

The Century of Progress International Exposition: An Outpost of Modern Architecture

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During the evening of 19 February 1932, a group of prominent designers gathered at a symposium to celebrate the recent opening of an architectural exhibition of photographs and models located on the twelfth floor of the Heckscher Building in New York City. Included among the scheduled speakers were two local architects, Harvey Wiley Corbett and Raymond Hood.¹ Both were currently involved in designing the largest architectural project underway at the time in the United States—the Century of Progress International Exposition, a world's fair located 800 miles to the west in Chicago. The New York architectural show, *Modern Architecture—International Exhibition*, sponsored by the Museum of Modern Art (MoMA), presented a definition of modern architecture to America based on the formal characteristics of highly selected contemporary European building designs. While the show initially attracted only minimal critical attention, the exhibition's catalog and a related book significantly influenced how later architects and historians perceived the development of modern architecture in the United States after World War I.² These publications primarily did this by offering a clear definition of modern architecture based on aesthetics that was easy to illustrate and to understand. The welcoming of noted members of the German architectural diaspora during the mid 1930s into major American architectural schools helped to ensure that the ideology promoted in the show would eventually become the standard framework through which the rise of modern architecture in the United States was interpreted. Restrictive and conceived primarily in formal terms, the definition put forth in the exhibition, however, encompassed only a small segment of the progressive architecture produced in the United States during the late 1920s and early 1930s.

After World War I, American architects began to take an increased interest in addressing concurrent social and technological issues in their work. A profound awareness of the need to find design solutions appropriate to the modern age provided the source for great creativity, as well as uncertainty, among American designers. Architects, as well as critics, became

involved in lively debates concerning the definition of modern architecture and the future direction of building design. This discourse reflected the development of a rich assemblage of architectural ideologies and forms during this period.

In contrast to the MoMA exhibition, the examination of a less acknowledged, but nevertheless significant, contemporary architectural event located on the edge or **outpost of history**—the international exhibition in which Corbett and Hood were involved—provides the opportunity to achieve a more comprehensive understanding of the complexity of modern American architecture in the late 1920s and early 1930s. (Figure 1) The 1933-34 Chicago world's fair does this by offering a new perspective on major aspects of American architecture during these years. This includes important insight into the great variety of prominent progressive design ideologies, the impact of new advances in science and technology on the construction industry, the effect of the Great Depression on building trends, the exploitation of spectacle in public architecture to achieve gains in political and economic power, and, most significantly, the desire among designers to create a uniquely American definition of modern architecture that was reflective of the times.

THE ROLE OF INTERNATIONAL EXPOSITIONS IN THE DEVELOPMENT OF MODERN ARCHITECTURE

The Century of Progress International Exposition presented an ideal opportunity for a select group of prominent architects to work together on a large event that could publicize their modern architectural ideologies. Although often viewed as not part of the “real” architectural discourse, the important role of international expositions as events for designers to develop or promote new architectural concepts was not new at the Chicago fair. Beginning in 1851 with the Great Exhibition of the Works of Industry of All Nations held in England, world fairs have served as venues for introducing innovative ideas in architec-

ture to large numbers of people. The Crystal Palace, built to house the Great Exhibition, demonstrated the capabilities of iron and glass construction, as well as the benefits of prefabrication and mass-production. (Figure 2)³ Other expositions also illustrated technological and aesthetic developments through building designs, such as the “unlimited potential” of iron construction in the erection of the Eiffel Tower at the 1889 *Exposition Universelle* in Paris. World fairs, however, did not always promote forward-looking ideas in architecture. In many instances, fair designers looked to historical forms for inspiration. For example, while the World’s Columbian Exposition held in Chicago in 1893 included Louis Sullivan’s colorful and organically-ornamented Transportation Building, white, neo-classical pavilions dominated the fair’s Court of Honor. (Figure 3) Their commanding presence helped to usher in a tremendous wave of neoclassical, pseudo-temple designs at later expositions and for large institutional buildings throughout the United States right up until the opening of the Century of Progress International Exposition in 1933.

OTHER MAJOR EVENTS IN AMERICAN ARCHITECTURE DURING THE EARLY 1930S

Although set outside the realm of everyday architecture, no other building project in the United States during the early 1930s influenced the exploration and promotion of modern American architecture as broadly as the Chicago world’s fair. Construction starts had plummeted in those years because of the Great Depression. The only other large-scale architectural project underway at this time in the United States was Rockefeller Center in New York City.⁴ Almost all American architects not involved in Rockefeller Center or A Century of Progress found themselves confined to designing projects on paper or to promoting their ideas through the written word in trade publications or at professional meetings. Architectural exhibitions also provided a means for exchanging new design ideas without the prohibitive cost of construction. The most historically influential of these exhibits was the Museum of Modern Art’s *Modern Architecture—International Exhibition*.

The Exhibition (commonly known as the International Style Show) was curated by Henry-Russell Hitchcock and Philip Johnson and consisted of black and white photographs, polychromatic models, and plans of contemporary architectural designs.⁵ For the show the curators selected buildings which had flat, unadorned facades that appear white in the large photographs that lined the beige gallery walls like paintings. (Figure 4)⁶ Relying upon a traditional Wölfflinian approach to art history, Hitchcock and Johnson focused on the aesthetic qualities of the chosen works while neglecting important social, economic, and technological factors.⁷ The included architecture, used to illustrate their definition of modern architecture, shared three major characteristics: an expression of volume over mass and solidity; a sense of regularity as opposed to rigid

symmetry; and a reliance upon the inherent beauty of materials and proportions, as opposed to applied ornament, for visual interest.⁸

The exhibit prominently featured buildings by noted progressive European architects, including Le Corbusier, Walter Gropius, J. J. P. Oud, and Mies van der Rohe.⁹ To fulfill a mandate made by the board of directors of MoMA, which stipulated that fifty-percent of the show be devoted to American architecture, Hitchcock and Johnson also included projects by Frank Lloyd Wright, Howe and Lescaze, Raymond Hood, Richard Neutra, and the Bowman Brothers.¹⁰ In comparison to the European buildings, these designs clearly revealed a significant diversity in the work of forward-looking American architects—a fact the curators downplayed.

While critics initially regarded the MoMA Show as only a moderate success, the ideas expounded in the exhibition were later disseminated primarily through the publication of a related book by Hitchcock and Johnson that became widely read in American schools of architecture.¹¹ Their book, *The International Style: Architecture Since 1922*, was a re-interpretation of the exhibition material and included a different selection of building illustrations than in either the catalog or the show. The curators replaced images that they felt were not sufficiently in line with their stylistic interpretation of modern architecture (including most of the buildings by American designers) with photographs that projected stronger illustrations of specific aesthetic qualities. The even more limiting formal definition of modern architecture put forward in the book contrasted sharply with that which was concurrently being promoted by many of the progressive architects in the United States, including those involved in the design of the Century of Progress International Exposition.

THE DEFINITION OF “MODERN ARCHITECTURE” IN THE UNITED STATES

A strong desire to reach a clear understanding of what was meant by “modern architecture” became a major objective among prominent American designers and critics during the late 1920s and early 1930s. The definition of the phrase, however, was not explicit and, as a result, significantly evolved during these years.¹² Whereas American architects typically looked to their European counterparts for inspiration and direction, many realized the need for more pertinent solutions that could better meet the specific demands of their own country. The disparate political and economic situations in Europe (still struggling to rebound from World War I) and the United States (experiencing unprecedented prosperity) during the 1920s contributed greatly to several basic differences between developing ideas about modern architecture by progressive American and European designers. For example, many European architects, trying to move beyond the recent events of

the war, rejected the past in their search for revolutionary change. Americans meanwhile, who only recently had discovered their own significant, albeit short, history, were much less willing to abandon previous developments. As a result, most American designers did not feel the need to divorce modern architecture completely from the past, but saw it more as an outgrowth from previous developments and the next logical step in the evolution of building design. After a series of heated debates that took place on the pages of architectural journals and at meetings of major architectural organizations during the previous decade, most progressive American designers by the early 1930s had arrived at a definition for modern architecture that was not based on a specific aesthetic vocabulary, but rather on the use of new building materials and construction processes to meet the functional needs of a rapidly changing, modern world.

While architectural historians have rarely discussed these debates, they were central to the development of the basic plan for the Century of Progress International Exposition. Headed by Paul Cret, Raymond Hood, and Harvey Wiley Corbett, the eight prominent architects who comprised the fair's architectural commission took full advantage of the event to promote a broad definition of modern architecture that was much more aesthetically inclusive than the definition promoted by Hitchcock and Johnson.¹³ The commissioners realized that the exposition offered a rare design opportunity. They were able to explore and present their ideas without having to deal with the difficult clients, conservative bankers, or even restrictive building programs that often haunted more permanent building projects. The long and winding exposition site along the Lake Michigan shore, as well as financial limitations resulting from the Great Depression, provided sources of both inspiration and guidance for the committee members. A lack of a rigid building code allowed the exposition architects to break away from conventional building standards. Knowledge that the buildings were going to be short-lived and set outside the everyday world offered them the freedom to experiment with new building materials and processes, as well as forms, without having to be concerned with their resulting buildings not maintaining value over time as styles changed or experimental construction materials failed. The commissioners created comprehensive schemes and pavilion plans that illustrated various modern aesthetic solutions that highlighted recently available building materials and construction concepts. The arrival of such a relatively coherent definition of modern architecture, however, was not an easy journey for the academically-trained member of the architectural commission.

CREATING A MODERN FAIR

With the decision made to create an exposition that would present a vision of modern architecture to the world, the commissioners knew that they had to reach a consensus

regarding what they meant by "modern." Discussions at early meetings of the architectural commission echoed the definition debate being waged in the pages of American architectural journals as each member brought to the table his own individual ideas on modern building design. As with the American architectural community at large, some of the commissioners initially felt that modern architecture formed another step in a long evolutionary development of architectural styles, while others saw it more as a set of design principles based on issues of purpose and function set apart from style.

John Holabird, for example, initially favored emphasizing formal design characteristics that would lead to a stylistic definition. In contrast, Paul Cret felt strongly that modern architecture was not limited to a question of stylistic detail. He wrote in 1931, that "... Modernism is something much deeper than this or that formula or ornamentation. Ornamentation is 'fashion,' it is only surface deep."¹⁴ Instead, Cret supported a broader definition that focused on whether a building reached an appropriate aesthetic solution for its intended function through the incorporation of new ideas, techniques, or type of construction. He believed that a skyscraper, no matter "whatever kind of old cast-offs" it was clothed in, was a modern structure regardless of its composition or mode of expression, since it was a building type introduced in the modern era.¹⁵

All three of the New Yorkers on the commission—Corbett, Hood, and Ralph Walker—agreed that the skyscraper served as a major symbol of modern architecture. This reflected the view held by many designers and critics in the 1920s that the one truly American contribution to modern building design was the tall office building: a form that offered a clear visual representation of the abilities of current structural technology, while symbolically expressing the important role of commerce in a twentieth-century capitalistic society. Heavily involved in the promotion of set-back skyscraper designs, the New York commissioners shared the view that a tall vertical tower should form the centerpiece of A Century of Progress.

While commissioners Edward Bennett and Arthur Brown, Jr. were still wrapped up in the neoclassicism of the City Beautiful Movement, Raymond Hood, like Paul Cret, placed solving functional needs ahead of aesthetics. He had no real interest in defining specific characteristics of modern design and looked at each project as an individual problem needing its own solution. Hood candidly expressed his view on modern architecture in the foreword to R. W. Sexton's book, *American Apartment Houses, Hotels and Apartments*, when he wrote:

Modern architecture consists of studying our problems from the ground up, solving each point in the most logical manner, in the light of our present day knowledge . . . Effort need not be centered on striving to create a new style, or on trying to develop an architecture that is distinctively American. We only need to do our building in

a straightforward manner, meeting squarely every condition that presents itself, and the style and decoration will come of themselves.¹⁶

Although their definitions varied, a statement regarding design philosophy from their first meeting, held in Chicago on 23 May 1928, reveals the early commitment by the architectural commission to create a unified vision of modern architecture. It proclaimed that:

The architecture of the buildings and of the grounds of the Exposition of 1933 will illustrate in definite form the development of the art of architecture since the great Fair of 1893, not only as in America, but also in the world at large. New elements of construction, products of modern invention and science, will be factors in the architectural composition. Artificial light, the tremendous progress of which has astonished all designers in recent years, will become an inherent component of the architectural composition. The extraordinary opportunities of the site for the use of water as an intrinsic element of the composition will be developed to the maximum.¹⁷

John Holabird's wish to create a modern exposition significantly different architecturally from previous fairs by focusing on the incorporation of specific stylistic forms quickly lost out to a desire to look towards new needs and sources for design solutions. The consensus to base aesthetic design decisions on the use of new building materials and processes was an idea shared by many progressive-minded colleagues and was in clear contrast to the more formal understanding of modern architecture soon to be put forth by Hitchcock and Johnson in the International Style Show.

PRELIMINARY DESIGNS

The preliminary designs for the exposition by the architectural commissioners reflect movement away from a neoclassical to a modern exposition. After producing several generations of plans that strongly echoed the symmetrical Beaux-Arts layout of the Court of Honor at Chicago's 1893 Columbian Exposition, the commissioners convened in January 1929.¹⁸ Despite the modern principles the architects had promulgated, their designs revealed that most had not yet moved beyond the lessons of their formal training. (Figure 5) Even the architects themselves regarded the studies as "rather traditional developments of the best world fair's planning of earlier years."¹⁹ The use of classical massing and forms of masonry (or, for temporary buildings, a material like staff—a mixture of plaster and sawdust) and of strong axial, Beaux-Arts planning in all of the designs directly reflected the educational backgrounds of the architects. The designs seamlessly blended in with the neoclassical forms of the recently completed Field Museum and Soldier Field adjacent to the fairgrounds.

At the meeting, John Holabird stressed the need for an element of great height that could correspond to "a modern office building" as a central feature of the design. Like the New York commissioners, he felt that a colossal modern feature that dramatically dominated the exposition grounds would give identity to the fair in a similar fashion as the Eiffel Tower had for the Paris exposition of 1889.²⁰ While Raymond Hood included a central obelisk in his design, every other architect on the commission included a tall building in their scheme reminiscent of a set-back skyscraper—a visual form clearly representative of the modern technological theme of the fair.

While the commissioners continued to follow the Beaux-Arts approach to design that they felt comfortable employing, their next official meeting marked a major shift towards the creation of a modern fair. The seven designers present at the start of the meeting, held in early May 1929, closely followed an agreed-upon *parti* (a common aspect of the design process taught at the École des Beaux-Arts) in their new series of preliminary plans.²¹ Although these preliminary sketches still demonstrate a strong Beaux-Arts influence, the actual designs by the commissioners illustrate the beginning of a departure from a classical style. (Figure 6) Almost all of the architects continued to incorporate a set-back skyscraper form for the central "Hall of Science" tower.²² In addition to the main science building, many of the architects' plans also contain smaller secondary towers laid out in a symmetrically balanced fashion. The dramatic use of exterior lighting in several of the schemes may have been a reflection of the presence of the two recently hired consultants to the group—Norman Bel Geddes and Hugh Ferriss.²³

Having arrived in Chicago from Europe during the evening of the first day of the meetings, Raymond Hood did not present his scheme for the exposition until the start of the next day. His design initially startled the other architects, as he had not followed the given *parti*. Instead, his design included a diverse group of elements informally situated along either side of a long rectangular basin, highlighted by a massive set-back tower located off-center. (Figure 7)²⁴ Hood told his colleagues that he had come to the realization that "no matter how grand" the symmetrical preliminary plans were made, they "were still monotonous."²⁵ He stated that he had been impressed with the "value of 'unfolding interest' in the compositions of the recently held international expositions in Barcelona and Sevilla."²⁶ He realized that the inclusion of an informal layout would provide an element of flexibility by freeing the designers from a strict formal site plan. This shift from the use of strict axial symmetry to an emphasis on only a sense of balance reflects a general transformation taking place in the work of many progressive designers at the time, including most of those featured by Hitchcock and Johnson in the International Style Show.

Paul Cret agreed with Hood and stressed that the exposition would be more modern with an asymmetrical site plan while at the same time present a greater departure from earlier fairs.²⁷

He also thought that Hood's design would allow for the individuality of the various architects, painters, and sculptors to be expressed, thereby providing great variety of building treatments in place of "the monotony" of unified schemes.²⁸ Serendipitously, the use of an asymmetrical layout was better suited to the unstable financial situation of the Great Depression that proceeded the opening of the fair. It offered greater design flexibility thus allowing exhibitors to be added or subtracted as financial outlooks changed. It also meant that buildings could be scaled for specific needs and functions without having to worry about matching the designs of other structures.

The committee members then took a vote to decide on the favorite individual plan. Harvey Wiley Corbett, a staunch supporter of using a symmetrical layout, continued to express his feeling that the committee should not even consider Hood's asymmetrical design since he ignored the assigned elements of the *parti* and, thus, did not follow the established design rules. The rest of the commissioners quickly overruled Corbett's objections and Hood's asymmetrical design won with five votes.²⁹ By carrying out this decision, the commissioners finally cut themselves "adrift from the past, breaking away from traditions of balance and symmetry and classical design."³⁰

THE FINAL LAYOUT

After agreeing to use an asymmetrical plan, the commissioners gave the responsibility of creating the final layout to Paul Cret.³¹ Along with the last major vestiges of the members' Beaux-Arts planning, insufficient financial resources and a realization of the severity of the depressed economy resulted in the elimination of several major features central to the earlier schemes, including moving sidewalks and an airport. (Figure 8).³² As built, the fair wound its way down the shore of Lake Michigan and along Northerly Island with bridges that connected the island with the lakeshore, creating a large hourglass-shaped lagoon at the northern end of the grounds. The non-aesthetic definition of modern architecture was clearly reflected in the 50 large modern exhibition halls, futuristic model houses, and progressive foreign buildings that included a wide range of building forms. Designs of the major pavilions ranged from the "ultra-modern" yellow and blue Administration Building (Bennett, Burnham, and Holabird), with its silver, undulating entrance and factory-like fenestration; to the silver and gold Illinois Host Building (C. Herrick Hammond), with decorative features derived from the *Exposition Internationale des Arts Décoratifs et Industriels Modernes* of 1925; to the curved, streamlined facade of the Crane Company Building. (Figure 9)

Several of the earliest constructed pavilions, including the Hall of Science (Paul Cret) which served as the centerpiece of the fair, and the Electrical Building (Raymond Hood), were decorated with panels of bas-relief sculpture containing stylized, allegorical figures representing the sciences. (Figure 10) Many other buildings, however, including most of the corporate pavilions, like the Chrysler Motors Building (Holabird and Root), contained little or no applied ornament, except letters spelling out the company's name across their facades. (Figure 11) Pavilions, such as the Time and Fortune Building (Nicolai and Faro) and the Havoline Thermometer Tower (Alfonso Iannelli and Charles Pope), strove for more immediate corporate recognition by including giant reproductions of their products or related items as part of their building's design. (Figure 12) Several other companies commissioned pavilions constructed out of their own modern products. For example, the Owens-Illinois Glass Corporation Pavilion (Elroy Ruiz) consisted of a tower and two wings built out of their new, colorful glass bricks. The Home and Industrial Arts Exhibit contained a display of full-scale houses presenting modern ideas in residential living, including the 12-sided, glass House of Tomorrow. (Figure 13) What united the modern fair buildings, regardless of their aesthetic design and function, was the incorporation of innovative construction techniques and building materials, such as Masonite, glass block, and gypsum board. A comprehensive color scheme, created by Joseph Urban, which articulated the individual exterior planes of the major buildings through the use of vivid hues, unified the diverse fair pavilions. At night, the use of dramatic lighting effects created a magnificent, modern architectural spectacle best viewed from the double-decker, streamlined "rocket cars" of the massive Skyride looming above the fairgrounds.

CONCLUSION

This paper demonstrates the benefit of including "outposts of history" in our scholarly explorations of architecture. Through examining the commissioners' search for an appropriate definition of modern architecture for the Century of Progress International Exposition we receive important insight into the central debates over the definition of modern architecture during the late 1920s and early 1930s. We find, in particular, that modern architecture for most progressive American designers during this period did not consist of a limited aesthetic style as defined by Hitchcock and Johnson in the International Style Show, but included a wide range of innovative design forms and beliefs that directly responded to the rapidly changing modern world. As a result of such scholarly explorations, we as historians are able to achieve a richer understanding of the complexities of our architectural heritage.

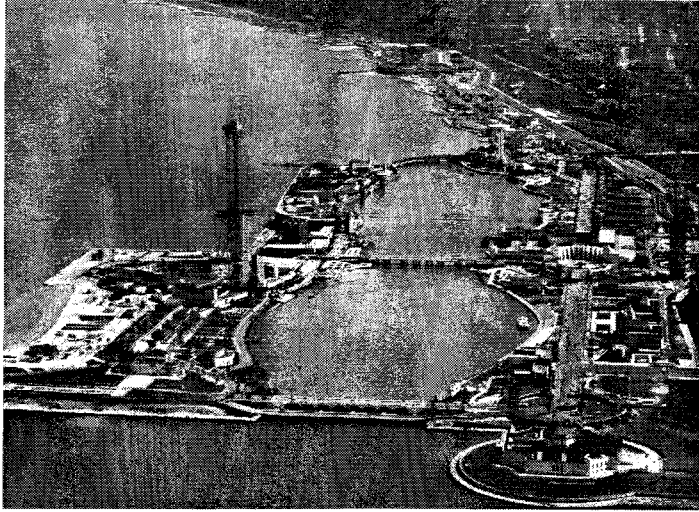


Fig. 1. Bird's-eye view of the fairgrounds. [Official World's Fair in Pictures: A Century of Progress Exposition, 1933. The Reuben H. Donnelley Co., 1933). np.]

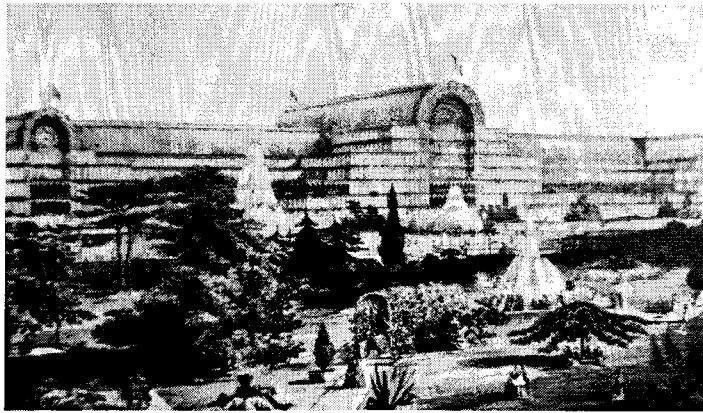


Fig. 2. Crystal Palace, 1851 Exposition. London. [Image in collection of author.]

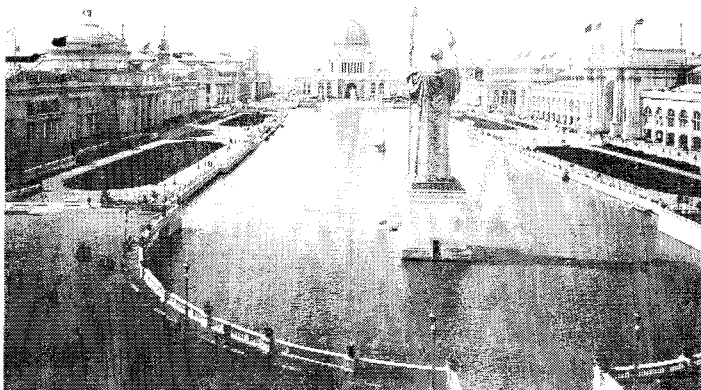


Fig. 3. Court of Honor at the 1893 Columbian Exposition. [Image in collection of author.]

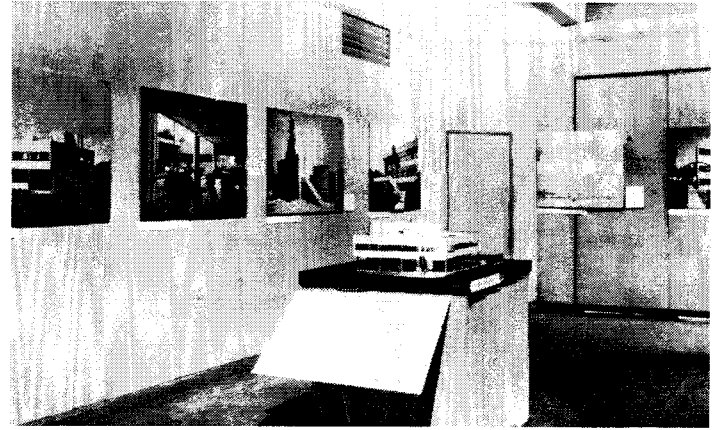


Fig. 4. Section of International Style Show dedicated to Le Corbusier. [©2000 The Museum of Modern Art, New York.]

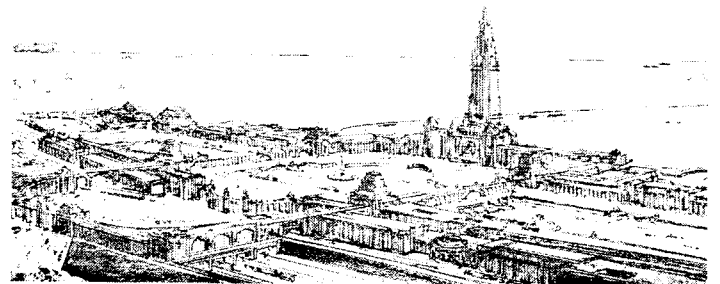


Fig. 5. Early scheme for the Exposition by Hubert Burnham. [Louis Skidmore, "Planning and Planners," 29.]

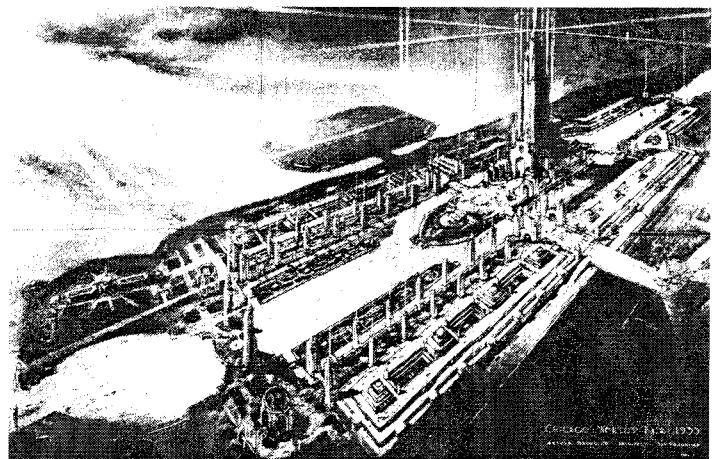


Fig. 6. Preliminary scheme using the parti by Arthur Brown, Jr. ["A Century of Progress," Western Architect (June 1929): 91.]

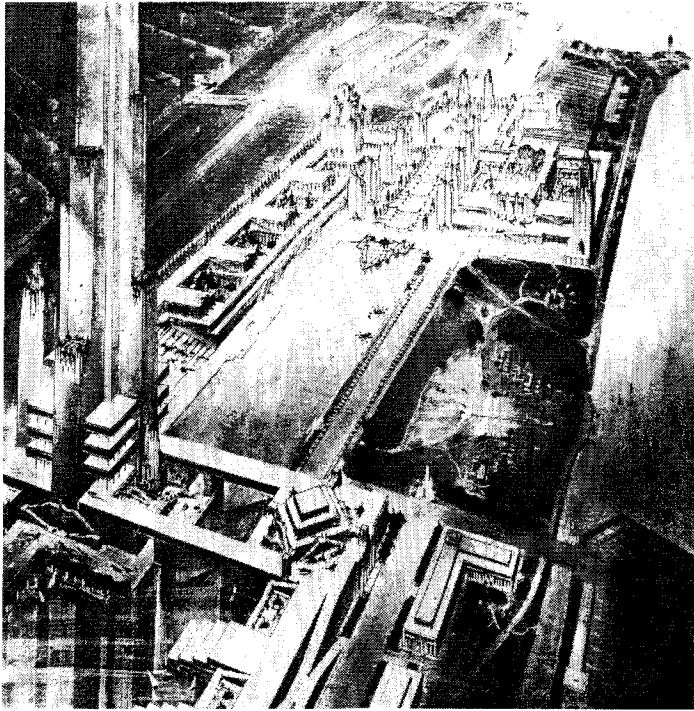


Fig. 7. Asymmetrical preliminary scheme by Raymond Hood. [“A Century of Progress.” *Western Architect* (June 1929): 93.]

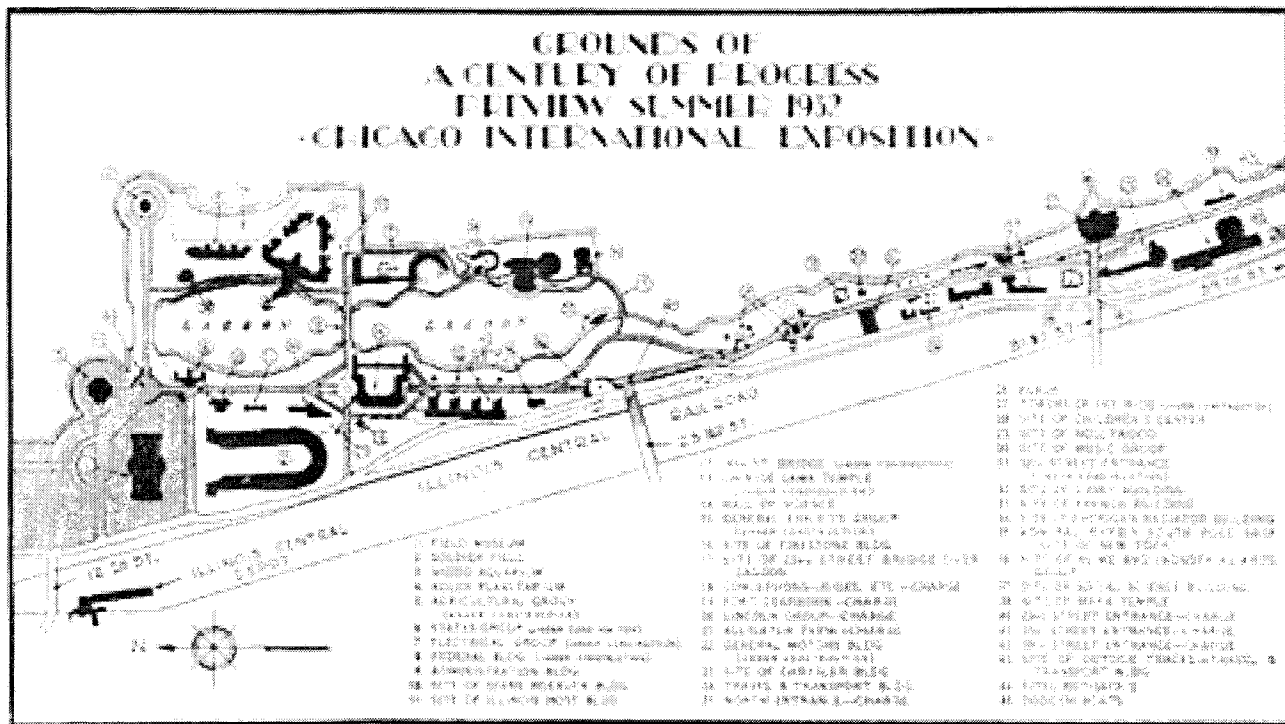


Fig. 8. Layout of fairgrounds. [Eben J. Carey, *Medical Science Exhibits: A Century of Progress* (Chicago: *A Century of Progress*, 1936), 4.]

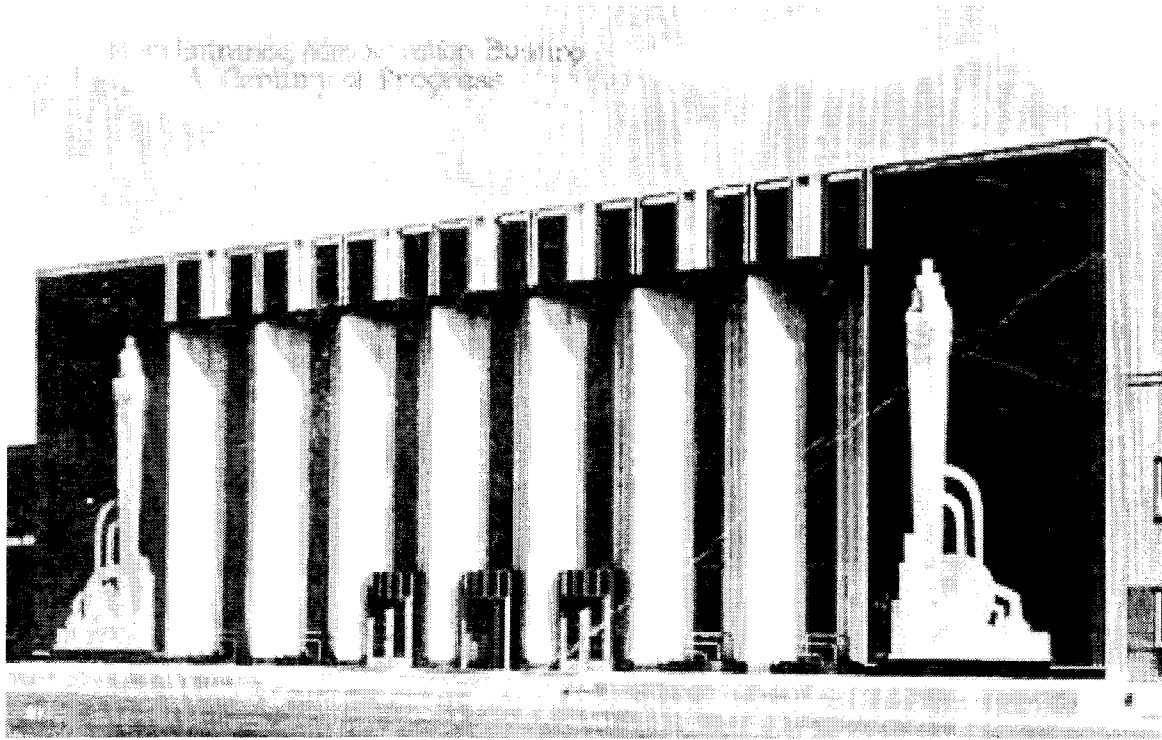


Fig. 9. Administration Building. [Postcard in collection of author.]

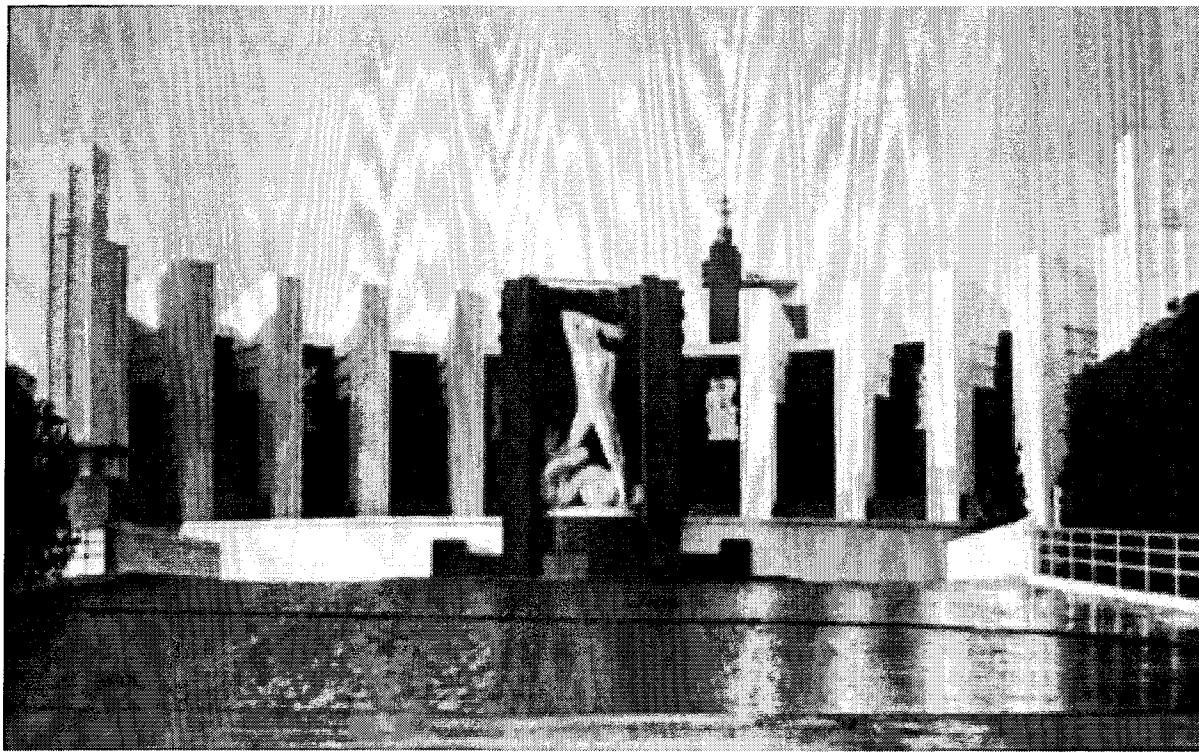


Fig. 10. North Court of the Hall of Science. [Official World's Fair in Pictures. np.]

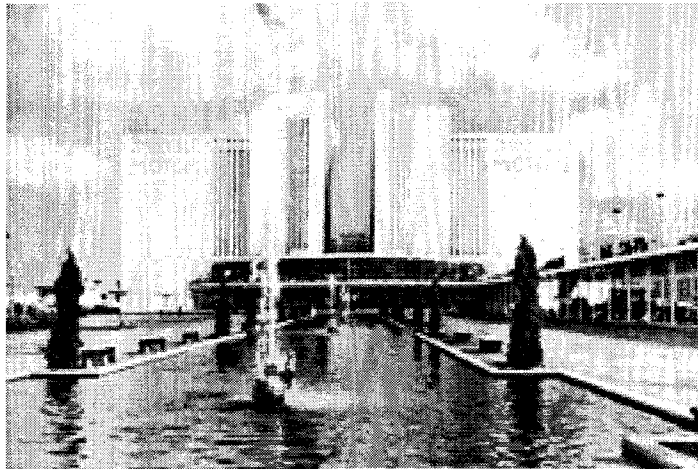


Fig. 11. Chrysler Pavilion. [Official Pictures in Color, 1934 (Chicago: A Century of Progress, 1934), np.]

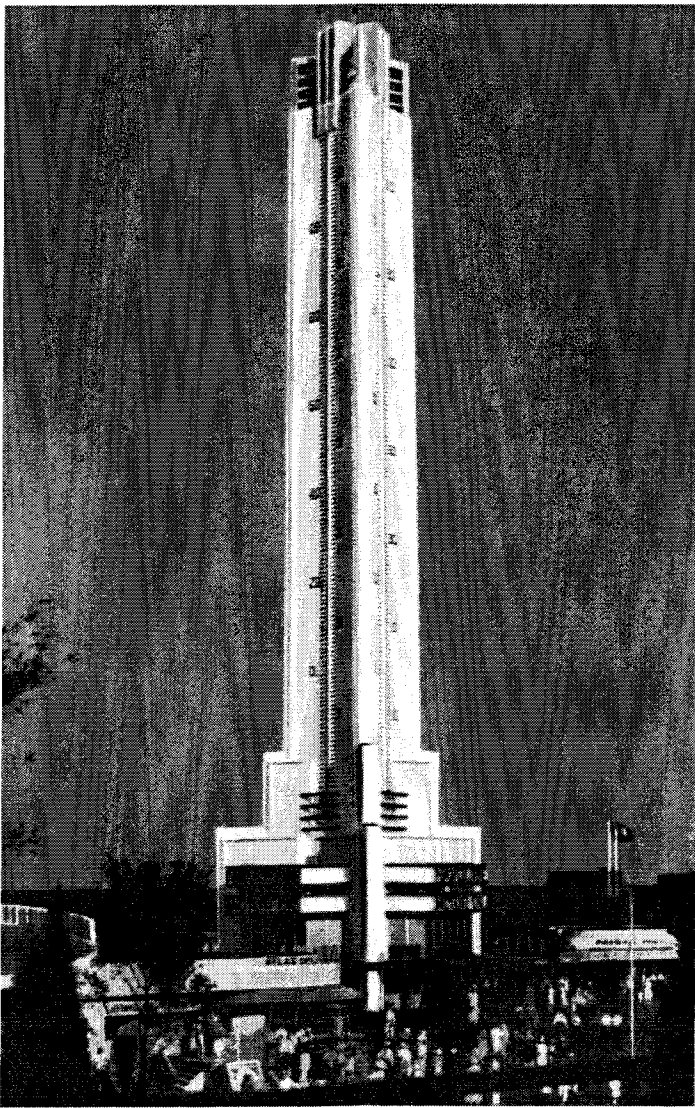


Fig. 12. Harline Thermometer Building. [Official World's Fair in Pictures, np.]

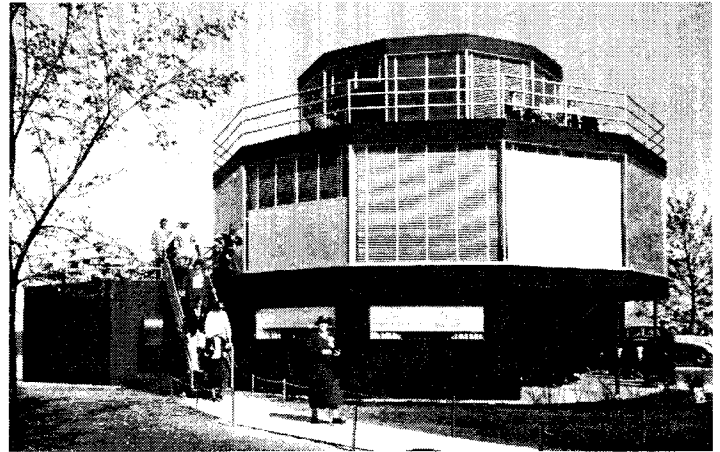


Fig. 13. House of Tomorrow. [Official World's Fair in Pictures, np.]

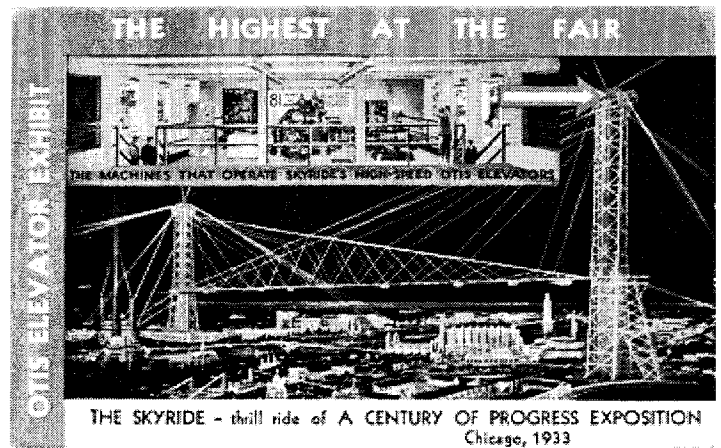


Fig. 14. Skyride at night. [Postcard in collection of author.]

NOTES

- ¹ Terence Riley, *The International Style: Exhibition 15 and the Museum of Modern Art* (New York: Rizzoli, 1992), 83.
- ² The exhibit drew 33,000 visitors during its six-week run. In contrast, 186,000 people attended the Metropolitan Museum of Art's "The Architect and the Industrial Arts" exhibit in 1929. *Ibid.*, 85-86.
- ³ The Crystal Palace, the largest glass and iron structures of its time, employed the concept of pre-fabrication in the construction of its exterior walls. The translucent facades consisted of thousands of twelve by 49 inch, mass-produced, glass panels, standardized for rapid assembly by men sitting on a wheeled trolley designed to run along "gutters" located in the iron framing of the building. Christopher Hobhouse, *1851 and the Crystal Palace* (New York: E. P. Dutton and Co., 1937), 50; Wolfgang Friebe, *Buildings of the World Expositions* (Leipzig: Druckerei Volksstimme Magdeburg, 1985), 73, 92.
- ⁴ The group of skyscrapers that comprised Rockefeller Center contained over 10,000,000 square feet of rental space. The RCA Building was the tallest building in the complex at 70 stories in height. While an exploration into this large-scale corporate neighborhood does provide insight into several major issues in American architecture during the early 1930s, including the rise of large multi-use building complexes designed by cooperative groups of architects, the limited character of the project precluded Rockefeller Center from embodying anywhere near the range of new developments in modern design explored at the second Chicago world's fair.
- ⁵ Hitchcock and Johnson were joined by Alfred Barr, the first director of MoMA. All three men had attended Harvard University. Henry-Russell Hitchcock completed a year of architectural study while in college before taking some

graduate courses in the fine arts department. After graduation he lectured and wrote extensively on a variety of topics, including contemporary architecture in Europe and the United States. He published his first work on modern architecture in 1928. Philip Johnson's initial studies at Harvard University included classics and philosophy. It was not until 1943, a decade after the International Style Show had closed, that Johnson received his degree in architecture from Harvard's Graduate School of Design. Riley, *The International Style*, 13; John Jacobus, "Philip Johnson," in *The Macmillan Encyclopedia of Architects*, vol. 2, ed. Adolf K. Placzek (New York: Free Press, 1982), 499.

⁶ Riley, *The International Style*, 66.

⁷ Social concerns were covered in the housing section of the exhibit organized separately by Clarence Stein, Henry Wright, and Catherine Bauer and curated by Lewis Mumford, as well as in a related essay by Mumford for the catalog. However, Hitchcock and Johnson avoided social issues in their sections of the exhibition and eliminated Mumford's essay in the related book *The International Style: Architecture Since 1922*.

⁸ Henry-Russell Hitchcock and Philip Johnson, *The International Style* 1932 repr. (New York: W & W Norton and Company, 1966), 13.

⁹ Hitchcock had praised these European designers in his earlier book, *Modern Architecture: Romanticism and Reintegration*, as the "new pioneers" responsible for initiating an European architectural movement based on lessons learned from engineers and the previous generation of progressive architects, including Frank Lloyd Wright, Peter Behrens, Henry Van de Velde, and Auguste Perret (designers Hitchcock considered only "half-modernists" and labeled "the new traditionalists"). Henry-Russell Hitchcock, *Modern Architecture: Romanticism and Reintegration* (New York: Payson & Clarke, Ltd., 1929), passim; Hitchcock and Johnson, *The International Style*, 27.

¹⁰ Hitchcock and Johnson added other designers prior to the exhibition opening when they realized that the architects originally selected for the show did not represent an extensive international assemblage. To validate their claim of the existence of an international style, the curators incorporated a section of photographs to illustrate the extent of modern architecture around the world. This display included images of 40 different buildings located in fifteen countries, ranging from Spain to Japan, which exemplified the aesthetic principles laid out in the exhibition. Lawrence Wodehouse, *The Roots of the International Style* (West Cornwall, CT: Locus Hill Press, 1991), 131; Riley, *The International Style*, 63.

¹¹ Riley, *The International Style*, 85.

¹² Deborah Frances Pokinski first discussed the evolution in the definition of "modern architecture" in the chapter "The Ascendance of Modernism" in her book, *The Development of the American Modern Style* (Ann Arbor, MI: UMI Research Press, 1984), 51-72.

¹³ The other members of the architectural commission were Edward Bennett, Arthur Brown, Jr., Hubert Burnham, John Holabird, and Ralph Walker.

¹⁴ Paul Philippe Cret, response to Howard Lewis Shay published in the *T-Square Club Journal* 1 (February 1931): 14. Cret, however, did view architecture as an art and felt strongly that architecture should not be devoid of ornamentation. He wrote in 1927 that "an architecture which is deduced solely from the necessities of construction is not architecture, because it was not art—it fails completely to evoke the emotional values latent in a mere manifold of mechanical factors. 'Architecture begins where calculations end.'" Paul Philippe Cret, "The Architect as Collaborator of the Engineer," *Architectural Forum* 49 (July 1928): 97-104.

¹⁵ Marc Vincent, "'Natura non facit saltus': The Evolution of Paul Cret's Architectural Theory," (Ph.D. Diss., University of Pennsylvania, 1994), 335.

¹⁶ R. W. Sexton, *American Apartment Houses, Hotels and Apartments* as quoted in Robert A. M. Stern, *Raymond M. Hood* (New York: Rizzoli International Publications, Inc., 1982), 24.

¹⁷ John A. Holabird for Harvey W. Corbett, to Rufus C. Dawes, 25 May 1928, Century of Progress International Exposition Archives, Special Collections, University of Illinois at Chicago.

¹⁸ Designs were published three months later in: "Preliminary Studies for the Chicago World's Fairs," *Pencil Points* 10 (April 1929): 217-28.

¹⁹ According to Dr. Albert D. Allen, the architects at this point reluctantly admitted that "the architectural traditions of the past still held them." Forrest Crissey, "Why the Century of Progress Architecture?: An Interview with Allen D. Albert," *Saturday Evening Post*, 10 June 1933, 62.

²⁰ Chicago World's Fair Centennial Celebration of 1933, "Minutes of the Third Meeting of the Architectural Commission," 21 January 1929, 5, CofP, UIC.

²¹ These designs were published in *Western Architect* the following month. "A Century of Progress," *Western Architect* 38 (June 1929): 91-98.

²² It is unclear in Ralph Walker's perspective, however, if his tower represents a Hall of Science, or illustrates a version of his design for the Tower of Water, a massive unrealized waterfall he created for the exposition.

²³ Chicago World's Fair Centennial Celebration of 1933, "Minutes of the Fifth Meeting of the Architectural Commission," 1 May 1929, 1, CofP, UIC. Both Geddes and Ferriss were interested in achieving dramatic theatrical effects in building design. Ferriss was known for his architectural renderings that often incorporated dramatic uses of lighting.

²⁴ "A Century of Progress," *Western Architect* 38 (June 1929): 93. Symmetry did prevail, however, in the individual elements of Hood's scheme.

²⁵ "Minutes of the Fifth Meeting of the Architectural Commission," 8.

²⁶ Ibid. There is some question whether Hood really did come up with the concept for an informal layout as a result of visiting the Spanish expositions. These fairs both contained strong symmetrical axes that dominate the grounds. The Spanish Village venue at the Barcelona exposition, still in operation today, however, consists of an asymmetrical layout. One alternative story, according to Louis Skidmore, was that the idea for an informal layout was "brewing" in Hood's mind while he sailed to Europe. During a stop in Paris, Hood met two "Architectural Scholarship" men in the Café des deux Magots (probably Frank Roorda and Carl Landerfelt) and told them of his idea for an asymmetrical plan. He sketched his new *parti* on the marble tabletop and then told them that he wanted a drawing prepared. The young designers worked day and night on the problem and when Hood returned to Paris several days later the sketch was ready for him to take back to the United States. Skidmore, "Planning and Planners," 30; Alfred Bendiner, "Wild Gold Medal Winners I have Known," *ALA Journal* 28 (May 1957): 24-25. A third story, suggested by Walter H. Kilham, Jr. in his biography on Hood, was that the architect received the idea while on vacation in Amalfi, Italy, then went to Paris and had Skidmore, Roorda, and Landerfelt draw up the design. Kilham, *Raymond Hood, Architect*, 108.

²⁷ Paul Cret, to Mr. Burnham, 1 July 1929, CofP, UIC.

²⁸ Ibid.; "Minutes of the Fifth Meeting of the Architectural Commission," 8.

²⁹ From comments made during the meeting and published in the minutes, it appears that the commission members not in favor of an asymmetrical layout were Corbett, Brown, and Bennett. "Minutes of the Fifth Meeting of the Architectural Commission," 13-14, 16.

³⁰ Skidmore, "Planning and Planners," 31.

³¹ Cret was selected for the task because the commissioners believed that he was the one member who could take into consideration all the points raised at the meeting and create a successful final design. Approval to his asymmetrical design scheme was to be then carried out through the mail. "A Century of Progress," *Western Architect* 38 (June 1929): 91; "Minutes of the Fifth Meeting of the Architectural Commission," 16-17.

³² Chicago World's Fair Centennial Celebration of 1933, "Minutes of the Meeting of the Architectural Commission," 26 September 1929, CofP, UIC; "A Century of Progress," *Western Architect*, 91.