

AMERICAN MODERN

THE CHICAGO SCHOOL AND THE INTERNATIONAL STYLE AT NEW YORK'S MUSEUM OF MODERN ART

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The idea of a “Chicago School” of architecture has assumed the mantle of modern “mythology” in the sense described by Roland Barthes, a historical construction whose ideological origins have been lost or deliberately forgotten. A signifier of American dominance in both technological and aesthetic innovation, it rests on the implicit understanding that architectural modernism has a strong foundation in the built products of capitalist urbanism. Architectural historians have begun to interrogate this mythology, examining when, how, and why it was constructed, as well as the role it continues to play in our image of Chicago and other global cities.^[1] This essay focuses on the role played by New York’s Museum of Modern Art (MoMA) in creating and disseminating the idea of the “Chicago School” of architecture to its influential audience during the 1930s. As I will show, the museum’s promotion of a group of buildings and architects categorized under the heading “Chicago School” was influenced by the writing of avant-garde architects and critics in Europe, and was closely tied to parallel efforts to promote the so-called “International Style,” a depoliticized version of the modern style

beginning to appear in Germany, France, and the Netherlands. Starting with a modest exhibition, *Early Modern Architecture: Chicago 1870 – 1910*, curated in 1933 by Henry-Russell Hitchcock and Philip Johnson, MoMA positioned the early Chicago skyscraper as a formal object worthy of aesthetic consideration; not just an innovative and sophisticated technological object, but one of the nation’s greatest artistic achievements. Throughout the 1930s and 1940s the museum mounted further exhibitions and employed increasingly sophisticated media, including publications, radio, and even film, to promote what they saw as formal parallels between the tall office buildings of late-nineteenth-century Chicago and the International Style. The primary goal of these efforts was to “naturalize” the International Style for the United States by providing it with American origins, linking it to capitalism rather than socialist movements in Europe, and by arguing that its representative architectural type was not social housing but the skyscraper.

Hitchcock and Johnson’s aim in linking Chicago to the International Style was intended to “correct” not only the American perception of the modern style, its political symbolism and geographical origins, but also the course of contemporary building in the US. *Early Modern Architecture: Chicago* was conceived at a time when the skyscraper was under threat as a sustainable type. In 1933 utopian visions for future skyscraper cities were

disintegrating in the wake of the global financial collapse of 1929. In this context, the exhibition acted as a form of “operative history,” an instrumental use of the past in order to promote action in the present.^[2] The curators used the temporary halt in building production caused by the Great Depression as an opportunity to criticize the products of the 1920s boom – the fashionable setback skyscraper with Art Deco massing and ornamental motifs – and at the same time they suggested an American precedent for future building. Co-opting European interest in the simplicity and apparent structural expressionism of the first tall office buildings erected in Chicago, they convinced their audience that the skyscraper was an important part of both its cultural heritage and its urban future.

POSITIONING THE CHICAGO SKYSCRAPER AS THE TRUE MODERN AMERICAN ARCHITECTURE

In the spring of 1932 the historian Henry-Russell Hitchcock and the critic Philip Johnson introduced America to a movement they called the International Style in a landmark show at the Museum of Modern Art in New York. During 1930 and 1931 they had traveled throughout Europe, accompanied by the museum's director Alfred H. Barr Jr., touring recent building projects as well as exhibitions of contemporary architecture and design. Influenced by what they had seen, their exhibition, *Modern Architecture: International Exhibition* (often called the "International Style" show) became the most famous architecture show ever mounted in the US, perhaps in the world, one with an enduring impact. But that influence would come later. This essay is concerned with the immediate future: it is about what happened next. In the summer of 1932, after the International Style exhibition had been demounted, Hitchcock and Johnson traveled to Chicago in search of local sources for the International Style, sources that pre-dated



118 INSTALLATION VIEWS OF *MODERN ARCHITECTURE: INTERNATIONAL EXHIBITION* AT THE MUSEUM OF MODERN ART, NEW YORK, 1932.

and perhaps influenced its appearance in Europe.^[3] The material they gathered became the basis for MoMA's second architecture exhibition, *Early Modern Architecture: Chicago 1870–1910*, displayed in January and February of 1933.

While the *International Style* show has had obvious lasting influence, popularizing a particular style of modern building, as well as generating an ongoing debate about the relationship between aesthetics and politics, the follow-up has

left few obvious traces.^[4] The museum's archives contain no installation photographs and only two publicity images of it, both showing Philip Johnson posing with models illustrating the transition from masonry construction to steel-framing. Unlike the earlier exhibition, there was no printed catalogue, only a mimeographed typescript. The lack of photographs depicting *Early Modern Architecture: Chicago* indicates that Johnson most likely did not employ the dynamic installation techniques, such as floating panels and scrim ceilings with hidden lighting, that he had admired during his visits to Germany, and which he later successfully exploited in his *Machine Art* exhibition of 1934.^[5] If he had, then surely photographs would have been taken. Much more modest, this exhibition consisted of thirty-three large format (24 x 30 inch) photographs mounted without frames on basswood, along with three models, and some wall texts. It featured many buildings that have since become familiar icons including the Leiter, Home Insurance, Tacoma, Monadnock, and Reliance Buildings. While the majority of the subjects were tall office buildings constructed in the down-

119 LEFT: INSTALLATION VIEW OF *MACHINE ART* AT THE MUSEUM OF MODERN ART, NEW YORK, 1934.
RIGHT: WILLIAM LE BARON JENNEY, FIRST LEITER BUILDING, CHICAGO, 1879.

town Loop before 1900, the curators included some residential and institutional buildings, including Frank Lloyd Wright's Winslow House (1893) and Dwight Perkins' Carl Schurz High School (1908). Together they were meant to illustrate, as the press release claimed, "the most important creative period in American architecture which saw the birth of the skyscraper and a new type of modern design suitable to it."^[6]

Hitchcock and Johnson’s goal was to convince their viewers that Chicago architects had managed to transform the raw industrial power and commercial drive that characterized that city into something beautiful and unprecedented in the field of art history. That transformation was reinforced by wall texts setting out two chronologies, one on the “Technical Development of the Skyscraper” and the other on its “Aesthetic Development.” These texts argued that the aesthetic development of the skyscraper was secondary to, but directly derived from, the invention of the steel-frame. The three models on display, illustrating “The All-Masonry Building,” “The Masonry Building with Steel Skeleton,” and “The Steel Skeleton Building,” dramatized this structural evolution. The story of this evolution was privileged for one particular aspect of its aesthetic potential: the aesthetic possibility of ever-more transparent curtain-walls.

The curators’ emphasis on the aesthetics of the steel-frame was based in their desire to draw a direct link between the formal characteristics of the early Chicago skyscraper and those of the International Style. In his introduction to the International



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LEFT: D. H. BURNHAM AND CO., RELIANCE BUILDING, CHICAGO, 1895.
RIGHT: DETAIL OF ORNAMENTED TERRACOTTA TILE, RELIANCE BUILDING.

Style catalogue, Barr defined these characteristics as an emphasis on volume as opposed to mass, and on the “intrinsic elegance of materials” rather than “applied ornament.”^[7] Although Chicago architects of the 1880s and 1890s (Louis Sullivan in particular) had engaged in a series of complex aesthetic experiments to re-imagine ornament for the industrial era, Hitchcock and Johnson preferred to present the ornament on Chicago School buildings as conceptually non-existent, concentrating instead on the simple forms underneath.^[8]

The erasure of ornament from the early Chicago skyscrapers was in support of one of the exhibition’s secondary agendas: a critique of the Art Deco skyscrapers for which New York City was becoming famous. Only a few years earlier Barr had dismissed the skyscraper as “the architectural taste of real estate speculators, renting agents and mortgage brokers!”^[9] The only New York City example included in the exhibition, George Post’s World Building of 1890, was a negative one, intended to demonstrate the failure of New York architects to grasp the aesthetic significance of new building technologies. Johnson argued that contemporary Manhattan skyscrapers were the result of New York architects’ continued dependence on ornament, that the Art Deco megaliths lining Park and Madison Avenues were a false and inauthentic form of the new style, “modernistic” rather than “modern.”^[10] (The specific example he cited was Arthur Loomis Harmon’s Shelton Hotel of 1924.) In Chicago, Hitchcock and Johnson found products of commercial development they could place in opposition to these examples of nineteenth and early-twentieth-century eclecticism. *Early Mod-*



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LEFT: GEORGE POST, WORLD BUILDING, PARK ROW, NEW YORK, 1890.
RIGHT: ARTHUR LOOMIS HARMON, SHELTON HOTEL, NEW YORK, 1924.

ern Architecture: Chicago posited the existence of a “Chicago formula” of skyscraper design based on structural expression that, even when banal, was superior to the revivalism and capricious stylistic invention characteristic of New York City skyscrapers.

Beyond this comparison between the two economic centers of the US, the exhibition allowed its curators to challenge the prevailing belief that modern architecture was a European invention exercised primarily in socialist countries in the form

of public housing and institutional buildings. Instead, the curators suggested, the International Style had an equally important antecedent in a type created within the framework of commercial financing, speculative development, and private ownership.

THE CHICAGO SCHOOL AS PRECURSOR TO THE INTERNATIONAL STYLE

Why was it necessary to link Chicago to the International Style? MoMA's formalist approach to architecture was designed to deflect ambivalence about the ideological message of modern design. The politics of the modern style was a topic of debate not only in the US, but also internationally. Late in 1932 the National Socialist party of Germany forced the closure of the Bauhaus in Dessau. Early in 1933 plans for the fourth CIAM Congress in Moscow were abandoned under pressure from the Soviets, and the event was hurriedly relocated to a cruise ship in the Mediterranean.^[11]

Although the reaction was less extreme in the US, modern design was widely perceived as foreign and potentially dangerous because of its basis in socialism.^[12] In promoting the International Style, MoMA found it necessary to advertise it as thoroughly native and democratic in its origins.

Although *Early Modern Architecture: Chicago* was an exhibition of American buildings curated by Americans, its staging was largely prompted by a European view of its subject. It was one of the first popular presentations in the US of the kind of paean to American commercial and industrial buildings first expressed by avant-garde architects and critics such as Ludwig Hilberseimer, Erich Mendelsohn, Bruno Taut, Walter Behrendt, and Richard Neutra.^[13] Various books by these Europeans presented commercial architecture in New York and Chicago, the product of rapid capitalist expansion, as an anonymous and objective vernacular, evidence of the potential of industrialized building techniques for social liberation. By the early 1930s American architects and critics including Lewis Mumford and Hitchcock had begun to represent this version of architectural history to Americans in a significantly amended form.^[14] First they transformed the European view of early Chicago skyscrapers as basically authorless products of industrialization into objects of conscious design. But while Mumford held on to the potential of modern architecture for social emancipation, Hitchcock preferred to concentrate on its formal aspects, playing down its political context.

Hitchcock presented the early Chicago skyscraper not as the vernacular product of the industrial age, but as the artistic creation of a group of named individuals, a category that could be considered a "school" in the art-historical tradition. *Early Modern Architecture: Chicago* was a tool for communicating the idea that Chicago architects working in the 1880s and 1890s

represented a unified "school," one that created a unified and innovative aesthetic response to new construction technologies and building programs. As Nina Stritzler-Levine has shown, Hitchcock saw the medium of the exhibition as a legitimate scholarly enterprise, an important tool for the communication of academic ideas: "As an architectural historian and curator Hitchcock adhered to a diachronic reading of modern architecture. He established genealogies of master architects, privileged so-called great monuments, and presented history as a linear progression of styles."^[15]

As a completely new building type, he believed the skyscraper occupied an important role in this progression: It was the form through which the modern style found its most current realization.

While they acknowledged the "authors" of the Chicago skyscraper – William Le Baron Jenney, Daniel H. Burnham, John W. Root, and Louis Sullivan – Hitchcock and Johnson focused on the skyscraper as an autonomous technical object at the expense of its urban and social context. As contemporary scholars have discussed, the appearance of the tall office building was not due solely to the invention of the steel-frame, but also to new economic practices, specifically the financial entity of the corporation, speculative ventures by large groups of individual investors grouped together in syndicates.^[16] By including biographical information about architects but no information about the location of these buildings, the men who commissioned them, or the economic circumstances of their development, the curators presented the Chicago skyscraper in the same manner as a work of fine art. MoMA's patrons had made their money from business. Now the skyscraper, the product of business and previously viewed in terms of economic value, could be presented at a museum of modern art in the company of the country's finest aesthetic productions.

Where European architects had co-opted Chicago as an early and imperfect test site for future skyscraper cities situated in radically altered socio-political landscapes, MoMA employed Chicago's commercial architecture for quite a different purpose, as a series of beautiful objects testifying to the success of capitalism. With this exhibition, the museum helped naturalize, as Barthes would say, an ideological view of the early American skyscraper, a view embedded in the mythology of the "Chicago School" of architecture.

PUBLICIZING THE CHICAGO SCHOOL OF ARCHITECTURE MYTHOLOGY

During the remainder of the 1930s and into the early 1940s MoMA continued to promote the idea of the "Chicago School" of architecture as a native precursor to the International Style. Where Johnson focused on more contemporary subjects during the brief time he remained at the museum, Hitchcock continued to look backwards, locating precursors to the modern aesthetic in mid-nineteenth-century America. In the spring of 1933 Johnson curated *Work of Young Architects of the Middle West*, which showcased Midwestern architects, including Fred Keck, Howard T. Fisher (whose "General House" system of prefabricated housing was featured) and Hamilton Beatty (who had worked in Le Corbusier's office), all of whom worked in what could be considered the International Style. He called this show the "logical successor to the International Exhibition."^[17]

Meanwhile Hitchcock kept looking to the past for clues to the future. His next project was an exhibition and a book on Boston architect H. H. Richardson. Organized with the help of Johnson before he left MoMA, *Architecture by H. H. Richardson* went on display in early 1936. This exhibition advanced Hitchcock's claim that Richardson was the source of American modernism. It abandoned the structural determinism evident in *Early Modern Architecture: Chicago*, and argued instead that the modern style in the US was not the result of the pragmatic appropriation of new technologies, particularly the steel-frame, but a deliberate formal sensibility dating back to the mid-nineteenth century. Hitchcock revised the popular view of Richardson's influence, de-emphasizing the significance of the Richardsonian Romanesque, and arguing instead that his work was valuable because it emphasized pure form and composition, that is, that it represented a proto-modern aesthetic. Overcoming critical and scholarly

ambivalence about his florid ornament, Hitchcock named Sullivan as the immediate heir to Richardson's artistry. Finally, Hitchcock diverged from Johnson by identifying Frank Lloyd Wright, rather than Keck, Fisher, or Beatty, as the most relevant contemporary descendent of the Chicago School.^[18]

Populated with a pantheon of heroes, the mythology of the Chicago School was now complete: prompted by the example of Richardson, Sullivan had produced the highest achievement of modern architecture in America, the skyscraper. Wright had translated this modernist sensibility into domestic design in the early twentieth century and promoted it across the Atlantic where it spurred a new generation of modernists. Throughout the 1930s MoMA continued to repeat this genealogy in a series of exhibitions and multi-media productions. In 1934 the museum's publicity director Sarah Newmeyer, organized, with the backing of the Carnegie Corporation, a series of radio programs broadcast under the title "Art in America" on the local NBC station on Saturday nights. Intended to promote the idea that modern art and design had been a long-standing national endeavor, it was supported by illustrated mail order supplements including essays on architecture written by Hitchcock, Johnson, and Catherine Bauer. In this way the museum's message about the Chicago School was delivered directly into American homes via radio waves and postal communication.^[19] In 1938 MoMA produced a forty-minute film, "Evolution of the Skyscraper," written by the new curator of the architecture department, John McAndrew, and directed by E. Francis Thompson.^[20] This film was incorporated into an exhibition entitled *Three Centuries of American Architecture*, which circulated to a dozen venues including other museums and academic institutions as well as department stores between 1939 and 1941. In 1946 it was sent to Great Britain under the auspices of the Office of War Information as part of the United States government's propaganda activities during World War II.^[21]

"Evolution of the Skyscraper" employed the accessible and popular medium of the film to link early Chicago architecture with urban projects in the present day. It began with the Chicago School and concluded with heroic images of utopian skyscraper cities by Le Corbusier and Richard Neutra. Still photographs were interspersed with graphic diagrams and panning shots of Chicago and New York. Title cards displayed hyperbolic prose: the steel-frame was "the greatest revolution in architectural construction since the Gothic system six hundred and fifty years before." Where *Early Modern Architecture: Chicago* illustrated the tectonic transformation from masonry to the steel-frame with models, the film used images of crustacean and vertebrate biological structures superimposed over images of the same buildings. The film also made explicit MoMA's intent to employ history to influence the future, voicing approval of contemporary

skyscrapers without historicist or overtly art deco trappings, including Raymond Hood's Daily News and McGraw Hill Buildings, Associated Architect's Rockefeller Center, and Howe and Lescaze's PSFS Building in Philadelphia, all presented as legitimate descendents of the Chicago School. In the process, the central message of *Early Modern Architecture: Chicago* was telegraphed and exaggerated into a popular mythology in which Chicago became the origin of the future of the modern city.

OPERATIVE HISTORY:

THE CHICAGO SCHOOL AND THE CONTEMPORARY BUILDING SITUATION

The mythology of the "Chicago School" of architecture must be seen in relation to the dramatic reshaping of American cities and the American building industry caused by capitalist cycles of boom and bust, especially the Great Depression. Hitchcock and Johnson's display of a select group of early Chicago skyscrapers as forerunners of the International Style was not a disinterested historical exercise. It was a form of operative history; a presentation of the past intended to influence building in the present. Their championing of the work of Jenney, Burnham & Root, Sullivan, and Wright, came at a critical time in the short life of the skyscraper type. After a period of what economists describe as "overbuilding" or "overinvestment" in commercial building stock during the 1920s, skyscrapers were increasingly losing their value and many of the early tall commercial buildings, now almost forty years old, were being demolished and replaced by low buildings or even vacant lots used for parking.^[22] As some contemporary review-



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RAYMOND HOOD, MCGRAW HILL BUILDING, NEW YORK, 1931, FROM THE EXHIBITION ALBUM *MODERN ARCHITECTURE: INTERNATIONAL EXHIBITION*. ALTHOUGH THE MCGRAW HILL BUILDING SHARES THE SAME STEPPED-BACK PROFILE AS THE SHELTON HOTEL, ITS CURTAIN-WALL IS EXPOSED BY LARGE HORIZONTAL WINDOWS AND IT LACKS HISTORICIZING ORNAMENT AT THE ROOF LINE, FORMALLY LINKING IT WITH THE INTERNATIONAL STYLE.

ers noted, the argument that early Chicago skyscrapers were valuable artistic productions was particularly significant at a time when many of the first generation of Chicago office buildings, including the Home Insurance Building, were being demolished because they were no longer economically viable. "The museum's exhibition will [...]

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be the first record of a great architecture which is vanishing under the sledgehammer of the housewrecker,” claimed the *Brooklyn Daily Eagle*.^[23] This process was exacerbated by the stock market crash of 1929. Planning for new commercial construction had virtually ceased and it would take almost thirty years for American cities to recover. At the same time that the skyscraper was becoming less financially viable, a growing trend toward urban decentralization suggested that the building type might become obsolete altogether.

Along with their European counterparts, by the early 1930s American urban planners and social reformers were beginning to think that the densely built, vertical cities that had appeared in the early twentieth century were inherently uneconomic, inefficient, and unhealthy. In 1942 an economist summarized the problems of the American city as: “poverty and inequality, dirt, smoke, and waste, noise and strain, delinquency and crime, exploitation of urban land, slums and blighted areas, housing difficulties, obsolescence, dislocation of industry, urban transit, lag in public improvements, legal obstructions, and tax tangles.”^[24] In response, architects tried to rationalize the urban landscape, focusing on the introduction of zoning legislation to restrict building size and function, along with hierarchies of transportation, and more open, green spaces.^[25] These new zoning regulations worked in concert with new communication and transportation technologies to decentralize American cities. If the skyscraper was to survive, then a new rationale had to be found for its continued existence, one based in aesthetics rather than economics. Although the skyscraper had ceased to be, at least temporarily, a profitable economic unit in the American city, it still held incalculable value as a signifier of American power. By the early 1930s it had become the symbolic image rather than literal product of capitalism. This was the agenda behind *Early Modern Architecture: Chicago*, namely to present the skyscraper as the original and essential modern building type, one that could not be so easily abandoned. This rhetorical strategy was remarkably effective in influencing the rebuilding of American and other global cities after World War II.^[26]

In 1932 MoMA introduced Americans to a cohesive and depoliticized version of modern architecture it called the International Style. In 1933 it created a backwards chronology for that style, transporting it in space and time to the middle of America, situating the first skyscrapers built in Chicago as its earliest embodiment. Throughout the 1930s and into the 1940s MoMA continued to identify Chicago as the home of modern architecture in the US. In doing so, it employed sophisticated mechanisms of publicity including exhibitions, radio, and film to transform an academic narrative into a popular mythology. The mythology of the “Chicago School” of architecture claimed the tall office buildings lining the streets of the downtown Loop as primary artifacts in the history of the modern city, the natural result of the positive and progressive technologies of capitalism, as important to the history of modern architecture as the mass housing and institutional buildings constructed under socialist governments in Europe. It also helped ensure that the modern style of skyscraper design, standing apart from its urban context, prismatic and devoid of conventional ornament, became a privileged component of strategies of post-war urban renewal across the US and Europe, a symbol of modernity throughout the world.

NOTES

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[1] John Zukowsky, “Introduction to Internationalism in Chicago Architecture,” in John Zukowsky, ed., *Chicago Architecture 1872–1922*, (New York: Prestel and the Art Institute of Chicago, 1987); Robert Brueggemann, “The Marquette Building and the Myth of the Chicago School,” *Threshold*, 5/6 (fall 1991), pp. 7–18, reprinted as “The Myth of the Chicago School,” in Charles Waldheim and Katerina Ruedi Ray, eds., *Chicago Architecture: Histories, Revisions, Alternatives* (Chicago: University of Chicago Press, 2005), pp. 15–29; Daniel Bluestone, “Preservation and Renewal in Post-World War II Chicago,” *Journal of Architectural Education*, vol. 47, no. 4 (May 1994), pp. 210–223.

[2] Manfredo Tafuri discusses the meaning of “operative criticism” in *Theories and History of Architecture*, trans. Giorgio Verrecchia (London: Granada, 1980). Originally published as *Teorie e storia dell’architettura* (1968).

[3] Chicago architect and ex-Burnham & Root employee Thomas Tallmadge was the local source for much of Hitchcock and Johnson’s information about Chicago architecture. Tallmadge’s most lasting legacy is the popular belief that William Le Baron Jenney’s Home Insurance Building was the “first” skyscraper. Thomas Tallmadge, “Was the Home Insurance Building in Chicago the First Skyscraper of Skeleton Construction?” *Architectural Record*, vol. 76, no. 2 (August 1934), pp. 113–118.

[4] On the impact of the International Style show, see Terence Riley, *International Style: Exhibition 15 and The Museum of Modern Art* (New York: Rizzoli, 1992); and Henry Matthews, “The Promotion of Modern Architecture by the Museum of Modern Art in the 1930s,” *Journal of Design History*, vol. 7, no. 1 (1994), pp. 43–59.

[5] Philip Johnson, “The Berlin Building Exposition of 1931,” *T-Square*, vol. 2, no. 1, p. 37; Mary Anne Staniszewski, *The Power of Display: A History of Exhibition Installations at the Museum of Modern Art* (Cambridge, MA: MIT Press, 1998), pp. 21, 36–38, 64, 152–160. On Johnson’s career as a curator and exhibition designer, see Franz Schulze, *Philip Johnson. Life and Work* (New York: Alfred A. Knopf, 1994), pp. 48–101; Terence Riley, “Portrait of the Curator as a Young Man,” in *Philip Johnson and the Museum of Modern Art: Studies in Modern Art no. 6* (New York: Museum of Modern Art and Harry N. Abrams, 1998), pp. 34–69; and Terence Riley and Joshua Sacks, “Philip Johnson: Act One, Scene One – The Museum of Modern Art?,” in Emmanuel Petit, ed., *Philip Johnson. The Constancy of Change*, (New Haven: Yale University Press, 2009), pp. 60–67.

[6] Press release for *Early Modern Architecture: Chicago 1870–1910* (January 15, 1932). Department of Circulating Exhibitions Records [Folder]. Series II.1.53.1. Museum of Modern Art Archives.

[7] The formal characteristics of International Style architecture are described in Henry-Russell Hitchcock and Philip Johnson, *The International Style: Architecture Since 1922*, Foreword by Alfred Barr Jr. (New York: W. W. Norton and Company, 1932), p. 29.

[8] On the newly imagined ornament invented for the early Chicago skyscrapers, see Daniel Bluestone, *Constructing Chicago* (Yale University Press: New Haven and London, 1991); and David Van Zanten, *Sullivan’s City: The Meaning of Ornament for Louis Sullivan* (New York: W. W. Norton and Co., 2000). On the modernist reading of Chicago School buildings as “unornamented,” see Juan Pablo Bonta, *Architecture and*

its Interpretation: A Study of Expressive Systems in Architecture (New York: Rizzoli, 1979), pp. 91–129; and Mark Wigley, *White Walls, Designer Dresses. The Fashioning of Modern Architecture* (Cambridge, MA: MIT Press, 1995), pp. 60–63, 123–125.

[9] Alfred H. Barr, Jr., Foreword, *The International Style*, p. 30.

[10] Philip Johnson, “Skyscraper School of Modern Architecture,” *Arts*, vol. 27, no. 8 (May 1931), p. 575.

[11] Eric Mumford, *The CIAM Discourse on Urbanism, 1928–1960* (Cambridge, MA: MIT Press, 2002), pp. 73–74.

[12] Karen Koehler discusses the association often made between modern art and architecture and socialism in American popular culture during the 1920s and 1930s in “The Bauhaus 1919–1928: Gropius in Exile and the Museum of Modern Art,” in Richard Etlin, ed., *Art, Culture and Media Under the Third Reich* (Chicago: University of Chicago Press, 2002), pp. 287–315.

[13] Reyner Banham, *The Concrete Atlantis: US Industrial Building and European Modern Architecture* (Cambridge, MA: MIT Press, 1986); and Jean-Louis Cohen, *Scenes of the World to Come: European Architecture and the American Challenge 1893–1960* (Paris/Montreal: Flammarion/Canadian Centre for Architecture, 1995).

[14] Lewis Mumford commented on the fascination avant-garde European architects held for American industrial and commercial buildings in “New York vs. Chicago in Architecture,” *Architecture*, 56 (November 1927), pp. 241–244. See also Henry-Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration* (New York: Payson and Clarke, 1929).

[15] Nina Stritzler-Levine, “Curating History, Exhibiting Ideas: Henry-Russell Hitchcock and Architectural Exhibition Practice at the MoMA,” in Frank Salmon, ed., *Summerson and Hitchcock: Centenary Essays on Architectural Historiography* (Yale University Press: New Haven and London, 2006), pp. 34–35.

[16] Miles Berger, *They Built Chicago: Entrepreneurs Who Shaped a Great City’s Architecture* (Chicago: Bonus Books, 1992); and Carol Willis, *Form Follows Finance: Skyscrapers and Skylines in New York and Chicago* (New York: Princeton Architectural Press, 1995). I explore the social and economic context of the early Chicago skyscraper in Joanna Merwood-Salisbury, *Chicago 1890: The Skyscraper and the Modern City* (Chicago: University of Chicago Press, 2009), pp. 13–54.

[17] “Forward,” *Work of Young Architects in the Middle West* (New York: Museum of Modern Art, 1933) [unpaginated manuscript in the Museum of Modern Art Archives]. This MoMA exhibition became later part of the 1933 *Century of Progress Exhibition* in Chicago.

[18] In 1940 Hitchcock curated a MoMA show called, *Frank Lloyd Wright, American Architect*, publishing the catalogue as *In the Nature of Materials: The Buildings of Frank Lloyd Wright, 1887–1941* (New York: Duell, Sloan and Pearce, 1942). Terence Riley has described the Museum of Modern Art’s role in resuscitating Wright’s reputation in, “‘Frank Lloyd Wright: Architect,’ Visions and Revisions Since 1910,” *Museum of Modern Art*, no. 16 (Winter 1993/Spring 1994), pp. 1–5. See also Peter Reed and William Kaizen, eds., “The Show to End all Shows: Frank Lloyd Wright and The Museum of Modern Art, 1940,” *Studies in Modern Art*, 8 (Museum of Modern Art: New York, 2004).

[19] These supplements were published as a book: Holger Cahill and Alfred H. Barr Jr., eds., *Art in America in Modern Times* (New York: Reynal and Hitchcock, 1934).

[20] John McAndrew, Scenario for *Evolution of the Skyscraper*, Department of Circulating Exhibitions Records. II.1.56.3 Exhibition 76b. *The Evolution of the Skyscraper*. Museum of Modern Art Archives.

[21] *Three Centuries of American Architecture* [MoMA Exh. #83, February 15–March 15, 1939], Museum of Modern Art Archives. On the museum’s wartime collaborations with the various propaganda wings of the United States government, see Staniszewski, *The Power of Display*, pp. 206–259.

[22] Robert M. Fogelson, “The Spectre of Decentralization: Downtown During the Great Depression and

World War II,” in *Downtown: Its Rise and Fall, 1880–1950* (Yale University Press, 2000), pp. 218–248.

[23] *Brooklyn Daily Eagle* (January 8, 1933).

[24] Leverett S. Lyon, “Economic Problems of American Cities,” *American Economic Review*, vol. 32, no. 1. Part 2 (1942), p. 308.

[25] Keith D. Revell, “Law Makes Order: The Search for the Skyscraper Ensemble, 1890–1930,” in Roberta Moudry, ed., *The American Skyscraper: Cultural Histories* (Cambridge, UK, and New York: Cambridge University Press, 2005).

[26] Daniel Bluestone describes the way in which the mythology of the Chicago School was instrumental for post-war urban renewal efforts in Chicago itself in “Preservation and Renewal in Post-World War II Chicago.” On Johnson’s promotion of modern skyscraper design in the post-war era, see the essays by Reinhold Martin and Kazys Varnelis in *Philip Johnson. The Constancy of Change*, pp. 110–119, 120–135.