized branding and 'image' activities; it has risen to further prominence in the post-Bilbao era as a means of civic boosterism.¹ Its objectives are generally well intentioned and may well be laudable (more space, an increased audience for its collection, its development as an institution, etc). Nonetheless, it is a distinctly different proposition than adding for architectural conversation's sake. A wide range of motives gives rise to an addition campaign, while the opportunity for productive fusion of 'successive intelligences' is merely

¹ The Guggenheim Museum, Bilbao, designed by Frank Gehry, and located in a northern industrial city in Spain (1997)

contingent upon it. International competitions for new wings may elevate institutions' prestige onto a world stage; through new architectural commissions, museums may demonstrate and reaffirm their role as artistic patrons to a new generation. In one sense, the act of building (as Deyan Sudjic notes) is "an attempt to construct a particular view of the world." New construction within venerated context is therefore a means of engineering a personal legacy – upon which an aura of legitimacy is instantly conferred. Securing necessary funds for a new museum wing, as Victoria Newhouse notes, is often easier than merely campaigning for the rehabilitation of an existing building.³ Of course, not every project suffers from the less savory side of institutional aggrandizement or delusions of demand. Changing demands on buildings over time is an established historical fact. But the correlation between these cultural forces and the increasing incidence of additions – to what are young buildings – is patently clear. An indiscriminate charge of functional obsolescence towards the entire era could not possibly account for this phenomenon. What is the nature of this continuing work then, and the extent of its success?

Walker Art Center and Denver Art Museum

The Walker Art Center in Minneapolis (1971), designed by Edward Larrabee Barnes (before Dallas) and the Denver Art Museum, designed by Italian architect Gio Ponti, are unlikely cousins. Completed in the same year, both subscribed to a self-contained environment for art, but Barnes achieved this through a quiet composition of rectilinear brick-clad, grounded forms with a handful of strip-windows. Ponti offered a more flamboyant, ceramic-tiled pair of towers – a fortress for art complete with articulated slit windows and abstracted crenellations. By the measure of his earlier work (like the 1956 Pirelli building in Milan), it was admittedly a bit eccentric. In hindsight, it also

² Deyan Sudjic, The Edifice Complex, 7; Victoria Newhouse, Towards a New Museum (New York: Monacelli Press, 1997): 138.

³ Newhouse, Towards a New Museum, 138. One might also be tempted to fast-forward historical legitimacy; financier Stephen Schwarzman contributed \$100 million toward the expansion of the New York Public Library in 2008, but as a condition of the gift, the flagship 1911 Main Branch Library, designed by Carrère and Hastings on Bryant Park and Fifth Avenue, was renamed "The Stephen A. Schwarzman Building."

seems to illustrate the confusion of the architectural moment. Thirty-five years later, high profile and substantial additions to the two museums were completed within 12 months of each other by internationally recognized design firms, with distinct results. (It bears mentioning that the two firms would never advertise themselves as preservation-focused.) The \$70 million Walker expansion (which doubled interior space to 260,000 square feet) was designed by Swiss firm Herzog + de Meuron (Figs. 5-6). Denver commissioned Daniel Libeskind to design what is today the Frederick C. Hamilton building, a 146,000 square foot, \$110 million pavilion, connected to Ponti's towers by a neutral entry and skywalk (Figs. 7-8).

Herzog and de Meuron added a large, chunky block a stone's throw from the original and connected it (along with three other skewed smaller masses) by a low glazed linking wing, abstracting the sculptural, hewn quality of Barnes' original, boxy set of forms. At the same time, the designers playfully exaggerated it by subtractive incisions in the new block's top perimeter and the skewing of its strip window's angles. The material contrast, from Barnes' dark red brick to Herzog's silvery, lightly crumpled aluminum cladding, offers a pleasing counterpoint, and the same can be said for the opposition between Barnes' resolutely grounded siting and the image of Herzog + de Meuron's ice block hovering over the sidewalk. Even casually it offers a promising lesson on the task of forthrightly engaging with the context "without being cowed by it" and still ending up with "one building" instead of two.⁴ Moreover, the addition reflects the Walker's evolution since the construction of its 1971 home into an animated, risk-taking institution that also celebrates its origins.

In Denver, it appears that Libeskind could muster little to say to Ponti, who is perhaps content enough to keep to himself behind his reflective seven-story battlements. The new building – which looks as if it sailed up and dropped anchor with its prow pointed at Ponti's fortress – is a riot of fractured angles and sharp edges, a neo-expressionist collection of crystalline titanium-clad points

⁴ Sarah Amelar, "Walker Arts Center," *Architectural Record*, Project Portfolio, July 2005. http://archrecord.construction.com/projects/portfolio/archives/0507walker.asp (accessed February 16, 2011.)



Fig. 5. Walker Art Center (east elevation). Herzog + de Meuron's zinc-clad 2005 addition to Edward Larrabee Barnes' 1971 building is a set of similar massings radiating from a connecting glazed concourse.



Fig. 6. Walker Art Center (west elevation). There is a clear, interesting, and deliberate dialog between old and new (lighter-colored) components of the institution, which nonetheless maintains a coherent identity.

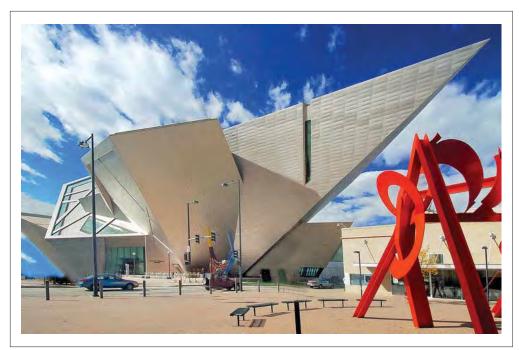


Fig. 7. Denver Art Museum. Daniel Libeskind's 2006 Frederic C. Hamilton building.

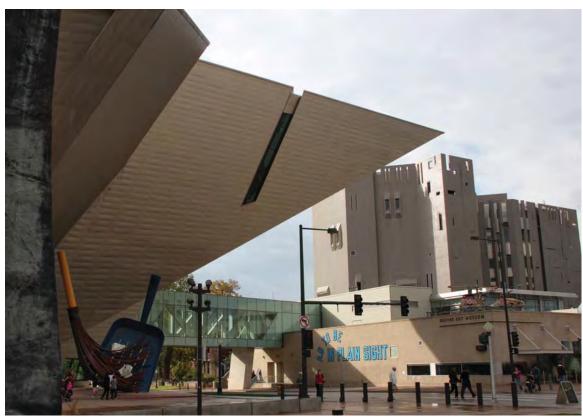


Fig. 8. Denver Art Museum. Daniel Libeskind's 2006 Frederic C. Hamilton building in the foreground with Gio Ponti's main museum building to the right (completed 1971). The enclosed bridge connects the two.

and shards. It creates some exciting, if not always comfortable, spaces within. As one reviewer notes, it also pointedly declares its position "in the ongoing debate about whether or not architecture should fade into the background when displaying art." And while it may be credited with some positive effects urbanistically, it makes resolutely clear where it stands of the continuing argument on what Deyan Sudjic calls the "bizarre quest for the icon."

Milwaukee Art Museum

This 'quest,' with its risk of long-term disappointment from both an institutional or preservation-minded view, is not limited to the sharply edged and pointed affects of Libeskind's Decon juxtapositions. Only five years earlier, Santiago Calatrava completed a large expansion for the Milwaukee Art Museum, its second since 1975. The situation was perhaps a little more complicated. As an independent institution, the museum had never really had a suitable home. As a small set of galleries, it had been originally and unconventionally paired with a veteran's community center and a memorial to the two World Wars in a 1957 building by Eero Saarinen. The Memorial was a bold, cantilevering structure constructed on a plinth overlooking the Lake Michigan shore (Fig. 9). Four wings set upon wedge-shaped pilotis vaulted outward from a rectilinear plan, opening up a court in the center. Saarinen, who had been given a challenging site at the end of a bridge above the lakeshore, was generally satisfied with his own building, finding in it both "rightness" and "guts." Forming a cross shape in plan, the building's cantilevered wings created a powerful extroverted presence, aggressively pushing the interiors "outside" to leave an austere memorial void within.

The original program for the project – consisting of veterans' center, museum, and large concert hall – had implied three separate structures, but funding shortfalls and skyrocketing building costs required a compromise and the delay of the concert hall to a later phase (it was never built.).

⁵ Suzanne Stephens, "Frederick C. Hamilton Building at the Denver Art Museum," *Architectural Record*, Project Portfolio, January 2007. http://archrecord.construction.com/projects/portfolio/archives/0701denver.asp (accessed February 16, 2011.)

⁶ Sudjic, 317.

^{7 &}quot;Milwaukee County War Memorial, Milwaukee, Wis," Architectural Forum 107 (December 1957): 95.

Saarinen placed the veterans' center's auditorium, meeting spaces and offices in the superstructure, relegating the "art gallery" to a lower level within the plinth itself. Space, light, and visibility were limited from the beginning. A local firm designed a sizeable 1975 museum expansion for the museum that extended the ground datum of Saarinen's courtyard lakeward, effectively extruding the section of his original plinth along one axis (Fig. 10).8 The move, while intended and initially hailed as deferential, came off awkwardly and arguably diffused much of the emotional power in Saarinen's lake-facing cantilever. It was also indifferent to the virtues of Saarinen's and landscape architect Dan Kiley's unrealized design for a cascading series of terraces to link the Memorial and future concert hall.9 The conceptually compromised addition continued to relegate the museum to the opaque condition of a base now writ large (Figs. 11-12).

The 1975 exhibition and program spaces may have been adequately sized, but the addition never defined a legitimate focus for the museum and its relationship to the memorial was still muddled. In the early 1990's the museum's director campaigned to establish an independent identity and organized an international competition in 1994. From a list of three finalists, the museum chose Santiago Calatrava, and the \$100 million, 142,000 square foot Quadracci Pavilion was completed in 2001. The pavilion, designed to be the museum's new main entrance, was situated south of the plinth and linked to the existing building by a long, low wing housing exhibition space, an auditorium, and museum shops (Figs. 13-15). The critical response to Calatrava's extravaganza was restrained approbation; most of the attention was drawn to the urban gestures of his signature cable-stayed pedestrian bridge and a spectacularly over-engineered mobile 'flying' brise-soleil, which takes wing daily over the lofty new entrance space. While impressed with the self-confidence of Calatrava's "structural pyrotechnics," art critic Joseph Giovanni expressed consternation over a static,

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^{8 &}quot;Milwaukee Art Center, a Big and Bold - but Modest - Addition to a Modern Monument," Architectural Record 160, no.1 (July 1976): 89. The local firm was Kahler Fitzhugh and Scott, who also served as the project architect for Calatrava.

^{9 &}quot;Milwaukee County War Memorial, Milwaukee, Wis," Architectural Forum 107 (December 1957): 93.

¹⁰ Benjamin Forgey, "Winged Victory; Santiago Calatrava's Stunning, Flap-Happy Design for Milwaukee Art Museum Flies in the Face of Convention," *The Washington Post*, November 4, 2001.

¹¹ Forgey. The other two finalists were Japanese architects Arata Isozaki and Fumihiko Maki

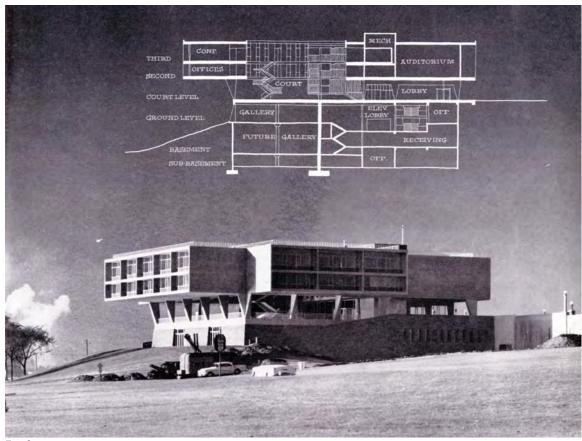


Fig. 9. Milwaukee County War Memorial (1957). Eero Saarinen's 1957 building, published in Architectural Forum that year. The disposition of the art gallery is shown in section, and the shore of Lake Michigan is to the left. Dan Kiley and Saarinen designed a landscape for the lawn beneath to link to a future concert hall.



Fig. 10. Milwaukee Art Center Addition (1975). Kahler Fitzhugh and Scott's mostly windowless extrusion of Saarinen's plinth out to the lakefront, which was praised as a deferential approach.

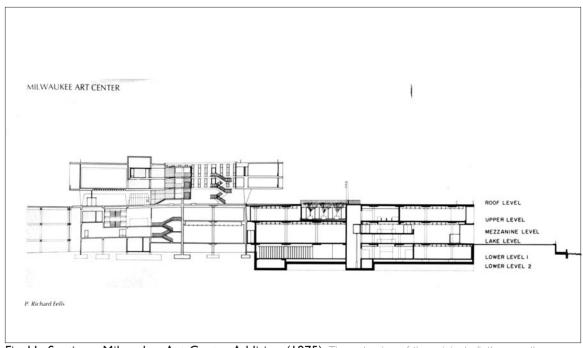


Fig. 11. Section - Milwaukee Art Center Addition (1975). The extrusion of the original plinth more than doubled the existing gallery space, but did not solve the Art Museum's identity concerns.



Fig. 12. Milwaukee Art Center Addition (1975). The relationship of the new addition to Saarinen's original building and to the street entry.



Fig. 13. Milwaukee Art Museum (2001). Santiago Calatrava's recent addition to the complex, creating a brand new entry for the museum complete with signature footbridge and dynamic brise-soleil, seen flying here.

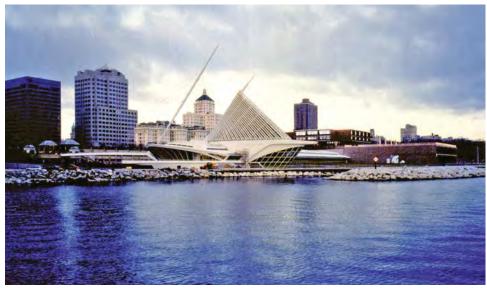


Fig. 14. Milwaukee Art Museum (2001). Calatrava's addition seen from Lake Michigan, with the 1975 addition and original 1957 building to the right.

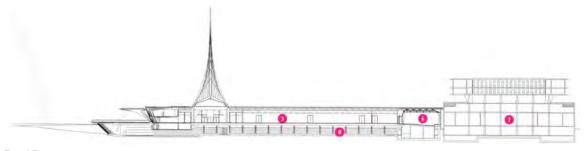


Fig. 15. Section - Milwaukee Art Museum (2001). Galleries fill the extruded section between old and new.

symmetrical plan he found "surprisingly unevolved... engineering reduced to decoration." Beneath the fireworks on the surface, the design was strangely impoverished. Calatrava, seemingly spellbound by his own neo-gothic structural aesthetic, offered the Saarinen building some breathing room but not much else, and was strangely indifferent to a range of opportunities afforded by the site. The result is even more disappointing when one considers some of the formal debts Calatrava owes Saarinen's later work. It was an effort in global branding for Milwaukee and the museum, and they chose their architect accordingly. Calatrava, whom Deyan Sudjic calls "the kitsch dark side to [Frank] Gehry's playful, free invention," has, according to Sudjic, "given up designing buildings to concentrate on producing icons." His project for Milwaukee, writes Sudjic, "says with surreal economy of means: 'art gallery." Besides containing relatively little exhibition space, "it was seven months late in opening," and cost so much that the museum "struggled for years to make up the shortfall." It remains unclear from a preservation-minded and institutionally sustainable perspective whether it was all worth it.

The Perils of Dissolution

One can argue that the museum owed little obligation to the Saarinen building when it had been primarily designed to house the veteran's center. Even so, Calatrava left the Memorial unaltered, and maybe it is not even one of Saarinen's greatest buildings. But there is a very real danger in the kind of institutional behavior that has comparatively little regard for its architectural resources when matched against the urge to expand. In these situations, twentieth century modernist and postwar heritage is especially fragile. In the case of both the Museum of Modern Art (MoMA) in New York and the Los Angeles County Museum of Art (LACMA), the aggregation of donor-funded

¹² Joseph Giovannini, "An icon [Milwaukee Art Museum]," Architecture 91 no. 2 (Feb 2002): 61.

¹³ From the lake, Calatrava's pavilion exhibits some formal similarities to Saarinen's 1962 TWA Flight Center, a dubious honorific. The opportunities referred to here are the relationship of multiple data, the large plinth, and some closer dialogue with Saarinen's 1957 building.

¹⁴ Sudjic, 345.

¹⁵ Ibid.

¹⁶ Ibid.

wings, renovations, expansions, and rehabilitations has resulted in a venerable cultural institution with little remaining architectural identity intact. Granted, LACMA's original building was not an icon, but MoMA's was of arguable architectural significance.

The Museum of Modern Art, which eventually chose Philip Goodwin and Edward Durell Stone's design for its 1939 home, has been the object of four expansions since: 1951, 1964, 1984, and 2004. The midcentury expansions by Philip Johnson were generally unremarkable and the 1984 addition by Cesar Pelli was a new breed of speculative museo-corporate development, a condominium tower-cum-shopping mall addition that did not age well. In an unconscious attempt to revive its 1930's golden days even as it proclaimed to be reinventing itself for a contemporary era, the museum chose an aggressive but stylistically conservative design by Yoshio Taniguchi, remarkable for the degree of earnest unaffectedness in its retro qualities.¹⁷ The proposal, wrote Victoria Newhouse, was "indeed so beholden to Bauhaus Modernism that it could well be a product of the 1940's." As such, the museum's roots are now enshrined through mythology rather than through preservation of its original fabric. More recently, Jean Nouvel has designed a crystalline 75-story tower for the lot adjacent to the museum, which it has spun off to a developer. If the tower is built, the museum will expand once again, extending galleries into the lower floors of Nouvel's building.

On the other coast, in 1965, the Los Angeles County Museum of Art had pursued a fresh start with a move to Wilshire Boulevard and a new home by William Pereira. Gradually, through the agglomeration of surrounding buildings and new extensions by Hardy, Holzman, Pfeiffer Associates (1986), Bruce Goff (1988), and Renzo Piano (twice: 2008 and 2010) among others, the museum has become a sprawling assemblage of architectural offerings. Swiss architect Peter Zumthor is currently tasked with formulating a masterplan for further expansion that may yet distill and preserve some institutional and architectural legibility. And while Pereira's building was relatively unexceptional, it is

¹⁷ Newhouse, *Towards a New Museum*, 160. With its vague brief, the early-2000's international competition and charette process appears not to have fulfilled the museum's hopes.
¹⁸ Ibid.

still a work by a prominent postwar modernist architect. The irreparable dilution and dissolution of recent heritage and architectural identity is an ever-present peril in the drive for expansion.

Living Memory and Authorial Intent

While the Denver and Milwaukee additions were not deeply explored here, the mobilized, jet-set 'starchitecture' of these projects epitomizes a condition of aloofness and ringing silence in situations that hold rich potential for architectural conversation. At MoMA and LACMA, architectural voices have been rendered permanently inaudible. However, if we recall the first dilemma described at the beginning of this chapter, regarding intentionality and indifference to it, the opposing pole also has some perils. In circumstances where original intention ostensibly played a central role, the outcomes have also been deeply ambiguous. Such is case for three projects: Gwathmey Siegel's 1992 addition to Frank Lloyd Wright's Guggenheim Museum in New York (1959); Anshen + Allen's 1996 addition to Louis Kahn's Salk Institute for Biological Studies, La Jolla, California (1967); and Romaldo Giurgola's unbuilt 1989 enlargement proposal for Kahn's Kimbell Art Museum in Fort Worth, Texas (1972). In these three schemes and the debates that ensued, the addition designers and their defenders invoked (alleged) authorial intent on the part of the original architect to legitimate their proposals. On the surface, this would seem like a positive development. "As a cultural artifact," wrote critic Michael Sorkin at the time, "the return of the notion of intentionality, of the idea that a work is to be read and judged on the basis of its success in representing some specified set of authorial intentions, is clearly a reversion to standards one had thought long gone." But the surviving traces of authorial intent, wielded with such assurance, were either not accurately understood clearly or deliberately misused. Genuflection at the altar of original intent is a tendency highly particular to modernist and postwar icon addition projects, and a timehonored diversionary tactic.

¹⁹ Michael Sorkin, "Forms of Attachment: Additions to Modern American Monuments," Lotus International 72 (1992): 92.

The Guggenheim Museum

The Guggenheim, completed after Wright's (and Guggenheim's) death, was challenged almost from the beginning by a fluid museum mission and late-phase modifications in some of the key construction details.²⁰ Moreover, several interior and exterior modifications from 1965 to 1978 further compromised Wright's original vision in various ways. But the critical moment came when the museum announced in 1985 that a large new wing, designed by Gwathmey Siegel, would occupy the space immediately to the northeast of the museum. The proposal, as Newhouse describes, was "an 11-story tower whose top half, covered in green tiles, to be cantilevered over the smaller of Wright's two rotundas—originally called the Monitor—adding a square box to the round building in a configuration likened to a toilet tank and bowl."21 The Guggenheim, controversial when first built, had garnered considerable praise in the intervening years as a major American work, and the proposed addition was met with almost universal disapprobation. In justifying the new wing, the designers disingenuously referenced Wright's "own unexecuted 1952 design for a 15-story studioresidence to be erected next to the museum," according to Newhouse.²² But Wright's design was nothing like the "toilet tank," Newhouse notes, and Wright never intended to shoehorn the slab onto the museum site itself.²³ Rather, it was meant for the site of the adjacent apartment building, now "no longer available since the museum had sold it to finance the 1968 annex."²⁴ However, in addition to the misuse of the Wright sketch, Michael Sorkin saw something even darker at work – what he called "the Stanislavski an or Method fallacy" - embodied in the designers' series of

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²⁰ The building was originally meant to exclusively house Solomon Guggenheim's permanent collection of non-objective art. The museum's second director, James Sweeney (from 1952-1960), expanded the scope of the collection and changed Wright's design for the top-lit exhibition bays around the central atrium, for instance. Newhouse, *Towards a New Museum*, 164.

²¹ Ibid., 162.

²² Ibid.,165.

²³ Ibid.

²⁴ Ibid. Newhouse cites the findings of Taliesin West archivist Bruce Pfeiffer; and thesis advisor David De Long has also confirmed this assessment in direct conversations.

geometric, art historical analyses of the Guggenheim's proportions. Through these, they argued that they were, in Sorkin's words, "in concert with some Wrightian quintessence:

Here was the true moment of the postmodern elision, the fuzzing of the seam, the conceptual eradication of difference, the appropriation of both object and aura... The intentional or Stanislavskian fallacies employ a particular strategy of camouflage, a notion that one can snuggle under an aura like a blanket. The question begged by schemes like those by Gwathmey... is precisely the radius of aura, of whether or not an aura can be snatched."²⁵

The issue of the building's 'aura' in the Benjaminian sense and the safeguarding of its remaining authenticity was a central one. The building campaign continued despite the outcry, with the compromise that Gwathmey Siegel built a second scheme, a natural beige limestone slab the firm modeled after that same design of Wright's that they had misleadingly invoked. Slightly shorter and narrower, and bereft of its previous cantilever, it was still in the wrong place. Completed in 1992, the thin, gridded block aggressively crowds and invades the domain of Wright's audacious monument, abruptly terminating the revolution of the main rotunda volume and neutering some of its power (Figs. 16-17). For a design firm that claimed to be shepherding modernist ideals through the riotous historicism of the 1980's, it was a disappointing and destructive project.²⁶

The phenomenon of authorial intent and its misuse in the case of the Guggenheim is clear. But how do we make sense of competing arguments or narratives when the conclusions are not so obvious? Tom Spector's earlier ethical analysis may prove to be helpful in clarifying the philosophical bases for the various, often-heated perspectives in these situations. In *The Ethical Architect*, Spector examines the Salk Institute addition to test out the scaffold that he constructs. Alone, his approach does not capture the complexities of the addition question, but it is useful in forming a larger (and, I hope, richer) framework for the analysis and design of additions.

²⁵ Sorkin, p. 93. Constantin Stanislavski (1862-1938) was a Russian actor and theater director credited with the concept of "emotion memory," popularly known today as Method acting, through which actors might 'experience' their parts through performance. Sorkin uses the term pejoratively.

²⁶ Charles Gwathmey, with Peter Eisenman, Richard Meier, John Hejduk, and Michael Graves (only temporarily), constituted the "whites" in their supposed adherence to abstracted modernist principles, as opposed to the relativist "grays" (Robert A. M. Stern, Robert Venturi, and Charles Moore.)



Fig. 16. Guggenheim Museum and addition (1959, 1992). Gwathmey Siegel & Associates' 1992 revised tower stands immediately to the east of Frank Lloyd Wright's 1959 masterpiece.

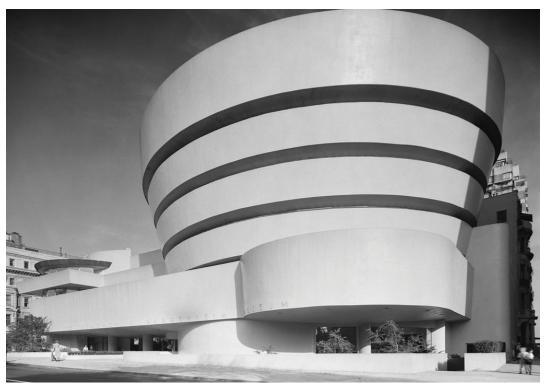


Fig. 17. Guggenheim Museum, New York (1959). The exterior of Frank Lloyd Wright's 1959 building, photographed from Fifth Avenue by Ezra Stoller after its opening.

Designing a laboratory complex rather than a museum, Kahn arranged two wings of threestory research labs flanking a long travertine plaza. The austere plaza is split along its axis by a narrow stream of water. As Spector describes, the west end of the campus opens onto the Pacific and is not terminated at all: "the paving simply stops, the water channel falls, and all is inflected toward the infinite horizon." A curtain of eucalyptus trees along the east side provided "just enough enclosure to obscure the mundane world of parking lots and roads," leaving the mountains and American continent framed in the distance.²⁷ "Reinforced by the water channel, the east-west axis appears infinitely long—more like an extrusion than a courtyard or town square."28 In the context of any future expansion, it is important to note that the spectacular experience that Kahn achieved in the plaza "was a fragile matter": even cutting down the eucalyptus grove would alter the experience of the plaza considerably. ²⁹ To satisfy the Institute's desire for expansion and administrative space in the early 1990's, the design firm proposed a bifurcated, low-profile building at the eastern edge of the plaza, the idea being an acknowledgement and continuation of Kahn's axis (Figs. 18-19). The Institute's president at the time defended the design because it was both "historically-based and the most functionally appropriate solution;" Jonas Salk himself (mistakenly) recalled that he and Kahn had originally agreed on that location for future expansion.³⁰ Aside from disagreement over Kahn's own artistic intention, controversy also stemmed from two concerns with the proposed design: the first was its general bookending of the plaza, which would alter Kahn's original hierarchy considerably. The second, contingent issue was the addition's establishment of its own axiality perpendicular to Kahn's, emphasized by the cross-haired bull's eye of a sunken, outdoor rotunda that unequivocally established a new gravitational center to the composition.

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²⁷ Spector, 168.

²⁸ Ibid.

²⁹ Ibid

³⁰ "A Delicate Balance," *Architecture* (July 1993): 45; quoted in Spector, 169. The firm was Anshen + Allen, and the project was directed by former Kahn associates David Rinehart and Jack MacAllister ("Add and Subtract," *Progressive Architecture* 74, no. 10 (October 1993): 48-51.) "A Talk with Salk," *Progressive Architecture* 74, no. 10 (October 1993): 47; noted in Spector, 169.

In Spector's examination of ethical approaches, the first is historicist. As Spector notes, this hinges on the idea that if Kahn wanted the design to evolve that way, "and if it was his vision that lead to the artistic success of the place," then the proposal can be regarded "as the completion of a fundamental component as 'previously' designed." But two issues need clarifying. The first is the assumption that the scheme conforms to Kahn's vision. In fact, there was heavy disagreement on this point, with the source of confusion (or manipulation) being a sketch from Kahn's office at the time that showed the addition scheme. Unlike Gwathmey Siegel's second proposal for the Guggenheim (which loosely applied a sketch by Wright's own hand to the wrong location), the Salk addition campaign invoked a sketch not made by Kahn but by a draftsman in his office that expressly illustrated what Kahn *did not* want. (One thing the 1990's proposal can't be faulted for is respecting the location and design shown in the sketch.) According to David De Long, Kahn kept the sketch because he found it useful in illustrating how any addition there would be wrong. If this were widely understood, it is hard not to ascribe some measure of cynicism to the addition's most vocal defenders.

However, purely for the sake of Spector's exercise, let us assume that erroneously invoking Kahn's intentions was due to bad information or honest confusion, as much as any nefarious plot. Then the second issue behind the (faulty) historicist perspective is ethical rationale. "Does it turn on a certain reverence for Kahn?" Spector asks,

31 Ibid.

34 Ibid.

³² Spector notes, in addition to Salk's testimony, corroboration by Stanford Anderson ("[At] La Jolla... there is discussion of an administration and reception building at the head of the eastern stairs." (Stanford Anderson, "Louis Kahn in the 1960's," in *Louis I. Kahn* (n.p.: n.d.), 301.) John Ellis reported in 1991, "a freehand sketch drawing from Kahn's office at the time indicates a proposed building at this location with a circular form of axis, split into two wings." ("Deferring to Kahn," *Architectural Review* 12 (December 1991): 73.) But Spector also notes an argument some made that "regardless of a few sketches," Kahn was hardly of a set mind in the matter." Here he cites "the sequence of major revisions that occurred at Kahn's instigation, both during design and after construction had begun," as reported by James Stelle in *Salk Institute, Louis I. Kahn* (London: Phaidon Press, 1993), 2-10.

³³ David De Long cites a meeting in New York at which Harriet Pattison (a landscape architect who collaborated professionally with Kahn and is the mother of his only son, Nathaniel) explained that the sketch was not by Kahn, but by someone in his office. (Interview with David De Long, March 12, 2011)

... claiming simply, 'This was the intention of the great Louis Kahn and we want to instantiate that vision'? Or, does it make the more complex evaluation, 'This was the vision of the great Louis Kahn, and upon reflection we think it was a good vision, so this is what we want to do'?³⁵

The first reading abstains from a critical evaluation of artifact and intent, but the second one assumes it. Like the condition in which a designer must have also met some threshold value in the client's eyes for him to revisit his own work, it is unlikely that the invocation of artistic intent in the historicist platform comes without this implicit bias. Additionally, the Salk president's decision to bolster his argument by maintaining "the functional superiority of the addition," as Spector observes, begins to appear more like "an excuse for the exercise of will": perfectly acceptable if framed as a matter personal preference, as an "ethical appeal to the best outcome" it cannot stand. When we do include the factual inaccuracy of the proponents' claim on the sketch into the equation, the appeal to a historicist outlook looks more and more like a way to cover one's tracks.

The second hypothetical approach is the functionalist one, stemming from the argument that "part of what makes the Salk successful as architecture is that it is a beautiful place where work occurs."³⁷ But the critical problem with the functionalist argument is that it reduces the entire project from the specific to a generic maximization of utility.

"If one firmly rejects [both] the ideas that following an acknowledged master's lead has any intrinsic value [or] that certain contexts are too fragile to disturb, then what is left looks like the standard design method... Surely the problem of adding to a sensitive context is more complicated than that." ³⁸

Even if aesthetic merit is included as a utility, the functionalist approach "can only address [it] by making it something it is not—an instance of function."³⁹

The aesthetic argument is probably the most reasonable, but it must stand on its own legs.

This platform was illustrated in Robert Venturi and Denise Scott Brown's July 1993 letter in

Architecture, "Genius Betrayed," which related the "moral outrage" that many architects felt about the

³⁶ Ibid., 169-170.

³⁵ Spector, 169.

³⁷ Ibid., 173.

³⁸ Ibid., 175-176.

³⁹ Ibid., 176.

proposed addition. Spector observes that the 'genius' was not so much Kahn as the architecture.⁴⁰ Rather, the case made in Venturi and Scott Brown's letter was that closing up the plaza's east end "would ruin the philosophical basis for appreciating the place" as a uniquely American, essentially democratic composition in its deft abstention of obvious classical hierarchy. This argument contains an "odd mixture" of philosophy and aesthetics:

The aesthetic experience would be ruined by eviscerating the philosophy supposedly embodied in the design. Yet, the critics say, it matters not whether Kahn intended this unique philosophy to be the basis for design. What matters is that the design came to be understood and appreciated in this way. The authors claimed to be disputing only a few particulars about the planned addition—it's 'location and arrangement,' which transforms 'an American architectural masterpiece... into an ordinary, Baroque bore,' not the basic idea that the Salk needs enlarging.⁴¹

The issue with this approach is that its aesthetic basis "strays into a discussion of utility": "The design of the Salk is great *because* of its social value." "Aesthetic value and social utility are best left as a plurality of values," argues Spector. "Aesthetic value must still be reconciled against [the others], but at least it enters this process on its own terms." Context is itself a plural value. Of the three ethical approaches Spector outlines, the chosen design loosely adhered to the historical outlook, dependent as it was on the incorrectly 'historical' legitimacy of the location. In the end, the addition designers suppressed the rotunda, but still insisted on imposing their new axis (Figs. 20-21). The entire crisis could potentially have been framed differently. "Absent a pluralistic outlook," as Spector notes, "architects are obliged to look on contextual sensitivity as an ameliorative process rather than a source of consideration on equal footing with utility." At the Salk, the camouflage and willful ignorance of

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⁴⁰ Ibid., 177. As for "Kahn's intentions," writes Spector, "these were irrelevant."

⁴¹ Robert Venturi and Denise Scott Brown, "Genius Betrayed," Architecture 7 (July 1993): 43; quoted Spector, 177.

⁴² Ibid., 181.

⁴³ Ibid., 182. "One may always reference the basic and irreducible values of intentions, function, and artistic achievement in deciding how to proceed... A fully satisfactory design deliberation would acknowledge the incommensurability of certain values that come to bear on the project at hand."

⁴⁴The designers thankfully dropped the circular-walled outdoor rotunda. This can be observed in comparing the published plan and model photographs with as-built and satellite photographs.

⁴⁵ A more detailed examination of the scheme is provided in Byard, *The Architecture of Additions*, 115-116.

⁴⁶ Spector, 183. As Spector laments, "the actual debate stood to be much richer and more inclusive of different points of view had the pluralism of the values at stake been recognized by the decision-makers."



Fig. 18. Model - Salk Institute, La Jolla, California. The campus masterplan that Kahn did propose, with the laboratory buildings in the center (built 1967) and a cluster of residences loosely strung to the southwest.

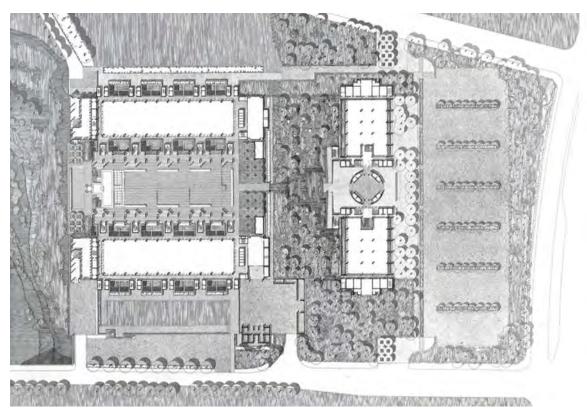


Fig. 19. Plan - Proposed Addition to the Salk Institute, La Jolla, California. Anshen + Allen's first scheme from 1995, proposing the bifurcated building to the east with its conflicting axis and bulls-eye rotunda.



Fig. 20. Model - Proposed Addition to the Salk Institute. Anshen + Allen's first scheme from 1995, which completely misread Kahn's single-axis composition. Bulls-eye rotunda in the foreground.



Fig. 21. Addition to the Salk Institute, La Jolla, California. The addition as it was actually built. The rotunda was ultimately suppressed, but the new and unsympathetic axis was still imposed.

aura 'radius,' accusations Michael Sorkin levied toward this generation of additions, bore unfavorably on the project. Sorkin called it "a bad piece of work, ill-sited and compromising, deeply un-Kahnian in its spatiality," another "fine instance of aura-snatch." While Spector rightly concludes the built scheme neither "ruined the experience of the plaza," nor "continued the sense of profundity and daring embodied in the original," the final scheme exposes the fundamental flaws in the historicist platform, especially when applied by comparatively lesser talent. In the end, the administration pavilions were needlessly close, a mediocre product of an impoverished debate.

The Kimbell Art Museum

The unbuilt 1989 Kimbell expansion scheme was, in some ways, the strangest embodiment of the confusion over the future legacy of postwar icons, and the most mangled appropriation of "original intent." Romaldo Giurgola, an academic colleague of Kahn's at the University of Pennsylvania and author of the 1975 book *Louis I. Kahn*, was chosen by the museum largely on the basis that he would be a thoughtful and sensitive interpreter of Kahn's legacy. In an article on Giurgola's hiring, the museum director related that during the search Giurgola was frequently recommended in interviews with his colleagues.⁴⁸ The Kimbell, completed in 1972, was one of the artistic triumphs of Kahn's late work (he died in 1974). The museum, set on a generous lawn in Fort Worth near Philip Johnson's Amon Carter museum (1961), was a dexterously composed arrangement of repeated bays formed by concrete cycloid vaults. The apex of each was open along its length to allow sunlight in, while a system of diffusers then directed it wallward to bathe the museum's collection in gentle light. The specific setting of the relatively small museum on a gentle slope, along with its sunken sculpture garden by Isamu Noguchi, was also important to the aesthetic whole. Kahn had not confronted the issue of expansion himself nor left any clear suggestions

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⁴⁷ Sorkin, 94. To Sorkin this was only further confirmed by the project supporters' advertisement that one of the lead architects was "a previous collaborator of the master's, as if such association (like Gwathmey's geometric analysis) were somehow the guarantor of the quality of the results."

⁴⁸ Barbara Koerble, "Kimbell Art Museum Unveils Addition Scheme by Giurgola," *Architecture: The ALA Journal* 78, no. 10 (October 1989): 21.

because it, too, was not expected to expand. After all, in the original conception of the project, the museum's founding director had specified to Kahn that "the form of the building should be so complete in its beauty... additions would spoil that form."49

In a shift symptomatic of the subsequent decade, the museum's leadership put increasing emphasis on temporary exhibitions and the display and support space required, which led them to engage Giurgola. The architect, earnestly seeking some hint of inspiration from the master, scoured Kahn's large collection of sketches and models for the project. In the end, he arrived at a proposal that put two symmetrical additions to the north and south of the original building. Most significantly, the two wings would each be composed of five of Kahn's same cycloid vaults, repeating the module and effectively extending the five principal bays of the museum (Figs. 22-23). To imply some (subtle) sense of differentiation between old and new, Giurgola inserted linkages between the wings and the original that were recessed by one bay's depth and somewhat wider than Kahn's repeated three-foot connection.⁵⁰

In his reasoning, Giurgola observed both Kahn's initial intention "to build a bigger building," and Kahn's (unbuilt) third model for the museum, which was similar in form and orientation to the final scheme but was composed of longer vault modules.⁵¹ Evidently, Giurgola, no doubt well intentioned, thought he was exercising appropriate restraint and respectfully effacing his design language in favor of the original designer's own. He related his revelation that Kahn's cycloid is like a Greek column – what do you do with a Greek column? You just use a Greek column!"52 However, it was not like a Greek column: rather than a decorated support, it was a highly resolved spatial construct, and the illusion of modularity that might allow for expansion belied Kahn's very

⁴⁹ Carter Wiseman, Louis I. Kahn: Beyond Time and Style (New York: Norton, 2007): 210.

⁵⁰ Barbara Koerble, "Kimbell Art Museum Unveils Addition Scheme," 22. Koerble also notes that while a parking garage was planned below the north wing, Giurgola also endeavored to renew focus on Kahn's underutilized pedestrian entrance which had failed to fully account for the habits of vehicle-driving Texan museumgoers. This would be accomplished by a light well in the garage to pull visitors to the ceremonial west entrance (Joel Warren Barna, "More vaults for Kahn's Kimbell," Progressive Architecture 70 no. 10 (October 1989): 27). The linkages would be 20 feet wide, the same as the cycloid vault depth.

⁵¹ Barbara Koerble, "Kimbell Art Museum Unveils Addition Scheme," 22.

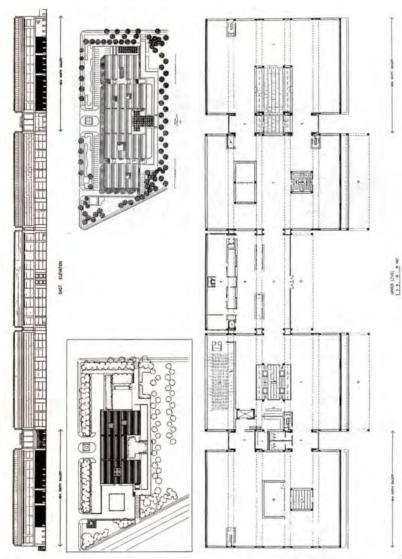
⁵² Ibid.

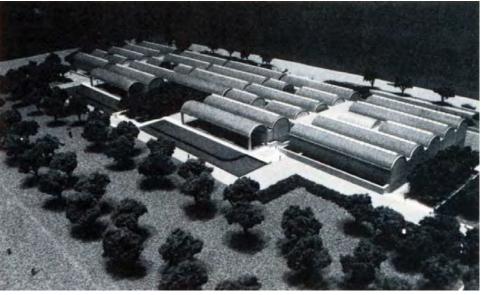
Fig. 22. Drawings -Addition to the Kimbell Museum of Art, Fort Worth, Texas (1989).

Romaldo Giurgola's 1989 proposal for the expansion of Kahn's 1972 landmark. Shown here are site plans of the original and Giurgola's proposal, and a section and floor plan of the proposal.

Fig. 23. Model -Addition to the Kimbell Museum of Art, Fort Worth, Texas (1989).

Romaldo Giurgola's 1989 proposal, showing the replication of Kahn's cycloid vaults at either end of the original building.





specific – and finite – arrangement of elements. Giurgola's all-too-telling comment was that "there is wonderful architecture which is perfectly anonymous."⁵³

Obsequious when meant as solicitous, the proposal faced almost unanimous concern for Kahn's masterwork from fellow theorists, architects, and preservationists. Some of the genuine issues raised were "the blurring of authorship, the deleterious impact that the wings would have on Kahn's proportions and siting, and the likely difficulty of recreating the original's high-quality construction."⁵⁴ In a development highly reminiscent of Michael Graves and the Whitney Museum (case study following), a number of high-profile architectural historians and practitioners wrote or signed letters of dismay and protest to the Kimbell trustees.⁵⁵ A heavily attended forum on Giurgola's design was held at the Architectural League in New York in January 1990; it was reported that the attendees seemed universally opposed to the scheme.⁵⁶

The proposal's detractors were not against expansion *per se* but the destruction of Kahn's aura by means of earnest suffocation. As one letter to the trustees pointed out, "An addition designed as a separate entity could preserve Kahn's building, provide a suitable opportunity for Giurgola's individual expression, and create an extraordinary degree of dialogue that might reflect the parallel Kahn and Giurgola maintained as teachers at the University of Pennsylvania." Thankfully,

⁵³ Ibid.

⁵⁴ Barbara Koerble, "Kimbell Art Museum Expansion Abandoned," A + U: Architecture and Urbanism 236 no. 5 (May 1990): 4.

⁵⁵ İbid., 4-5. Richard Meier and Kenneth Frampton drafted one letter, which was signed by Arata Isozaki, James Stirling, Philip Johnson, James Freed, Phyllis Lambert (née Bronfman), and Kurt Forster. Robert Venturi and Henry Cobb wrote their own letters.

⁵⁶ Ibid.; Mark Alden Branch, "Kimbell plans ambushed in New York," *Progressive Architecture*, 71 no. 3 (March 1990): 23. At the forum, held January 22 and attended by nearly 300 people, Giurgola and the museum director, Edmund Pillsbury, made a presentation followed by a question-and-answer session, which was reportedly characterized "by a great deal of comment but very few questions." (Branch, 23). Historian Vincent Scully reportedly proposed wing "as far away and as different as possible," while Frampton, Robert Stern, Anne Tyng, and members of Kahn's family also expressed their disapproval. (Branch, 23): (Koerble, "Kimbell Art Museum Expansion Abandoned," 4-5;)

⁵⁷ Koerble, "Kimbell Art Museum Expansion Abandoned," 4-5. De Long, Brownlee, and Julia Converse, signers of the letter, were Chair of Penn's Graduate Program in Historic Preservation, History of Art Professor, and Curator of the Louis I. Kahn Collection and Director of the Architectural Archives, respectively. Since, De Long and Brownlee also authored *Louis I. Kahn: In the Realm of Architecture* (New York: Rizzoli, 2005).

the project was soon abandoned.⁵⁸ But while Giurgola's proposal was fundamentally misguided, it is unfair to presume his approach to be neither earnest nor thoughtful. The episode offers some less obvious lessons on uses and abuses of authorial intent. Invocation of intent can be twisted into a mandate, and respect can become the temptation to read in tectonic modules the blueprints for appropriate expansion. Veneration slides into imitation and plagiarism. In at least two of these cases, the Kimbell and the Guggenheim, the act of ascribing of a particular design position through archival sleuthing has proven to be a contested, if not compromised activity. Either specific instructions were left, or they were not. And regardless, the use of the exclusively historicist position, as Spector illustrated in the case of Salk, fails through the critical omission of self-conscious agency. Those seeking to serve their own ends wield intent as a rationalization all too often.

Infrastructure and Exigencies of Change

Dulles Airport and TWA Flight Center

But what of situations where subsequent expansion – according to an established modular design unit such that the phasing of construction is essentially indistinguishable – *might* be appropriate? This is arguably the case at Dulles Airport outside Washington, D.C. (completed 1962), where Eero Saarinen left a detailed masterplan in place for the expansion of the complex. Saarinen's other renowned air terminal, the TWA Flight Center at Idlewild (now John F. Kennedy) Airport in New York (completed in the same year), is a highly relevant counterpoint. Both are heroic, expressionist *tours de force* from one of the age's heroes. However, TWA's finite, tightly bounded massing is nothing like Dulles' open-ended, hangar-like volume of repetitive bays, and TWA has also undergone expansion, with much less positive results.

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⁵⁸ Ibid. Strangely, however, the board had decided at the project outset that a separate building or underground annex was unacceptable in its potential disruption and were now painted into a corner. The breadth of disapproval, as well as some behind the scenes persuasion of major donors to reconsider, deflated the museum's momentum and the board voted to indefinitely postpone the expansion in February 1990

It bears noting that airports arguably require an approach to heritage that is distinct from museums. Society generally expects museums, as cultural stewards, to care for and value their buildings according to certain standards; after all, they do the same for their collections. Spector has proven the danger of the exclusively functionalist outlook, but even a pluralist approach probably rates the functional requirements for airports more heavily than it might in the case of other programs. An airport that is a functional failure may generally not amount to much more. But was that the case with Dulles or TWA? And when there are failures, where is the line drawn between what is and is not compromised?

Critic Edgar Kaufmann called Dulles "a landmark of modern architecture" for its celebration of "the fulfillment of simple needs," its "openness," and its fundamentally "human concern." There are no mysteries" in the forms of its suspended pendular roof and series of sculpted muscular piers, he wrote, "only exhilaration." The design of the building, which Saarinen concluded shortly before his death to be "the best thing" he had done, was predicated on both a poetic response to the scale of the Virginia plain and a "hardboiled" approach to the needs of a modern airport (Fig. 24). It was also the first airport to be designed expressly for the jet age. Performing like a linear diffusion membrane writ large, the original airport accepted departing passengers all along its curbside elevation and facilitated easy, direct access to scissor-jack "mobile lounges" (waiting tarmac-side), which would transport them directly to their planes. It was a radical departure from the 'finger' airport model ("narrow Kafkian corridors that stretch in tarsocidal

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⁵⁹ "Dulles International Airport," *Progressive Architecture* 44 (August 1963): 94.

⁶⁰ Ibid.

⁶¹ The flat open site, in what was then rather rural Virginia, inspired the architect's urge to "place a strong form between earth and sky that seems both to rise from the plain and hover of it... The terminal should have a monumental scale in this landscape and in the vastness of this huge airfield." ("Dulles International Airport," *Architectural Record* 134 (July 1963): 103. Dan Kiley collaborated on the landscape design. At the same time, the design firm conducted earnest analysis of existing facilities and found the major issues to be "the time and inconvenience of getting passengers to and from planes... tremendous walking distances... the fuel costs for extraneous jet taxiing, and the need for maximum flexibility." ("Dulles," *Architectural Record* (July 1963): 107.)

⁶² This notion is referenced by numerous sources and Saarinen himself.

foreverness," according to Kaufman.)⁶³ Many reviewers agreed that the solution "is likely to influence all future airport design."⁶⁴

The building itself was a structurally expressive delight, its piers resembling "two rows of concrete trees between which a continuous hammock has been hung."65 The pull of the roof (which was carried on light suspension cables in a catenary curve rather than on massive trusses) could be visually traced to the piers whose outward slope counteracted the tension force of the cables (Saarinen exaggerated this outward slope for aesthetic reasons.)66 The designers thought expansion inevitable and accounted for it from the beginning. Glazing within each lateral bay was curved inwardly, but the two glazed end-walls of the building were made flat and vertical and supported by an independent (and removable) truss system. What Saarinen and his team did not foresee were the extraordinary changes in airport mechanics over the last half-century, of which added security was just one. The terminal was ill adapted to the layovers of the hub-and-spoke system, larger planes, baggage automation, and the compounding effect of drastically increasing passenger volume. In 1980 Hellmuth, Obata & Kassabaum (HOK) added a low-profile addition planeside for passenger lounges and baggage handling that removed the original mobile lounge ports but was meant to have a minimal visual impact on the Saarinen terminal.⁶⁷ A temporary midfield concourse was added in 1985 per HOK's revised masterplan and a low "hunkering" International Arrivals Building was constructed in 1989 by Skidmore Owings & Merrill (SOM) at a distance directly to the west.⁶⁸

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^{63 &}quot;Dulles," Progressive Architecture (August 1963): 94; "Washington's new Jet Age International Airport," Aia Journal 33 (March 1960): 33. "Dulles," Architectural Record (1963): 110.

⁶⁴ "Dulles," Progressive Architecture (1963): 48.

⁶⁵ AIA Journal (1960): 33.

^{66 &}quot;Dulles," Architectural Record (1963): 109, quoting Saarinen: "We exaggerated this outward slope, as well as the compressive flange at the rear of the columns, in order to give the colonnade a dynamic and soaring look—in addition to its dignity."

^{67&}quot;Whither Dulles? Cold war 'landmark,"" *Progressive Architecture* 59 no. 3 (March 1978): 28. While it had been designed to keep a low profile and respect the original structure, there was much consternation over HOK's waiting room, built to extend the entire length of the terminal with only a 9'-6" ceiling height. It was disrespectful to Saarinen's design in a less obvious way, through the creation of an impoverished spatial experience at odds with the original.

⁶⁸ Allen Freeman, "SOM's addition to Dulles International Airport respects Eero Saarinen's 'Modern Masterpiece," Architectural Record 185, no. 3 (March 1997): 67.



Fig. 24. Dulles Airport, Chantilly, Virginia (1962). Eero Saarinen's "lantern" on the expansive Virginia plain with landscape by Dan Kiley, photographed by Ezra Stoller - the first airport designed for the jet age.



Fig. 25. Dulles Airport Expansion (1997). Skidmore Owings and Merrill's 1997 expansion of Saarinen's landmark terminal increased the original building from 15 bays to 31.

Between the completion of the original in 1962 and the expansion in 1997, HOK added a tarmac-side extension waiting room in 1980, and SOM added an International Arrivals Hall in 1989. Numerous field terminals have also been added over these decades.

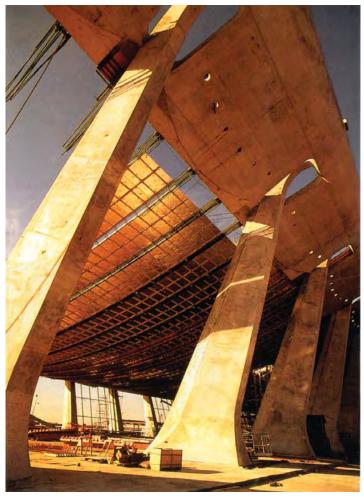


Fig. 26. Dulles Airport, Chantilly, Virginia (1962) - side elevation.

Ezra Stoller dramatically captures the catenary curve of Saarinen's pendulous roof, and the direct transition from curbside arrival through the terminal to the waiting "mobile lounges." One is seen to the right, beneath the control tower.

Fig. 27. Dulles Airport Expansion (1997) - construction process.

Although more than thirty years had passed, the optimal method of construction for the addition was the original technique of draping concrete panels over catenary cables tensioned between the piers. The expansion was intended to appear seamless with the original.



SOM was also retained in the early 1990's to expand the main terminal in accordance with Saarinen's original vision, replicating the original bay unit identically and lengthening the building from 600 feet to 1,240 feet, from 15 bays to 31 (Fig. 25).69 The intention of this project was also to restore the original grandeur of Saarinen's masterpiece while simultaneously augmenting it according to his masterplan. In this multiplied simulacrum of Saarinen's original terminal, project design partner Marilyn Taylor saw "an extrudable section," (Fig. 26) one that turned out to be "richer, more commanding when extended." SOM also discovered that the most straightforward method of construction was to follow the original technique of "draping concrete panels" over the catenary cables that were tensioned between the piers (Fig. 27). With matched concrete finish and window profiles, the addition appears and operates seamlessly, with no visual distinction between building campaigns. And what of the overall effect? The curbside façade is positively dizzying in its astonishing scale and relentless repetition. Saarinen had originally imagined his creation as a "giant lantern on the landscape," but it is perhaps now a fragment of landscape infrastructure itself. He would likely approve of the expansion carried out to his design, but in the choreography of modern air travel, he would recognize little else.

The TWA Flight Center, designed a few years before Dulles, was a comparatively totalizing (and perhaps willful) experiment that responded to a very different site. Idlewild planners took the approach of having terminals owned and operated by various airlines, "in turn connected by an unusual amount of public space." Saarinen's client was not an airport authority but the corporate entity of Trans World Airlines, operating in what seemed at the time to be a predictable, government-regulated industry. The commission was an opportunity for Saarinen to give the airline's brand an architectural dimension, and he designed the building through iterative physical models to arrive at a

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⁶⁹ "Dulles Airport Expansion, Washington, DC: Skidmore, Owings & Merrill," Architecture 82, no. 11 (Nov 1993): 40.

⁷⁰ Freeman, "SOM's addition to Dulles..." Taylor is now the dean at the University of Pennsylvania's School of Design.

⁷¹ Ibid.

⁷² Ibid. Quote is from SOM project manager Tony Vacchione.

⁷³ Christopher Hart Leubkeman, "Form swallows function," *Progressive Architecture* 73 no. 5 (May 1992): 106.

daring sculptural form that recalled a "giant bird in flight," (Figs. 28-29).⁷⁴ The terminal itself was articulated by four separate shells tied together at adjacent supports from which glazed curtain walls hung. By separating the concrete shells, a sharper definition of the volumes could be achieved and skylights could crisscross the central volume.⁷⁵ An entrance lobby, waiting area, arriving passenger services, and concessions were located in the terminal proper while two boarding lounges with their own sets of gates were accessed through tubular enclosed passageways.

The design team's main occupation was to express a "sense of movement" and carry it through every element of the building. Like the shell structure, the interior was also iteratively modeled for flowing continuity of line, with curvilinear bridges, balconies, and level changes propelling travelers skyward with anticipation (Fig. 30). Even the tubes to the gates, originally planned with skylights and moving sidewalks, were made narrow and completely enclosed with a rise in the middle. The design was a sensationalist, bravura performance that owed something to Erich Mendelssohn's sketches of the 1920's. It was not well received by the theorists of the time; Edgar Kaufman called it a "morphological bacchanal" while Alan Colquhoun found it to be "an act of caprice..." monumentality that was "purely rhetorical." Reyner Banham saw only a "grotesque...piece of formalism." Apart from its success as a technological achievement, what they failed to grasp was the extent to which Saarinen had captured a specific moment in the popular imagination. Today it is an object of mid-century nostalgia and unreserved affection.

By 1992, a series of unsympathetic changes to the interior had left the terminal in a disgraceful condition and compromised much of Saarinen's vision, such as the addition of a ticketing

⁷⁴ "Terminal for Trans World Airlines, New York International Airport, New York, N.Y." Architectural Forum 108 (January 1958): 80.

⁷⁵ Ibid.

⁷⁶ "Terminal for Trans World Airlines, Inc., New York International Airport," *Architectural Forum* 108 (Jan 1958): 80.

⁷⁷ Edgar Kaufman, "Dulles," *Progressive Architecture* (August 1963): 99; Alan Colquhoun, "TWA Terminal Building, Idlewild, New York," *Architectural Design* 32 (Oct 1962): 465.

⁷⁸ Vidler, *Histories of the Immediate Present,* 170; Banham, "Convenient Benches and Handy Hooks: Functional Considerations in the Criticism of the Art of Architecture," in Marcus Whiffen, ed., The History, Theory and Criticism of Architecture (Cambridge: MIT Press, 1965): 96-97.



Fig. 28. TWA Flight Center, Idlewild Airport, New York (1962). Completed the same year as Dulles, TWA was designed by Saarinen before the Virginia Airport. As a carrier-owned terminal within a larger airport, TWA was designed with an emphasis on corporate branding rather than expansion pragmatics in mind.



Fig. 29. TWA Flight Center, Idlewild Airport, New York (1962). This aerial photograph of Saarinen's terminal shows the relationship of the main terminal with curbside arrival to the flight "tubes," leading to the two gate lounges. Also visible in the terminal roof are the articulated skylights between roof shells.



Fig. 30. TWA Flight Center (1962) - Interior view. The information desk, like many elements of the terminal interior, were designed through iterative physical modeling rather than through plan and section.



Fig. 31. TWA Flight Center - 1962 Interior with 1992 inset. By the 1990's, even before the terminal's closing and the arrival of Terminal 5, there were many unsympathetic interior changes, including covering the sunken lobby waiting lounge to gain more space for ticketing counters.

area over the original recessed waiting lounge that also interrupted the sweeping views over the tarmac (Figs. 31-32).⁷⁹ The repetitive bays of Dulles' "classically composed structure" had allowed for straightforward expansion, but the TWA terminal, wrote one critic, "has a Baroque space tightly wrapped around the crisscrossing and spiraling circulation patterns of passengers... its sculptural forms have an integrity and completeness." As well, the rectilinear geometry in most of Dulles' interior elements had accommodated changes in ways that the technique at TWA – scaling of exterior curvature down to the smallest interior fixtures – could not. The same shift in demands witnessed at Dulles was also a greater hardship for much smaller TWA, designed specifically for shorter and more compact planes.

Perhaps it was a miracle that by 2001, when the airline (which had filed for bankruptcy in 1992) finally ceased operations, the headhouse and lounges had survived largely intact.⁸¹ By that point, plans were in motion for a new and much larger terminal directly to the east that would require the demolition of the boarding lounges and effectively sever Saarinen's terminal from the tarmac (Fig. 33).⁸² Despite protests, construction for Terminal 5 began in 2005 and the facility opened in 2008 for US budget carrier JetBlue. Gensler, the firm that designed the new terminal, adhered to JetBlue's interest in an efficient, value-engineered solution that would satisfy the pragmatics of passengers' and the airline's needs with little fanfare.⁸³ The building is content to keep its head down in relation to Saarinen's landmark. The facing roofline is only 20 feet above grade – save the wan nod at either end that recalls the ascending profile of Saarinen's shells (Fig. 34). If one ignores the

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⁷⁹ Thomas Fisher, "Landmarks: TWA Terminal," *Progressive Architecture* 73, no. 5 (May 1992): 96. Likewise, a handicapped ramp tortuously laid over the short set of main-floor stairs arrested all the streamlined flow in its proximity.

⁸⁰ Ibid., 96.

⁸¹ Theodore Prudon, "Will the Eagle Fly Again?" DO.CO.MO.MO Journal 25 (July 2001): 25. Although it should be noted that the City of New York designated both the interior and exterior of the terminal in 1994 under its historic preservation ordinance.

⁸² Ibid., 27.

⁸³ The terminal contains the largest single security checkpoint in the world as of 2008, while dual-taxiways and housekeeping facilities located at the gates get Jet-Blue's planes back in the air more quickly. (Greg Lindsay, "Heirport: Eero Saarinen's TWA terminal has a new neighbor," I.D. 55 no. 7 (Nov.-Dec. 2008): 136; Bill Millard, "American Idol," *RIBA Journal* 115, no. 3 (March 2008): 45.)

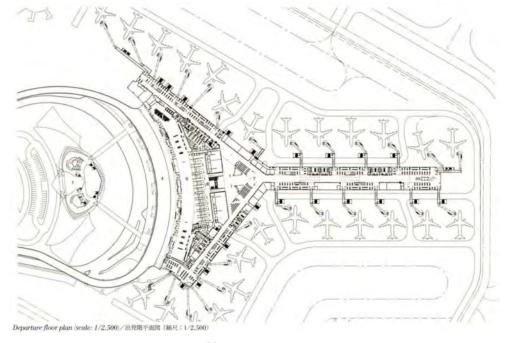
Fig. 32. TWA Flight Center 1962 Interior with 1992 inset.

View of the main stair connecting the entrance lobby to the sunken waiting lounge (at left.) The upper floor held a restaurant and concessions. By the early 1990's, an ad-hoc handicapped ramp was inserted across the stairway.



Fig. 33. Plan - Terminal 5 with TWA Flight Center (2008).

Gensler's Y-shaped terminal for US carrier JetBlue (at right) dominates Saarinen's original building (left) and severs it from the tarmac, isolating it within JFK Airport's maze of access roads.



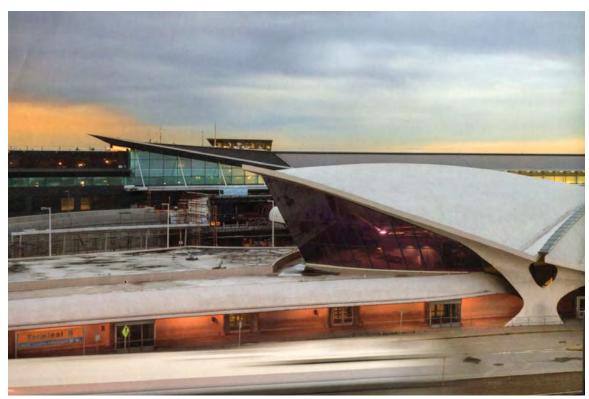


Fig. 34. Terminal 5 and TWA Flight Center (2008). While it mostly keeps its head down, Gensler's terminal makes a timid nod to its older neighbor in the final lift of a roofline.

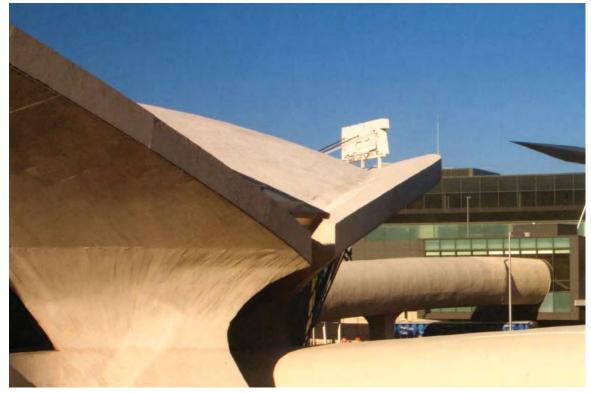


Fig. 35. Terminal 5 and TWA Flight Center (2008). The original gate lounges were demolished to make way for the new terminal, and Saarinen's dramatic flight tubes now appear crudely jammed into it.

engulfing size and siting of the new "addition," and considers only those variables that were strictly within the architect's control, it is generally deferential, but the conversation is not inspiring. The exception is the tubes, which were very poorly handled (Fig. 35).⁸⁴ As part of the project, the older building was to be restored and rehabilitated as an alternate entry hall for JetBlue, but it has not yet opened and it is also unclear how long that arrangement could sustain itself.

It can be concluded that the functional requirements of building programs like airports present a particular challenge to the safeguarding of postwar heritage. Airport planners, officials, and a large percentage of the flying public, it can be assumed, are not overly sentimental when faced with questions of efficiency. The resulting atmosphere is almost Darwinian: adapt, or die in the process. Dulles offers an intriguing case in the expansion endeavor – the original icon saved itself by accommodating the literal replication of its own DNA. Saarinen's original vision was 'preserved' by mimicking it. If that is ethically permissible, then it hinges on the explicit authorial intent of Saarinen's masterplan. Preoccupied with other effects, TWA was never seriously conceived with expansion in mind and when the hard dilemma eventually arrived, it found few on its side with enough influence. While its physical fabric is ostensibly 'protected' for the near-term, the addition has ensured that the headhouse – purpose-built and purpose-inspired – will never regain its original use.

Going Underground

UCSD Central Library and Vietnam Veterans Memorial Visitor's Center

Some of the more conservative-minded, in observing this series of episodes, might well be forgiven for throwing up their hands and concluding that the only acceptable solution is one that subsumes itself so resolutely and literally as to find itself underground. After all, no one can accuse a subterranean addition of towering over its predecessor or engulfing it. Moving new architecture

⁸⁴ The crude tectonic relationship is like Saarinen's round peg punching through a square hole.

below the ground datum may offer the illusion of "non-disturbance," to both the physical landscape and the Benjaminian "aura." Indeed, it has been found to be an appropriate resolution in a number of cases. Moving underground, however, can carry some serious secondary implications, such as the arrangement and hierarchy of access in the case of I. M. Pei's 1988 addition to the (non-modern) Louvre in Paris. Through changes to interior spatial arrangements and relationships, an underground addition may significantly affect the architectural and metaphysical message of the original in unintended ways. As a strategy, it is not a universally ameliorative "type." This is borne out in the cases of William Pereira's University of California San Diego (UCSD) Central Library (Figs. 36-37) and Maya Lin's Vietnam Veterans Memorial.

The Central Library, completed in 1970, was designed as the centerpiece of a new campus plan. With minimal built context – the library was both the first phase of the campus and meant to be in the "middle" – Pereira began with a plinth at the head of a wooded canyon. The library, set atop the plaza in turn, was a spheroid section thrust skyward by a muscular concrete superstructure emerging out of the base (see Fig. 36).85 Each of the library's five floors takes its area from the section, progressively increasing up to the third floor and then diminishing above. The conceit of the design was its symbolizing of a body of knowledge grasped in an upturned hand held above the landscape: the library as the flame and spiritual center of the university. Recognizing that the bounded volume offered no obvious opportunities for expansion, Pereira proposed a series of low-rise extensions into an adjacent canyon (Fig. 38).86 It is not clear how far this scheme was developed, but the university did not pursue it. Gunnar Birkerts, designer of an addition completed in 1993, instead placed the bulk of his large expansion around the library and so intensively camouflaged it in plan that it would have done a designer of military installations credit. The final scheme surrounds Pereira's pedestal on three sides and channels the canyon around the pedestal by opening a jagged

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⁸⁵ James Britton, "Evaluation: Lantern-like Library held aloft on Concrete Fingers," ALA Journal 66, no. 9 (August 1977): 32. To keep within budget, the concrete "bents" that bracket the floors were engineered by infrastructure contractors more used to building bridges, dams, and freeways. The reviewer noted that the southern California library is appropriately "a stone flower of the freeway technology."
86 Ibid.



Fig. 36. UCSD Central Library, San Diego (1970). William Pereira's intended centerpiece of a new planned campus, the library sits on a plinth like an upturned, outstretched hand offering the spiritual promise of knowledge and scholarship.



Fig. 37. UCSD (Geisel) Central Library and Addition (1992). Gunnar Birkerts added a low-rise, camouflaged "canyon" addition that surrounds Pereira's 1970 monument like a green-roofed, reflective fissure. The tree in the foreground is in fact a metal sculpture, extending the conceit.

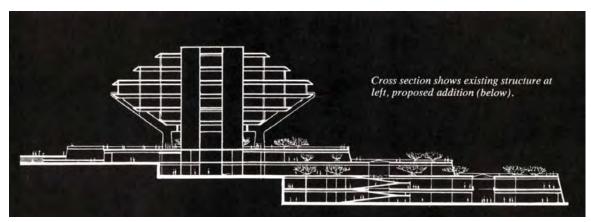


Fig. 38. Section - UCSD Central Library. Pereira's proposal for the later expansion of his library consisted of an underground extension further down the canyon that the main structure sits at the head of.

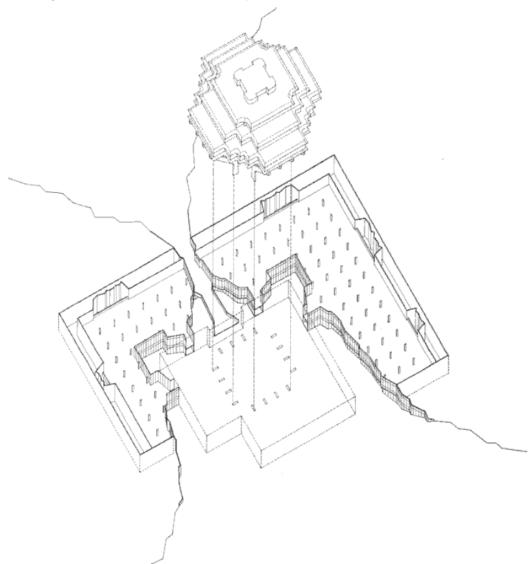


Fig. 39. Axonometric - UCSD (Geisel) Central Library Addition (1992). Birkerts' camouflaged addition attempts to paraphrase a constriction of the canyon around Pereira's "lantern" (above), complete with jagged walls, a landscaped roof, and fissure-like light wells at regularly spaced intervals on the perimeter.

seam between old and new (Fig. 39).⁸⁷ Birkerts then clad his willful "canyon" walls with faceted, highly reflective glass that attempts to negate itself. The addition goes to great lengths to say something to or about the Pereira lantern above, but it is not totally clear what, and the overall combined work appears to verge into incoherence with Pereira's uplifted hand encircled by Birkerts' iceberg.

A very different but relevant set of challenges with the 'underground' addition is currently being played out on the National Mall at Maya Lin's 1982 Memorial for Veterans of the Vietnam War. A "Memorial Center," to be built just west of Lin's polished black granite wall, is in the midst of the approvals and fundraising process. The underground interpretive center, designed by Polshek Partnership Architects with Ralph Appelbaum, is planned to contain more than 25,000 square feet of space, "featuring 75-foot-high plasma screens with rotating images of the war's dead, a timeline of Vietnam-era events, and a selection of the medals, fatigues, and letters that are left at the memorial each year." The goal, according to General Colin Powell, is to "to enhance the Vietnam Wall experience."

What 'enhancement' the memorial might require is not declared. The Memorial was extraordinarily controversial when it was first unveiled ("a shameful degrading ditch" was one epithet), but it is also the most frequented monument in the country. Matthew Glazer rightly credits its success with its silence. "Is there any other monument that refuses to say anything at all? Its dumbness... fits our ambivalence about the war – there is nothing to be said, and nothing is said." Its cool abstraction has also rendered it an active and dynamic ritual space, highlighting the personal expression that a contemporary, neo-modernist approach can evoke and accommodate in

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⁸⁷ Gunnar Birkerts, *Process and Expression in Architectural Form (Bruce Goff Series in Creative Architecture, Vol. 1).* (Oklahoma City: University of Oklahoma Press, 1994): 78.

⁸⁸ Clay Risen, "Speak (louder), Memory: Plans to add an Interpretive Center to Maya Lin's Vietnam Veterans Memorial," *Architect* (Washington, D.C.) 97, no. 9 (July 2008): 49.

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Matthew Glazer, From a Cause to a Style: Modernist Architecture's Encounter with the American City (Princeton: Princeton University Press, 2007): 137.

turn. In effect, Lin demonstrates modernism's relevancy for modernity. For the visitor, a secondary descent, into an underground visitor's center with media bombardment, will categorically spoil the emotional power of Lin's intensely choreographed processional down to the hinged nadir and back up. Descending below ground becomes just another banal exigency of building on the National Mall. It is an important and subtle lesson: abstraction (or its experience) is deceptively fragile. In light of all these perils, the center's proponents have inadequately demonstrated its need, especially with the risk that an interpretive facility – however well intentioned – could inadvertently render an official interpretation of the war. As one critic, who pins the center on "a nation's unease" with abstraction, observes, "Plurality of meaning is a critical part of modern democratic society...

Abstraction is not just an aesthetic; it is a civic value."92

Directions in Current Practice

As this chapter attempts to make clear, design techniques for making a successful addition cannot be pinned on a specific typology (underground, overground), nor can invocation of authorial intent ever be taken at face value. Moreover, that value itself is subject to multiple readings. Some programmatic activities present large challenges in which flexibility and accommodation are the most expedient means of survival. The use-value and art-value in postwar icons are at times conflated; modernism's mythology of 'bespoke,' functionalist tailoring to specific program has led audiences to judge its monuments on those terms. At the same time, art museums, which have undergone the greatest concentration of alterations and physical expansions of perhaps any building typology in the last half-century, have – by their own commissions – left the question of what constitutes appropriate architecture for showing art to be remarkably undefined. This chapter concludes with three open-ended, consciously acknowledged directions in the making of additions from within contemporary practice.

⁹² Risen, 50.

Arrival of the Theorists

The first is illustrated in the 1997 international design competition for a new campus center on the Illinois Institute of Technology (IIT) campus designed and planned by Mies van der Rohe. The location was a marginal space, directly under a set of tracks for one of Chicago's elevated transit lines. The issue was not so much physical fabric (the adjacent Commons dining facility was not one of the better buildings) as the pervading Miesian aura. It was a situation where a weighty authorial presence played a central role as pervading specter rather than through work-specific intent. More to the point, the competition results attracted an unusual amount of attention from contemporary architectural theorists and inspired them to contribute on a historic preservation-related debate. The IIT jury originally selected 56 "top architects" to participate, from which it named five finalists. The finalists submitted full proposals in January 1998, and from the group comprised of Rem Koolhaas, Peter Eisenman, Zaha Hadid, and the teams of Helmut Jahn with Werner Sobek and Kazuyo Sejima and Ryue Nishizawa (SANAA), Koolhaas was named the winner (Fig. 40). During the competition, Eisenman was purported to have said that the person to beat was the architect already dead: Mies himself (Fig. 41).93 The dynamic, as Detlef Mertins described, was five of the "best" contemporary architects "pitching themselves against Mies." Preservation was never so self-consciously combative or patricidal. The central question for Mertins and others, it seems, was how competitors chose to "read" Mies and then how they responded in a critical and creative fashion to that reading.

The results broke down according to some intriguing lines (see Fig. 40). As Robert Somol notes, Jahn most directly extended "the corporate legacy of Mies' production," while SANAA assumed "his most recent form of academic institutionalization" – a kind of electronically enabled

⁹³ Detlef Mertins, "Design after Mies [Illinois Institute of Technology, McCormick Tribune Campus Center]," ANY [Architecture New York]24 (1999): 14.

⁹⁴ Ibid.

nonexistence.⁹⁵ Zaha, in her characteristically oppositional approach, was content to forsake Mies as "irrelevant for architectural production today... perhaps indirectly affirming [his] sometime invocation of the *zeitgeist*."⁹⁶ To most critics, Eisenman and Koolhaas were the most alluring of the five through their production of "copies' that serve to question the stable traits of the presumed 'original.' "⁹⁷ Simply described, Eisenman's project endeavors to distort and subvert the totalizing Miesian grid, subjecting it to pinching and folding vectors that resulted in a series of low landscape elements. Koolhaas proposed an exuberantly profane pinball machine – a toy box with an unaffected air of irreverent sloppiness about it – that fully embraced the elevated tracks and distilled organizing circulation literally from the lines of desire students had worn in the grass (Fig. 42). As Somol notes,

Both attempt to expose and extend the dark side, or perhaps the "optical unconscious," of Mies's supposed idealism: Eisenman by turning geometry against itself, Koolhaas by invoking the "stuff" of cultural matter... both proposals imply that it is only possible to revisit Mies by introducing variation (or perhaps more accurately in the case of these two schemes, "noise" or "interference." 98

Rem's was perhaps most straightforwardly an architecture of consumable image and lighthearted nose thumbing; photographs of Mies were blown up to gigantic size and silkscreened onto the building's glazed walls (Figs. 43-44). At the main entrance visitors are confronted with the master's stern gaze, but then "the doors open," explained one of the building's graphic design consultants, "[and] you walk through his mouth... you picture him swallowing you." It is perhaps a just critique on Mies' "blameless authority," enshrined at the school since he retired from heading it in 1958, as well as his influential design philosophy based on eternal laws, which as one reviewer put it, "can be

⁹⁵ Robert E. Somol, "Five Easy Mieses," ANY 24 (1999): 21. Jahn's scheme, which applied advanced environmental technology but did not rethink "the conceptual or organizational principles of Mies...can largely be viewed as a merely building a better Mies trap." SANAA's project was "practically imperceptible, 'almost nothing' raised by the power of electronic media." (Ibid, 22.)

⁹⁶ Somol, 23.

⁹⁷ Ibid.

⁹⁸ Ibid.

⁹⁹ Peter Hall, "Wrestling with the Legacy: OMA and 2X4 Collaborate on a Student Center that stands on Sacred Ground," *Metropolis* 21, no. 1 (Aug-Sept 2001): 108.

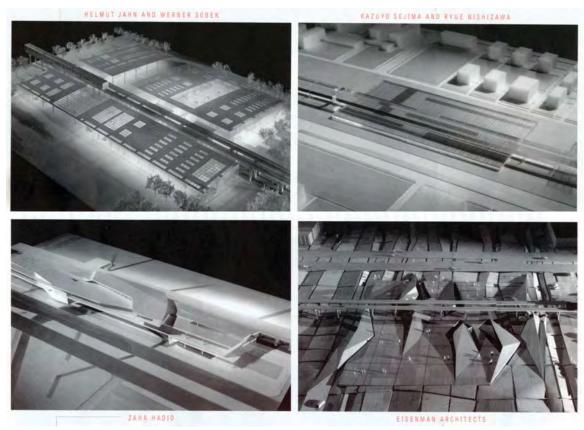


Fig. 40. IIT Campus Center Competition Finalists (1997). Four of the five finalists' proposals: Helmut Jahn with Werner Sobek, Kazuyo Sejima and Ryue Nishizawa (SANAA), Zaha Hadid, and Eisenman Architects.



Fig. 41. Mies van der Rohe and model of Crown Hall, IIT. In this undated photograph, Mies van der Rohe stands before a model of Crown Hall, home of IIT's College of Architecture, completed 1956.

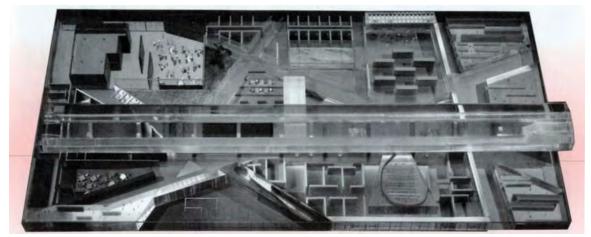


Fig. 42. IIT Campus Center Competition Winner (1997). Rem Koolhaas/OMA's "pinball machine" entry.



Fig. 43. McCormick Tribune Campus Center (2003). Building entry, with Mies silkscreened on the glazing.



Fig. 44. McCormick Tribune Campus Center - Interior (2003). OMA's trademark punchy color scheme.

flaunted or flouted, but not ignored."¹⁰⁰ And thanks to the historical biases of Johnson and others, Mies, more than anyone else (even Wright), embodies the promises and failures of the modern movement in today's American consciousness.

In its concentration of critical, highly theorized approaches to (early) postwar context (the Commons itself was from 1953), the IIT competition was unusual, but it accurately captured and expanded the theoretical and emotional complexities of adding to celebrated postwar heritage. Moreover, the positions that Eisenman and Koolhaas staked out, tortuous on the one hand and overly-clever on the other, represent an approach to additions that seeks to inject in the relation between new architecture and its context a dialog rich with allusions, feints, vehement intensity, double-meanings, and occasional absurdism. At the least, it makes for interesting conversation between work and context. Koolhaas' response also echoes his subsequent approach to the Whitney Museum.

Renzo Piano and the Pavilion

The second direction in current practice heavily contrasts with the prior one and is perhaps the most conservative of the three. It is the design approach exemplified by Italian Architect Renzo Piano, especially in his latest addition work. A thoughtful designer who is virtuosic when he rises to the occasion, Piano has been the architect of choice for additions more generally over the past decade. Not surprisingly, he is also completing an increasing number of additions to postwar icons. His expansion of Richard Meier's 1983 High Museum in Atlanta was completed in 2002, and an addition to Kahn's Kimbell museum (the first since Giurgola's aborted scheme) is currently under construction. His unbuilt proposal for the Whitney Museum site is addressed in the case study. While each of these projects is unique, the larger basis for Piano's approach is grounded in an occupation with urbanistic effects and his decided modesty, which tips the scales firmly towards

¹⁰⁰ Ibid.

foregrounding existing fabric. The overall result is one of well-mannered cordiality. In consequence, Piano's offerings more often approximate town and city-like arrangements, with multiple massings arranged around bounded, piazza-like public spaces. In his additions, Piano also demurs from confrontation in a self-conscious, ironic way or otherwise: presumably, this would be bad manners. The strength of his attitude is in the acknowledged authority of the original fabric and overall legibility; masses are broken up and arranged with breathing room. But the corollary weakness is that a too-respectful approach and the invocation of the 'urban' at a micro-scale — in the hands of a single designer — also runs the risk of self-consciously historicizing the monument in question, perhaps even rendering it precious. At the High Museum, the potential perils of historicization are brought into sharp focus by the compressed temporal distance between Meier and Piano, acts of building less than two decades apart.

While the Meier building was regarded as a great success for the institution and the city of Atlanta, when it came time to expand, the museum made the decision not to hire the architect for a second run on his own landmark (Fig. 45). It was largely agreed that the gallery spaces in the original were intimate and sophisticated in their arrangement but that their size constrained the ability to show the larger contemporary artworks in the museum's growing collection.¹⁰¹ Critics also complained of glare created by the atrium, of awkward circulation routes, certain galleries that did not show art well.¹⁰² Reviewer Joseph Giovannini attributes the museum directors' choice of Piano to his work for the Beyeler Foundation in Switzerland and Menil Collection in Houston, among other museums; the directors "concluded the High needed similar galleries – large, clean, and columnfree." Meier's building also proved expensive to maintain; Piano has put lifelong emphasis on

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William Weathersby, "Renzo Piano Building Workshop Doubles the size of the High Museum in Atlanta," Architectural Record 193, no. 11 (November 2005): 131; and Joseph Giovannini, "Highs and Lows: Renzo Piano's High Museum expansion is graceful but can't match its forebear," I.D. 53, no. 1 (Jan-Feb 2006): 95. Weathersby, 132.

¹⁰³ Giovannini, "Highs and Lows," 95.

construction engineering. It is for these and other qualities in Piano's easy-going designs that he has all but become the default choice for museums in the U.S.¹⁰⁴

But the main reason for *not* choosing Meier may have also been less practical. The original was an iconic masterpiece that redefined the High. Meier's arrangement derived from four quadrants with one scooped out to form a quarter-circle atrium. Entry to the museum was gained via a long projecting exterior ramp on the diagonal, "a foil" to the tensile quarter-circle interior ramp that formed the building's formal and circulatory center (see Fig. 45). 105 Robert Campbell, who described it in 1984 as "Forms 'exploding' from a drum," called the original "an exquisite, self-contained, intricately formed and crafted white porcelain object on a green lawn."106... It was in his view "a promenade through architectural sculpture that has rarely been surpassed," as well as a generous "civic gesture." 107 Of course, the museum also stood on contested philosophical ground: by its success in execution and reception, it provoked direct questions on the status of the Modern Movement's ideological and pragmatic aspirations at the time. While acknowledging the larger narrative backdrop of that language's disillusion from naïveté to knowing artifice, Robert Maxwell nonetheless called the High "an improved model" in the Modern brand, "offering better functionality along with more seductive body-work."108 It was, Maxwell enthused, "a system of mutually adapted parts working together – the very definition of a mechanism." ¹⁰⁹ The museum likely saw the prospect of choosing Meier for the addition as undesirable from a public relations or museum 'image' perspective: it would tinker with the institution's mythology rather than monumentalizing it, which is ostensibly the general aim of any institution.

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¹⁰⁴ The following year Piano's Nasher Sculpture Center opened across from Larrabee Barne's Dallas Art Museum (2003), and he was since hired for expansions to the Morgan Library (completed 2006), the Los Angeles County Museum of Art (already discussed), the Whitney Museum (unbuilt, case study Chapter Four), and the Art Institute of Chicago (264,000 square feet, completed 2009).

^{105 &}quot;Richard Meier & Partners: the High Museum of Art, Atlanta, Georgia," Architectural Design 54, no. 11-12 (Nov-Dec 1984): 36.

¹⁰⁶ Robert Campbell, "Forms 'exploding' from a drum: High Museum, Atlanta," *Architecture: The ALA Journal* 73, no. 5 (May 1984): 222.

¹⁰⁷ Ibid., 222, 224, 229.

¹⁰⁸ Robert Maxwell, "The High Museum, Atlanta," AA Files 7 (September 1984): 73.

¹⁰⁹ Ibid., 68.

In Meier's context, perhaps the choice of Piano – an "unreconstructed modernist" in Giovannini's eyes - would seem fitting and congruent. Similar to Meier, Piano's work demonstrates a life-long preoccupation with light on minimalist surface diffused, filtered, or incisively admitted, although Piano's fascination is a bit more technical. His addition for the High consisted of boxy masses surfaced with "simple abstract facades in white metal panels" that rise to the roof's edge in continuous ribbons to torque sideways and deflect the sun's rays into diffuse light for the galleries.¹¹⁰ This uniform treatment on a series of volumes creates the "comfortable village scale" that is Piano's aim (Figs. 46-49), but within, Piano "failed to animate" his interiors as Meier had done.¹¹¹ While the 17-foot, loft-like spaces are generous containers for the art inside, Piano's floors were "stacked like pancakes."112 As Giovannini laments, the arrangement "does not develop the spatial complexity... that made Meier's building so porous and light-filled."113 And while its urbanistic benefits are acknowledged, he describes the arrangement of buildings that wall the plaza as "a wagon train of cubes."114 Piano never came close to matching the extraordinary effect of Meier, but his aims appear to have been conscientiously distinct. Benjamin Forgey called it "a friendly handshake - not awfully exciting, but satisfying."115 Whether fully deliberate or not, "the boxy simplicity of Piano's design" complements, rather than competes with Meier's icon.

Meier, for his part, appears to have stoically taken it all in stride and was reported to relish the attention that the addition opening had refocused on the original. In a joint interview with *The New York Times*, Meier expressed his pleasure with the choice of Piano and the two shared the memory of sketching on a napkin the point of contact between old and new on the original

¹¹⁰ Giovannini, "Highs and Lows," 95.

¹¹¹ Ibid.

¹¹² Ibid.

¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Benjamin Forgey, "A High Complement: Museum Wings Fit in Fine," The Washington Post, November 20, 2005.

¹¹⁶ Ted Loos, "Lovely Museum. Mind if I Redesign It for You?" New York Times, October 30, 2005.



Fig. 45. High Museum of Art, Atlanta, Georgia. Richard Meier's white temple (1983) viewed from the building's organizing ramp. At left, in the background, is one of Renzo Piano's pavilions (2002 addition).

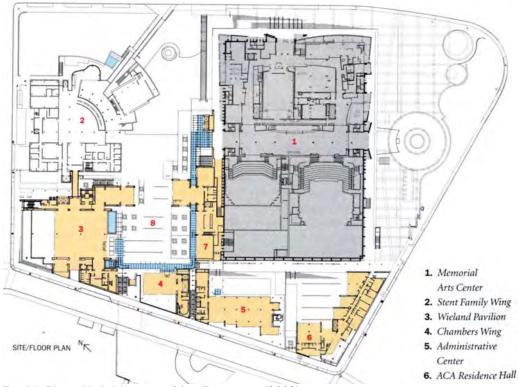


Fig. 46. Plan - High Museum of Art Expansion (2002). The Meier building, now the Stent Family Wing, is (2) upper-left. Piano's pavilions are shown in orange (3-7). The Memorial Arts Center (1) is not part of the museum. The expansion's urbanistic knitting of Meier's building with the Arts Center is highly successful.



Fig. 47. High Museum of Art Expansion (2002). Piano's Chambers Wing at center, with sky bridges connecting to his Wieland Pavilion. The Meier building (Stent Family Wing) is in the foreground, behind a sculpture by Auguste Rodin (other sculpture by Roy Lichtenstein.)

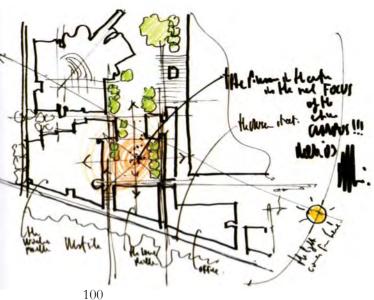


Fig. 48. Section - High Museum of Art Expansion (2002).

Piano's Wieland Pavilion at left, with sky bridges connecting to Meier's 1983 building (right). Sightlines through the bridges continues to Meier's atrium.

Fig. 49. Sketch - High Museum of Art Expansion (2002).

One of Piano's signature sketches, here showing the relationship of a new piazza (in orange) to the new buildings and the Meier building at upper left.



building's west side.¹¹⁷ Cleverly executed, it was a highlight of the intervention, visually connecting one of Piano's new contemporary galleries all the way through the Meier interiors and out to Peachtree Street (see Fig. 48). 118 Piano noted that to be denied the opportunity to add to your own work is "a pity... But from another point of view, it's too emotional." Meier agreed, calling it "perfectly appropriate for one architect to add onto another architect's work. That's the history of architecture, the way it's always been."120

This glib declaration was likely made easier by the fact that Piano's addition is a relatively conservative, deferential series of gestures that operate in part as an honorific. Through his own imprint on existing works, Piano does not endeavor to offer audiences an explicitly critical reading of the past, choosing instead to bestow a threshold of respectful distance and loosely knit old and new together in a comfortable campus disposition. "Cities are made by layers," he avers, and as "good architects are inevitably city planners," his additions are meant to act as catalysts for activity without, as much as to house program within. 121 At the High, Meier's principal role in the overall arrangement is clear, but visitors might be bewildered as to exactly what is being said. Is Meier the focal point, the secular temple in the village? Meanwhile, the original building's intriguing role in the postmodern debate and resurgence of a 'knowing' modernism in the 1980's goes unacknowledged. Maybe some past is too recent.

At the Kimbell, where his addition is not yet complete, Piano may find more success. In the years since Giurgola's failed proposal, the Kimbell has become the centerpiece of a museum complex (Fig. 50). Philip Johnson built an addition to his own 1961 Amon Carter Museum in 2001, and Tadao Ando's new home for the Modern Art Museum of Fort Worth was added across the street

¹¹⁷ The face-to-face meeting was during a lunch with Philip Johnson at the Four Seasons restaurant (designed by Johnson) within the Seagram Building in Manhattan (Benjamin Forgey, "A High Complement: Museum Wings Fit in Fine," The Washington Post, November 20, 2005.) ¹¹⁸ Weathersby, 133.

¹¹⁹ Loos, "Lovely Museum." For a work he would be willing to let Meier expand, Piano lightheartedly suggested the Centre Georges Pompidou in Paris he designed with Richard Rogers (completed 1977) 120 Ibid.

¹²¹ Ibid.



Fig. 50. Plan - Addition to the Kimbell Museum of Art (2012). Fort Worth's museum complex is shown: Philip Johnson's Amon Carter Museum to the far left (1961), Tadao Ando's Modern Art Museum (2002) to the upper right, and the Kimbell in the center. Renzo Piano's proposed addition is shown in grey immediate to the left (west) of the original building (1972).

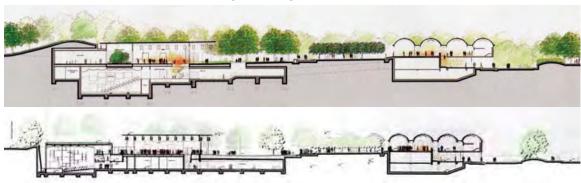


Fig. 51. Sections - Addition to the Kimbell Museum of Art (2012). Renzo Piano's conceptual (top) and revised (bottom) sectional relationship between his addition and Kahn's original 1972 building.



Fig. 52. Facade Model - Addition to the Kimbell Museum of Art (2012). Renzo Piano's concept for the east elevation of the addition, to face Kahn's primary west entrance across a new court.

from the Kimbell to the northeast (completed 2002). Ando's design is a contemplative arrangement of articulated glass pavilions on a large reflecting pool that is offset to the north of the Kimbell and gives it plenty of space. Piano's new expansion for the Kimbell itself will be set on the other side, 90 feet to the west of Kahn's masterpiece, and set on axis with Kahn's front entry but separated from it by a shallow reflecting pool. An intriguing manipulation of the site's landscape will also allow the addition to keep a lower profile while a specific sequence of spaces can be choreographed in interesting relation to the original (Figs. 51-52). Like an iceberg, the addition will contain much of its square footage underground, while restoring Kahn's intention with the formal entrance to the west. Piano's approach here at the Kimbell, less urbanistic and more directly engaged with the original master through various allusions and pleasing counterpoints, may evince the best outcome of the architect's addition approach. Indeed, as one reviewer declared, "If you're going to worship anybody, why not Kahn?" 122

Addition Ecologies and Non-architecture

The following approach to additions illustrates two strands in a promising, if high-wire campaign to renegotiate mainstream addition paradigms. Two projects are described here, the first notable as a case of existing postwar architecture (of debatable iconicity) that is not protected by historical designation, and the second rather the opposite, a well-known postwar icon situated in a physical context of extraordinary protection. Proposed additions for New York's Fashion Institute of Technology (FIT) and the Smithsonian's Hirshhorn Museum in Washington, D.C. add an additional and intriguing dimension to the current debate over the future of postwar icons and how they may or may not be expanded.

The Fashion Institute of Technology, the country's preeminent fashion design institution, has made its home since 1957 on an urban campus in the center of New York's garment district.

¹²² Nicolai Ouroussoff, "Two Architects Have a Meeting of the Minds at a Texas Museum," New York Times, May 27, 2010. It should also be noted that Piano spent some part of 1965-1970 as an architect in Kahn's office (the balance being spent in the office of ZS Makowski in London.)

Building C, located midblock on 27th and 28th Streets between Seventh and Eighth Avenues, was designed by campus architects de Young, Moscowitz & Rosenberg and completed in 1959. It currently houses classrooms, an auditorium, design studios, and fabrication labs. Despite simple massing, it was a bravura statement for a young institution, with a faceted, patinated façade composed of quilted aluminum panels set in a harlequin pattern and regularly interspersed with square window openings in bronze-colored frames (Fig. 53). Nonetheless, as a school with a number of commuter students situated on a cramped city campus site, the community has suffered in recent years from a lack of communal leisure space for students and a central zone of student/faculty interaction. A 2009 addition proposal ("C²") by SHoP Architects aims to confront these conditions through what is essentially a thickening of the north façade's existing skin, made possible by Building C's setback from 28th Street (Fig. 54). It is a direct engagement with the original building that subverts the addition as type in itself. This thin-sectioned inhabitable skin, with a multilayered glass and metal façade that nests circulation, review and exhibition spaces and a sky-lit student quad, completely renegotiates the relationship between the building and the street (Figs. 55-56).

Very appropriately for a fashion design school, the design develops the idea of a loom writ large, stitching "form and structure simultaneously." ¹²³ In the scheme, articulated, morphing section-cuts are woven to define spatial complexity and circulation patterns, but at a deeper level the design also allows "structural systems, environmental technologies, and visual permeability" to be "interwoven" into an integral whole (Fig. 57). ¹²⁴ Delicate structural armatures, hung off the building, seem to fold and unfold across the façade defining a linking pattern of merging and bifurcating transparent volumes. In this regard, it can be read as an updating of the aluminum-quilting pattern of the original, poetically expressing the character of the work within and the unity of the allied arts. And as a thickened transparent envelope condition, it necessarily references, frames, and protects the original within.

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¹²³ "C² Building, Fashion Institute of Technology, New York, 2009-: SHoP Architects," *Architectural Design* 79, no. 2 (Mar-April 2009): 48.

¹²⁴ Ibid.



Fig. 53. Building C, Fashion Institute of Technology, New York (1959). de Young Moscowitz & Rosenberg's quilted aluminum panel facade for New York's youthful fashion design school.



Fig. 54. Section - Building C and addition (designed 2005). Original building to left, with 28th Street to the right. A new escalator will maintain the existing building's entrance, and directly connect with a new multistory student lounge. The fresnel system is located on the addition's south-facing elevation at top.



Fig. 55. Rendering - Building C Addition at FIT (designed 2005). The 28th Street facade, with the diamond-patterned original building just behind the addition.

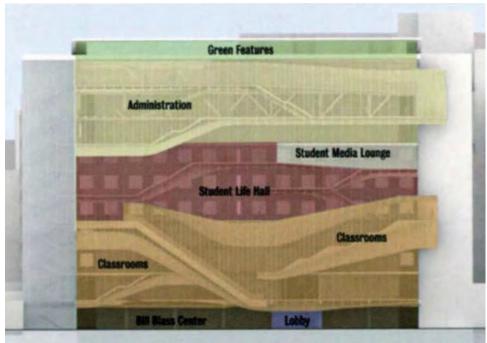


Fig. 56. Diagram - Building C Addition at FIT (designed 2005). 28th Street elevation diagram, showing disposition of program in relation to the interweaving of the various sections.



Fig. 57. Model - Building C and addition (designed 2005). Armatures open and close, stitching circulation and program together as an update to the original building's quilted aluminum facade.



Fig. 58. Rendering - Building C and addition (designed 2005). The new fifth-floor student lounge within SHoP's addition, with the existing building to left and the fresnel photovoltaic system visible at upper-right.

The addition is also explicitly performative: the south-facing façade, which peaks above the original building for full exposure, presents an integrated experimental solar curtain-wall system. Responsive Fresnel lenses set on sun-tracking algorithms generate hot water and electricity, at four times the rate of commercially available technology, while also diffusing glare and managing thermal gain. Within the original building, a large-capacity escalator is inserted to connect the original ground-floor lobby with the fifth-floor atrium in the new addition, emerging through an opening in de Young and Moscowitz' exterior façade (see Fig. 54; Fig 58).

The retention of original façade and its presence within the liminal space of the new addition could lapse into shopping mall banality, but SHoP defines a coherence of approach that frames the addition as a moment of opportunistic parasitism that stabilizes into a happy symbiosis. The old continues to honorably perform its original purpose (down to the original entrance circulation) even as it serves to be a framework for the new. It will be an interesting experiment in the phenomenon of additions that stitch themselves to their originals (both literally and figuratively) and change their meanings, invent their own, and create provocative disjuncture. Moreover, the aggressive environmental agenda in the new addition highlights an ecological reading of the addition endeavor. Steward Brand, who has written on the capacity of buildings to learn through time, relates a comment from urban theorist Christopher Alexander that "things that are good have a certain kind of structure... You can't get that structure except dynamically." Here, the solution has not been adaptive reuse with all its preservation platitudes but an alliance forged between old and new to meet the world together. As a design intervention, it is a relatively aggressive treatment for heritage, but for secondary postwar icons and functional buildings of that era it has interesting applications that speak towards a kind of ecological resilience in the dynamic real estate ecosystem.

¹²⁵ Ibid.

¹²⁶ Stewart Brand, How Buildings Learn, 21.

The second project in this renegotiation is Diller Scofidio + Renfro's addition proposal for the Hirshhorn Museum, a Smithsonian outpost for modern art and sculpture fronting the National Mall. Here, a highly restrictive alteration and addition policy for the National Mall engendered a rethinking of the addition into something temporary, deployable, and almost nonmaterial (Figs. 59-60). The Hirshhorn itself, completed in 1974, owed its namesake to Joseph H. Hirshhorn, the assertive donor of its collection who also handpicked the architect, SOM's Gordon Bunshaft. The museum, purpose-built for modern and contemporary art, adopted its high-contrast role on the Mall with evident seriousness and a bleakly somber expressionist massivity. On the subject of its architecture, Ben Forgey could only observe that it was "indisputably and emphatically there." 127 The building was, as he described, "an almost totally windowless cylinder hollowed out like a doughnut at the center" perched upon four streamlined concrete legs (Figs. 61-62).¹²⁸ The scale of the hollow was such that, Forgey noted, the Guggenheim's spiral would fit into it. 129 The question was whether Bunshaft had fallen over the edge from monumentality to oppression. New York Times architecture critic Ada Louise Huxtable likened the design to a World War II artillery bunker and condemned it as "born-dead, neopenitentiary modern" and a failure. 130 The extreme austerity was carried through the design for a rather uninviting reflecting pool, located in the center of the doughnut, while a 1.3-acre, two-level Sculpture Garden was eventually sited immediately to the north.¹³¹ However, despite the single-minded intensity of the formidable exterior, designed in what Deyan Sudjic called the architect's "aesthetic of swaggering restraint," the building's inside was, as both Huxtable and Forgey

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¹²⁷ Benjamin Forgey, "An Auspicious Beginning: the New Hirshhorn Museum," *Art News* 73, no. 8 (October 1974): 40.

¹²⁸ Ibid., 41.

¹²⁹ Ibid., 41.

¹³⁰ Ada Louise Huxtable, "The Windowless Bulk of the Hirshhorn," New York Times, October 6, 1974. Huxtable wrote that Bunshaft, "not guilty of excessive humility or false modesty," "has fought the Capital and the... Brontosaurian marble boneyard [of the Mall] to a draw and, alas, nobody wins." She also refers to the sculpture garden, "so lacking in grace," and asks if, since Mr. Bunshaft is "a known aficionado of 20thcentury art, ...must each man kill the thing he loves? If architecture is the weapon, something is very wrong indeed..."

¹³¹ Amid heated controversy Bunshaft was forced to abandon his initial concept for the Sculpture Garden, an elongated sunken rectangle that crossed the entire width of the Mall.

noted, "A pleasant surprise." The rationale in the circular, hollowed massing was a continuous loop of gallery space on each floor, lit with daylight filtered through deep-set windows encircling the central void. Three floors of galleries in the superstructure were joined by a lower level, temporary exhibition space and the sculpture garden to offer a protected container for art. Despite the overwhelmingly negative response to its outward identity, Forgey found the building to "perform its main task [exhibition] very well." Nonetheless, its ponderousness and siting on the National Mall made the museum a stolidly adequate place for the exhibition of midcentury art. Few would mistake it for a hotbed of some contemporary art scene.

Against this backdrop of Bunshaft's stultifying monumentality, the current director envisioned a resituated museum – one that directly engaged contemporary art production and critique through dialogues with new partners and artists. Diller Scofidio + Renfro (DS+R), hired to conceptualize the idea, proposed a conversational tent of sorts: a 145-foot-tall temporary inflatable bubble that would balloon through the top of the building and create interior programmable space within the large underutilized courtyard (Figs. 63-64). Envisioned as a postmodern play on the democratic allusions of a dome, the \$5 million structure aims to dispel the cool remoteness of the void and turn the symbolic center of the Hirshhorn into an engaging programmable public space. 134 It also conspires to fill in the sizeable void where the Hirshhorn's sense of humor might have been. Most importantly, however, the bubble is not subject to approval by the National Capital Planning Commission because it is a temporary construction. (Because of unrelieved crowding on the Mall, it is highly unlikely a permanent addition would ever be approved, no matter its design.) DS+R's approach is a sly, deceptively sophisticated gesture, an 'event-space' in the current parlance that –

¹³² Forgery, "An Auspicious Beginning: the New Hirshhorn," 42; Sudjic, 279.

¹³³ Forgey, "An Auspicious Beginning: the New Hirshhorn," 42.

¹³⁴ Director Richard Koshalek "would prefer that the public think of the structure as a dome. The dome is not a perfect dome. It is a metaphor for 'Sleeping Muse' by Constantin Brancusi" he said, referring to the Romanian artist's bronze sculpture of a head lying on its side. You know, you are not a distinguished institution unless you have a dome, like the U.S. Capitol, the Jefferson Memorial, St. Peter's in Rome." (Koshalek quoted in Jacqueline Trescott, "Hirshhorn Invests in an Inflationary Measure," *The Washington Post*, December 16, 2009.)



Fig. 59. Photomontage - Hirshhorn Museum and addition (designed 2009). The south elevation of Gordon Bunshaft's 1974 Hirshhorn, with Diller Scofidio + Renfro's inflatable event space emerging.

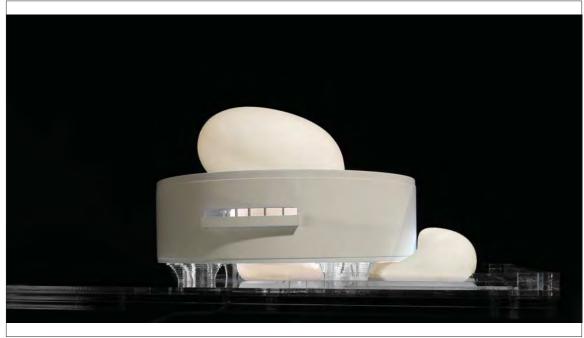


Fig. 60. Model - Hirshhorn Museum and addition (designed 2009). Diller Scofidio + Renfro's proposal, which looks something like an exuberant herniated disk. It has been described as an "imperfect dome" and a metaphor for Constantin Brancusi's "Sleeping Muse."

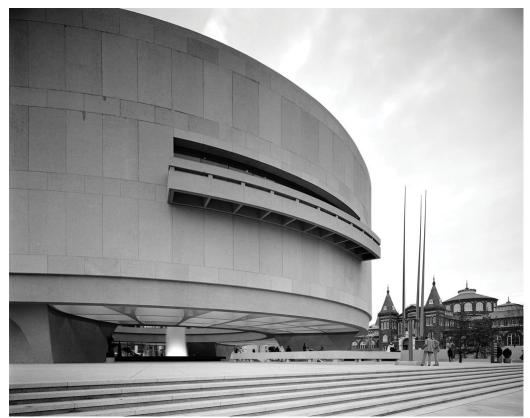


Fig. 61. Hirshhorn Museum, Smithsonian Institution, Washington, D.C. (1974). Ada Louise Huxtable described Bunshaft's somber doughnut as a "neopenitentiary modern failure."



Fig. 62. Hirshhorn Museum (1974). Bunshaft's original plans included a reflecting pool that would stretch across the National Mall. This was revised to a more modest sculpture garden.

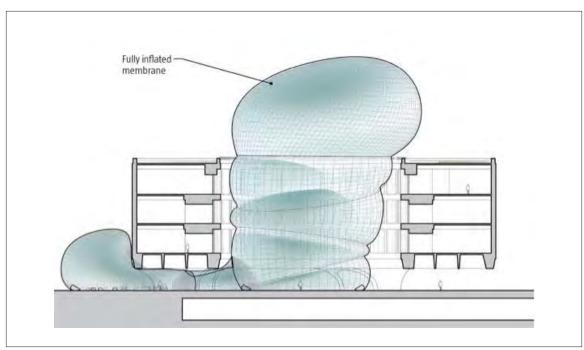


Fig. 63. Section - Hirshhorn Museum addition (designed 2009). Diller Scofidio + Renfro's inflated membrane has a compound, articulated surface formed by a constricting series of cable rings. Rather than the typical strategy of roofing over courtyards, the 'Bubble' produces a soft building inside a hard one.

An ephemeral structure, it is erected twice a year in the spring and fall.



Fig. 64. Rendering - Hirshhorn Museum addition (designed 2009). The membrane will create a "conversational tent," interior programmable space within Bunshaft's underutilized courtyard.



Fig. 65. Hirshhorn Museum (1974). The legs of the hollowed-out cylinder were intended to make the building appear to perch. Continuous loops of gallery space look into the courtyard from above.



Fig. 66. Photomontage - Hirshhorn Museum and addition (designed 2009). The 'Bubble' distends out from beyond the bounds the original building, creating a semi-conditioned cafe space and entrance.

made of sturdy semitransparent vinyl with a blue tint – is all space and no structure. As one critic notes, the design is an "appealingly anti-monumental" offering that by its nature recalls earlier hypothetical experiments by Archigram and other 1960's avant-garde anti-heroic movements.¹³⁵

Perhaps the precise massing as it is shown in models – a distended Bibendum with a secondary bubble emerging from underneath – lacks something in proportion, but when the project is conceived as irreverent anti-matter that may be beside the point. 136 As an addition approach, DS+R's scheme deftly sidesteps many of the concerns over aura-theft, architectural legibility of building history, or the contested juxtaposition of modernist and neomodernist language and philosophy. After all, this is a firm that cut its 'postwar revision' teeth on the design of a restaurant (Brasserie, completed 2000) in the windowless basement of Mies van der Rohe's Seagram Building, a location they referred to as "a site of the Miesian unconscious." 137 The firm also had the formative experience of renovating and updating New York's Lincoln Center (see Chapter 6.) The Hirshhorn proposal takes orthodox modernism's monumental aspirations and wryly engages them, offering a lighthearted critique that at the same time does the original no disrespect, happy to let Bunshaft be Bunshaft while maybe giving him a friendly ribbing. There is also the neat parallel in the relationship that expressionist works of the postwar era built upon avant-garde concepts of the 1910's. Diller and Scofidio have in some sense rehabilitated and appropriated Archigram's 1969-1970 "Instant City" imagery forty years later. Instant City was a mobile technological event wherein blimps and balloons would drift into drab towns with provisional performance spaces in tow, deployed to instigate public engagement and the actualizing of mass culture. At the Hirshhorn, Diller and Scofidio have parked the airship and event space inside the stuffy museum itself as a single unit. And like Instant City, we can expect that their bubble will eventually move on, its job complete. This approach succeeds

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¹³⁵ Christopher Hawthorne, "Urban Reflections: A New Wave of Museum Building is Founded on what a Facility Means to Its City," *Los Angeles Times*, September 19, 2010.

¹³⁶ Bibendum is the proper name for the Michelin Man, and is a term used by the designers (Charles Renfro, "Diller Scofidio + Renfro: Current Work," Lecture at the Architectural League, New York City, New York, November 22, 2010.)

¹³⁷ Elizabeth Diller, quoted in an interview with Deane Simpson, in Diller + Scofidio (+ Renfro), *The Ciliary Function: Works and Projects 1979-2007*, ed. Guido Incerti et. al. (Milan: Skira Editore, 2007), 54.

mostly through the extraordinary counterpoint in the relationship of old to new, and the extreme anti-monumentality of DS+R's bubble requires an equally weighty foil (Figs. 65-66). As such, it is likely to be an approach that is exclusively appropriate to only the most sculptural, simplified expressionist works, a non-architecture for only the most somberly serious architecture.

Case Study Framework

This chapter has introduced a broad range of architectural responses in the making of additions to postwar icons. At the very least, the issues and ambiguities confronted expose the unique nature of the endeavor, a condition attributable to both the postmodern era and its complicated relationship with the postwar modernism that immediately preceded it. As Michael Sorkin rhetorically demanded in 1992, "Is anything more vexed than adjacency in culture nowadays? Adjudications of the juxtaposable," he wrote, "or what goes with what, comprise the main artistic activity of postmodernity." The aim in choosing case studies for a more detailed analysis of these issues was to find an acceptable diversity in idiom and program while optimally keeping a tight chronological window. Projects like the High Museum have been mentioned here for the purposes of illustrating the problem, but as originals, they are too recent for a systematic case study approach. The goal was also to find case studies where the additions are perceived to have been relatively successful or at least complex; outright failures, while instructive, have much less nuance and are ultimately not as helpful.

The three case studies, whose originals date from 1963 to 1969, just six years, are Marcel Breuer's 1966 Whitney Museum of American Art and its series of unbuilt addition proposals, Paul Rudolph's 1963 Yale Art and Architecture Building and its 2008 addition by Gwathmey Siegel & Associates, and Diller Scofidio + Renfro's 2009 alteration and addition to Pietro Belluschi's 1969 Alice Tully Hall and Juilliard Building, as part of DS+R's larger renovation of Lincoln Center. These

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¹³⁸ Sorkin, "Forms of Attachment," 91.

icons and their additions illustrate a sound range of modernisms and contemporary idioms, with Belluschi's Juilliard as the most orthodox modern of the three (despite the classicizing language at Lincoln Center overall.) The three "original" architects occupy complicated ground in historical discourse today; in the traditional histories, none was viewed as one of the postwar period's foremost visionaries, like Saarinen or Kahn, but revisionist histories are resituating these figures. Breuer, celebrated for his youthful creative outpourings at the Bauhaus and teaching career with Gropius at Harvard, was not widely recognized for his later work. Belluschi was a talented architect with an enigmatic career who is typically relegated to a second tier of his generation.¹³⁹ Similarly, Rudolph's idiosyncratic work has long engendered mixed feelings (further complicated by his role as an educator), but his reputation is currently on the rise, subject to enthusiastic rehabilitation in the current rewriting of midcentury narratives. The building at Yale exemplifies the architect's highly personal synthesis of a Wrightian spatial disposition and brutalist expressionism. And Breuer's design for the Whitney – probably his best-known work in the U.S. – was a loosely expressionist struggle, reaching for something beyond the architect's own earlier Bauhaus-trained modernism. In its more primitivist object-like nature, the Whitney also shares something in common with Bunshaft's Hirshhorn. Diller Scofidio's refined work at Lincoln Center has been well received but also provokes some deep philosophical questions, while Gwathmey's addendum to his teacher's masterwork has been met with mixed response. The mostly-flawed series of addition proposals for the Whitney, meanwhile, have covered not only every major architectural trend since the late 1970's but a broad diversity of approaches to addition making as well.

The challenge with utilizing case studies as a means to larger conclusions is that critique, especially in the case of additions, is (as has been suggested) most often specific, provisional, and

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¹³⁹ In the public's view this may have something to do with the dubious reputation of Belluschi's Pan-Am building, adjacent to Grand Central Terminal in New York, designed with Walter Gropius and almost universally disliked for its drastic transformation of the skyline and viewshed down Park Avenue, and its domineering treatment of the beloved Beaux-Arts train terminal.

contingent. Every original is different. Postmodernity tells us that context is everything, and that relationships operate on a number of psychological, perceptual, and physical layers. The loose conceptual framework laid out over this and the previous two chapters is intended to offer not a rationalized system for additions "rating" but a holistic means of viewing, reading, and comprehending the complex architectural relationships between postwar icons and their subsequent evolutions. As a particular mode of creative production, additions are neither typological nor ruledriven, but at the same time, it is important to recognize the range of critical factors introduced so far that come to bear on additions to icons of the postwar era. More generally, there is Paul Byard's model of expressive identities, successive intelligences, and protected meanings. There are the psychological, philosophical, and formal disjunctions between postwar and contemporary practice, and the diversity of 'modernisms' that each permit varying treatments. There is the degree to which designers endeavor to create one indivisible building versus a campus, or the restless quest by institutions of the contemporary era for popular icons – a mode of behavior that ostensibly began in the postwar years of the originals but has equally transformed the way these institutions approach additions. In his discussion of the Salk Institute, Tom Spector introduces the implicit pluralism of aesthetic value, as well as its incommensurability with historicist and functional values. The heated debate over various additions, as has been shown in this chapter, consistently conflates the aesthetic value of the thing with historicist values concerning what was or was not its author's intent. While not mutually exclusive, they are manifestly distinct. In turn, historicist values have often been allied with functional concerns in a politically expedient marriage to rationalize motivations that are usually functional, personal, or aggrandizing.

Riegl's 'art-value,' time-dependent and shifting (intrinsically specific as it is to every age and period) helps explain the inherently politicized nature of additions to modernist monuments. The architectural expression of an explicit narrative critique on the recent past appears to be unavoidable. For instance, Piano's work in Atlanta (attractive and pleasant as it is) runs the risk of evaporating into

village-planning platitudes – a post-event production of neutral context for Meier. As the competition for a student center at IIT illustrates, some form of ritual patricide appears to be accepted custom and enlivens the dialogue. But IIT, as Mies' *gesamtkunstwerk*, was never really in peril from Koolhaas, Eisenman, or Hadid. As the Whitney case study shows, there is a difference between the oedipal theatrics and the perceptual domination of thing itself.

There are conservation issues particularly unique to the postwar/contemporary circumstances. Saarinen's Dulles gained a second life through the kind of replication that would have ruined Kahn's Kimbell Museum, while Saarinen's TWA terminal, which may well survive intact for years to come, has been irreparably and fatally deprived of its meaning through a loss of function. In evaluating addition projects fully and adequately, we must charge ourselves with the responsibility of examining them in relation to all of these issues. In the end, all good additions successfully 'preserve,' reinforce, and renegotiate a set of fundamental design intentions and relationships in the original work. These are not intentions archeologically excavated from the archives of process drawings, but those found demonstrated in the work itself, and are conscientiously considered in production towards a more enriching whole. It is in confronting the modernism of living memory that this challenge is rendered specific and open to further understanding and clarification.

4. CASE STUDY: THE WHITNEY MUSEUM OF AMERICAN ART

Introduction

The Whitney Museum of American Art is unique among the three case studies – and perhaps many cultural institutions as well – in the remarkable proportion of expansion schemes proposed to those actually built. Using the Whitney in this context, we benefit from the approaches of five different architects for the price of one. At the same time, with unbuilt designs, we are limited to the various media of the architects' representational tools. The Whitney is also exceptional in the social history of our investigation; Michael Graves' first addition scheme, released in May of 1985, was the primary catalyst in raising broad – albeit inchoate – awareness of additions to postwar icons for the first time as a protracted dilemma.¹

Today, at the High Line Park's south end, miles from the Breuer building, the Whitney is constructing a new museum, designed by Renzo Piano and scheduled for completion in 2015. This project, widely praised, both obscures and underscores the fraught history of the museum's abortive expansion campaigns since the opening of its 75th street location, and the ultimate abandonment of that effort.² Over the course of three decades, the Whitney successively employed five different architects (including three Pritzker Prize winners) who, in total, unveiled more than eight different proposals to expand the museum's 1966 Breuer building into the surrounding block. Only Richard Gluckman's extraordinarily modest scheme was ever built. A necessary, achievable, and politically

¹ Graves' hiring at the Whitney predated Gwathmey Siegel's hiring at the Guggenheim, and the release of his first scheme (May 1985) predated theirs by five months (October 1985). Paul Goldberger, "An Appraisal; Architecture: A Design for Guggenheim Tower," *New York Times*, October 10, 1985, Final Edition.

² "Whitney Unveils New Satellite at the High Line," *The Architect's Newspaper*, May 1, 2008, Online Edition < http://archpaper.com/e-board_rev.asp?News_ID=1625 > (accessed November 12, 2009). Nicolai Ouroussoff, "The Whitney's Downtown Sanctuary," *The New York Times*, May 1, 2008.

expedient solution nonetheless inadequate to the museum's needs, it was not the last to be proposed. The long chapter on additions in the Whitney's history ended with the abandonment of Renzo Piano's last proposal in 2005, and the decision to engage him for a new building downtown. Today, the eventual fate of the 1966 building is uncertain.³

The narrative embedded in the chronology of successive unsuccessful campaigns—what the Whitney *did not* build—offers a unique lens on the shifts in discourse and theory in the addition-making endeavor over the past thirty years. This history also touches on some tangential topics, like the development of the Upper East Side Historic District and the power that neighborhood preservation advocacy groups wielded with increasing zeal. These phenomena played a central role in frustrating the museum's ambitions, but in the interest of larger arguments in this thesis they not explored here in-depth. Instead, each architect's approach is examined through the primary modes of investigation laid out in the last two chapters. What are those elements that collectively define the Whitney's aura? How are these recognized – or not – in an addition proposal, and then deployed? How did prevailing theoretic attitudes towards postwar heritage, at these specific moments in recent history, filter into, reflect, or explicitly express themselves in the addition? To what degree might an addition also express, contradict, or reinvent the shifting identity of the museum (self-defined or perceived)? And in the end, what would this mean for the original building when a component in a combined work?

The Institution and the Original – "a brutish imposition" (Illustration pages 1-3)

Understanding the idiosyncratic character of the Whitney as an institution, and Breuer's particular intentions behind the 1966 building, are instrumental in situating the later addition schemes. The 1966 landmark that would come to define the Museum's image – almost as much as

³ The Whitney is prevented from selling the building – at least for the foreseeable future – under the terms of \$131 million gift from board chairman emeritus Leonard Lauder in 2008, the largest donation in the museum's history. The exact terms are not public. (Carol Vogel, "The Whitney Trims Its East Side Holdings," *New York Times*, October 14, 2010)

⁴ Ned Cramer, "The Whitney turns 30," Architecture 85 No. 10 (October 1996): 41.

the Wright building has done for the Guggenheim – was actually the Whitney's third home in 35 years, and it was the conscientious architectural response to a client's demand for an inimitable and unmistakable identity (Fig. 67). When a building is so deliberately crafted to express and extend the personality of the institution it houses, campaigns that deliberately or unintentionally alter that mode of expression in a significant way can prove that much more problematic.

The Whitney's original founder, Gertrude Vanderbilt Whitney (1875-1942), had been a talented American sculptor and uncommonly wealthy benefactor who, starting in 1905, sought to assist fellow Greenwich Village artists through the acquisition, dealing, and exhibition of their work in her Village studio.⁵ Like other institutions that evolved from the vision of a single collector, the Whitney was organized around an idiosyncratic mission: a catholic approach that prioritized patronage of living artists while also promoting the United States' twentieth-century art canon. The Whitney also developed an itinerant attitude toward location, migrating north – first, from in its earliest inception as the Village "Whitney Studio Club" in 1918, to an official opening as a museum in 1931 in clubby rooms on West 8th Street, and then to West 54th Street in 1954, in a new but fusty home facing the sculpture garden of the Museum of Modern Art (MoMA).⁶ The decades of the 40's and 50's were marked by a series of crises for the museum with the death of Gertrude Vanderbilt Whitney followed by unsuccessful negotiations with the Metropolitan Museum for the wholesale donation of her collection (and dissolution of the Whitney), and then the move to a new but maligned home deep in MoMA's shadows.⁷ The Whitney, remarkably resilient, found reinvigoration with the turn of the 1960's when the board of trustees was opened beyond the Whitney family and its

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⁵ Whitney, the eldest daughter of Cornelius Vanderbilt II, married Harry Payne Whitney.

⁶ Nicholas Olsberg, "Breuer's Whitney: An Anniversary Exhibition," in *Breuer's Whitney: Exhibition Catalog*, ed. Nicholas Olsberg (New York: Whitney Museum of American Art, 1996), 5. Sanka Knox, "Whitney Museum Reopening Today," *The New York Times*, October 26, 1954, Final Edition, p. 29. John Canaday and Ada Louise Huxtable, "Art: The Whitney Museum Shows What It Can Do... In the Right Building," *The New York Times*, October 2, 1966, Final Edition, p. 139.

⁷ Robert Gatje reported that the Whitney had little presence in that location, as it was usually assumed to be a MoMA pavilion. Robert F. Gatje/NFRR, Personal Interview, March 9, 2011.

close advisers.⁸ The board, with ambitions to put the Whitney on the same map that included the newly-completed Guggenheim (1959) and then twice-expanded MoMA (1951, 1964), engaged New York architect Marcel Breuer in 1961 to design a new museum on an already-excavated site at the southeast corner of Madison Avenue and 75th Street.⁹ The Whitney would be the first project in Manhattan for Breuer, principally known at that time for the sculptural brutalist aesthetic in his UNESCO headquarters in Paris and IBM laboratory in Nice, along with the revolutionary tubular steel furniture designs of his Bauhaus days.¹⁰

In the commission brief, Breuer, working with principal Hamilton Smith, was confronted with the Whitney's contradictory demands for an "assertive, even 'controversial' presence that would announce the experimentation it sought within; a clear 'definition, even monumentality that was basic to our program'; but also a continued effort to be 'as human as possible,' to reflect the Whitney's tradition of warmth and intimacy" that was the legacy of its years in the Village. In response to its search for identity, wrote Robert Gatje, another of Breuer's principals, "The Whitney was designed to be instantly, almost outrageously, recognizable." The building was conceived as a deliberate antidote to the anonymity of the museum's previous location in MoMA's shadows. In the neighborhood that, pre-WW II, had been a dignified stronghold of townhouses and was, by the postwar period, evenly divided between luxury co-ops and the fashionable art dealers' establishments, Breuer created a striking, assertive presence for the museum, sculpting 'an inverted Babylonian

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⁸ Calvin Trillin, "The Art World: Modern vs. Postmodern," New Yorker, February 17, 1986, 63. Aline B. Louchheim, "Midtown Museum Plan Progressive," The New York Times, May 6, 1949, Final Edition, p. 6. Knox. 1954.

⁹ The pre-excavated property was to be an apartment tower but the project fell through (Ada Louise Huxtable, "Harsh and Handsome: The New Whitney is Superbly Suited for an Art that Thrives on Isolation," *The New York Times,* September 08, 1966, Final Edition, p. 49). Marcel Breuer (1902-1981), one of the principals of the post-war Modernist movement, was a Hungarian-born designer who had studied and taught at the Bauhaus in Dessau in the 1920's before leaving Germany with the rise of the National Socialists. Like colleagues Walter Gropius, Ludwig Mies van der Rohe, Josef Albers and László Moholy-Nagy, he eventually immigrated to the United States and enjoyed a successful career in both academe and practice.

¹⁰ Ada Louise Huxtable, "Plans Shown for New Building for Whitney Museum," The New York Times, December 12, 1963, Final Edition, p. 41.

¹¹ Olsberg, 6.

¹² Robert F. Gatje, *Marcel Breuer: A Memoir* (New York: Monacelli Press, 2000): 197; and Robert F. Gatje/NFRR, Personal Interview, March 9, 2011.

ziggurat' with dark granite cladding and pierced by an array of projecting trapezoidal windows (see Fig. 67). It was, to the neighborhood's way of thinking, "a brutish imposition," but nonetheless, it definitively signaled the Whitney's determined arrival.¹³

Maximizing floor area on a small, awkward lot, the steel and concrete composite structure with granite cladding was shaped by progressively stepped cantilevers rising over a sunken sculpture court, itself spanned by a concrete entrance bridge (Figs.68-70). The building was hollowed out at street level, according to Gatje, to "suck you in." Inside, the galleries were spread over four floors of varying ceiling height, with museum administration and a small library on the fifth floor. To accommodate the museum's curatorial mission, Breuer designed the gallery floors to operate like an enormous *Kunsthalle* for changing exhibitions. These spaces were completely flexible, with suspended, open-grid precast concrete ceilings from which movable wall panels and modular lighting hung. According to Ada Louise Huxtable, the building was typical of the post-war trend toward "a completely controlled artificial interior environment made possible by modern architecture and technology." The new Whitney," Huxtable wrote upon its September 1966 opening, "is superbly suited for an art that thrives on isolation," (Figs. 71-72).

Compositionally, however, Breuer's Whitney was complex in its approach to surrounding context, a contested matter with the later additions.¹⁷ Certainly, Breuer's central idea was evident: "that mind and hand, form and matter could work together to make a world of 'concentration."¹⁸ The full-height poured-concrete articulated wing walls, which form the party walls, emphasized the building's architectural independence from its brownstone neighbors. But Breuer was conscientious of context; the operative issue was how, and at what scale. The architect explained that a museum in

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¹³ Cramer, 1996, 41. Gatje recounts that Breuer told him the building was meant to be 'consciously shocking.' (Robert F. Gatje/NFRR, Personal Interview, March 9, 2011.)

¹⁴ Gatje, 197.

¹⁵ Huxtable, 1963.

¹⁶ Huxtable, 1966.

¹⁷ As Robert Gatje noted in my interview with him, "I think it's fair to say that Breuer did not think very much about context, at least in the way the press and postmodern people were using the word to serve their own purposes." (Robert F. Gatje/NFRR, Personal Interview, March 9, 2011.)

¹⁸ Olsberg, 8.

Manhattan "should have identity and weight in the neighborhood of 50-story skyscrapers, of milelong bridges, in the midst of the dynamic jungle of our colorful city. It should be an independent and self-relying unit."¹⁹ Admittedly, the wing-walls evince the building's seeming lack of interest in the neighboring structures.

Moreover, the "self-relying" opacity of the upper floors obscures some very real urbanistic gestures at the levels below. The lower setbacks, which generously open up the street intersection, dematerialize into a continuous plane of glass spanning the first floor and sculpture garden levels.²⁰ The trapezoidal windows – especially Madison Avenue's single oversized cyclopean aperture – were never programmatically relevant; instead, they were designed to lead the eye diagonally down to the street intersection and to frame estranging views of the neighboring buildings.²¹ Tucked against the south wing wall, the beautifully crafted circulation stair, with its dimly lit intimate spaces and tactility of detail, also offered strange and wonderful glimpses of the avenue outside. Climbing or descending was a delightful palliative between successive submersions into the galleries on each floor. As Huxtable rightly noted, the building "has an extraordinary urbanity" (referring to its skillfully handled brutalist aesthetic), that "masquerades as a kind of 'back to structure crudeness." 22 "One of the Whitney's more significant lessons, this time in urban design," Huxtable wrote a month later, "is that the new and different is not necessarily destructive, and the timid and traditional does not necessarily preserve and protect. Done badly, one can be as vicious as the other."23 The Whitney uniquely demonstrates the phenomenon of the postwar icon, achieving what Ross Miller has called "autonomy in context: [the act of being] both apart from and a part of the environment in which it

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¹⁹ Breuer quoted in Paul Goldberger, "Marcel Breuer, 79, Dies: Architect and Designer," *The New York Times*, July 2, 1981, Final Edition, p. A1.

²⁰ Gatje describes a forgotten critic's portrayal of the building as Marcel Marceau, the French mime, standing inside the lot and pushing to the limit on the upper levels, then backing away below and welcoming people across the moat. (Robert F. Gatje/NFRR, Personal Interview, March 9, 2011.)

²¹ Gatje also confirms that Breuer "loved the trapezoid." (Ibid.)

²² Huxtable, 1966.

²³Canaday and Huxtable, "Art: The Whitney Museum Shows What It Can Do," 1966.

exists."²⁴ This was fundamentally misunderstood in at least one of the subsequent addition debates, where proponents' rhetoric centered on the need to civilize a past era's fossil openly hostile to the city and its inhabitants.

At the building's opening, critical and professional response towards it was thoughtfully positive. Huxtable and others made nuanced (if unavoidable) comparisons with Wright's Guggenheim, the other newly completed museum eleven blocks away. Both were "in the current mode of architecture for sculpture's sake," but in this comparison, as Huxtable continued, the Whitney fared better:

In a sense, the [Breuer] building is its own exhibit. But unlike the Guggenheim, it is not the whole show. The new Whitney uses the strict, understated fulfillment of a functional program as the basis for a serious and successful work of architecture... The Guggenheim is an *objet d'art*, inside and out, with its staff battling endlessly to make it a workable museum, while the Whitney is a workable museum raised to the level of architectural art.²⁵

Like the initial response to the Guggenheim, whose 'inverted ziggurat' gene Breuer's design shared, public praise for the Whitney was far from unanimous. Huxtable herself admitted that the Whitney's "stark and sometimes unsettling structure may be less than pretty" and "the taste for its disconcertingly top-heavy, inverted pyramidal mass grows on one slowly, like a taste for olives or warm beer. It has a constant complement of sidewalk critics." She reported that despite her own admiration, it was likely to be "the most disliked building in New York." However, despite the outrage and disparagement, the opening exhibition, "Art of the United States: 1670-1966," was critically acclaimed and well attended, and the institution was quickly and happily established in its new home. For his design of the museum, Breuer won the 1968 Bard Award for Excellence in Architecture and Urban Design, and a 1970 Honor Award from the AIA Journal. Conspicuously,

²⁴ Ross Miller, "Commentary: Adding to Icons," Progressive Architecture 71, no. 6 (June 1990): 125.

²⁵ Huxtable, 1966. Canaday and Huxtable, 1966.

²⁶Huxtable, 1966.

²⁷ Huxtable, quoted in Olsberg, 9.

²⁸Canaday and Huxtable, 1966.

the Bard committee cited the Breuer design as "a distinct personal statement that strengthens rather than destroys its neighborhood."²⁹

Expansions

A curiously prescient article, "Evaluation: The Whitney Suffers from Success," ran in the September 1978 issue of the AIA Journal, remarking on the explosion in museum-going crowds that had taken place in the intervening years. The Breuer building, with its roughly 30,000 square feet of gallery space distributed over four main levels on a 13,000 square foot lot - believed to function perfectly for about 1,000 visitors per day – was straining to accommodate the 3,000 to 5,000 who were visiting on the museum's busier days.³⁰ As Breuer's conception of a Kunsthalle, the building severely limited the display of artworks from a permanent collection that, by 1986, would number ten thousand objects.³¹ From 1968 to 1978 (the year of the article), the Whitney's board had been quietly acquiring the rest of the museum's blockfront south to West 74th Street—five 1870's brownstones both to guard against unsympathetic development in the future and as a potential expansion option for itself. 32 (The Upper East Side Historic District, which would ultimately defend the southern four of these five brownstones as "contributing buildings," would not be created until 1981, and the four not designated until later.) Breuer, who had publically denied any consideration towards expansion flexibility in his building, had in fact designed otherwise, undoubtedly at the board's behest. The circulation core was placed on the site's perimeter, against the Madison Avenue wing-wall, and knockout panels for each floor were installed in the wing-wall between the elevators and the stairs as rational means of expansion.33

²⁹ "Whitney Museum Wins Bard Prize," The New York Times, April 26, 1968, Final Edition, p. 39.

³⁰ B.P. Spring, "Evaluation: the Whitney Suffers from Success," AIA Journal 67, No. 11 (Sept 1978): 43.

³¹ Trillin 1986, 65.

³² Ada Louise Huxtable, "Architecture: 'Bigger—And Maybe Better," *The New York Times,* August 26, 1979, Final Edition, p. 83.

³³Joseph Giovannini, "A Grave Situation for Marcel Breuer's Whitney," *Art Forum* 24 no. 3 (March 1985): 86. Robert Gatje essentially confirmed this notion in my interview with him. (Interview with Robert F. Gatje,

High-Tech Tower

The Whitney's first expansion proposal came out of the late 1970's climate of corporate museum culture, and this had direct architectural consequences. In 1978, the Whitney, encouraged by a museum-condominium model being attempted by the Museum of Modern Art and enabled by the legal precedent it would set, offered a consortium of Italian developers an option for a mixed-use and luxury apartment tower that would permit extension of the galleries into its lower floors.³⁴ The development consortium hired British firms Norman Foster Associates and Derek Walker Associates to prepare a speculative proposal.³⁵ The developers included an item in the brief for 50,000 square feet of gallery space in the tower for the museum.³⁶

Foster and Walker's scheme, belonging to the early phase of the High-Tech movement that Foster would lead with Richard Rogers and Nicholas Grimshaw, sought to create very different kind of space from its neighbor, one that "would be transparent, acting as a shop window to excite the curiosity of passers-by." Foster's own initial sketches demonstrate his struggle with the task, and somewhat unsatisfying results. The final design, notably Foster's first skyscraper project, offered a structural and compositional contrast between the glazed five-story base linked to Whitney and the thirty-five to forty-story tower above (Figs. 73-74). The design team, "anxious to avoid the conventional tower and podium solution," had eventually settled on a large triangulated structure that acted as rigid base for the tower. For the tower, Foster proposed a cladding system of interchangeable metal and glass panels that reflected the frame just within, pioneering a closer relationship between skin and structure that would become a recognizable trademark in his work. At

³⁴ Huxtable, 1979. This development model, which MoMA's legal counsel developed in virtual collusion with the mayor's office, consisted of MoMA transferring its air rights to a non-profit cultural trust and participating in the development of a revenue-producing high-rise — made possible with the re-grifted air.

participating in the development of a revenue-producing high-rise – made possible with the re-gifted air rights. The museum could expand sideways into the tower while nominally preserving its outward identity, and an intricate tax-exemption scheme redirected tax monies back to a non-profit development trust. See Victoria Newhouse, *Towards a New Art Museum* (New York: Monacelli Press, 1998), 154.

³⁵ The two developers on the team were Sviluppo Tecnica and SGI/Sogene.

³⁶ David Jenkins, Norman Foster: Works 2 (New York: Prestel USA, 2006): 167.

³⁷ Ibid., 167.

³⁸ Ibid., 169.

street level, "the building became completely transparent. New gallery levels rose to the height of the existing museum, overlooking a tall triangular-sectioned atrium filled with sculpture and greenery." Rather than enclosing the galleries, Foster arranged partitions on open floor plates visible from the street. He nonetheless retained the alignment of progressive cantilevers and even rendered the same modular ceiling grid for his own gallery ceilings (Fig. 161). When financial analysis revealed that Madison Avenue's height restrictions made the mix of facilities and programs unprofitable, the project was quietly dropped. The scheme was eventually leaked to the press (and immediately disavowed by the Whitney); Huxtable recalled the recently opened Pompidou Center, calling the design "a startling, vertical Beaubourg on Madison Avenue."

The proposal had mixed merits. Through conscious contrasting of Breuer's dour opacity with articulated transparency, the design acknowledged the sanctity of the Whitney's self-contained shrine while offering an alternative gallery model. Foster remarked later that the design team "was interested in revealing public glimpses into the new galleries—the opposite of the closed form of Breuer's museum. This approach," according to Foster, "also respected the identity of the neighboring building." Breuer's building, with its aggressive strength of sculptural form, would stand resolute against the tower whose scale was not so out of place on Madison (a block from the similarly sized Carlyle) and was offset by the lightness of Foster's detailing. The overall visual effect, underscored by the fact that the Whitney did not commission it directly, is that the proposal left Breuer to be Breuer. It was not an addition in the way we might use the word, but rather like a neighbor who had made space available to the museum (albeit at the museum's own directive and

³⁹ Ibid

⁴⁰ Hugh Pearman, "The Whitney Museum repulses Norman Foster's first assault on New York," Gabion: Retained Writing on Architecture, http://www.hughpearman.com/vaults/whitney.html (accessed November 30, 2009).

⁴¹ Huxtable, 1979. However, in Foster's portfolio it would not have been all that revolutionary: critic Deyan Sudjic later wrote that the project "bears an uncanny relationship to the bland tower he built for the Hong Kong and Shanghai bank at Canary Wharf [2002], rather than his bravura first project" for the bank in Hong Kong (1986). (Deyan Sudjic, "The Whitney Museum: Self Confidence is needed to cure the elephantiasis of the museum world," *The Art Newspaper* No. 149 (July-August 2004), 22.)

⁴² Jenkins, 170.

financial benefit.) The conversation extends little beyond the strong contrast in transparency and the reverse rake of the glass base against Breuer's cantilever. Of course, it arguably left the museum's identity – through entrance, circulation, and image – intact, and the mimicking of floorplates and ceilings grids is intended to be deferential.⁴³ Foster and Walker's design would have also required the demolition of the 19th-century brownstones (a key issue with later proposals) but at that time, it would have been politically feasible.

However, one cannot help feeling a twinge of architectural disingenuousness in this type of expansion, and time did not treat kindly the phenomenon of museums overtly wedded to speculative and commercial interests. Victoria Newhouse wrote that Cesar Pelli's condo tower addition to MoMA, with all the grace of a shopping mall, "impoverished the museum's architecture and contradicted standards it had championed since its founding." Ada Louise Huxtable, who had called the MoMA project "a dubious undertaking," and "bad news," fairly asked if the public were meant to judge these "speculative-aesthetic capers" on the basis of "architecture, urbanism, or museology?" On the basis of "architecture, urbanism, or museology?"

"Post-modern panoply"

Michael Graves' design (first released in May of 1985 and subsequently revised in 1987 and again in 1988) – and the rancorous debate it instigated – represented a watershed moment, not merely in the tiresome battles of stylistic legitimacy but over the much more serious and uncertain fate of landmarks from the postwar era. Graves' three proposals were also symptomatic of identity confusion for an overreaching Whitney that had neglected some hard self-examination. The Graves addition schemes, their reception, and the issues they laid bare would color all subsequent expansion schemes to the museum. There is a larger legacy as well: the specific circumstances of presentation

⁴³ This visual and programmatic relationship is surreally prescient of the Whitney's 1982 opening of a branch museum in the Phillip Morris (later, Altria) building, an International Style-influenced skyscraper across from Grand Central Terminal designed by Ulrich Franzen.

⁴⁴ Newhouse, Towards a New Museum, 154.

⁴⁵ Huxtable, 1980.

and response did much to fragment and confuse the debate over the dilemma of additions to postwar icons even as they brought attention to it.

Marcel Breuer, the last major survivor of the Bauhaus generation, died in July 1981. Three months later the museum announced that it had commissioned an addition from Post-Modernist proselyte Michael Graves. Hired when appreciation for Modernism's legacy was at its lowest ebb, Graves was asked to design a single-use museum extension, with the possibility of commercial space at ground level, that would take up the rest of the blockfront to 74th street. The first design was released in May of 1985 and immediately provoked severe consternation not only for its overall bulk but also – particularly in architectural circles – over its seemingly heartless treatment of the Breuer building (Fig. 76). The \$37.5 million addition, which would add 134,000 square feet to the existing building's 83,500, consisted of four principal parts: a blocky mass on the southern half of the blockfront that was presumably meant to balance Breuer's Whitney and abstractly recall the five (to-be-demolished) brownstones and Breuer windows in its detailing; a semicircular, progressively-stepped, silo-like "hinge" that mediated between the two counterbalanced masses on the street; a multilevel podium with a segmental arched window reaching across its face; and a vast colonnaded temple slung across the top the podium, reaching a height of 188 feet. Raves, known for his "painterly penchant," likened the role of his central cylinder to the hinge of a Piero della Francesca

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⁴⁶ Grace Glueck, "Graves Named to Design Addition to the Whitney," *The New York Times*, October 18, 1981, Final Edition, p. 69. Graves, who had first emerged into notoriety as one of the "Whites," (versus the "Grey's") was only recently known "for his return to the classical, humanist language of architecture and highly personal adaptation of classical elements." Kenneth Frampton notes the 1970's emergence of the Five, "a loose-knit association of New York-based architects under the leadership of Peter Eisenman." Eisenman and John Hedjuk "grounded their work in extreme avant-gardist aesthetic practice... [taking] the work of Giuseppe Terragni and Theo van Doesburg as their respective paradigms... The remaining three, Michael Graves, Charles Gwathmey and Richard Meier, assumed the Purist villas of Le Corbusier as their point of departure... Graves left behind the Neo-Purism of his early work in favor of a more decorative Post-Modernist approach." Kenneth Frampton, *Modern Architecture: a Critical History* (New York: Thames and Hudson, 1985), 299.

⁴⁷ Giovannini, 86.

⁴⁸ Writes Frampton, "In Post-Modern architecture classical and vernacular quotations tend to interpenetrate each other disconcertingly. Invariably rendered as unfocussed images, they easily disintegrate and mix with other more abstract, usually cubistic forms, for which the architect has no more respect than for his extremely arbitrary historical allusions." (Frampton, *Modern Architecture: a Critical History*, 307)

diptych.⁴⁹ Perhaps the implicit presumption was that this hinge would also differentiate the sacred from the profane.

Effect and Response

The fate of Breuer's stair, deprived of views, purpose, and rendered trivial by Graves' hinge, was a metaphor for the fate of the whole building, assailed from above, inside and out. Graves' symmetry and neoclassical ornamentation negated Breuer's asymmetry and heroically rugged expressionism, reducing the building to one of several elements like a pile of toy blocks, trivializing it with an equal but inferior bulk to the south.⁵⁰ The addition of a huge mass atop the old building and the stepped hinge beside it completely shattered the power of Breuer's cantilever, pressing on it from above while perceptually shouldering its weight from below. Apart from raw space, the temple and cylinder had very little programmatic justification, serving instead as formal façade maneuvers. Other important aspects of the interior were transformed, and Grave's enclosed, classically inspired galleries "did not relate well to Breuer's open spaces."⁵¹

The traditionally collegial atmosphere of professional practice in Manhattan was deeply shaken. While a number of Breuer's friends and fellow architects were alarmed, honest feelings were kept to informal channels for several weeks after the unveiling. That year's winner of the AIA New York Chapter Medal of Honor, Abraham Geller, used his acceptance speech at the June awards reception to break the silence and publicly denounce the Graves proposal, stating that

The myopia of brilliant minds has never been more apparent that in the proposal for the Whitney addition.... [The trustees have chosen an architect] whose stated philosophy is the antithesis of the philosophy of the museum's originator, Marcel Breuer. The Whitney states that it has the foremost collection of modern American art in the world today. One is prompted to ask, then, how it justifies a building addition which features applied classical forms? ... To put it succinctly, the Breuer building is being literally crushed. It is being subjugated to an assemblage of many diverse and unrelated blocks. My plea is – give the Breuer building air to breathe and exist, both on the side and on the top—don't smother it[!]

⁴⁹ "Growing Pains," Metropolis May 1987, 22.

⁵⁰ Paul Spencer Byard, *The Architecture of Additions: Design and Regulation* (New York: Norton, 1998), 151.

⁵¹ Newhouse, Towards a New Museum, 162.

The audience greeted his remarks with an enthusiastic ovation.⁵²

In the months following, Geller amassed signatures for a petition to the Whitney board while Philip Johnson and Vincent Scully voiced support for Graves. On July 25, the New York Chapter of the AIA sponsored a presentation and public discussion of the Graves proposal. An extraordinary event, it was the first step into a semipublic realm of debate "and proved an especially awkward forum," as a 1986 Art Forum article noted. "The addition puts the architectural community in the uncomfortable position of having to weigh the work of an eminent colleague against the interests of a building done by a dead master." Graves, who regarded the gathering as a "tar and feather affair," according to one reporter, began the standing-room only event by presenting the design and quoting art history with slides "like passages from the Bible." The architect explained his rationale for the hinge and uniting the old and new components, seeking to make it "one Whitney, one institution." Philip Johnson, Ulrich Franzen, and Vincent Scully were among those who "delivered passionate defenses of Graves's design in the presence of the building's most vocal opponents, who mainly chose to remain silent."

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Edition, p. C26.

⁵² Enid Nemy, "Architect Castigates Whitney Plan," *The New York Times*, June 21, 1985, Final Edition, p. C15. The presence of this New York Times reporter, as well as Geller's speech, was orchestrated beforehand by the addition's opponents. Using the non-political platform of the AIA Chapter event for such ends would normally have been seen as poor taste at the time, and Geller was reportedly torn over his final decision before ultimately choosing to use the opportunity to denounce the proposal. (Robert F. Gatje, Personal Interview, March 9, 2011.)

⁵³ Giovannini, 86.

⁵⁴ "Commentary: The Whitney design debate," *Progressive Architecture* 66 no. 9 (Sept 1985): 25; Giovannini, 86. ⁵⁵ Douglas C. McGill, "Architects Debate Plan for Whitney Museum," *The New York Times*, July 26, 1985, Final

⁵⁶ Some of Graves' supporters did him more harm than good, according to several media reports, as for example the redoubtable Scully who launched into a lecture of "what seemed party rhetoric," and made the preposterous contention that "the Graves addition finally gives the Breuer building a reason for being (namely to support Graves' superstructure)," before being deflated by a heckler. At another point in the proceedings, Graves was accused by a Cooper Union student of "ignoring poetry" of the Breuer building, which drew loud applause. Paul Goldberger, "For the Whitney, Adding Less May Result in More," *The New York Times*, August 11, 1985, Final Edition, p. H31; *Progressive Architecture* 1985, 25; Giovannini, 86; McGill "Debate" 1985. While undeniably an ally of the postmodernist Greys and Whites, Scully held an unusually unsympathetic position towards Breuer. Gatje attributes it to a personal clash between the two men. Ulrich Franzen's support was a deep surprise to the opponents, as he had been a student and great friend of Breuer's. Gatje attributes his position to influence from the board because of the Whitney-Phillip Morris branch on the ground floor of his midtown office building. Richard Meier, who had worked in Breuer's

By October, Geller had collected signatures from over 600 people including architects, artists, and writers—among them Edward Larrabee Barnes, I. M. Pei, Romaldo Giurgola, John Johansen, Isamu Noguchi, and Arthur Miller—for a petition he submitted to the Whitney board stating that Graves' design "would destroy a world-renowned work of architecture." The petition acknowledged the need to expand, but urged trustees to "develop a strong and important new building that would, at the same time, respect the existing museum." Hamilton Smith, Breuer's junior partner on the project, wrote in a *New York Times* op-ed letter that "rather than see his museum invaded and disfigured as is proposed, Mr. Breuer, I believe, would have strongly preferred to have it completely torn down." Constance Breuer (the architect's widow) believed much the same, writing to the trustees,

I am horrified by the cynical swallowing of the Breuer building, the demeaning of the exterior by pretending it is a quaint design detail, part of an eclectic mass, by gutting its interior... and trivializing an honest building which should be allowed to stand on its own. I wish so much that you would tear down the original building and feel sure that Marcel Breuer would wish so too.⁶⁰

The incredible quantity and severity of critical responses in the media also intimated the degree to which the situation stood for something larger than matters of style or just expansion *per se*.

Reception in the press was varied and colorful; some of it was downright strange.⁶¹ Negative

office, was a noticeable absentee from Graves' bandwagon. (Robert F. Gatje, Personal Interview, March 9, 2011.)

⁵⁷ Douglas McGill, "600 Sign Petition Against Whitney Design," *The New York Times,* October 05, 1985, Final Edition, p. 11.

⁵⁸ McGill "Petition" 1985.

⁵⁹ Hamilton Smith, "Architecture Disserves New York," Op-Ed in *The New York Times*, July 20, 1985, Final Edition, p. 23.

⁶⁰ Constance Breuer, "Would Marcel Breuer Approve of the Whitney Addition?" Op-Ed in *The New York Times*, May 24, 1987, Final Edition, p. H25. Gatje confirms that Breuer likely would have preferred demolition. Breuer's widow, who chose not to join Geller and Gatje's activist activities, engaged I. M. Pei and Edward Larrabee Barnes, as well as other friends, to lobby through more informal channels. (Robert F. Gatje, Personal Interview, March 9, 2011.)

⁶¹ Some critics came out pro, most con, and a few waffled—most notably *New York Times* architecture critic Paul Goldberger, who sabotaged his own favorable reviews of Graves' design (which he deludingly called "daring and sensitive") with the facile suggestion that ultimately, the most appropriate remedy under the circumstances would be a mannerist prank – a limestone Beaux-Arts building would disingenuously appear to predate the Breuer building and have suffered partial demolition for it. *Progressive Architecture* 1985; Paul Goldberger, "A Daring and Sensitive Design," *The New York Times*, May 22, 1985, Final Edition, p. C20; Paul

criticism of the project ran along the same basic lines as Geller's original denunciation, although some colorfully framed the relation of old and new in lethal, oedipal terms. The proposal was, variously, "a collage acropolis [which] seeks to swallow and digest architectural modernism in one great gulp," (Thomas Hine, *Philadelphia Inquirer*), or "a petulant, Oedipal piece of work, an attack on a modernist father by an upstart, intolerant child, blind or callow perhaps, but murderous," (Michael Sorkin, *Village Voice*). The normally staid *Journal of Museum Management* invoked fascist architecture, calling it "curiously reminiscent of Italy in the 1930's." Art Forum insightfully identified the underlying problem in Grave's metaphorical 'diptych,' writing that the formal conceit could almost have worked, "if the temple on top did not strongly evoke a different reference to art history—the image of the seated ruler, often depicted in paintings and sculptures, the royal foot resting on the body of a subjugated enemy." To some, it was indicative of larger forces at work. Hilton Kramer (*The New Criterion*), eviscerated the Whitney's more recent institutional ethos, writing that the design

is hideously inappropriate to the function to which, for the moment anyway, the Whitney still gives lip service: exhibiting works of art. With its sherbet-colored cladding and its cookie-cutter windows, its ornamental cornices and penthouse colonnade, all topped off with one of those preposterous pergolas which serve no other function than to announce to all the world that the whole lugubrious conception is unmistakably Michael Graves's, this design belongs in one of those ballyhoo exhibitions of which the current curatorship of the Whitney is so inordinately proud.⁶⁵

Public hearings (part of the approvals process) gave the neighborhood the opportunity to voice its own concerns. Because of the establishment of the Upper East Side Historic District in 1981, demolition of the brownstones and construction of Graves' expansion would require additional community board and Landmarks Preservation Commission approvals.⁶⁶ The Friends of the Upper

Goldberger, "For the Whitney, Adding Less May Result in More," *The New York Times,* August 11, 1985, Final Edition, p. H31.

⁶² Both are quoted in Trillin, 65.

⁶³ "Additions to the Guggenheim and Whitney Museums," *The International Journal of Museum Management and Curatorship* 5, No. 1 (January 1986): 93.

⁶⁴ Giovannini, 85.

⁶⁵ Hilton Cramer, "The Whitney's new Graves," The New Criterion (September 1985), 2.

⁶⁶ Approvals from the Planning Commission and the Board of Standards and Appeals were required for the necessary zoning variance regardless. At a crowded community board hearing in mid-November 1985, statements of opposition (mostly over scale and size) outnumbered the statements of support at a ratio of 3

East Side Historic District, a zealous advocacy non-profit, came out firmly against the expansion as "overwhelming for the character and fabric of the district." The Ad Hoc Committee to Save the Whitney, created by Abe Geller who had originally denounced the expansion, formed a politically expedient coalition with The Friends, as well as the 75th Street Block Association. It is unlikely that the Ad Hoc Committee and the Friends agreed on much beyond the inappropriateness of the Graves design, and for different reasons.

The Whitney trustees were unprepared for the intensity of disfavor, and hastily withdrew the Landmarks Commission application in hopes that passions would cool. The museum, while it began aggregating quantitative data supporting its case, demanded that Graves make alterations to appease certain critics. Sixteen months later, the Whitney unveiled a smaller expansion plan, in March of 1987, which after some controversy received Community Board approval. Nonetheless, the museum's ambitions established a lasting (and current) antagonism between the institution and the well-connected, architecturally conservative neighborhood.

Given the obvious damage the Graves proposal would have caused to the Breuer building's integrity, it is perplexing how arguments could be made in support of the design on *any* basis beyond the generic demand for space. Graves' supporters framed the debate in several misleading and spurious ways, (1) offering MoMA and the Metropolitan Museum as venerable precedents for art museum expansion in New York; (2) positing the problem solely in terms of an anti-progressive, generational or stylistic conflict; (3) averring that Breuer was himself no angel (as if that mattered); and (4) proposing that the Graves scheme was an urbanistic palliative for an uncivilized, anti-

to 1. Additionally, about 40 tenants, some elderly, expressed "shock and horror" over their eviction from the brownstones.

⁶⁷ "Neighbors Criticize Plan to Expand Whitney," *The New York Times,* November 14, 1985, Final Edition, p. C33.

⁶⁸ Trillin, 58.

⁶⁹ Gatje reports that the strongest neighborhood activism came from an interest in saving the brownstones, which the group of architects "didn't care a fig about." (Robert F. Gatje, Personal Interview, March 9, 2011.)

⁷⁰ Ibid., 66. According to Robert Gatje, the Whitney's board really hadn't thought anyone would care so much about the expansion. The negative response would have also found its way into Upper East Side parties and social events, which likely gave board members, facing the prospect of significant fundraising, some anxiety. (Robert F. Gatje, Personal Interview, March 9, 2011.)

humanist Breuer building. As Philip Johnson related to the press multiple times, he had some experience with additions: Johnson had altered Goodwin and Stone's original MoMA and seen Cesar Pelli 'revise' his own work.

Calvert Vaux designed the Metropolitan Museum. Richard Morris Hunt changed it. McKim, Mead and White altered Vaux and Hunt. And Kevin Roche did the glass wing, redid the façade and rebuilt the Hunt steps... We all ruin other people's buildings. I 'ruined' the Museum of Modern Art—not once but twice!—and now Cesar Pelli has 'ruined' my garden there. Breuer [himself, with the Grand Central Tower scheme] tried to ruin Grand Central Terminal.⁷¹

Douglas Davis, Newsweek's architecture critic, wrote in favor of both the Whitney and concurrently debated Gwathmey Siegel Guggenheim expansions in a *Times* 1988 Op-Ed,

Many of us are being stampeded by the notion that the architecture of a museum—most of all, its exterior—is its prime value. Unhampered public access to its interior, collection or exhibitions is secondary to the preservation of the time-honored 'masterpiece.' Museum expansionism is inevitable because people demand it—with their feet... One need only look at an aerial photograph of the august Met to learn that the Met is the quintessential anti-masterpiece... an impure labyrinth of wings-upon-wings-upon-wings.... Here in this liveliest of cities, we seem to have turned against our own relentless vitality.⁷²

In their rhetoric, what Johnson, Davis, and others either overlooked or ignored was a large and fundamental difference. As Victoria Newhouse put it, "whereas the Met had undergone so many changes that it no longer had any particular architectural identity, and MoMA was never perceived as a masterpiece," the Wright and Breuer buildings "were still relatively intact and [were indisputably] modern icons."⁷³ Each building, Breuer's Whitney and Wright's Guggenheim, is ostensibly the principal work in its respective institution's collection.

Framing the dispute as a generational conflict obscured the extent to which Postmodernism was a reactionary movement and not an avant-garde one, even if there was easy irony in iconoclastic modernists trying to protect the work of one of their own. Having taught alongside Gropius at

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⁷¹ Ibid., 66; Charlotte Curtis, "Drawing the Battle Lines," *The New York Times*, July 2, 1985, Final Edition, p. C8. Gatje recalls that Johnson, notoriously political, volunteered at a weekday lunch held at Breuer & Associates after Breuer's death that 'of course, Ham [Hamilton Smith] should have designed the addition – it was outrageous they went elsewhere.' Johnson was reportedly one of Flora Biddle's and the board's advisors who had recommended Graves. (Robert F. Gatje, Personal Interview, March 9, 2011.)

⁷² Douglas Davis, "Museums Need Space to Grow," Op-Ed in *The New York Times*, February 13, 1988, Final Edition, P. 27.

⁷³ Newhouse, Towards a New Museum, 162

Harvard, Breuer was beloved by several generations of American architecture students. The prospect of seeing his most important building "swallowed up by a postmodernist extravaganza turned an aesthetic issue into an emotional one."⁷⁴ But the issue was stewardship, not a style war, even if the stylistic idiom was a conspirator in the disfigurement. "We may not build [in the manner of Breuer's building] today," averred *Progressive Architecture*, "but, so the argument goes, we should respect this piece of a not-so-distant past."⁷⁵

Instead, proponents of the expansion criticized the Breuer building and its designer for poor civic manners, which, they argued, Graves' proposals would somehow remedy. Paul Goldberger wrote that the "essential architectural idea" of the Breuer building "is its own aloofness. It is a kind of Greta Garbo architecture: it wants to be left alone. It is so determinedly anti-urban that it exists in a kind of world of its own, so violently different from everything around it that it could be said to belong in another dimension." Many pointed out that Breuer had not tried to accommodate his building to its neighbors because, as he told a reporter, they weren't any good. Graves' proposal, wrote Vincent Scully in September 1985, endeavors to "fit an iconoclastic original into a traditional urban block." An august body of architects and architectural theorists— Alan Colquhoun, Peter Eisenman, Gwathmey and Seigel, Charles Jencks, Philip Johnson, William Pedersen, Kevin Roche, Ulrich Franzen, Vincent Scully, and Jorge Silvetti—wrote much the same to the Landmarks Preservation Commission in support of the application for the museum's 1987 revised design. Jencks wrote that the brownstones' integrity was already compromised. But the very idea that Graves' blocky pastiche of historical references was an urbanistic panacea for 74th and Madison, more so than the existing historic fabric, was a specious one. As *Times* critic Herbert Muschamp

⁷⁴ Trillin, 59.

⁷⁵ Progressive Architecture 1985.

⁷⁶ Paul Goldberger, "3rd Try on an Expansion Design for the Whitney," *The New York Times*, December 20, 1988, Final Edition, p. C19.

⁷⁷Trillin, 66. "Breuer himself, no boy scout, was quite adamant in disdaining the 'dumpy' look of the brownstones next to the Whitney." (Metropolis 1987, 23.)

⁷⁸ Vincent Scully, "Buildings Without Souls," feature in *The New York Times*, September 08, 1985, Final Edition, p. SM43.

rightly pointed out a decade later, "It is unclear how Graves' design for the Whitney demonstrated greater sympathy for the adjacent townhouses by proposing to tear them down."⁷⁹

The chapter of Graves' additions spanned almost a decade in the Whitney's history, finally expiring in June of 1990 with a shake-up of the museum administration and board of directors. Graves' revised (second) proposal from 1987 offered a top structure reduced to 40% of original size and 47 feet lower, lacking the painfully simplistic "eyebrow" window, and set back on the corners of the rear façade to appease neighborhood groups (Figs. 77-78).80 Despite the overall reduction, total exhibition space had increased slightly.⁸¹ Some minor changes were made to the street façade, and the hinge lost its stepped profile. The new design, meant to appease neighbors concerned with overall bulk, was approved by Community Board 8. However, in the years between the first and second proposals, four of the Madison brownstones were designated as contributing to the historic district, and the Whitney withdrew the second design in anticipation of likely Landmarks disapproval.82 The museum unveiled Graves' third proposal in December of 1988, roughly the same size and massing arrangement but now abstracted and more cluttered (Fig. 79). The diptychal hinge was now out of the picture. The transformation intimates that the project was clearly a struggle for Graves, and the final scheme was panned by the press as Graves' final defeat.⁸³ Graves' main advocate on the board, museum director Thomas Armstrong III, resigned in administrative turmoil before the approvals process was even begun. Paul Byard wrote later that the Graves proposal, over its five years and two redesigns, "got drabber and drabber and its components less object-like, which [ironically] allowed Breuer, to a degree, to reassume command as the principal object in a combined

⁷⁹ Herbert Muschamp, "Considering the Once and Future Whitney Museum," *The New York Times,* November 17, 1996, Final Edition, p. H42.

⁸⁰ Douglas McGill, "The Whitney Unveils Smaller Expansion Plan," *The New York Times*, March 11, 1987, Final Edition, p. C19.

McGill 1987. This was achieved by scaling down the office space, store, restaurant, theatre, library, and removing the mechanical floor at the penthouse base. The addition still included 31,600 square feet of new gallery space, a theatre, orientation gallery, works on paper study center, an expanded library, and support spaces.

⁸² Grace Glueck, "Troubles at the Whitney, Both at the Top and in the Future," *The New York Times*, December 26, 1989, Final Edition, p. C15.

⁸³ Goldberger, "3rd Try."

work of ever-decreasing interest."84 The project was now itself passé. When Graves was hired in 1981, postmodern historicism seemed to be the next new wave leading the profession out of arid modernism to a new kind of essential humanism. By the mid-1980's, many had decamped to new and diverging projects (as discussed in Chapter 2.)

The Graves episode was a failure, but does the blame fall fully on the designer? The formal outcome notwithstanding, Graves himself had stated that the task of adding to such a "monument" was "a struggle and a challenge." Breuer's building, he acceded, "has become synonymous with the Whitney. It isn't first a building that then houses the Whitney—it is the Whitney."85 Graves thought himself to be operating with utmost respect, maintaining Breuer's bridged entrance and recalling the Breuer façade in his own. Much of the vitriol was directed towards Graves as author, but as one architect wrote in a letter to AIA Journal, really, "what did anyone expect?"

What examples of his recent work would lead anyone to believe that he would propose a building that was not "an amalgam" of "modernity" and "elaborate and figurative tradition?" Graves, as an architect who has clearly arrived at some conclusions about the way he makes architecture, would be trying to do just what he does even in the absence of publicity. Michael Graves is being Michael Graves. Why should he not? If the results appear unacceptable, look to the trustees.86

The Whitney board chose their architect with some deliberation and provided him with the program brief, and his initial design response reflected what was asked for. It is safe to assume that the trustees had approved each iteration of the design, and when each scheme met with outcry, they confused legitimate concerns with usual controversies. As one critic reported, Armstrong and board president Flora Biddle had stated more than once that in choosing Graves "they were doing just what an earlier Whitney board had done when it selected Breuer-entrusting the museum's future to the cutting edge of architectural excellence."87 According to Armstrong, it was "very appropriate for a museum that shows contemporary art to choose a leading contemporary architect."88 Real

⁸⁴ Paul Spencer Byard, The Architecture of Additions: Design and Regulation (New York: Norton, 1998), 151.

⁸⁵ Graves quoted in Glueck, "Graves Named," 1981; Olsberg, 5.

⁸⁶ Ferd Johns, "Whitney Irony," Letter to the editor, AIA Journal, October 1985, 2.

⁸⁷ Trillin, 59.

⁸⁸ Armstrong quoted in Susan Yerkes, "Raising the Roof at the Whitney," Skylines, October 1985, 26.

consternation, when it arrived, was shrugged off. "We're getting the same criticisms about the building that we do about the art in our exhibitions," Armstrong noted. "It's the same controversy that goes on between figurative and abstract painting."89

The museum's general argument for expansion was compelling, but with what limitations and at what cost? Also at stake was something more complex and subliminal. For nearly all of its life, the museum had been perceived as "a kind of dowdy poor relation among Manhattan's glitzier art institutions" – this insecurity led to Breuer's commission in the first place – and Armstrong saw his job primarily in terms of professionalizing the place. As a 1987 *Metropolis* review noted in the revised design, "Persisting is a lingering sense that [Graves'] building carries the mandate to 'monumentalize' the Whitney's image." Rather than blindly looking for legitimation, the real question should have been whether the Whitney, in the midst of opening corporate branch museums in New York and Connecticut, really needed all these things in one place if the price included doing in the Breuer building that had come to define it. As Paul Goldberger sensibly asked, was the addition the right assignment?

Is this sweeping building program to more than double the size of the museum really necessary? There is a real question as to whether the museum must be all things to all people, or even all things to all people interested in American Art.⁹³

Flora Biddle's statement – in the midst of the uproar – that the board thought it was "making a great gift to the city," reveals, as Victoria Newhouse points out, "a general assumption that the public wants bigger facilities and is indifferent" to changes in existing resources. More than their architectural failures, the Graves proposals demonstrated abdications in postwar stewardship roles

⁸⁹ Ibid.

⁹⁰ A tower on the brownstone site only was not developed because, as Tom Armstrong insisted, the museum felt it needed horizontal space. (Giovannini, 85.) Nonetheless, the program brief was a grab bag of items that included an expanded store, restaurant, library, new 250-seat theatre, orientation gallery, and works on paper study center, in addition to new gallery, office, and support spaces.

⁹¹ Grace Glueck, "Mogul Power at the Whitney," *The New York Times,* December 4, 1988, Final Edition, p. TBW26; Trillin, 63.

⁹² Metropolis, 23.

⁹³ Goldberger, "Adding Less," 1985.

⁹⁴ Newhouse, Towards a New Museum, 170.

and – in the cacophonous and fragmentary debate they launched – the bewildering fog of issues surrounding the addition dilemma.

Covert Expansion

The Whitney's board, while perhaps unclear on its lapses in judgment, was determined not to repeat them. Richard Gluckman's almost-imperceptible expansion, completed two years after the 75th Street building's 30th birthday in 1996, was deliberately conceived as a diametric opposite to the Graves proposals; it may not really be an addition at all. Rather than attempting to remake the museum's architectural image, the Gluckman scheme affirmed both the sanctity of the Breuer building as a modern monument and its rehabilitation in the affections of the public as well. Gluckman's project is a success on preservation terms, but limited in size, it could never deliver the volume and variety of space that would satisfy the museum in any an enduring way.

The Museum purchased the townhouse at 33 E 74th Street, increasing its ownership to every property south to 74th Street. The recession of the early 90's and the undermining of the Whitney's progressive position in contemporary art, by MoMA and the Guggenheim, had also convinced the board to evaluate a change in course: one that traded ambition for a renewed interest in inheritance. Gluckman Mayner's "no architecture' architectural style positioned the firm as Grave's polar opposite and the ideal choice to honor Breuer," a task now understood to be the museum's primary obligation. Gluckman executed the \$13.5 million expansion in two phases, first renovating three of the townhouses to create office space for the staff, and connecting the renovation to the museum through Breuer's original knockout panels (Figs. 80-81). A new double-height library was carved out of a rear yard within the interior of the block (Fig. 82). The design team chose a low-impact approach in creating most of the new spaces, and many of the townhouses' defining interiors were

⁹⁵ This now included all five Madison brownstones, two 74th Street townhouses, and an inconsequential twostory building between the two groups.

⁹⁶ Allan Schwartzman, "Expanding an Icon," Architecture 87 No. 6 (June 1998), 106.

kept or restored.⁹⁷ Once the staff decamped to the adapted townhouses, the second phase consisted of enclosing the Museum's two fifth floor terraces and converting the entire floor, along with the fourth-floor mezzanine, into dedicated galleries for the permanent collection. These were the first in the institution's 67-year history.⁹⁸ The Breuer building itself was given an overhaul that was long overdue, with new HVAC systems and panel-by-panel cleaning of the entire façade.⁹⁹ Given the complex limitations, the project was a logistical triumph. Stealth extended beyond its architecture; the Whitney kept the expansion out of the press to "avoid histrionics."¹⁰⁰

The expansion was praised as a skillful honorific with some cleverly subtle improvements. The new fifth floor galleries were made to look as if they could well have been original, with the same flagstone-paved foyer seen on other floors. In a new stair down to the fourth-floor mezzanine, Gluckman replicated many of the details of the Breuer stair (Fig.83). In the fifth floor galleries themselves, he added unique but sympathetic elements in the skylights and wooden flooring, noting that the design team "originally thought of placing the galleries on axis with the elevator, but decided that wasn't an appropriate image for the display of the permanent collection, nor was it right for circulation. Instead, we used light to guide the visitor through the galleries." New York's art critic Mark Stevens wrote that Gluckman has performed the task of "tempering Breuer's cold ethos with daylight and a whisper of elegance... extremely well." The scale of the new galleries, with half the ceiling height of Breuer's fourth floor, suits the smaller format of works by Edward Hopper and other prewar American artists shown there. Ramps within the renovation addressed the different floor levels between the Museum and the townhouses, and Gluckman created an especially deft transition space adjacent to the first floor elevators to negotiate between the "old" Breuer building,

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⁹⁷ Elements such as the wood-paneled drawing room with fireplace on the second-floor of 33 E 74th.

⁹⁸ Emily Denitto, "The Whitney Expands its Canvas," Crain's New York Business, March 23, 1998, 3.

⁹⁹ Eric Adams, "Collaborating with conservators," Architecture 86, no. 9 (September 1997), 138. The panels were removed one-by-one (some panels weighed over 3,000 pounds), and every cladding anchor was replaced.

¹⁰⁰ Denitto, 3.

¹⁰¹ Schwartzman, 106.

¹⁰² Mark Stevens, "Let the Sun Shine In," New York, April 6, 1998, 54.

the "new" 33 E 74th townhouse renovation, and the separate curatorial offices in the northernmost Madison brownstone. The expansion only gave the museum a small fraction of the gallery square footage that the trustees had demanded from Graves, but it solved the immediate and critical space shortage for the research library and staff offices, and created an entire floor of new gallery space within Breuer's building. Gluckman's design cleverly and creatively re-used space and established new connections while protecting Breuer's masterpiece and the immediate historic fabric. In its minimally additive nature, it also satisfied the increasingly reactionary demands of the conservative neighborhood.

"Misidentified as an alien: a native New Yorker"

In its trustees' minds, however, the Whitney had yet to strike a satisfying balance between aspirations and achievable solutions. The early 2000's brought forth a proposal from a fourth architect, Rotterdam-based Pritzker Prize-winning Rem Koolhaas, for a large-scale, outrageously massed addition that would cantilever above and over the original building. The scheme was conceptually rich and offered a number of promising ideas in negotiating the complex challenge of adding to Breuer's Whitney, but the final form was, regrettably, flawed and ultimately rendered the proposal inappropriate (Figs. 84-85).

Only two years after the Gluckman expansion was completed, the Whitney announced in February of 2001 that it was again looking for more space and had hired Koolhaas (and his firm, OMA) to explore and examine the institution's needs in the new century. The trustees' planning committee had selected Koolhaas from among seven firms: Peter Eisenman, Steven Holl, Machado & Silvetti, Jean Nouvel, (and, notably) Richard Gluckman and Norman Foster. Maxwell Anderson, the second museum director to follow Thomas Armstrong, described the open-ended contract with Koolhaas as a tool to "explore the landscape of opportunities for us going forward, to study the larger conceptual process," and reported that the museum was proceeding cautiously but did not

want to drag its heels in the face of a surge in attendance.¹⁰³ Gluckman's budget and proposal had been born out of recession-era prudence while the last years of the 1990's offered an influx of museum visitors and capital to institutional coffers. Of course, the economic landscape and national mood changed dramatically with the events of September 2001. While OMA developed a serious and adventurous \$200 million scheme in the two years following, there was little mention of it in the press; the museum kept it secret and then abandoned it in April 2003 – blaming economics and bad timing – before it was subject to formal review.¹⁰⁴ Koolhaas was limited to publishing the Whitney design in his 2004 book *Content* for an accompanying exhibition in Berlin.¹⁰⁵

While admittedly audacious and outsized, Koolhaas' scheme shared little in common with the Graves proposal. In a fashion typical of OMA's working method, exhaustive interrogation of typological models (i.e. the postmodern museum as a mass-cultural phenomenon) was wedded to an exuberant *parti* that endeavored to capitalize on—or subversively exploit—those findings (Figs. 86-87). In this case, the Whitney still lacked proper space for its permanent collection of about 13,000 works and for special exhibitions of contemporary art, nor did it have room for public programs. Koolhaas, rather than simply accepting existing landmark constraints, made them central to his stance on the design of an addition. In the schematic phase, the Dutch designer concluded that "the 'magic' number is 3.

The difficulty with those schemes that either competed or harmonized with the Breuer is that they are a Breuer + 1 composition, and ultimately focused on a new-old dialogue. Preservation of the brownstones (+Breuer+1) would be both interesting and politically advantageous.¹⁰⁶

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¹⁰³ Anderson quoted in Carol Vogel, "Whitney Again Looks for Space," The New York Times, February 16, 2001, Final Edition, p. E34. Armstrong's successor David Ross left the Whitney after seeing the Gluckman construction to completion. Anderson noted, "Our attendance and membership have doubled over the last two years and we're feeling the punch."

¹⁰⁴ Carol Vogel, "Whitney Selects Former Staff Member as Director," The New York Times, August 8, 2003, Final Edition, p. E28. Much like Armstrong thirteen years before, Maxwell Anderson resigned after an administrative shake-up, particularly disappointed with the board for scrapping OMA's proposal. Anderson, whose tenure was marked by a host of disagreements, had championed the expansion, "calling the issue of the building's expense debatable."

¹⁰⁵ Clay Risen, "Still Delirious: Has Rem Koolhaas Abandoned the City?" The New York Observer, September 7, 2003.

¹⁰⁶ Rem Koolhaas, Content (New York: Taschen, 2004), 220.

The domestic spaces of the brownstones seemed ideal for comparatively small pre-war paintings and sculptures in the collection, and the arrangement could recall the museum's townhouse roots in Greenwich Village.

While conceptually attractive, preserving the four protected brownstones out of the five and adding an addition was a challenge. It was illegal to build on their roofs, and the firm ruled out facadism on principle. Ultimately, a forty-foot-by-forty-foot backyard inside the block, residual space where Landmark designation did not apply, provided the spot from which the new addition could be launched. Irreverently 'contextual', the envelope of OMA's faceted concrete form was derived, literally, from site conditions: the small footprint in the block and the stipulated zoning envelop that steps and slopes as it mediates between a commercial avenue and residential side street. Concrete, while the most efficient and cost-effective material for the form, engaged with Breuer's concrete wing wall that slices the blockfront in two. The "lace" openings in the tower were dictated in part by structural analysis (with glazing where the skin stresses are lowest) and by programmatic demands. Within the combined building, OMA melded a strong curatorial vision, moving the museum's prewar collections to the late-19th-century brownstones, bigger postwar art to the Breuer building, and displaying large-format contemporary art and temporary exhibitions in the new tower (Fig. 88). A new lobby on level 3 would link to all the buildings as the central dispersion point for visitors. Rather than an adjunct wing, the new extension was meant to perform as the core of the complex while simultaneously acknowledging the history that preceded it. The design team committed serious effort to researching and critiquing typical museum programming and the cultural trends of institutional homogenization. OMA sought to elevate Breuer by returning the entirety of spaces in the 1966 building back to art appreciation and moving non-art spaces into the annex.

Trouble came in the execution. To the design's critics, the weakest aspect of the proposal was the aggressive contortions of the cantilever. While defiantly challenging gravity in a similar way to Breuer's Whitney, it also held a trace of Graves' invasion into a sacred precinct, and the massing

and articulation of glazing appeared willful without engaging the original building. Indeed, despite the obvious intentions, the formal effect was ambiguous. Koolhaas' design, wrote New York Times critic Nicolai Ouroussoff, seemed to at once "shelter the old granite Breuer building even as it loomed over it like a gigantic cat's paw," (Fig. 89).¹⁰⁷ According to Ouroussoff (himself ambivalent), reaction depended in part on the degree to which one perceived fragility in the original; if one agrees with the critic that "Breuer's building is no shrinking flower," then "that sense of irreverence" for the confining traditions of Upper East Side society that Koolhaas sought to tap into makes for a thrilling prospect.¹⁰⁸ It is true that Breuer himself had approached the project with the same brash attitude, once telling junior principal Robert Gatje that the building was intended to be "consciously shocking."109 Koolhaas' design, "a bold composition of faceted concrete forms that loomed over the Whitney as if it were about to devour it— was brash, playful, and bizarre."110 While the museum squandered more than \$6 million on fees for the proposal, the board was presumably nervous about raising many more funds for what promised to be a controversial project.¹¹¹ OMA offered a creative, albeit flawed, take on the addition dilemma. Age had conferred a certain status on the now-venerable Whitney—once boldly arrivé— and it was a diffident, cautious board that turned Koolhaas down. "Misidentified as an alien," Koolhaas later eulogized, "the Whitney extension was a native New Yorker: shaped by zoning laws, surrounded by landmarks, killed by conservatism."112

"Incremental progress, not radical change"

The board toyed with the idea of a competition in the early months of 2004 and interviewed a number of designers, but when favorite Renzo Piano said he would not participate, the board

¹⁰⁷ Nicolai Ouroussoff, "Uptown or Down? The Whitney's Identity Crisis," New York Times, November 2, 2006.

¹⁰⁸ Ibid.

^{109 (}Robert F. Gatje, Personal Interview, March 9, 2011.)

¹¹⁰ Ibid.

¹¹¹ Ibid. Figure according to Maxwell Anderson. Koolhaas is also known to be volatile, and his firm, experimental and research-based, builds only a fifth of what it designs. (Daniel Zalewski, "Profiles: Intelligent Design. Can Rem Koolhaas kill the skyscraper?" New Yorker, March 14, 2005, 46.)

¹¹² Koolhaas, 220.

simply hired him directly. Piano, whose museum bona fides have been discussed in Chapter 3, was already heavily engaged in New York at the time and a media darling. The Museum tightened their expansion program after the Koolhaas episode: it was announced with Piano's hiring that he would design "an expansion for the permanent collection and for much-needed public and educational space" only. Like Koolhaas, Piano would also have to accept the brownstones in some fashion; the neighborhood and city would be unlikely to allow the demolition of the south four, now that they were designated as contributing. But with the possible exception of the fifth-floor galleries, the Breuer building would remain unchanged; as in Atlanta at the High Museum, the board was not seeking to aggressively renegotiate the museum's image. Piano's two addition proposals for the Whitney were emblematic of his general professional approach, emphasizing the elegant articulation of historical layers in the production of democratic, transparent public space (Fig. 90).

The museum unveiled the scheme in November 2004, a sedate nine-story (172') tower inset into the block that would rise alongside the Breuer landmark without contacting it directly; glass bridges would connect the two buildings (Fig.91). Nicolai Ouroussoff captured the spirit and perils of the project, writing that

The tower's simple form and silvery copper and aluminum-alloy skin would be a dignified counterpoint to Marcel Breuer's brutal dark granite masterpiece. Respectful of its context, the proposal is about incremental progress, not radical change... The aim clearly is to placate the preservationists and community leaders who have stymied the Whitney's expansion plans in the past. Such humility may seem laudable... But great design is never cautious; it cannot arise amid a climate of fear. The risk is that the building will ultimately be too subdued, as if it is trying too hard to fit in.¹¹⁵

Nonetheless, Piano, also regarded as cleverly humanistic in his urban approach, offered a gracious counterpoint to the monastic seclusion of the Breuer building. In the design he opened the

¹¹³ Melva Bucksbaum, selection committee. (Carol Vogel, "Whitney Hires Renzo Piano to Design Its Expansion," *The New York Times,* June 16, 2004, Final Edition, p. E1.

¹¹⁴ Ibid. As one trustee on the selection committee phrased it – in a manner highly reminiscent of Piano's engagement at the High Museum in Atlanta – "We knew we needed to hire an architect who could get a museum building built. We didn't feel we needed a destination building that would compete with the Breuer building. The Whitney already is a destination. Renzo saw the limitations and was interesting in using them, not fighting them."

¹¹⁵ Nicolai Ouroussoff, "Whitney's New Plan: A Respectful Approach," The New York Times, November 09, 2004, Final Edition, p. E1.

museum up to the surrounding street life by demolishing the two northernmost town houses (one of which is 'contributing') and replacing their 32 feet of street frontage with a small entry garden leading to a fully transparent vestibule (Fig.92). Visitors would slip under the cantilevered corner of the new building before turning into a new lobby and café area, akin to a medieval piazza where space expands and architectural fabric from a variety of ages is brought into clear but pleasant relief. The demolition of a marginal building on 74th Street would open the lobby south to the side street (Fig. 93). Above the main entrance, a 10-foot slot between the old and new buildings would be bridged by a series of "crystalline glass walkways" that offer dynamic transparency and a lightness of touch.¹¹⁶ Within, Piano's galleries were intended to be tranquil and contextual: essentially updated versions of the existing galleries' large flexible loft-like spaces. At the top floor, Piano could experiment with his lifelong interest in the flow, control, and architectural effect of diffuse natural light. The weakest points of the design, as Ouroussoff summarized, are when one senses Piano is deferring too much to Breuer. The color and texture of the cladding, for example, almost replicates the original building and is maybe too contextual. The other issue, subject to debate, was that Breuer's original bridge could be made redundant, compromising the integrity of the original. "Mr. Piano is cautious by nature," wrote Ouroussoff, "but his work, at its best, has a wonderfully human quality. To stand up to Breuer he will have to show a bit more bravado."117

To some stakeholders, it was too much bravado by half. Piano had proposed demolishing two brownstones, 941 Madison (a contributing building to the Historic District) and 943 Madison. (943 has far less integrity and is unprotected but could still have proven to be the lynchpin of the proposal's denial.) A public hearing held in February 2005 had to move venues for the number of attendees, many of whom angrily objected to demolishing the brownstones. More than the building at 941 Madison, precedent was at stake: the Landmarks Preservation Commission (LPC) had never once issued a certificate of appropriateness allowing the demolition of a contributing brownstone in a

116 Ibid.

¹¹⁷ Ibid.

historic district.¹¹⁸ The issues were complicated; the expansion's proponents argued that precedent would not be set because the LPC rules case-by-case. They also commended Piano for keeping the three remaining brownstones and for his respectful treatment of the Breuer building. Chuck Close (a trustee), Maya Lin, Philippe de Montebello of the Metropolitan Museum and Glenn Lowry of MoMA testified in favor of the expansion, as well as Hamilton Smith, who concluded that Piano's design "neither engulfs nor overshadows the original Breuer building." The Municipal Art Society disputed the proposal, arguing that Piano ought to preserve the contributing brownstone at 941, and keep 943 Madison, too, writing, "We are confident that this very talented architect could develop a very satisfactory solution that both retains the contributing *buildings* and provides for the museum's programmatic needs." The AIA New York Chapter, while supporting addition in principle, asked LPC to require that an alternative study be prepared which would illustrate other options beside complete demolition. The Whitney framed it as an exceptional case with its own institutional health on the line. "Is it worthwhile to allow the well-being of an entire complex to be diminished by the preservation of a single brownstone?" demanded the museum's historical preservation consultant.¹²⁰

At another hearing in March, Landmarks commission members concluded that the Whitney had failed to persuade them of the need to demolish two brownstones. One member suggested Piano develop an alternative plan that kept *all* the brownstones and had visitors pass through one of them to enter the museum. Agitated, Piano countered that retaining the brownstones would undermine the essential concept of his design: to open the new portion of the Whitney to the street and invite people into the piazza. "I'm a bit at a loss," he said. "How can you make a piazza - create a sense of connection - if you have to enter through a shop window? It's not going to work," he

¹¹⁸ Robin Pogrebin, "Fierce Battle Over Plan to Expand the Whitney," *The New York Times*, February 2, 2005, Final Edition.

¹¹⁹ Ibid.

¹²⁰ Bill Higgins, Whitney's historic preservation consultant, quoted in Ibid. Some vocal members of the neighborhood thought the answer to the question was 'Yes,' presciently suggesting that the Whitney relocate altogether.

said, "because I don't see how to solve the problem." Commission members also questioned the need for a second entrance that could trivialize the Breuer bridge, but the museum director testified that the existing bridge could not handle crowds currently and was routinely congested by school tours. The bridge would serve different groups, he said, without lessening one building or the other.

Compromise was inevitable. At a third hearing in May, Whitney officials still sought approval for the original design but Piano had also brought an alternative scheme that preserved the 941 Madison brownstone and narrowed the new entrance to 16 feet (Figs. 94-95). The museum argued that it was less attractive and posed potential security and ADA accessibility problems, but it was the only option left that had a chance of success. The LPC approved the proposal later that year. The local community board also voted in favor of the revised design in January 2006, despite strident protests from a neighborhood activist group, which vowed future defeat of the project as it advanced to the Board of Standards and Appeals.¹²² When the museum was granted seven zoning variances necessary for the expansion, the group – with the owners of the Carlyle hotel (the tallest tower in the immediate area), and another entity, the Defenders of the Historic Upper East Side, filed a suit against the city. 123 The beleaguered museum had finally received the approvals necessary to build the addition it sought for decades, but it was still being fought by the neighborhood to put up a building (with an arguably compromised entry scheme), that would only add 16,000 to 20,000 square feet of exhibition space when the museum had wanted 30,000. Construction costs had skyrocketed since the museum started planning the addition and it was now estimated at \$200 million - the same price as Koolhaas' proposal – and the necessary endowment drive would bring the fund-raising goal to \$500 million. The excavation would have to be done from within the block, behind the

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¹²¹ Robin Pogrebin, "Landmarks Panel Questions Whitney Plan," *The New York Times, March* 16, 2005, Final Edition

¹²² Robin Pogrebin, "Green Light for Whitney Expansion," *The New York Times*, January 13, 2006, Final Edition.

¹²³ Kate Taylor, "Suit is Filed Against City Over Plans to Expand Whitney Museum," The New York Sun, September 01, 2006, Final Edition. The plaintiffs argued that the BSA gave the museum undue special treatment and failed to "adequately scrutinize its variance application."

brownstones, "an expensive and logistically challenging proposition." 124 The museum also faced the prospect of having to close for two years to build the addition, absent from the museum scene just when the New Museum of Contemporary Art was reopening in a new building on the Bowery. This wasn't the expansion the museum wanted after all, and ultimately what the museum *did want* appeared to be impossible if physically adjacent to the Breuer building.

Conclusion

Where did all these designers fail? Graves misunderstood, willfully ignored, or was incapable of attuning himself to the aura of Breuer's building. That fundamental misunderstanding was exponentially compounded by the overall scale of his project. The key was to recognize Breuer's deliberate asymmetry, the forceful demonstration of personal space, the ways in which the building asserts its independence. The building is not fundamentally incapable of taking a partner, as so many suggested, but it is prickly. The taut granite surface, its minimalism, points to the essential introversion that makes an addition to the building admittedly difficult. Emerging from a movement that claimed to embrace complexity and contradiction, Graves' proposal was surprisingly self-serious in its abstracted classicism, especially in its attempt to corral Breuer into a waltz. It is difficult to blame the Breuer building for demonstrating little interest in performing in Graves' neo-Renaissance, farcical diptych at its own cost.

Koolhaas' proposal ultimately came up short in the particular combination of massing and material that appeared more sinister than exuberant. The cantilever, if properly approached, might not necessarily have been fatal, but OMA's ponderous language was too close to the original for comfort. Going above would seem to require a lighter, more cheerful approach. The effect otherwise seems to be Breuer's building done in by its own cantilever, about to be bludgeoned by its own Frankenstein monster. One is left to wonder, especially in light of OMA's early formal studies,

¹²⁴ Robin Pogrebin, "Whitney May Move Expansion to Downtown Site," The New York Times, October 31, 2006, Final Edition.

whether if it had been the same massing but fuzzy, or squishy, or colorful, that the result would have been the same (see Figs. 86-97). The outcome unfortunately overshadows Koolhaas's successes in attempting to redefine the problem of the addition, of brownstone preservation, and interrogating the curatorial image of the museum. The proposal undeniably comes from an infectious, exuberant place, similar to OMA's response as at IIT: an ironic, punk-ish take that manages to avoid some of the elitist subtlety of Pop Art and early postmodernist allusion.

Nonetheless, Koolhaas has earned his role as provocateur, and it's difficult not to hold some healthy suspicion for the place from which these ideas emerge. Wes Jones has insightfully described "Dutch" architecture (of which Koolhaas is the iconoclastic patriarch) as a post-critical phenomenon: one defined by its overwhelming preoccupation with cleverness. "Like collage and criticality," Jones writes, "cleverness requires a host, but unlike them it does not seek to *improve* the host, much less supplant it."

Cleverness must preserve enough of the original condition to demonstrate the advantage it has taken, but more importantly, it must avoid becoming a *new* standard that could be subjected to the same treatment... to survive, cleverness must keep moving – requiring agility and a continual situational awareness to outflank the contexts that ever threaten to ensnare and normalize it.... Unlike the avant-garde or progressive innovation that judges its significance in linear terms of forward movement or cumulative gain, cleverness is too busy weaving around the field, feinting and dodging, to care about forward or behind... Each [project] is recognized by its wits alone.¹²⁵

Koolhaas, as Jones notes, is not the only purveyor of this clever Dutch architecture (the firms MVRDV and BIG – Bjarke Ingels Group – are two others) and the tenets of the movement, now accommodating itself to the conveniences of capital in China and the Middle East, show no sign of subsiding.

Piano came the closest to something interesting and equitable, although his design lacked Koolhaas's punch while owing several organization debts to the Dutchman.¹²⁶ There is also a nagging sense that the project falls short of being bold and unique. One could already find Piano's

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¹²⁵ Jones, "Big Forking Dilemma," Harvard Design Journal no. 32 (Spring Summer 2010): 10.

¹²⁶ In Koolhaas's scheme, the northernmost brownstone on Madison and the two-story marginal building would also be demolished to create multiple entry points to a tower emerging from the middle of the block.

connecting sky bridges in Atlanta, and his 'humanist' interior piazza had just been very successfully deployed two miles down Madison, at the Morgan Library renovation. Piano's proposal never acknowledges the audacious inception and historically fraught legacy of the building. It is fair to ask why he should do so in the first place. But the answer may be in the result: diffident, cautious, and somehow unsatisfying. Set back from an older, very interesting box clad in moody granite with strange windows and wild cantilevers is... another box, taller, rather plain, and muted in color. Nonetheless, Piano's success in small details is well established, and the urbanity of his proposals would no doubt be splendid. The new galleries would have complemented Breuer. Of all the schemes, his should be judged the best overall. However, Piano's temperament may be more closely aligned with his former employer in the end, as it appears that his addition to the Kimbell will be much more engaging.

Postscript

The additional space the museum has so long sought will not be anywhere near Madison and 75th. When the Dia Foundation scrapped plans to open a museum at the south end of the High Line in October 2006, the Whitney emerged as a logical choice. The museum could sell the brownstones and put the proceeds toward a building downtown, with some additional help from the city. As Robin Pogrebin of the *Times* wrote, "If expansion is a way for the Whitney to reinvent itself and remain competitive, this could be seen as realistic and responsible."

At the High Line site, the Whitney could establish the downtown outpost that many in the art world have long said the museum should have, a hip, more youthful presence suitable to its mission as the artists' museum.¹²⁸

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¹²⁷ The city had promised Dia \$8 million in support and had an active interest in anchoring the High Line with a cultural attraction. The Whitney sold the brownstones as a block in early October, 2010, making expansion of the original building by any entity now virtually impossible. (Carol Vogel, "The Whitney Trims Its East Side Holdings," *New York Times*, October 14, 2010, Final Edition)

¹²⁸ Robin Pogrebin, "Whitney May Move Expansion to Downtown Site," *The New York Times,* October 31, 2006, Final Edition.

Compared with around 65,000 square feet of gallery space in would have been the combined building uptown, the High Line site would offer about 100,000 to 150,000 square feet of gallery space (the current Breuer building has some 30,000 square feet). Piano was retained by the museum for the new building, and Ouroussoff and others, who questioned the Whitney's waffling between uptown and down as a crisis of confidence endemic to the museum, hailed Piano's design as a robust and adventurous architectural expression for an institution that seemed to have finally found its bearings (Figs. 96-99). Freed from the incredible constraints of the uptown site, Piano here "has laid the groundwork for a serious work of architecture. The bold form expresses a level of experimental courage that he hasn't shown in years." The building recalls elements of Breuer's fortress, but fluidly combines that quality of self-preservation with welcoming urbanity. It is an acknowledged geographic homecoming for the museum that was founded in Greenwich Village, but Piano's proposal is also an obvious heir to the institution's years and emergence on the world stage in the Breuer building uptown.

While that building is now itself protected as a contributing element in the local historic district, its future is uncertain. The Whitney's leadership, now more realistic about the prospect of operating two fully programmed museums several miles apart, is nonetheless prohibited from selling the 1966 building by the terms of a recent and significant gift.¹³² (A long-term loan of the building to the Metropolitan Museum is under consideration.) The building was purpose-built for a singular client for whom its architectural identity alone – through the vagaries and travails of successive institutional and curatorial visions – was that client's one constancy. The physical building's severance from the museum it sheltered for over four decades is an undeniably lamentable

¹²⁹ Ibid.

¹³⁰ Nicolai Ouroussoff, "Uptown or Down? The Whitney's Identity Crisis," The New York Times, November 2, 2006, Final Edition; Nicolai Ouroussoff, "Whitney's Downtown Sanctuary," The New York Times, May 1, 2008, Final Edition.

¹³¹ Nicolai Ouroussoff, "Whitney's Downtown Sanctuary," 2008.

¹³² The gift of \$131 million from board chairman emeritus Leonard Lauder in 2008 was the largest donation in the museum's history. The exact terms are not public. (Carol Vogel, "The Whitney Trims Its East Side Holdings," New York Times, October 14, 2010, Final Edition)

development. In one way, it also forces us to consider if we ought to weigh the various addition proposals' flaws against this other, undeniably consequential negation of meaning.

For a structure so often described in brutal and aggressive terms, the building now has a disarming fragility. Admiring Breuer's masterpiece from the street intersection with its bold cantilever and alien windows, we might agree with Herbert Muschamp that in fact, it is a building about "listening." "With its dark façade, its receding entrance," he wrote, "the building conveys the power of tuning in." In New York, that can be a rare thing. And if the series of failed addition proposals has any meaning, it may be that this is a task Breuer's Whitney is best left to do on its own.

133 Herbert Muschamp, "The Once and Future Whitney," New York Times, November 17, 1996, Final Edition.



Fig. 67. Whitney Museum (1966), Street View. Facing southeast at the intersection of Madison Avenue and 75th Street. Brownstones are to immediate right.



Fig. 68. Whitney Museum (1966), Lower Level. One level below grade, looking out the front windows to the entrance bridge.



Fig. 69. Whitney Museum (1966), Entrance Lobby. Doors at center of photograph lead to the entrance bridge, with galleries leading off to the left. The railings in the background overlook the lower (Sculpture Garden) level.

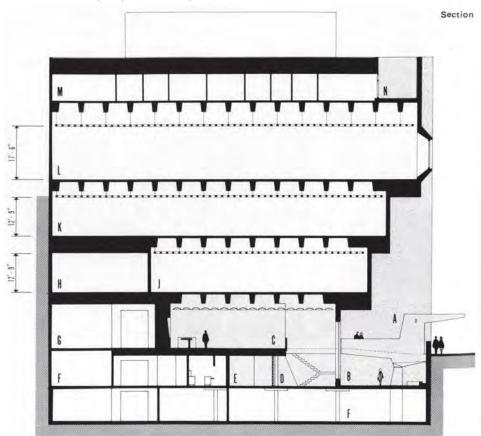


Fig. 70. Section - Whitney Museum (1966). Looking south, entry at right (cut is just north of entry.) The principal gallery floors (J, K, and L) vary in height. The fifth floor (M) was originally museum offices.



Fig. 71. Whitney Museum (1966), Interior. Breuer employed a

modular gridded ceiling system that carried moveable partitions and lighting. The floors are stone.

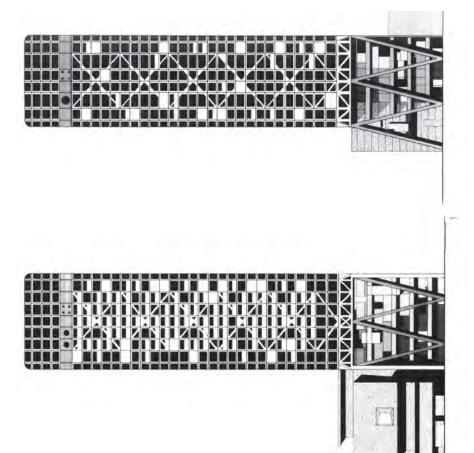


Fig. 73. Elevations - Whitney Museum Addition, Foster, 1978.

Not technically an addition, Foster's speculative tower proposal would have risen immediately south of the museum. Galleries would extend from the Breuer building into Foster's sloped atrium.

Fig. 74. Model - Whitney Museum Addition, Foster, 1978.

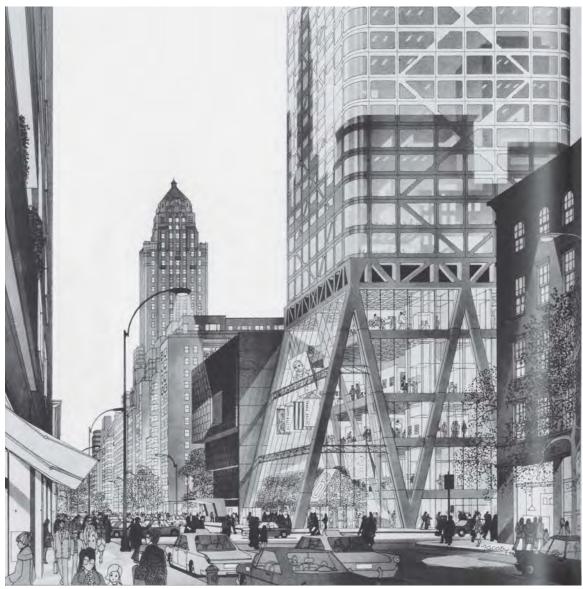


Fig. 75. Rendering - Whitney Museum Addition, Foster, 1978. The additional gallery floors accommodated by Foster's tower are visible in the middle-right, suspended within the triangulated atrium space. There are some nods to Breuer with the progressive cantilevering of the new gallery floors, and the gridded ceilings.



Fig. 76. Model - Whitney Museum Addition, Graves, 1985. This was Graves' first proposal, consisting of four parts: a stepped hinge, a new mass south of the Breuer building, and then a podium and temple-like structure immediately above.

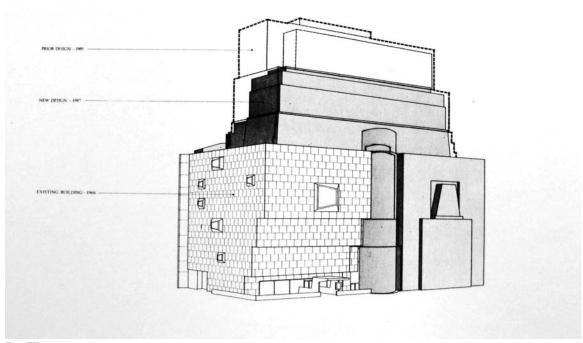


Fig. 77. Drawing - Whitney Museum Addition, Graves, 1987. Graves released a revised design in 1987, compared here with his first one. The second scheme lost the steps on the hinge and significant bulk.

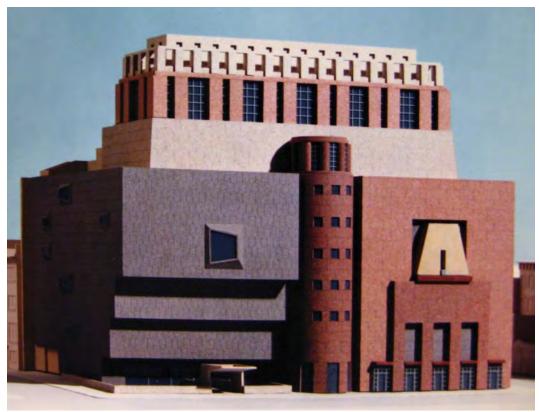


Fig. 78. Model - Whitney Museum Addition, Graves, 1987.

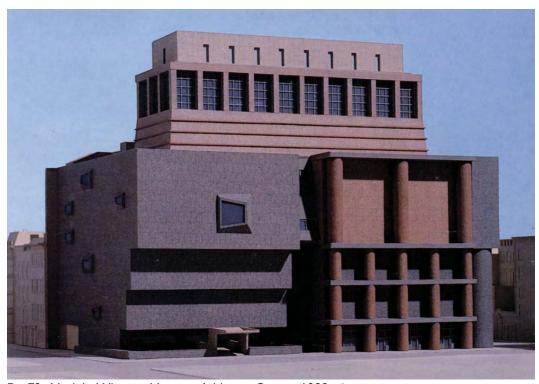


Fig. 79. Model - Whitney Museum Addition, Graves, 1988. Graves' final, most abstracted design.



Fig. 80. Model - Whitney Museum Addition, Gluckman (1998). Richard Gluckman's "stealth" addition connected the museum to the 74th Street townhouse immediately south (shown in natural wood color). The fifth floor terrace was enclosed with skylights (seen in the model) and converted to gallery space.

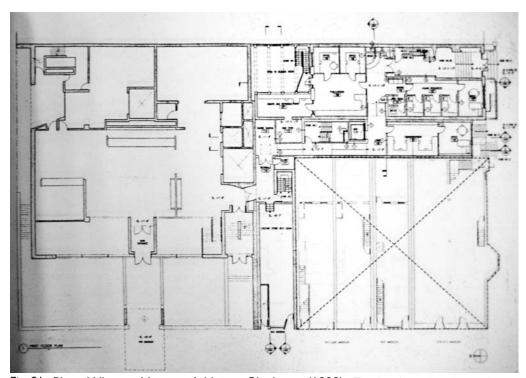


Fig. 81. Plan - Whitney Museum Addition, Gluckman (1998). The first-floor plan shows the connection between the Breuer building and the E. 74th Street townhouse through the knockout panel. The northermmost Madison brownstone (center) also connects internally at this junction.

Fig. 82. Whitney Museum Addition, Gluckman (1998), Library.

Gluckman constructed a small research library with double-height reading room in the interior of the block.



Fig. 83. Whitney Museum Renovation, Gluckman (1998), Mezzanine.

The new fourth-floor mezzanine gallery, with Gluckman's Breuer-inspired stair in the background leading to the fifth floor.





Fig. 84. Model - Whitney Museum Addition, Koolhaas, 2003. Koolhaas's scheme involved demolishing the northernmost Madison brownstone, then launching his addition out of the block's interior. The four remaining brownstones would become galley space for prewar art.



Fig. 85. Model - Whitney Museum Addition, Koolhaas, 2003. The cantilevered addition was clearly meant to play off the brashness of the original building, but also appeared menacing.



Fig. 86. Models - Whitney Museum Addition, Koolhaas, 2003. Conceptual study and massing models for the Whitney project, in the exhibition, "Content," at the Neue National Gallery in Berlin.

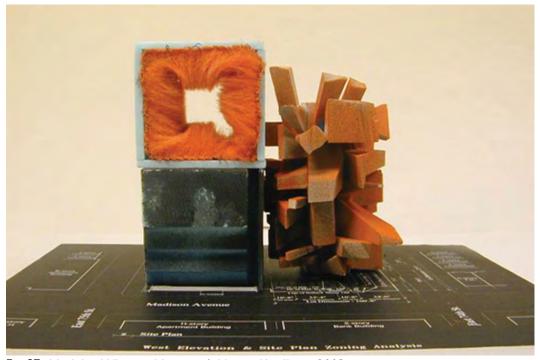


Fig. 87. Models - Whitney Museum Addition, Koolhaas, 2003. Early conceptual study model for the Whitney project, exploring various material effects and attitudes in relation to the Breuer building.

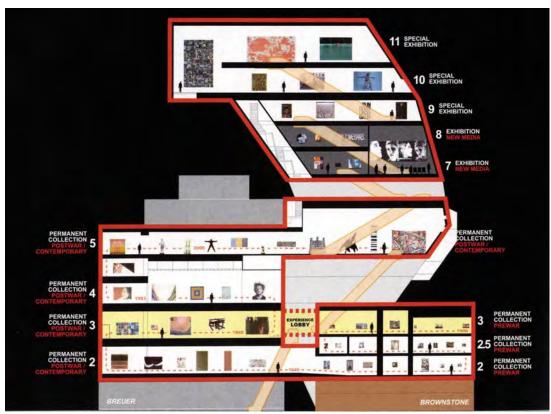


Fig. 88. Section - Whitney Museum Addition, Koolhaas, 2003. The design team's vision for the expanded museum's new spatial arrangement and curatorial organization.



Fig. 89. Model - Whitney Museum Addition, Koolhaas, 2003. Large-scale sectional model of the addition proposal, showing spatial and organizational relationships between old and new.

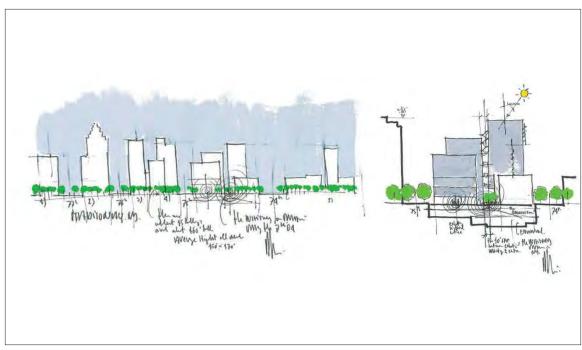


Fig. 90. Sketch - Whitney Museum Addition, Piano, 2004. Piano's scheme for a backgrounded tower to the south of the Breuer building. Here, he illustrates the relationship to surrounding buildings in the Madison Avenue street elevation (Carlyle Hotel to the left) and his vision for a "piazza" within the block.



Fig. 91. Model - Whitney Museum Addition, Piano, 2004. The proposal, with the connecting glass bridges between old and new buildings. Note the removal of the two northernmost brownstones for Piano's new primary entrance to the interior piazza.

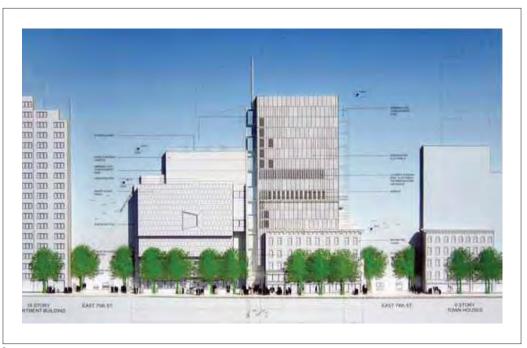


Fig. 92. Elevation - Whitney Museum Addition, Piano, 2004 (East). The new tower would be clad in a silvery copper-and-aluminum alloy.



Fig. 93. Elevation - Whitney Museum Addition, Piano, 2004 (South). Piano also proposed the removal of a marginal building fronting 74th Street to create a secondary entrance on 74th Street and make his interior lobby a public space with continuous flow on and off the street.



Fig. 94. Plans - Whitney Museum Addition, Piano, 2004, 2005. The New York Times compares original and revised plans for Piano's ground-floor lobby. The second brownstone south from the Breuer building is a contributing building to the Upper East Side local Historic District, and was protected from demolition. In the revised scheme (right), Piano retains the facade of the brownstone and a small portion of its interior.



Fig. 95. Rendering - Whitney Museum Addition, Piano, 2004, 2005. The revised proposal is shown to the right, with a narrower entrance. Note the glass bridges connecting old and new buildings in the background.

Fig. 96. Sketch - New Whitney Museum (2012), Piano.

Piano's conceptual design for the Whitney's new home at the southern end of the High Line in Manhattan's meatpacking district. A series of flowing terraces on the eastern side of the building allows visitors to traverse the structure and move between interior and exterior. Piano's signature approach to daylight filtering can be inferred from the treatment of the roof.

Fig. 97. Section - New Whitney Museum (2012), Piano.

The general disposition of the new building, with the generous interior lobby and cafe at the ground floor, adjacent to the High Line (at right). Galleries begin on the fourth floor, above service and support program. Stairs connecting the outdoor terraces are visible in the background.

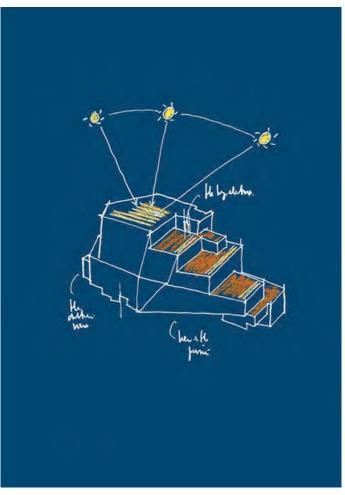




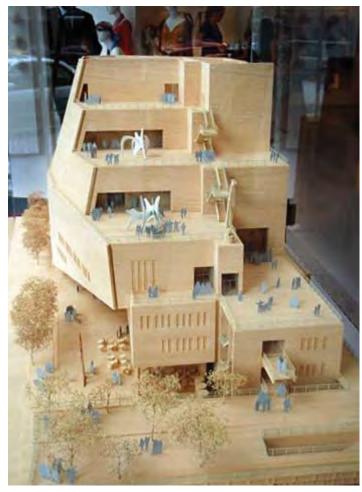


Fig. 98. Rendering - New Whitney Museum (2012), Piano.

Looking northwest, the new museum and its relationship to the southern end of the High Line.

Fig. 99. Model - New Whitney Museum (2012), Piano.

Early presentation model for the scheme. High Line in the foreground at bottom.



5. CASE STUDY: THE YALE ART & ARCHITECTURE BUILDING

Introduction

The dilemma of adding to the Yale Art and Architecture Building (A&A) is compounded by the formidable challenge of the building's spectacular conception and its complicated history. Over four decades, the building was a front-row witness to the vicissitudes of time and its capacity for indifferent cruelty. Reputations of few buildings, as one scholar notes, "have fluctuated as wildly as that of Paul Rudolph's [A&A]." By the measure of original intent, however, the building itself was largely blameless. Over the years, unsympathetic critiques and agendas, false presumption, rumor, and outright misinformation compounded as the building – presumed to embody the brightest promises of an era – became an unwilling surrogate (and casualty) in the larger postmodern battles over theory and architecture's role in society. More than almost any other building, it became homiletic as the archetypal 'anti-icon.' It was as if the Arcadian idealism, consummation, and crushing dissolution depicted in Thomas Cole's series *Course of Empire* (1833-36) had been compressed into the short life of a single postwar building.² Even current critiques indicate that the A&A may never overcome our insatiable appetite for Greek tragedies, their narrative drama and knowing irony, even if this allegory has managed to find a (relatively) happy ending.

The A&A is an exceptional case in the way that Riegl's art-value, shifting and timecontingent, operates: the way that each successive generation applies its own successive, overlapping layers of meaning to architectural form. After all, what is an addition but one of these layers – an

¹ Timothy Rohan, "Canon and Anti-Canon," Harvard Design Magazine No. 14 (Summer 2001): 24.

² Cole was a nineteenth-century American Romantic artist in the Hudson River School. Admittedly, this comparison is itself postmodern in reading mid-twentieth century architecture as a dramatic arc.

expression of a specific cultural attitude of its moment, sublimated into material form? With postwar icons and with the A&A especially, the uneasy and entangled intimacy between first intent and successive meaning constitutes a unique challenge that places demands over and above the satisfaction of functional concerns and typical considerations of deference or independence. In the case of the Yale A&A, the task that confronted Gwathmey Siegel and Associates was deeply complicated by the building's extraordinary and complicated legacy.

The building, so dramatically depicted in Ezra Stoller's photographs from 1963, is – both visually and tectonically – a puzzle (Figs. 100-101). When compared to Breuer's Whitney or Gordon Bunshaft's Hirshhorn (two other buildings with which it shares some sculptural monumentality), their smooth surfaces and Euclidian object-ness is clearly absent. Articulated, textured, and overwhelmingly kinetic, the A&A is exceptional; one struggles for the words to describe its appearance. It has been argued that the A&A's designer possessed the most promising American talent of his generation,3 and the building – perhaps Rudolph's greatest and certainly his best known - is intricately tied up in his legacy of incredible promise and successive disillusion. A direct challenge to modernist orthodoxies in the immediate postwar period, the building unfairly became the scapegoat for the excesses of the same soon after. Within the building itself, sustained hard use, overcrowding, deferred maintenance, a 1969 fire, and numerous unsympathetic renovations obliterated the A&A's integrity and significance in the eyes of generations of users. More damningly, these circumstances appeared to confirm all the failed promises of an earlier era. In the thirty years after the fire, as Timothy Rohan writes, "the building slid further and further into sad decrepitude," a decay "mirrored by the decline of Rudolph's reputation." Over the last decade, however, this gradually restored building has played a critical role in the rehabilitation of Rudolph's legacy and his (tentative) canonization. These are high-stakes environs for an addition. What are the numerous aspects of this building's operative context that constitute its 'Benjaminian' aura, at least from the

³ Robert A.M. Stern, Foreword, in Paul Rudolph, Writings on Architecture (New Haven: Yale University Press, 2008): 6.

⁴ Rohan, 26.

perspective of addition making? And to what degree are these terms expressed by Gwathmey Siegel's postscript?

Wunderkind with a military brush-cut

While a number of the previous generation's most prominent modernists (including Breuer and Belluschi) were European émigrés, Rudolph (1918-1997) had a quintessentially American upbringing. Born a minister's son in Kentucky, he attended Auburn University in Alabama. After spending World War II working in the Brooklyn Navy Yards, Rudolph got his graduate degree from Harvard, studying under Gropius and Breuer. He rose to early fame in the 1950's through a series of thoughtful, pioneering house designs in Florida; this led to his appointment as Chair of Yale's Department of Architecture in 1958, at the relatively youthful age of 40. Almost immediately upon his arrival, the University engaged Rudolph to design a new home for the department, which, along with the department of fine arts, would constitute a new School of Art and Architecture. (The position of Chair of Architecture would become a deanship after Rudolph's time, when the art and architecture departments parted ways.) Rudolph's meteoric rise drew significant media attention, and the appearance of the highly anticipated building and its architect on the covers of the leading architectural journals of the day "seemed to signal," as Rudolph scholar Timothy Rohan notes, "the emergence of architecture into the realm of media-driven, Warhol-style celebrity," (Fig. 102).⁵ Students at Yale admiringly imitated Rudolph's virtuosic style of rendering and perspectival sections, and engaged themselves without hesitation in his investigations of alternatives to, in one critic's words, "the expressive limitations of Harvard functionalism."

Completed in late 1963, the A&A was a tour-de-force and a challenge to the stylistic hegemony of the time. At a gateway corner of Yale's campus where New Haven's colonial grid

⁵ Ibid., 24. A reporter from *Architectural Forum* enthused that Rudolph "probably comes closer to being his generation's ideal of the complete architect than anyone else..." (Russell Bourne, "Yale's Paul Rudolph," *Architectural Forum* 108 (April 1958): 128.)

⁶ Rohan, 24; Philip Nobel, Introduction, *The Yale Art + Architecture Building: Photographs by Ezra Stoller* (Building Blocks Series, New York: Princeton Architectural Press, 1999): 6.

pivots into the surrounding city fabric, Rudolph sited "a monumental play of interlocking spaces pinwheeling off four massive service piers," as Joseph Giovannini described in 2008.7 With "virtuoso skill," Rohan writes, he arranged no fewer than 36 different floor levels over seven stories, "then carpeted them in pulsating orange wall-to-wall and filled them with Abstract Expressionist Art, Le Corbusier sketches, Beaux-Arts plaster casts," complete with a statue of Minerva presiding over the drafting room; "with this one dramatic structure," Rohan continues, "Rudolph seemed to have provided an alternative to the gray, soulless world of the corporatized International Style – to have devised a modernism simultaneously colorful, textured, rough, elegant, exciting, witty, slightly vulgar," and, in its relentless corduroyed concrete, "even dangerous."

A sensation, the building was widely reviewed and publicized and consequently overrun with visitors.⁹ Its simultaneous coverage by the three leading American architectural magazines was, according to Helen Sroat, the only instance of such an occurrence in the postwar period.¹⁰ Rudolph, it seemed, was poised to usher in a new era of American modernism. Yet the "glamorous voyage of this Titanic of a building," as Rohan later concluded, "would prove brief."¹¹ In several ways, the

⁷ Joseph Giovannini, "Old School, New School: Yale University," *Architect: The Magazine of the AIA* 97, no. 15 (November 2008): 15.

⁸ Rohan, 24.

Onobel, 5. Praise for the A&A, at least by Progressive Architecture's critics, also took the form of attributing more "'personality' or humanness, to the 'expressionist' A&A than to Bunshaft's 'impersonal,' 'formalist'" Beinecke Library. (Ilse M. Reese and James T. Burns, Jr., "The Opposites: Expressionism and Formalism at Yale," Progressive Architecture (February 1964): 129, quoted in Helene Sroat, "The Humanism of Brutalist Architecture: The Yale Art & Architecture Building and Postwar Constructions of Aesthetic Experience in American Universities and Architecture" (PhD diss., University of Chicago, 2003): 225.)

The February 1964 issues of Architectural Forum, Architectural Record and Progressive Architecture all pictured the A&A on their covers and included feature articles by leading critics with extensive work by leading photographers (Sroat, 217.) Sroat notes that several other major projects, like the United Nations and Le Corbusier's Chandigarh buildings, also received "a similar amount of attention but [this] was scattered over several years." There is a possibility Kahn's University of Pennsylvania Richards Labs also received similar publicity and Sroat is incorrect. The degree to which Rudolph stood for a fresh young American talent is demonstrated in comparing the critics' receptions of the A&A to those of the Carpenter Center for the Visual Arts, which Le Corbusier was designing around the same time. The Carpenter Center opened in the spring of 1963 (half a year before the A&A) and reviews were, surprisingly, "less than overwhelming," Sroat notes. "By contrast, the American architectural press was virtually unrestrained in its celebratory reception of Rudolph's A&A which opened to a gala reception on November 9, 1963 and to massive press coverage," (Sroat 96-98.) The Yale Daily News reported that this was by far the most elaborate dedication ever held at Yale. (Robert L.W. Moss, "Art and Architecture Building to Open," Yale Daily News (November 8, 1963): 7; cited in Sroat, 155.)

¹¹ Rohan, 24.

culture of celebrity and atmosphere of excitement over the building overshadowed and obscured the degree to which it was three fundamental things: (1) an immensely personal synthesis of two looming shadows – those of Frank Lloyd Wright and Le Corbusier; (2) a searching endeavor for a new kind of urbanism; and finally, (3) part of a larger cultural project undertaken in the postwar era – framed in humanist and developmental criteria – to reorient aesthetic experience in the public realm.

Le Corbusier and Wright

When Rudolph himself described the building in print soon after its dedication, he spoke in remarkably pragmatic terms. Because of its location, the building's "role in the cityscape is to turn the corner." Therefore:

A pinwheel scheme has been adopted, because (1) it turns the corner; (2) it allows such rooms as the architectural drafting room to have an area of desk which logically turns the corner; (3) this fundamental pinwheel scheme allows a centralized space with a higher ceiling for every other floor; (4) the pinwheel can grow logically, i.e. the building is open-ended.¹²

Such forthrightness (even the obvious clue for future additions) belies the evident struggle and remarkable transformation the design underwent from 1958. When he arrived on campus in 1957, Rudolph was, according to Philip Nobel, already beginning to drift away "from the distantly Miesian structural experimentation" of his earlier projects.¹³ Contact with Vincent Scully, Yale's leading architectural historian and "an infamous charismatic," in Nobel's words, reinforced this shift. Scully had championed Le Corbusier's late work, particularly the High Court (1951-6) and other buildings at the government complex in Chandigarh, India." ¹⁴ Rudolph's earliest design renderings for the A&A, (a commission he first thought should be offered to Le Corbusier), show modularity and smooth concrete planes, a reconfiguration of the language Rudolph developed in Florida "grafted on to an adaptation of the atrium and massing of Frank Lloyd Wright's Larkin Building," (1904-5).¹⁵

¹² Paul Rudolph, "Yale Art and Architecture Building," Architectural Design, April 1964, p. 161, reprinted in Paul Rudolph, Writings on Architecture (New Haven: Yale University Press, 2008), 99.

¹³ Nobel, 8.

¹⁴ Ibid.

¹⁵ Ibid.

Several scholars have made note of the fact that the more "tenaciously physical" final designs of irregular, roughly textured facades emerged only after Rudolph visited Chandigarh in May 1960 (Fig. 103). There, he found an architectural aesthetic that, in his words, could express man's "aspirations" and move "every man." Back in New Haven, the Temple Street Parking Garage, which Rudolph was designing concurrently with the A&A, was a laboratory for testing various effects in concrete. For the first time, Rudolph used board forms in the manner of Le Corbusier to produce various textures, "principally flat surfaces marked by low, thin ridges," the genesis of the béton brut aesthetic. Nobel identifies a central factor in the leap from this simple material expression, then in vogue, to "the contrivance of Rudolph's signature bush-hammered concrete" that soon followed in the A&A. According to Nobel, the jagged ridged treatment that may be "Rudolph's best-known contribution to his art" did not "evolve solely from a sculptural urge": rather, it was a means of literalizing his rendering technique. While Rudolph himself offered this explanation, he framed the treatment equally as a design response to weathering, later recalling his rationale that "if you got to the inner guts of the concrete – the aggregate and its color – and exposed that, and then made channels for the staining to occur, that it would weather much better," (Figs. 104-105). 19

Rudolph, according to Vincent Scully, never experienced the Larkin Building for himself, but that did not discourage its influence (which Scully ultimately saw as insidious.) In the 1980's, Scully described how several members of the Frank Lloyd Wright Home and Studio Foundation in Oak

¹⁶ Nobel, 8. Sroat writes that Rudolph, while "he had admired Le Corbusier's chapel at Ronchamp (1955)... had also expressed hesitancy" over the degree to which its "sculptural plasticity was really viable or appropriate in the United States. But in the more rectilinear brutalism of [Chandigarh] and La Tourette, he "found an architectural aesthetic that he believed could express 'the aspirations of man' and move 'every man.'" (Paul Rudolph in "The Contribution of Le Corbusier," *Architectural Forum*, (April 1961): 90, quoted in Sroat, 71.)

¹⁷ Nobel, 13.

¹⁸ In an essay titled "From Conception to Sketch to Rendering to Building," Rudolph explained the development: "Some construction materials are easier to depict through rendering than others. This probably accounts for some of my interest in concrete and highly textured surfaces in general... For instance, the development of textured concrete, as used in many of our buildings, probably started... with the concept of rendering and how to make buildings conform more exactly to the image depicted." (Yukio Futagawa, ed., *Paul Rudolph: Drawings* (Tokyo: ADA Edita, 1972), 7; quoted in Nobel, 10.)

¹⁹ Michael Crosbie, "Paul Rudolph on Yale's A&A: His First Interview on His Most Famous Work," Architecture: The AIA Journal 77 no. 11 (Nov 1988): 102.

Park witnessed and recounted Rudolph's emotion when he first saw Unity Temple. "He was moved to a sincere and selfless admiration," Scully wrote, "to that rarest and purest of human emotions, an objective aesthetic reaction."²⁰ Scully continued,

The [A&A design's] first stages had clearly been based on other models, Corbusian in character. But somewhere along the line, the sinister genius of Unity Temple began to take over, whispering in Rudolph's ear... [Unity, Larkin] – Rudolph was determined to bring it all back.²¹

This 1986 evaluation of Scully's – written during the A&A's and modernism's nadir – framed the building and its designer in ultimately tragic terms. More recently, Joseph Giovannini framed the inspiration in more positive terms, crediting Rudolph with bringing "a dazzling complexity to Wright's four-poster idea" with the A&A's "blocks of form and space pushing and pulling back and forth, up and down." Rudolph, according to Giovannini, "reestablished the 20th century monument," and in the process "actually solved Wright's conundrum about how to bring Prairie architecture to the dense city: Wright broke the box horizontally, and Rudolph, vertically."²²

Context

In 1988, on the building's 25th anniversary, an interviewer asked Rudolph how the building, "as an object, worked pedagogically?" Rudolph's response was emphatic: "I don't think of it as an object. I think of it as participating in urbanism." The building was a legacy of the architect's deep – and surprisingly catholic interest – in the nature of context and the implications of historical layers in the character of urban spaces. Such thinking would have been stridently reformist, if not downright heretical amongst the establishment at the time. In a 1954 Architectural Forum article,

²⁰ Vincent Scully, "Unity Temple and the A&A," Perspecta no. 22 (1986): 108.

²¹ Ibid

²² Joseph Giovannini, "Old School, New School: Yale University," 15.

²³ Rudolph quoted in Crosbie, 102.

²⁴ The paradoxical and weakly historicizing urbanism of Lincoln Center (that had nothing to do with context) notwithstanding, the activism of Jane Jacobs, as well as Robert Venturi's *Complexity and Contradiction*, was still a few years off. Kahn, like Rudolph, was experimenting with context and issues of history, as opposed to the dominant thinking exhibited in the a-contextual work of Eero Saarinen and others.

Rudolph pointedly critiqued the International Style-influenced mode of practice dominant at the time, writing that:

Modern architecture's range of expression is today from A to B. We build isolated buildings with no regard to the space between them, monotonous and endless streets, too many goldfish bowls, too few caves. We tend to build merely diagrams of buildings. The diagram consists of regularly spaced bays, with the long sides filled with glass and the end walls filled with some opaque material. If we raise it on pilotis we might even snare an important prize.25

As he lamented four years later, in a written address to Yale alumni, "We, in truth, do not know how to do many other things, which the great periods of architecture have known. Foremost is our lack of a coherent theory with regard to how to relate one building to another, and to give meaning to the spaces between."²⁶ A captivated correspondent for the Forum reported in 1958 that Rudolph's position "as an intellectual leader" was established "[firmly] enough for him to be able to afford some highly unfashionable opinions."27 Rudolph had a gift for playing the maverick. Philip Nobel writes that he "created a public personal for himself that hovered somewhere between the mysticism of Louis Kahn and Philip Johnson's brashness."28 During his tenure, Rudolph explicitly shaped Yale's pedagogy around these ideas. As he told Jonathan Barnett, reporter for Architectural Record, 1962,

A school of architecture has to make clear where we are at a given moment, which means defining where we have been in order to see what forces are shaping the present... It means analyzing the so-called International Style and its buildings to see how much is still relevant. The International Style evolved theories that were applicable to industrial buildings; it never had anything constructive to say about building for the city. Le Corbusier's solution was to tear down Paris; Gropius tried to reduce planning to a few simple rules and principles; even Wright – not that he was an International Stylist – had nothing to suggest, except that we all move to the country... We have still to learn how to add to the evolving city without tearing down everything in sight.²⁹

²⁵ Paul Rudolph, "Changing Philosophy of Architecture," Architectural Forum 101 (July 1954), p. 120-121, reprinted in Paul Rudolph, Writings on Architecture (New Haven: Yale University Press, 2008): 14.

²⁶ Paul Rudolph, "Architecture: The Unending Search," Yale Alumni Magazine, v. 21, no.8, May 1958, reprinted in Paul Rudolph, Writings on Architecture, p. 39.

²⁷ Bourne, 128. Bourne notes in particular Rudolph's claim that "we should reassess our condemnation of the 1893 Chicago World's Fair..."

²⁸ Nobel, 4.

²⁹ Interview, Paul Rudolph with Jonathan Barnett, Architectural Record, v. 131, January 1962, p. 12, 62, 74-76, reprinted in Paul Rudolph, Writings on Architecture, 82. High-tech architects Norman Foster and Richard Rogers, renowned for their particular brand of theatrical urbanism filtered through technology and

When it came to designing his own building for the school, Rudolph was conscientious of the multiple contexts in which it would operate: the implication of the city grid's realignment at the street corner, the gateway nature of the lot into Yale's campus, and perhaps most significantly, Louis Kahn's Yale University Art Gallery across York Street (completed 1953). Because of Chapel Street's pivot, the southeast corner of the lot presents frontage directly down the street to the New Haven Green, circumstances that Rudolph took "brazen" advantage of.³⁰ As his Chapel Street elevation demonstrates, the building was meant to conclude a processional route from the Green that ran alongside Yale's arts complex, act as a hinge in the city's street fabric, and operate as a formal entry into the campus proper, north along York Street (Figs. 106-107).³¹ In this elevation, the abstracted allusions to Gothic Revival verticality in Rudolph's articulated towers are clear.³²

As far as Kahn's earlier and comparatively restrained building, the matter was somewhat more complex.³³ In the close quarters of York Street, the A&A itself can be understood today as an addition to what was then the (very) recent past. Rudolph averred in 1988 that aligning his wall with Kahn's was "an intention to embrace his building,"³⁴ but he was not quite as deferential in 1964, writing that "the new Art Gallery, with its neutral wall of brick forms the perfect transition to the

infrastructure, attended Yale and studied under Rudolph. While highly differentiated from Rudolph's weighty expressionism, High Tech's kit-of-parts approach also broke down scale and investigated megastructures in an appealingly democratic way. Barnett (Yale B.A. and M. Arch) would later become a well-known urban designer and is today a professor in practice in the University of Pennsylvania's City and Regional Planning department and the director of the Urban Design program there.

³⁰ Sibyl Moholy-Nagy, introduction, *The Architecture of Paul Rudolph* (New York: Praeger Publishers, 1970): 19.

³¹ Rohan, 31, makes note of the processional in architectural theory.

^{32 ...}supporting his later assertion that the A&A demonstrates "that you don't have to pick up details from a Gothic building nearby to make it sympathetic." (Rudolph, quoted in Crosbie, 103.)

³³ The relationship between the two men is not without its controversies. Kahn was teaching at Yale when Rudolph arrived, and William Huff (a colleague and employee of Kahn's) reports that the two had pedagogical differences. It should be noted that in addition to the Architecture Department's treatment of the Kahn's Art Gallery while in-residence during the years of the A&A's construction, Rudolph was also implicated in curator Andrew Carnduff Ritchie's direct alterations of Kahn's gallery spaces. Ritchie went to Rudolph with the scheme, who somewhat gracelessly accepted it while Kahn was still teaching studios as a critic at Yale. This, along with the nonchalance of Scully and other historians to the proceedings, and Yale President A. Whitney Griswold's irascible relationship with Kahn over cost overruns on the gallery, William Huff reports, led to Kahn leaving the Architecture department. It was not until 1969 (after Griswold's death) that Kahn was given another commission at the University, the Yale Center for British Art, completed in 1974. William S. Huff, "Kahn and Yale," *Journal of Architectural Education* 35, No. 3 (Spring, 1982): 26.

new Art and Architecture building, which can become much more plastic because of the [Art Gallery's] neutrality..."³⁵ As Gwathmey (who as a student helped Rudolph ink drawings for the A&A) later recounted, Kahn cast a formidable shadow in those environs, and Rudolph's competitive zeal, mixed with obvious respect, magnified the already intense creative struggle.³⁶ Time has softened the hard edges of the relationship; while some of Kahn's acolytes saw the A&A as deliberately antagonistic, the buildings (both newly restored) are today delightful counterparts.³⁷

The issue of context for the A&A, like that for all good icons, is an intriguingly open-ended debate. Critics, both in the 1960's and more recently, made frequent note of Rudolph's sensitivity to the building's surroundings amidst obvious formal struggles. Sibyl Moholy-Nagy disagreed, arguing in 1970 that with the A&A, Rudolph departed from an artistic mode of responding to "the given ambient": "Sympathetic critics of the [A&A] have pointed out how well it adjusts to the cityscape. It does nothing of the sort: it creates a new one." Rudolph, who acknowledged later that the A&A was never large enough for the program it contained, viewed the building as a type of infrastructure, intending it to grow toward the north once Yale acquired the two buildings adjacent. He wrote in 1964 that the building was "open-ended" in that direction, and "consequently, a service and vertical circulation core have been placed [there]... allowing the building to grow, [and] form a future courtyard," (Figs. 108-109). 39

³⁵ Paul Rudolph, "Yale Art and Architecture Building," *Architectural Design*, April 1964, p. 161, reprinted in Paul Rudolph, *Writings on Architecture*, 99.

³⁶ Robin Pogrebin, "Last Exam: Renovate A Master's Yale Shrine," New York Times, July 1, 2006. "Interview: Charles Gwathmey & Robert A. M. Stern," Constructs: Yale Architecture (Fall 2008): 2. Nicolai Ouroussoff, "Architecture Review; Restoring Kahn's Gallery, and Reclaiming a Corner of Architectural History, at Yale," New York Times, December 11, 2006. Gwathmey is quoted in Pogrebin: "It was a huge struggle for [Rudolph]. He had many schemes, and the shadow of Kahn was pervasive, and he really wanted to build the ultimate diagram and the ideal architecture school in his vocabulary. And he wanted it to be the greatest modern building."

³⁷ Huff; Ouroussoff, "Restoring Kahn's Gallery."

³⁸ Sibyl Moholy-Nagy, introduction, *The Architecture of Paul Rudolph*, 19.

³⁹ Paul Rudolph, "Yale Art and Architecture Building," *Architectural Design*, April 1964, p. 161, reprinted in Paul Rudolph, *Writings on Architecture*, 99.

Amidst these superlatives and theoretical implications, how was the building itself organized? Rudolph related that once the pinwheel scheme was adopted, the architectural problem was "articulating it in three dimensions."

To this end a structure was adopted which allowed each leg of the pinwheel to be at a different height, giving a kind of overlapping and an interpenetration of platforms. These series of platforms have been manipulated in such a way as to change the spaces as desired.⁴⁰

As the original plans and perspectival section show, Rudolph's pinwheel consisted of four rectangles overlaid around a void, each one terminated by at least one articulated tower. The primary circulation core to the north was pulled out from the building while an additional egress stair was more fully engaged at the southwestern corner (Figs. 110-112). The two subterranean floors were given over to sculpture and fabrication workshops and a lecture hall; the first floor held the art and architecture reference library (with its double-height portion and a small mezzanine penetrating the second floor); on the piano nobile, exhibition spaces, a double-height jury space and a student lounge all reachable by Rudolph's "chasm" entry stair; and administrative offices on a third floor mezzanine above (the additional bridges were not built). The architecture and planning studios occupied the fourth and fifth floors, consisting of a central double-height jury space, lit by lofty, four-story skylights and flanked by two balconies for the planners (Fig. 113). The sixth and seventh floors were divided into painting studios and workrooms, with more than half of the painting studios' total area arranged along the south and east sides of the building. A series of terraces started on the sixth floor, culminating in a sleek penthouse apartment for visiting critics on the eighth floor. In addition to the two principal vertical circulation cores (both enclosed), there were various open staircases in the minor towers connecting various floors, and countless runs of Rudolph's signature floating-plane steps connecting and differentiating all the disposed levels. The vertical walls and articulated towers that define the pinwheel in plan were textured in the corduroy, while board-finish concrete was used

⁴⁰ Ibid., 100.

for the horizontal structure of floors and roof to express the dynamic relationship of interlocking volumetric slippage.

Arduous aestheticism

The plans and section give some indication of the degree to which Rudolph's baroque excesses placed unusual demands on its users. As Helen Sroat notes, its eccentrically shaped interior spaces and labyrinthine circulation routes – despite the physical and visual adjacencies of spaces – "make finding one's way a feat of sorts…its articulated sculptural masses, startling vistas, striking textures and lighting effects, and the curiousness of some of its ornament, furnishings, and displayed artworks seem bent on impelling users and visitors to take note and react," (Figs. 114-115).⁴¹ A young Charles Jencks reviewed the building soon after its dedication, describing a disorienting encounter:

After walking down a ramp to the jury space, one can find the exhibition space, behind a wall, by walking up another ramp on either side of the wall, and turning 180 degrees. But how does one get to the mezzanine right above in plain sight, only ten feet away? [Figs. 116-117] Either by walking back in the direction of the entry, up and down two ramps, back outside again, in eight different directions, into an elevator, and out into a corridor and another blank wall, in all a distance of 150 feet, or by walking calmly down a ramp to the fire exit, into an enclosed tour-de-force of stairs, again to the outside, again a blank wall, in five different directions and finally one hundred feet later back inside the mezzanine. Straight ahead is a bridge. By this time the four million dollar architectural potpourri has caught the spirit and one bursts into private conference rooms, pushes open doors into private offices, leers at surprised secretaries trying hard to work in the open reverberatory mezzanine space. Now every space is different, every turn brings new confusion, another daring tour-de-force, another jagged corner, another borrowed conceit. How exciting!⁴²

While Jencks' sardonic disdain is palpable, his momentary surrender to aesthetic enlivenment was arguably Rudolph's intention. For the purposes of this thesis, we have characterized the A&A as a particular idiom of 'brutalist expressionism' that was inimitably personal. However, the building is often identified as emblematic of brutalist architecture in the United States and resultingly employed

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⁴¹ Sroat, 2.

⁴² Charles Jencks, "Esprit Nouveau est Mort a New Haven, or Meaningless Architecture," *Connection* (January 1964): 16. Jencks, an architect, critic and historian, was then a twenty five year-old student at Harvard's Graduate School of Design, quoted in Sroat, 1.

to substantiate unsympathetic critiques. Many of these readings are entangled with postmodern theory of the '70's and '80's.⁴³ According to Helen Sroat, who lays out the framework for Brutalism's humanist objectives in her revisionist 2003 dissertation on the A&A (and postwar constructions of aesthetic experience), the features that Brutalist sensibilities made use of "were actually anticipated to exalt and empower users."⁴⁴

Brutalism in fact laid great weight on the experience of users and aimed to provide them with a setting that encouraged a higher, fuller way of being in the world. Sculptural and spatial impressiveness, physical and cognitive challenge, struggle, surprise, and exceptional levels of perceptual stimulation were viewed as promising strategies for creating an enveloping, enlivening and therefore more human environment.⁴⁵

In today's atmosphere of relativism and diminished design agency (two legacies of postmodernism), the idea is not an intuitive one. But the first decades of the postwar era were a time when, as Sroat avers, faith in the agency of architecture was combined with "idealized formulations of human nature and the encouragement of humanistic development." Confronting this optimism were new American conditions, such as "the political consensus mandated by the Cold War, the anonymity and bureaucratization of the corporate work world, and the manipulative allure of mass media." 46

Meanwhile, humanist psychology was contending that aesthetic stimulation was an important human need, "providing a means for individuals to exercise their perceptual and cognitive

⁴³ In his entry on architecture for one reference anthology, Robert Twombly writes, "As realized in New Haven, brutalism is an architecture of impenetrability and rejection. Entries are tucked under downward-bearing cantilevers or at the rear of slots cut into the façade. Enter at your peril, it seems to say. There is plenty of glass but it is beyond reach or visible access from the street." (Robert Twombly, "Architecture," in Encyclopedia of the United States in the Twentieth Century, Stanley I. Kutler, editor, (New York: Charles Scribner, 1996): 1689; quoted in Sroat, 6.) Twombly, Sroat notes, claims that "brutalist buildings were a repressive response by institutional powers to the social unrest of the sixties," but this is out of order and chronologically impossible. Sroat writes, "Twombly's interpretation, particularly his concern with the surveillance aspect of the A&A, also seems to reflect the influence of Michel Foucault and others' contention [Manfredo Tafuri in particular] that architecture could work in concert with the modern disciplinary interests of power." Twombly construes the monumental exteriors and interiors of so-called brutalist buildings "as blatant assertions of oppressive and unresponsive power structures," (Sroat, 7.) Sroat also cites the far gentler entry on Brutalism by Cyril Harris in his 1998 American Architecture: An Illustrated Encyclopedia (New York: W.W. Norton, 1998), 40.

⁴⁴ Sroat, 8.

⁴⁵ Ibid.

⁴⁶ Ibid., 9, 17.

capacities."⁴⁷ Numerous studies on the effects of sensory deprivation (spurred on initially by the Korean War, Sroat notes) were undertaken in the '50's and '60's, many starting from the universalist premise that "stimulation is good, indeed, essential for [human] development."⁴⁸

Sroat compellingly situates brutalist architecture in this pseudo-scientific milieu as the "expression of a cultural attitude toward human beings," the creative outcome of a "highly intense notion of aesthetic experience" combined with a cultural project to use "artistic objects and environments to redirect people's perceptual habits and thereby promote in them the humanist ideal of a 'whole' individual."⁴⁹ The A&A was a centerpiece of the University's ambitious "Center for the Arts," a project imbued with the ethical imperative of helping shape, according to Sroat, "a more aesthetic and therefore more humane and accomplished society."⁵⁰ Much like the fin-de-siècle Protestant aestheticism in the late-nineteenth and early twentieth century, the brutalist sensibility revealed larger and widespread dissent from mass culture, one that aimed to meet it on its own terms through authenticity and intensity of experience. "Man wants to be stretched to his utmost," cried William James in 1896, "if not in one way then in another!"⁵¹

The A&A, as its reception and Rudolph's own defense of it delineate, was part of this postwar search for a more 'human' architecture that would stimulate and enliven.⁵² Rudolph, who

⁴⁷ Ibid., 200.

⁴⁸ Sroat, 200. Sroat references Albert Gilgen, American Psychology Since World War II: A Profile of the Discipline (Westport, CT: Greenwood, 1982): 122-24; and Joachim F. Wohlwill, "The Physical Environment: A Problem for a Psychology of Stimulation," Journal of Social Issues 22, no. 4 (1966): 29-38.)

⁴⁹ Sroat, 2, 17. In the atmosphere of affluence, leisure, and consumption that typified the postwar era (at least for white bourgeois classes), "fulfilling psychological and sensual needs assumed greater urgency, and producing products or environments that counteracted the superficiality of mass culture and the fragmenting, alienating forces of daily life were perceived as necessary," (Sroat, 17.)

⁵⁰ Ibid., 103. President A. Whitney Griswold's commissioned landmark buildings by Eero Saarinen, Gordon Bunshaft, Philip Johnson, and Louis Kahn among others during his progressive tenure, leaving Yale with an incredible legacy of postwar architecture.

⁵¹ William James to his wife, Alice, 31 July 1896, in *The Letters of William James*, 2:43-44, quoted in George Cotkin, Reluctant Modernism: American Thought and Culture, 1880-1900 (New York: Twayne Publishers, 1992): p. 125.

⁵² Sroat, 4. That critics' reception of the A&A was generally "lavish and enthusiastic" corroborates Sroat's contention that the A&A's particular disposition spoke, at least in part, "to concerns and ideals then pressing in American architectural culture," (Sroat 24.) Sroat also notes that many critics also ascribed human qualities to the structure and "extolled it as a work of architectural art that could teach, inspire and prompt an invigorating, fulfilling aesthetic experience in its users," (Sroat, 3.)

later confirmed his lifelong preoccupation with the "psychology of space," wrote in 1958, "We need desperately to relearn the art of disposing of buildings to create different kinds of space":

the quiet, enclosed, isolated, shaded space; the hustling, bustling, space, pungent with vitality; the paved, dignified, vast sumptuous, even awe-inspiring space; the mysterious space; the transition space which defines, separates, and yet joins juxtaposed spaces of contrasting character. We need sequences of space which arouse one's curiosity, give a sense of anticipation, which beckon and impel us to rush forward to find that releasing space which dominates, which acts as a climax and magnet, and gives direct. Most important of all, we need those outer spaces, which encourage social contract.⁵³

Rather than repelling users, features like the A&A's roof terraces, generous glass walls (especially when they were lit up at night), and interior vistas that stretched through and between floors expressed to users and passersby the dynamism of creative human endeavors taking place within. Rudolph, revealingly, saw the building "as being very human," and the meticulous renderings illustrate his interest in the way people would interact with the space and each other (see Fig. 109). 54 The modulation of floor data, seen as hubristic excess by the building's detractors, was a way to define specific autonomies within an overall framework of spatial integration. "Each discipline has its own precise area," Rudolph wrote, "but when possible they are brought together." In the drafting room, the architect noted, "Each of the five years has its own platform, but [it] is still one room taking up the entire floor in order to facilitate interchange of ideas between the students and faculty," (Figs. 118-119).55

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⁵³ Paul Rudolph, "Architecture: The Unending Search," Yale Alumni Magazine, v. 21, no.8, May 1958, reprinted in Paul Rudolph, Writings on Architecture, 40. Crosbie, 104.

^{54 &}quot;I'm afraid that I would rather see most buildings without people in them, but really this is one building which seems to me to look better with people," (Paul Rudolph quoted in Jonathan Barnett, "A School for the Arts at Yale," Architectural Record (February 1964): 118.)

^{55 &}quot;Two mezzanines have been introduced in order to accommodate the planners in the same general area. This fundamental scheme allowed the ceiling heights to vary from seven feet to twenty-eight feet," (Paul Rudolph, "Yale Art and Architecture Building," *Architectural Design*, April 1964, p. 161, reprinted in *Paul Rudolph, Writings on Architecture*, 100.) Rudolph commented in 1988, "I thought it important that first-year students be very aware of what [upper years] were thinking and doing," (Crosbie, 105.)

Idiosyncrasy

Despite the broader physical and cultural contexts in which the A&A operates, there is nonetheless an unsettling, relentlessly personal thread that runs through the monument, which Gwathmey Siegel would be forced to confront. Amidst its gregariousness, one gets the sense that wherever Rudolph journeyed to psychologically in the building's design and redesign, it is a lonely place (Fig. 120).⁵⁶ Even in 1961, Walter McQuade admitted he found Rudolph's artistry "disquieting," despite the building's successively more resolved iterations, "because he has inserted himself so ruthlessly into his work."⁵⁷ In what was no doubt an embarrassment for Rudolph, Nikolaus Pevsner marred the otherwise celebratory dedication, admonishing Yale students not to emulate the building because it was too much the work, in Pevsner's words, of an "individualist... primarily concerned with [his own] self-expression."⁵⁸ Scully, the building's committed champion, nonetheless characterized the A&A in heroic terms as the outcome of a great individualistic struggle.⁵⁹

Into every intersection the abundant energy reaches, the power and the unease. One senses the fast-drawing pencil with its compulsively neat, parallel linear shadings, which studied each nook and cranny time after time, proliferating forms, breaking them down, recombining. Total integration is the intention - of interior and exterior, of all floors, which

⁵⁶ Rudolph: "For, to me, the architect's function as artist means everything: Insofar as he is an artist, the architect must inevitably be subject to the same rule as any other artist, that of personal expression. Here he is alone, despite his many roles," (Paul Rudolph, Acceptance Speech, American Academy of Arts and Letters, Second Series, no. 9, 1959, reprinted in *Paul Rudolph, Writings on Architecture*, 57.) Philip Johnson, who taught at Yale during Rudolph's time there, recounted to Robert Stern that Eero Saarinen "was the one person I could talk to – besides Rudolph, and Rudolph and I never could keep up the same quality of conversation because Rudolph is an artist. That really, I suppose, has been his problem throughout life. He is a real artist. He knew what he wanted, knew what shapes he wanted. And he was more interested in those than he was in the – although there's nothing wrong with his intellect. He's a great teacher, as you know [speaking to Robert A.M. Stern]," (Philip Johnson, *The Philip Johnson Tapes: Interviews by Robert A.M. Stern* (New York: The Monacelli Press, 2008): 100.)

⁵⁷ "No matter how he varies the recipes for façades, I can see the faultless young crew cut head peering out the windows," (Walter McQuade, "The Exploded Landscape," Perspecta 7 (1961): 83, quoted in Nobel, 1.

⁵⁸Nikolaus Pevsner, "Address Given at the Opening of the Yale School of Art and Architecture, 1963," *Studies in Art, Architecture, and Design, vol. II* (New York: Walker, 1968, 260-265; quoted in Rohan, 28.

⁵⁹ "This furiously ambitious building is the first of its architect's full maturity. It is surely the most historically significant of the many buildings constructed at Yale since [Kahn's] Art Gallery, and it demands and rewards extended critical attention," (Vincent Scully, "Art and Architecture Building, Yale University," *Architectural Review* (May 1964): 325.

cease to exist as such - total integration and the constant action of all surfaces... How raw and violent it is, all this so truly, openly, with so much talent, I think bravely, stated here.⁶⁰

The building, in Rudolph's inimitable inception, was also ground zero in the central paradox of brutalist sensibilities: the twin aims of acting in users' best interests – providing them with enlivening 'humanist' environments – while at the same time challenging these users through confusion and discomfort.⁶¹ Scully noted early on that Rudolph's vertiginous space-making, sculptural massivity and labyrinthine circulation "puts demands upon the individual user that not every psyche will be able to meet."⁶² It is difficult to reconcile the atmosphere of simultaneous holiness and terror, in the A&A's vaguely ecclesiastical underground lecture hall (Figs. 121-122), for instance, with Rudolph's suppressed sense of whimsy, indulged in dark corners of the building where he had amethysts and nautilus shells inset into the concrete.⁶³

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⁶⁰ Ibid.

⁶¹ Sroat writes that while Rudolph thought he was acting in users' best interests, also implicit was his assumption of a "hardened stance," (Sroat, 215.) When Rudolph, speaking at the AIA national convention in 1963, was asked by an audience member whether architects were "justified in practicing (such) sculpture" where and when it "offends lay people," he answered in the affirmative: "Quite often a given form of art will seem terribly awkward when introduced... In time quite often this aspect becomes less... It is my opinion that all forms of art, including sculpture and certainly architecture should be concerned with that which is meaningful and significant and not merely pretty," (Paul Rudolph in the recorded proceedings of the 1963 National AIA Conference, AIA Journal (July 1963): 82; quoted in Sroat, 216.)

⁶² Vincent Scully, "A note on the Work of Paul Rudolph," unpaginated catalog to the exhibition *The Work of Paul Rudolph, Architect* (Yale University, New Haven, 9 November 1963-January 1964); quoted in Nobel, 4.) Rudolph, as Sroat notes, would later describe the A&A's interior "in very active, physical terms as a series of spatial 'thrusts,' "(Sroat, 175.) Rudolph: "I'm fascinated with the interaction of one space with another. For example the Art and Architecture building consists of many wings. Each wing has a strong horizontal thrust around a vertical thrust," (Paul Rudolph, interviewed by John W. Cook and Heinrich Klotz in *Conversations with Architects* (New York: Praeger, 1973): 98.) Rudolph later acknowledged, "Such active spatial designs often troubled users. The balancing of thrusting and counterthrusting spaces, often rushing through the blue, outward and upward, leads to the most dynamic of all interior spaces. However, if this... is not brought into equilibrium, it causes most people to feel a sense of disorientation and unease. They are actively repelled by the space, because it is felt too much," (Paul Rudolph, "Enigmas of Architecture," A+U: Architecture and Urbanism (June 1977): 320; quoted in Sroat, 175.)

⁶³ Sroat very insightfully describes the lecture hall as "rigidly symmetrical in layout and imposing. Low concrete walls divide the seating into three sections," like a nave and two aisles. "Wooden bench seating strengthens the ecclesiastical evocation... [but] the auditorium also calls to mind a tomb or place of sacrifice," emphasized by "a violent de Kooning cloth painting behind the stage and the two Ionic capitals, 'impaled,' [according to Sibyl Moholy-Nagy,] on slender pipes," (Sroat, 211, quoting Sibyl Moholy-Nagy, 'The Measure," *Architectural Forum* (February 1964): 79.)

Response

For a project of such raw promise, its timing was unpropitious. The A&A, which had been "conceived amid the relative cold war consensus of the second Eisenhower administration," Timothy Rohan notes, "was baptized in the traumatic times" that followed Kennedy's assassination.⁶⁴ Rudolph, who later admitted that he never felt very comfortable as an educator, left Yale in 1965 to pursue private practice just two years after the A&A's opening, and Charles Moore was chosen to succeed him as department chair.⁶⁵ The building's functional shortcomings, discovered by its users almost upon its opening, were no longer brushed under the carpet (which was itself soon replaced.)66 The painters were bitterly dissatisfied with their cramped and impersonal quarters, too small for evergrowing canvases and exposed to the direct light of south-facing windows, while the sculptors compared their poorly lit, unventilated basement studios to a "dungeon," (Fig. 123).67 It seemed clear that built-in favoritism had resulted in Rudolph's own department being given the best space in the building.⁶⁸ Art students, after only two months' residence in the completed building, picketed the University's dedication ceremonies, shot out a window with a B-B gun, and graffitied various walls.69

The real blows, however, came from within the architecture department. Moore, it was reported, openly disdained the building and collaborated with students on "a tongue-in-cheek

⁶⁴ Rohan, 28.

⁶⁵ Crosbie, 104.

⁶⁶ Rudolph's paprika (orange) carpet only lasted until the late 1960's before being replaced with a shade of gray, (Nobel, 4.)

⁶⁷ Sroat, 164, citing "Painters, Sculptors Find New Building Lacks Functionality," Yale Daily News (November 8, 1963): 7. The departments had moved into the building at the beginning of the academic year, even though it was not yet finished. The lower levels were lit through Rudolph's "courtyards."

⁶⁸ Rohan notes that commentary frequently focused on Rudolph in the enviable position of being his own client, but it was more complicated. President Griswold had pushed for the union of the fine arts department and architecture in the same building. Rudolph "had to accommodate the dean of the art and the architecture school," Gibson Danes (Rudolph was only the chair of the ARCH department), and the chairmen of the art and the art history departments. "Right up until the last moment, the library was pulled in and out of the design," (Rohan, 27). In the end, art history remained in its own building (until 2008.) Reportedly, earlier stages of the design consolidated the painting studios "in such a way as to receive north light... apparently in the final result other considerations became more important," (Barnett, "A School for the Arts at Yale," 120.)

⁶⁹ Rohan, 27

'ridicula' in the heroic second-floor jury space."⁷⁰ Moreover, Moore's appointment seemed to be indicative of a newly permissive attitude, as the architecture students were "permitted to reconstruct Rudolph's carrels to their own specifications, even turning some of them into two-story structures."⁷¹ A 1967 Architectural Forum article marked the turn for the building in the architectural press. The author, Ellen Berkeley, discussed the building's decline and approvingly described how the students had "spontaneously' reconfigured the interior to their own specifications... transforming the main drafting room into a 'settlement.' "⁷³ Noting their similarity to *favelas*, "Berkeley implicitly recalled period discussions of social consciousness and proof of Modernism's inadequacies in places like Brasilia."⁷⁴ However, the images that accompanied Berkeley's article were arguably more damning: candid photographs of the interior's present state were contrasted with Stoller's immaculate images from 1963 (Figs. 124-125). "The implication," Rohan writes, "was clear: the building had failed in the same way that the Establishment itself was failing, and it was left to 'youth' to move in and to generate more open-ended, flexible, and spontaneous practices."⁷⁵

Rudolph also became the scapegoat of a scathing critique in Robert Venturi, Denise Scott Brown, and Steven Izenour's 1972 *Learning from Last Vegas*, which compared Rudolph's Crawford Manor House for the Elderly and its so-called aesthetics of exclusion to Venturi's Guild House. Why Rudolph, and not Bunshaft, for instance? After all, the studios that the book built upon took place at Yale, where the authors were critics. As Robert Bruegmann notes, using a work by Rudolph as a negative foil "was more than just an act of rebellion by Venturi against the accepted wisdom of

⁷⁰ Giovannini, "Old School New School," 15.

⁷¹ Rohan, 28.

⁷² The article is Ellen Berkeley, "Yale: A Building as a Teacher," and "How do Students Really Live?" *Architectural Forum* 127 no. 1 (July-Aug 1967): 46-85, 90-97. Rudolph blamed the article for the loss of some commissions, (Rohan, 28.)

⁷³ Rohan, 28.

⁷⁴ Ibid.

⁷⁵ Ibid.: Ellen Perry Berkeley, "Architecture on the Campus: Yale: A Building as a Teacher," *Architectural Forum* (July/August 1967): 47-53.

an era. It was more than a little [directly] Oedipal."⁷⁶ The building, as Joseph Giovannini notes, was increasingly being ridiculed by architects building themselves up "by tearing it down."⁷⁷ By the late sixties and early seventies, Brutalism's reformist, aesthetically confrontational ideology was itself seen as the aggrandizing style of the establishment. To postmodernist thinking, Brutalism's experiential challenges were a sign of trouble rather than, in Sroat's words, "a marker of excellence."⁷⁸

The suspicious fire of 1969, occurring amidst widespread unrest on Yale's campus, became an integral part of the building's tragic lore. Rohan notes that like most campuses, Yale in the late '60's "was the scene of mass demonstrations against the war in Vietnam"; New Haven was also the setting for the Black Panther trials. Because of its large spaces and "an abundance of sign-making materials," the A&A became a logical staging ground for student protests. Within the school itself, "tensions also rose when some students and faculty in the city planning department demanded the university admit more black and Hispanic students," (Fig. 126). That students started the fire is often alleged or at least left open-ended, but Rohan has ultimately settled the matter as an accident. The conflagration resulted from combusting solvents, thinners, and an "ever-proliferating mass" of paper in the studios. "The favelas were as combustible as any shantytown," he writes; the interior was immolated not by deliberate instigation, but "by its own production: Art and architecture burnt Art & Architecture."

⁷⁶As Robert Bruegmann rightly asks, "What accounts for Venturi's abrupt change of tactic between 1966 and 1971 and his unexpected attack on Rudolph?... Rudolph himself had invited Venturi to teach at the Yale School of Architecture when Rudolph was [department chair]. Starting ten years earlier, Rudolph himself had enunciated many of the most important arguments made in the Venturi Scott Brown essay... He had rejected the Ville Radieuse and had spent the decade working on ways to carry out a new program of urbanism." Certainly Gordon Bunshaft or I. M. Pei, were much more *exclusivist* ("a term used at the time to designate modernists uninterested in dealing with the complexities of existing urban context") than was Rudolph. Bruegmann points to Rudolph's establishment of the kind of practice to which a younger architect like Venturi might have aspired: an office run like an atelier rather than a corporate practice and with strong ties to academia. (Robert Bruegmann, introduction, in Roberto De Alba, *Paul Rudolph: The Late Work* (New York: Princeton Architectural Press, 2003), 29.)

⁷⁷ Giovannini, "Old School, New School," 15.

⁷⁸ Sroat, 336.

⁷⁹ Rohan, 30.

⁸⁰ Ibid. See Perspecta 29, entire issue.

⁸¹ Rohan, 30. Rohan writes, "An unpublished interview that C. Ray Smith conducted on October 11, 1979, with New Haven Fire Marshall Thomas Lyden, who investigated the incident in 1969, has convinced me that

The fire resulted in the gutting of the fourth and fifth floor architecture studios (Fig. 127), and the renovations throughout the building that took place in its wake "were emphatically unsympathetic." Under Moore's eye, enclosed mezzanine levels and partitions were inserted into the building, dividing double-height spaces into single-story ones. Rooms were closed, merged, or carved up, uses changed, expansive walls of glass covered in cheap wallboard, interior vistas blocked. Original ceilings were torn down and hung ceilings appeared; sickly-green fluorescent lighting replaced Rudolph's incandescent perimeter light scheme. False floors were installed, negating differentiations in level. The narrow U-channel concrete bridge spanning the fifth floor balconies that starred in Stoller's shots was removed; the fourth and fifth floors, Rudolph's particular gift to architecture students, instead became single-story warrens of painting studios. When Rudolph saw the A&A on a 1977 visit to Yale with George Ranalli for a show of Rudolph's drawings that Ranalli had curated, he reportedly broke into tears: "What have they done to my building?" A

For the next thirty years, the building was "a sad semiruin that fit comfortably into neither modern nor postmodern categories." Dirty, trash-strewn, and uncared-for, its worsening condition could also be attributed to the cash-strapped University's policy of deferred maintenance, which lasted from the economic crises of the 1970's into the late '80's.86 Even Vincent Scully, once the A&A's ardent champion, would now mournfully present slides from the early '60's in history lectures and deliver his epitaph of the A&A: a casualty in the "tragic drama' of the '60's' sociopolitical crises" and an artifact "that had no place in what was now the 'age of irony." Scully, writing in the 1988

the fire was an accident. The interview is part of Rudolph's papers; unprocessed documents, Paul Rudolph archives, the Library of Congress."

⁸² Rohan 30; Crosbie, 100; Nobel, 2.

⁸³ Nobel, 2. Sarah Amelar, "Gwathmey Siegel Sparks Controversy with an Addition to Paul Rudolph's Yale Art and Architecture Building," Architectural Record 197 no. 2 (Feb 2009): 55.

⁸⁴ Joseph Giovannini, "Old School, New School," 15.

⁸⁵ Rohan, 30.

⁸⁶ Ibid., 27.

⁸⁷ Ibid., 26: Rohan cites the postscript to Vincent Scully's Modern Architecture: The Architecture of Democracy, revised edition (New York: George Braziller, 1974), 49-50.

issue of *Perspecta* on Rudolph's "aesthetic reaction" at Unity Temple, lamented that "as so often happens with all our most generous impulses, this feeling was to prove his undoing."

He tried to shape another building on the foundation of his admiration, but... the result, while as magnificent as the charge of the House Guards at Austerlitz, was equally disastrous... He should have abandoned the model, one supposes, but his blood was up. He fought the thing through at every level, and the building shows the marks of that struggle, which was exacerbated by the going Brutalist mode of the period. This suggested vast lintels and, eventually, the sadistic concrete. Wright's way of handling detail in his early work had been utterly different.... Rudolph had to bludgeon our senses with titanic roarings. It was all the gruesome zeitgeist of the moment would seem to have allowed....⁸⁸

Rudolph's reputation was partially revived in the late 1980's by Michael Sorkin and others as the postmodern historicist craze had run its course, but the successive events that took place at the A&A and the overarching narrative they suggested forever eclipsed his career.⁸⁹ By the early 1970's he had ceased to receive the larger commissions that, funded by Great Society legislation, had sustained him in the 1960's; the enabling Cold War liberal consensus culture "had collapsed under assault from left and right." In later life, Rudolph was engaged in consistent work and larger-scale projects in Asia but remained a specter in American architectural circles. ⁹¹

A glimmer of hope for the building came in 1988, when a small group of students mounted an exhibition of Rudolph's original drawings for the A&A on its 25th anniversary, and the architect consented to an interview. "I never talk about this building," he began. "It's a very painful subject for me." Rudolph described his own naïveté for the functionality of the second-floor jury space which, too exposed for reviews, went unused and was adapted into a gallery (see Fig. 117), stated his intention for future expansion ("the courtyards in the back were to be centrally ringed"), and called the appropriateness of interior space "a mixed bag," regretting his "inability to get natural light into

⁸⁸ Vincent Scully, "Unity Temple and the A&A," Perspecta, 109.

⁸⁹ Nobel 6.

⁹⁰ Herbert Muschamp, "Paul Rudolph is Dead at 78; Modernist Architect of the 60's," New York Times, August 9, 1997. Rohan, 29.

⁹¹ "Although articulate over the drafting board, [Rudolph] never successfully defended himself... Enigmatic to the end, he has left his answers in the form of buildings," (Rohan, 31.) According to one critic, "Rudolph would lurk in the back of lecture halls and sneak out before he was seen," (Philip Nobel, "Ashes to Ashes," *Metropolis* 17 no. 7 (Apr 1998): 37.)

⁹² Crosbie, 101.

the second floor as it was intended... [as] natural light becomes an integral part of the psychology of space."

... Obviously [the building's] too small [for its program.] I did not anticipate – I'm not sure that anyone anticipated - that the painters for instance would want to make very large paintings... The size of the paintings studios would have to be much larger.

[Of all the changes, what's the most damaging?] The lighting. Well, no, I should say first of all, the divisions of the major space, which happened to be the architectural drafting room [of the fourth and fifth floors.] That it's subdivided and it's used in an entirely different way. While that's the nature of buildings... it seems particularly damaging to me because... Well, I guess it's fairly clear that that was a major part of the building... It would be wrong of me to say I'm not touched by the [rumor] that students of architecture set the building on fire. But I'm also touched by the fact that they make a model of the building and they want to have an exhibition. Of course it touches me. I'm pleased that the building touches people, and part of that is that people's opinions oscillate about it. That's okay. The worst fate from my viewpoint would be indifference. I've never worked on a building that affected me as much as that one does. I'd like to think that, in spite of everything, it says something about the nature of architecture.⁹³

That same year there was a faint possibility that the building might be revived, but nothing came of it, and the interview was the first and last time since the fire that Rudolph would speak of the A&A publicly. After a lecture in 1993, Rudolph refused to answer a question about the building, stating flatly that it "no longer exists for me." He died four years later of asbestos-induced mesothelioma, leaving behind what Herbert Muschamp called "a perplexing legacy that will take many years to untangle." Sibyl Moholy-Nagy, his longtime defender, had written in the 1970's that Rudolph had been one of a handful of American architects who "broke the Atlantic sound barrier, creating designs that were more than the sum of their European influences." The result, in her view, was "architecture that is experimental, contradictory, competitive, and bigger than life." However, few people, including the architecture faculty and students who used it every day, could see much value in the A&A, now haggard and aggressive, the immensity of its significance hiding in plain sight.

⁹³ Ibid.

⁹⁴ Ibid., 105. The dean at the time, Thomas Beeby, reported potential plans for rejuvenation and eventually, an addition.

⁹⁵ Paul Rudolph, lecture at the National Institute for Architectural Education, New York, 2 December 1993, quoted in Nobel, introduction, *The Yale Art + Architecture Building*, 2.

⁹⁶ Herbert Muschamp, "Paul Rudolph is Dead at 78; Modernist Architect of the 60's," *New York Times,* August 9, 1997) The mesothelioma was likely caused by his time in the Navy, lining ships with asbestos.

⁹⁷ Moholy-Nagy, "The Measure."

Revision

It is a miracle that, in such condition, the building survived at all through the late 1990's; Robert A.M. Stern (an alumnus of Yale's architecture program, sometimes postmodernist, and Rudolph's onetime student) notes that this could be attributed, at least in part, to the fact that it was too expensive to tear down. 8 Stern, who became dean in 1998, called the building a "lost child" and lobbied heavily for its renovation.⁹⁹ The art program, always deeply unhappy within the A&A, finally decamped to a newly renovated building across the street in 2000, leaving the A&A to the architects.¹⁰⁰ This was the result of some behind-the-scenes planning and departmental shuffling; the art program's departure coincided with the announcement that Sid Bass, a wealthy benefactor and former patron of Rudolph's, donated \$20 million towards restoration of the A&A and an eventual expansion to house the art history department.¹⁰¹ The fine arts department's departure had freed up its parts of the building, allowing for the removal of all the accretions and alterations of the previous decades. It was "exorcism by crowbar," an archeological excavation that exposed some of the original building's defining elements to the light for the first time in thirty years. 102 This dramatic revelation awoke scholars and critics to aspects of the building that its mythology had overshadowed, like the precision-tuned relationships within and to its immediate surroundings. The building was like a Piranesi etching brought to life, Timothy Rohan wrote in 2001, "for in its original incarnation

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⁹⁸ Paul Needham, "A&A Building Renovation to Restore Historic Elements," Yale Daily News, February 6, 2008.

⁹⁹ "Interview with Charles Gwathmey and Robert A.M. Stern," *Constructs.* In the project's fact sheet, Gwathmey Siegel attributes the overall approach to the building to a 1996 planning study, (Gwathmey Siegel and Associates, "Yale Arts Complex," 2008.)

¹⁰⁰ This was the former Jewish Community Center, renovated and expanded by Deborah Burke and dedicated Holcombe T. Green Jr. Hall. The Sculpture Building was completed in 2007 by Philadelphia architecture firm Kieran Timberlake and served as the architecture school's home during some of the A&A building's 2007-2008 renovations.

¹⁰¹ Bass had commissioned three significant projects from Rudolph in the '70's and 80's, including his Fort Worth family home, (Julie V. Iovine, "A Treasure at Yale, Freed of Wallboard," New York Times, November 16, 2000.)

¹⁰² Theodore Whitten, "Brutalist Butterfly: Revealing the Hidden Beauty of Yale's Legendary Art & Architecture Building," Metropolis 20 no. 4 (Dec 2000): 44; Iovine.

Rudolph's building functioned as a kind of pre-photographic viewing apparatus, a *camera obscura* that dramatically framed specific interior elements."

Like those of Piranesi, these interiors were the product of a fevered and impassioned imagination whose designs could make the viewer – or inhabitant – uneasy. Rudolph's process was less a machine for producing design in a rational manner than it was an apparatus attuned to the sort of gaze that could envision an architecture based on vistas, textures, and the inchoate, half-understood signs littered throughout the building. 103

Unlike Piranesi, Rudolph's complex interiors (it was rediscovered) were outward looking, emphasizing in the views they framed the architect's particular interest in urban relationships. This discovery in particular led to revisionist research into Rudolph's lifelong and largely ignored investigations in the dilemmas of urbanist modernism.¹⁰⁴

In 2002, Yale announced that it had commissioned Richard Meier to design an addition to the A&A, a new art history building containing twelve to fifteen classrooms that would also include an expansion of the ground-floor arts library. Rudolph had probably anticipated expanded studio spaces rather than classrooms and offices, but the expedient marriage of Architecture and Art History was driven by the departments' need to be in proximity to the arts library, which was overflowing its original space. David Childs of Skidmore Owings & Merrill would oversee the A&A's restoration. The combined project was expected to be completed in three years, but in 2004, it was quietly dropped in the schematic design stage for reasons that were unclear. The University ultimately decided on a single architect for the renovation and addition, probably a wise idea given the potentially complicated relationships with the combined project, and engaged Gwathmey Siegel

¹⁰³ Rohan, 30.

¹⁰⁴ Particularly Rohan's and Sroat's scholarship and the 2008-2009 exhibition "Model City: Buildings and Projects by Paul Rudolph for Yale and New Haven," Yale School of Architecture, 2008.

¹⁰⁵ Stern quoted in "Interview with Charles Gwathmey and Robert A. M. Stern," Constructs, 2.

¹⁰⁶ Yale President Richard Levin told the *New York Times* in 2006 that Mr. Meier's design was "spectacular' but was ruled out as too expensive," (Pogrebin, quoting Richard Levin.) David Childs related that the university had "decided to go with a single architect and deemed it unfair to choose between him and Mr. Meier; Mr. Gwathmey was the new choice. Meier "said he was never informed about Yale's reason for abandoning his design," (Pogrebin.) Stern is quoted as saying that "for various reasons the strategy did not work out, and when the project was ready to move forward again, it was thought that perhaps a single architect would be more appropriate. Rick Levin, the facilities department, and I agreed that [Gwathmey] was the right architect," ("Interview with Charles Gwathmey and Robert A. M. Stern," *Constructs*, 2.)

and Associates. The combined project began construction in 2006 and was completed in 2008 (Figs. 128-129).

It was an intensely personal project for Charles Gwathmey, who graduated from Yale a year before the original A&A was completed and had worked in Rudolph's office on weekends while it was being designed. Gwathmey, who admitted some anxiety over the project, stated,

It was very complimentary for me to have been asked to do this because I loved Paul and because of my time [at Yale]. Paul used to recruit Der Scutt ('61) and me to ink perspective drawings of the building at night. As he designed, he struggled about being across the street from Louis Kahn... he wanted to build the ultimate diagram and the ideal architecture school. For me to be able to come back and restore the building and also do an addition is a great way to express my gratitude.107

The mention of Kahn was germane: the Art Gallery was also undergoing a universally praised, highly sensitive restoration by Polshek Partnership, also the master planner for the arts area. 108 The two projects were part of a larger effort to reclaim a corner of the Yale campus, and their restorations – especially the rebuilding of Kahn's glass and steel-framed west façade - shed new light on the interplay between Kahn's and Rudolph's original visions (Fig. 130).

While this thesis focuses on additions, the degree to which a unified approach to the original building's interior and the addition was framed – and what that approach was – is highly relevant. According to Gwathmey, the design team's first priority was to "to clarify the true essence of Rudolph's intention." In his view, this meant "pulling everything out that was vestigial or added, and making the building the pure diagram."109

Renovation

Considering that the A&A was a relatively young building, it is hard to overstate the scope that a proper restoration of it would require. Remarkably, the building had never been outfitted with

¹⁰⁷ Pogrebin; Constructs, 2.

¹⁰⁸ Firm of James Polshek (Yale '55). The challenging renovation to the Art Gallery was completed in 2006, with an expansion currently under way.

^{109 &}quot;Interview with Charles Gwathmey and Robert A. M. Stern," Constructs, 2.

Gwathmey Siegel swapped the pallor-casting fluorescent lighting with a halogen scheme that replicated Rudolph's original design, moving all lighting back to the perimeter so that the white ceilings would once more be unbroken. The building's glazing was replaced with the largest insulated glass panes ever made available; a new glass press was fabricated especially for the project. The new panes reflect minimal daylight, revealing the building's interior to the street in a way Rudolph, limited by 1960's technology, never could have imagined (see Fig. 128). Years with only minimal maintenance had left the concrete in grimy and critical shape, with spalling and exposed rebar in a number of places; these were patched, and the facades powerwashed. Rudolph's original asbestos ceilings had been ripped out in the 1970's, so to create the effect of the original ceiling plans while inserting modern climate control systems, the team design adopted a radiant ceiling panel from Europe that could heat and cool while reducing the ductwork and overall section. Stern and Gwathmey even had a two-inch-wide swath of salvaged original paprika carpet cleaned and computer analyzed so its color and texture could be reproduced exactly (Fig. 131). 112

Of course, given today's accessibility and building codes and climatic expectations, some compromises were inevitable. On the second floor, the main gallery's sprawling set of eight separate levels (not including steps) was reduced to an accessible three by adding wood flooring and two handicapped ramps, regrettably domesticating one of the original A&A's best spaces (Fig. 132). Some rooms were not restored but readapted, as in the case of the smaller, sunken lecture room southwest of the gallery: a miniature, Corinthian-order version of the disquieting main hall

¹¹⁰ Zeynep Pamuk, "Back to Former Glory, A&A Named for Rudolph," Yale Daily News, November 7, 2008.

¹¹¹ A 1994 stopgap refit of the building's windows by Beyer Blinder Belle also used pre-cast caps to cover over the worst conditions, like dentists' crowns (these made conditions worse.) Rudolph's original windows had not been insulated; the ones that Beyer Blinder Belle replaced them with were, but were also much smaller because of manufacturing limitations. ("Interview with Charles Gwathmey and Robert A. M. Stern," *Constructs*, 2; Kate Taylor, "Pennies to Build, Millions to Restore," *The New York Sun*, November 26, 2007; Amelar.

¹¹² Paul Needham, "A&A Building Renovation to Restore Historic Elements," Yale Daily News, February 6, 2008.

downstairs (Fig. 133).¹¹³ But most updates to Rudolph's original vision were inconspicuous and as minimal as the codes would allow, like the ramps installed in a number of other places. Some of the small twists were extremely positive. The team made another cast of Minerva to watch over the fourth and fifth floor studios, and Gwathmey restored Rudolph's fifth-floor U-channel bridge at the west end of the space, recessing it into the balcony to make the two floors flush (Figs. 134-135). In a deliciously subtle move, Gwathmey replicated the bridge for the east end, achieving a more fully interconnected network of spaces and routes.¹¹⁴ The overall outcome was a stunning revelation.

Nicolai Ouroussoff wrote that the result "should stun those who have continued to deny Rudolph's talent. Now seen in its full glory, [the A&A] will force many to reappraise an entire period of Modernist history."¹¹⁵ The building has been sensitively and expertly reinstated back to the canon (Figs. 136-138). As one Yale student put it, "The building was a diamond covered in mud. Gwathmey scraped it clean"¹¹⁶

Addition

Primarily, Gwathmey's addition approach was a respectful problem-solving one, and at this he excelled (Fig. 139). Design of the addition was, like most additions, significantly complicated by the program and need to satisfy distinct user groups: the School of Architecture, the History of Art department, and the arts library. The library wanted to double its space, be contiguous, and have an entry and presence from the street; History of Art, Gwathmey recounted several times, "was concerned about being perceived as an addition," and wanted to be distinguished through "an

¹¹³ It is unclear whether any of it survived into 2000's, but the renovation flattened the floor and it became the gallery's curatorial offices.

¹¹⁴ This was not obvious, as the original U-channel bridge is often not included in Rudolph's published drawings. It does, however, appear in Stoller's photographs (whereas the second one does not.) Nobel also makes mention of its removal in the post-fire renovations.

¹¹⁵ Nicolai Ouroussoff, "Yale Revelation: Renewal for a Building and Its Original Designer," New York Times, August 28, 2008.

¹¹⁶ Zeynep Pamuk, "Back to Former Glory, A&A Named for Rudolph," Yale Daily News, November 7, 2008.

architectonic resolution."¹¹⁷ The Architecture school required that transparency and views be maintained from the north-side studios even with an addition (Fig.140). It can be assumed that many of these concerns, at least for Architecture and History of Art, were responses to Richard Meier's earlier scheme. Meier had proposed a top-lit atrium between the A&A and his enclosed spaces, roofed at the A&A's height, that would create a seven-story internal void over the expanded library reading room (Figs. 141-148). The enclosure would have made the A&A's entire north wall an internal one and blocked students' views to the outside, but it is likely that History of Art was more vocal in their displeasure, suspicious about whatever honorifics to A&A might come at their expense.¹¹⁸

In his addition, Gwathmey took a much more sophisticated approach to the contested ground between old and new. Rudolph had filled the space between the A&A's north and south walls and the lot boundaries with his "courtyards," a unique combination of double-height basement spaces, skylights, and natural plantings (see Fig. 123). (The north courtyard, unlike the south, did not survive the later alterations.) Rudolph's idea had been that the north courtyards would be "centrally ringed," a twentieth century counterpart to Yale's picturesque Gothic Revival quadrangles. While Meier's scheme recognized this intention, it ignored the intimacy of the original courtyards and their principle function of exterior separation. Gwathmey's approach was to enclose the space but only within two aboveground stories (plus one belowground), a closer adherence to Rudolph's architectural vision, despite the various programmatic differences and demands the A&A's architect never imagined.

^{117 &}quot;Interview with Charles Gwathmey and Robert A. M. Stern," Constructs, 2; Pogrebin.

¹¹⁸ For instance, Gwathmey recounted that he did review Meier's plans, "and I used them to initiate our first meeting with the library and the History of Art Department. I told them, 'he's a friend, this is a little awkward, but tell me, what didn't work?' And they were very clear," ("Interview with Charles Gwathmey and Robert A. M. Stern," *Constructs*, 2.) Gwathmey also notes that History of Art requested varied offices, without double-loaded corridors (clearly visible on Meier's fifth-floor plan). (Ibid.)

¹¹⁹ Crosbie, 105. When asked if he'd drawn schemes for an addition, Rudolph answered, "doodles." Timothy Rohan reportedly found these sketches in the Rudolph archive but Gwathmey never saw them, (Taylor.)

The library, the existential reason for Architecture and Art History's new marriage, would forge the physical link between old and new but its height would now be limited (Fig. 149).

Gwathmey handled the programming and variety of spaces imaginatively, as in his well-crafted two-story lecture hall on the second floor. As he described the *parti*,

The disposition was very clear once we understood the library had to be on the ground and basement levels and that it was the connecting space. Then we took Rudolph's ceremonial stair as the idea of entering the exhibition floor, with the entry to the new lecture hall and the History of Art Department reception, which established the vertical disposition. The offices for the History of Art in Loria start on the fourth floor and go up to the seventh, and the all the connecting links to the A&A from the new core were self-clarifying. 120

The need to protect the A&A studios' northern views generated the addition's bifurcation into two separate towers on the east and the west. The west tower (which Rudolph had probably not anticipated) operates like a service apparatus for the original building, containing code-compliant restrooms, egress stairs, and a service elevator. This division into two volumes creates a delineated plane atop the lecture hall, two stories above the library, which Gwathmey made an occupiable planted terrace to frame the bottom edge of views out from the A&A north (Fig. 150). This "fifth façade," a green roof linking his two towers, was a key element for Gwathmey, who was keen to avoid the prospect of looking down from the A&A's windows onto generic roofing. The planted roof, while much higher up, also abstractly recalls Rudolph's original planted courtyard. In mild weather, it is sure to be an engaging place, an elevated green partially bounded by the combined building.

In its complex interlocking of old and new, the renovated library is the addition's most successful interior space. The two-story library court was enclosed under a grid of domed skylights, and the back of the old A&A within is now an interior wall (Fig. 151). Space, like Rudolph's own, starts to leak and run over and around overlapping volumes and develop some psychological identity (Figs. 152-154). Gwathmey's enclosure highlights the gravity-defying spans of Rudolph's single-story openings, compressed only further by the relentlessly perspectival lines of the bookshelves. The

^{120 &}quot;Interview with Charles Gwathmey and Robert A. M. Stern," Constructs, 2.

¹²¹ Ibid.

plane of the library's roof even sociably juts into Rudolph's gallery foyer on the second floor of his original core, happily proclaiming the A&A's rededication as Paul Rudolph Hall (see Fig. 151). This conscientious effort to frame glimpses and transitions to the Rudolph building is felt throughout the addition, for instance the clever pair of aligned windows on the Loria Center's third-floor interior corridor that exposes a view of the A&A through the two-story lecture hall (Fig. 155). Wherever you are in the addition, Gwathmey intended to keep Rudolph's presence nearby. Gwathmey also attempts to frame and reference the campus context in a manner after Rudolph (Fig. 156).

The complications arise where the addition plays a role in making the original building 'pure diagram.' Of course, the consolidation of systems into inconspicuous mechanical towers on the addition allowed modern climate control in the A&A while preserving Rudolph's spectacular roof terraces. But Gwathmey also declared that the design team "could take the circulation and elevators out [of the A&A] and add a new service core to make [Rudolph's] building absolutely pure." This is obviously problematic thinking: how can purity be gained by negating function or suppressing intention? To that end, the architects created a sizeable elevator bank in the new addition and adapted Rudolph's now-vacant shafts into mail- and laser cutting rooms. Rudolph's intention, as Giovannini rightly notes, was for the elevator core to "hyphenate the two buildings, but the addition loses the hyphen," (Figs. 157-159). While Rudolph's elevators and openings may not be codecompliant today, the building now has two cores, one largely suppressed. Despite Gwathmey's placement of the new lecture hall, this suppression has led to the disuse of Rudolph's ceremonial stairs; visitors are now encouraged to enter via Gwathmey's ground-floor entrance and take the new elevators to their destination. Even the architecture students use the addition almost exclusively to reach their studio floors.

The constant shafts into inconspicuous mechanical towers of the original stairs; visitors are now encouraged to enter via Gwathmey's ground-floor entrance and take the new elevators to their destination. Even the architecture students use the addition almost exclusively to reach their studio floors.

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¹²² Ibid.

¹²³ Giovannini, "Old School, New School," 15.

¹²⁴ This was observed in a March 2011 visit to the building and was confirmed by several interviewed students. Also noted in Paul Needham, "Architecture Review: Two Buildings, One with Ideas," Yale Daily News, November 7, 2008.

If only Rudolph's spirit of raw integration were felt more strongly in the addition's execution. Perhaps the trouble lies in Gwathmey's statement that the goal for his addition "was to make [it] recessive but articulate – not imitative." Ostensibly, Gwathmey was hired for the job on the basis of his experience with Rudolph on the original design, but Stern and several critics referred to the successes of Gwathmey's addition to the Guggenheim (discussed in Chapter 3) and a 1990's expansion to Harvard's Fogg Art Museum. This kind of thinking underscored a regrettable misunderstanding, as Joseph Giovannini pointedly argues, which "stems from the fact that Gwathmey, despite his status as a Rudolph student, represents a different Modernist tradition."

Rudolph slips planes and volumes past each other, creating a relational environment of independent parts, whereas Gwathmey meets corners and volumes in a flush architecture of modular agreement: Gwathmey obeys the grid that Rudolph escapes. Rudolph's buildings tend to great complexity, whereas Gwathmey's tend to simplicity. Whenever Gwathmey adds a dropped ceiling, or even a bookcase, he makes lines coincide that Rudolph would have intentionally misaligned. 127

Rather than picking up the mantle of Corbusier's late work, as Rudolph had attempted to do with some historical continuity back in the late '50's, Gwathmey's (and Meier's) '70's neo-modernist thread was revivalist: the two of them (along with Michael Graves, initially) took as a point of departure the white planes and geometric forms of Le Corbusier's villas from the 1920's. As such, Gwathmey and Meier are in the strange position of overlapping with Rudolph's era chronologically – negating some potential critical distance – while situating their respective practices in a very different place philosophically and idiomatically.

The resulting addition, while enormously successful from a planning and preservation perspective, is unfortunately diminished by the way that Gwathmey shifted into defining and

¹²⁵ Gwathmey quoted in Zeynep Pamuk, "Back to Former Glory, A&A Named for Rudolph," *Yale Daily News*, November 7, 2008.

^{126 &}quot;Interview with Charles Gwathmey and Robert A. M. Stern," Constructs, 2; Pogrebin; Nicolai Ouroussoff, "Yale Revelation: Renewal for a Building and Its Original Designer," New York Times, August 28, 2008; Nicolai Ouroussoff, "Architecture Review; Restoring Kahn's Gallery, and Reclaiming a Corner of Architectural History, at Yale," New York Times, December 11, 2006. Gwathmey Siegel's expansion to the Fogg was demolished recently for a much larger addition and comprehensive overhaul by Renzo Piano, currently in construction phase.

¹²⁷ Joseph Giovannini, "Old School, New School," 15. Also, the radiant ceilings, which the design team claimed to recall Rudolph's rough-textured asbestos, instead have a smooth, cheap, vinyl-looking appearance.

embellishing the spaces he composed. No one expected or desired a mimetic response. It would be impossible to even consider paraphrasing Rudolph's combination of exhilaration and unease, his Herculean exertions, subjected to tragic abuse. But many of Gwathmey's interiors, intended to evince a kind of easy informality and let the A&A shine, instead feel generic and conventional in geometry and material (Fig. 160). Outside, on the east façade particularly, the original and addition are placed in unkind counterpoint (Fig. 161). While the overall massing was decided early in the project, the composition and surface treatment were two of the last things determined. Meier, in his own scheme, had used a combination of large transparent and translucent glass panes across simple massing planes (see Fig. 141), but this approach was evidently rejected.¹²⁸

In the Loria Center's collage of volumetric doodads and various cladding materials, one senses Gwathmey's earnest struggle and ultimately unresolved frustration. Working in the original designer's formidable shadow without obvious directions, Rudolph's onetime student searched for various design rationale. The zinc paneling would refer to Kahn's nearby Center for British Art, but appears much more like board-and-batten construction. The limestone cladding of the cantilever (along with other projections to the north and west), intended to recall Yale's collegiate Gothic residential colleges by James Gamble Rogers, was added later at Cesar Pelli's suggestion and subsequently redesigned several times. Page As a preliminary model of the design shows, the limestone was originally carried lower (Fig. 162). After mixed response to a presentation he gave students and faculty in September 2006, Gwathmey raised and simplified it to echo Rudolph's glazed depression immediately to the south, like a positive to the original's negative (see Fig. 140). Page 130 and page 130 and page 140 and page 130 and page 140 and page

¹²⁸ While one might have expected Meier's signature white porcelain enamel finish, Rohan reported that Yale administrators, for whatever reason, took it off the table and requested some variation of glazing, (Rohan, 31.)

¹²⁹ Paul Needham, "A&A Building Renovation." Stern notes that when the dean's design advisory committee – made up of the president, the officers, Stern, and former deans Cesar Pelli and Tom Beeby, "had a meeting in which Charles presented his design, Cesar said, I think you should consider limestone for the building.' Everyone looked like deer caught in headlights: 'Limestone, that sounds very expensive!' But Cesar was very firm. The limestone is fantastic," ("Interview with Charles Gwathmey and Robert A. M. Stern," *Constructs*, 2)

¹³⁰ Ibid.; Paul Needham, "A&A Building Renovation."

feels like a bit of compositional desperation. The task of designing for a bunch of outspoken fellow architects and theorists was not an enviable one, and the input that Eisenman, Scully, and Pelli (an outspoken group) offered Gwathmey seems to have complicated his task. Scully had made his own opinion widely known, telling the *Yale Daily News* back in 2002 that Meier's anticipated glass façade was the only appropriate strategy. The A&A "is so heavy and massive," he said, that "it would be a mistake to try and deal with it in similar heavy terms." Scully rendered the same judgment to Gwathmey at the presentation, while Eisenman recommended taking the limestone cladding down to the ground. Even after the addition's opening, Scully called it ultimately unsuccessful. "It should have been simpler – maybe all glass. Gwathmey tried very hard to dance with Rudolph's building, but there are too many small things in and out, up and down, too many changes of material," (Fig. 163). 133

Indeed, while the overall arrangement is agreeable, the compositions are overwrought and lacking in discipline. The articulated massing appears awkward and arbitrary, without a clear sense of purpose. The materials look – and are – insignificant, seen against the robust concrete that is simultaneously surface, form, volume, and structure. The Rudolph building, in one critic's words, "had body"; Gwathmey's, with its skin-deep cladding, is "dressed."¹³⁴ Paradoxically, or perhaps because of the triviality of the surface, the north elevation especially comes off as crude and out of scale (see Fig. 129). Michael Lewis notes that it is not only the "odd little flourishes" on the zinc-clad

¹³¹ Jonathan Horn, "Yale enlists famed architect for New Art History building," Yale Daily News, January 16, 2002.

¹³² Gwathmey: "When I presented the building to faculty and students in September 2006, I left heartsick because Vince Scully said, 'You should make it all glass.' M.J. Long said, 'The elevation is not resolved.' Everybody said the plan and section were amazing, but the façade didn't do it. I drove back to New York sick; I couldn't even eat dinner, I was so upset. I came back to the office and said, 'Tm relooking at the elevations.' Peter Eisenman called and said, 'Bring the limestone to the ground.' I knew that was a mistake because Peter got interested. So I raised the limestone and changed the entire image of the building... But the drawings had already been approved, and they [the contractors] went crazy. That was my student teacher instinct; if it doesn't read, you can't explain it away. And I felt it wasn't reading, despite all the different takes. So lifting the limestone and making it the same size as the Rudolph glazing was major," (Interview with Charles Gwathmey and Robert A. M. Stern, Constructs, 2.)

¹³³ Scully quoted in Zeynep Pamuk, "Back to Former Glory, A&A Named for Rudolph," Yale Daily News, November 7, 2008.

¹³⁴ Giovannini, "Old School, New School," 15.

elevations that seem gratuitous, like the drunkenly angled monitor on the second-story (see Fig. 161), or the "jaunty way that the limestone bay swings into space, parodying the strenuous display of structure... like a clown lifting spurious weights next to a genuine weightlifter." Rather, it is that these features "are placed arhythmically; they neither express the spaces within nor establish a coherent set of relationships on their own terms."¹³⁵

Critics diverged as to the ultimate result – had a deferential Gwathmey, so anxious to do right by Rudolph, restrained himself from taking on the building in a more resolute and satisfying way? Giovannini thought so, arguing that the better way to honor Rudolph's A&A "would have been a response equaling its power and presence."

Rudolph, who was ecumenical as chair, would have enjoyed – and even demanded – a building that took on his own, *mano a mano*. This is a commission that asked for brilliant parity among architectural equals, but standing now at this pivotal corner is a perpetuation of the student-teacher relationship.¹³⁶

Nicolai Ouroussoff averred, "The challenge Mr. Gwathmey faced was not only to be a good neighbor, it was also to rise to the high standards set by his predecessor." Especially in proximity to Rudolph's and Kahn's incredible statements, the addition "was a rare opportunity to broaden that conversation by extending it into the present..."

It should have answered the questions: 'Who should speak for our era? Where are the great voices of today?' Mr. Gwathmey doesn't make a strong case for himself.¹³⁷

Michael Lewis felt the opposite, arguing that it would be "asking too much for Gwathmey to match the emotional intensity" of the original A&A: "Its existential energies – its concrete tormented with hammers – cannot be retrieved and should not be feigned."

In the end, Gwathmey stumbled over his insistence that his building 'present its own iconic presence in the overall composition.' Next to this leviathan of American Modernism, this is one icon too many.¹³⁸

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¹³⁵ Michael Lewis, "Yale Art and Architecture Building: The Problem of Adding onto an Icon," Architectural Record 197 no. 2 (Feb 2008): 60.

¹³⁶ Giovannini, "Old School, New School," 15.

¹³⁷ Ouroussoff, "Yale Revelation."

¹³⁸ Lewis, 60.

These fragmentary opinions underscore the fact that, while ostensibly lacking necessary critical distance, Gwathmey confronted the paradoxes of the addition problem firsthand, and very personally.

It was to be his coda; he died less than a year after the addition opened. Paul Goldberger poignantly elegized him in the *New Yorker* as "the architecture world's Norman Mailer, with the same bravado, the same raw talent, and the same career-long anxiety." While closer in the end to a "modernist John Russell Pope" than a member of the avant-garde, Gwathmey "hated to be thought conservative, and the unspoken theme of his career was the struggle between his desire to continue to make buildings that were new and different and his passion for a kind of classic modernism..."

He poured his heart and soul into a project he cherished, [the A&A renovation and addition]... It tells you all you need to know about its architect, who couldn't bring himself to sit quietly beside his mentor. Gwathmey paid loving homage to Rudolph in the restoration, and then he wanted to get in the ring with him. I don't think he was trying to show his teacher up. He just worried about what it would look like if he didn't assert himself. He never wanted anyone to think that he didn't have the right stuff.¹³⁹

There is a touching parallel in the addition designer' struggle and his teacher's own, five decades before. Perhaps time, as Stern has argued, will deal more kindly with the Loria Center.

What do we make of the dilemma of the A&A addition in all its architectural and historical complexities? First, in its respectfulness and care, Gwathmey's combined intervention was an act of grace that arrested and reversed a cycle of mistreatment and indifference. Like a resounding answer to time's entropic habits, the renovation and the addition revealed a forgotten gem. But the fussiness in the east elevation brings us back to earth, inducing wincing pathos for a painstaking and unrequited effort. Meier's proposal, on the other hand, offers real insight as a scheme that was functionally problematic (in the atrium), but formally interesting. Its gradients of semitransparent glazing had a subtlety that could play off the heroics of the A&A's brash corduroy concrete: the effect was a ghostly veil that acknowledged and played upon Rudolph's preoccupations with the goldfish bowl and the cave. At the same time, its aloof opacity and regularized, inconspicuous

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¹³⁹ Paul Goldberger, "Postscript: Charles Gwathmey," New Yorker, August 5, 2009.

geometries negate the clear outward identity that the History of Art department sought. Gwathmey's later solution to the interior of the block was much more satisfying: Meier's atrium would have created an overscaled, trivializing space at odds with Rudolph building. If we can be sure of anything, it is that Rudolph's building, especially at its higher levels, wants to be left out in the rain, not embalmed in a world of snowblinding whiteness (see Fig. 144).

For Gwathmey, the central regret is where he fell short considering how close he got. Some of the false notes in the circulation components could be forgiven, considering the stakeholders' demands. But the real virtues of the way the addition "works" are forgotten in the degree to which it occupies itself with various contextual allusions. The language is additive – not necessarily a fatal thing – but it lacks rigorous or clearly defined rationale (Figs. 164-165). Gwathmey's approach for the east façade, in the end, evaporated into postmodern scenographic effects, resulting in what "no architectural feature should be," wrote Lewis, "verbose but not articulate." Perhaps a tongue-tied, baffled Gwathmey was not sure what he ought to say. While Gwathmey has undoubtedly and thankfully restored Rudolph's gem to greatness, the architectural stammer next door is a pity.

¹⁴⁰ Lewis, 60.



Fig. 100. Yale Art & Architecture (A&A) building (1963), Street View. Looking northwest, with Chapel Street in the foreground.



Fig. 101. Yale A&A (1963), East facade and main entry. Rudolph's entry "chasm" at right, leading to piano nobile and gallery level.



Fig. 102. Montage - Yale A&A (1963) and Rudolph.

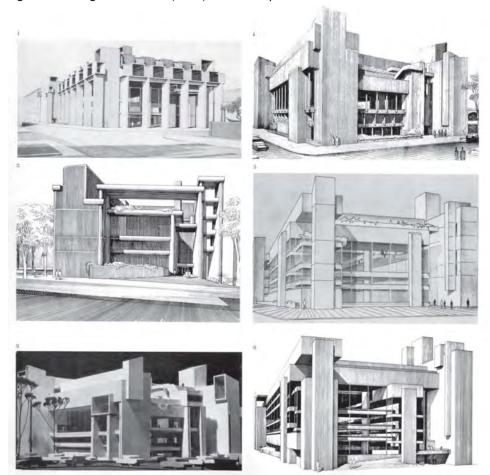


Fig. 103. Renderings - A&A Process (1958-1961) Ordered into columns (1-3, left, 4-6, right). After stage 1, which Rudolph felt unsuitable for the corner lot, the refinement of the pinwheel scheme is evident.

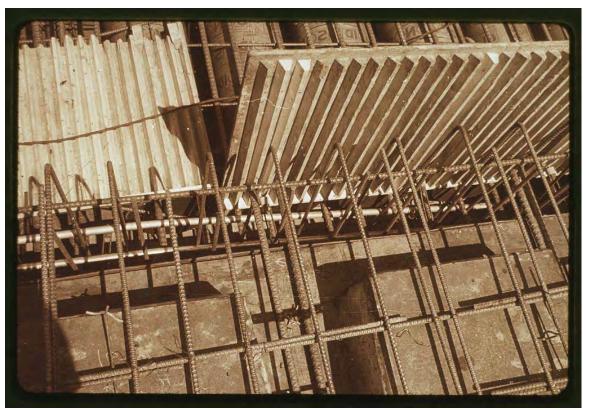


Fig. 104. Yale A&A (1963), process. The corduroy mold that gave the concrete its texture. After the concrete had set, the ribs were painstakingly knocked back with hammers to expose the aggregate.



Fig. 105. Rudolph and Yale A&A. The designer on the fifth floor mezzanine, with Minerva behind him (ca. 1963-1965)

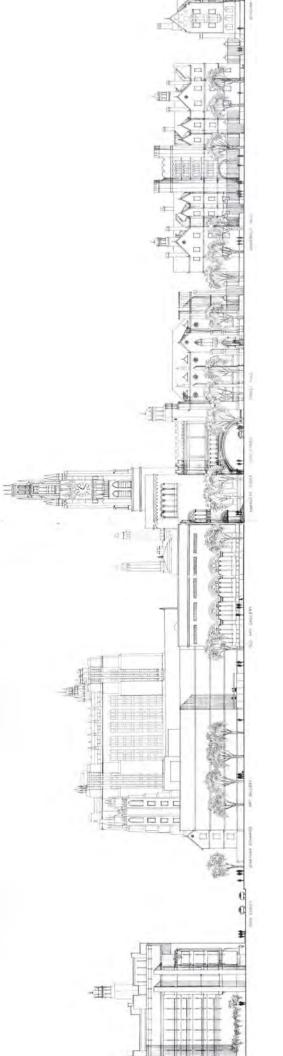
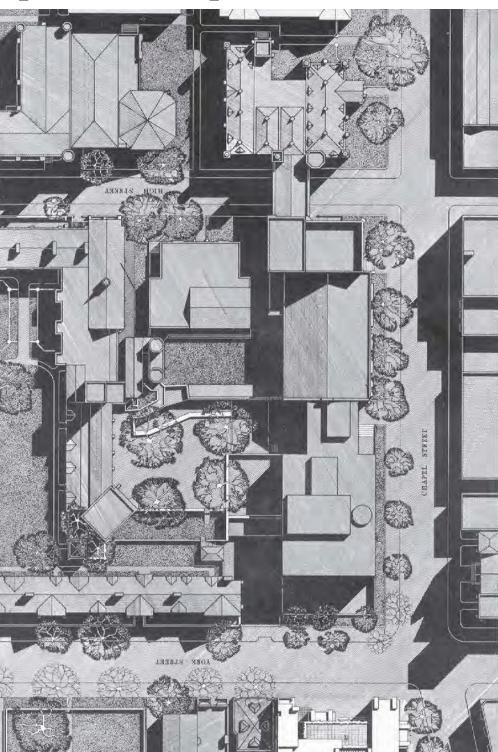


Fig. 106. Street Elevation - Yale A&A (1963).
hand) of the procession up Chapel Street or right), seen in this north elevation of Carticulation abstracts some of the vertical Egerton Swartwout's 1928 building (with

Yale University Art Gallery, followed by the background at center, is James Gamble Fig. 107. Site Plan - Yale A&A (1963). Rudolph A&A's surroundings and its role on the "P in this hand-rendered site plan. A&A in v A&A's southeast tower to the Chapel Str





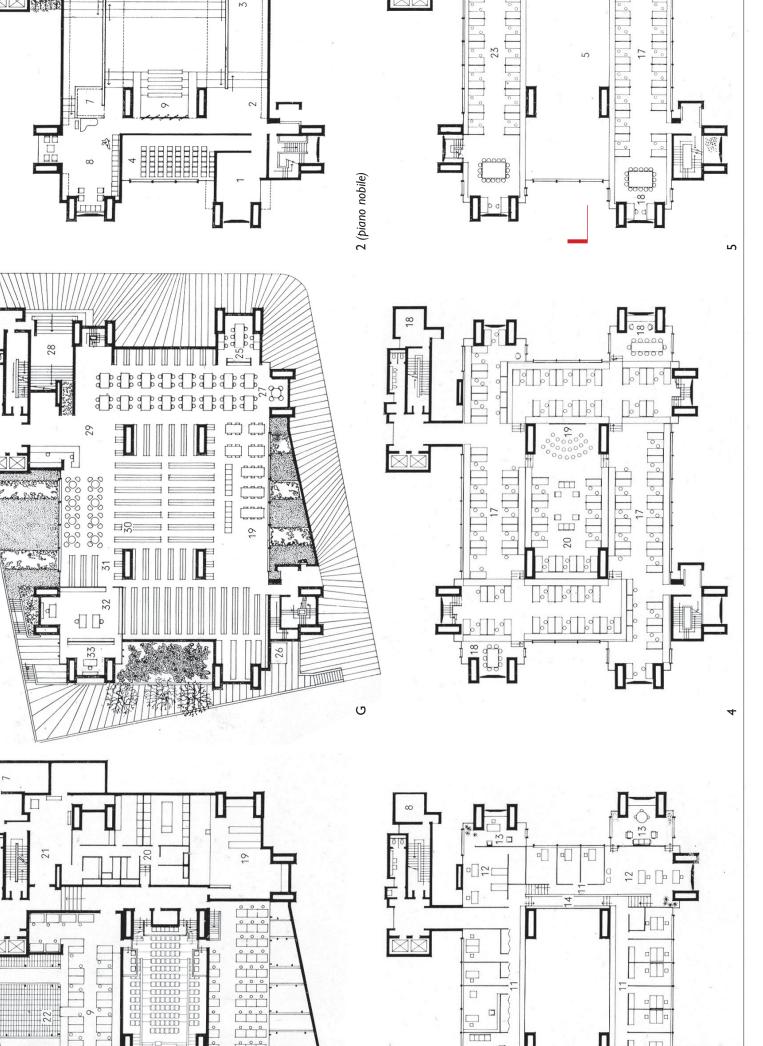


Fig. 108. Floor Plans - Yale A&A (1963), basement, ground level, and floors 2-5. Note: the central space of the pinwheel is doub The main circulation tower is the detached zone at upper right. Secondary egress stairs are located and pooling steps mediate between the intermediate levels. The U-channel concrete bridge, connecting the two sides of the fi second, and fourth floors.

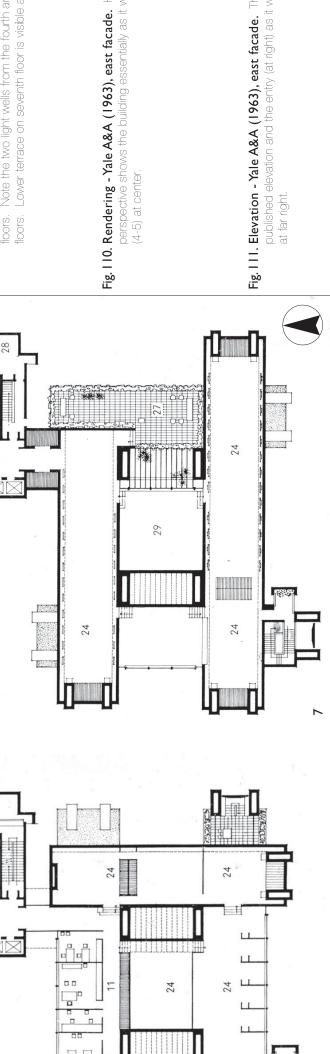
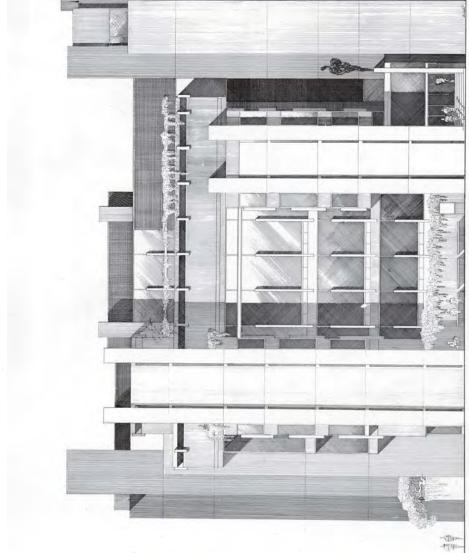
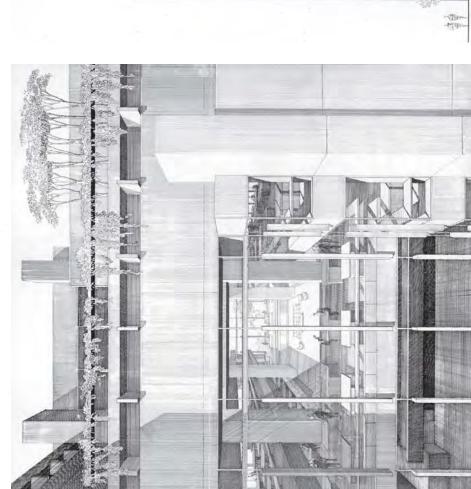
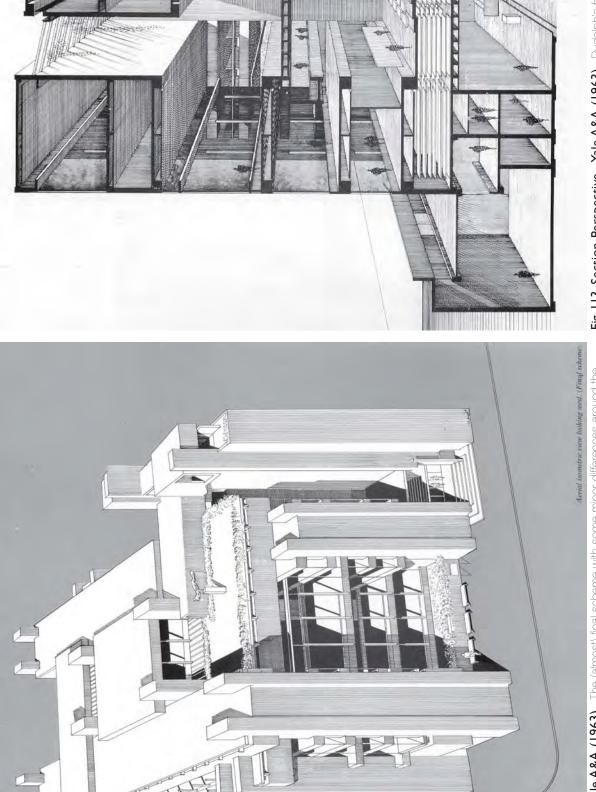


Fig. 110. Rendering - Yale A&A (1963), east facade. perspective shows the building essentially as it w (4-5) at center.

Fig. 111. Elevation - Yale A&A (1963), east facade. 🎹 published elevation and the entry (at right) as it w at far right.







.le A&A (1963). The (almost) final scheme with some minor differences around the st. York Street, elevation is in foreground.

Fig. 113. Section Perspective - Yale A&A (1963). Rudolph's famous rendered section of the building, showing, fro the lecture hall and sculpture facilities, the library on the ground floor, the gallery and jury space on the piano mezzanine, the fourth- and fifth-floor architecture studios, and the painting studios and terraces amongst the section cut is east-west on the building midline, looking north.



Fig. 114. Yale A&A (1963), main entry. Student entering side door into stair tower. Main entry beyond.



Fig. I 15. Yale A&A (1963), entry chasm. Kahn's Yale University Art Gallery across Chapel Street.



Fig. 116. Yale A&A (1963), gallery interior. Looking northeast. Located on the piano nobile, the gallery contains eight separate levels (not including steps).



Fig. 117. Yale A&A (1963), gallery interior. Looking west. The "pit" at center was intended to serve as the main jury space.



Fig. 118. Yale A&A (1963), architecture studios. Looking east. The fifth floor balconies held urban design studios.



Fig. 119. Yale A&A (1963), architecture studios. Looking southwest. Minerva presides over the drafting tables. Light wells deliver daylight from roof level on the eighth floor.



Fig. 120. Yale A&A (1963), roof terraces. Looking northeast. The upper terrace opens off the visiting critics apartment. James Gamble Rogers' Harkness tower at right.



Fig. 121. Yale A&A (1963), main lecture hall. Concrete, either corduroyed or board-formed, covers almost every vertical surface. Casting of Greek frieze on balcony railing.



Fig. 123. Yale A&A (1963), north "courtyards." Rudolph's vertically complex sunken spaces. Largely dismantled in the 1970's, this area became the lower floor of Gwathmey's double-height library court.



Fig. 122. Yale A&A (1963), main lecture hall. View upon entry (basement level.)
A de Kooning cloth hangs on the far wall. Note "impaled" lonic capitals.



Fig. 124. Yale A&A, architecture studio "favelas," 1967. Published in Architectural Forum, 1967.

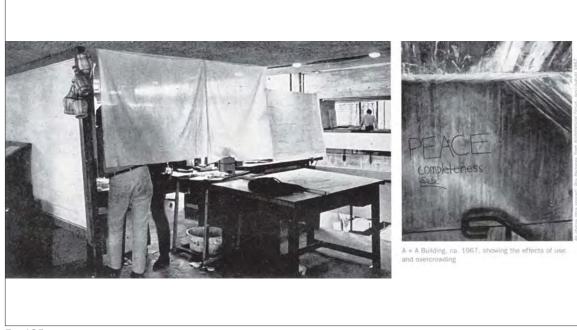


Fig. 125. Yale A&A, architecture studio "favelas," 1967. Published in Architectural Forum, 1967.







Fig. 128. Yale A&A and Loria Center addition (2008), east elevation. Walled court of Kahn's Gallery to right in the foreground.



Fig. 129. Yale A&A and Loria Center addition (2008), street view. looking southwest.



Fig. I30. Yale A&A Renovation (2008), gallery. Looking east over the double-height library reading room, with Kahn's Art Gallery beyond, and Kahn's Center for British Art in the far distance.



Fig. 131. Yale A&A Renovation (2008), library. The gallery is visible through the glass wall at top.



Fig. 132. Yale A&A Renovation (2008), gallery. Wood flooring now covers the various levels for handicapped access. Rudolph standing on the Temple Street garage in photo in foreground.

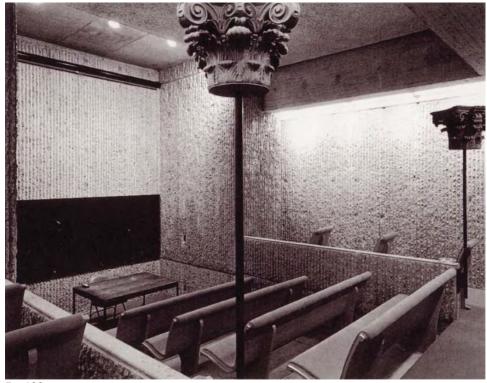


Fig. 133. Yale A&A (1963), seminar room. It is not known if this survived the travails of the 1960's and '70's. Nothing of it seems to exist today; the space has become gallery curators' offices.



Fig. 134. Yale A&A Renovation (2008), architecture studios. Another cast of Minerva was installed overlooking the fourth floor jury space. Gwathmey's radiant ceilings are prominent in the background.



Fig. 135. Yale A&A Renovation (2008), west U-channel bridge. Gwathmey restored Rudolph's narrow bridge (making it flush with the fifth floor), and installed his own at the east end of the studio.



Fig. 136. Yale A&A Renovation (2008), lecture hall. Hastings Hall, with the original "paprika" carpeting and upholstery replicated.



Fig. 137. Yale A&A Renovation (2008), architecture studios. Renovated and restored studios, now in the guise of an open-office concept with no partitions. Kahn's Art Gallery is visible through the east wall.



lightwells that illuminate the fourth and fifth floors were uncovered after several decades. Here, Le Corbusier's Fig. 138. Yale A&A Renovation (2008), light well. The modular snake runs up the wall.

Rudolph's elevators, at near left, are now laser-cutting rooms.

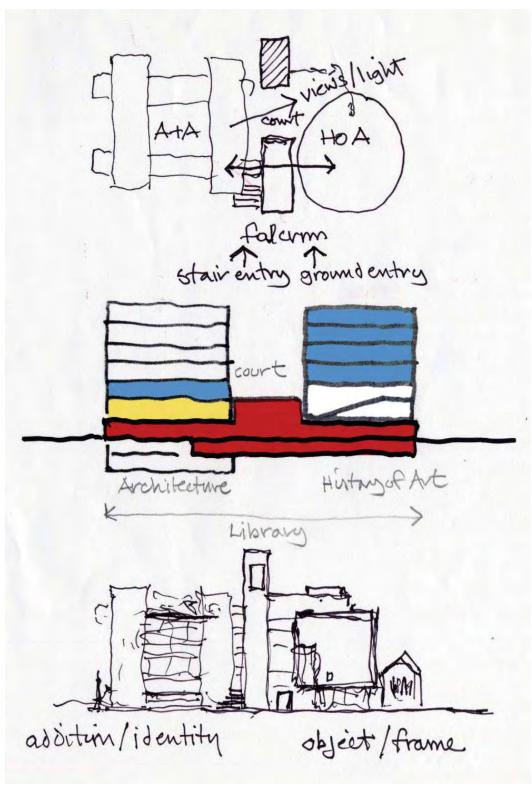


Fig. 140. Yale A&A addition, Gwathmey, process. Gwathmey's parti, showing the key elements of the proposal (Rudolph's stair tower as a "fulcrum, north views and light retained for the A&A.) The library would be the common program that brought the departments together.



Fig. 141. Photomontage - Yale A&A addition, Meier, 2004. Street view looking south.



Fig. 142. Model - Yale A&A and addition, Meier, 2004. Original building and proposal.









i (center top) - Yale A&A addition,

- Yale A&A addition, Meier, 2004, ior with main part of addition beyond.

le A&A addition, Meier, 2004. and entry.

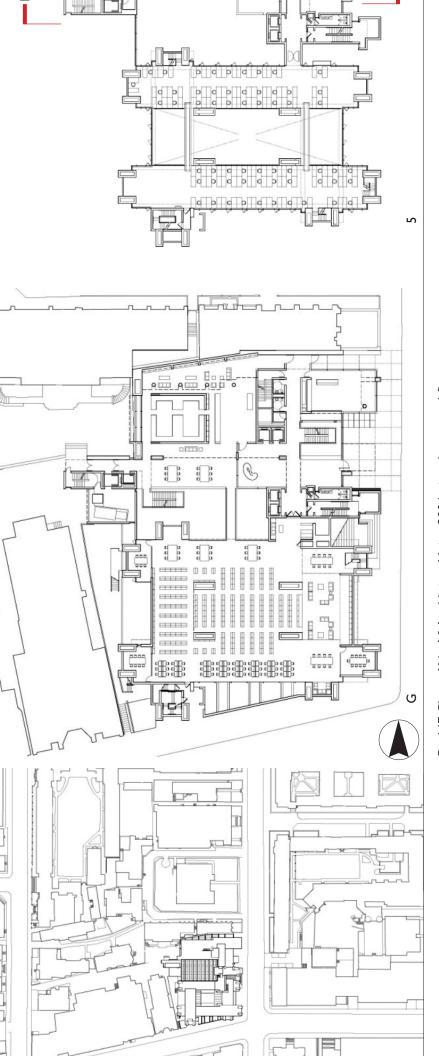
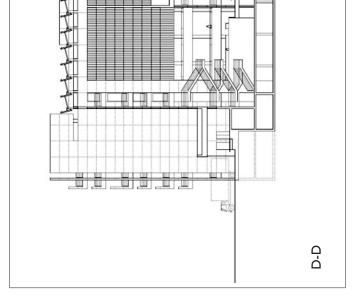


Fig. 147. Plans - Yale A&A addition, Meier, 2004: site plan, ground floor,

fifth floor. Meier's scheme proposed an enclosed atrium over the library, roofed at the same height as the A&A. Note the double-loaded corridors for Art History faculty offices on the fifth floor. The way that this proposal would have interfaced with the original building is not as sophisticated as Gwathmey's built scheme.

Fig. 148. Section - Yale A&A addition, Meier, 2004, east-west through atrium, looking north. The atrium roof is visible here, seen with its light filtering mechanism. Below that is the interior elevation of the addition that faces the atrium.



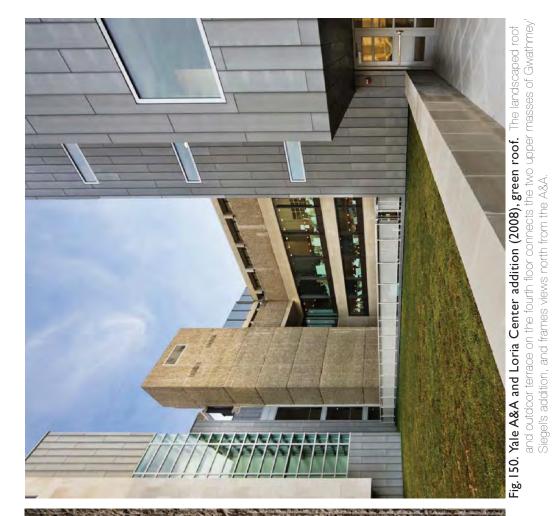




Fig.149. Yale A&A and Loria Center addition (2008), library



Fig. 151. Yale A&A and Loria Center addition (2008), original A&A entry. Gwathmey's library roof pops into Rudolph's original formal entry on the second floor, giving us a view over the library court.



Fig. 152. Yale A&A and Loria Center addition (2008), library court. The triple-height space reaches from the basement up to the second floor. Note the compressive feeling of Rudolph's large span over the stacks.



Fig. 153. Yale A&A and Loria Center addition (2008), library court. Looking northwest.



Fig. 154. Yale A&A and Loria Center addition (2008), library court.

Basement level. The recess at left, an occupiable lounge space, seems to play on Rudolph's whimsical and sometimes secretive inclusion of nautilus shells and amethysts in the darker comers of the original building.

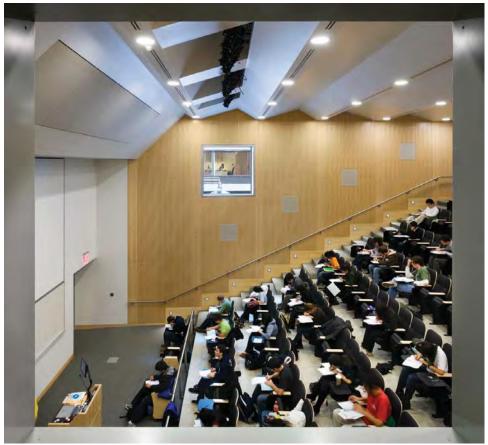


Fig. 155. Yale A&A and Loria Center addition (2008), new lecture hall.

This photo is taken from an enclosed hallway in the addition through an aligned pair of windows, revealing the A&A across the library roof.

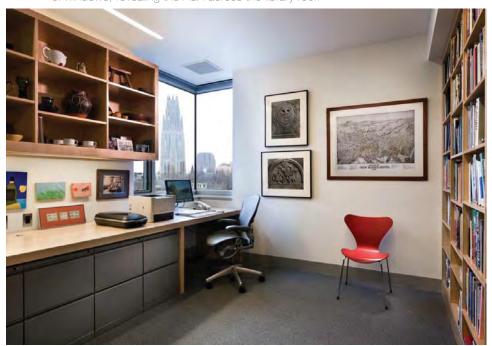
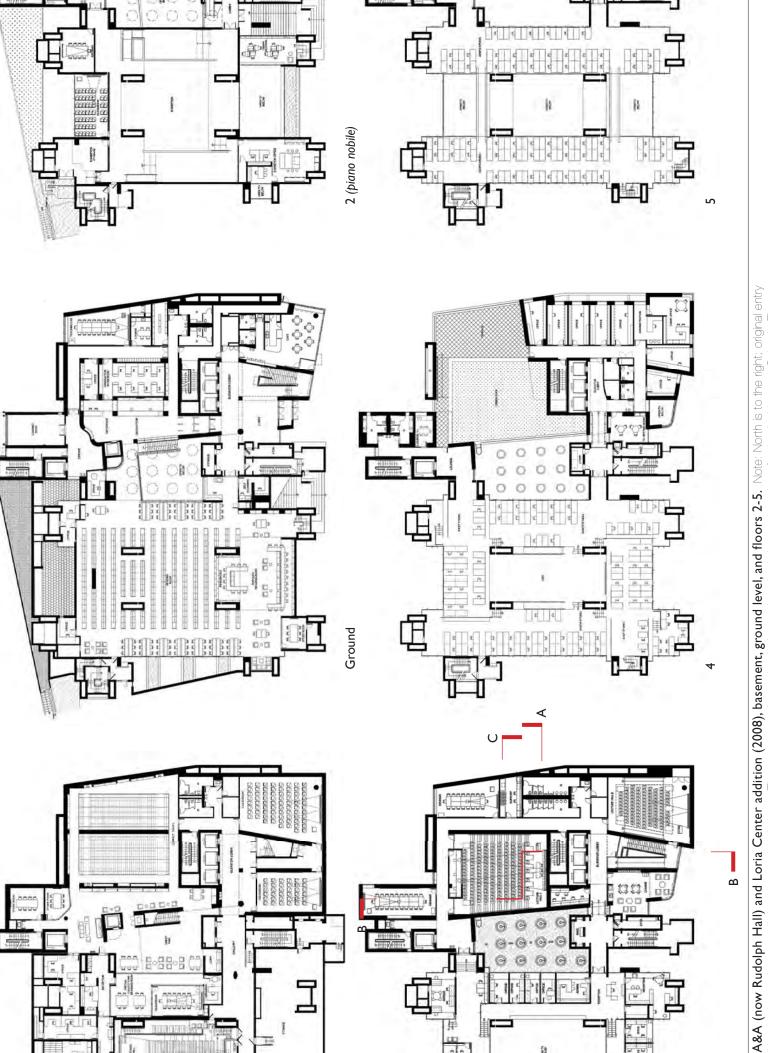


Fig. 156. Yale A&A and Loria Center addition (2008), office. Typical Art History faculty office in the addition. 238



offices for the Art History department. Library skylights shown on floor 3 (at building center) and the addition's landscaped roof is on floor 4 (hatched) addition contains an expansion of the library (basement and first floor plans), a two-story lecture hall (beginning on the second floor), and a number of iftion separates into two distinct masses as it rises. The west mass (at top in plan) contains circulation and services for the Architecture School.

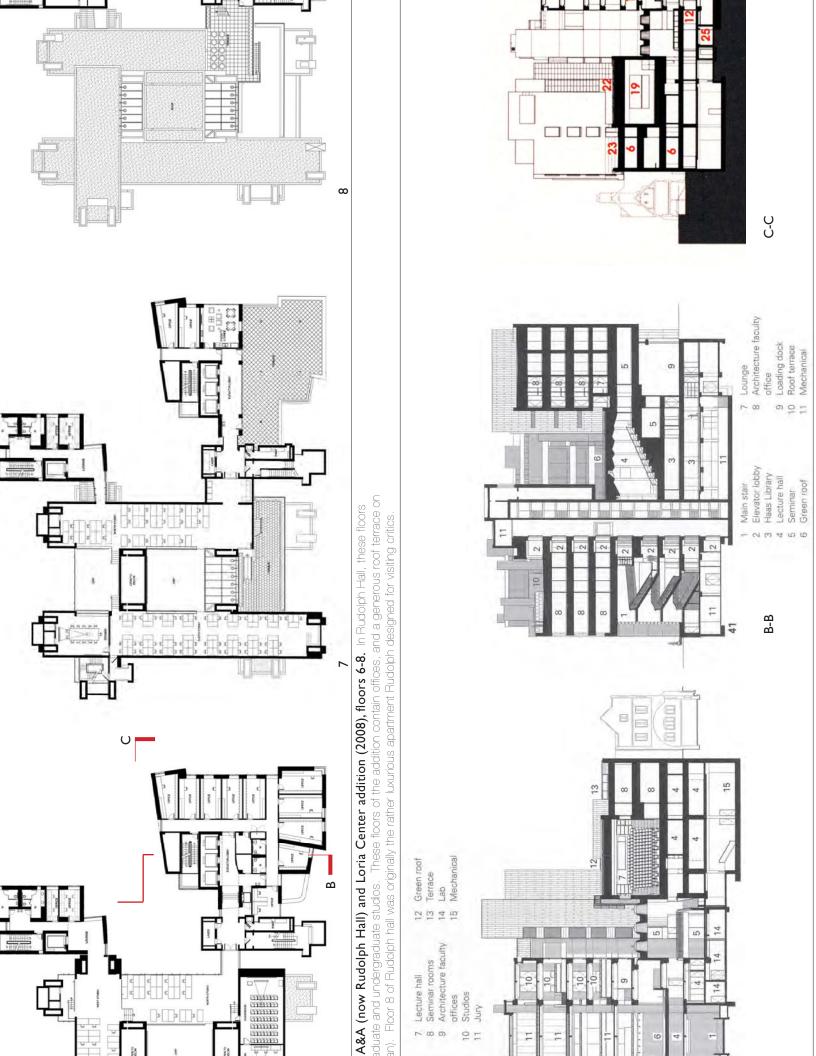




Fig. 160. Yale A&A and Loria Center addition (2008), lobby.
Gwathmey's new identity for the Art History department.

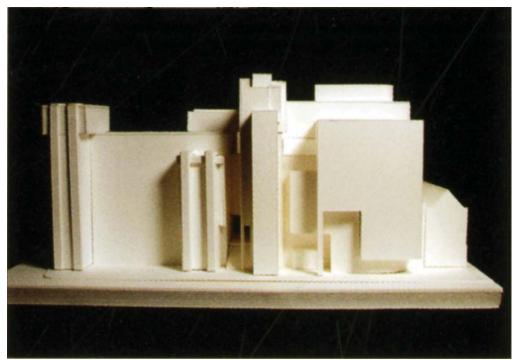


Fig. 162. Model - Yale A&A addition, Gwathmey, process. In this preliminary iteration, the limestone projection is carried almost to the ground.



Fig. 163. Model - Yale A&A (now Rudolph Hall) and Loria Center addition (2008). The addition as it was eventually built, with the various modulations and material changes of the addition facade.

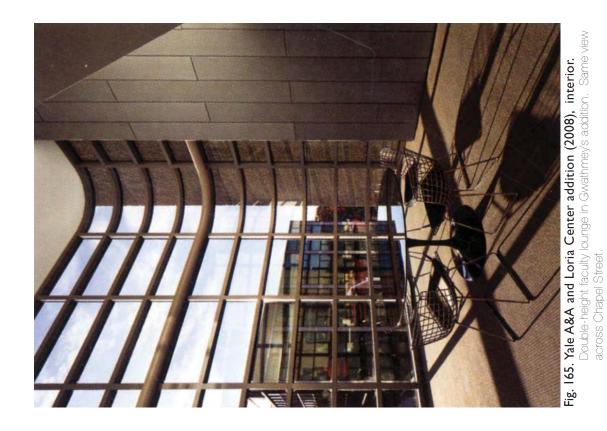


Fig. 164. Yale A&A and Loria Center addition (2008), interior. Robert A. M. Stem's office beyond. Kahn's Art Gallery across York Street.

Fig. 64. Vale A&A and Oria Center addition (2008)

6. CASE STUDY: ALICE TULLY HALL AND THE JUILLIARD SCHOOL

Introduction

The Lincoln Center building that was completed in 1969 to house the Juilliard School and Alice Tully Hall cannot claim the singular brilliance or fraught history of Rudolph's A&A, nor has it ever enjoyed the same affection (or outrage) as Breuer's straightforwardly iconic Whitney. However, Lincoln Center is undeniably an icon of the postwar period, and this building is generally ranked as one of the Center's better ones. The building (which I will refer to as the Juilliard building although Alice Tully Hall is a concert venue independent of the school) occupies a curious place in Lincoln Center's geography and history. The casual observer would not be faulted for thinking that its status as an icon must hinge on its proximity and affiliation with the three primary and much better known performance venues that flank Lincoln Center's main plaza a block south. These geographical and relational circumstances, as well as the development of Lincoln Center writ large, played a significant and involved role in the design of the Juilliard building and its history well before the final form was realized. Additionally, the building has the dubious legacy of being one of few positively critiqued designs in a complex that, overall, is usually the object of opprobrium for insipid, compromised architecture and urbanistic dysfunction.

The Juilliard building, designed to present a coolly detached and impassive face to Broadway and Columbus Avenue – unlike its more romantic southern neighbors – was always something of a misfit (Fig. 166). Often – and not quite accurately – described in brutalist terms because of its bulky cantilevers, the Juilliard building was clad in the same Italian travertine as all of Lincoln Center's other original buildings. The three buildings much better known to the public, the Metropolitan

Opera House, the New York State Theater (for opera and ballet, recently renamed as the David Koch Theater), and Philharmonic Hall (Avery Fisher Hall since 1976), are essentially single- or dual-function performance facilities framing a monumental civic space, and they became largely synonymous with the notion of Lincoln Center as a geographical destination and cultural institution. The Juilliard building, in the scheme ultimately built, was relegated to the complex's margins, across 65th Street and outside the quasi-symmetrical environs of the main plaza (Fig. 167). Filled with a diverse range of programs and user groups, the original building was the Center's most complex structure, but it was never very forthcoming about the variety of activities within (Alice Tully Hall was notoriously hard to find.) Pietro Belluschi, the lead architect, had a reputation for a regionalist variation of International Style modernism, and was best known for his delicately crafted timber churches and houses, and an aluminum-and-glass skyscraper in Portland, Oregon. Juilliard, with its ponderous, top-heavy cantilevers rhythmically punctuated by openings and structural articulation, is a somewhat curious article in his portfolio.

Misfit or not, all these circumstances, it turns out, were an excellent basis for the formation of a renegotiated approach to addition-making. In fact, it may be the most promising strategy to date. Diller Scofidio + Renfro's (DS+R's) interventions, briefly described, include the demolition of a wide plaza extension that bridged a portion of 65th Street, the construction of a triangular addition that carries the building's envelope out to the property line on Broadway, and a renovation and overhaul of its street frontages and many of its interiors (Figs. 168-169). The second phase of the firm's involvement at Lincoln Center has included alternations to the North Plaza and the addition of a hyperbolic landscaped roof that shelters a new restaurant, along with a total overhaul of the Main Plaza's relationship with Columbus Avenue. The Juilliard project's most ill-disposed critics have argued that the new addition to Belluschi's Juilliard building operates on radical, destructive terms. In fact, the relationship between existing fabric and DS+R's mode of intervention is – like the original Juilliard building itself – informed by the unique history of Lincoln Center's development

and shifting conceptions of what cultural institutions' roles ought to be vis-à-vis the urban realm. At least casually, we often read existing architectural heritage as a static thing: the supposed final outcome of a process in which a range of options were progressively narrowed down to a resolved solution. But within this large, bureaucratic and complex project of the 1950's and 1960's, with its staggering constellation of politics and personalities, the various design schemes and intentions were fluid, amorphous, and dynamic. Compromised and negotiated solutions usually ended up winning the day, obscuring or negating real moments of design intelligence and virtue. So when Ric Scofidio states that DS+R's modus operandi for the renovation project was the semantic conundrum of making "Lincoln Center more Lincoln Center than Lincoln Center," we imagine an intensifying of its essential virtues. Fine and well, but what Lincoln Center? Is that a reducible entity and is this a philosophically feasible project? Can ethical preservation include restoration or acknowledgment of some specific intent, when that intent was never fulfilled because of other compromises? How does architectural identity interface with institutional identity? What, in short, is Lincoln Center, if one is to make it "more Lincoln Center" than it already is?

Beginnings

The Center is at once a physical campus and an umbrella consortium, administering a set of venues for resident performing arts organizations that enjoy differing degrees of autonomy and influence over the whole. Politics play a time-honored role at the complex, a legacy of its formation steeped in equal parts postwar idealism and hardheaded expediency. It is, as one critic has called it, "a Cold War period piece," a peculiar endeavor in which mid-century *tabula rasa* urban redevelopment efforts were momentarily aligned with philanthropic and institutional interests. How did it come about? In late fall, 1955, John D. Rockefeller 3rd called a meeting with the heads of the

¹ Ricardo Scofidio, quoted in Elizabeth Diller and Ricardo Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," *Future Anterior* (New York) 6 no. 1 (Summer 2009): 86.

² Nicolai Ouroussoff, "The Greening of Lincoln Center," New York Times May 21, 2010.

Metropolitan Opera and Philharmonic Orchestra, along with several highly prominent architects.³ The Met, which had outgrown its cramped 1883 home long before, had been trying to relocate for decades, while the Philharmonic faced imminent eviction from Carnegie Hall (about to be torn down for an office building development.)⁴ The potential ground on which to combine forces was a site Robert Moses had targeted in Manhattan's West 60's, as part of his Lincoln Square Urban Renewal Project initiated in April 1955.⁵ In this sense, the *raison d'être* for the center, as Paul Goldberger notes, "was dubious from the beginning." After all, it was Moses, not Leonard Bernstein, who led the charge for the center; Moses, in Goldberger's assessment, "didn't care much for opera, or theatre, or symphony orchestras. He just figured that they could serve as a magnet for development." As things progressed, the group of constituents was expanded to include the New York City Ballet, the Juilliard School, and a new repertory theater.

Wallace K. Harrison had been the Rockefeller's house architect since the design and planning of Rockefeller Center in the 1930's, and he had a long-standing connection with the Met.⁸ On this basis, along with his recent experience corralling a number of outspoken personalities for the United Nations Headquarters, Harrison was chosen as to serve as Lincoln Center's director of planning. He would eventually coordinate the design team's overall approach, at least officially. Harrison invited a handful of architects to his office for a two-week charette in October 1956,

³ Meredith L. Clausen, Pietro Belluschi: Modern American Architect (Cambridge, MA: MIT Press, 1994), 254.

⁴ Paul Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," New Yorker, July 7, 2003, 36; Victoria Newhouse, "Chapter 2: Lincoln Center (typed manuscript)," in Site and Sound: New Opera Houses and Concert Halls (Scheduled for 2011 publication, New York: Monacelli Press), 3-4. (With deep appreciation for permission to quote from manuscript.) Anthony Tommasini reports that the Philharmonic had an option to buy the Hall at least as late as 1956 but dithered. Anthony Tommasini, "Lincoln Center: Mixed Reviews," New York Times May 10, 2009.

⁵ Clausen, *Pietro Belluschi*, 254. Stephen Stamas, *Lincoln Center: A Promise Realized*, 1979-2006 (Hoboken, New Jersey: Wiley, 2007): 201. Clausen notes that the idea "gradually expanded into the concept of a cultural center including all the performing arts – dance, drama, and film in addition to symphony and opera – to be subsidized by federal funding under Title I of the 1949 Housing Act, a portion of which was made available to the arts." (Clausen cites Ada Louise Huxtable, "Dissimilar Buildings, Similar Awards," *New York Times*, 24 May 1970.)

⁶ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36. ⁷ Ibid.

⁸ Clausen, *Pietro Belluschi*, 255; see also, Victoria Newhouse, *Wallace K. Harrison, Architect.* (New York: Rizzoli, 1989).

Edward Durell Stone.⁹ Pei and Stone did not attend, but the group, which became the Center's Advisory Committee, grew to include Philip Johnson, Swedish architect Sven Markelius, Walter Unruh, and Henry Shepley (a "lone architectural conservative" from Boston.)¹⁰ They produced a variety of conceptual schemes over 1956 and 1957 (Figs. 170-171). Despite "numerous subsequent disagreements," ¹¹ the common thread at the beginning of this process was the notion of an enclave setting for the arts, as the October 1956 minutes state:

With the realization that for the arts and for music one needs to get out of the maelstrom and into a quiet place, the consultants were unanimous in agreeing that Lincoln Center for the Performing Arts be an area isolated from the hubbub of New York City. The Center will be a special place, concentrated upon an inner space and inward-looking.¹²

To this end, radical proposals ranged from Aalto's concept of a "casbah," a single massive building with courtyards, to Breuer's asymmetrical scheme, "suspending one of the concert halls above an entrance of pilotis." There was recurrent talk of raising the complex above street level or surrounding it with a wall. Harwood reports that Belluschi and Shepley proposed "more classicizing, symmetrical arrangements of freestanding buildings." ¹⁴

Eventually, the group was winnowed down to those designers who had been handpicked to progress with the design of individual buildings; they would also carry out the final masterplan. The Met chose Harrison for their opera house, and Abramovitz was given Philharmonic Hall. Aalto and Markelius were dropped from consideration, according to Harwood, due to their status as foreigners on a politically charged project. Breuer was reportedly headstrong and Shepley too "rearguard";

⁹ Paul Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

¹⁰ Ibid (Goldberger). John Harwood, "More Lincoln Center than Lincoln Center: Max Abramovitz versus the Fortress," *DO.CO.MO.MO Journal* 31 (September 2004), 97.

¹¹ Harwood, 97.

¹² Max Abramovitz Architectural Records and Papers Collection, Drawings and Archives, Avery Library, Columbia University, Box 18, Folder 5: "Lincoln Center Meeting Minutes, Report, Oct. 2-12, 1956," p. 3. Harwood notes that the ongoing design process is chronicled in the remainder of Box 18; quoted Harwood, 97.

¹³ Harwood, 97; Newhouse, Site and Sound, Chapter 2 typed manuscript, 1.

¹⁴ Harwood, 97.

neither of them were given commissions.¹⁵ Juilliard's president, William Schuman, chose Belluschi for a new school building on the basis that "he felt comfortable with him personally," according to Meredith Clausen.¹⁶ Johnson, whose presence on the advisory committee and subsequent design team can be attributed in part to his personal relationship with Governor Nelson Rockefeller, was generally regarded as "a maverick and a tastemaker," in Victoria Newhouse's words.¹⁷ "His work was often simply trendy, and in the late 1950's he had already begun his unfortunate flirtation with what later became known as the postmodernism that informs the whole scheme." Johnson was tapped by Rockefeller and New York City Ballet founder Lincoln Kirstein to design the dance theater, built with funding from New York State and named in its honor.¹⁹

Negotiations over the buildings' arrangement were complicated (and ultimately improved) by the later addition of Eero Saarinen and Gordon Bunshaft to the group. The two were respectively engaged to design a repertory theater facility and a library for the performing arts. The legacy of the Advisory Committee's earlier work was a roughly classical layout, with buildings symmetrically arranged around a formal plaza facing east.²⁰ Bunshaft reportedly called the plan "lousy,"²¹ and he and Saarinen argued that Broadway's angle made the symmetry unfeasible. Eventually, the team arrived at a compromise wherein Bunshaft and Saarinen would design a combined theater and library with its own, more contemporary plaza to the north (Fig. 172-176). This element, according to Harwood, "would counteract the rigid axiality of three buildings on the main plaza with an element

¹⁵ Harwood, 98. In several sources, the reason for Breuer's absence from the final group is, variously, his "temper" (Harwood, 98) or his "rigidity" (Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.) It may be a simpler case of Breuer's not having a specific patron amongst the various organization leaders.

¹⁶ Clausen relates that when Belluschi was asked by Schuman what kind of building he envisioned, "Belluschi had replied straightforwardly that he could not begin to think in terms of form until he understood the situation, the emotional as well as physical climate of the school." Clausen, *Pietro Belluschi*, 326.

¹⁷ Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 7. Johnson himself credits Nelson Rockefeller's patronage: Philip Johnson, *The Philip Johnson Tapes: Interviews by Robert A.M. Stern* (New York: The Monacelli Press, 2008), 151.

¹⁸ Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 7.

¹⁹ Harwood, 98. It was renamed the David H. Koch Theater in 2008 in honor of Koch's \$100 million pledge.

²⁰ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

²¹ Harwood, 98, cites Bunshaft, quoted in Victoria Newhouse, Wallace K. Harrison, Architect.

of asymmetry."²² Design of the north plaza was delegated to landscape architect Dan Kiley, who organized it around a long reflecting pool with a sculpture by Henry Moore. Nonetheless, it was placed tangentially and hidden from Broadway and Columbus Avenue behind Abramovitz's Philharmonic Hall, while the ersatz Roman Campidoglio out front – complete with its awkward taxiway – greeted most visitors. On the opposite side of the main plaza, Moses (who, no one needed reminding, had enabled the entire project) pedantically insisted on the creation of a city park, despite the architects' vociferous protests.²³

Because Harrison tended to be "a passive leader," Philip Johnson "had a great deal of say in the design of the central plaza and the architectural style of the three main buildings," according to numerous sources, including Johnson himself.²⁴ Because of this and Harrison's increasing delegation (read: abdication), the overall tenor of the group was not especially cooperative.²⁵ Johnson, who later recounted the Lincoln Center project as the catalyst for "my shift to historicism at a ripe early age," had begun to embrace a sort of decorative classicism, and wore the other designers down into letting him set up some of the rules and designing the front court.²⁷ At one point, he proposed an even stronger classicizing sensibility for the complex, with a delicate, columned arcade fronting the east

²² Harwood, 100; Endnote 8.

²³ As Johnson later recounted, "It was Moses, who kept that park [Damrosch Park] that ruins the court. That's what [Sven] Markelius said. But he knew nothing of Moses, of his horrors. And the only price that we had to pay at Lincoln Center was that Moses kept that park." Johnson, *Johnson Tapes*, 160. Moses, serving as chairman of the Mayor's Slum Clearance Committee, had obtained permission from the NYC Board of Estimate to designate the Lincoln Square area for urban renewal. Newhouse also notes that the advisory committee disfavored Moses' plan for yet another of his parks in the complex. Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 7.

²⁴ Paul Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36. See also, Newhouse, *Site and Sound*, Chapter 2 typed manuscript.

²⁵ Johnson recounts that "At the meetings with Bunshaft, Saarinen, Johnson and Harrison, the same thing [Bunshaft] thought here, each of us, of course, was thinking too, playing the same game: 'Why don't you give the whole thing to me and it will be much better?" Johnson, *Johnson Tapes*, 154.

²⁶ Ibid., 151.

²⁷ Johnson: "Unfortunately, the rules we set up were mine: a twenty-foot bay dimension and travertine material... I changed it to twenty-forty, which is a little more amusing but not very good. In that kind of atmosphere it's so easy as an architect to say, 'Oh, well, I was forced into this design because of the pattern set up by a committee.' Well, in a way it's true and in a way it isn't. I mean, baroque architects were always being forced into that and somehow they managed to create some of their best works around a court. The next big battles were among Belluschi, Saarinen, and me over the exterior... finally out of exhaustion, they just said, 'Well alright, you do the front court.'" Johnson, Johnson Tapes, 155-156.

side of the plaza (see Fig. 172).²⁸ Johnson later implied that it was his idea to use travertine as a unifying veneer for the complex; most sources instead attribute the suggestion to Belluschi, but it might as well have been Johnson's.²⁹

The traditionalist attitude that prevailed was arguably the best adapted for the design procedure of individual buildings, "something of a horror," according to Goldberger, since each architect had to produce a plan acceptable not only to the leaders of the organization that would occupy that specific building, but also "the organization's board of trustees, the board of Lincoln Center itself, and the city." Not simply architecture by committee, it was architecture by four tiers of bureaucracy. The Met, which had "no more interest in being a patron of contemporary architecture than it had in being a producer of contemporary opera," sent Harrison back to the drawing board more than forty-three times on the design of their opera house, and the final version that got built was, according to Goldberger, "the smallest, meanest, and dullest of them all." Undeniably, it is a sentimental pastiche, down to the red velvet and crystal chandeliers. While Johnson and Abramovitz's schemes were not subjected to the same degree of revision, all three of the main plaza buildings ended up as "awkward, overdecorated hybrids," (Fig. 177).32

However, while Lincoln Center can be read as an unsettled negotiation between historicism and innovation, the matter of its sequestering the arts into a closed fortress is also more ambiguous than has been traditionally acknowledged. Undeniably, some of the Center's DNA was intentionally isolationist. But John Harwood argues that the epithet "Monumental Modernism," a pejorative stylistic term that recalls derivative or fascist architecture, has led to the widely held but "misguided belief that the complex is in some way static, stable, unitary – that it is a kind of foregone

²⁸ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

²⁹ Johnson, Johnson Tapes, 155; Clausen, Pietro Belluschi, 258, Clausen's footnote: "Taped Interviews, PB/MLC, Portland, 26 February 1988; 29 March 1988; 15 May 1989." Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36. Johnson may not be trustworthy on this point.

³⁰ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

³¹ Ibid.

³² Ibid.

architecture, in short, a set of monuments to the obsolete mindset of mid-20th-century architects."³³ At some point early in 1959, according to Harwood, "all the architects began to acknowledge that the closed logic of the center's plan, drawn as it was either from corporate architecture or from a romantic-monastic notion of introspection, was self-defeating and ultimately paradoxical in the face of the quasi-public nature of the project."³⁴ From the early days of the Advisory Committee to the Center's constructed form, the project underwent a transformation towards more porosity even as it became more historicizing (see Fig. 172).

The earliest concepts had proposed facilities in wildly different arrangements from the final scheme. However, once the main plaza was settled, the relational and physical connection between the north site above 65th Street – where Juilliard would be located – and the main plaza was contentious. While Belluschi was in charge of the Juilliard building itself, his role in the overscaled, 210-foot wide Milstein bridge – meant to act as an extension of the plaza and link Juilliard to the rest of the complex – is unclear, but appears marginal. The fact that he organized his main entrance to Juilliard on 65th Street *beneath* the overpass and not on it would seem to indicate that the bridge was a late-term addition, or that Belluschi engaged in some shoulder shrugging if not outright protest.³⁵

The bridge (called the Milstein Plaza, as if it were a functioning, welcoming public space) was a hackneyed affair. Because it had to operate at a higher datum than both the North Plaza and Belluschi's wraparound terrace in order to clear the street below, steps were located around to its

³³ Harwood, 96.

³⁴ Ibid. This had largely to do with rising costs, demands from the LCPA for more seats in the theaters and increased revenue possibilities for subscriptions and concessions.

³⁵ The relationship between Belluschi's and Saarinen's and Bunshaft's intentions for the North Plaza and Milstein "Plaza" are murky. A proposed Site Plan from 1958 shows a broad bridge over 65th, but at that point Juilliard was in the northwest corner of the principal superblock. Philip Johnson recollected in the 1980's that he "went to Johnny [John D. Rockefeller 3rd] with the purpose of getting rid of that ridiculous stairway up to Belluschi's building," but it is unclear if this was the stairway from the ground-level plaza fronting Broadway that climbed over the Alice Tully Hall entrance, or if it was the smaller stair tucked to the side of the Milstein bridge that mediated between the bridge and Saarinen's north plaza. Johnson continues: "It wasn't only a matter of the baroque – I didn't want [the stair] tucked off to one side so that you had to crawl up and around. It isn't a space that usable in any case, but if we had connected it by making the whole thing a stairway – At that time money hadn't reared its too-ugly head, but of course, Saarinen didn't want to hurt his hortus conclusus [walled garden] theory by having the stair become part of a grand scheme that led to what? So Johnny said, 'No, we're doing it that way. End of subject." Johnson, Johnson Tapes, 159.

flanking side on the North Plaza, leaving a blank travertine wall facing Kiley's reflecting pool (see Fig. 176). Where the bridge met Belluschi's building across the street, steps spilled down into a secondary entrance beneath the Juilliard cantilever, effectively lurching into the building. Whatever Belluschi thought of it, Bunshaft and Saarinen opposed the bridge adamantly. Victoria Newhouse reports that the two designers – who nominally had authority over the north plaza – presented alternative schemes for narrower walkways that Max Abramovitz overruled, as he presumably had final say on this component. Most likely, the bridge was intended to conceal the unsightly maw of the Center's parking garage, located directly beneath the complex. Abramovitz's overall role is still rather puzzling: at the time that he was maintaining the impregnable citadel aspect against the protests of two other designers, he was meanwhile working to steadily open the travertine walls of his own Philharmonic Hall and reveal the activities within. Harwood notes that the Hall, from the earliest models to its final form, exhibits the shifting positions on exposure and transparency that were latent in the various disagreements and negotiations.

Lincoln Center as a whole is a paradox, with a number of intriguing internal contradictions.

Intended as a redevelopment and gentrification scheme, it was financed through governmental and foundation grants, and private donations, and always intended to operate completely outside the market.³⁹ Its designers, to varying degrees, settled on uneasy compromises between contemporary design and retrograde classicism, piecemeal gestures towards urbanistic porosity and conceptions of a citadel for culture, but many aspects were in flux even as buildings went up. Designers' intentions were routinely frustrated by the interference of others. While Lincoln Center was ostensibly meant

³⁶ Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 10. No specific notation is provided, but in Endnote 1 of this manuscript, Newhouse writes that "unless otherwise indicated, with the exception of the [Met] all my accounts of [Lincoln Center's origins] are based on Deborah Fulton Rau, 'The Evolution of Lincoln Center's Site Plan 1956-1959. The Historical Development of the Buildings and Outdoor Spaces,' July, 2004."

³⁷ Harwood writes that as a series of model studies show, Abramovitz "continued to wage war on the fortress concept of his colleagues" in the steady erosion of its travertine walls. Harwood, 99.

³⁸ Ibid.

³⁹ Harwood, 97. Moreover, most of the public funding used to build the Center (20% of its total cost) was discretely funneled from the Title I urban renewal program or the 1964 World's Fair finances. Kathleen Randall, "Lincoln Center: Modern Meets Monumental," DO_CO,MO.MO_US, New York/Tri-State Newsletter, (Summer 2004): 1.

to embody the cooperative and creative ideals of the postwar United States, through the consolidation of multiple arts organizations into a collectively planned and unified precinct, its designers' approaches grew increasingly atomized.⁴⁰ What role did the Juilliard building itself play in the larger, confusing narrative?

Architect

Belluschi was an enigmatic figure in the development of Lincoln Center. He was a European émigré, but not one of the United States' Bauhaus transplants. Born in 1899, he grew up in Bologna and Rome and emigrated to the US in 1923, with little experience of the avant-garde movements then emerging across Europe. "Over the first half of his career, until his move to the East Coast and change in *modus operandi*" in the 1950's, according to his biographer, Meredith Clausen, "he produced a series of buildings that have found a place in the modernist canon, among them the Portland Art Museum, his simple, regionalist houses and churches of the 1940's, and the Equitable building in Portland." With increasing fame, Belluschi was eventually appointed Dean of Architecture and Urban Planning at MIT in 1951. Harrison had brought Belluschi in at the beginning on the basis of personal friendship, and Clausen relates that he frequently brought a "humanistic point of view" to the proceedings.⁴² As an 'informalist,' according to Clausen, he consistently encouraged a smaller, more intimate scale and a less aggrandizing attitude to the design

⁴⁰ Philip Johnson (who may not be fully trustworthy) recounted in the 1980's that, in addition to his own battles with Saarinen over design agency in the main and north plazas, Saarinen "had his own battles with Bunshaft. Bunshaft had more or less shrugged his shoulders... But he got into my battle with Saarinen and he ended up backing me. He thought I was a contentious worm – not worm, annoyance, which of course, I was... Well of course you cannot do a job as big as Lincoln Center, I suppose, without this kind of recrimination and backbiting. So everyone pretty well hated everybody. And you've seen that picture with Johnny Rockefeller in the middle of the model with all of us sitting around just blissful? We weren't speaking by then. We just sat there glaring at the camera." Johnson, Johnson Tapes, 157.

⁴¹ Clausen, *Pietro Belluschi*, viii. Completed in 1948, "it was the first major corporate office tower to be built after the Second World War," and was one of the first of a long line of sleek metal-and-glass buildings. Clausen notes that widely recognized, "it established Belluschi as one of the preeminent modern architects" in the US.

⁴² Ibid., 258. In her endnote, Clausen cites taped interview, Mark Schubart/MLC, New York City, 1986.

of the complex – an emphasis on use and pedestrian circulation, rather than "the formal, classical scheme eventually adopted."⁴³

Early on, Juilliard President Schuman had consulted Belluschi on the choice of designer for school's new building. Belluschi provided him with a list of six leading young architects he thought should be considered: Stone, Pei, Saarinen, Yamasaki, Hugh Stubbins, and Eduardo Catalano. "He also included his own name with the understanding that were he selected, he would work in association with another firm," which was the eventual outcome.⁴⁴ Belluschi chose to work with Catalano, a young Argentine architect who was his friend and colleague at MIT.⁴⁵ Catalano set up a small office attached to his Cambridge house and relied on former students for help. All of Juilliard's working drawings and design production were carried out there, while Helge Westermann, a classmate of Catalano's from Harvard, served as a local liaison in New York.⁴⁶

Building

The Juilliard building has a singular legacy in the larger complex. The last piece to be agreed upon and the last to be built, it was plagued by an ever-changing site, budget constraints, and the frequent addition and removal of different programmatic components from the design brief. The project had several false starts in the late 1950's and was then put on hold for several years while sites and budgets were negotiated. It came to life again in the early 1960's. By this time, the Catalano office was engaged in the design of the MIT Student Center, a job that Belluschi used his influence to help Catalano get.⁴⁷ The initial concept studies for Juilliard, as Clausen notes, "drew on mid-fifties prototypes and related comfortably to the white classical temple image being adopted in the other

⁴³ Ibid., 258.

⁴⁴ Ibid. Belluschi was engaged for the Juilliard building by 1958.

⁴⁵ Ibid., 327. Belluschi had brought Catalano to MIT in 1956 to teach in the department, according to Clausen, and the two worked on several projects together.

⁴⁶ Ibid.

⁴⁷ Ibid.

Lincoln Center buildings," (Fig. 178)⁴⁸ However, as time passed, the site was changed from the northwest corner of the superblock (at Amsterdam Avenue and 65th Street) to the north side of 65th Street where it met Broadway (see Figs. 174-176). The project finally got the green light in 1963, "with the understanding that Belluschi would provide the basic concept to be developed in the Catalano office."⁴⁹

However, the scheme being developed in 1963 only covered half the eventual site. Belluschi and Catalano were concurrently designing a new High School for the Performing Arts (with the city's Board of Education as their client), which would replace an existing facility on the parcel adjoining Juilliard's. Belluschi reported to Lincoln Center and the Board of Education that fitting all the requirements for the two schools was very difficult.⁵⁰ Negotiations were begun to move the planned high school elsewhere (it eventually landed on the other side of Amsterdam Avenue) and Juilliard made plans to purchase the additional lot to allow for an enlarged building. This was a protracted legal negotiation, as the adjoining parcel had to be treated as an amendment to the Lincoln Square Urban Renewal Project.⁵¹ The clients were prepared to wait, and design was stopped until there would be more certainty on the site and program.⁵²

Clausen writes that due to the series of project delays and Belluschi's various other commitments, he and Catalano "had both gone stale. In the hopes of generating fresh ideas, Catalano turned over several schemes he and Belluschi had proposed earlier to three men in the office – Robert Burns, Frederick Taylor, and Frederick Preis – to develop, based on the new site and

⁴⁸ Ibid.

⁴⁹ Ibid., 329. It should be noted that the Pan Am building, finished in 1963, marked a turning point in Belluschi's and Walter Gropius's professional careers, as well as, according to Clausen, the future of modernism. That building, a tall, massive structure that dominated the Park Avenue viewshed from its site against Grand Central Terminal, was widely viewed as an example of rapacious and aggrandizing egotism and Belluschi's name was forever associated with it. Further reading in Meredith Clausen, *The Pan Am Building and the Shattering of the Modernist Dream*, (Cambridge, MA: Massachusetts of Technology (MIT) Press, 2005).

⁵⁰ Edgar Young, Lincoln Center: The Building of an Institution (New York: New York University Press, 1980), 162.

⁵¹ Ibid., 201.

⁵² Ibid., 163.

revised program."⁵³ As Clausen describes, Burns' solution, the one ultimately used, drew heavily on the MIT Student Center that Burns had also worked on. The similarities in continuous deep-set, planar cantilevers and emphasis on monolithic solidity over transparency – with punched window openings set in deep reveals – is immediately apparent.

The design team set the main performance spaces, the Juilliard Theater and Alice Tully Hall, on either side of centralized vertical circulation (Fig. 179-181).⁵⁴ The structural system was a steel-concrete composite system on a (mostly) regular grid, and "exterior massing was to consist of a symmetrical, heavily cantilevered upper portion, with recessed lower stories and projecting terraces, the whole design uncompromisingly orthogonal."⁵⁵ The disposition of program and spatial arrangement was very challenging, given various access routes for different users, integration between performance spaces and instructional and rehearsal facilities, structural considerations, and acoustical insulation required throughout. Edgar Young, the Center's behind-the-scenes project liaison, called Juilliard was "the most complex structure in Lincoln Center."⁵⁶ In addition to all the facilities expected for an educational institution in an urban setting,

Large workshop studios with high ceilings were required for opera, dance, and drama coaching; dance studios needed specially sprung floors. A large orchestra rehearsal room was needed that would be acoustically adequate. Provision had to be made for three pipe organs. Performance halls were needed for individual recitals, for orchestra concerts, for opera, dance, and theater productions. Shops were required for scene building and costume preparation.⁵⁷

However, Belluschi's precise role in the design of a building usually attributed to him is unclear. Clausen reports that personnel on the project was fluid over the six years from the restart of design to the building's completion; Catalano was the only constant throughout. Belluschi "was

⁵³ Clausen, *Pietro Belluschi*, 329. Clausen notes that Burns was later made head of architecture at the University of North Carolina.

⁵⁴ Ibid. The Lincoln Center Chamber Music Hall (Alice Tully Hall by the time of its construction), which had been originally planned for Abramovitz's Philharmonic building, was shifted in 1959 to the Juilliard brief. Young, 161.

⁵⁵ Clausen, Pietro Belluschi, 329.

⁵⁶ Young, 160. In addition to the seventy preliminary drawings that the design team made beginning in 1958, more than three hundred sketch drawings were made during the construction phase. Mildred Schmertz, "The Juilliard School," Architectural Record, January 1970, 121-130.

⁵⁷ Young, 160.

around only occasionally until later when, as the design took shape," and the project appeared to be going ahead, "he began coming in to review [the team's] work." As the project neared completion, "he stepped in with specific suggestions on the proportioning and detailing of the fenestration and treatment of the travertine veneer," refining, as Burns put it to Clausen, their "somewhat brutish forms." Belluschi also had direct involvement in resolving the building's public spaces, naturally a key concern with the major donors. 60

Finally completed in 1969 after more than ten years of stop-and-start design and redesign, the building was an organizational and technological triumph that also bore the marks, in Clausen's words, of "the rapidly shifting trends in architecture at the time.⁶¹ (Philharmonic Hall had opened in 1962, New York State Theater in 1964, the Library and Museum and Vivian Beaumont Theater in 1965, and the Met in 1966.)⁶² While Juilliard cannot be categorized as brutalist, the building evinces the larger 1960's interest in boldly sculptured, weighty cantilevered forms that was Brutalism's wider influence.⁶³ Remarkably, the design, as Clausen observes, "was wholly antithetical to Belluschi's former formal language, though tempered by his preference for understatement and sense of refinement."⁶⁴ Like an intricately carved-up iceberg, it furnished "the facilities of an entire campus in a single urban structure, with four stories below grade and six above. [It was] a monumental achievement of coordinated work on the part of architects, special consultants, structural,

⁵⁸ Clausen, Pietro Belluschi, 331.

⁵⁹ Ibid. In her endnote, Clausen cites Burns letter to MLC, 27 March 1989. Clausen reports that interestingly, Taylor "remembers the situation somewhat differently, especially Belluschi's participation."

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Stamas, 203-204.

⁶³ Clausen, 331.

⁶⁴ Ibid., 332. It is for this reason that the question of authorship is an interesting one. Clausen writes that after retiring from the MIT deanship in 1965, "Belluschi continued to practice independently in association with local architectural firms... In this capacity he turned out, at least in name, an astonishingly large body of work." In this phase, criticisms were frequently leveled, either toward the profit-oriented nature of these projects or Belluschi's role as a facilitator, "cashing in on his reputation": getting his name on work for which he was only marginally involved. Clausen, *Pietro Belluschi*, x, 334.

mechanical, and acoustical engineers."65 Architectural Record's Mildred Schmertz proclaimed it "an incredible effort on the part of Belluschi and his team."66

As a sort of late-term idiosyncratic hybrid that abstained from architectural pyrotechnics, it was met with general apathy amongst the profession at large. Coming at a murky moment when the inchoate 'Brutalist' sympathies of the 1960's were dissolving into postmodernism's various strands, "the basis for critical evaluation," Clausen writes, "was the visual image – form rather than function, which was never Belluschi's interest." Nonetheless, she writes, "it was acclaimed a success by the Juilliard administration and by critics in the general press." Ada Louise Huxtable declared the building to be free of the "uncertain pretensions and pomposities" of the Center's other, more iconic buildings. It exhibited a "marriage of form and function in terms of rational simplicity and bareboned solutions."

The style... is a kind of restrained establishment modern. It is not avant-garde, but its refinements and simplicities are timeless. With [Saarinen's] Beaumont Theater, Juilliard offers architectural and aesthetic reality to the cultural confusion of Lincoln Center, ending 14 years on an upbeat. [Juilliard and the Beaumont] are better buildings than the tiresomely, tentatively traditionalized star structures.⁷¹

In Architectural Record, Mildred Schmertz agreed, marveling,

Contained within the serene, well-ordered, simple and rather innocent facades of the new Juilliard School (the world's first conservatory for all the performing arts) is an almost infinite variety of spaces fitted together with a sorcerer's skill in an arrangement as intricate as a Chinese puzzle.⁷²

While most of the praise focused on the building as an organizational feat with a kind of forthright honesty, Clausen notes that the school facilities proved less successful, "with students finding its labyrinthine circulation system confusing."⁷³ Belluschi's primary 65th street entrance never overcame

⁶⁵ Ibid., 332.

⁶⁶ Mildred Schmertz, "The Juilliard School," 122.

⁶⁷ Clausen, Pietro Belluschi, 332.

⁶⁸ Ibid.

⁶⁹ Ada Louise Huxtable, "Juilliard's New Building: Esthetic Reality," New York Times, October 8, 1969.

⁷⁰ Ada Louise Huxtable, "Dissimilar Buildings, Similar Awards," New York Times, May 24, 1970.

⁷¹ Ada Louise Huxtable, "Juilliard's New Building: Esthetic Reality."

⁷² Mildred Schmertz, "The Juilliard School."

⁷³ Clausen, *Pietro Belluschi*, 333.

the dank unpleasantness of its burial beneath the Milstein overpass and was rarely used. On the other hand, given the remarkable challenge of combining four concert halls, dance studios, theater facilities, "some 67 practice rooms," and office spaces for faculty and administration into a coherent whole with "long spans superimposed upon short spans, two-story spaces dovetailing between one and three, the whole structure a closely interlocking puzzle of spaces tightly compacted into a container of set dimensions," it was "from an operational point of view perhaps the best that could be done."

Legacy

When one considers the incredible investment of time, effort, and capital – more than \$165 million in early 1960's dollars – that went into creating the Lincoln Center complex, it is both ironic and unfortunate that many of the principles it was built upon were already passé by its completion. Paul Goldberger notes that while we may speak wistfully of the kind of political will that enabled beloved infrastructural projects like Central Park or the city's greatest bridges, Lincoln Center is rarely talked about in such terms – "the premises on which it was conceived are no longer convincing." Its adherence to the tenets of mid-century car-culture planning has proven to be remarkably shortsighted. At a time when cities were stereotyped as chaotic and dangerous, Lincoln Center's culturally conservative proponents saw the prospect of luring suburbanites to performances and cultural events as essential to the Center's success. A music lover could drive in from the suburbs, "park, have a meal, attend a performance and return home without setting foot on a New

⁷⁴ Ibid.

⁷⁵ Figure is from Norval White & Elliot Willensky with Fran Leadon, *ALA Guide to New York City,* 5th ed. (New York: Oxford University Press, 2010), 354. The figure does not include federal aid for acquisition of the site or New York State's contribution to the New York State Theater. \$165 million in 1962 would be well over \$1 billion in 2011 dollars.

⁷⁶ Paul Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

York sidewalk."⁷⁷ Not much thought was given to public transportation, although the network of passages within the plinth was connected to the existing 66th Street subway station.

The vast centralized parking garage offered functional rationalization for the formal agenda: the superblock, elevated on a plinth. As *New York Times* music critic Anthony Tommasini notes, at the start of the project "almost everyone involved said the right things about access to the arts for all citizens... But however principled the intent, it was not matched by the imposing architecture," which suggested "a little white palace on a hill," as a Lincoln Center executive put it to him. In many ways, it was a regression. In *Site and Sound*, Victoria Newhouse reviews the social history of cultural institutions that directly engage with their contexts, from Europe's greatest nineteenth-century opera houses to Renzo Piano and Richard Rogers' 1977 Centre Georges Pompidou and Frank Gehry's 2003 Los Angeles Disney Hall. Lincoln Center was celebrated as both a generous gift from the city's haute bourgeoisie and a new, philanthropic approach to the urban blight then seen as a critical obstacle to the vitality of cities. We can have no doubt that the 16,732 residents Moses relocated from more than 16 acres in the San Juan Hill neighborhood would find more powerful defenders today.

Even for the arts groups themselves, the Center' advantages have been mixed. The Met, with its deep pockets and devoted audiences, could be located almost anywhere, but the New York City Opera has been an unhappy tenant since it arrived at the New York State Theater in 1966; sitting in the Met's shadow, it has struggled to show the public it is more than just a lesser Met.⁸¹ The Philharmonic had been the primary instigator of the original project, but it never found

⁷⁷ Tommasini, "Lincoln Center: Mixed Reviews." Newhouse notes that Johnson even proposed allowing dropoffs in the plaza itself. She writes that "this fact was discovered by Elizabeth Diller in her research... other information and quotes from Diller" are taken from Newhouse's conversations with her, February 26 and April 18, 2009. Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 3.

⁷⁸ Jane S. Moss, Lincoln Center's then-vice president for programming, quoted in Tommasini, "Lincoln Center: Mixed Reviews."

⁷⁹ Newhouse, Site and Sound, Chapter 2 typed manuscript, 2-3.

⁸⁰ Figure is from Columbia University Program in Historic Preservation, 2007 Studio, "Lincoln Square: Preserving the Modern Architecture of Slum Clearance, Urban Renewal, and Their Architectural Aftermath," http://www.gsapp.org/Archive/HP/Lincoln%20Square.pdf, p. 7 (accessed 10 April 2011)

⁸¹ Tommasini, "Lincoln Center: Mixed Reviews."

Abramovitz's home satisfying, acoustically or functionally, despite numerous, drastic renovations.⁸² As Tommasini put it, "The idealistic assumption that sparked the creation of Lincoln Center -- that orchestras, opera companies, ballet troupes and theaters would have much to gain by becoming partners in a centralized complex -- would be vigorously challenged today." Such consolidation behind a unified façade is largely antithetical to contemporary notions of organization image and audience development and outreach.

Yet despite the limitations of indifferent facilities and some of its more retrograde design principles, Lincoln Center became over the years a surprisingly beloved institution, imbued with a kind of affectionate nostalgia. As Ada Louise Huxtable remarked in a measured assessment later, the three main plaza halls "are lushly decorated, conservative structures that the public finds pleasing and most professionals consider a failure of nerve, imagination and talent. Fortunately," she continued, "the scale and relationship of the plazas are good, and they can be enjoyed as pedestrian open spaces." However, Huxtable made no mention of the Juilliard building, whose reputation, ironically, had suffered as the south plaza's had stabilized. Paul Goldberger recounted that when Alice Tully Hall and Juilliard's facilities opened, in 1969, "they seemed like an ambitious attempt to bring cutting-edge brutalism to the place. That's probably why so many architecture critics liked them and so many other people didn't."

Amid the tepid classicism of so much of Lincoln Center, Juilliard stood out as something totally nineteen-sixties, all cantilevers and boxy geometries. Granted, it was covered in travertine, to match its genteel neighbors, but that served only to make the building seem ill at ease, like a wrestler dressed in a Sunday suit.⁸⁵

⁸² Philip Johnson's firm, Johnson and Burgee, designed the Philharmonic Hall's rebuilding, completed in 1976. Tommasini touches on some of the key issues. Tommasini, "Lincoln Center: Mixed Reviews." Newhouse discusses the Hall's acoustic controversies in-depth in Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 26-35. Another upgrade, by Norman Foster and Associates, is currently being planned.

⁸³ Anthony Tommasini, "Lincoln Center: Mixed Reviews."

⁸⁴ Ada Louise Huxtable, New York Times, September 24, 1966. Reprinted as "Adding Up the Score," in On Architecture: Collected Reflections on a Century of Change (New York: Walker & Co, 2008): 346.

⁸⁵ Paul Goldberger, "Center Stage: The new Alice Tully Hall Bodes Well for other Lincoln Center Renovations," New Yorker 84 no. 47 (February 2, 2009): 72

And from a functional standpoint, an increasingly critical issue was the way that the public interfaced with Alice Tully Hall, Lincoln Center's primary venue for chamber music and recitals. Alice Tully was supposed to be the building's "most conspicuous public element," but Belluschi and his team had tucked the entrance underneath the broad staircase that led up to the side terrace linking with the Milstein bridge (see Fig.169).86 The half-hidden entrance was also separated from the street by an awkward triangular plaza, the legacy of the design team's insistence on a rectangular building plan for a trapezoidal lot. Tommasini compared the entrance to one for "a bunker"; another critic called it an "air raid shelter." Once inside the door, a cramped vestibule led down several steps to a low-ceilinged lobby. Inside the hall, some interior elements had been value-engineered into less luxurious treatments and the verdict on the hall's acoustics was ambiguous.88 Taken all together, the "Lincoln Center" that Ric Scofidio referenced in that 2009 interview is rife with internal contradictions and paradoxes. It is by no means a simple or obvious thing.

Renewal

The Center had cobbled enough political will together in the early 1990's to solve a critical space shortage (this resulted in the 29-story Rose building immediately west of Juilliard) but the existing campus was not directly addressed.⁸⁹ By the late 1990's, Lincoln Center faced an aging physical plant in disrepair, a significant amount of deferred maintenance, and an elderly, diminishing audience. The organizational politics, in which each of twelve self-concerned constituents with conflicting interests had to unanimously agree on all major decisions, had left Lincoln Center frozen

86 Ibid.

⁸⁷ Tommasini, "Lincoln Center: Mixed Reviews." The "air raid shelter" remark is from Barrymore Laurence Scherer, "Alice Tully's Pleasing Makeover," *Wall Street Journal*, April 14, 2009; in turn quoted in Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 13.

⁸⁸ Newhouse provides a fascinating examination of the hall's acoustics in *Site and Sound*, as she does for Avery Fisher Hall.

⁸⁹ The Samuel B. and David Rose Building, designed by Davis Brody and Associates, is comprised of a 12-story base building containing a number of cultural and administrative facilities for the Center, with an adjoining 17-story dormitory tower for students of Juilliard and the School of American Ballet. The northern half of the parcel, fronting 66th Street, was developed as an independent 47-story condominium tower. Davis Brody did some minor renovations within Juilliard itself, notably the transition of the entrance to the plaza level, which created space for the insertion of a small recital hall on the ground floor.

in time. In 1999, Lincoln Center and its constituents, with the help of Beyer Blinder Belle, initiated planning on a comprehensive series of repairs, renovations, and improvements across the campus that would begin with the outdoor public space.⁹⁰ The outcome of this long-waged campaign primarily includes the set of interventions designed by Diller Scofidio + Renfro, of which the Juilliard addition, Alice Tully Hall renovation, and 65th Street overhaul are some critical components (Fig. 182). (DS+R also made significant changes to the main plaza and its approach from Columbus Avenue, but I will primarily focus on the northern campus and the Juilliard addition in particular.)

Unlike Frank Gehry, who had tentatively suggested a huge glass dome over Lincoln Center's main plaza in 2001 (before he was hustled off the project), Diller Scofidio started with an approach that was intentionally subtractive. This would set the tone for their overall strategy, more akin to agile nip and tuck than basic augmentation. First, it was recognized that 65th Street was ground-zero in the renegotiation between Lincoln Center and its urban environs. The Milstein bridge was summarily removed, effectively disinterring the street from its role as a service tunnel and revealing it as a continuous spine *through* the complex to formerly marginalized Amsterdam Avenue (Fig. 183). Now a (potentially) active thoroughfare exposed to light and fresh air, the renamed Avenue for the Arts could accommodate new streetscapes along the north wall of the main plinth and Juilliard's ground floor (Fig. 184). At the same time, the removal of the old bridge negated the (marginal) functionality of Belluschi's wide stair fronting Broadway. Charged with the assignment to expand Juilliard's facilities within the school's existing lot, Diller Scofidio carried their addition out to the Broadway property line, maximizing the school's as-of-right zoning envelope. This would avoid the very expensive and problematic alternative of an addition on top of Belluschi's building, which

⁹⁰ Newhouse, Site and Sound, Chapter 2 typed manuscript, 1.

⁹¹ Gehry's firm was brought onto the project sometime after 2000. Goldberger, like other sources, cites Beverly Sills' (then-chairman of Lincoln Center) skepticism over the idea: "'A glass dome? We're going to have to heat it and air-condition it and clean the pigeon poop!' she said to the Times. Which constituent would like to pay for that?" Goldberger reports that Joseph Volpe, "the general manager of the Met, hated the idea of the dome, and he announced at the beginning of 2001 that the redevelopment plan was being handled so badly that the Met wanted nothing to do with it. Gehry was gone by the end of the year." Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

lacked the lateral bracing an upward expansion would require.⁹² On the plinth wall that formed the street's south side, a series of new amenities, stairways, and entrances enlivened the exchange between city and Lincoln Center, while a restaurant and landscape element was added to the edge of the remodeled North Plaza, to recreate the physical insularity that the Milstein bridge had provided (Figs. 185-186). Unsurprisingly, most of the interventions were focused around hardheaded problem solving, but it is the 'how' and not so much the 'what' that is most interesting.

For the designers, the act of making Lincoln Center "more Lincoln Center than Lincoln Center," hinged upon a dual identity of the place. The first was more straightforward and nonformal: Lincoln Center as a day-to-day cultural and institutional framework supporting the myriad artistic activities that constantly take place. Set designers go about their work backstage at the Met while Juilliard ballet dancers tie their toe shoes before a rehearsal; an orchestra begins to tune itself as the lights dim while latecomers rush from their dinner to a debut recital. The second identity is an architectural one, a contemporary vision of the complex imbued with that strange mix of affectionate nostalgia and resolute criticism. This is a key point, as the architects seem to proclaim the futility of attempting to extricate ourselves from the entanglements of near-term heritage. Instead, they aimed to celebrate and democratize the first part of Lincoln Center's dual identity – its bechive-like aura of almost constant, reciprocal performance and spectacle – while engaging in a lively, enriching dialog with the second part of its image: the particular architectural heritage of the postwar era. As Elizabeth Diller observed in the 2009 interview, "There is a 50's and 60's language there that had not been intruded upon."

In the overall strategy for the project, the design team endeavors to stake out a unique position that departs from both high-contrast and contextualist approaches to addition-making. As stated in DS+R's monograph, the goal was to "amplify" Lincoln Center's "most successful attributes while teasing out its unrealized potential."

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⁹² Interview with Josh Uhl/NFRR, New York City, 20 March 2011.

⁹³ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 89.

The architectural challenge has been to interpret the genetic code of the architecture into a language that can speak to a diverse audience after several generations of cultural and political change. The project aims to turn the campus inside out by extending the spectacle within the performance halls into the mute public spaces between the halls and beyond into the surrounding streets.⁹⁴

Diller remarked that they wanted the new work to be "legible – a cohesive language that doesn't feel entirely alien ... something that is of the DNA of what's there." This DNA, the 'essence' in Scofidio's conundrum, has to do with the original campus's latent, conflicting notions of the public: the seemingly intractable ethical distances between Lincoln Center's various idealistic aspirations and its hard realities. Art had been elevated to a "rarified domain above the street," but the intractable plinth contained the parking garage and the mechanical plant – cynically reputed to be the only thing that ever really united the Center's constituents. 97

The renovation approach is a satisfyingly auspicious and sophisticated one from a firm that, despite its elevation to Lincoln Center's renovation shortlist, "seemed less like a serious candidate than token representative of the avant-garde... the sort put on search lists so that institutional boards don't appear out of touch," as Paul Goldberger wrote in 2003.98 The husband-and-wife architectural team (Charles Renfro was made partner in 2004) are of a younger generation than Graves, Gwathmey, Piano, Meier, and they came of age in the late 1970's recessionary era of conceptual and performance art. While trained as architects, Diller and Scofidio only alighted on architectural practice after a long maturation in conceptual art-making, and their trajectory has resultingly followed a less aggressive, more probing curve than Koolhaas's.99 (Their work also evinces a fascination with

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⁹⁴ Diller + Scofidio (+ Renfro), The Ciliary Function, Works and Projects 1979-2007, edited by Guido Incerti, Daria Ricchi, and Deane Simpson (Milan: Skira Editore, 2007), 190.

⁹⁵ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 90.

⁹⁶ Particularly, in addition to the plinth that unites the campus but simultaneously divorces it from the city, all the open spaces meant for public activities and public concerts that ended up difficult to use and largely dysfunctional, or the travertine cladding, which denotes 'publicness' but works against democratic transparency. Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 92.

⁹⁷ Liz Diller, on *Charlie Rose*, broadcast March 31, 2009, accessed April 13, 2011, http://www.charlierose.com/view/interview/10185

⁹⁸ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

⁹⁹ Diller typically cites the influence of John Hejduk, who was the Dean of Cooper Union during Diller's time there (Hejduk was also onetime member of the New York Five with Eisenman, Meier, Graves and

material, or its absence, to which Koolhaas is seemingly indifferent.) When DS+R received the Lincoln Center commission, as Victoria Newhouse notes, "the firm had received more attention for its Blur Building of the year before," a series of suspended platforms enveloped in artificially-generated fog on Lake Neuchâtel in Switzerland, "than for its single completed project, social housing in Gifu, Japan."¹⁰⁰

When Diller and Scofidio were invited to present to the renovation committee, they designed three postcards, calling the first one "the image of Lincoln Center you want to send to your friends"; it was the iconic view of the fountain in the main plaza with the Met in the background. The two other postcards showed a view of the sterile atmosphere around Kiley's neglected reflecting pool with the oppressive Milstein bridge in the background, and an image of the virtually abandoned concrete band shell in Moses' Damrosch park to the south. As Scofidio later recounted, "We opened our presentation by saying we really love Lincoln Center. They were shocked. They hadn't expected to hear that from an architect," particularly – as Goldberger notes – from a firm with an avant-garde reputation. The generational gap was in some ways decisive. Diller and Scofidio's attitude, according to Goldberger, was emblematic of "a growing affection among younger architects for the architecture of the nineteen-sixties." 104

For practitioners whose stated interest is in "the critical extension of the modernist project," Lincoln Center's architecture was deserving of clearheaded investigation and engagement, not kitsch sentimentality.¹⁰⁵ As Diller later averred, "We were very much politically aligned with the clients to

Gwathmey). Liz Diller on *Charlie Rose.* Koolhaas work was initially Deconstructivist, along with his mentor Elia Zenghelis.

¹⁰⁰ Newhouse, Site and Sound, Chapter 2 typed manuscript, 8. The Gifu project was completed in 2000. The Institute for Contemporary Art in Boston, completed in 2006, was the firm's first building in the U.S.

¹⁰¹ Goldberger, West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

¹⁰² Ibid.

¹⁰³ Scofidio, quoted in Ibid.

¹⁰⁴ Ibid.

Diller, Scofidio and Renfro, interviewed by Deane Simpson in DS+R, The Ciliary Function, 54. In a December 2007 "TED Talk," Elizabeth Diller tellingly stated – while projecting the infamous photo of the original design team gathered around the Lincoln Center model – "These are the guys that did the project in the first place – 50 years ago. We're taking over now, doing work that ranges in scale from small-scale repairs to major renovations and facility expansions. But we're doing it with a lot less testosterone." Diller,

make the campus more open, more porous, to bring the outside in and to bring the inside out, to make these open spaces a destination for the public without tickets to an event."106 Lincoln Center's leadership was anxious revise its public image, as John Harwood put it, "from one of disinterested and elitist cultural endeavor to one of accessibility and excitement, to be achieved by cracking open the travertine nutshell to reveal (and add to) the multimedia meat inside."107 The design team endeavored to achieve this - variously - by "eroding the edges, making the base transparent, by making many more entrances, by making them really interesting thresholds, [and] by reconnecting" the Center to street life (Figs. 187-189). "Rather than thinking of the plinth as an object," Diller remarked to Paul Goldberger, "think of it as a surface whose edges can be bent up and down. The street warps its way up to the plaza. The plinth is relentless, but we want to create a topography that is less relentlessly horizontal." 109 If Lincoln Center's original proponents had deigned to allow the city up to the level of the art (and only qualified sectors of the city), the new architects' charge was to give art renewed relevancy by returning it back to the city, by making all of the Center's public spaces a little more public. The interventions covered a range of scales, from urbanism, architecture, and landscape, to information and media design. "Continuity of language was important," according to Diller, to avoid an ineffective group of discrete gestures. 110 At a larger and more fundamental level, DS+R's work is also defined in their consistent efforts to use materials in an unorthodox ways, or

Elizabeth. "Liz Diller plays with Architecture." TED Talk, December 2007, accessed March 15, 2011, http://www.ted.com/index.php/talks/liz_diller_plays_with_architecture.html Diller + Scofidio already had some experience dealing with the minefield of postwar legacies: they redesigned the interior of the Brasserie (completed 2000), an acclaimed restaurant in the stone base of Mies van der Rohe's Seagram building. Diller referred to its windowless location beneath the landmark International Style tower as "a site of the Miesian unconscious." Scofidio also noted that "Just about anything we could do would indirectly be read as critical act on Modernism... But we tried hard to speak to Mies directly." The designers used the enclosed, artificially lit location to "explore various attributes of glass." Diller, Scofidio and Renfro, interviewed by Deane Simpson in DS+R, The Ciliary Function, 54.

¹⁰⁶ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 92.

¹⁰⁷ Harwood, 96.

¹⁰⁸ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 89.

¹⁰⁹ Diller quoted in Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.

¹¹⁰ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 97. Josh Uhl, the project architect for the Juilliard renovation, confirmed that there was a palette developed and refined over the course of the project. The design team was constantly trying to "riff off of what was there." Josh Uhl/NFRR Interview, 20 March 2011.

through small moments of inventiveness to put twists on the everyday. Initially, the firm examined the feasibility of translucent travertine with a glass skin behind, but this had to be abandoned.¹¹¹ Instead, glass itself was deployed in a variety of ways across the complex for a sophisticated range of effects.

Addition to Juilliard and Alice Tully Hall

DS+R was first engaged on a limited basis to revamp the outdoor public spaces; the Juilliard addition and interior renovations were included in the project incrementally as the scope expanded logically from exteriors to adjacent public spaces on the interiors. After 65th Street's renewal, Lincoln Center administration directed DS+R to Alice Tully Hall's problematic street identity. Like the Juilliard theater, Alice Tully Hall had long suffered from anonymity and identity confusion. The hall, according to Uhl, "wanted to be seen, but everyone knew the building as Juilliard."112 Diller and Scofidio, who asked themselves why the Belluschi building "shouldn't be as exhibitionistic" as the Met was, set about a glib-sounding but very aptly named "architectural striptease" for Juilliard and Alice Tully Hall.¹¹³ This was executed in a series of deliberative steps (Fig. 190). First, the removal of the Milstein bridge and the building's ground-floor travertine exposed its lower-level interiors and the volumetric masses of Alice Tully Hall and the Juilliard Theater within. Belluschi's superfluous stair was removed from the front of the building, fully exposing the building's bottom half, and the datum of Belluschi's second-floor terrace was extruded outwards over the triangular plaza to Broadway. Creased at Belluschi's east elevation and folded upward, this extruded plane became a kind of upturned canopy, forming the underside of three levels of expansion for Juilliard of about 45,000 square feet. In the final two steps, the entire volume was sliced along the angle of Broadway, and an exceptionally transparent glass curtain wall dropped from the canopy, sheltering a new light-

¹¹¹ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 89.

¹¹² Josh Uhl/NFRR Interview, 20 March 2011.

¹¹³ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 89.

filled, visually porous Tully Hall lobby (Figs. 191-194).¹¹⁴ (The mullion-less curtain wall utilizes laminated low-iron glass and is cable-stayed along the vertical axis only with minimal hardware to ensure little visual interference.) This complex act operated on a variety of levels, peeling back and folding up layers to reveal a kind of latent tectonic dynamism, while also seemingly carving the upper half of the building open to expose the activities within (Figs. 195-198). The act's central conceit was an extrusion, created by genetically replicating Belluschi's repetitive logic, which was then literally "sectioned" along the line of Broadway. In reality, it is DS+R's own addition that is being carved up, but the emotional power comes from the idea that you're getting a never-before-seen glimpse into Belluschi's monastic close. It is worth noting that the building was not protected by local or national historic designation. Under those frameworks, the course of treatment ultimately carried out (especially the removal of the principal façade) would have been extremely difficult.

The lifting, pulling, and peeling up of the building was a way to make legible the clear differentiation between Juilliard and Alice Tully Hall, or in other words, the semi-private domain of a school versus a sleekly welcoming public performance venue. According to Uhl, the "trap-door" dropdown of the Juilliard dance studio into the Alice Tully precinct fulfilled two purposes: the first was to break up the plane of the upturned canopy and differentiate the volume of the lobby below into multiple zones. The second was the very real concern over square footage; the gesture was actually a way to sneak second-story dance rehearsal space into the scheme. A smaller, interior drop-down plane, cantilevered over the door to the concert hall itself, holds a balcony for the second-floor donor's lobby, nominally in Juilliard's territory (see Fig. 194). This is the one piece of program that crosses the boundary, and it is intended to be in opposition to the dance studio (which is Juilliard's penetration into Tully Hall's precinct.) The overall relationship is like one of continental plates. The irrepressible life of the street is diving from the sidewalk down to the hall, driving the wing above further upwards and compressing it into a smaller vertical section. The two trap doors serve to relieve this overwhelming geologic pressure. To the north, a set of television studios is also wedging

¹¹⁴ Diller, TED Talk, December, 2007.

itself into the building, splaying the plaza level apart into two ribbons (Figs. 199-200). Not only has the sectioning "cut" revealed Juilliard's innards above for all to see, but the public is waging a worthy campaign from below, infiltrating itself within the formerly closed-off block.

Within the hall itself (now rededicated as the Starr Theater), Diller Scofidio performed an incredible "dress-up" for Belluschi and Catalano's original space, which had remained largely untouched since it was built and was in need of visual and acoustical updating (Figs. 201-202). Operating within the eighteen-inch boundary between the existing container and the hall's seating (the capacity of which had to be preserved), DS+R wrapped the interior with a unifying skin, made of composite panels of resin and translucent veneers of African moabi in a variety of complex-curvature profiles. LEDs embedded within the cross-section allow the panels to emit a controlled glow, creating, in Liz Diller's words, "a seamless continuity that wraps the hall in a belt of light... similar to the parting of curtains or the raising of a chandelier," in anticipation of the start of a performance, (Fig. 203).¹¹⁵

The renovation and renewal of Alice Tully Hall has garnered a larger share of the press because of its role as public space, but the relationship of the addition to Juilliard's portion of the building is more complex from a preservation standpoint (Fig. 204). A monastic atmosphere was pervasive in Belluschi and Catalano's disposition of Juilliard's interior spaces. The building, internally focused, was always disorienting to navigate despite the presence of two interior courtyards (see Fig. 179). As Josh Uhl, the renovation's project architect, recalled, "you would go into practice rooms and come up and you would have no idea what way was what because there was a certain sameness

¹¹⁵ Ibid. DSR's task for the hall was to create a renewed sense of "intimacy," a challenge for a 1,100-seat venue. For the firm, this challenge was understood as combining acoustic isolation and improvement for the hall (the Broadway line of the city's subway passes close-by) with a unified visual and auditory experience. The hall was stripped of extraneous visual distractions, and all the systems were tucked into the new high-performance skin, which was acoustically engineered for optimum shape. Newhouse traces the "blush" lighting effect to a similar concept by Heinrich Tessenow in collaboration with Adolph Appia for a project in Hellerau, Germany, in 1911, using "electric light bulbs between layers of wax-impregnated canvas." Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 15.

to everything."¹¹⁶ Each of the floors – successive rings of almost oppressively rationalized program – acted autonomously with minimal vertical communication in the elevators and enclosed fire stairs. Corridors, optimized to allow for maximum programmed space, were shut off from views outside the building.

The design team immediately warmed the original building and its fascinating variety of spaces while lamenting the stingy appropriation and relentless anonymity of its public and performance venues.¹¹⁷ Uhl remarked,

I liked it when I surveyed it, and so did everyone else. We found the building austere and totalizing; it seems to answer its own questions, and there's very little ambiguity about the spaces. So there were a lot of interesting things for architects to pick up on. We asked ourselves, what does the building say? How can you take the language of the building and give it a new presence? I was always trying to look at what was there, and come up with something that played off its monumentality but was a little bit more democratic, a new idea in an existing framework.¹¹⁸

Diller distinguished the building from the classicizing structures south, lightheartedly accusing it of "shamelessly [taking] on travertine as a clad. That's why I call it 'brutalism in drag," she continued. "It knows better, but it has to conform with the rest of the look and the outfit of Lincoln Center." Scofidio remarked that there was actually some very beautiful design that went into the building, but had always remained hidden behind travertine. "So we wanted to tease this out and we didn't want to erase it. We did not want to make it a hodgepodge of things, but really to finally reveal the unity of the building," (Figs. 205-211). ¹²⁰ In some ways, the robust solidity of the building tolerated a commensurately assertive approach.

Design is not a linear process, so what seems like obvious and compelling rationale within a presentation often belies a much longer and discursive series of decisions. The tectonic logic of the

¹¹⁶ Josh Uhl/NFRR Interview, 20 March 2011.

¹¹⁷ Ibid. Uhl: The actual Juilliard Theater was a really interesting space. There was something really nice about it – it was totally interior-focused... really deep blood red continuous carpeting and these interesting light fixtures that we sort of reused in Tully – but we did the opposite – they were 'outies' and we did 'innies.' It was an interesting space – in the office we often used the word 'rarified' to describe it."

¹¹⁸ Ibid

¹¹⁹ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 92.

¹²⁰ Ibid.

striptease, with its peeled up terrace level, largely dictated the dematerialized transparency of the new Alice Tully lobby, but the treatment of the new south and east elevations above was not immediately obvious to the design team. According to Uhl, there were a number of different studies looking at how to deal with the façades for the south and east elevations.¹²¹

What followed was the concept of "sectioning" the building. The design team found it to be more formally successful and it gave the team much more flexibility negotiating the nonperpendicular angles between the east elevation and the rest of the building. Without having to articulate or rationalize specific articulated windows, sectioning freed up the program along the east elevation to be more dynamic. It's worth noting that the addition contains offices, practice rooms, a black box theater, a jazz ensemble rehearsal space, and a language arts laboratory. A large student orchestra rehearsal room was carved out of Belluschi's east courtyard by boxing over the void above the surrounding building. According to Uhl, fitting everything into the triangle meant stacking it as efficiently as possible while trying to create some sort of interesting public spaces in and amongst dedicated program. The multi-story void against the fully glazed east façade, with a series of suspended stairs connecting the floors, reinforces the implication of the section as an anatomical, visceral view of the building's insides, but this also satisfied the very pragmatic demand of connecting the floors in line with the existing scheme (Figs. 211-212). And because of the "box-in-box" construction that the acoustical considerations demanded, programming the space out to the edge of an all-glass façade would have been unfeasible. The open stairs offer the additional benefit as one of the rare social spaces for students within the building. Terminating Belluschi's double-loaded corridors in the light-filled void overlooking Lincoln Square also presented a much-needed sense of orientation within. 122 Huxtable, who had found virtue in Belluschi's original building more than

¹²¹ Josh Uhl/NFRR Interview, 20 March 2011. Uhl related that the team tried one scheme "where we kept the punched windows all the way around the front, and torqued them so that they pinched with the rest of the building. Liz [Diller] declared it to be a little too mannerist."

¹²² Ibid. Uhl reported that literally, in the building's depths, it was difficult to differentiate cardinal directions.

thirty years before, declared DS+R's new glazed Broadway façade to Victoria Newhouse to be "A miracle from the street." ¹²³

Instead of detailing the line between old and new on the south façade with the paradigmatic recessed joint or a change in material, DS+R chose to smudge the boundary. While the addition was clad with travertine from the same part of the same quarry, 124 the transition between old and new on the south elevation is subtly but forthrightly intimated by two things: the first is the shift in floor data from two floors to three floors within the upper cantilever, which dictates the change in glazing. The second is directly below, where Belluschi's terrace level is creased and bent upwards to vault out to the projecting wing above (Fig. 213-214). As Ezra Stoller's 1960's photographs of the original building show, the middle six bays of the east elevation expressed two floors within each reveal. Within a small portion, three floors had been squeezed into the height of the two that can be seen in the north and south perimeter windows. The renovation team maintained the three floors, extending them into the addition for the benefit of extra square footage (Belluschi's double-height spaces had been intended for dance rehearsal.) The extension of the additional floor mitigated some previous awkwardness due its small area originally. However, the designers also chose to carry the additional floor out to the south elevation of the addition, giving them cause for the transition from Belluschi's regular double-height openings to the addition's seemingly randomized moments along two floors where travertine veneer has dematerialized into glass panes (see Fig. 204). On the north elevation of the building, the situation is slightly different. Because of the angle of the cut, the façade that the addition can claim is below Belluschi's upper cantilever. On the first two levels, a small wedge of transparency and civic program has driven itself between layers of the terrace level, seeming to part the original building like a zipper.

The south façade was contentious. Local and regional preservation advocacy groups, invoking the Secretary of Interior's Standards, were of the opinion that the addition should appear

¹²³ Huxtable, quoted in Newhouse, *Site and Sound,* Chapter 2 typed manuscript, 12, from a conversation between Huxtable and Newhouse, February 26, 2009.

¹²⁴ Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 97.

distinctly different, and that its location was problematic to begin with. DS+R had considered a high-contrast approach early in the process, but ultimately concluded that a conspicuous break between old and new worked against their strategy and would be ultimately unsympathetic.¹²⁵ There was already an established language that somehow had to be confronted, and the addition – essentially the remaining triangle in the as-of-right zoning envelope - would come off fragmented and lost if highly differentiated. Instead, the addition demanded an intimately sympathetic but ultimately legible relationship with the existing building. The removal of Milstein bridge had met with little protest from anyone, but disagreement arose over the resulting modifications to the Belluschi building itself. Do.Co.Mo.Mo's local chapter vocally opposed replacing large areas of travertine with glass on the ground floor, which would "float a very weighty building awkwardly on a glass base in a way Pietro Belluschi never intended."126 The chapter also raised protests over the addition as a "radical alteration" that was also 'barely delineated' from the original.¹²⁷ Landmarks West!, a local preservation advocacy group, protested what they considered a fundamental renegotiation between the building and the main avenues, and proposed a "sensitive roof-top addition" instead. 128 Belluschi and Catalano's stubborn insistence on designing a rectangular building on a trapezoidal block was hailed as one of the building's character-defining and non-negotiable elements.129

However, despite this more contested renegotiation, specific elements and intentions also underwent more straightforward restoration. Back in the early 1990's, to connect the new Rose building to the rest of Lincoln Center, Lewis Davis of Davis Brody had remodeled Belluschi's

¹²⁵ Josh Uhl/NFRR Interview, 20 March 2011.

¹²⁶ Kathleen Randall, "Lincoln Center: Modern Meets Monumental," 4.

¹²⁷ Lincoln Center Working Group, DOCOMOMO US New York/Tri-State Chapter, "Statement prepared for Manhattan Community Board 7 public hearing regarding Phase I, Lincoln Center Redevelopment Proposal," January 20, 2005, (accessed April 10, 2011, http://www.landmarkwest.org/publications/Fall%2007/DOCOMOMO_-_1.20.05_CB7_LC_Statement.pdf

¹²⁸ Letter to Reynold Levy, President, LCPA, from Arlene Simon, President, and Kate Wood, Executive Director, Landmarks West!, dated April 28, 2004, accessed April 10, 2011, http://www.landmarkwest.org/advocacy/ad_05/thank_you.pdf

Letter to Reynold Levy, President, LCPA, from Arlene Simon, President, and Kate Wood, Executive Director, Landmarks West!, dated January 17, 2005, accessed April 10, 2011, http://www.landmarkwest.org/advocacy/ad_05/Response%20to%20 Jan%2011%20Briefing.pdf

original and unused lobby underneath the Milstein bridge to create a main entrance one level up on the plaza, moving what had become the building's *de facto* entrance on 66th Street back to the south side and linking it to the rest of the campus. To that point, the Milstein bridge was (unsurprisingly) largely unused. Davis made this a promenade level and located many of the Rose Center's primary amenities on it, which only further enervated 65th Street, despite his gesture to connect with Amsterdam Avenue via a west stairway.¹³⁰ The result was that, for unfamiliar visitors not arriving from the North plaza, Juilliard's entrance was near impossible to find.¹³¹ DS+R's new Entrance to Juilliard, "a landscape of sorts that can be inhabited," essentially brought back one of Belluschi's original features with an additional twist (Figs. 215-216).¹³² Likewise, the removal of the Milstein bridge and its imminent replacement with a much narrower and lighter footbridge connecting the west end of the Belluschi's building to the corner of Saarinen's Vivian Beaumont Theater recalls Bunshaft and Saarinen's original proposal for the Juilliard-North Plaza link.¹³³

In many ways, Diller Scofidio + Renfro's approach was a deeply personal one that did not consciously acknowledge its own engagement in a unique kind of preservation. Josh Uhl recollects that there was never any meta-discussion of historic preservation in the office beyond inchoate assumptions that the contextualist, hands-off, or high-contrast theories the discipline was thought to offer were largely irrelevant to this kind of design challenge. He remarked to me that the team gave a "big sigh of relief that it wasn't landmarked." The notion within the office, instead, was consistently about making the spaces vital while working within the bounds of an existing framework. Putting something contrastingly different on, as opposed to working with the language that was there, was generally agreed to be *more* disrespectful. Diller argued,

¹³⁰ Stamas, 125.

¹³¹ Paul Goldberger, "Center Stage," 72.

¹³² Charles Renfro, "Diller Scofidio + Renfro: Current Work," Lecture at the Architectural League, New York City, New York, November 22, 2010.

¹³³ Tom Stoelker, "Lincoln Center's Catwalk for Culture," *The Architect's Newspaper* February 15, 2011, accessed April 3, 2011, http://www.archpaper.com/e-board_rev.asp?News_ID=5162 Newhouse notes that the new footbridge is "in the spirit of Saarinen's project for two narrow, bronze covered bridges." Newhouse, *Site and Sound*, Chapter 2 typed manuscript, 10.

¹³⁴ Josh Uhl/NFRR Interview, 20 March 2011.

We made a point about having a continuous transition from the old to the new. But the places where we needed openings did not coincide with the existing window pattern. So we came up with this sculptural idea of making punches in very random, or seemingly random, places. That, to me, is closer to morphing than to an intervention or to an expressed addition. It's like the building itself is twisting itself into something and there are all these different moments... I think that morphing may be applied to Lincoln Center work in general as a kind of time and space issue.¹³⁵

Jorge Otero-Pailos offered that this kind of approach to the addition implies, rather than "a nineteenth -century understanding of time as a sequence of discrete segments," a conception of time that is "embedded and continuous, but also impossible to reverse-engineer," to which Diller emphatically agreed.¹³⁶

We wanted to have that much more slippery connection than either a kind of historicist approach or an appropriate preservation addition approach... The reason for insisting on the distinction between new and old is in order not to make a fake thing, to not pass something new into something that might have been built originally. We stuck to the ethic of being very honest about what's new is new.¹³⁷

Rather than reifying static conceptions of history, the new portion expresses a particular notion about the nature of Lincoln Center as an urban entity, and how that notion of public engagement has shifted from the original conception (that was largely dated the moment the Center was completed.) This approach did not reject mid-century intentions of aesthetic challenge or public enlivenment; rather, it sought to repair (or, alternatively, mine) the holes in its logic. Where the designers couldn't be subtractive, the idiom of the interventions was deliberately intended to be topological rather than additive, while still remaining legible. Things were added in such a way that they had seemingly peeled up, dropped down, or were sentient, ad-hoc disruptions and mutations in Belluschi's ordered tectonics — a joyful ghost in the machine. The strategy was a predominantly synthetic one: making something new only out of what was available (Figs. 217-218). This geometrical understanding of morphing and deformation, driven by eternally manipulatable digital surfaces and topologies, is also honest in its reflection of the current era. This is a different kind of expressionistic endeavor than those of the 1920's or the 1960's; today, software describes a virtual

¹³⁵ Diller, quoted in Diller and Scofidio, interviewed by Jorge Otero-Pailos, "Morphing Lincoln Center," 95.

¹³⁶ Ibid.

¹³⁷ Ibid.

reality where control points in space can be located and relocated endlessly. The delightful landscaped roof above the restaurant and Film Society across the street started as a rectangle incised in the North Plaza. Three of its corner-points were elevated to different heights, the resulting geometry was made to accommodate a planted landscape, and, presto, Juilliard students now have a torqued campus quadrangle of sorts. For the 'lounge' stair in the Juilliard entry, the cresting Juilliard entry canopy above it, or, way above, the single-steel plate stair running inside the east façade, the geometry - in its ease of transmutation and visualization - is digital. This is all put to the service of inserting some kind of mutating, kinetic bug into Belluschi's serene rhythms. Lines become slits, slits become edges, and edges are fluidly pulled down a floor, like taffy. On the south façade, the shelf of Belluschi's original terrace stretches out and vaults upward to support what appears to be an organic growth of the original building, but still new and different. On the north façade, the wedge of television studios appears to be delaminating and destabilizing the travertine wall of the north terrace. An additional, concurrent reading for the folded-plate stair within the glazed east façade is that is it is enigmatically ad-hoc: a sleek but 'temporary' insertion that seems to have appeared in an instant, provided by the building itself. All these gestures maintain the integrity of the original even as they seem to be subverting it, because while the language is not foreign to what is already there, the architectural "moves" are legible. Through this diagrammatic, algorithmic quality, the author's heavy hand is not nearly as present as the vague sense that the building has sentiently and surreptitiously adapted itself – deforming, extending, and opening – to fill the demands and imaginations of its users once again.

While we know this is not really the case, the complicated legacy of Belluschi's building is being preserved *and* engaged resolutely in the complex interactions of original and updated interior programs, and by the various strategies that reveal the ingenuity of the building's engineering and its jigsaw puzzle space-planning. By effectively cutting it open like a surgeon, the design team is designating it to be worth a detailed look. DS+R's treatment of the south façade, while

unconventional from a preservation standpoint, is a critical conceit to their approach. The "sectioning" effect of the glazed cantilever could not appear to reveal the Belluschi building's viscera to Lincoln Square below if the addition's architectural language had been completely alien to the original. But when it comes to the line of deliberate disingenuousness – the eliding of history – DS+R rightly shy away from illegibility. Instead, they engage in some delicious but decipherable artifice, using the expression of the additional floor as a means to play off Belluschi's straightforward window reveals with random dematerialization of travertine into butt-jointed, mullion-less glass. There is an especially vertiginous moment when a travertine column comes down on a upside-down glass "T." The designers appear to be gently reminding us that even the seemingly impenetrable and self-important Italian stonework across the rest of Lincoln Center is still just cladding. One conceit impishly pulls back the curtain and exposes another.

These kinds of tectonic moves, like the bending-up of the terrace level to form the ceiling of the Alice Tully lobby, would not have been possible without the relentless regularity of Belluschi's structural bays and window openings. The consistent rhythm of the original building's façades enables the success of both graduated adjustment (the progressive shallowing of the widow reveals) and more direct playfulness, like the punched windows. After a few New York winters, when the visible distinction between old and new travertine eventually disappears, this will be a deeply engaging facade. It is clear that the use of travertine is a conscientious commitment, not to some kind of unreflective and problematic contextualism, but to a far more sophisticated effect. Such probing consideration of materials differentiates the Juilliard addition from the Yale A&A's. At Yale, the zinc and limestone are simply deployed as a "non-concrete," but it is unclear why, except for the kind of contextual rhetoric that unintentionally parodies Rudolph's deliberative urban-scale thinking.

The strength of Diller and Scofidio's conception at Lincoln Center underscores, as Paul Goldberger noted in 2003, a subtle truth:

For all their talk about architecture as a form of social criticism or performance art, their real passions are traditional. They believe that architecture should encourage social interaction,

and they believe in the purity and power of formal composition. They love exploiting the latest technology, but they use it to embellish and reinvent traditional urban space, not to escape it.138

This synthesis of critical distance, probing investigation, and forthright acceptance of the modernist project's aspirational mantle – now thoughtfully tempered – holds significant future promise.

¹³⁸ Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," 36.



Fig. 166. Lincoln Center (1962-1969). Ezra Stoller's 1969 portrait of the campus, looking west towards the Hudson River. Juilliard is to the far right, Philharmonic Hall in the foreground, the New York State Theater at left, Metropolitan Opera between the two, and the Vivian Beaumont Theater behind Philharmonic Hall.



Fig. 167. Juilliard and Alice Tully Hall (1969). The Broadway facade with the small triangular plaza fronting the building. Note Milstein bridge at left, and second floor terraces, reachable by staircase in the front plaza.



Fig. 168. Juilliard and Alice Tully Hall Addition (2009), street view. The new Broadway facade, with 65th Street receding at left. Note slight line in the travertine revealing the new cladding, upper left.



Fig. 169. Juilliard and Alice Tully Hall (1969), street view. Alice Tully entrance at lower left underneath stairs to plaza level. 282



novitz, 1955. Aerial view of early scheme for Lincoln Center, December Hugh Ferris.



Abramovitz, Hope Bagenal, Hugh Ferris, Herbert Graf, Watter Unruh. Sven Markelius is presenting.

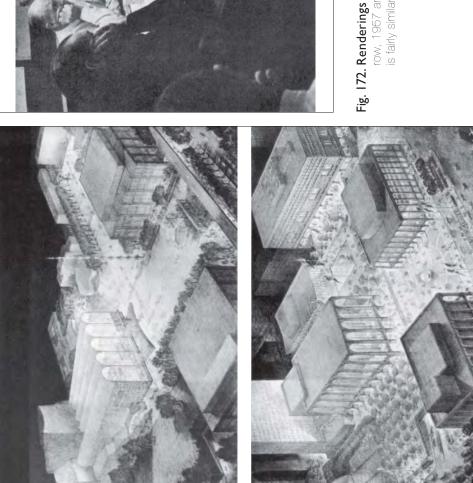
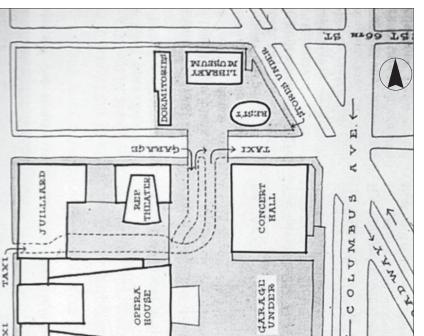
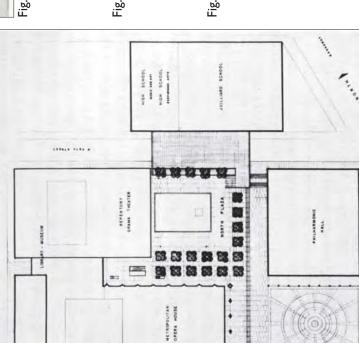


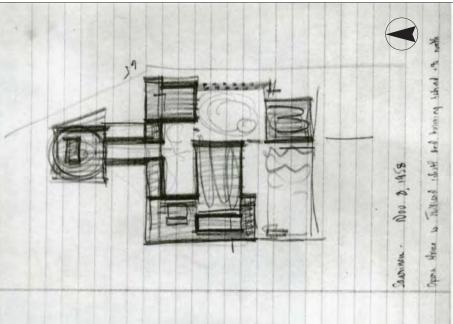
Fig. 172. Renderings - (left) Lincoln Center, process: 1957-1960. Sketches row, 1957 and 1958 schemes. Bottom row, 1959 and 1960 schemes is fairly similar to the final outcome - the most significant exception is the

Fig. 173. Lincoln Center Architects Gro Rene d'Harnoncourt (director of N Johnson, Bunshaft, Abramovitz, S









principal buildings are located, as is a bridge connecting to the north site, but Juilliard is placed at the northwest Fig. 174. Plan (top left) - Lincoln Center, 1958. The three corner of the main block.

Fig. 175. Plan (above) - Eero Saarinen, 1958. November 8 sketch plan for a narrower bridge connecting the two parcels

The complex as it was ultimately built. The width of the Milstein bridge is remarkable, and its circulation pattern Fig. 176. Plan (lower left) - Lincoln Center (1962-1969). was rather curious.



Edward Matthews, Johnson, Jo Mielziner, Harrison, and Pietro E Rockefeller 3rd, Eero Saarinen, Gordon Bunshaft, and Max Abra Fig. 177. Group Portrait of the Lincoln Center Architects Group,

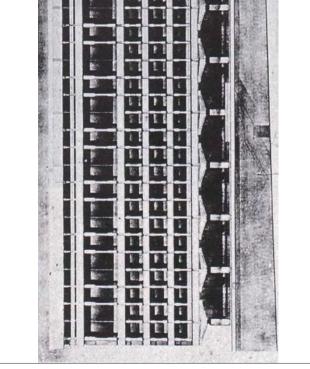
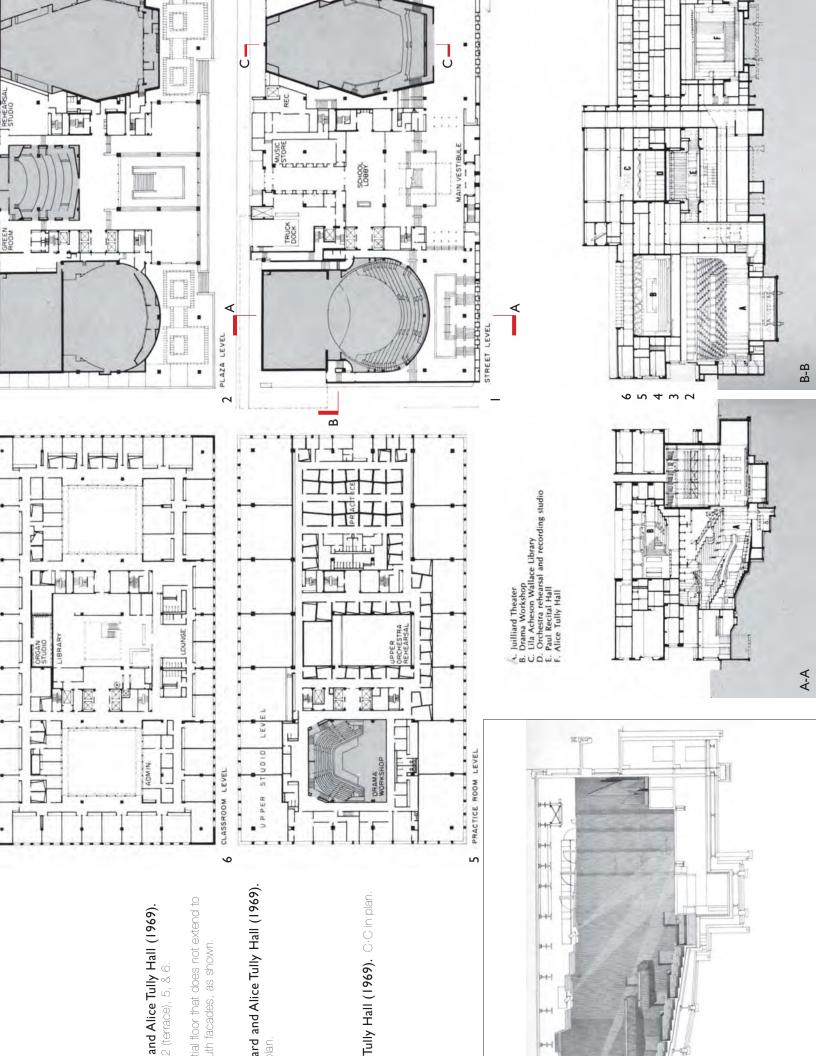


Fig. 178. Elevation (above)- Pietro Belluschi, Juilliard School. Preli



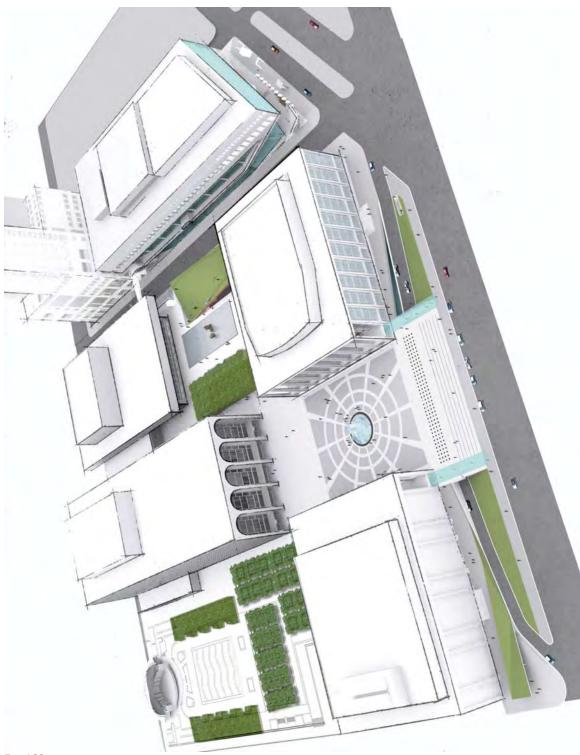


Fig. 182. Rendering - Lincoln Center Renewal (2009-2011). In addition to the Juilliard addition and renovation, DS+R's alterations include: at the main plaza, burying the Columbus Avenue taxiway beneath a new, generous stair, adding new porte-cochères and renovating the fountain; at the north plaza, adding the restaurant with torqued green roof and altering Dan Kiley's landscape to include a new, linear grove of trees and benches, and adding a new connecting footbridge to Juilliard and the Rose Building that replaces the Milstein bridge (to provide plaza access for the School of American Ballet).



Fig. 183. Juilliard and Alice Tully Hall (1969), southwest corner. Eero Saarinen's Vivian Beaumont Theater at right, and the Milstein bridge connecting Juilliard to the main campus. The bridge, plaza, and Belluschi's terraces were set at three different levels, with stairs connecting them.



Fig. 184. Rendering - Juilliard and Alice Tully Hall Addition (2009), southwest corner.

Diller Scofidio + Renfro's (DS+R's) treatment of 65th Street, with the new footbridge (in construction), the new but sympathetic street entrance for Juilliard, and the addition in the distance.



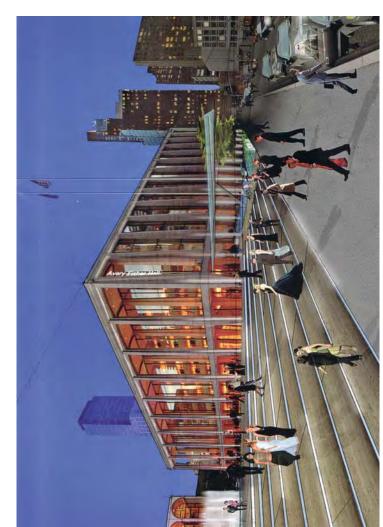
Fig. 185. Lincoln Center North Plaza, 1969. Beaumont Theater at left. Dan Kiley's reflecting pool and Henry Moore sculpture. The Milstein bridge encloses the plaza, with stairs to the side.



Fig. 186. Rendering - North Plaza (2009). DS+R's new restaurant in the background, with its landscaped hyperbolic roof.









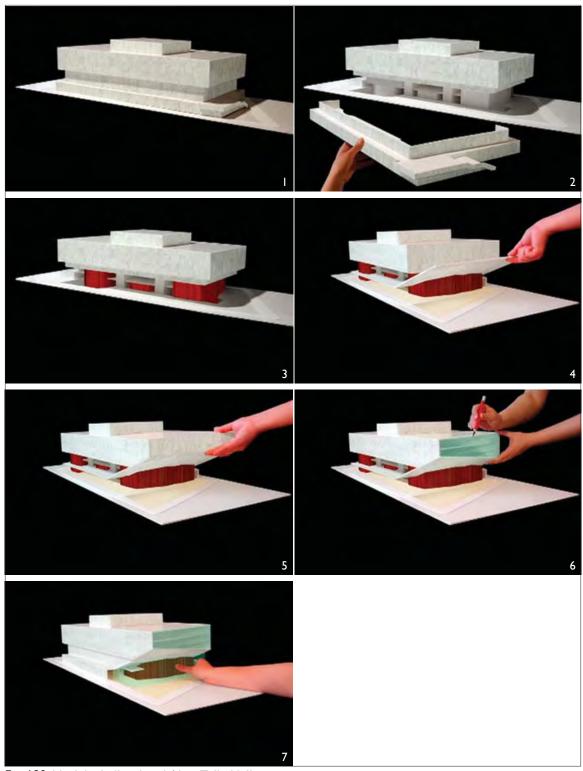


Fig. 190. Model - Juilliard and Alice Tully Hall, process. The architectural "striptease": the building in travertine 'drag' (1), removing the travertine and terrace 'skirts' (2), the activity of the three theaters exposed (3), extending the plane of the terraces out and tipping it upwards (4), extruding the upper building to meet it (5), 'slicing' the expanded building open along the line of Broadway (6), dressing the building back up with glass, creating a new lobby, and executing the cuts and folds of the donor lobby (7) and the dance studio (not shown).

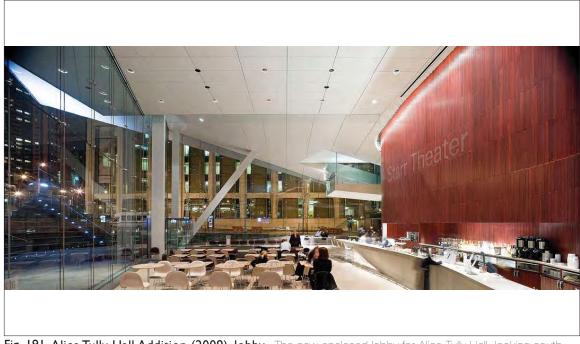


Fig. 191. Alice Tully Hall Addition (2009), lobby. The new enclosed lobby for Alice Tully Hall, looking south.



Fig. 192. Alice Tully Hall Addition (2009), plaza. The hardscape that mediates between sidewalk level and the lobby below. Note the minimal construction detailing on the mullion-less glass curtain wall.

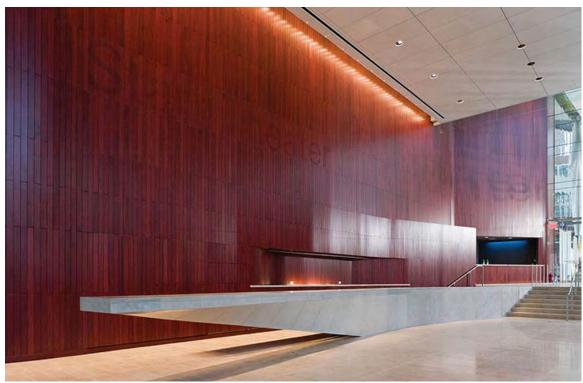


Fig. 193. Alice Tully Hall Addition (2009), lobby. The sidewalk datum continues into the building at the box offices (in background), and then continues as a sleek, limestone-clad, cantilevered bar, intended to look like the result of deformation in an existing vertical wall.

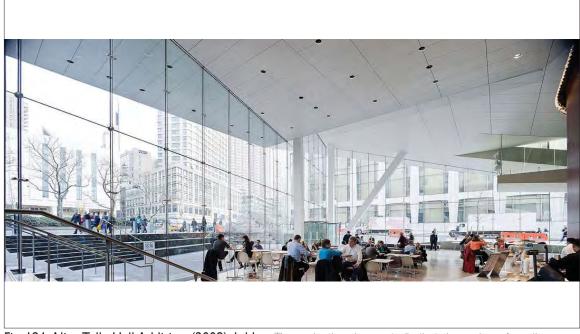


Fig. 194. Alice Tully Hall Addition (2009), lobby. The projecting dance studio that drops down from the Juilliard expansion is immediately above in the foreground, while the Alice Tully Hall donors' lobby forms the smaller drop-down to the right. Each is meant to represent the penetration of one program into the other, but also increased available space.









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Fig. 199. Juilliard and Alice Tully Hall (1969), street view. Northeast corner of the building, with 66th Street at right. The middle six bays on the east elevation express the two floors within in that location.



Fig. 200. Juilliard and Alice Tully Hall Addition (2009), street view. The northeast corner of the building. The upper travertine is original, but the inclined planes that split from the terrace railing below this cantilever are part of the addition. A public television studio occupies this lower portion of the addition.



Fig. 201. Alice Tully Hall (1969). The concert hall in its original guise, with vertical wood diffusers providing the primary means of surface articulation.



Fig. 202. Alice Tully Hall Renovation (2009). The renovated, reclad in light emitting moabi veneer panels that wrap almost every original surface.

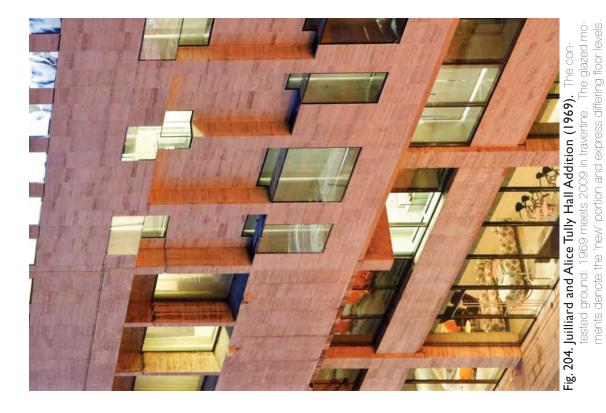
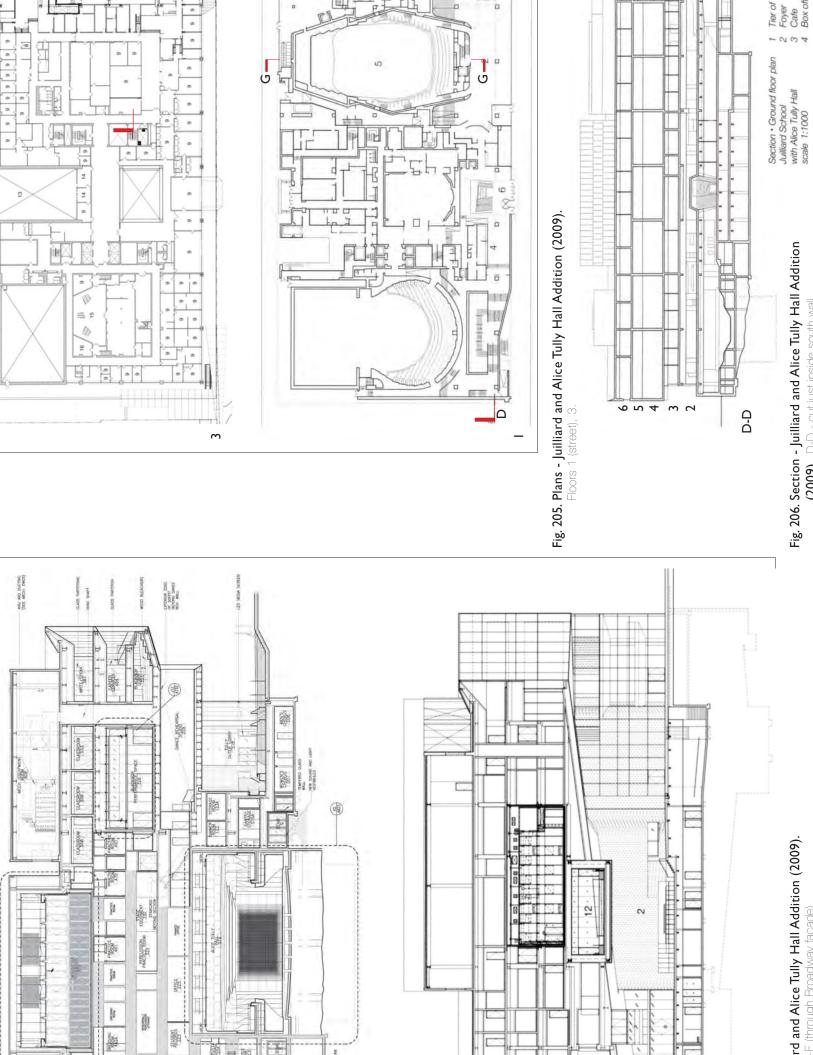




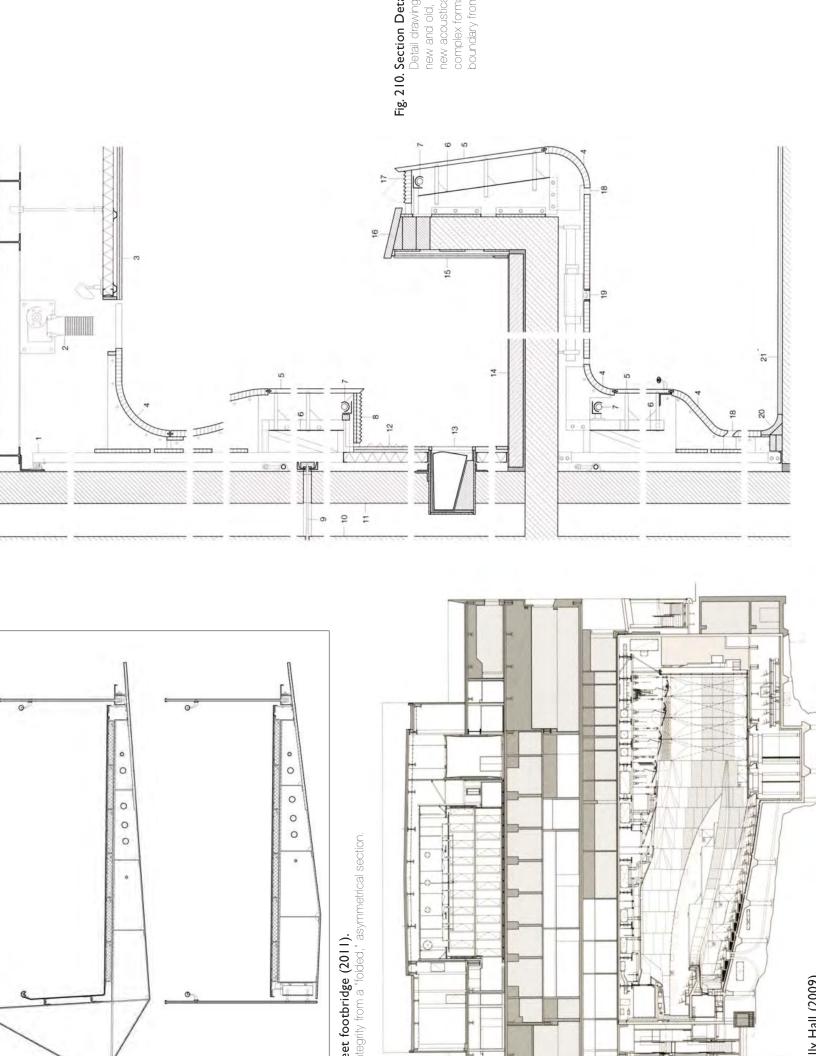
Fig. 203. Alice Tully Hall Renovation (1969). The "blush" activated in the double-curved panels before a performance.



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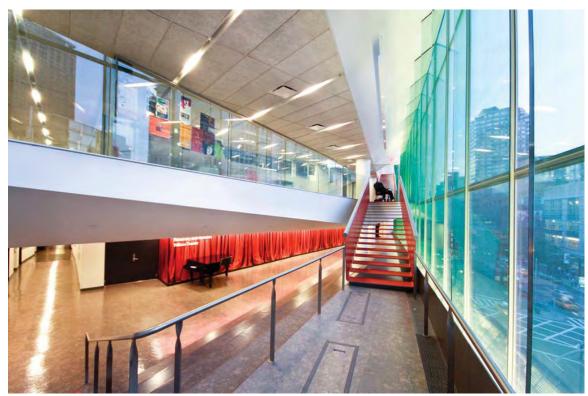


Fig. 211. Juilliard School Addition (2009). The triple-height circulation zone within the glazed, cantilevered addition facade over Broadway. For the most part, vertical circulation in the original building at Juilliard's upper floors consisted of elevators and fully enclosed egress stairs only.



Fig. 212. Juilliard School Addition (2009). One of the addition stairs, cut and bent from a single piece of steel, it appears as a single, ad-hoc element.



Fig. 213. Juilliard and Alice Tully Hall (1969), southeast corner. Belluschi's elevated terraces are at center, with 65th Street passing beneath the Milstein bridge at left.



Fig. 214. Juilliard and Alice Tully Hall Addition (2009), southeast corner. The launch of the new addition. The single pier seen at left is original: it is the corner pier in Fig. 213 above.



Fig. 215. Juilliard School (1969). Belluschi's principal entry lobby for the school on 65th Street, located on the first floor with the entry doors beneath the Milstein bridge. Significantly altered in the 1990's when principal the entry was moved to the plaza level above and a recital hall was carved out of the space.

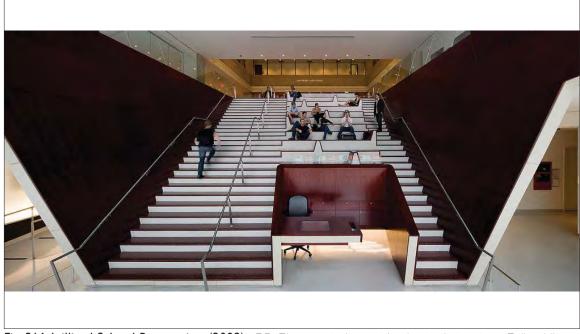


Fig. 216. Juilliard School Renovation (2009). DS+R's renovated, street-level entry that restores Belluschi's original intent. A lounge as well, the stair appears grasped and stretched to meet the ground floor.

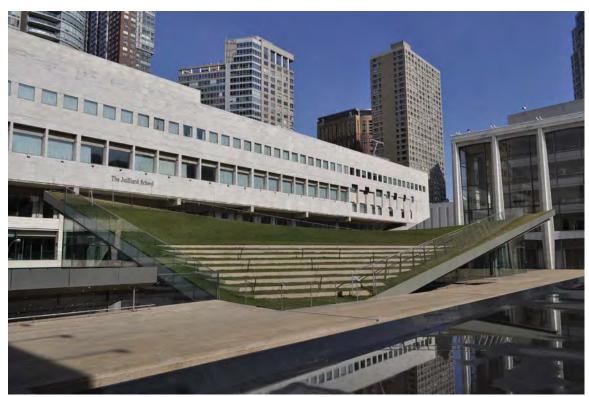


Fig. 217. North Plaza and Juilliard Additions (2009). The torqued landscape, a reimagined campus quadrangle for Juilliard students, with the Juilliard addition in the background. Avery Fisher Hall at right.



Fig. 218. Juilliard School Renovation (2009). The Juilliard entry stair. More than infrastructure, a moment of respite or leisure for students and the public.

CONCLUSION

I began this thesis with the notion that postwar icons are ultimately disserved by conventional approaches to addition making. What appears to be mounting evidence for this idea — both theoretical (as discussed in the second chapter) and in-practice (broadly surveyed in the third chapter) — initiated my interest in testing the premise through a series of case studies. Three different buildings, with at least as many subsequent approaches to addition making, might not only corroborate the inadequacy of typical paradigms; the case studies would begin to outline a set of relevant and effective principles. Better yet, taken together, these projects might clarify a comprehensible ethical framework, bringing it into sharp relief. We would benefit from some clear path forward in an endeavor that has been left scarred and murky by successive inchoate frustrations and general disquietude. The endeavor, it seems, is extraordinarily challenging to just *get right*. If I was overcome by any revelations during the process, then they are lost to memory. The one conclusion I can make is that there are no obvious answers, at least not in the way we might be looking for them.

Let me explain. Within historic preservation and architectural practice, we approach additions and debate them in terms of material palettes, deference in siting, entry schemes, and so on. We subscribe to a zeitgeist conception of addition-making ('to each age their own architecture!''), while preoccupying ourselves with scenographic effects in a very postmodern way. We want to have our cake and eat it too, and the unfortunate result is the somewhat dissatisfying, slightly patronizing set of principles immortalized in the Secretary of the Interior's Standards for rehabilitation. This strange turn starts to make sense when we consider the emergence of historic preservation as an academic discipline (read: critical framework) for recurring and self-aware interventions against the

entropic habits of time. While critical preservation began in the immediate postwar years, it speaks to a specifically postmodern condition in its agency over time. The dominant addition paradigm, the so-called "theory of disjunction," was not invented by clear-headed preservationists at one single moment. Instead, it is a patchwork of borrowed modernist theories. Softened and civilized since the midcentury, the paradigm is still a murky legacy of late-nineteenth and twentieth century attitudes on all that precedes a particular era.

Over the last few decades, practitioners have dutifully attempted to apply the precepts of a Modernist approach to that era's own monuments, and then – no surprise – were completely bewildered by the unforeseen baggage of intent and aura, so uncomfortably close at hand. A few addition designers even shrewdly wielded intent to serve other purposes. Regardless, the baggage is heavy lifting. (The moderns, as Marshall Berman and Tony Vidler argued, kept a lofty, watchful eye over history even as they swore they would never repeat it. Practitioners of the 1970's, '80's, and '90's, crowded into the strangely claustrophobic echo chambers of the twentieth century, on the toes of their predecessors, could not enjoy the same luxury.) When we continue to even conceptualize additions in the way we always have – in terms of deference, disjunction, honoring of intent (or its suppression) –we are already deaf to new answers, even if they may reveal themselves in a clearer way. With postwar icons, we're looking to building a better mousetrap, but the 'better' addition is framed along the same old lines.

From my study, I have uncovered the following principles that will inform my own approach to the design of additions for modern buildings. These principles range from the conceptual to the concrete, and are a composite of various lessons from the case studies. First, it seems clear that one must understand original intent fully, if only to recognize that one should not be bound by it. Historically, so-called intent has been discovered, defined, and invented in a variety of ways, from deep within archives to even deeper in the "revealed" essences of the original building. Alarmingly subjective, intent has been misunderstood and misrepresented far more frequently than it has shed

light on any particular challenge, and for this reason it should always be approached critically. If the architect of the original building left a clear and well-documented expansion masterplan, then it's worth having a look: it might offer a very sound and appropriate starting point. But it is also important to remember that the original building, once completed, is no longer under the sovereignty of its author. As Paul Goldberger rightly points out, Belluschi probably wouldn't have liked the renovation and addition to the Juilliard building. That's OK. Diller and Scofidio's allegiance is appropriately directed towards the building itself – its identity and its continued vitality.

Good addition-making demands careful study and a deep understanding of the building's latent possibilities. Here, I don't mean functional or reuse concerns, but potentialities in terms of tectonic idiom, dialog, and successive identities. This only comes about through research: systematic, insistently curious inquiry into the hidden nature of the original. What makes the building tick? This type of approach is a corrective to current design atmospheres, still rife with postmodernism's lazy answers and misleading assumptions over the operative contexts, urbanisms, and canons of the postwar era. However, some projects, like Louis Kahn's Kimbell Museum or his Salk Institute, are so deliberately and resolutely *complete* in their original form (ranging in scale from envelope to landscape) that almost any addition within their precincts can't help but start out behind the eight-ball. In these situations, the entire addition project should be seriously reconsidered.

The functional and tectonic relationships informed by Gestalt theory – what the addition seems to "say" or "do" to the original building, in other words – still matters. Graves deluded himself into thinking he was demonstrating respect to Breuer's building, and the ingenuity of Koolhaas's scheme couldn't overcome its seeming menace towards Breuer. As well, when the architect of an addition moves circulation or program outside the building in the effort to "distill" the original down to some purer essence, there is a problem.

¹ Paul Goldberger, "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite," New Yorker, July 7, 2003, 36.

Never more so than with modern icons of the postwar era, addition making is a political act, and the task therefore demands a robust yet sensitive approach to expression. We like rich complexity, but not additive cacophony. Abstraction retains its original meaning in a surprisingly fragile way, despite brutalist appearances to the contrary. One successful avenue is pursuing an addition *parti* that demonstrates a deep understanding for the original while critiquing its flaws in an ultimately good-natured way. Sophisticated, self-aware addition design engages and confronts recent history as a messy, living thing, and acknowledges, to the degree it is possible, the moment of its own operation.

The question of language and idiom nonetheless remains difficult, and is at the heart of the problem. Looking across the three case studies, for me the most successful use of idiom is Diller Scofidio's at Lincoln Center. However, Richard Meier offers good lessons in his (unbuilt) elevations for Yale's A&A. Meier's ethereal gradients of transparent and semitransparent glass take Rudolph's large-span, "goldfish bowl" panes and his concrete towers as a point of departure, modulating transparency values between the diametric poles of Rudolph's glazing and the concrete's textured massivity. Throughout, however, Meier's glass remains dematerialized and abstracted, entering into an intriguing dialog with the solidity of the original building next door.

At Lincoln Center, Diller and Scofidio's palette was much broader, including glass types that ranged widely in application, opacity, and structure; travertine cladding; various tropical hardwoods – even a planted softscape; dynamic, performative materials like the "blush" panels in Alice Tully Hall; and digital "information" surfaces, like the main plaza stair risers or the 65th street "blade" displays that extend Lincoln Center's campaign for transparency into a virtual dimension. Nonetheless, the firm exercised relentless discipline across a variety of operative scales (despite some value engineering) and the principle effect is that the Juilliard building has seemingly updated itself. Every one of the designers' moves and interventions has an honest, diagrammatic quality that permits real legibility while maintaining a unified and deeply engaging tectonic language. You know what's new

because you imagine how it might have come to exist – how it emerged, almost organically, out of the original complex, a place that is architecturally dynamic once again. This conceit, of a building that resiliently strives to meet the desires of a new generation of users, after all the opprobrium directed towards postwar modernism – even dynamically transforming itself in the process – is quite poignant.

In many ways, the future holds significant promise for the endeavor. Diller and Scofidio's bravura effort at Lincoln Center makes a strong statement for their talent and acumen, but, ostensibly, it also intimates the growing *critical* distance that comes with succeeding generations. While Graves', Gwathmey's, and Giurgola's addition approaches were distinct, they each struggled to unsatisfying and problematic ends with designing in such close proximity to their own generation's mentors and idols – Breuer, Rudolph, and Kahn. The patricidal and iconoclastic tendencies embodied by every succeeding era were combined with the muddle of dealing with a palpably immediate and ethically fraught past. Even the more successful (but unbuilt) schemes by Meier for Yale and Piano for the Whitney had unmistakable flaws that may have had something to do with generational differences.

With each passing year, the architects that come of age benefit from successive layers of revisionist history – leading to a more sophisticated understanding of the past – while freed from the grudges and obligations of their elders. Perhaps what is most interesting is this strange, hybrid moment of the present when we are just finally coming to grips with heritage of the recent past at the same time that it recedes into requisite chronological distance. It's hard for me not to greet this phenomenon with some ambivalence – to want to preserve and enshrine the palpable immediacy that makes these original works and the questions they pose so compelling. It is a cruelty of time's passage that when we are finally mature enough to grasp the nature of our own attachment to this modernism of living memory (and our additions as its purest outward form) we are forced to let it

In the three case studies, their original architects were each, through personal struggle, striving to respond creatively to a variety of uncertainties. The question is not "What is the architecture that should express our era?" so much as "What is a mode of architecture that is relevant to the current conditions of modernity?" Beneath all the battles over style, this has always been the essence of modernism, what Charles Jencks calls "critical modernism": the tradition "that bubbles away under the surface ... a creative avant-garde always reloading its canons in response to a perceived imbalance, and of course, a creative opportunity." In this sense – always revising itself, never perfect – modernism is forever unfinished. Additions that acknowledge postwar icons in this state can engage them in a candid, intimate, and open-ended fashion, rather than trying to fussily tie up the seams and affirm Vidler's unappealing portent of a *posthistoire* eternity. In parallel to Jencks' critique of establishment and critical modernisms, architects and preservationists have spent too long in an orthodoxy of mutual antagonism. It is time for, in Jorge Ortero-Pailos' words, historic provocation, to continue asking and imagining "what will have been," rather than "what will be."

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² Charles Jencks, "Canons in the Crossfire," GSD No. 14, 2001, 42.

³ Jorge Otero-Pailos, "Historic Provocation: Thinking Past Architecture and Preservation," Future Anterior 2 (N2, Winter 2005), iv, Editorial.

BIBLIOGRAPHY

Theory of Additions

Byard, Paul. The Architecture of Additions: Design and Regulation. New York: Norton & Co, 1998.

De Long, David. "The Design of History." Fine Arts 1998, American Academy in Rome, (1998): 38-39.

Dibner, David R. Building Additions Design. New York: McGraw-Hill, 1985.

Goldstone, Harmon. "The Marriage of New Buildings with Old." *Historic Preservation* 23 (January-March 1971): 19-23.

Groat, Linda. "Measuring the Fit of New to Old." Architecture (Nov 1983): 58-61.

Lawrence, John W. "Contemporary Design in a Historic Context." *Historic Preservation* 23 (January-March 1971): 24-28.

Longstreth, Richard. "The Dilemma of Adding." Keynote Address, Annual Conference, Frank Lloyd Wright Building Conservancy, Cincinnati, Ohio, 23 September 2010, unpublished manuscript.

National Trust for Historic Preservation. Old & New Architecture: Design Relationship. Washington, DC: The Preservation Press, 1980.

Newhouse, Victoria. Towards a New Museum. New York: Monacelli, 1998.

Sorkin, Michael. "Forms Of Attachment: Additions To Modern American Monuments." *Lotus International* no. 72 (1992): 90-95.

Modernism: Narratives, Legacies, and Ethics of Architectural Practice

Banham, Reyner. "The New Brutalism." Architectural Review 118 no. 708 (December 1955): 354-361.

Benjamin, Walter. "The Work of Art in an Age of Mechanical Reproduction." Reprinted in *Illuminations*, edited by H. Arendt, trans. H. Zohn. New York: Schocken Books, 1988.

Berman, Marshall. All That is Solid Melts into Air: The Experience of Modernity. London, Verso, 1985.

Brand, Stewart. How Buildings Learn: What Happens after They're Built. New York: Penguin, 1994.

Canizaro, Vincent B. Ed. Architectural Regionalism: Collected Writings on Place, Identity, Modernity, and Tradition. New York: Princeton Architectural Press, 2007.

Clausen, Meredith L. *The Pan Am Building and the Shattering of the Modernist Dream*. Cambridge, MA: Massachusetts of Technology (MIT) Press, 2005.

Crinson, Mark, ed. Urban Memory: History and Amnesia in the Modern City. New York: Routledge, 2005.

De Long, David. "Points of View in American Architecture" in *US Design 1975-2000*, ed. R. Craig Miller. (New York: Prestel Verlag with the Denver Art Museum, 2001), 69-115.

Ermarth, Elizabeth Deeds. Sequel to History: Postmodernism and the Crisis of Representational Time. Princeton: Princeton University Press, 1992.

Frampton, Kenneth. "Ten Points on an Architecture of Regionalism: A Provisional Polemic (1987.)" Reprinted in *Architectural Regionalism*, edited by Vincent B. Canizaro, 374-385. New York: Princeton Architectural Press, 2007.

Frampton, Kenneth. Modern Architecture. New York: Thames and Hudson, 1985.

Frampton, Kenneth. The Evolution of 20th Century Architecture. New York: Springer Wein, 2007.

Giedion, Sigfried. Space, Time and Architecture. Cambridge, Mass: Harvard University Press, 1967.

Glazer, Matthew. From a Cause to a Style: Modernist Architecture's Encounter with the American City. Princeton: Princeton UPress, 2007.

Harries, Karsten. The Ethical Function of Architecture. Cambridge, MA: MIT Press, 1997.

Jameson, Fredric. A Singular Modernity: Essay on the Ontology of the Present. London: Verso, 2002.

Jencks, Charles. "Cannons in the Crossfire." Harvard Design Magazine no. 14 (Summer 2001): 42-49.

Johnson, Philip. The Philip Johnson Tapes: Interviews by Robert A.M. Stern. New York: The Monacelli Press, 2008.

Jones, Wesley. "Big Forking Dilemma." Harvard Design Journal no. 32 (Spring Summer 2010): 8-17.

Levine, Neil. Modern Architecture: Representation and Reality. New Haven: Yale University Press, 2009.

Mostafavi, Mohsen and David Leatherbarrow. On Weathering: The Life of Buildings in Time. Cambridge, MA: MIT Press, 1993.

Otero-Pailos, Jorge. "Historic Provocation: Thinking Past Architecture and Preservation." *Future Anterior* no. 2 (Winter 2005), iii, Editorial.

Otero-Pailos, Jorge. Architecture's Historical Turn: Phenomenology and the Rise of the Postmodern. Minneapolis: University of Minnesota Press, 2010.

Schapiro, Meyer. "Style." (1962 essay) reprinted in Schapiro, Meyer. Theory and Philosophy of Art: Style, Artist, and Society. New York: George Braziller, 1994.

Spector, Tom. *The Ethical Architect: The Dilemma of Contemporary Practice.* New York: Princeton Architectural Press, 2001

Sudjic, Deyan. The Edifice Complex. New York: Penguin, 2005.

Vidler, Anthony. Histories of the Immediate Present. Cambridge, MA: MIT Press, 2008.

General Theories of Preservation & Rehabilitation

Cantacuzino, Sherban. Re-Architecture: Old Buildings/New Uses. New York: Abbeville Press, 1989.

- Lowenthal, David. The Past is a Foreign Country. Cambridge: Cambridge University Press, 1985.
- National Parks Service. Secretary of the Interior's Standards for the Treatment of Historic Properties. 36 CFR Part 1207, December 7, 1978 (43 FR 57250).
- National Parks Service. Secretary of the Interior's Standards for the Treatment of Historic Properties. 36 CFR Part 68, July 1, 1981 (46 FR 34329).
- National Parks Service. Secretary of the Interior's Standards for the Treatment of Historic Properties. 36 CFR Part 68, July 12, 1995 (60 FR 35842).

Conservation of Modern Heritage

Cunningham, Allen, ed. Modern Movement Heritage. New York: Routledge, 1998.

- Freeman, Allan. "Complexities and Contradictions: Preservation Meets Modernism Head-On at the Preserving the Recent Past' Conference," *Historic Preservation* 47 (July/August 1995): 20-21.
- Longstreth, Richard. "Taste versus History," Historic Preservation Forum 8 (May-June 1994): 40-45.
- Longstreth, Richard. "The Problem with 'Style'," *The Forum*, Bulletin of the Committee of Preservation, SAH, 6 (December 1984): whole issue.
- Longstreth, Richard. "What to Save? Midcentury Modernism at Risk." *Architectural Record* 188 no. 9 (September 2000): 59-61.
- Longstreth, Richard. "When the Present Becomes the Past." in *Past Meets the Future: Saving America's Historic Environments*, edited by Antoinette Lee, 212-25, 249-53. Washington: Preservation Press, 1992.
- Rappaport, Nina. "Preserving Modern Architecture in the US." In *Modern Movement Heritage*, edited by Allen Cunningham, 59-65. New York: Routledge, 1998.
- Starn, Randolph. "Authenticity and Historic Preservation: Towards an Authentic History." *History of the Human Sciences* 15 no. 1 (February 2002): 1-16.

Prior departmental student work consulted

- Beier, Brendan R. "Preserving the Work of Mitchell/Giurgola Associates," M.S. Hist. Preservation thesis, University of Pennsylvania, 2006.
- Donahoe, Stacey. "An Analysis of Design Guidelines for Additions to Historic Structures." Paper presented for HSPV Seminar in American Architecture, Professor David De Long, University of Pennsylvania, May 2, 2002.
- Lofstrom, Johanna. "Beneficial Additions: Addressing Brutalist Architecture to Create a Financial and Spatial Synergy Between Historic Places of Worship with Secular Mix-Use Building Additions," M.S. Hist. Preservation thesis, University of Pennsylvania, 2010.
- Wang, Fon. "Additions to Historic Structures: Examining Design Principles, Imagining Possibilities." Paper presented for HSPV Independent Study, Professor David De Long, University of Pennsylvania, December 1, 2006.

Relevant prior work by this thesis candidate

- Rogers, N. "Architecture of Addenda: Problematics in the Expansion of the Whitney Museum of American Art." Paper presented for Theories of Historic Preservation, Professor Frank Matero, University of Pennsylvania, December 2009.
- _. "Posthistories of Modern Traditionalism: Robert A.M. Stern and Contemporary Practice." Paper presented for Architectural History and Theory III, Professor Helene Furjan, University of Pennsylvania, December 14, 2008.
- __. "Urban Urbanity: Renzo Piano's Addition to the Morgan Museum and Library, New York." Paper presented for Architectural History and Theory II, Professor David Leatherbarrow (Teaching Assistant, Charles Davis), University of Pennsylvania, May 5, 2008.

SURVEY CHAPTER

(Alphabetical Order by Author)

- "A Delicate Balance." Architecture (July 1993): 45.
- "A Talk with Salk." Progressive Architecture 74 no. 10 (October 1993): 47.
- "C² Building, Fashion Institute of Technology, New York, 2009-: SHoP Architects." *Architectural Design* 79 no. 2 (Mar-Apr 2009): 48-51.
- "Dulles Airport Expansion, Washington, D.C. Skidmore, Owings & Merrill." *Architecture* 82 no. 11 (Nov 1993): 40-41.
- "Dulles International Airport." Architectural Record 134 (July 1963): 101-110.
- "Dulles International Airport." Progressive Architecture 44 (Aug 1963): 86-101.
- "Eero Saarinen, TWA Terminal, 1962 Gensler, TWA Terminal and JetBlue Airways' Terminal 5, New York, New York, USA 2004-2008." A + U: Architecture and Urbanism 474 no. 3 (March 2010): 10-19.
- "Haunting Franklin's House," *Architect's Newspaper*, May 7, 2010, accessed February 3, 2011, http://www.archpaper.com/e-board_rev.asp?News_ID=4519
- "Milwaukee Art Center: a big and bold but modest addition to a modern monument." *Architectural Record* 160 no. 1 (July 1976): 87-92.
- "Milwaukee County War Memorial, Milwaukee, Wis." Architectural Forum 107 (Dec 1957): 90-95, 144.
- "Milwaukee's Proposed Memorial Center." Architectural Record 102 (Nov 1947): 74-77.
- "Richard Meier & Partners: the High Museum of Art, Atlanta, Georgia." *Architectural Design* 54 no. 11-12 (Nov-Dec 1984): 36-39.
- "Solicitous additions to an architectural icon [Kimbell Art Museum]." *Architectural Record* 177 no. 12 (October 1989): 59.

- "Terminal for Trans World Airlines, Inc., New York International Airport, New York, N.Y." *Architectural Forum* 108 (Jan 1958): 78-83.
- "TWA Terminal Building, Idlewild, New York." Architectural Design 32 (October 1962): 465-469.
- "Washington's new Jet Age International Airport." AIA Journal 33 (March 1960): 33.
- "Whither Dulles? Cold war 'landmark." Progressive Architecture 59 no. 3 (March 1978): 28.
- Banham, Reyner. "Convenient Benches and Handy Hooks: Functional Considerations in the Criticism of the Art of Architecture." In *The History, Theory and Criticism of Architecture*, edited by Marcus Whiffen, 96-97. Cambridge: MIT Press, 1965.
- Barna, Joel Warren. "Dallas Museum addition marks reorganization." *Progressive Architecture* 74 no. 12 (Dec 1993): 12.
- Barna, Joel Warren. "More vaults for Kahn's Kimbell." Progressive Architecture 70 (Oct 1989): 27.
- Birkerts, Gunnar. *Process and Expression in Architectural Form* (Bruce Goff Series in Creative Architecture, Vol. 1). Oklahoma City: University of Oklahoma Press, 1994.
- Blake, Peter. "Save Dulles Airport!" Interior Design 59 no. 14 (Oct 1988): 300-301.
- Bose, Sudip. "Flights Of Fancy: the nation's grand airport terminals still make the imagination soar which is why they're worth saving." *Preservation (*The magazine of the National Trust for Historic Preservation) 61 no. 3 (May-June 2009): 28-35.
- Branch, Mark Alden. "Kimbell Plans Ambushed In New York." *Progressive Architecture* 71 no. 3 (Mar 1990): 23.
- Britton, James. "Evaluation: Lantern-Like Library Held Aloft On Concrete Fingers." *ALA Journal* 66 no. 9 (August 1977): 30-35.
- Brownlee, David and David De Long. Louis I. Kahn: In the Realm of Architecture. New York: Rizzoli, 2005.
- Campbell, Robert. "Forms 'exploding' From A Drum: High Museum, Atlanta." *Architecture: the AIA Journal* 73 no. 5 (May 1984): 222-229.
- Cohen, Preston Scott. "Dexterous architecture." *Harvard Design Magazine* no. 29 (Fall-Winter 2008-2009): 65-69.
- Cramer, Ned. "Copy cat [Gensler]." Architecture 87 no. 6 (June 1998): 67.
- Cramer, Ned. "Tunnel of love [McCormick Tribune Campus Center, Chicago]." *Architecture* 92 no. 12 (Dec 2003): 102-109.
- Dillon, David. "Piano's design for Kimbell Museum revealed." *Architectural Record* 197 no. 1 (Jan 2009): 26.
- Dixon, John Morris. "Art Oasis: Dallas Museum of Art." *Progressive Architecture* 65 no. 4 (Apr 1984): 127-136.
- Duany, Andres M. "Slouching Towards Modernism: Rem Koolhaas's New Student Center At Iit Is As Perfect A Setting For Today's Grungy Tech-Jocks As Mies's Original Campus Was For 1950s Engineering Nerds." *Metropolis* 23 no. 8 (April 2004): 84, 86.
- Fisher, Thomas. "Landmarks: TWA Terminal." Progressive Architecture 73, no. 5 (May 1992): 96.

- Forgey, Benjamin. "A High Complement: Museum Wings Fit in Fine." *The Washington Post*, November 20, 2005.
- Forgey, Benjamin. "An Auspicious Beginning: the new Hirshhorn Museum." *Art News* 73 no. 8 (October 1974): 40-42.
- Forgey, Benjamin. "Winged Victory; Santiago Calatrava's Stunning, Flap-Happy Design for Milwaukee Art Museum Flies in the Face of Convention." *The Washington Post*, November 4, 2001.
- Freeman, Allen. "SOM's addition to Dulles International Airport respects Eero Saarinen's 'Modern Masterpiece." *Architectural Record* 185 no. 3 (March 1997): 62-67.
- Giovannini, Joseph. "An icon [Milwaukee Art Museum]." Architecture 91, no. 2 (Feb 2002): 52-61.
- Giovannini, Joseph. "Highs And Lows: Renzo Piano's High Museum expansion is graceful but can't match its forebear." *I.D.* (Magazine of International Design) 53 no. 1 (Jan-Feb 2006): 95-96.
- Goldberger, Paul. "An Appraisal; Architecture: A Design for Guggenheim Tower." New York Times, October 10, 1985.
- Gregory, Rob. "SHoP: Fashion Institute of Technology, New York, USA." *Architectural Review* 217 no. 1298 (April 2005): 65.
- Hall, Peter. "Wrestling With The Legacy: OMA and 2X4 collaborate on a student center that stands on sacred ground: The Mies-designed campus of IIT." *Metropolis* 21 no. 1 (Aug-Sept 2001): 66-69,108-109,113.
- Hawthorne, Christopher. "Urban Reflections: A New Wave of Museum Building is Founded on what a Facility Means to Its City." Los Angeles Times, September 19, 2010.
- Hodge, Paul. "Critics Say Proposed Expansion Would 'Destroy' Dulles Design." Washington Post, December 15, 1977.
- Huxtable, Ada Louise. "The Windowless Bulk of the Hirshhorn." New York Times, October 6, 1974.
- Jones, Wesley. "Mies-takes." ANY (Architecture New York) no. 24 (1999): 36-43.
- Koerble, Barbara L. "Giurgola's Kimbell addition draws fire." *Architecture: the AIA Journal* 79 no. 1 (January 1990): 35-36.
- Koerble, Barbara L. "Kimbell Art Museum unveils Addition Scheme by Giurgola." *Architecture: the AIA Journal* 78 no. 10 (October 1989): 19, 22.
- Koerble, Barbara L. "Report: Kimbell Art Museum Expansion Abandoned." A + U: Architecture and Urbanism 236 no. 5 (May 1990): 4-5.
- Koerble, Barbara L. "Report: Kimbell Art Museum expansion." A + U: Architecture and Urbanism 233 no. 2 (Feb 1990): 4-8.
- Leubkeman, Christopher Hart. "Form Swallows Function." *Progressive Architecture* 73 no. 5 (May 1992): 106-109.
- Lindsay, Greg. "Heirport: Eero Saarinen's TWA terminal has a new neighbor that embodies the realities of 21st-century air travel." *I.D.* (Magazine of International Design) 55 no. 7 (Nov-Dec 2008): 136-137
- Loos, Ted. "Lovely Museum. Mind if I Redesign It for You?" New York Times, October 30, 2005.

- Lubell, Sam. "Polshek chosen for Vietnam Veterans Memorial addition." *Architectural Record* 192 no. 11 (Nov 2004): 32.
- Maxwell, Robert. "The High Museum, Atlanta, Georgia." AA Files no. 7(Sept 1984): 68-74.
- Mertins, Detlef. "Design after Mies [Illinois Institute of Technology, McCormick Tribune Campus Center]." ANY (Architecture New York) no. 24 (1999): 14-19.
- Millard, Bill. "American Idol: Saarinen's 60s stunner, the TWA building, is being dug out of mothballs to act as gateway to Gensler's terminal for US airline JetBlue." *RIBA Journal* 115 no. 3 (Mar 2008): 42-46, 48.
- Miller, Ross. "Commentary: Adding to Icons." Progressive Architecture 71 no. 6 (June 1990): 124-125.
- Newhouse, Victoria, Ed. Renzo Piano Museums. New York: Monacelli Press, 2007.
- Newhouse, Victoria. Towards a New Museum. New York: The Monacelli Press, 1998.
- Nobel, Philip. "I Love It But I Still Don't Like Rem: A visit to the Koolhaas-designed student center in Chicago." *Metropolis* 26 no. 6 (Jan 2007): 46,48.
- Ouroussoff, Nicolai. "Even If His Own Work Isn't Broken, a Brazilian Architect Fixes It." New York Times, December 26, 2007.
- Ouroussoff, Nicolai. "Two Architects Have a Meeting of the Minds at a Texas Museum." New York Times, May 27, 2010.
- Prudon, Theodore. "Will the Eagle Fly Again?" DO.CO.MO.MO Journal 25 (July 2001): 25.
- Risen, Clay. "Speak (louder), Memory: Plans to Add an Interpretive Center to Maya Lin's Vietnam Veterans Memorial." *Architect* (Washington, D.C.) 97 no. 9 (July 2008): 49-50.
- Somol, Robert E. "Five Easy Mieses." ANY (Architecture New York) no. 24 (1999): 20-27.
- Sorkin, Michael. "Forms Of Attachment: Additions To Modern American Monuments." *Lotus International* no. 72 (1992): 90-95.
- Sudip, Bose. "Looking Skyward, Feeling Grounded: the airport that heralded the jet age still has the power to enchant and inspire [Washington Dulles International Airport]." *Preservation* (The magazine of the National Trust for Historic Preservation) 59 no. 4 (July-August 2007): 18-21.
- Trescott, Jacqueline. "Hirshhorn Invests in an Inflationary Measure." *The Washington Post*, December 16, 2009.
- Venturi, Robert and Denise Scott Brown. "Genius Betrayed." Architecture 7 (July 1993): 43.
- Weathersby, William. "Piano addition for Meier's High Museum." *Architectural Record* 190, no. 7 (July 2002): 24.
- Weathersby, William. "Renzo Piano Building Workshop doubles the size of the High Museum in Atlanta, embracing Richard Meier's original building with a village-like campus for culture." *Architectural Record* 193 no. 11 (Nov 2005): 130-135.
- Wiseman, Carter. Louis I. Kahn: Beyond Time and Style. New York: Norton, 2007.

Other Sources:

Renfro, Charles. "Diller Scofidio + Renfro: Current Work." Lecture given at the Architectural League (New York, New York.) November 22, 2010, accessed March 14, 2011, http://archleague.org/2011/02/charles-renfro/

WHITNEY MUSEUM OF AMERICAN ART

Books:

American Visionaries: Selections from the Whitney Museum of American Art. New York: Harry N Abrams, 2001.

Byard, Paul. The Architecture of Additions: Design and Regulation. New York: W.W. Norton, 1998.

Droste, Magdalena. Marcel Breuer, Design. ln: B. Taschen, 1992.

Gatje, Robert F. Marcel Breuer: A Memoir. New York: Monacelli Press, 2000.

Hyman, Isabelle. Marcel Breuer, Architect: The Career And The Buildings. New York: H.N. Abrams, 2001.

Jenkins, David. Norman Foster: Works, Volume 2. New York: Prestel USA, 2006.

Koolhaas, Rem. Content. New York: Taschen, 2004.

Marcel Breuer: Design And Architecture. Edited by Alexander von Vegesack and Mathias Remmele. Weil am Rhein, Germany: Vitra Design Museum, 2003.

Newhouse, Victoria. Renzo Piano Museums. New York: Monacelli Press, 2007.

Newhouse, Victoria. Towards a New Museum. New York: Monacelli Press, 1998.

Olsberg, Nicholas. "Breuer's Whitney: An Anniversary Exhibition." In *Breuer's Whitney: Exhibition Catalog*, ed. Nicholas Olsberg (New York: Whitney Museum of American Art, 1996), 1-3.

Papachristou, Tician. Marcel Breuer: New Buildings and Projects. New York: Praeger, 1970.

White, Norval and Elliot Willensky. AIA Guide to New York City. New York: Three Rivers Press, 2000.

Periodicals & Newsprint (Alphabetical Order by Author):

"1970 Honor Awards." American Institute of Architects Journal 53 (1970): 79-93.

"A Whitney Designed For 21st-Century Use." New York Times, August 1, 1985.

"Additions to the Guggenheim and Whitney Museums." The International Journal of Museum Management and Curatorship 5 no. 1 (January 1986): 93.

"Art museum, New York." Architect and Building News 230 no. 16 (1966): 681-684.

"Bad Precedent at Whitney." New York Times, February 17, 2005.

"Covert Expansion at the Whitney: Whitney Museum of American Art." ANY no. 22 (1998): 27.

- "Expanding on the Whitney." New York Times, June 14, 1987.
- "Growing pains [Whitney Museum]." Metropolis 6 no. 9 (1987): 22-23.
- "Innovating Architect." New York Times, February 24, 1968.
- "Neighbors Criticize Plan to Expand Whitney." New York Times, November 14, 1985.
- "Strong Breuer design for Madison Avenue," Progressive Architecture 45 (1964): 49.
- "The Whitney Addition; Clone It." New York Times, January 29, 1989.
- "The Whitney Addition; Designs On A Landmark." New York Times, January 29, 1989.
- "The Whitney Addition; Pas De Deux." New York Times, January 29, 1989.
- "The Whitney Expansion." New York Times, February 10, 2005.
- "Upside-down museum in Manhattan," Architectural Forum 120 (1964): 90-93.
- "Whitney Museum Announces Expansion." Architecture 84 no. 11 (November 1995): 23.
- "Whitney Museum Expansion." Oculus 58 no. 3 (March 1995): 3.
- "Whitney Museum of American Art, 945 Madison Avenue, at 75th Street: Marcel Breuer with Hamilton Smith, 1966." A + U: Architecture and Urbanism extra edition (Dec 1994): 308-315.
- "Whitney Museum Plans \$37.5 Million Addition." New York Times, May 22, 1985.
- "Whitney Museum Wins Bard Prize." New York Times, April 26, 1968.
- "Whitney Unveils New Satellite at the High Line." *The Architect's Newspaper*, May 1, 2008, accessed November 12, 2009, http://archpaper.com/e-board_rev.asp?News_ID=1625
- "Would Marcel Breuer Approve Of The Whitney Addition?" New York Times, May 24, 1987.
- Adams, Eric. "Collaborating with conservators," Architecture 86 no. 9 (September 1997): 138-144.
- Boles, Daralice. "Commentary: The Whitney design debate." *Progressive Architecture* 66 no. 9 (Sept 1985): 25.
- Branch, Mark Allen. "Another Try for Graves and Whitney." *Progressive Architecture* 70 no. 2 (Feb 1989): 21,22.
- Breuer, Constance. "Would Marcel Breuer Approve of the Whitney Addition?" Op-Ed in *New York Times*, May 24, 1987.
- Cramer, Hilton. "The Whitney's new Graves." The New Criterion (September 1985): 2-10.
- Cramer, Ned. "The Whitney turns 30." Architecture 85 no. 10 (October 1996): 41.
- Curtis, Charlotte. "Drawing The Battle Lines." New York Times, July 2, 1985.
- Davis, Douglas. "Museums Need Space to Grow." Op-Ed in The New York Times, February 13, 1988.
- Denitto, Emily. "The Whitney Expands its Canvas." Crain's New York Business, March 23, 1998, 3.
- Giovannini, Joseph. "A Grave Situation for Marcel Breuer's Whitney." *Art Forum* 24 no. 3 (March 1985): 84-86.

Glueck, Grace. "Graves Named To Design Addition On The Whitney." New York Times, October 18, 1981.

Glueck, Grace. "Mogul Power at the Whitney." The New York Times, December 4, 1988.

Glueck, Grace. "Troubles at the Whitney, Both at the Top and in the Future." *The New York Times*, December 26, 1989.

Goldberger, Paul. "3d Try on an Expansion Design for the Whitney." New York Times, December 20, 1988.

Goldberger, Paul. "A Daring and Sensitive Design," New York Times, May 22, 1985.

Goldberger, Paul. "Architecture View; Adding A Little Less To The Whitney." New York Times, March 15, 1987.

Goldberger, Paul. "Architecture View; Designing A Proper Environment For Art." New York Times, July 4, 1982.

Goldberger, Paul. "Architecture View; For The Whitney, Adding Less May Result In More." New York Times, August 11, 1985.

Goldberger, Paul. "Architecture View; Modernism Reaffirms Its Power." New York Times, November 24, 1985.

Goldberger, Paul. "Architecture View; The Prospect Of Bigger Towers Cast A Shadow." New York Times, December 29, 1985.

Goldberger, Paul. "For the Whitney, Adding Less May Result in More." New York Times, August 11, 1985.

Goldberger, Paul. "Marcel Breuer, 79, Dies: Architect and Designer." New York Times, July 2, 1981.

Goldberger, Paul. "The Whitney Paradox: To Add Is To Subtract." New York Times, January 8, 1989.

Haskell, D. "Ten buildings that climax an era." Fortune 74, no. 7 (1966): 156-162.

Huxtable, Ada Louise and John Canaday. "Art: The Whitney Museum Shows What It Can Do.. In the Right Building." *New York Times*, October 2, 1966.

Huxtable, Ada Louise. "Architecture: 'Bigger—And Maybe Better." New York Times, August 26, 1979.

Huxtable, Ada Louise. "Focus on the Museum Tower." New York Times, August 24, 1980.

Huxtable, Ada Louise. "Harsh and Handsome: The New Whitney Is Superbly Suited For an Art That Thrives on Isolation." New York Times, September 8, 1966.

Huxtable, Ada Louise. "Plans Shown for New Building for Whitney Museum." New York Times, December 12, 1963.

Jones, Wesley. "Big Forking Dilemma." Harvard Design Journal no. 32 (Spring Summer 2010): 8-17.

Knox, Sanka. "Whitney Museum Reopening Today." New York Times, October 26, 1954.

Louchheim, Aline B. "Midtown Museum Plan Progressive." New York Times, June 5, 1949.

McGill, Douglas. "600 Sign Petition Against Whitney Design." New York Times, October 5, 1985.

McGill, Douglas. "Architects Debate Plan For Whitney Museum." New York Times, July 26, 1985.

McGill, Douglas. "The Whitney Unveils Smaller Expansion Plan." New York Times, March 11, 1987.

McGill, Douglas. "Whitney Addition Is Planned." New York Times, May 22, 1985.

Miller, Ross. "Commentary: Adding to Icons." Progressive Architecture 71 no. 6 (June 1990): 125.

Muschamp, Herbert. "The Once and Future Whitney." New York Times, November 17, 1996.

Nemy, Enid. "Architect Castigates Whitney Plan." New York Times, June 21, 1985.

Ouroussoff, Nicolai. "Art and Architecture, Together Again." New York Times, January 19, 2006.

Ouroussoff, Nicolai. "Uptown or Down? The Whitney's Identity Crisis." New York Times, November 2, 2006.

Ouroussoff, Nicolai. "Whitney's Downtown Sanctuary." New York Times, May 1, 2008.

Ouroussoff, Nicolai. "Whitney's New Plan: A Respectful Approach." New York Times, November 9, 2004.

Paul Goldberger, "Marcel Breuer, 79, Dies: Architect and Designer," New York Times, July 2, 1981.

Pogrebin, Robin. "A Man About Town, in Glass and Steel." New York Times, January 5, 2005.

Pogrebin, Robin. "Fierce Battle Over Plan To Expand The Whitney." New York Times, February 2, 2005.

Pogrebin, Robin. "Fierce Battle Over Plan to Expand the Whitney." The New York Times, February 2, 2005.

Pogrebin, Robin. "Green Light for Whitney Expansion." New York Times, January 13, 2006.

Pogrebin, Robin. "Landmarks Panel Questions Whitney Plan." The New York Times, March 16, 2005.

Pogrebin, Robin. "The Whitney's Case For Expansion." New York Times, April 27, 2006.

Pogrebin, Robin. "Whitney Expansion Challenged." New York Times, September 7, 2006.

Pogrebin, Robin. "Whitney Expansion Is Approved." New York Times, July 26, 2006.

Pogrebin, Robin. "Whitney Museum May Move Expansion to Downtown Site." New York Times, October 31, 2006.

Risen, Clay. "Still Delirious: Has Rem Koolhaas Abandoned the City?" *The New York Observer*, September 7, 2003.

Schwartzman, A. "Expanding an icon [Whitney Museum, New York City]." *Architecture* 87 no. 6 (1998): 108-113.

Scully, Vincent. "Buildings Without Souls." Feature in The New York Times, September 08, 1985.

Smith, Hamilton. "Architecture Disserves New York." Op-Ed in New York Times, July 20, 1985.

Spring, B.P. "Evaluation: the Whitney Suffers from Success." ALA journal 67 no. 11 (1978): 40-47.

Stevens, Mark. "Let the Sun Shine In." New York Magazine, April 6, 1998, 54.

Sudjic, Deyan. "The Whitney Museum: Self Confidence is needed to cure the Elephantiasis of the Museum World," *The Art Newspaper* no. 149 (July-August 2004): 22.

Taylor, Kate. "Suit is Filed Against City Over Plans to Expand Whitney Museum." *The New York Sun,* September 01, 2006.

Trillin, Calvin. "The Art World: Modern vs. Postmodern." New Yorker, February 17, 1986.

Vogel, Carol. "Dia Art Foundation Abandons Plans for a Museum at High Line." New York Times, October 25, 2006.

Vogel, Carol. "Once Again, The Whitney Is Planning To Expand." New York Times, May 19, 2004.

Vogel, Carol. "The Whitney Addition; Wrong Architect?" New York Times, April 2, 1989.

Vogel, Carol. "The Whitney Trims Its East Side Holdings." New York Times, October 14, 2010.

Vogel, Carol. "Whitney Advances Plans for Museum Near the High Line." New York Times, October 12, 2009.

Vogel, Carol. "Whitney Again Looks for Space," The New York Times, February 16, 2001.

Vogel, Carol. "Whitney Hires Renzo Piano To Design Its Expansion." New York Times, June 16, 2004.

Vogel, Carol. "Whitney Museum to Receive \$131 Million Gift." New York Times, March 19, 2008.

Vogel, Carol. "Whitney Selects Former Staff Member as Director." The New York Times, August 8, 2003.

Vogel, Carol. "Whitney's Expansion Plans Are Shifting South, to the Meatpacking District." New York Times, November 28, 2006.

Yerkes, Susan. "Raising the Roof at the Whitney." Skylines (October 1985): 26.

Zalewski, Daniel. "Profiles: Intelligent Design. Can Rem Koolhaas kill the skyscraper?" New Yorker, March 14, 2005: 40-58.

Interviews:

Robert F. Gatje and Nathaniel Rogers, in-person interview, New York City, March 9, 2011.

YALE ART & ARCHITECTURE

Books & Texts:

Moholy-Nagy, Sibyl. Introduction to *The Architecture of Paul Rudolph*. New York: Praeger Publishers, 1970.

Cook, John W. and Heinrich Klotz. Conversations with Architects. New York: Praeger, 1973.

Rudolph, Paul. Architecture of Paul Rudolph. New York: Praeger Publishers, 1970.

Rudolph, Paul. Writings on Architecture. New Haven: Yale University Press, 2008.

Sroat, Helene. "The Humanism of Brutalist Architecture: The Yale Art & Architecture Building and Postwar Constructions of Aesthetic Experience in American Universities and Architecture." Dissertation submitted for Ph. D., University of Chicago, 2003.

Rudolph, Paul. *Paul Rudolph: The Late Work*, edited by Roberto De Alba. New York: Princeton Architectural Press, 2003.

Periodicals & Newsprint (Alphabetical Order by Author):

"Art and Architecture building, Yale University, New Haven, Connecticut, 1958; Architect: Paul Rudolph." *A+U: Architecture and Urbanism* 80 (extra issue - July 1977): 234-239.

"Painters, Sculptors Find New Building Lacks Functionality." Yale Daily News, November 8, 1963.

"College buildings." Architectural Record 131 (Apr 1962): 125-148.

"Paul Rudolph, Yale Art and Architecture building, 1963 - Gwathmey Siegel & Associates Architects, Yale University Arts Complex, New Haven, Connecticut, USA 2005-2008." A+U: Architecture and Urbanism 474 no. 3 (Mar 2010): 34-43.

"The Work of Paul Rudolph." Building 210 (Mar 1966): 87-89.

Amelar, Sarah. "Gwathmey Siegel Associates Sparks Controversy with an Addition to Paul Rudolph's Yale Art and Architecture building." *Architectural Record* 197 no. 2 (Feb 2009): 54-61.

Lewis, Michael J. "The Problem of Adding onto an Icon." Architectural Record 197 no. 2 (Feb 2009): 60.

Barnett, Jonathan. "Interview, Paul Rudolph with Jonathan Barnett." *Architectural Record* 131 (January 1962): 12, 62, 74-76.

Barnett, Jonathan. "A School for the Arts at Yale." Architectural Record (February 1964): 111-120.

Berkeley, Ellen Perry. "Architecture on the Campus: Yale: A Building as a Teacher." *Architectural Forum* (July/August 1967): 47-53.

Bernstein, Fred. "Charles Gwathmey, Architect Loyal to Aesthetics of High Modernism, Dies at 71." New York Times, August 5, 2009.

Bernstein, Fred. "The End of 1960's Architecture." New York Times, October 31, 2004.

Bourne, Russell. "Yale's Paul Rudolph." Architectural Forum 108 (Apr 1958): 128-129, 192.

Bruegmann, Robert. Introduction in *Paul Rudolph: The Late Work*, edited by Roberto De Alba. New York: Princeton Architectural Press, 2003.

Crosbie, Michael J. "Paul Rudolph on Yale's A & A: His first interview on his most famous work." Architecture: the AIA Journal 77 no. 11 (Nov 1988): 100-105.

Editorial. "News' View: In Stern We Trust." Yale Daily News, November 13, 2008.

Fisher, Thomas. "Nietzsche in New Haven: How One Philosophizes with a Hammer." *Perspecta* no. 29 (1998): 50-59.

Giovannini, Joseph. "An Architect's Last Word." New York Times, July 8, 2004.

Giovannini, Joseph. "Old School, New School: Yale University." *Architect (Washington, D.C.)* 97 no. 15 (Nov 2008): 15.

Goldberger, Paul. "Architecture View; Yale Students Lend a Hand to an Abused Building." New York Times, November 20, 1988.

Goldberger, Paul. "Postscript: Charles Gwathmey." New Yorker, August 5, 2009.

Gwathmey, Charles and Robert A. M. Stern. "Interview." Constructs: Yale Architecture (Fall 2008): 2.

Horn, Jonathan. "Yale Enlists Famed Architect for New Art History Building." Yale Daily News, January 16, 2002.

Huff, William S. "Kahn and Yale." *JAE* (Journal of Architectural Education) 35 no. 3 (Spring 1982): 22-31.

Iovine, Julie. "A Treasure at Yale, Freed of Wallboard." New York Times, November 16, 2000.

Jencks, Charles. "Esprit Nouveau est Mort a New Haven, or Meaningless Architecture." *Connection* (January 1964): 16.

Jin, Sin. "Studio Space – Renovating Controversy." Yale Daily News, October 10, 2008.

Moholy-Nagy, Sibyl. "The Measure." Architectural Forum (February 1964): 79.

McQuade, Walter. "The Exploded Landscape." Perspecta 7 (1961): 83.

Millard, Bill. "Magnificent Brute: Art and Architecture Building, Yale University." *RIBA Journal* 115 no. 11 (Nov 2008): 38-42, 44.

Moss, Robert L.W. "Art and Architecture Building to Open." Yale Daily News, November 8, 1963.

Muschamp, Herbert. "Paul Rudolph Is Dead at 78; Modernist Architect of the 60's." New York Times, August 9, 1997.

Needham, Paul. "A&A Building Renovation to Restore Historic Elements." *Yale Daily News*, February 6, 2008.

Needham, Paul. "Architecture Review: Two Buildings, One with Ideas." Yale Daily News, November 7, 2008.

Nobel, Philip. "Ashes to Ashes: Paul Rudolph." Metropolis 17 no.7 (Apr. 1998): 36.

Nobel, Philip. Introduction to *The Yale Art + Architecture Building: Photographs by Ezra Stoller* (Building Blocks Series). New York: Princeton Architectural Press, 1999.

Osowski, Kevin. "The A&A Building: Love It, Leave It or Live in It." Yale Daily News, April 15, 2005.

Ouroussoff, Nicolai. "Architecture Review; Restoring Kahn's Gallery, and Reclaiming a Corner of Architectural History, at Yale." New York Times, December 11, 2006.

Ouroussoff, Nicolai. "Yale Revelation: Renewal for a Building and Its Original Designer." New York Times, August 28, 2008.

Pamuk, Zeynep. "Back to Former Glory, A&A Named for Rudolph." Yale Daily News, November 7, 2008.

Pamuk, Zeynep. "Gwathmey ARC '62 Remembered at Memorial." Yale Daily News, September 14, 2009.

Pamuk, Zeynep. "On the Ground: Paul Rudolph Draws a Crowd." Yale Daily News, November 10, 2008.

Pamuk, Zeynep. "Q&A: Stern on Gwathmey's Legacy." Yale Daily News, August 6, 2009.

Pamuk, Zeynep. "Rudolph Rededicated." Yale Daily News, November 10, 2008.

Pevsner, Nikolaus. "Address Given at the Opening of the Yale School of Art and Architecture, 1963." Reprinted in *Studies in Art, Architecture, and Design, vol. II*, 260-265. New York: Walker, 1968.

Pogrebin, Robin. "Last Exam: Renovate A Master's Yale Shrine." New York Times, July 1, 2006.

Reese, Ilse M. and James T. Burns, Jr. "The Opposites: Expressionism and Formalism at Yale." *Progressive Architecture* (February 1964): 129.

Rohan, Timothy. "Rendering the Surface: Paul Rudolph's Art and Architecture Building at Yale." *Grey Room* no. 1 (Fall 2000): 84-107

Rohan, Timothy. "Canon and Anti-Canon." Harvard Design Magazine no. 14 (Summer 2001): 24-31.

Rudolph, Paul. "Enigmas of Architecture." A+U: Architecture and Urbanism (June 1977): 317-320.

Rudolph, Paul. "Changing Philosophy of Architecture." Architectural Forum 101 (July 1954): 120-121.

Rudolph, Paul. "Architecture: The Unending Search." Yale Alumni Magazine 21 no.8 (May 1958): 39.

Rudolph, Paul. "The Contribution of Le Corbusier." Architectural Forum (April 1961): 90.

Rudolph, Paul. "From Conception to Sketch to Rendering to Building." In *Paul Rudolph: Drawings*, edited by Yukio Futagawa. Tokyo: ADA Edita, 1972.

Fowler, John. "Yale Art and Architecture Building." Architectural Design 34 (April 1964): 160-161.

Rybczynski, Witold. "Bringing Brutal Back." *Slate,* December 3, 2008, accessed March 20, 2011, http://www.slate.com/id/2205430/

Scully, Vincent. "Unity Temple and the A & A." Perspecta no. 22 (1986): 108-111.

Scully, Vincent. "Art and Architecture Building, Yale University." *Architectural Review* (May 1964): 325-332.

Sharif, Amir. "A House Divided?" Yale Daily News, March 3, 2010.

Taylor, Kate. "Pennies to Build, Millions to Restore." New York Sun, November 26, 2007.

Whitten, Theodore. "Brutalist butterfly: Revealing the Hidden Beauty of Yale's Legendary Art + Architecture Building." *Metropolis* 20 no. 4 (Dec 2000): 44.

Wohlwill, Joachim F. "The Physical Environment: A Problem for a Psychology of Stimulation." *Journal of Social Issues* 22 no. 4 (1966): 29-38.

JUILLIARD SCHOOL AND ALICE TULLY HALL

Books and Texts:

Clausen, Meredith L. Pietro Belluschi: Modern American Architect. Cambridge, MA: MIT Press, 1994.

Clausen, Meredith. *The Pan Am Building and the Shattering of the Modernist Dream*. Cambridge, MA: Massachusetts of Technology (MIT) Press, 2005.

Diller, Elizabeth, Ricardo Scofidio and Charles Renfro. *Diller + Scofidio (+ Renfro): The Ciliary Function, Works and Projects 1979-2007*, edited by Guido Incerti, Daria Ricchi, and Deane Simpson. Milan: Skira Editore, 2007.

Huxtable, Ada Louise. On Architecture: Collected Reflections on a Century of Change. New York: Walker & Co, 2008.

Newhouse, Victoria. Typed manuscript, "Chapter 2: Lincoln Center." In *Site and Sound: New Opera Houses and Concert Halls*, unpublished. Scheduled for 2011 publication, New York: Monacelli Press. With deep appreciation for permission to quote from manuscript.

Newhouse, Victoria. Wallace K. Harrison, Architect. New York: Rizzoli, 1989.

Rich, Alan. The Lincoln Center Story. New York: American Heritage, 1984.

Stamas, Stephen. Lincoln Center: A Promise Realized, 1979-2006. Hoboken, New Jersey: Wiley, 2007.

White, Norval and Elliot Willensky with Fran Leadon. *AIA Guide to New York City*, 5th ed. New York: Oxford University Press, 2010.

Young, Edgar B. Lincoln Center: The Building of an Institution. New York: New York University Press, 1980.

Periodicals & Newsprint (Alphabetical Order by Author):

"Alice Tully Hall and Juilliard School in New York." Detail 50 no. 4 (2010): 303-310, 411.

"Juilliard School: A Conservatory for the Performing Arts Completes the Construction of Lincoln Center." *Architectural Record* 147 no. 1 (Jan 1970): 121-130.

"Theater Inflation: Are Buildings Killing the Theater?" Progressive Architecture 51 (Dec 1970): 48-64.

"Theater Technology." Progressive Architecture 51 (Dec 1970): 65-75.

Abaffy, Luke. "New-Look Lincoln." Engineering News-Record 266 no. 4 (Feb 7, 2011): 74-.

Columbia Preservation Studio. "Lincoln Square: Preserving the Modern Architecture of Slum Clearance, Urban Renewal, and Their Architectural Aftermath," Columbia University Program in Historic Preservation, academic year 2007, accessed 10 April 2011. http://www.gsapp.org/Archive/HP/Lincoln%20Square.pdf

Diller, Elizabeth, and Ricardo Scofidio, interviewed by Jorge Otero-Pailos. "Morphing Lincoln Center." Future Anterior (New York) 6 no. 1 (Summer 2009): 85-97.

Goldberger, Paul. "Center Stage: The New Alice Tully Hall Bodes Well for Other Lincoln Center Renovations." *New Yorker*, February 2, 2009.

Goldberger, Paul. "West Side Fixer-Upper; New Ideas for Lincoln Center that Don't Involve Dynamite." *New Yorker*, July 7, 2003, 36.

Harwood, John. "More Lincoln Center than Lincoln Center: Max Abramovitz versus the Fortress." DO.CO.MO.MO Journal 31 (September 2004): 96-100.

Huxtable, Ada Louise. "Dissimilar Buildings, Similar Awards." New York Times, 24 May 1970.

Huxtable, Ada Louise. "Juilliard's New Building: Esthetic Reality." New York Times, October 8, 1969.

Kennicott, Philip. "Stepping Up." Washington Post, December 30, 2010.

Lentz, Linda. "The Juilliard School, New York City." Architectural Record 199 no. 2 (Feb 2011): 96-100.

Muschamp, Herbert. "A New Face for Lincoln Center; You Say You Want an Evolution? O.K., Then Tweak." New York Times, April 13, 2004.

Ouroussoff, Nicolai. "Boxy to Bold: A Concert Hall Bursts Out." New York Times, February 20, 2009.

Ouroussoff, Nicolai. "The Greening of Lincoln Center." New York Times, May 21, 2010.

Pogrebin, Robin. "Architecture: Alice Tully, Could That Really Be You?" New York Times, November 13, 2005.

Pogrebin, Robin. "At Lincoln Center, Information Joins Architecture." New York Times, September 2, 2010.

Pogrebin, Robin. "Preservationists Criticize Plans to Change Lincoln Center." New York Times, January 22, 2005.

Pollock, Naomi R. "Davis Brody: New York's Lincoln Center for the Performing Arts expands into the Ultimate Mixed-Use Building." *Interior Design* 64 no. 5 (May 1993): 212-241.

Randall, Kathleen. "Lincoln Center: Modern Meets Monumental." DO_CO,MO.MO_US, New York/Tri-State Newsletter, (Summer 2004): 1,9.

Scherer, Barrymore Laurence. "Alice Tully's Pleasing Makeover." Wall Street Journal, April 14, 2009.

Schmertz, Mildred. "The Juilliard School." Architectural Record (January 1970): 121-130.

Stoelker, Tom. "Lincoln Center's Catwalk for Culture." *The Architect's Newspaper*, February 15, 2011, accessed April 3, 2011, http://www.archpaper.com/e-board_rev.asp?News_ID=5162

Tommasini, Anthony. "A Citadel of Culture Shows a Friendlier Face." New York Times, January 1, 2011

Tommasini, Anthony. "Lincoln Center: Mixed Reviews." New York Times, May 10, 2009.

Other Sources:

Lincoln Center Working Group, DO.CO.MO.MO US New York/Tri-State Chapter. "Statement prepared for Manhattan Community Board 7 public hearing regarding Phase I, Lincoln Center Redevelopment Proposal." January 20, 2005, accessed April 10, 2011, http://www.landmarkwest.org/publications/Fall%2007/DOCOMOMO_-_1.20.05_CB7_LC_Statement.pdf

Simon, Arlene and Kate Wood (Landmarks West!) Letter to Reynold Levy, President, LCPA, dated

April 28, 2004, accessed April 10, 2011, http://www.landmarkwest.org/advocacy/ad_05/thank_you.pdf

Simon, Arlene and Kate Wood (Landmarks West!) Letter to Reynold Levy, President, LCPA, dated January 17, 2005, accessed April 10, 2011, http://www.landmarkwest.org/advocacy/ad_05/Response%20to%20 Jan%2011%20Briefing.pdf

"Interview with Elizabeth Diller, Ricardo Scofidio, and Charles Renfro." *Charlie Rose*, broadcast March 31, 2009, accessed April 13, 2011, http://www.charlierose.com/view/interview/10185

Diller, Elizabeth. "Liz Diller plays with Architecture." TED Talk, December 2007, accessed March 15, 2011, http://www.ted.com/index.php/talks/liz_diller_plays_with_architecture.html

Renfro, Charles. "Diller Scofidio + Renfro: Current Work." Lecture given at the Architectural League (New York, New York.) November 22, 2010, accessed March 14, 2011, http://archleague.org/2011/02/charles-renfro/

Interviews:

Josh Uhl (former employee at Diller Scofidio + Renfro and Project Architect for Juilliard Addition) and Nathaniel Rogers, in-person interview, New York City, March 20, 2011.

FIGURES: CREDITS & SOURCES

Figure 1:	 Marcel Breuer's 1968 Addition Proposal for Grand Central Terminal Credit: Marcel Breuer Papers, Archives of American Art, Smithsonian Institution. Source: Paul Byard, The Architecture of Additions (New York: Norton, 1998), 8.
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Source: "An Icon," Architecture 91 no. 2 (Feb 2002), 60.

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Credit: (photographer unknown)

Source: http://critiquethis.us

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Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)

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Credit: Louis I. Kahn Collection, University of Pennsylvania

Source: Paul Byard, The Architecture of Additions (New York: Norton, 1998), 116.

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• Credit: Anshen + Allen, 1995.

 Source: "Forms of Attachment: Additions to Modern American Monuments," Lotus International no. 72 (1992), 95.

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Credit: Anshen + Allen, 1995.

 Source: "Forms of Attachment: Additions to Modern American Monuments," Lotus International no. 72 (1992), 95.

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• Credit: Scott Gilchrist, 1996.

Source: ARTstor Digital Library, Archivision Base Collection.

Figure 22: Drawings – Addition to the Kimbell Museum of Art, Fort Worth, Texas (1989)

• Credit: Mitchell/Giurgola, 1989.

 Source: "Forms of Attachment: Additions to Modern American Monuments," Lotus International no. 72 (1992), 95.

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Credit: Don Tilley, 1989.

Source: "Commentary: Adding to Icons," Progressive Architecture 71 no. 6 (June 1990)

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• Credit: Ezra Stoller/Esto, 1964.

Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)

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 Source: "SOM's Addition to Dulles International Airport respects Eero Saarinen's 'Modern Masterpiece," Architectural Record 185 no. 3 (March 1997), 63.

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• Credit: Ezra Stoller/Esto, 1964.

Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)

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 Source: "SOM's Addition to Dulles International Airport respects Eero Saarinen's 'Modern Masterpiece," Architectural Record 185 no. 3 (March 1997), 63.

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■ Credit: Ezra Stoller/Esto, 1962.

Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)

Figure 29: TWA Flight Center, Idlewild Airport, New York (1962) – aerial.

 Source: "Eero Saarinen, TWA Terminal (1962) – Gensler, Terminal 5 (2008)," A+U Architecture and Urbanism 474 no. 3 (March 2010), 11.

Figure 30: TWA Flight Center (1962) – interior view

Credit: Ezra Stoller/Esto, 1962.

Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)

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Credit: (B&W assumed to be Ezra Stoller/Esto, 1962; color photograph uknown)

Source: "Form Swallows Function," Progressive Architecture 73 no. 5 (May 1992), 106.

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- Credit: (B&W assumed to be Ezra Stoller/Esto, 1962; color photograph uknown)
- Source: "Form Swallows Function," *Progressive Architecture* 73 no. 5 (May 1992), 106.
- Figure 33: Plan Terminal 5 with TWA Flight Center (2008)
 - Source: "Eero Saarinen, TWA Terminal (1962) Gensler, Terminal 5 (2008)," A+U Architecture and Urbanism 474 no. 3 (March 2010), 11.
- Figure 34: Terminal 5 with TWA Flight Center (2008) (1)
 - Source: "Eero Saarinen, TWA Terminal (1962) Gensler, Terminal 5 (2008)," A+U Architecture and Urbanism 474 no. 3 (March 2010), 12.
- Figure 35: Terminal 5 with TWA Flight Center (2008) (2)
 - Source: "Eero Saarinen, TWA Terminal (1962) Gensler, Terminal 5 (2008)," A+U Architecture and Urbanism 474 no. 3 (March 2010), 15.
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 - Source: "Evaluation: Lantern-like Library held aloft on Concrete Fingers," AIA Journal 66 no. 9 (August 1977), 31.
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 - Source: http://www.panoramio.com/photo/3628086
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 - Credit: William Pereira, 1970.
 - Source: "Evaluation: Lantern-like Library held aloft on Concrete Fingers," AIA Journal 66 no. 9 (August 1977), 31.
- Figure 39: Axonometric UCSD (Geisel) Central Library and Addition (1992)
 - Credit: Gunnar Birkerts, 1992.
 - Source: Gunnar Birkerts, Process and Expression in Architectural Form, Vol. 1 in the Bruce Alonzo Goff Series in Creative Architecture (Norman, Oklahoma: University of Oklahoma Press, 1994), 82.
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 - Credit: unknown, courtesy of Illinois Institute of Technology
 - Source: http://blog.archpaper.com/wordpress/archives/14912
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 - Source:

http://picasaweb.google.com/djKRE8/CoastToCoastPARTONE#5067644529828102850

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 - Source: http://img392.imageshack.us/i/31099586rz9.png/
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 - Source: http://www.flickr.com/photos/davidwilliamreed/854720912/
- Figure 46: Plan High Museum of Art Expansion (2002)
 - Credit: Renzo Piano Building Workshop, 2002.
 - Source: "RPBW doubles the size of the High Museum in Atlanta," Architectural Record 193, no. 11 (November 2005), 132.
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Source: http://archidose.blogspot.com/2008/11/architecture-in-shadows.html

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Source: http://archidose.blogspot.com/2008/11/architecture-in-shadows.html,

1. http://www.nytimes.com/2010/05/27/arts/design/27kimbell.html?pagewanted=2

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Source:

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Source:

 $http://www.worldarchitecturenews.com/index.php?fuseaction=wanappln.projectview\&uplo\ ad_id=13080$

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Source: ARTstor Digital Library, Ezra Stoller Archive (Esto)
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Source:

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Credit: DS+R

Credit: DS+R

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■ Source: A+U Architecture and Urbanism 474 no. 3 (March 2010)

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■ Source: A+U Architecture and Urbanism 474 no. 3 (March 2010)

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 Source: "Lincoln Center's Catwalk for Culture," The Architect's Newspaper, 2 Feb 2011, http://archpaper.com/news/articles.asp?id=5162

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Credit: Scott Norsworthy

Source: http://www.flickr.com/photos/scottnorsworthy/collections/

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Source: A+U Architecture and Urbanism 474 no. 3 (March 2010)

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Credit: Nathaniel Rogers

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APPENDIX A: INTERVIEW WITH ROBERT F. GATJE

This is the transcript of an interview that took place in New York City on March 9, 2011. My portion of the dialogue is written in italics with a different indent. While I did not conduct similar interviews for the other two case studies, I was able to speak to Diller Scofidio + Renfro's project architect for the Juilliard building. I have chosen to include my interview with Robert Gatje in this thesis as I believe it contains a valuable perspective from an elder generation. Gatje had a twenty-three year working relationship with Marcel Breuer, and they were partners for eleven years. From 1987 to 1995, Gatje worked with Richard Meier, becoming his partner in 1990. He is now retired.

NFRR: In your book on Breuer, you wrote that in the quest for identity, the Whitney was meant to be "almost outrageously recognizable." To what degree did contextuality play a role in the design and at what scale does that operate? Obviously the brownstones were a controversial issue later on. Context for the Whitney seems to be important at a larger scale.

ROBERT GATJE: I think it's fair to say that Breuer did not think very much about context, at least in the way the press and the postmodern people were using the word to serve their own purposes. There were situations in which he made a very careful attempt to match himself to the context. There were situations in which he made a very careful attempt to match himself. For example, the McKim Mead and White Hall of Fame Campus for NYU up in the Bronx was built of yellow Roman brick and limestone, and when we came to design, we used as close as we could find to the yellow brick. Unfortunately that fired yellow brick they had was no longer made by anybody, but we did use yellow brick and concrete so he made this gesture towards context there. And similarly, at Hunter College in the Bronx, we used shot-cut variegated limestone because all the other buildings were built of that material. I must say we hated it because it's a very ugly sort of last ditch effort to solidify some buildings. So yes, he made gestures towards these things but he didn't feel strongly about it.

In the case of the Whitney... frankly, if I remember, Breuer had his first meetings with the people at the museum by himself - nobody else was with him - and it was toward the end of the summer. He took the program with him to his house over a long weekend and somebody in the drafting room remembered that he came back to the office with an 8.5 x 11 sheet of graph paper which he loved to draw on. And unfortunately he used a ballpoint pen, why, I don't know. But everything that was to be found essentially on the final building, you could read in the drawing on that piece of paper. He had thought it all out. It wasn't drawn to scale but it was dimensioned. I think there was one change and that had to do with dropping one of the courses of stone because to bridge across part of the cantilever they needed a certain dimension for the steel. But it was all there. Now, what did he do? He said, 'It's a corner block,' and he just carved it out by these two concrete walls, and essentially said, Well, this is my territory. Whatever happens on this side or that side is somebody else. I've made it very clear that this is mine.' It is a clear gesture that 'I don't want to deal with this.' On the other hand, the height, and the use of a wealthy material was his gesture toward New York. He never had a budget, so far as I can remember, to cover anything in flesh finished granite before. They said 'We'll pay for it,' so he was very pleased to see something he could use as a very precious material... I think he was saying 'This is a New York City street corner,' but maybe he could have said that on any street corner.

One of the best things anyone has said about the Whitney is, and I can't remember the critic — he speaks of the building envelope as a taut piece of glass or something, and says 'Think of the French mime, Marcel Marceau, standing inside and pushing his hands against the limit — he's back here, pushing the limit.' I think it's a beautiful way of describing the tension that comes about from going as far as he could on one level, and then backing away, welcoming people in at the moat.

Now Ham [Hamilton Smith] worked on the job, and that started in the fall. I left the office to go to Paris and I was gone two and a half years. I came back a week and a half before [the building] opened. So anything that happened in the office while I was gone, Lord knows. There is a rumor which Ham supports that Breuer built in a knock-out panel [in each of the landings?] Yes, something like that — I've never tried to search it out. Of course there is now a connection to the offices next door.

So the issue of context really seems misapplied by the postmodernist camp. In some ways, the Whitney is almost quintessentially a New Yorker, saying, 'This is my lot.' And so the wing walls simply define the space. Ada Louise Huxtable wrote that the building has an "extraordinary urbanity." These seemingly simple geometric forms can do so much, like the trapezoidal windows that bring your view to the street corner.

Yes. And there's another reason why they're trapezoidal windows. It turns out that Breuer absolutely loved the trapezoid.

Did you ever see the Foster scheme from the 1970's?

No, I've never seen this proposal before. But a museum needs walls. This is not a terribly useful museum with all this glass – it would make a good office building. In a way, it's not really an addition.

Right, it's more of a neighbor. OK, So let's move on to Graves. As a design, it's been recognized as one with a lot of failures. But it also seems like a unique moment for the way in which the design community rallied around the building and formed a sort of preservation movement.

I know specifically what happened, at least with the first scheme. The first publication had come out in the Times, and everybody was on the phone shouting and screaming. I think it was Carl Stein who organized a meeting in his apartment in the village, and Arthur Rosenblatt was the president of the chapter, and Arthur led the discussion. He said, 'We've got to do something about this, we've got to organize things.' And he said, 'Abe Geller is going to get the Gold Medal of the Chapter, and Abe has told me he's so upset at what they're doing to the Whitney that he wants to use his speech – making time to speak against the Graves structure.' And everybody said, 'Oh, great!' Because Abe Geller was a beloved figure in the New York practice at that time, and to see him willing to step out of his role and take a strong position was uncharacteristic – he was very soft-spoken, gentle sort of guy. So, Arthur talked to Abe, and said how everybody was enthusiastic about it. And we had stickies made up, saying Save the Whitney, and I think we may have also had the buttons also made, and I called a friend at the New York Times, and he said 'I'll get a reporter there.'

Now George Lewis was the executive director of the Chapter, and an old friend of all of ours. About two days, three days before the meeting, at which Abe would have received his medal, George heard about the rumor. And he called Abe on the phone and said Abe, 'This is wrong, what you're doing. The Chapter is non-political – we've never taken a position this way about a building designed by an architect, and this is your moment, you should be there and be honored and be listened to but please, please, please don't do it, Abe.' George was the sort of – everybody's friend, and Abe said, 'Gee whiz, George, if you really feel that way, maybe it is wrong.' So Abe called Arthur Rosenblatt and told him what George had said. And Arthur was sufficiently persuasive. He said 'Look, we all love George Lewis, but in this case he's wrong, and what you want to do is right! Now you can follow his advice if you like, but we're behind you if you're up for it.'

So we all arrived at this meeting, and we were handing out the Save the Whitney stickies and buttons. I forget where the meeting was. At any rate, Abe said later 'It was so awesome' because he stood up in front of his audience of friends and everybody had a sticky, and he realized that what he wanted to say was completely receptive to his audience. He spoke a very eloquent case, and Rita Rife (*Times*) wrote a very brilliant big article in the *Times* the next day. And George Lewis didn't know what had happened. And I'd never spoken to George – I was a very good friend of his because I'd been chapter president a few years before. I did hear that what he said was '*The New York Times* never covers our meetings – what the hell happened there?' He didn't realize that this was all organized. So the sense that there was opposition suddenly hit the Whitney. They really hadn't thought that anyone would care. Flora Whitney Biddle later said – I think she told Ham, 'Of course the obvious thing Ham was to turn to you when we needed an extension, but we wanted to do something that was different, just as choosing Breuer at the time we chose him was different.' And Michael Graves was certainly different.

Now what he particularly wanted to do was so outrageous. The other thing you have to understand is that the board of trustees of the Whitney, at that time and I think still to this day, are largely a bunch of nouveau-riche, who are members of the board in hopes that someday they'll be thought of the way the members of the Met are. So when they suddenly found at cocktail parties that people were saying, 'You're a member of the board of the Whitney? Why are you doing this?' It became a really gossipy thing, and the board got very scared. They said, 'Look, we have to raise a lot of money if we do this, and if everyone's against it... 'they got very nervous! And so they went back to Graves, and said 'You've heard all this, let's try another one.' And the second one was just about as bad.

Meanwhile, Breuer's widow, Connie, had her own thing. She called I.M. Pei, and Ed [Edward Larrabee] Barnes, and a number of her close personal friends who had all been dear friends of Breuer's. They had a couple of meetings at her apartment. And although they never made anything dramatically publishable in the paper that I'm aware of, they certainly must have gotten the word out.

There was a letter, I believe.

The serious architects at this level were very much opposed to the idea. There was one presentation that we all attended – the famous Frenchman with the red suspenders stood up and spoke. He was a member of our staff, although I forget his name. He spoke very eloquently, and he was the one that the *New York Times* picked up.

Right. Wasn't he misidentified as a student?

He was over here on a visa working in the office for a year or two. He became something of a character people kept referring to.

When the museum retreated and came back with the second proposal, they had garnered a letter of support for the addition from Eisenman, Ric Franzen, Vince Scully, Kevin Roche, and others. Do you think that that letter was political in a way? Did the museum go out and wrestle those signatures?

Well first of all, Vince Scully, for reasons that I've never understood, has always been opposed to Breuer. Breuer brushed it off by saying, 'We had words once.' And I have no idea, but Vince has always written things against Breuer's work. Particularly, he almost tried to knife Breuer in the back at Yale to prevent the biochemistry building there. So he's no surprise. Peter Eisenman is no surprise because that was his working with Graves and the postmodern movement. Ric Franzen was the one that shocked us all, because Ric had been a student of Breuer's, a great friend of Breuer's, but you will remember that the Whitney had a branch [the Phillip Morris branch] in the ground floor of his office building opposite Grand Central. So somebody at the Whitney, I think, got to him and said 'Change the wording if you like, but we would sure like to have someone like you join this thing.' But he was always considered a turncoat at that time and people were pretty mad at him.

I suppose Eisenman and Gwathmey comprised the "Whites" with Graves...

Yes. But Richard Meier was not part of that group - Richard had worked in Breuer's office.

So to what degree do you think the board was at fault? After all, they had hired Graves, picked the program, etc.

Tom Armstrong was the director at the time, and I think he had very little to do with it. He's always seemed to me a somewhat weak figure in most other controversies that have arisen around the Whitney, and I genuinely think it probably was Flora [Biddle] and the people who listened to her. That was particularly hurtful to Ham [Hamilton Smith], because while they were doing the first building they had become socially very close, and I know Ham was proud of the fact that he went to those types of cocktail parties.

Well they'd become acquaintances and friends.

Exactly. And it completely surprised us. Another thing pops into my head. When Breuer had died, and we had moved the office down to Madison Square, we hosted a series of luncheons and invited our architect friends to come and have sandwiches with us and just talk. We invited Philip [Johnson] and his partner at that time – I can't remember who – and they came. We didn't ask Philip about the Whitney, but he volunteered anyway to say, 'Well of course Ham should have designed the addition – it was outrageous that they went elsewhere.' And at the time we knew he was lying because we'd been told by other people that he had been advising Flora [Biddle] as to who to choose. The man was just completely unreliable.

He had that quote about architects always ruining other people's buildings – that it was a matter of course.

He'd say anything if -

If it would keep him on the leading edge?

Absolutely.

And what did everyone think of the Graves third proposal?

Well they all had essentially the same interior, I think, even if it got smaller. A number of architects who joined with us said, "I don't particularly like the building, but that great stairway has to be preserved." The first Graves scheme would have required changing or blocking or ripping out the stair.

So would you agree that Breuer would have preferred demolition, as Hamilton Smith and Connie Breuer both wrote the Times?

Quite possibly. Years later, when Ikea bought a building that I had a lot to do with in New Haven, the Armstrong Rubber Company building [later Pirelli] – we tried to save it. We said, 'Look, build off to the side there, but you don't need to tear it down, but people really didn't need – the building was so specifically designed with an office building and R&D, with a vertical space between. Breuer used to sell the space by saying 'You can use it for further expansion – but it wasn't ever meant for that! He wanted space to articulate and separate the two parts. When they [Ikea] torn down the back, and left the front, the front looked stupid without the

long mass behind it. I said to a local preservation advocate, 'Look, if they're going to take down the back, then just take down the entire building.'

So obviously the Graves episode was unsuccessful. What did you think of Richard Gluckman's renovation and connection to the E 74th townhouses?

I think he did a very nice job. I've never heard anyone amongst the Breuer clan speak against what he did.

So he navigated that line —respectful gestures without mimicking the original?

Well yes, he put in his own stairs. The other issue has always been the Friends of the Upper East Side. The woman who headed it was probably, politically, the most powerful figure to prevent any addition to the Whitney, and it was always because she wanted to save the goddamn brownstones. We didn't care a fig about the brownstones! But if she was on our side? Perfectly fine. I don't think her son is the head [of it] now that his mother's passed away, but he's still on the board. The echo of her strength in preserving the brownstones is still to be heard.

Well, I suppose that came back around with all the trouble over the Piano proposal.

Yes. When the first Graves project came out, the Whitney was not protected in any way I don't think. It has never been protected as a building but was since protected by the district as a contributing building. And now I understand that it has be always kept in the hands of the museum – that's the way Lauder gave his money. My guess is that the Met will probably find a use for it – maybe for some special collection that was given once and the building would be a special space for it.

We can embrace controversy and talk about Koolhaas. What did you think about the massing of the scheme?

I never dreamed it would have that shape. When it was described as—well, you start with the empty space behind the brownstones and the Whitney and you go up high enough to be over their heads without touching and then spreading out. Well I could imagine some sort of a form that could have worked, but then when you saw the shape of it.

It seems emblematic of Koolhaas's work. Maybe a sort of deliberate cleverness?

Right... almost pushing it in your eye.

Well I know he had an entire rebranding effort and new curatorial vision, with reappropriation of various spaces for different parts of the permanent collection.

He's a very clever man. He's got bright, curious ideas. We dealt with him at Richard Meier's office on the Hague City Hall, and he was willing to do almost anything.

What do you think about the various irreverent contextual gestures, like the expressionist cantilever or menacing windows?

I can see intellectually, or public-relations-wise or whatever, why he might suggest things like that, but it's not a very good urban idea at that street corner.

Do you think the major failure is that it's too big, or that it overhangs and encroaches on the Breuer building?

Yes, it just looks like it's, again, an aggressive attack on an existing building.

Well let's move on to Piano. I know Ham Smith wrote a letter of support in the Times. Was it the general feeling that this was the best approach?

Yes. And the only argument was whether you had to take down one of the protected brownstones for the approach.

What do you think about Piano's newest proposal, and the whole notion of the Whitney moving down to the High Line?

It's not a bad idea. I think the Whitney has always had so much trouble raising money. To build a brand new building! I guess it depends what they get for the old one. Will Lauder allow them to sell it or just rent it? If you go way way back, I remember as a student going down to Greenwich village and seeing things in the old brownstone. Of course, after that, there was the link with MoMA, and the talk about merging with the Met. When we were getting involved with project, we did a lot of research at the time and I remember being astounded at the complexity of the story. And then, of course, the gentlemen's rules then were that you had MoMA doing European and Modern, the Met was hands-off Modern, and the Whitney was doing American Modern. When the Met hired a curator to come out and direct a department of Modern art, everybody was sort of, 'Whoa! The deal's off!'

Do you agree with the idea that for the Guggenheim and the Whitney, the buildings are the most important pieces in collections?

When we were organizing a show of Breuer's work in New York, we went to see the thendirector, and it was the guy Maxwell Anderson. He seemed to be sympathetic, and he said Yes, of course, if you're going to show Breuer work it should be in the Whitney. But then, in a matter of months, he hired a guy from Yale to be his architecture curator who didn't like Breuer's work at all and said No, no, no we can't do that. They just dropped us. We were very surprised – we thought we had a deal.

The show that got put together by Vitra – we showed it last in this country down in Atlanta – nobody in New York would house it. But it was not a show that Breuer would have been very pleased with. Because of the Vitra sponsorship, the curator gave half the space to architecture and half to furniture. The controversy over the Jessica chair and the question of credit to March Dom was always very painful to Marcel.

What was the office like at Marcel Breuer and Associates?

Well it began with about seven or eight people in a brownstone 113 E 37th Street. We later moved to 57th and 3rd, then moved again to 635 Madison. The firm never got very big – the

biggest was 50-55 people. We changed the name to Gatje Papachristou Smith after Breuer's retirement. The Paris branch I opened was kept going the longest. Back then, half or more of projects that came into the office were because another architect had recommended Breuer to the client.

What was Breuer like personally?

He was a remarkable person to deal with – he was very much like a father: very kind most of the time, and when he had to be tough he was tough.

Did he ever talk about the Whitney?

He told me it was meant to be 'consciously shocking.' Those were his words. I remember being in a cab with him going up Madison Avenue one time and as we went by the museum, the cabbie looked up and said, "Look at that goddamn thing," or something like that. Breuer just smiled and a few blocks further he said quietly, "I love it, I love it." The design approach was absolutely in response to what had happened next to MoMA. The Whitney was forgotten there... same brick, or similar brick, similar structural steel expression and so forth, and everybody thought it was a branch of MoMA, through the back garden. So the Whitney wanted to put themselves into people's eyes.

I always thought Ham should be given a lot of credit for the great stair, and I told him that, but he said 'No Bob, that's all Breuer – he sat down next to me at the table and he sketched it all out.' Breuer always ran the office that way – he hated the idea that architecture could be done by a committee, but when it came time to give credit on a particular building it was always Marcel Breuer and one of his partners. Breuer always said about this building, "It is the work of Marcel Breuer and Ham Smith."

APPENDIX B: PARTIAL SURVEY LIST OF ADDITIONS TO POSTWAR ICONS

This partial list of combined architectural works was drawn up through searches of bibliographic indexes and the back issues of professional journals, as well as consultations with various professors. This list is meant to underscore the breadth of the particular phenomenon I examine in this thesis (addition projects where the "original" portion is an iconic or significant building of the postwar era) but it makes no claim of comprehensiveness or completeness. This list is organized chronologically by year of the original building's completion, then alphabetically by project. I have focused on non-residential commissions (i.e. civic, institutional, cultural, and commercial) but have included a handful of residential projects at the end that I thought deserved mention. I also acknowledge that what constitutes the distinction between what we might call "second-tier" icons and a non-icon altogether is an open question.

Museum of Modern Art, New York* Art Museum, New York City	Completed	Designed	1939-1957
Stone, (Edward Durrell) & Philip Goodwir	1939		
Philip Johnson Cesar Pelli Yoshio Taniguchi Jean Nouvel	1951, 196 1984 2004	2007	
Des Moines Art Center Art Museum, Des Moines			
Saarinen, Eliel	1948		
I.M. Pei Richard Meier	1968 1985		
Parke-Bernet Gallery Mixed-Use, New York City			
Walker, Stewart & Alfred Poor	1950		
Norman Foster & Partners		(2009)	
McCormick Tribune Campus Center Academic, Chicago			
Mies van der Rohe / his office	1953		
Rem Koolhaas / OMA	2003		
Cinncinnati Library Civic, Cinncinnati			
Garber, Woodie	1955		
(unkown)	1982 1995		
Milwaukee County Art Memorial Cultural, Milwaukee			
Saarinen, Eero	1957		
Kahler Fitzhugh and Scott Santiago Calatrava	1975 2001		

Wexner Center for the Visual Arts Cultural, Columbus, Ohio		
Bellman, Gillette and Richards (Mershon Auditorium - neoclassical)	1957	
Eschliman Associates (Weigel Hall) Peter Eisenman	1979 1989	
Jewett Arts Center / Davis Museum Cultural, Wellesley, Mass		
Rudolph, Paul	1958	
Rafael Moneo	1995	
Riverview High School Academic, Sarasota, Florida		
Rudolph, Paul	1958	
Diane Lewis, RMJM (original demolished 2009)		(2008)
Building C, Fashion Institute of Technology Academic, New York City		
de Young, Moscowitz & Rosenberg	1959	
SHoP Architects	tba	(2005)
Guggenheim Museum Art Museum, New York City		
Wright, Frank Lloyd	1959	
Gwathmey Siegel & Associates	1992	
500 Park Avenue Tower Commercial, New York City		
Skidmore Owings Merrill	1960	
James Polshek	1985	
Jerome M. Green Hall, Columbia University Academic, New York		
Harrison & Abramovitz	1961	

Polshek & Partners (Ennead)

1997

1957-1961

Dulles International Airport

1962-1964

Airport, Washington

Saarinen, Eero	1962	
(HOK) Hellmuth, Obata & Kassabaum	1980	
SOM - Int'l Arrivals Hall	1989	
SOM - Saarinen expansion	1997	

Lincoln Center for the Performing Arts

Cultural/Academic, New York City

Harrison, Belluschi, Abramovitz, Johnson,
Saarinen, Bunshaft

Davis Brody - Rose building
Diller Scofidio + Renfro

1962-1969

1962-1969

1962-1969

Marin County Civic Center

Civic, San Rafael, California

Wright, Frank Lloyd 1962

HOK - Marin County Jail 1994

TWA Flight Center, John F. Kennedy Airport

Airport, New York City

Saarinen, Eero 1962
Roche Dinkaloo 1969
Gensler 2008

Yale Art & Architecture Building

Academic, New Haven

Rudolph, Paul 1963

Richard Meier & SOM (2004)
Gwathmey Siegel & Associates 2008

North Shore Congregation Israel

Worship, Glencoe, Illinois

Uris Hall, Columbia University Academic, New York City Moore and Hutchins 1964 Peter Gluck 1986 Los Angeles County Museum of Art Art Museum, Los Angeles Pereira, William 1965 Hardy Holzman Pfeiffer; Bruce Goff 1986; 1988 Renzo Piano 2008, 2010 Peter Zumthor Phoenix Art Museum Art Museum, Phoenix Dow, Alden; with Taliesin 1965 Williams Tsien 1996 Kew Garden Hills Library Civic, New York City 1966 (unknown) Work AC tba (2011)Whitney Museum of American Art Art Museum, New York City Breuer, Marcel 1966 Michael Graves (1985)Richard Gluckman 1998 Rem Koolhaas / OMA (2003)Renzo Piano Building Workshop (2005). Salk Institute for Biological Studies Research, La Jolla, California

1964-1967

1967

1996

Kahn, Louis I. & Halprin

Anshen & Allen

Boston Aquarium Cultural, Boston Cambridge Seven 1969 Schwartz-Silver 1998 **Boston City Hall** Civic, Boston Kallmann, McKinnell & Knowles 1969 (various) (various) Oakland Museum of California Art Museum, Oakland 1969 Roche and Dinkeloo Mark Cavagnero 2010 University of California, San Diego Central Library Academic, San Diego Pereira, William 1970 **Gunnar Birkerts** 1992 Denver Art Museum Art Museum, Denver Ponti, Gio 1971 Daniel Libeskind 2006 Walker Art Center Art Museum, Minneapolis 1971 Barnes, Edward Larrabee Herzog + deMeuron 2005 Kimbell Art Museum Art Museum, Fort Worth, Texas Kahn, Louis I. 1972

Mitchell/Giurgola

Renzo Piano

2012

(1989)

1969-1972

Temple Beth El Worship, Chappaqua, New York		
Kahn, Louis I.	1972	
Alexander Gorlin	2012	
Science Center, Harvard University Academic, Cambridge, Mass		
Sert, Jose Lluis	1973	
Leers Weinzapfel	2002	
Hirshhorn Museum, Smithsonian Art Museum, Washington, D.C.		
Skidmore Owings Merrill	1974	
Diller Scofidio + Renfro	2011	
Franklin Court, Independence National Histor Cultural, Philadelphia	rical Park	
Venturi, Scott, Brown	1976	
Quinn Evans	2013	
John F. Kennedy Presidential Library Cultural, Boston		
Pei, Freed, Cobb	1979	
Einhorn Yaffee Prescott	2011	
John Hancock Tower Commercial, Chicago		
Skidmore Owings Merrill	1980	
Green Hiltscher	1994	
Vietnam Veterans Memorial Education Cente Memorial, Washington, D.C.	r	
Lin, Maya (Vietnam Veterans Memorial)	1982	

Polshek & Partners (Ennead)

tba

(2004)

1972-1982

High Museum 1983-1995

Art Museum, Atlanta

Meier, Richard 1983

Renzo Piano Building Workshop 2002

North Carolina Museum of Art

Art Museum, Raleigh, N. Carolina

Dallas Museum of Art

Art Museum, Dallas

Barnes, Edward Larrabee 1984

Edward Larrabee Barnes 1985
Edward Larrabee Barnes 1993
Gluckman Mayner 2004

San Francisco Museum of Modern Art

Art Museum, San Francisco

Botta, Mario 1995

Snohetta 2015

Noteworthy Additions to Postwar Residential Commissions

Revere Quality Institute House

Home, Sarasota

F. Taylor Gates House

Home, New Canaan

Marcel Breuer's Conn. House Home, New Canaan, Conn. Breuer, Marcel 1951 Toshiko Mori 2009 Hammerman House Home, Bel Air, California 1954 Neutra, Richard Marc Appleton 1970's John Bertram 2005 Morris Greenwald House Home, Weston, Conn. Mies van der Rohe 1955 Peter Gluck 1989 Peter Gluck 2001 **Burkhardt Residence** Home, Sarasota Rudolph, Paul 1957 Toshiko Mori 1996 Alfred Taubman Residence (Mack Hse) Home, Palm Beach 1979 Meier, Richard Mark Stumer 1995 Ackerberg Beach House

Home, Malibu

Meier, Richard

Richard Meier & Associates

1984

1994

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