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The Image of the Skyscraper in American Art, 1890-1931

By

Merrill Schleier
A.B. (City University of New York, City College) 1973
M.A. (University of California) 1976

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

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Dickran Tadjjian

DOCTORAL DEGREE CONFERRED
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INTRODUCTION

By the 1890's, skyscrapers became an integral part of the topography of both New York and Chicago. As a result of advances in technology and engineering, these vertical towers changed the physical character of cities in the United States. They proliferated at a crucial period when America's perception of itself and the values supposedly represented were being questioned. The advent of the tall building, concurrent with the dawn of the new century, both engendered and was symptomatic of the cultural metamorphosis that was taking place. It suggested such diverse issues as material and technological advancement to the detriment of human priorities, the relationship of business to spirituality, the expansion of cities at the expense of the natural ambiance, and the position of American art and architecture in relation to European prototypes. Simply, it served as both a thorn in the side of those who sought to preserve traditional culture and modes of living, and as a symbol of ingenuity, progress, and nationalism to those who wished to embrace the new. It transformed irreversibly America's views of itself.

An analysis of the artistic interpretation of the skyscraper enables one to identify and define these tensions
and issues in the painting, photography, and graphics of
the period. Moreover, the tall building possesses a
character all its own, separate from other manifestations
of industry and urbanism. The aesthetic response to the
skyscraper reveals how artists perceived and coped with
the rising city, and those aspects of the metropolis that
inspired their reactions. More importantly, skyscraper
imagery provides insight into what it meant for American
artists to depict their own milieu in the early years of the
century.

There has been no comprehensive study on the image
of the skyscraper to date. Traditionally, scholars have
treated renditions of industry and the urban sphere as
a homogeneous unit, discussing visualizations of bridges,
the machine, and the tall building interchangeably. This
approach was initiated by Milton Brown in 1943 and developed
by Martin Friedman in The Precisionist View of American Art
of 1960.2 It is important to separate the tall building
from other manifestations of industry because of its
inimitable character and the particular iconography it
engendered. For example, the skyscraper's loftiness and
shape as well as certain buildings prompted interpretations
that did not encompass other aspects of the city.

Moreover, many of these general studies have
categorized the artistic response to the skyscraper as
largely favorable. Joshua Taylor referred to them as
"images of urban optimism" while Friedman spoke of them as "proud symbols of technological splendor." Despite the quintessentially laudatory interpretations by Hugh Ferriss and Charles Sheeler, a closer examination of skyscraper depictions and artists' statements suggests that most were ambivalent. This feeling began with the picturesque renditions of the early period when the tall building's so-called prosaic and industrial character was obfuscated by evocative veils of pigment and was continued in the crushing, disorienting, and vertiginous images of the twenties. Often these equivocal representations reflected the polemical discussions concerning the skyscraper's viability which persist today.

A reliance on the intellectual and cultural history, literature, and popular criticism of America is essential in assessing skyscraper images more accurately. Too often, scholars have surveyed these depictions solely in terms of stylistic antecedents and formal analysis. While it is important to acknowledge the debts to Cubism, Futurism and Dada, often this approach omits the climate of opinion in America which spawned these depictions of the tall building. Only by integrating the aesthetic responses of native artists with those of other intellectuals and observers in their milieu do patterns of thought and consistent attitudes begin to emerge concerning the skyscraper. Often artists articulated
similar views as their colleagues in other disciplines. This methodology is particularly useful in evaluating the early years of the century when both images and writings concerning the skyscraper were scattered and infrequent.

Another problem with a purely stylistic analysis is that it often leads to an assessment of American images solely in terms of an international context, negating attitudes toward the city present in the native milieu. For example, Stieglitz's photographs, writings, and gallery practices often tell us more about the nature of the American modernists' reaction to the skyscraper than the superficial resemblance of their work to the paintings of Delaunay and Boccioni.

In addition, the architectural history and changing topography of the American city is crucial to any discussion of the artistic response to the skyscraper. The selection of specific buildings and areas of New York such as Wall Street, the adaptation of the new skyscraper morphology of the twenties, and the juxtaposition of certain towers with older edifices by artists provides insight into the myriad ways the architecture itself engendered the resultant images.

Despite the paucity of information concerning depictions of the skyscraper, preliminary attempts have been made to consider it in art historical scholarship. An exhibition of 1979 entitled *Skyscraperism, The Tall*
Building Artistically Considered c. 1900 – 1930 was conceived by James O'Gorman of Wellesley College. Beginning with a single page introduction by O'Gorman, the remainder of the catalogue was devoted to short essays by undergraduates in the latter's seminar. The concept of "skyscraperism" as employed by O'Gorman remains vague, however. While it was used originally as a pejorative term by Frank Lloyd Wright, O'Gorman maintained that he was employing it objectively to encompass both the imagery and history of the city. He perceived the artistic response to the skyscraper as "a function of temperament ... tending to make each record a separate experience." O'Gorman's approach is directly at odds with the present study which explores the cultural context that spawned these images.

However, O'Gorman recognized that the skyscraper was rendered in a myriad of ways from skyline views to isolated monuments. Most importantly, the author and his students considered the specific edifices which appeared in the works, a parallel concern of this author. Yet he disputed the notion that artists were responding to certain styles in architecture, a factor explored in the final chapter of this inquiry.

A dissertation by Dominic Ricciotti entitled "The Urban Scene: Images of the City in American Painting, 1890 – 1930" of 1977 included a separate chapter on the skyscraper.
This analysis was largely chronological in format and stylistic in orientation, as he traced the artists' awareness of the skyline in the 1890's to Stella's *New York Interpreted* series of 1922. Moreover, the author did not utilize primary source material which is crucial to an understanding of the subject.\(^7\)

More useful to the present study are two general works on urbanism. Wanda Corn's article "New New York" of 1973 explored the artistic reaction to modern Manhattan in the years 1900 until 1910. Integrating the art with both literary and popular responses to the urban scene, Corn evaluated them in the context of the changing appearance of the city, including its electric lighting, sprawling overhead "Els," and burgeoning new buildings. Ultimately, she concluded that these early chroniclers were uncomfortable with the rapid pace of growth and preferred the "sublime, picturesque and exotic" as an appropriate vocabulary in which to couch their images.\(^8\)

While Corn focussed on the early years of the century, Joshua Taylor surveyed the years after the first world war. In his chapter "The Image of Urban Optimism" in *America As Art* of 1976, Taylor examined the response to the city in the context of international developments from Futurism to the Bauhaus. Information is provided on such forgotten, but crucial personalities as Louis Lozowick and Hugh Ferriss. The author's categorization of the city
as a symbol, often of man's exhilaration, served as an important springboard for many of the ideas in this work.\textsuperscript{9} Augmenting art historical sources, three dissertations on architectural issues were essential for this study. Arnold Lehman's "The New York Skyscraper: A History of its Development, 1870 - 1939" of 1974 provided a historical and stylistic account of the genesis of the Manhattan skyscraper, with specific emphasis on the most important buildings. Lehman's research helped clarify why certain edifices were repeatedly selected by artists, and served as a point of departure for further exploration on the architectural character and changing topography of New York. In "Esthetic and Socio-Economic Factors of Skyscraper Design, 1880 - 1930" of 1975, Bruce Radde discussed the skyscrapers in cities other than New York and Chicago and the architects who helped formulate the new skyscraper morphology of the twenties. Finally, in Stanley Peter Andersen's "The Response to the Skyscraper, 1870 - 1939" of 1960, the author analyzed the critical reaction of the architectural community, introducing the tensions between Hugh Ferriss and Lewis Mumford in the third decade of the century. As he demonstrated, the opinions of architects and their critics create a more comprehensive picture of the views of other intellectuals to the tall building.\textsuperscript{10} 

* * *
This study commences just before the turn of the century when the aesthetic visability of the skyscraper was still a hotly debated issue. The simultaneous hostility and sympathy to the tall building will be viewed as symptomatic of the shift in American values, from an adherence to conservative, genteel, European-derived principles to a progressive view which favored an art derived from the native experience. These conflicting positions may be seen if one compares the writings of Henry James and John C. Van Dyke. The former advocated the preservation of traditional culture and forms while the latter preferred the change and novelty wrought by commercial expansion. Pictorially, these tensions were manifested in the juxtaposition of older monuments with the skyscraper.

The vocabulary employed in the rendition of these early images reveals a deeply felt ambivalence even among skyscraper renderers and their apologists. The efforts of Birge Harrison, Colin Campbell Cooper, Joseph Pennell, Albert Fleury, and Alfred Stieglitz will be examined in this regard. In addition, a close study of eighteenth-century notions of the picturesque demonstrates how artists and critics rationalized the depiction of the skyscraper in the context of anachronistic concepts developed in Europe.

An examination of the themes selected by the early
chroniclers of the skyscraper suggests that certain accepted modes of rendering were established in the early years of the century. These were inspired by such diverse factors as the changing appearance of the city caused by the tall building, the most spectacular buildings that were erected, and the impact of these factors on the life of the city's inhabitants.

Although Alfred Steiglitz was a contemporary of the early renderers of the skyscraper, his works, writings, and the intellectual climate he provided requires separate treatment. Despite his role as an equivocal renderer of the skyscraper throughout his career, his views engendered a new way of perceiving it among his colleagues at "291." He may have prompted the seminal images of Alvin Langdon Coburn whose significance as an objective renderer of the tall building has not been fully explored. An examination of the influence of the photographers on American modernists such as John Marin, Max Weber, and Abraham Walkowitz, seen in their adoption of identical buildings and sites, will reverse the trend to view these works solely in the context of European stylistic antecedents. Although the statements and works of Duchamp, Picabia, and Gleizes will be considered, they will be evaluated as a further popularization of the favorable opinions articulated earlier by Stieglitz and his associates.

The brief period of optimism among the members of
the "291" circle in the years before the war was supplanted once again by a more ambivalent stance. Inspired in part by the rapid city expansion in the twenties, the dialogue concerning the feasibility of the skyscraper reemerged. In this context, the intellectual history of the decade is most important because similar views were voiced by a wide variety of commentators from novelists to city planners. The skyscraper became a symbol both of man's highest intellectual and spiritual potential and his most oppressive nightmares. The positions taken by such detractors as Lewis Mumford, Harold Stearns, Mary Borden, and Waldo Frank were directly at odds with the utopian pronouncements of Sheldon Cheney, Hugh Ferriss, and Jane Heap.

Thus, images of pure optimism, pessimism, and ambivalence existed simultaneously in the twenties. The unequivocal position was manifested in the functionalist predilections of Charles Sheeler, the corporate-inspired efforts of Margaret Bourke-White, and the utopian renderings of Hugh Ferriss. In contrast, the overtly negative reaction was seen in the associations of dehumanization, congestion, and hell in the work of Joseph Stella, Paul Strand, and John Alden Carpenter. Others were more tentative in their hostilities. The proliferation of disorienting and detaching images revealed an inability to cope with the continued lateral and vertical expansion of
the skyscraper. These conflicting positions were most cogently expressed in Strand's and Sheeler's film Mannahatta of 1921.

Lastly, the twenties experienced the formulation of a new American solution to the problem of skyscraper design. The set-back morphology transformed the shape of the unarticulated tall building which, in turn, transformed the artistic perception of it. Thus, the image of the tall building was not simply a symbol of the ideological tensions of the decade but a product of the physical imperatives of the city itself.
Chapter I.
THE CRITICAL RESPONSE TO THE SKYSCRAPER,
1890 - 1917

From approximately 1890 until 1917, the aesthetic viability of the skyscraper was a hotly debated issue. On one side were Henry James, William Dean Howells and George Santayana who sought to preserve the traditional, the academic, and the European-derived. Referring to the skyscraper as a usurper of time-honored values, a symbol of materialism, and an aesthetic anathema, they advocated its abolition. Augmenting these representatives of genteel America were those that pointed to the detrimental impact of the skyscraper on the health and welfare of the city's inhabitants. The Chicago realists Henry B. Fuller, Will Payne, and Frank Norris indicted the tall building for fostering pollution, congestion, and dehumanization. These views were so pronounced that they resulted in the activity surrounding the skyscraper being likened to war, hell, and death, subjects that were taken up by artists in succeeding decades.

While the negative view was dominant until around 1910, there were those that praised the new architecture
as the first truly American creative endeavor. By the late 1890's, progressives such as Robert Henri, Louis Sullivan, and John Dewey attempted to revamp their respective fields by insisting that they reflect the native experience of the present rather than rely on antiquated European prototypes. These prescient observers made it possible for others to accept the skyscraper. Suddenly, art critics began to call for its depiction in such periodicals as Scribner's, Camera Work and The Craftsman. Yet a close examination of these ostensible statements of encouragement reveals that attitudes were still influenced to a large extent by the detractors. They considered the skyscraper as inherently mundane and ugly and suggested that artists infuse their depictions of it with emotion and poetry. Those creative personalities responding to these invocations reflected the same covert discomfort. Adopting a picturesque vocabulary, they suppressed the industrial character of the tall building in favor of a skyscraper image which accorded with conservative notions of taste.

It was not until the turn of the century that skyscrapers were finally accepted as subjects suitable for the fine arts. The lack of recognition occurred, in part, because of the dominant perception that skyscrapers were a product of base commercialism and thus wholly incongruent with elevated artistic matters. From approximately the Centennial Exposition of 1876 until the outbreak of World
War I, the dominant aesthetic thought was firmly rooted in Old World values and conservatism. Employing religious terminology, cultured intellectuals such as the Harvard art historian Charles Eliot Norton asserted that art should be the embodiment of abstract ideals, an expression of the country's "faith" and "loftiness" of spirit. The self-appointed wards of high culture, including William James, Edith Wharton, and George Santayana, advocated the preservation of tradition borrowed from a wide variety of European sources. Rather than regarding these adaptations as eclectic in a negative sense, these traditionalists believed that since fledgling America lacked a viable cultural past, drawing from the entire gamut of western civilization afforded one the opportunity to absorb only its high points.

In order to imbue their subjects with a high moral tone, artists often rendered human figures as symbolic virtues and landscapes as representations of God's work. The depiction of the here and now was eschewed in favor of the absolute or the ethereal. As Richard Guy Wilson observed recently, even in those works that did not seek to communicate a sense of the ideal, such as genre and historical subjects, "the influence of the idea" could be detected in "art's removal from the world of mundane realities." One need only recall the cloistered, exotic interiors of Sargent, the contemplative female protagonists
of Dewing's insular, indeterminant ambiances and the other-worldly character of Inness' late landscapes to appreciate how far art was divorced from current actualities.

The most important argument levelled at the tall building was that its commercial character was physically and ideologically antithetical to aesthetic concerns. One of the earliest acknowledgments of the rupture between elevated artistic matters and the crudity of business occurred in Frank Norris' *The Pit* of 1902. At the onset of the novel, which explores the machinations of Chicago's financial district, the major female protagonist is pursued by two gentlemen of contrasting sensibilities. One is a sensitive, aesthetic type who occupies his time "gently in the calm, still atmosphere of art . . . painting, reading or . . . developing his stained glass" while the other, an aggressive capitalist and speculator, procures his fortune in the midst of the city's burgeoning skyscrapers. Won over by the forceful spirit of the latter, she discovers to her chagrin that their married life together is secondary to his stock market dealings. Often alone and neglected, she realizes the incongruity of business with that of high culture:

... the clatter of millions of dollars, and
the trampling and wild shouting of thousands of men
... invaded the very sanctuary of art, and cut
athwart the music of Italy and the cadence of polite conversation.
The most articulate spokesman of this view was Henry James, an expatriate who immersed himself in European tradition. In his acclaimed *The American Scene* of 1904-5, James surveyed the changes that had transpired during his thirty-year absence. Discounting tall office buildings, he maintained that they were "giants of the mere market," hence implying that they were still opposed to lofty ideals. Comparing the tall monolith built for economic expediency to Giotto's skyward bell-tower in Florence, he pointed to the inherent differences for their respective existences. Unlike the American tower erected for pure material gain, "beauty has been the object of its creator's idea" in Giotto's endeavor, suggesting that architecture must be the product of an elevated conception in order to possess aesthetic legitimacy.

This rupture between the so-called fine arts and commercial interests is nowhere more obvious than the simultaneous burgeoning of the utilitarian, curtain-walled buildings of the Chicago School and the *World's Columbian Exposition* of 1893. Despite the pioneering of a new and experimental mode of building, the official notion of architecture was firmly entrenched in *beaux-art* notions of taste. Prominent intellectuals such as William Dean Howells who visited the fair commented on the dramatic contrast between the rapid urban expansion of Chicago and the great white city of the Exposition. Preferring the
utopian simplicity and harmonious balance of the fair, he lambasted Chicago as a "Newer York, an ultimate Manhattan, the realized ideal of that largeness, loudness and fastness, which New York has persuaded the Americans is metropolitan."\(^8\)

The rupture between business and art was also evident in the artistic tastes of the nation's leading patrons. The "American Medici," as they have been recently termed, secured their fortunes in industry, yet ironically were unwilling to accept an art based on their American milieu.\(^9\) Amassing a huge fortune from railroads and real estate, the Vanderbilts erected seventeen houses filled with assorted treasures from Europe. Frank Copperwood, the major protagonist of Theodore Dreiser's *The Titan* also engaged in seemingly incongruous pursuits. Despite his rugged, individualistic, and not always ethical manner of doing business in Chicago's developing rapid transit system, Copperwood also collected art. Instead of purchasing the work of the American realists who were depicting the metropolitan scene, his aesthetic tastes were wholly European in orientation. Paintings by Luini, Pinturrico, Van Beers, Bastien-Le-Page, and Gerôme comprised his collection.\(^10\)

Expectedly, one of the most popular art displays of the 1893 *World's Columbian Exposition* was entitled, "Foreign Masterpieces Owned By Americans." Whether this popularity resulted from a sense of cultural inferiority on
the part of collectors or the investment potential of recognized European artists, there was definite resistance to both American artists and native subjects.

In addition to the pervasive notion that the pecuniary and the aesthetic were mutually exclusive, a sizable number of commentators considered the tall building, both individually and in groups, as physically ugly. Since art was supposedly concerned with the depiction of the "beautiful," this attitude precluded a consideration of the skyscraper as a suitable subject for artistic endeavor. An early observer lamented that tall office buildings "would be calculated first to occasion surprise" in the "well ordered and stable mind," and second to fill the "artistic and aspirant soul with utter disgust."

Henry Fuller's *The Cliff Dwellers*, the earliest novel to treat the skyscraper at length in 1893, developed this disparaging view. Employing metaphors derived from the natural landscape, Fuller painted a picture of wanton chaos and irregularity. At the top of one of "these great capitains," one would find:

> the rugged and erratic plateau of the Badlands . . . in all its hideousness . . . a wild tractful of sudden falls, unexpected rises, precipitous dislocations. The high and the low are met together. The big and the little alternate in a rapid and illogical succession. 

This image of urban chaos was to attain an increasing number of adherents. William Dean Howells, whose
novels were often situated in urban locales, detested the hodge-podge of tall buildings in Manhattan and Chicago. In *Letters of an Altrurian Traveller*, a fictional account of the reaction of a martian to the United States in 1893, Howells complained of the "long stretch of one of their tiresome perspectives (that of the New Yorker) which is architecturally like nothing so much as a horse's jaw bone, with the teeth broken or dislodged at intervals . . . a chaos come again." Likewise, the journalist and art critic Charles Caffin complained of a "higgledy-piggledy agglomeration of many styles, dimensions and degrees of good, bad and indifferent . . . with little regard for harmony. . . ." Henry James' characterization of the New York skyline as a "pin-cushion in profile" seemed to sum up the attitude of a generation of detractors.  

Those who considered the skyscraper physically objectionable were no doubt comparing the new steel-framed structure to European prototypes or more traditional buildings. Skyscrapers were not only criticized for their lack of homogeneity, but also were considered grossly out of proportion in relation to accepted standards of architecture. In an article of 1899, an anonymous critic observed that "their exaggerated vertical proportions" rendered "it impossible to judge these buildings by ordinary canons" of beauty. Later, Henry James referred to the skyscraper as a "fifty-floored conspiracy against the
very idea of ancient graces."\(^{13}\)

Those that wished to maintain a genteel conception of the city viewed the skyscraper as a usurper of its more traditional architectural monuments. Commercial interests were blamed for encroaching upon the delicate flowers of civilization. William Merritt Chase deplored the current situation in Manhattan:

> It is most discouraging to find one bit after another of the old architectural artistic productions wiped out of existence . . . The skyscraping monsters have smothered quite out of existence as objects of beauty many of the mighty landmarks of this city . . . old Trinity Church down Broadway, Dr. Parkhurst's church in Madison Square and many others too numerous to mention.

The novelist and artist F. Hopkinson Smith concluded pessimistically that there were "no more time-honored treasures--houses, churches . . . no more quaint doorways and twisted iron railings. . . ."\(^{14}\)

It was Henry James who explored most extensively this view of the skyscraper as undermining, both physically and philosophically, the very bastions of culture and tradition. In *The American Scene*, James blamed tall buildings for overshadowing and replacing the revered older structures of the past as well as extinguishing the sense of refined community so reminiscent of his boyhood in New York. Of the older edifices supposedly victimized by the skyscraper, he singled out the once preeminent Trinity Church, now "mercilessly robbed" of its "visibility." Clearly, this
particular building was selected because of its past status as the tallest building in Manhattan, "the pride of the town and the feature of Broadway." Because of the encroachment of the massive skyscrapers of the financial district, it had been reduced to a "poor, ineffectual thing." Earlier, it was noted that the equanimity created by Trinity had given way to "riot and roar."¹⁵

James' characterization of Trinity Church as a building deprived of its status not only referred to its physical dimensions but to the replacement of sacred spiritual values by the forces of economic growth. Recalling an intense religious and aesthetic experience in another of Manhattan's churches, his mind was wrenching from the jewel-like windows to the sinister forces of materialism epitomized by the skyscraper. According to James, the office buildings threatened not only important public monuments but the ideals and aspirations embedded in their external forms. As Lincoln Steffens observed previously in a discussion of the overshadowing of Trinity Church, "the enterprise of business" had "surpassed the aspiration of religion."¹⁶ In an accompanying illustration to the article, appropriately titled Higher Than The Head of The Cross, the spire of the church was juxtaposed with the loftier Park Row Building, a format that was adopted by later renderers of the skyscraper (Fig. 1.).

Another criticism levelled at the new office building
was its destruction of the respected older neighborhoods and communities, reinforcing the notion that the skyscraper was a usurper of tradition. William Dean Howells noted:

"Business and poverty are everywhere slowly or swiftly eating their way into the haunts of respectability, and destroying its pleasant homes. They already have the whole of the old town to themselves. In large spaces of it no one dwells but the janitors. . . ."

Likewise, James was horrified to revisit the streets of his boyhood, the refined enclave of Washington Square. To his dismay, the site of his birthplace had been replaced with a "high square impersonal structure," which caused him to feel amputated from half his history. Even the Ashcan artist Jerome Myers bemoaned the disappearance of the old, colorful neighborhoods which he found more vital than the bland industrial milieu. He was sorry to see the destruction of the tenements in favor of the "beautiful and sanitary New York" because picturesque types were seen less often. 17

Like their genteel contemporaries, the muckrakers and realists inveighed against the changes wrought by the skyscraper. But whereas James and Howells had stressed the destruction of tradition, these observers evaluated the detrimental effects on the salubrious existence of the inhabitants. One of the consequences of rapid urban and industrial expansion was the noxious fumes which pervaded the atmosphere of Chicago. Henry B. Fuller regarded
the western metropolis was an airless country in which "the medium of sight, sound, light and life becomes largely carbonaceous," a place where the buildings loom up "through swathing mists of coal smoke." In the novel *The Money Captain* of 1896, Will Payne referred to the "enormous blotch of smoke" which hung perpetually over Chicago's horizon. "At first glance the neighborhood had the effect of a thicket of huge buildings. Towering cornices rose everywhere, and the air about them was murky," he noted. A cartoon which appeared in *Life* magazine of 1898 expressed concern that allowing these conditions to remain unchecked would result in a city inundated with pollution. Picturing the future metropolis of 1910, the artist revealed a city of limitless height and smoke which totally obfuscated all sources of light and air.

The increased proliferation of titanic buildings seemed to render human life inconsequential as well. Contemporaries noted that the gargantuan scale of the buildings literally dwarfed the people in their midst. In an article on the Flatiron Building, Edgar Saltus surveyed the swarm of humanity from above, observing pessimistically:

... the ants are beings—primitive but human hurrying grotesquely over the most expensive spot on earth. They hurry because everybody hurries ... in the hammers of the ceaseless skyscrapers ... in the ambiant neurosis.
James also spoke of the dehumanizing effects of the skyscraper which engendered both congestion and anonymity. In his view, people were reduced to "the consummate monotonousness of the pushing male crowd, moving in its dense mass . . . a welter of objects in which relief, detachment, dignity, meaning, perished utterly. . . ."20

Tall buildings were also perceived as the physical manifestation of anti-humanitarian impulses. Conceived as a way to maximize profits in view of rising land values in the nation's metropolitan centers, to many, skyscrapers were symbols of capitalism incarnate. One critic referred to the aggregate of lofty structures in New York as "a congerie of temples for the deification of gold, a city of basilicas for the glory of greed." In an article appropriately titled "The City of Mammon" of 1906, written in response to his trip to the United States, Maxim Gorky inveighed against the Manhattan skyscraper for its negation of the true notions of democracy espoused by Jefferson and Whitman in favor of the lust for money. This pursuit of the "yellow devil gold" resulted in a huge city of stone, iron, and glass which enslaved the masses. The American poet Amy Lowell observed the inequities perpetuated by the few against the many revealed by the skyscraper:
Above, one tower tops the rest
And hold aloft man's constant quest:
Time! Joyless emblem of greed
Of millions, robbers of the best
Which earth can give, the vulgar creed
Has seared upon the night its flaming ruthless screed.21

The clamor for wealth in the business district and the dehumanizing quality of life among the skyscrapers prompted more than one observer to compare this frenetic activity to the violence of war. Henry B. Fuller likened "all this downtown racket" to "the music of a battle hymn" while Will Payne spoke of the pollution as suggestive of "the battle always waging there." Frank Norris presented perhaps the most troubling account when he referred to the obstreperous male voices which "filled the air with the noise of battle," maintaining that this was a "drama in deadly earnest--drama and tragedy and death, and the jar of mortal fighting."22

The proliferation of tall buildings represented such a threatening menace that detractors compared them to consuming ogres and the urban environment to a living hell. One article on the effects of the skyscraper began on the following negative note: "'What do you know of New York?' said one wanderer to another. 'Only what I have read in Dante' was the bleak reply." Henry B. Fuller expressed similar sentiments, referring to the Chicago environs as a "basso inferno" and likening the
people of Chicago to the wayfaring stranger who asked Virgil about Dante: "Chi è costui, che senza morte, va per lo regno della morte gente?" In 1906, Maxim Gorky presented the most disparaging view of metropolitan living to date. In his opinion, residing in New York was synonymous with entrapment in the bowels of the netherworld:

It belches forth clouds of smoke . . . . When you enter it you feel you have fallen into a stomach of brick and iron which swallows up millions of people . . . . It is the first time that I have seen such a huge phantasmagoria of stone, iron and glass, this product of the sick and wasted imagination of Mercury and Pluto.^^23

In addition to its association with the work of the devil, skyscrapers were also associated with the wrath of God. The incongruity of the New York skyline and the magnitude of borrowings from architectural styles of the past prompted contemporaries to liken the lofty edifice to the tower of Babel. More importantly, the skyscraper was linked with the biblical structure because of its presumptuous attempt to "storm heaven," as one critic lamented, a sphere reserved previously for religious architecture.^^24 Implicit in the comparison was a word of caution--continuation of this folly could result in the destruction of the skyscraper.

Contemporary with the negative view of the skyscraper, there were those who applauded its existence. By 1911, an apologist noted that "to sneer at skyscraping
New York is less in vogue nowadays than it was some years ago," suggesting that perhaps the tide began to turn around this time. The initial acceptance of the tall building both architecturally and artistically resulted, in part, from the reformist spirit which characterized the progressive era in the early years of the century. Reevaluating the previous belief in the superiority of European art and culture, Americans began to look to their own heritage and surroundings for inspiration.

A number of disciplines experienced the results of this reassessment of the native milieu. In School and Society of 1899, John Dewey rejected the traditional notion of education based on the rote memorization of the classics. Instead, he encouraged an educational system based on practical experience. Only a "sense of reality acquired with first hand contact with actualities" would foster ingenuity and imagination.

In accord with Dewey, the artist and educator Robert Henri believed that a similar approach should be applied to the teaching of art. In The Art Spirit, Henri articulated his opposition to the academic teaching methods in the art institutions of the country, settings which he felt fostered mediocrity. Referring to the artist as a "sketch hunter," he encouraged his pupils to derive their subjects from their immediate surroundings instead of copying the old masters in a sterile fashion. In another
context, he asserted that "art can not be separated from life."\textsuperscript{27}

Despite the Ashcan artists' preference for both the picturesque and the vignettes of daily life, as opposed to the erection of the new metropolis, they engendered a climate of acceptance for skyscraper subjects. Even more significant was their rejection of traditional notions of beauty and propriety, in favor of the so-called mundane and abhorrent. Defending the tall building against such charges of ugliness, Henri maintained that the skyscraper was indeed beautiful, "typical of all that America" meant.\textsuperscript{28}

The synthesis of art and life also found expression in the writings of Louis Sullivan, the early proponent and architect of the skyscraper. The major impetus for the writing of his \textit{Kindergarten Chats} of 1901 was to "liberate the mind" from the "serfdom to tradition." Distinguishing between the "historic feudal" and the "advancing democratic" minds, Sullivan called for a living art derived from one's own time. He encouraged architects to adopt only those forms which reflected "the function of the building" and the native experience, rather than a slavish copying of European prototypes.\textsuperscript{29}

To be of one's own time and reflect one's own milieu, an overriding concern at the turn of the century, expressed the growing sense of nationalism that characterized American arts and letters. Echoing Walt Whitman, who
insisted on the necessity of a class of native authors, Robert Henri called upon artists to employ American motifs. In an effort to express an intrinsically local sensibility, artists sought subjects that would convey their aims. In this context, the skyscraper was lauded as the true expression of the American creative genius and a symbol of nationalism. An eminent New York engineer who specialized in the construction of tall buildings proclaimed the skyscraper as "distinctly American." Mary Fanton Roberts, editor of the periodical The Craftsman and a strong proponent of the development of a native art, observed:

The skyscraper is the first absolutely genuine expression of an original American architecture. In this tall eccentric tower we have begun to feel our way toward national building--buildings that suit our needs, our comfort, our landscape, without regard to any nation or civilization.

Visiting Europeans voiced the same opinion. In 1911, the German academic artist Herman Stuck held that "the skyscraper is the only child of Dame Art born in this country" along with "negro and Indian songs."30

In their attempt to embrace the skyscraper as a symbol of nationalism, critics bestowed upon it features attributed to an American "personality." According to Sadakichi Hartman, who wrote frequently in Camera Work, as the United States was only in existence for a short period of time, supposedly unencumbered by centuries of stultifying tradition, the tall building was also in
possession of the "forceful vitality of youth, adolescent in its tentative desire for beauty." Frank Norris, who inveighed against the city of Chicago in The Pit, nevertheless categorized the new metropolis as the physical manifestation of an American sensibility. "Here, of all her cities, throbbed the true life—the true power and spirit of America; gigantic, crude with the crudity of youth, . . . sane and healthy and vigorous . . . infinite in its desire," he claimed.  

Not only perceived as pubescent in spirit, the skyscraper was also imbued with the properties of sexual awakening and activity, obviously a result of its rather phallic shape. "Surging," "restless," "vigorous," "assertive," and "primal" were all applied to the building by a wide variety of commentators. Robert Henri described its peculiar morphology as "indicative of our virile young lustiness."  

This anthropomorphizing of the tall building expressed the desire to make it comprehensible. Observers even began to liken the erect, vertical structure to a man. Louis Sullivan lauded H. H. Richardson's commercial Marshall Field Store, an important precursor to the skyscraper, as "a real man, a manly man," which sings the song of procreant power. According to the architect, every building was the image of the man you don't see.
Likewise, the American journalist Jesse Lynch Williams asserted that skyscrapers possessed "a strong manly beauty all their own." This notion was so pervasive that one of the foremost philosophers of the period, George Santayana, differentiated between refined and pragmatic architecture, assigning them gender characteristics:

... one-half of the American mind, that not occupied intensely in practical affairs, has remained ... slightly becalmed; it has floated gently in the backwater, while, alongside, in invention and industry ... the other half of the mind was leaping down a sort of Niagara Rapids. This division may be found symbolized in American architecture: a neat reproduction of the colonial mansion ... stands beside the skyscraper ... the one is the sphere of the American man, the other ... of the American woman.33

Apologists for the tall building also attempted to counter the charges that it was encroaching upon the revered, more traditional buildings of the city. This was accomplished by comparing the skyscraper itself to monuments of the past. In response to disparaging remarks concerning Daniel Burnham's Flatiron Building (1903), Alfred Stieglitz asserted that it was as important to America as the Parthenon was to Greece. Another commentator went so far as to categorize Ernest Flagg's Singer Building (1908) as an example of civic architecture:

This forty-seven story structure rises above the surrounding skyscrapers as a great shaft in memory of some hero or military triumph. To one coming up the bay or across the river, it appears as a monument rather than a business structure.34
Contemporary with the celebration of the skyscraper in progressive intellectual circles, art critics and observers began to encourage painters to undertake the theme. As early as 1896, an anonymous author in "The Field of Art Column" in *Scribner's* magazine maintained that the much abused skyscrapers would provide excellent "painter's motifs." In an 1899 article entitled "The Artistic Side of Chicago," the author observed uptapped artistic material in the rapid city building, citing a number of artists and writers who were portraying such a view of the burgeoning new metropolis. Despite these fledgling attempts, however, he claimed that the true chroniclers of Chicago had not emerged.

The city awaits her artistic creator. She may think she exists in literature, but it is only in a form at once evanescent and tentative. No one has yet risen to rescue her from oblivion and give her immortality through art. . . . The city seems to cry out to the workers with pencil and pen.

Moreover, in a "Plea for the Picturesqueness of New York" of 1900, Sadakichi Hartmann included a strong invocation to artists to undertake urban subjects, especially the skyscraper. Even the otherwise hostile James conceded that in the skyscraper "lurked material for the artist."35

Often, European commentators of the American scene were cited so as to lend the skyscraper additional credibility. Presumably, these foreigners had seen the best of both worlds and were in a better position to pronounce
judgment. Excerpts from Paul Adam's *Vues d'Amerique* of 1906 were included in an American periodical. Addressing the issue of young girls practicing copying, Adam advised:

They would do well . . . to transfer to their watercolor pads these colossal, tower-like structures and the buildings that cluster in their shadow. . . . I firmly believe that the Americans have discovered a new type of architecture which their coming art will raise to a high degree of excellence.36

Despite the praise of the skyscraper by nationalists and the increased encouragement to render it, artists and their apologists still viewed the new architecture as inherently ugly or mundane. Numerous articles ostensibly lauding the tall buildings revealed an underlying ambivalence inspired, in part, by the dominant views of James and Howells. The first artists to render the skyscraper were often credited with the creative ability to metamorphose the prosaic structures into true works of aesthetic merit which could evoke poetic associations. Usually, this meant the depiction of the skyscraper in accord with traditional notions of taste. Revealing the current misgivings concerning the lofty structures, Colin Campbell Cooper was praised for his ability to metamorphose the true character of the buildings.

Crude as these buildings are today, the drift of the sunlight on them, the glorious and often merciful veils of mist . . . help us to the relation toward them of instinctive joy in a beauty already there.37
Commenting on the work of the Chicago renderer of the skyscraper, Albert Fleury, an art critic praised his singular talent for deriving "his inspiration in the city's apparent ugliness, and who, through the medium of an exceptionally sensitive touch, has happily recorded beauties and poetry. . . ." 38

Roland Rood, a frequent contributor to the periodical Camera Work, echoed the equivocal viewpoint when he pronounced "our skyscrapers ugly and our factory districts dreary deserts" but encouraged the artist to imbue these industrial scenes with "his or her personality." Justifying his position with the employment of pseudo-scientific theories of evolutionary development, Rood explained that the reluctance to accept the aesthetic merits of the skyscraper came from the imprint of antiquated notions of beauty on our brain in a "particular molecular form." Nevertheless, he was hopeful that as our brains developed, we would lose this link with our prehistoric past and "in the distant future come to look upon buildings in the shape of banks and stock exchanges . . . as being poetical, and even skyscrapers may be the ideal architecture."

Cautioning the artist not to confuse his "inherited race associations" with personal likes and dislikes, Rood concluded on an optimistic note. The true artist could disobey these laws of nature and "succeed in the almost impossible feat of combining . . . thoughts with railroad
yards, locomotives and skyscrapers."\(^{39}\)

Further evidence of the art community's ambivalence to the skyscraper is revealed in the prevailing attitude concerning the depiction of individual office buildings. Despite the so-called unaesthetic appearance of the lone edifice, some felt that the mass or aggregate of buildings could evoke aesthetic pleasure. Jesse Lynch Williams asserted that separately skyscrapers were "vulgar" and "impertinent" but as a group they were aesthetically pleasing. As late as 1913, the American painter Childe Hassam summed up this position:

... if taken individually a skyscraper is not so much a marvel of art as a wildly formed architectural freak. ... . It is when taken in groups with their zig zag outlines towering against the sky and melting tenderly in the distance that the skyscrapers are truly beautiful.\(^{40}\)

Many artists believed that the proper appreciation of skyscrapers not only necessitated viewing them en masse but from the proper vantage point as well. Skyscrapers were impressive enough when observed from the town but this was "nothing compared to their beauty when seen from a point a mile beyond the houses," a critic from Scribner's asserted. Likewise, Childe Hassam noted that standing too close to a skyscraper would be like "sticking your nose in the canvas of an oil painting." Rather, it was necessary "to stand off at a proper angle to get the right light on the subject."\(^{41}\) This argument, employed to counter
the charges of the detractors who were supposedly not viewing the tall building correctly, was ambivalent itself.

The current debate concerning the skyscraper's viability and aesthetic merit seemed to engender the artistic acceptance of the theme in the early years of the century. Yet the initial depictions often reflected the tensions of these polemical discussions. Oddly enough, the tall building was viewed simultaneously as a symbol of national pride and as a mundane, commercial structure that required an infusion of poetry and a picturesque vocabulary to obfuscate its prosaic character.
The first images of skyscrapers appeared in popular illustrated magazines accompanying articles on the new urban America. In the 1890's, Harper's, Century, and Scribner's included a multitude of representations of the novel buildings, including views of the skyline and port, skyscrapers in construction, nocturnal views celebrating electricity, and the flurry of people around the tall buildings.¹ These early skyscraper subjects reveal that in fin de siècle America the popular illustrator was able to take more risks than his academic counterpart.² Not restricted by the pressure to depict morally uplifting subjects, the magazine artist could render more topical images of the United States. Despite the use of innovative subject matter, however, the illustrator was still bound by the notion that art was essentially the rendition of the tasteful. Thus, these pioneer depictions of urban America were cast in the vocabulary of the picturesque, the tonal, and the evocative, serving as important visual precursors to painters and photographers of subsequent decades.

37
Countering the often disparaging content of the articles they meant to augment, these popular images set the stage for the acceptance of the tall building as a suitable subject for the fine arts.

Once the skyscraper was tacitly accepted by such established American artists as Childe Hassam, Colin Campbell Cooper, and Birge Harrison, consistent themes and "ways of seeing" the building emerged in the early years of the century. Popular subjects included the transmutation of the historical city in favor of the modern metropolis, seen in the juxtaposition of church and skyscraper. These dramatic contrasts between the old and the new which resulted from skyscraper building could not be overlooked. The proliferation of these steel scaffolds also engendered a fascination with the marvels of modern technology. Artists such as Joseph Pennell and Alfred Stieglitz who recorded the coexistence of old and new buildings were inspired by these manifestations of industrial progress as well. Change was the keynote theme of the day.

Artists explored often inadvertently the impact of the skyscraper on the people of the city. The numerous images of Wall Street, often rendered from high above a lofty edifice, conveyed the inconsequentiality of the people in the street below. Yet, the interaction of people and skyscraper was far from uniformly negative. The workers who built the skyscraper were lauded as the new
American folk hero, belying the notion that tall buildings squelched the spirit of the individual.

Artists interested in rendering what was quintessentially American about skyscrapers often selected specific areas. Wall Street was depicted not only because of those who congested the area but also because of its status as the financial hub of the nation. Individual office buildings were also seized upon for their often idiosyncratic character, reinforcing their effectiveness as objects of advertising.

Despite the seemingly novel subject matter, the initial images of the skyscraper were largely cast in the vocabulary of nineteenth century landscape painting. Rather than perceived as commercial or business structures, they were properly groomed for a public that still held substantial misgivings. Even those otherwise favorable to the tall building felt that the skyscrapers should be properly poeticized to counteract their inherent material function. In order to elevate the architecture, it was necessary to treat it with grace and subtlety.

The Traditional Building and the Skyscraper

The transformation of the city from a community of genteel brownstones, quaint monuments from the American revolution, and pavilion-like beaux arts structures to a rising metropolis was widely commented upon at the turn of
the century. Books such as John C. Van Dyke's *New New York* (1909), F. Hopkinson Smith's *Charcoals of New and Old New York* (1912) and Rufus Rockwell's *New York Old and New* (1909) attest to an awareness of a historic and modern Manhattan.4

While critics such as Howells and James bemoaned the destruction of the older buildings, others celebrated the appearance of the commercial edifice. Van Dyke's book *The New New York* supported the emergent city as opposed to its antiquated monuments. Critical of the skyscraper phobia expressed by James, Van Dyke maintained that people were merely hanging on to the old as a force of habit. Instead of the small, ineffectual buildings of the past, which many viewed as European-derived, he preferred the vertical, stalwart skyscraper. New York should not be preserved as a "historical museum in the large," he claimed, but realize its current commercial potential. This antihistorical approach was put forth previously by Henri and Sullivan, the latter encouraging architects to "liberate the mind from serfdom to tradition."5

Even the revered Trinity Church was not spared from Van Dyke's theories of economic determinism. Of the church once attended by George Washington, he noted somewhat apologetically: "Alas, fair Trinity! With all its beauty it is only a survival. Its usefulness as a church is gone and it lags superfluous on the scene."6 Van Dyke was more interested in the present tide of events
than in preserving the nostalgia and romanticism of the past. To critics like James, he replied that economic expansion was a necessary prerequisite to the luxuries and monuments they sought to preserve.

The view that the old, European-derived architecture was not relevant to the industrial urban centers of America was echoed by art critics. Commenting on the work of Colin Campbell Cooper, one critic noted that the artist was previously a painter of Old World buildings, but that these subjects were no longer applicable to the American milieu:

As students and artists we admire and study these wonderful buildings, but we have no share in the spirit that produced them, or we would be building them today. . . . We may have love and reverence for these but our problem in life is so far different that we can not work it out on the old lines.  

It is difficult to ascertain whether artists supported the position of either Van Dyke or James, but like their literary counterparts they could not fail to observe the dramatic opposition of the old and the new so evident in Manhattan. An article from a popular periodical articulated the painter's attraction to the antithetical aspects of New York:

At present there are still enough of the old buildings left to enjoy the astonishing contrasts as he turns any corner of Broadway. The incongruity of old and new types is one of the greatest "finds" for the artist. 

Joseph Pennell had already noted these startling
contrasts as early as 1905. In *The Four Story Building*, the artist was intrigued with the interaction of the relatively unassuming buildings of the past with the gargantuan monoliths of the turn of the century (Fig. 2). He focused particularly on the disparity in heights. Unlike his friend James, it appears that Pennell sympathized with the march of progress, pointing to the absurdity of the tiny edifice in the downtown section of Manhattan. The artist's publisher, Frederick Keppel provided some insight into Pennell's urban preferences:

He cares as little as ever for the recognized "showpieces,"—just as little as Whistler himself—and says of our Old City Hall, and the Grace Church . . . that they are all very well in their way but the same things . . . may be seen in almost any other civilized capital; but the towering piles of the New York "skyscrapers" have impressed Mr. Pennell very strongly.9

Pennell's illustrations for Van Dyke's *New New York* further support the artist's acceptance of the novel at the expense of the anachronistic. In *Singer Building—Early Evening*, Manhattan's loftiest skyscraper of 1908 is seen illuminating the nocturnal sky, dwarfing the slender pinnacle of Trinity Church (Fig.3).

Despite Van Dyke's suggestions for the artistic subject matter to accompany his text, many of Pennell's images are independent in conception.10 Whereas the writer was pessimistic about the feasibility of the old and new to coexist, Pennell often pictured them in total harmony.
Van Dyke had categorized the Old City Hall as "too delicate, too lovely, too feminine for contact with those great structures of steel and granite," while Pennell rendered the civic monument in accord with the adjacent steel-framed World Building (1889-90) by George B. Post (Fig. 4). The similarity of the baroque cupolas indicated that stylistically the New York skyscraper was often not unlike its architectural predecessors. In an article entitled "Picturesque New York" of 1892, M. G. Van Rensselaer seemed to articulate the artist's position:

Even you, young artist, born on the Pacific slope and now fresh from Parisian boulevards, can see that your New York is picturesque. But I wish that I could show you mine, which is not mine of my infancy, or mine of today, but the two together, delightfully, inextricably, mysteriously, perpetually mixed.11

One of the most dramatic juxtapositions of the ancient and the modern in the downtown region of New York was that of St. Paul's Church and the adjacent Park Row Building (1899) by R. H. Robertson and the St. Paul's Building (1899) by George B. Post.12 Probably what fascinated renderers of the skyscraper in relation to older architecture was St. Paul's legacy as the oldest extant religious edifice in New York. Completed in 1764 by James McBean, it provided for the quintessential contrast of old and new.

The photographer Alvin Langdon Coburn, a close associate of Alfred Stieglitz and a frequent contributor to
the periodical *Camera Work*, was among the first to record this subject. Rendering the buildings in evocative silhouette in 1905, a method he adopted from the careful study of Japanese prints, Coburn presented the buildings as relatively equal in size and dimension (Fig. 5). In view of the actual towering of the two skyscrapers over the diminutive colonial edifice, it is telling that the photographer selected such a viewpoint. Recently inspired by the religious monuments of Europe, at this point in his career, Coburn was unwilling to admit the prominence of the skyscraper.

In another of Pennell's illustrations for *The New New York*, he pictured St. Paul's and its two adjacent skyscrapers (Fig. 6). Although Van Dyke spoke of the encroachment of the massive buildings on the church's domain, Pennell presented the steeple as preeminent.

John Marin explored New York's incongruities with the most consistency. Beginning in 1911 and continuing throughout 1914, he rendered both Trinity and St. Paul's in relation to New York's skyscrapers. In one such view, the painter presented a view similar to that of his colleague at "291," Alvin Langdon Coburn (Fig. 7). Although the watercolor displayed a synthesis of the loose brushwork of the Fauves with the embroidered strokes of Bonnard and Vuillard, the static quality of the image seems more akin to a photograph. Like Coburn, Marin presented the religious
monument as taller than the business structures.

By 1912, Marin presented St. Paul's as towering dramatically above all the buildings in the immediate area; and by 1914, it assumed a position of domination over the entire skyline (Figs. 8 and 9)! In the latter painting, the church is shown as erect and immovable while the surrounding buildings are in a state of metamorphosis. Rendered as if viewed through a wide angled camera lens further reinforced the preeminence of the church. One is reminded of Marin's oft-quoted description of Manhattan's changing topography as "the warring of the great and the small" for which he found ample evidence in his own milieu.¹⁴

The contrast of churches and skyscrapers reflected not only the changes in the city's topography but also the confrontation of spiritual and pecuniary values. As did James, many commentators of the time decried the destruction of religion in favor of capitalism and gain. Hoping for a return to piety, one physician categorized the clamor for wealth a disease called "newyorkitis." The Christian Socialist Walter Rauschenbusch indicted the capitalist system as anti-religious in Christianity and the Social Crisis of 1907.¹⁵ At the beginning of the twentieth century America was still very much a Christian nation and the new business ethic was seen to be in marked opposition to its moralistic principles. It is no accident that Cass Gilbert's Woolworth Building (1913) was fashioned in the guise of a
gothic cathedral. Nicknamed the "cathedral of commerce," it seemed to reconcile the previous conflict of business and religion. No doubt, the numerous renditions of church and skyscraper displayed a cognizance of the tensions and shifts in cultural values. This conflict surfaced again during and after the war years in the writings of Van Wyck Brooks and Waldo Frank, who blamed commercialism for the lack of spiritual values.

While the aforementioned images represented a keen awareness of the relationship between the historical past and the transformations wrought by the present in New York, the juxtaposition of church and skyscraper indirectly reflected the artistic dialogue with European culture. Pennell's likening of Grace Church and the Old City Hall to the architecture of Europe supports this view. Likewise, the photographer Alfred Stieglitz viewed the skyscraper in relation to the traditional edifices of Europe. In the October 1903 issue of Camera Work, Frederick Evans' photographs of Ely Cathedral were literally juxtaposed with Stieglitz's view of the recently completed Flatiron Building. An editorial comment in the periodical revealed Steiglitz's self-conscious attempt to point out the differences between European and American architecture. "In contrast to the antiquity of the architectural subjects of Mr. Evans, we reproduce the extreme modernity of the 'Flat-iron.'"
It is significant that Pennell, Coburn, and Marin had been enthusiastic admirers of the venerated monuments of Europe prior to their adoption of the skyscraper in their art. By the early 1880's, Pennell had already etched the architecture of London and Tuscany, remaining an indefatigable chronicler of historical edifices throughout his career. Shortly after the turn of the century, Alvin Langdon Coburn explored the differences between various international centers. In a photographic essay entitled "Contrasts," he juxtaposed scenes from New York, Paris, London, Venice, and Liverpool in an effort to capture "the spirit of representative cities." Prior to John Marin's final return to the United States in 1910, he was engaged in the reproduction of highly detailed etchings of the cathedrals of Europe. It seems plausible that these renderers of the skyscraper possessed a heightened awareness of the differences between Europe and America as a result of having been seasoned abroad. Their renditions of ancient and modern seem to represent the current tension between Old and New World values so prevalent in America.

Another indication of the American artists' dialogue with the parent culture was the constant likening of the skyscraper to the buildings or cities of Europe. Attempting to establish the superiority of New York's wonders, Joseph Pennell encouraged the tourist to pay heed to:
the color more shimmering than Venice, by night more magical than London. . . . Piling up higher and higher right before you is New York, and what does it remind you of? San Gimignano of the Beautiful Towers away off in Tuscany. . . . You land in streets that are Florence glorified. You emerge in squares more noble than Seville.

Another observer reported that "often one hears the comparison made between New York . . . and Mont Saint-Michel or . . . a broadside view . . . and the ridge-perched San Gimigiano." October Haze by Childe Hassam visually conjures up associations with medieval cities or of traversing the waterways of Venice at sunset (Fig. 10).

The likening of the modern marvels to more traditional building was symptomatic of a desire to situate America within a historical context. The inability to draw upon things American as well as the desire to outdo Europe in grandeur suggests a feeling of cultural inferiority on the part of American artists and intellectuals. This lack of confidence in cultural matters is manifested in the attitude that life in the United States was generally mediocre and prosaic. Earlier, Nathaniel Hawthorne summed up this position in his preface to The Marble Faun of 1860. "No author, without a trial, can conceive of the difficulty of writing a romance about a country where there is no shadow, no antiquity, no mystery, no picturesque and gloomy wrong, nor anything but commonplace prosperity," he claimed. To answer the charge that skyscrapers were mundane, utilitarian
structures, artists and writers, therefore, recalled their similarity with the palaces, towers, and churches of the Old World.

The inability of some contemporaries to view the skyscraper as a product of their own milieu is further revealed in their comparing of it to the buildings of the near and far east. Sadakichi Hartmann referred to the New York skyline as a "modern Cathay" while O'Henry likened Manhattan to Bagdad with its "palaces," "khans and byways."

John C. Van Dyke exclaimed:

The white sky-scrapers of New York, that thoughtless people jeer at, catches light as readily as a Moslem minaret; the solid "blocks"... make up walls more massive than those of Stamboul, and if New York lacks the silvery domes of Constantinople, it is not without its tall towers flying flags against the blue.

The removal of the skyscraper from its current context in favor of the novelty of non-western locales was no doubt related to the cosmopolitan sophistication which characterized the period. Yet, the selection of more unusual scenery illustrated a more concerted effort to divorce the skyscraper from its American context by imbuing it with exotic associations.

Construction

New York as a city in a perpetual state of transformation was noted throughout its history. As early as 1840, the English traveller, Philip Hone commented
on the "annual metamorphosis" of the city. "The spirit of pulling down and building up is abroad. The whole of New York is rebuilt once in ten years." Up until America's involvement in the World War I, numerous commentators remarked on the transience of the city's architecture. After returning from a vacation, Howells observed that an "architectural geyser" had shot up where formerly a "meek little ten story edifice cowered." And William George Fitzgerald, a British author who visited the United States in 1917, reported "that the note of New York" was impermanence. "Great pits yawn here and there—perhaps the legs rests of yet another skyscraper."21

The constant tearing down of buildings and the erection of skyscrapers everywhere provided for the omnipresence of steel scaffolds as well as massive excavation sites. To a generation grappling with the formulation of an intrinsically American art, the steel skeleton provided an excellent solution, for it stood as an inherently native feat of engineering. The skyscraper was literally made possible by the invention of the steel frame. In depicting the virtual support of future buildings, artists were, perhaps inadvertently, reflecting what was peculiarly American about American architecture.

Functional and utilitarian, the skeleton frame illustrated an aspect of the American sensibility already noted on the occasion of the 1851 International Exposition
in London. As Sigfried Giedion has observed, visitors to the show were particularly impressed by the "simplicity" and "technical correctness" of American industry. Likewise, the functional superiority of the skyscraper was recognized almost immediately. Responding to the critics who accused it of squelching the life of the individual, one author praised the tall building as the best possible solution in a congested urban area.

This, light towering building was not designed in the first place for beauty nor to satisfy any aesthetic cravings of citizens of the metropolis. It was built to meet the demands of a rapidly increasing population in a restricted area. The one thought that ruled the erection of the tall, steel-framed building was strength, simplicity and the maximum of light and space. Later, Duchamp and Picabia would assert that America's true contribution to aesthetics was in the realm of technology itself.

Aside from the national pride in the formulation of the titan architecture, skyscraper building was the source of fascination and wonder from excavation to emergent scaffold. Newspapers and magazines abounded in lengthy descriptions of a quite technical nature as to the scope of various building projects beginning at the turn of the century. An excerpt from an article in a popular periodical is surprising for its thoroughness of detail concerning all aspects of the building's construction:

A shaft was sunk 90 feet below the level of Broadway. . . . Rock caissons were lowered and anchorage and
reinforcement rods were placed. . . . On this base the steel framework was raised, so braced and anchored as to distribute the strain and weight.\textsuperscript{23}

Drilling into the "earth's vitals," as one critic referred to the initial stage of skyscraper building, became a veritable sidewalk show in the early years of the century. The detailed descriptions of the grandiose scope of skyscrapers in process attested to the incredulity of the public concerning the immensity of the new architecture. In an article entitled, "City of Towers," the author reflected the prevailing reaction to the city's numerous excavation sites:

\ldots this matter of foundations--these mysterious, invisible feats of engineering which insure the safety of the fortieth story tenant--have not they also the power to stir the imagination? Do the crowds of office workers who pass their noon respite in watching the caissons slowly sinking into the depths of the earth--do these noon audiences go away unstirred?\textsuperscript{24}

Artists as well as art critics began to take note of the excavations and steel frames in their midst. In 1900, Sadakichi Hartmann pointed to their possibilities as stimulating subjects for the Photo-Secessionists:

Wherever some large building is being constructed the photographer should appear. It would be so easy to procure an interesting picture, and yet I have never had the pleasure to see a good picture of an excavation or an iron skeleton framework.\textsuperscript{25}

Joseph Pennell explored the theme repeatedly throughout his career. In an etching entitled \textit{A Hole in the Ground} of 1904, a cavity in the earth is juxtaposed with adjacent lofty edifices (Fig. 11). The artist
maintained that "the tearing down of an old structure for the building of a new one" often provided "unexpected vistas. 26

Following advice to paint his own milieu from his mentor Robert Henri, George Bellows recorded the excavation for the enormous Pennsylvania Station (Fig. 12). 27 In a quick, flurry of strokes, he stressed the gritty atmosphere of New York in subtle browns and off-whites. 28 Like Pennell, Bellows focussed on the startling juxtaposition of the depth of the cavity with the loftiness of the skyscrapers, pointing to the expansion of space both downward and upward. Yet, the Ashcan artist could not ignore the activity of the worker whose efforts made the march of technology possible. Above all, it was the metropolitan denizen rather than the skyscraper which interested this group.

Skyscraper builders were lauded, in fact, for their courage in the face of overwhelming obstacles and danger, a theme later developed by the photographer Lewis Hine. Christened "cowboys of the skies," they were hailed as:

Rough pioneers . . . of the steel pushing each year their frontier line up toward the clouds. Wanderers, living for their jobs alone . . . living their lives fast and free. 29

To those that condemned the skyscraper for its impersonality and exploitation of the masses, the rugged
individualism of these men could be employed to counter the charge.

The courage and prowess of the construction worker was acknowledged early in the popular Chicago press. In a story entitled, "A Young Man in Upper Life," a reference to the new experiences available to skyscraper inhabitants, George Ade explored the distractions suffered by a young office worker. Usually motivated, Mr. Ponsby could not concentrate because of the construction of a tall office building directly outside his window. What alarmed him the most was "the solitary column showing itself above the ledge, and perched on top of this column a man." Often the man would keep his balance by "hooking his toes behind the column and hugging it with his knees." In an accompanying illustration by George McCutcheon, the daredevils are seen casually sitting on a beam, much to the consternation of Mr. Ponsby (Fig. 13).

Joseph Pennell explored the theme of construction most comprehensively. He developed a philosophy known as the "wonder of work" which included "building, digging, constructing" and "demolishing." Before the advent of the skyscraper, Pennell had been fascinated with subjects pertaining to industrial development and the fabrication of buildings. As a youth, he drew the old mills in German-town and etched the scaffolds on Philadelphia's public buildings. In 1881, Pennell executed a wash drawing of the
Bethlehem Steel works to accompany an article in *Century* magazine.  

Pennell traced his notion of the "wonder of work" to artistic renditions of the past, including Rembrandt's "true mechanical renderings" of the mills and dykes of Holland, Claude's "commercial harbours," Turner's "Steam, Rain, Speed," Whistler's recognition of the aesthetic possibilities of "the poor buildings" and the warehouses of London, and the depictions of rural labor by Courbet, Millet and Legros. Perhaps Pennell was attempting to lend the industrial themes of America art historical legitimacy.

Ultimately, Pennell's theories on labor involved the current progress in this country. Rather than relying on retrogressive images of work, the artist advised that:  

... it is to America we must turn, to White's etchings of Brooklyn Bridge, Cooper's skyscrapers, Alden Weir's New York at Night, Bellow's docks, Childe Hassam's high buildings, Thornton Oakley's coal breakers--to these one must look for the modern renderings of work.

In addition to the general labor subjects available to the artist, an essential component of Pennell's philosophy was the actual erection of skyscrapers. He described New York as "the city that has been built since I grew up ... built by men I know, built for people I know." His interest in buildings in progress was corroborated by his wife, Elizabeth Robins Pennell who claimed
that the artist would stay over in New York many weeks to study "already built or in the building," its "monsters of many moods." She reported that he was constantly cancelling appointments "so impatient was he to get back to his inexhaustible skyscrapers." One such note read as follows: "I'll try to look into lunch tomorrow--but the mill is grinding--and when it does so, I don't like to stop the machinery." The mill grinding was an obvious reference to the incessant clattering of steel in Manhattan, a process which he likened to his own creativity.35

Despite Pennell's recognition of the manifold aspects of skyscraper construction, workers were all but absent from his images. Rather, he focussed on the limitless soaring of the steel scaffolds. Skies are often darkened suggestively to enhance the drama of the derricks suspended crosswise in the air (Fig. 14). Although he included the entire process of building in his conception of the "wonder of works," the skyscraper images bespeak of a fascination with progress. Pennell seemed to confirm this view. "What I have all my life been trying to show in my work is just this, that there is something in engineering work--the great work of our age," he reported.36

The steel skeleton as an image of progress was also photographed by Alfred Stieglitz. In *Old and New New York* of 1910, a rising scaffold is contrasted with the somber brownstones of a past era (Fig. 15). The older
structures are symbolically cast in darkness while the lithe metal frame seems to herald the dawn. Stieglitz's fascination with advancements in architecture was in keeping with his battle for the acceptance of the semi-mechanical process of photography.

Not all renderers of the emergent city saw the massive construction effort in positive terms. F. Hopkinson Smith launched an aggressive attack on the physical destruction of his beloved old New York. In Charcoals of New and Old New York (1912), written and illustrated by Smith, the erection of the skyscraper was viewed as a destructive process:

So in go the testing drills, way down... Then the blasting begins... Now the caissons are sunk--big round as ship's funnels and many times as long. Down they go, slowly--... the brown ground hogs digging like moles in the foul air. A swarm of titans rush in. Up go the derricks, -- the cranes swing, -- half a score of engines vomit steam and smoke. Then... a gigantic skeleton of steel... punctured with a thousand browless eyes.37

Childe Hassam rendered the construction of a skyscraper by the fearless workers of steel. In The Hovel and the Skyscraper of 1904, a rising steel frame is seen amidst a group of nondescript tenements, reminiscent of the comparative views of Pennell, Coburn, and Marin (Fig. 16). Considering the artist's preference for the more refined aspects of Manhattan, perhaps he was alluding to the absurdity of the increased expansion of business in view of the squalid housing conditions. In addition, the
rapid increase in "business and poverty," as Howells previously commented, was seriously lowering the quality of life in the nation's urban centers. 38

The Skyline

Manhattan's distinction as an island coupled with the proliferation of tall buildings in its southern tip provided for an unobstructed view of its emergent skyline. From James' pejorative characterization of the aggregate of buildings as a "pin-cushion in profile" to those who rhapsodized about the picturesque variety and uneven contour, the developing New York skyline was widely commented upon.

The variegated silhouette of the city's numerous skyscrapers did not develop until the mid-eighteen nineties. Because of restrictive building codes limiting the use of structural steel, tall buildings were not erected on a large scale until that time. As early as 1892, one author applauded the picturesque potential of the "skyline." By 1894, photographs of downtown Manhattan from the bay began to appear in popular periodicals, indicating the rapid changes that had transpired in the past few years. Lincoln Steffens observed that "the sky-line of New York is changing so rapidly that the American traveller who goes abroad can recognize with more certainty the profiles of the foreign cities he approaches than that of his own metropolis." 39
So as to assess the profundity of change which characterized the decade, in 1897, Harper's Weekly published comparative drawings of the skylines of 1881 and the present (Figs. 17 and 17a). Whereas Trinity Church still dominated the horizon in the former decade, by the 1890's a multitude of new buildings attained preeminence. These included the St. Paul's Building, the American Surety Building, and the Standard Building. A chart of comparative heights published in 1908 corroborated the rapid upward growth of the city in the last five decades (Fig. 18).

The awesome height of the numerous buildings engendered laudatory commentaries on the aesthetic merits of the skyline. What captivated both natives and tourists alike was the approach to New York by sea. The prescient M. G. Van Rensselaer observed:

The most picturesque of all sights that New York offers is . . . when seen at night by a boat on the water. The abrupt, extraordinary contrasts of its skyline are then subdued to a gigantic mystery.

Later, Joseph Pennell enthusiastically described the journey:

As the steamer moves up the bay on one side the Great Goddess greets you, a composition in color and form, with only the city beyond, finer in the world than ever existed, finer than Claude ever imagined or Turner ever dreamed. . . . Piling up higher and higher.

The New York skyline was perceived as among the most breathtaking of man-made wonders and often couched in
the language of fantasy and incredulity. "Words are inadequate to describe this apparition," exclaimed Paul Bourget. Accompanying an etching of the panorama of tall buildings entitled Cortlandt Street Ferry, Pennell described the scene in rhapsodic terms (Fig. 19): "The towering splendor of New York is one of the marvels of the world. The mind can only grope afterwards to express its proportions . . . ." So as to enhance the properties of grandeur and unreality, the artist situated the buildings in the midst of swirling, cataclysmic cloud formations, suggesting that the dramatic breadth of the buildings was commensurate with the power of nature.

The foreign traveller to these shores was also awed by the approach to Manhattan island. An article which appeared in The Craftsman articulated the visitor's response to the fantastical city by the sea:

To see the American skyscraper is the desideratum of all foreigners. And when for the first time the European visits this country he receives his most lasting impression as the ship bearing him swings from the harbor and makes its way along the riverfront of New York. . . . He is astounded by this strip of country appearing o' nights a veritable fairy-land,--a fairy-land peopled with argus-eyed giants, the so-called skyscrapers.

In keeping with the desire to remove the tall buildings from commonplace realities, commentators could not resist comparing the skyline to European cities by the sea. "As the traveller approaches it, he thinks of Venice rising from the sea" one foreigner remarked. Joseph
Pennell boasted that the New York skyline by day was superior to that of Venice and more magical than London at night. Viewing the approach to Manhattan, contemporaries were probably reminded of the aquatic views of London and Venice by Whistler. F. Hopkinson Smith pictured the American skyscrapers as if en route to the Italian city at dusk (Fig. 20). The tallest skyscraper on the horizon was, in fact, the Metropolitan Tower (1909) by Le Brun and Sons, which was based on the Venetian campanile!

Not only were the panorama of skyscrapers by the sea the source of imaginary and exotic musings, but were seen as inextricably linked with the city's commercial activities. Since the seventeenth century and the chartering of the Dutch West India Company, New York assumed the character of a busy center of trade. By the 1860's, the port handled more of the nation's imports and exports than any other city. With the burgeoning of skyward buildings at the end of the nineteenth century, observers associated them with the ferries and ships docked in the harbor. In an article entitled "The Waterfront of New York" of 1899, it was noted that "Behind a foreground of tall masts with their square rigging and mystery (symbols of the world's commerce, if you wish), looms up a wondrous bit of the towering white city of 1900, a cluster of modern high buildings." Accompanying the text is an illustration by Henry McCarter in which the lofty, geometric web of ship's...
masts are superimposed on the tall office buildings (Fig. 21). In 1907, a similar photographic image by Alvin Langdon Coburn which pictured New York as a city of trade was published in *Camera Work* (Fig. 22). In view of the conflict between religious and pecuniary values, perhaps the three cruciform patterns were meant to suggest that commerce and business epitomized the faith of the future.

In addition to the static juxtaposition of lofty masts and architecture, the waterfront skyscrapers were rendered in the context of the hustle-bustle of port activity. In Stieglitz's *The City of Ambition* of 1910, steaming, chugging ferries are seen travelling from the harbor, flanked by the city's looming skyscrapers (Fig. 23).

An awareness of the emergent New York skyline was inevitably linked with the impressive span of the Brooklyn Bridge. Completed in 1883 by Roebling, the bridge embodied many of the same notions as the subsequent tall buildings. Both were technical feats of engineering, employing and exploiting the potential of structural steel. The bridge and the skyscraper seemed to reinforce and expand the view of New York City as a major metropolis. In many respects, the bridge made it feasible to transport large masses of people to a centralized area in Manhattan which may have indirectly prompted the desire to build upward. Moreover, the ingenuity necessary to erect both technical wonders expanded traditional notions of horizontal and vertical
From a purely visual standpoint, the aggregate of skyscrapers from Brooklyn Heights included the vast, curvilinear sweep of Roebling's steel suspension structure. Artists interested in celebrating the progress of New York often employed the span of the bridge to crown the aspiring, vertical edifices as in Joseph Pennell's and Leon Kroll's renditions (Figs. 24 and 25). In the latter work, the triumvirate of transportation, business and commerce is used to characterize New York. A watercolor by John Marin pictures the dual symbols of technological achievement as merged into a single entity, stressing the equivalent loftiness of the bridge's towers and the skyscraper's pinnacles (Fig. 26).

**The Financial District**

The largest concentration of skyscrapers was located in the southern tip of Manhattan island in an area known as the financial, or Wall Street district. With its shift from the seat of revolutionary government to a center of banking at the beginning of the nineteenth century, Wall Street represented the heartbeat of the nation's pecuniary interests. By 1832, a writer noted:

This is the street which contains most of the floating capital of the city, and indeed there is little specie to be found anywhere else. This is the mart for bankers, brokers, underwriters, and stock-jobbers. Here
are planned and consummated speculations of every shape, character, color and dimension.47

The final consolidation of the New York Stock Exchange and the introduction of the first ticker machines in the 1860's resulted in the district's prominence in the volume of business handled. Congestion and the necessity of centralization forced land values upward, in turn prompting the erection of loftier buildings. By the turn of the century, Wall Street was inextricably linked with the proliferation and domination of the tall building. Those critical of the practices of the business community even heaped insults on its architecture as the physical manifestation of the questionable dealings which it housed.

In contrast to the harsh critics of capitalism, however, the positive acceptance of New York as the financial capital of the United States probably engendered the numerous images of Wall Street. The theme of Van Dyke's New New York supported this optimistic view of business, pointing to the skyscraper as the economic and architectural keynote of the future. "The skyscraper of commerce looms above the university and the art gallery . . . the so-called capitain of industry, seems to fill the most conspicuous place in the interest and affections of the city's people," he maintained. Jesse Lynch Williams also commented on the pecuniary orientations of the city, praising the "wondrous bit of the towering white city of the new century" as "symbols of modern capital."48
Wall Street and the business transacted there were viewed as peculiarly American. In 1892, M. G. Van Rensselaer noted that both the buildings and the activity in the district reflected a native sensibility:

The Stock Exchange is certainly the heart of the business life New York. Yet there are stock exchanges in every big city in the world . . . something more distinctively American, more specifically local we find in our skyscrapers.

H. G. Wells preferred the dynamic activity of Wall Street which he found "all American and local" to the nostalgic views of Fifth Avenue. 49

For contemporary artists and writers interested in exploring native architecture, it was logical to proceed to the financial district. Perhaps more than any other single location, the skyscraper's impact on, and interaction with, the throngs of humanity could be explored. Observers began to comment on the accelerated movement of the crowds among the skyscrapers. Pennell referred to the Stock Exchange as "the scene of strange business tumult and excitement" but noted that in the "curb market" there was no less animation. In accord with Pennell, Van Dyke noted that the majority of the activity took place in the street:

... most of the business on Wall Street is transacted on the sidewalk. The phrase "in the street" has been taken too literally, as meaning that operators in the stock market carry on business involving millions in an unconventional shirt sleeve manner while leaning against a lamp post . . . . 50
In the tradition of the illustrators of urban tour guides who selected the most significant sights and spectacles of a city, many of the early skyscraperists were drawn to Wall Street. Unlike the picturesque renditions of interesting scenes, the architecture of the financial district was inextricably linked with the life of the urban dweller. Joseph Pennell, Childe Hassam, Colin Campbell Cooper, and Alvin Langdon Coburn selected identical viewpoints from which to render the monetary center (Figs. 27, 28, 29, 30). From the corner of Broad and Wall Streets, the compact, classical Stock Exchange building both symbolically and physically engendered the momentum of the crowds around the tall buildings. In the version by Hassam, the building was illuminated so as to suggest its incalculable impact as a financial institution.

The centralization of skyscrapers in the downtown region not only inspired the rapid activity of the countless throngs but pointed to the disparate size relationship between the titan buildings and the people who filled the streets. H. G. Wells described the Wall Street area in terms of a "cliff of material achievement above a black froth of people." Another author maintained that the office buildings reduced human beings to Lilliputians and black ants. 51

The images of Wall Street were rendered from above so as to stress the dramatic inconsistency in size,
prohibiting the viewer from mingling freely on the sidewalks and curbs. Just as in the urban scenes by Pissarro, who recorded the spectacle of humanity from lofty heights, people were reduced to indeterminant dabs. Unlike the rather sparsely populated boulevards of Baron Hausmann by Pissarro, the chroniclers of lower New York conveyed the density and anonymity of the masses which resulted from urban congestion.

Prior to the introduction of European modernism to the United States around 1910, artists attempted to communicate the rapid expansion and dynamism of New York. In contrast to the surge of humanity, Manhattan's skyscrapers remained stalwart and immovable. Soon American artists would transform the static structures into shifting planes, subsumed in a whirl of energy. Yet, this does not discount the efforts of the early skyscraperists who recorded the transformation, dynamism, and activity of the metropolis in a vocabulary suited to the time.

**Nature and the Picturesque**

Despite the novelty of the skyscraper theme, many of the initial renderers of the tall building, such as Pennell, Cooper, and Harrison, sought to situate their images in the context of accepted notions of taste. In order to conform to the prevailing conservatism of the American art establishment, a detailed depiction of the
skyscraper was discouraged. Rather, a private, subjective response to the external world, or the ability to reflect its symbolic significance, was preferred. As Birge Harrison suggested:

> Of course one must paint what one sees, but one must see with the mind as well as with the eye. The true vision means not only the power to see and to recognize beauty, but the power to see it stripped of all its vulgarities and inessentials.53

In accord with Harrison, Childe Hassam compared the portrait of a city to that of a person. "The difference is to catch not only the superficial resemblance but the inner self," Hassam advised. Rather than aiming for versimilitude, "one should strive to portray the soul of the city with the same care as the soul of a sitter." The beauty of the Hassam's skyscraper images were appropriately praised by a reviewer for their success in depriving the buildings of their "rawness and afflicting realism." Likewise, the "poetic vision" of Colin Campbell Cooper was applauded, especially his transformation of the "prosaic structures" by "inclusion and elimination."54

The so-called factual character of the business architecture was suppressed in a variety of ways. Often, the buildings were cast in atmospheric veils or mists so as to soften the details, thereby transporting the viewer to an otherworldly realm. This process of subtle suggestion is seen in the skyscraper renditions of Birge Harrison, who immersed the renowned Flatiron Building in ephemeral
As a result, the loftiness and particularities of the building are reduced to an amorphous glow (Fig. 31). A passage from Van Dyke's *New New York*, which is remarkably similar in content to Harrison's painting, points to the uniformity of this view of the skyscraper:

> How very beautiful the high ridge of skyscrapers look shrouded in that silver-gray mist, their tops half disappearing in the upper blend of rain and clouds. . . . What mysterious appearances these high buildings take upon themselves with their masses of light and dark floating in the heavy atmosphere of rain.

Even James allowed for the "parts and pieces melting together rather richly now of 'downtown'."56

The French expatriate Albert Fleury, among the first to paint the skyscrapers of Chicago, situated Burnham and Root's Masonic Temple of 1891-92 in a mixture of blustery snow and industrial smoke (Fig. 32). Likewise Alfred Stieglitz attempted to convey the solidity and lightness of the Flatiron Building by immersing the monolithic structure in the evanescence of a winter blizzard (Fig. 33).

As Wanda Corn has pointed out, the preference for tone in *fin de siècle* America was heir to the nineteenth century's "search for the beautiful and the sublime in nature" and represented a discomfort with the current rate of urbanization.57 Coupled with the distaste for the momentary realism of the native Hudson River School and the French Impressionists, artists sought to forge a synthesis
between objective reality and "subjective sentiment," as George Inness so aptly phrased it. The sources for this mode of representation are varied, including a strong link to the moody romanticism of the Barbizon masters, the loose, painterly style of Whistler and the late works of Inness, and the evocative, otherworldly character of European Symbolist painting.

In addition to the exploration of meteorological conditions, urban artists were sensitive to the changing appearance of skyscrapers at different times of day. Unlike the work of the French Impressionists, the fleeting aspects of nature were explored for their suggestiveness or drama. Perhaps the most popular time of day to render the skyscraper was in the evening when the tenebrous envelope blurred the harsh realities of daylight and lent the scene an air of mystery. The nocturne also provided a vehicle to explore the luminous reflections created by the new electric lighting.

The casting of natural scenery in darkness enjoyed a tradition in American landscape painting. Although inspired, in part, by their connection with the Barbizon painters, native artists could refer to the writings of Edgar Allen Poe for poetic inspiration:

At midnight, in the month of June, I stand beneath the mystic moon
An opiate vapor, dew, dim
Exhales from out her golden rim
Wrapping the fog about its breast
The ruin molders into rest.  

The nocturne enjoyed a renewed interest probably because of the popularity of Whistler. Despite his move to Europe in the 1850's, the American press covered the 1878 Whistler-Ruskin trials extensively. Whistler's death in 1903 and Pennell's undertaking of a major biography on the artist probably rekindled the preference.

The photographer Edward Steichen spoke of the impact of Whistler on the developing American artist:

At the same time I began painting nocturnes, Milwaukee didn't have an art gallery in the sense that it has today . . . there was no influence except what I would pick up in the newspapers and magazines, but Whistler was a name that appealed to me and the fact that he painted nocturnes . . . .

The paintings and photographs of Steichen clearly demonstrate the transposition of fin de siècle notions of landscape painting to the burgeoning new skyscraper. His early endeavors in both media display an obsession with nature by moonlight. In a letter to Stieglitz, written shortly after his marriage, he rhapsodized:

We had a moon night before last--the like of which I have never seen before--the whole landscape was still bathed in a warm twilight glow--the color simply marvelous in its dark light--and into this rose a large disc of brilliant golden orange in a warm purplish sky.

Steichen's first skyscraper photographs were of the Flatiron Building at night, illuminated by both lunar and
electric light which reflected off the wet asphalt (Fig. 34). In order to simulate the rich tones of the natural scenery he admired, his prints were touched with yellow, blue, and green pigment.  

Skyscrapers at night provided artists with the opportunity to explore the jewel-like effects of the new electric lighting. Not only did the street lamps and advertisements glow with marvels of modern science, but office buildings at night were often illuminated from within and without. By the 1890's, observers commented upon the effects created by the radiant buildings. Jesse Lynch Williams exclaimed: "... it is already quite dark, but the city is still at work and the towering office buildings are lighted--are brilliant indeed with many perfect even rows of light dots." In accord with William's description, Julian Alden Weir presented a nocturnal image of the numerous skyscrapers, focussing on the scintillating effects created by the intermittent dabs of electricity (Fig. 35).  

The journalist F. Hopkinson Smith described the multitude of ways electricity affected the new architecture:

When the shadows soften the hard lines and the great mass looses its details, and skyscrapers melt into a purple grey... when the glow worms light their tapers in countless windows, when the towers and steeples flash greetings to each other... when the streets run molten gold and the sky is decked with millions of jewels.  

The painter Albert Fleury presented the glowing
nocturnal splendor of the western metropolis in State Street, Chicago Evening, one of his favorite themes (Fig. 36). Here, the abstract patterns created by the rectilinear windows "shine redly," as if igniting a massive inferno.

Stieglitz and his Photo-Secessionist colleagues were particularly enamoured with the mysterious potential of the nocturne as well as the wonder of electricity at night. In one of the first photographs taken at night employing artificial lighting, Stieglitz demonstrated his ability to expand the boundaries of the medium. Not only an experiment in the feasibility of evening photography, Icy Night, New York (1897) is both an eerie, somber view of the city and a record of its rapid conversion to electricity (Fig. 37).

Following his mentor's example, Alvin Langdon Coburn rendered a silhouette of the Ernest Flagg's Singer Building (1908) at twilight, bedizzened in its glittering evening costume (Fig. 38). It was "the most exquisite of all New York's daily effects," proclaimed H. G. Wells.

Since the Singer was the first skyscraper to sport both internal and external lighting, the building could be rendered more lucidly.

This is not to suggest that skyscrapers were perceived solely in murky mists and veils; rather, artists were also stimulated by the exploration of the spectacle of light and color. Prophecizing on the future of American
art, Birge Harrison encouraged artists to paint "the
glimmering iridescent effects that happen only under the
great blue arch of the sky, the glory of the noonday
sunlight, the pale beauty of dawn" and "the golden glow
of sunset." John C. Van Dyke situated the skyscraper in
similar colored ambiances. Observing the Flatiron on a
July afternoon, he perceived it "float in a rosy atmosphere
... the high sky above it showing a pallid blue suffused
with pink." Of the high tower of the Times Building, he
saw it "run from a red glow at sunset through pink mauve
and lilac ... ." Sadakichi Hartman's poem "To the
Flatiron" pictured the building in a variety of luminous
effects:

On Roof and Street, on park and pier
The spring-tide sun shines soft and white,
Where the "Flatiron," gaunt austere,
Lifts its huge tiers in limpid light.

From the city's stir and madd'ning roar
Your monstrous shape soars in massive flight;
And 'mid the breezes the ocean bore
Your windows flare in the sunset light.

Well may you smile over Gotham's vast domain
As dawn greets your pillars with roseate flame.69

This concern for the variegated properties of light was
inspired, in part, by their exposure to the works of the
French Impressionists. Yet unlike Monet and Renoir who
wished to convey the transient aspects of nature,
Americans explored the evocative, expressive, and subjective
properties of color and light in a language that may be
termed proto-abstract.70
The rendering of skyscrapers in various seasons and times of day suggested that the tall buildings were viewed as an integral part of the natural scenery, rather than as independent entities. At the onset, skyscrapers were likened to lofty mountains and the interstices to canyons or plateaus. In Henry B. Fuller's *The Cliff Dwellers*, analogies were drawn with the natural topography. "These great canyons—conduits, in fact, for the leaping volume of an ever-increasing prosperity... Each of these canyons is closed in by a long frontage of towering cliffs...," the author maintained. Jesse Lynch Williams spoke of "a cluster of mountains with their bright peaks glistening in the sun far above the dark shadows of valleys in which the stream of business flows."  

A number of commentators noted the similarity between the aggregate of skyscrapers and specific lofty mountain ranges. Van Dyke compared the Manhattan skyline to the "wall of the Alps" while another observer evoked the following lines from Tennyson:

I climbed the roofs at break of day:  
Sun-smitten alps before me lay,  
I stood among the silent statues,  
And statued pinnacles, mute as they.  

Pennell often entitled his skyscraper renditions canyons or cliffs, conveying the steep precipices created by the titan structures. In the *Cliffs of West Street* of 1912, the backs of buildings were viewed from the north river, revealing a variegated silhouette of anonymous
monoliths, their undifferentiated surfaces suggesting mountains (Fig. 39).\(^73\)

The New York skyline was often the source of natural analogy. Aside from the obvious associations with cliffs, tall buildings were likened to emergent plant life, perhaps to reinforce their ever-rising, changing character. James called them "this loose nosegay of architectural flowers" while Hassam praised the light of New York as garlanding "the skyscrapers with rosy tints that suggest the flowers of spring." Pennell referred to the group of buildings in the downtown region as "flowers among the grass of a spring lawn."\(^74\)

The likening of cityscapes to features of the land was symptomatic of a desire to accommodate the new topography to accepted notions of landscape painting, a rich tradition in nineteenth century American art. In addition, the fusion of architecture and natural scenery was an important concept associated with the picturesque as originated by the late eighteenth century English theorists William Gilpin and Uvedale Price. Developed to justify the untamed appearance of the English countryside in contrast to an ordered, classical conception of nature, the picturesque provided a whole new vocabulary of aesthetic appreciation for scenes previously considered unworthy. At the end of the nineteenth century in America, artists seized upon the precepts of the picturesque to justify their employment of
the skyscraper. To those that inveighed against the tall building for its so-called crudity, lack of proportion, chaotic, uneven appearance, and ugliness, apologists could respond as their eighteenth century precursors had.

In his *Essay on the Picturesque* of 1798, Uvedale Price described a once smooth and symmetrical building which was now rough and uneven due to its abandonment to the vicissitudes of time. This building was not ugly as formerly thought but picturesque, Price maintained. Earlier, William Gilpin had differentiated between smoothness and neatness associated with the beautiful, and the roughness and irregularity of the picturesque. According to Price:

> The most picturesque . . . buildings are old castles for they in general consist of towers of different heights, and of various outworks and projections, particularly where the abruptness and irregularity of the ground, has in a manner forced the architect to adopt the same irregularity in the shapes and heights of his buildings.

Castles were extremely picturesque, Price continued, owing to the erection of the various parts at different times.75

Similar rationalizations were employed in defense of the new office building. In 1903, a journalist observed:

> Hideous it assuredly is to the rhythm-loving eyes of an architect, and all its details are incongruous—the front of a Grecian temple surmounting a rocket. . . . Yet the eye that delights in varieties of light and shadow, in the surprises of perspective and in the picturesque juxtapositions of masses, will find endless subjects of interest.76

Perhaps the earliest connection of the skyscraper with eighteenth century notions of the picturesque occurred
in M. G. Van Rensselaer's seminal article "Picturesque New York" of 1892 which defined and articulated the picturesque aesthetic which was to dominate American industrial imagery for the next three decades. Acknowledging Uvedale Price as an authority on the subject, she expounded on the characteristic features of the picturesque, including "harmonious and alien elements," "sharp and telling contrasts," "variety," atmosphere, the nocturne, and "the beauties of light and shadow." Although New York was considered prosaic compared to Paris and Nuremberg, the sensitive observer could discover a multitude of sites in Manhattan. "Those frank big irregularities of form which drive an architect to righteous despair" and the "entertaining panorama of ruddy architectural irregularities spotted by the more aggressive tall white or yellow irregularities of recent years" were among the scenes recommended by the author.77

Others began to champion the picturesque features of the skyscraper. In Scribner's in "The Field of Art" column of 1896, the painter was encouraged to explore "the picturesque quality of the much abused office buildings." Almost a decade after Van Rensselaer's article, Sadakichi Hartmann published "A Plea for the Picturesque New York" in which he explored the multitude of interesting views available to the artist and the photographer. Praising the various technological wonders of the city, he singled
out "the gigantic parallelograms of office buildings" as well as the magic of the skyscraper in construction as "it weaves its networks with scientific precision over the rivers . . . ." 78

Responding to the exhortations of the early discoverers of the picturesque in urban America, artists and critics began to describe and render the scenery of New York and Chicago in similar terms. In Landscape Painting of 1909, Birge Harrison asserted that there was "a strange picturesqueness in some of our modern steel mills" and "our skyscrapers have an unusual beauty all their own." 79 For Harrison, the picturesque aspects of the city were represented in uncommon viewpoints and the exploration of various atmospheric effects.

Indeed, many artists of the time associated the picturesque with the tonal. In an exhibition entitled "Picturesque Chicago," Albert Fleury rendered the city in a variety of hazy and indistinct weather conditions. Alfred Stieglitz's Picturesque New York of 1897, a collection of photographs of Manhattan and other European cities, explored weather conditions and light. 80

Although the interest in tonal effects had formal precedents in nineteenth century painting, Price stressed the effects of light and shade. His praise of a contemporary painter might have been uttered at the beginning of the twentieth century in America:
... the peculiar beauty ... which arises from the even surface, and the silver purity of tint in that farthest building--from the soft haze of the atmosphere, and the aerial perspective produced by the union of these circumstances ... makes the architecture retire from the eye, and melt into the distance.

According to Christopher Hussey, the most respected modern writer on the subject, since the seventeenth century "overall tonal unity and accentuated chiaroscuro" and painterly values were keynotes of the picturesque. According to Christopher Hussey, the most respected modern writer on the subject, since the seventeenth century "overall tonal unity and accentuated chiaroscuro" and painterly values were keynotes of the picturesque. 81

Joseph Pennell claimed that he studied the skyscraper for its "grandeur, picturesqueness, mystery of pathos," suggesting a more emotional interpretation of the concept incorporating features of the sublime. 82 An examination of Pennell's skyscraper images reveal a number of adaptations of the picturesque, including the fusion of the architecture with the natural scenery and the exploration of tonal effects. But the artist was particularly fascinated with the irregularity and variety of the unequal building heights. In From Fulton Ferry of 1910, the jagged contour created by the disparity in size is explored (Fig. 40).

It is difficult to determine if American artists and intellectuals had actually read Gilpin and Price. 83 However, their employment of equivalent terminology indicated a comprehensive knowledge of the general concepts associated with the eighteenth century theoreticians. While an identification of picturesque features in their art is often problematic, many contemporaries felt that the mere adoption
of the skyscraper as a motif represented an acceptance of its principles.

Although the majority of early skyscraperists viewed the tall building in picturesque terms, Alvin Langdon Coburn and Alfred Stieglitz forged a new and more objective vision of it. Presented in crisp, veristic terms, the skyscraper was finally perceived as a commercial, business edifice instead of an integral part of the natural landscape.
Stieglitz and the City

It is necessary to consider Stieglitz separately for his pioneer contribution to the positive attitude concerning urban imagery at the turn of the century. Although he was an integral part of the intellectual climate that viewed the skyscraper in equivocal terms, his overriding belief in progress and experiment, his photographs of metropolitan New York, and the lively dialogue on various aspects of urban living put forth in Camera Work engendered a receptive attitude toward the tall building. Not only were the Photo-Secessionists stimulated to consider the city as a viable theme, but the American modernists affiliated with the "291" gallery communicated many of the views first disseminated by Stieglitz.

Stieglitz's predilection for urban subjects was motivated by a number of progressive beliefs, similar to those that catalyzed the creation of "291." His confidence in the march of progress was the cornerstone of his activities, from his championing of photography as an aesthetic
medium to his introduction of modern art to a largely conservative American public. He stated:

The progress of the ages has been rhythmic and not continuous, although always forward. In all phases of human activity the tendency of the masses has been invariably toward ultraconservatism. Progress has been accomplished by reason of the fanatical enthusiasm of the revolutionist.¹

Stieglitz's belief in progress also extended to science and technology. As early as 1884, he experimented with the limits of photography, rendering a still dynamo illuminated by sixteen power electric bulbs. After his return to New York, he was the first to photograph the city employing artificial lighting, as seen in Icy Night, New York (Fig. 37). Even the "291" gallery was conceived of as a "laboratory of experiment," so strong were his convictions concerning the innovations of technology.² The October 1911 issue of Camera Work corroborated this view; in addition to three skyscraper images, a railroad view, a dirigible, and an airplane were included.

Despite his reservations toward the United States, Stieglitz's efforts revealed a certain nationalist orientation. During his student days abroad, he zealously defended things American, including the Brooklyn Bridge, against derisive attacks from his European colleagues. In another context, he criticized native photography as too conventional and dependent on outworn formulae, encouraging our early artists of the camera "to push ahead with that American will power which is so greatly admired by the whole
civilized world." His subsequent support of the American painters Marin, Hartley, O'Keeffe, and Dove attested to his belief in his own country. This equivocal stance was symptomatic, in part, of the persistent dialogue of American artists with European culture.

The Photo-Secessionists were also opposed in principle to the staged studio images and hackneyed efforts of a sizable number of American photographers. Stieglitz criticized the "conventionality of the subjects chosen," including "the same types of country roads, of wood interiors, the everlasting waterfall, village scenes . . . piazzas etc." Gertrude Kasebier, a colleague at "291," voiced a similar opinion:

> Who has educated the public to a false standard of photography? Who sanctions the painted background, the paper maché accessories, the high backed chair, the potted palm. There is one prominent photographer who never need sign his productions for the sake of identification. The same Turkish cushion, and muslin rose appear in all his photographs of society women.

Stieglitz became the epitome of Henri's "sketch hunter," scouring the streets of New York for subject matter, a method which reinforced his rejection of hackneyed subjects. The critic Charles Caffin stressed that Stieglitz worked chiefly in the open air, allowing his models to pose for themselves. Likening him to the Impressionists, Caffin asserted that the photographer sought the "effects of vivid actuality." In accord with Henri, Dewey, and
Sullivan, Stieglitz rejected, at least theoretically, the rampant eclecticism of the period in favor of the contemporaneous.

At the outset, however, Stieglitz's response to New York was colored with ambivalence. Upon his return from the stimulating atmosphere of Berlin with its varied cultural offerings, he found fin de siècle New York hopelessly boring; his "yearning for Europe was constant." This sense of detachment prompted feelings of profound depression. He recalled:

It was strange to experience such unhappiness in my homeland among my own people, to feel no point of contact with anyone or anything. The streets were filthy. For months despite being twenty-six years old and living with my parents, I cried every night, not from self pity, but from a sense of overpowering loneliness.6

Ironically, the photographer's moods of despair drew him closer to the source of his anguish. Wandering through the city with his camera, he imbued his subjects with his sense of isolation. Often, he focussed on the seemingly inconsequential aspects of life—a lone ragpicker or a driver watering his horses on a bleak winter day. Or he employed dull, murky tones, as in The Hand of Man of 1893, which served to reflect his despondency.

Although he held an abstract belief in progress and the importance of technology, these ideas conflicted with his sympathies toward the common man engaged in meaningful labor and the oppressiveness of materialism.7 In Spring
Showers of 1900, perhaps his first photograph to purposely display the skyscraper, a tiny human figure is dwarfed by the gargantuan scale of an office building (Fig. 41). Buffeted by the overwhelming power of the elements, the sweeper performs his seemingly obsolete task in view of the forces of nature and urbanization.

In accord with his contemporaries, Stieglitz considered the urban milieu as inherently unaesthetic. It was the artist's responsibility to infuse his productions with subjective sentiment. Referring to his work, he stated that "metropolitan scenes, homely in themselves, have been presented in such a way as to impart them a permanent value because of the poetic conception of the subject . . . ." In January of 1903, he voiced a similar opinion. An editorial comment on the photographs included in Camera Work described The Hand of Man, a view of a railroad yard, as "an attempt to treat pictorially a subject which enters so much into our daily lives that we are apt to lose sight of the pictorial possibilities of the commonplace." ⁸

The desire to imbue his prints with his personality was also symptomatic of the desire to dispel the myth that photography was a purely mechanical process, a mere handmaiden of art according to Baudelaire. ⁹ Stieglitz fought indefatigably to demonstrate that it was a subjective as painting. His urban views of the 1890's reflected his
intention to record "the evolution of an inward principle."

In an interview with Theodore Dreiser which occurred on the roof of a skyscraper, the writer reported the following:

Dark clouds had clustered around the sun, gray tones were creeping over the plateaus of roofs; the roar of the city surged up tense, somber and pitiless.

"If we could but picture that mood," said Mr. Stieglitz, waving his hand over the city.10

Despite his numerous misgivings concerning urbanization, he conceived of producing a series of one hundred views of New York in 1893. Four years later, he published his aforementioned *Picturesque Bits of New York and Other Studies* which featured preliminary interpretations of Manhattan, including *Winter-Fifth Avenue* and his experiments employing artificial lighting.11 The desire to record the varied aspects of the city continued intermittently throughout his career. As late as 1932, Stieglitz exhibited 96 of his urban photographs at "An American Place." These spanned his career from the 1890's until the present. In an introductory statement, he spoke of wanting to "establish the continuity and underlying idea of the work as a whole."12

By the end of 1903 and the publication of his photograph of the Flatiron building in the pages of *Camera Work*, he assumed a somewhat more positive attitude toward the skyscraper. Having observed the edifice in the course of construction, he perceived it anew during a violent
snowstorm. Utilizing atmospheric effects, he sought to convey the "lightness of the structure combined with solidity." He spoke with awe concerning the whole process of fabrication, commenting specifically on the steel and the workers as they ascended the enormous scaffolds. His interest in construction and his intent to convey the building's relative weightlessness indicated a recognition of the contributions of modern technology.

Aside from Stieglitz's incisive reminiscences concerning the technical advances revealed in the skyscraper, the building is interpreted in the language of the picturesque. Partially obfuscated by snowy gusts, it was inextricably linked to the landscape. Moreover, the placement of the tree parallel to the picture plane so as to suggest depth displayed his understanding of Japanese principles of design. This use of picturesque features and non-western methods of compositional design served to remove the image from its contemporary American setting. Thus in 1903, his progressive attitudes concerning the skyscraper were not congruent with the resultant images.

By 1910, Stieglitz demonstrated a willingness to accept the skyscraper on its own terms. The tall building was no longer rendered in the language of nineteenth century landscape painting, but celebrated as a symbol of American business prosperity. The titles of, and the messages implicit in, the recent endeavors conveyed his positive
regard. A view of the skyline entitled The City of Ambition communicated New York's material expansion and commercial orientations, while Old and New New York applauded the erection of a lofty steel scaffold (Figs. 15 and 23).

His correspondence in the years prior to the war reinforced his positive regard for the city. Replying to Marsden Hartley in 1914, he sought to counter the painter's disparaging remarks: "You speak of New York as an unspeakable place. It is truly that. But it is fascinating. It is like some giant machine, soulless and without a trace of heart." A letter to Sadakichi Hartmann, of the following year, indicated his current preference for urban living.

To live in the country I hope doesn't mean that one becomes an intellectual hayseed. . . . So why live in the country. That is what a real skyscraper still does for me.15

The dissolution of the "291" gallery, the United States entry in World War I and the beginning of Stieglitz's involvement with Georgia O'Keefee in 1917 prompted an unprecedented antipathy toward New York. From his resort at Lake George, he wrote to the photographer Paul Strand: "New York seems vary far away and I assure you I don't miss any part of it--if I never saw it again I don't think I would hear it call." A month later, he reiterated his distaste for the "noise and dirt and city hum drum--the newspapers, the extras--Wall Street."16

The promulgation of Stieglitz's ideas occurred in variety of forums. The periodicals he edited and published,
the works he exhibited in his galleries, and the numerous discussions he facilitated insured the dissemination of his views on the nature of technological progress and the viability of the skyscraper. In many ways, his major magazine Camera Work served as a mouthpiece for his continued dialogue with his urban milieu.

The Periodicals
Stieglitz's role as editor of The American Amateur Photographer (1893 - 1896), Camera Notes (1897 - 1902) and Camera Work (1903 - 1917) aided in the artistic recognition of the skyscraper. In the earlier magazines, the subject was cursorily alluded to. Camera Work, on the other hand, featured numerous urban photographs as well as a lively dialogue on various aspects of the metropolis.

The first mention of the possibilities of photographing the skyscraper were elaborated in an article entitled "Architectural Photography," in The American Amateur Photographer of 1893. Although he was concerned predominantly with technical matters, such as the proper selection of lenses, cameras, and vantage points in the rendition of various types of buildings, the author recognized the challenges involved in skyscraper photography. Referring to the architect of a current skyscraper in process, he stated:

Mr. F. H. Kimball will require a man of some resource to photograph the Manhattan Life Building on lower
Broadway. . . . It is to rise twenty stories, the highest habitable building on Manhattan island. . . . In the case of an isolated building . . . I would advise a view to be taken from a point across the street. In the case of high buildings, such as are under construction, that would be impractical.

The author's desire to relegate architectural photography to the realm of the chronicler is evidenced by his criticism of that "'fuzziness,' which his associates considered artistic" but which he found ill-suited to architectural photography's documentary purpose. 17

Whereas The American Amateur Photographer suggested the aesthetic possibilities of urban photography, Camera Notes supported its cause. In "A Plea for the Picturesqueness of New York," Hartmann encouraged photographers to render the myriad aspects of their urban milieu. In the course of its publication, the periodical included various industrial and metropolitan scenes to augment Hartmann's exhortation. In 1900, Stieglitz's famed Winter-Fifth Avenue of 1893 and Clarence White's Telegraph Poles were reproduced. In the first number of the following year, Prescott Adamson's Midst Steam and Smoke, a view of a factory in snow, was offered. The next issue featured a catalogue of the members exhibition of The Camera Club which listed Ed Heim's The Edge of New York and D. H. Goodwillie's Bulls and Bears of Wall Street as well as an illustration of Charles H. Loeber's view of the Brooklyn Bridge. In January of 1902, Stieglitz's Spring Showers
of 1900 appeared, perhaps the first of his published skyscraper views.\textsuperscript{18}

The urban photographs of the United States included in Camera Work are too numerous to mention.\textsuperscript{19} From the appearance of the Flatiron Building in 1903 to Paul Strand's interpretations of Manhattan in the last issue of 1917, views of the city were included regularly. More importantly, a lively debate concerning the impact of urbanism and the viability of skyscraper subjects was offered in its pages, a subject which requires further elaboration.

The October 1903 issue included Stieglitz's Flatiron--Winter as well as Hartmann's "The 'Flat-Iron' building--An Esthetical Dissertation" and his poem "To the 'Flat-Iron'." While this number of the periodical ostensibly represented a celebration of the skyscraper, a closer examination reveals that Stieglitz and his colleagues still held misgivings. Hartmann praised both the building's picturesque quality and its utilitarian properties. Yet he criticized "the pernicious habit of industry, yelling and writhing before the juggernaut of commerce." An excerpt from the accompanying poem supported his equivocal stance:

\begin{verbatim}
From the city's stir and madd'ning roar
Your monstrous shape soars in massive flight.\textsuperscript{20}
\end{verbatim}

Joseph Keiley's article "Landscape A Reverie" provided a more dismal appraisal of metropolitan living.
The author complained about congestion, the hustle-bustle, noise, and pollution:

Morning and evening ferry-boat, street car, elevated train are packed to suffocation. . . . Time for reflection there is none—it is always hurry, hurry. . . . We hear but the roar and the rattle of the city whose din is never still. We breath air heavy with overuse, surcharged with noxious gases . . . .

As an antidote to this oppressive existence, Keiley recommended an escape to the country.

Perhaps the most detailed exploration of the aesthetic merit of the skyscraper and other urban sites to appear in Camera Work occurred in the previously discussed "The Origin of Poetical Feeling" by Roland Rood. The author presented a detailed analysis of our so-called aesthetic predilections, encouraging a reevaluation of these tastes. This position had been prefigured, in part, by Hartmann who questioned the relative connotations of beauty which were dependent on the particular Zeitgeist.

By 1911 Stieglitz and his colleagues no longer found it necessary to criticize or justify the city. The October issue of Camera Work self-consciously considered the skyscraper in unequivocally positive terms and served as a celebration of New York City and technological progress. It included four skyscraper images by Stieglitz completed the previous year, Spring Showers of 1900, a host of urban photographs from the 1890's, a dirigible, and an airplane. Relying on a "straight" or unmanipulated approach to the medium, the skyscraper was finally interpreted on its
own terms, divorced from its previous associations with the picturesque. This may have reflected Stieglitz's desire to explore the mechanical potential of the camera art, a direction which accorded with his current enthusiasm for industrial development. Moreover, the inclusion of a Picasso drawing in the same issue suggested that this "straight" method was to be distinguished from the abstract directions of modern painting as well.

An article by Alvin Langdon Coburn seemed to corroborate Stieglitz's optimism. In "The Relation of Time to Art," he linked the technical modernity of photography to the skyscraper, suggesting that the camera was particularly suited to the rendition of office buildings.

Photography born of this age of steel seems to have naturally adapted itself to the unusual requirements of an art that must live in skyscrapers, and it is because she has become so much at home in these gigantic structures that the Americans undoubtedly are the recognized leaders in the world movement of pictorial photography.23

According to Coburn, the rapid pace of New York was particularly suited to the camera's ability to capture the momentary impression.

The last two issues of Camera Work introduced the urban photographs of Paul Strand, and the reemergence of a more ambivalent view of the tall building. Although a few of the images suggested a fascination with the abstract patterns of the city, others expressed the alienation and loss of identity experienced by the urban
dweller (Figs. 42 and 42a). These images seemed to sum up Stieglitz's own equivocal feelings toward the city at the time. While he was optimistic concerning the strides made by modern science, increasingly he felt that the city squelched the individuality of the metropolitan inhabitant.

Alvin Langdon Coburn

Stieglitz's persistent dialogue with the burgeoning city had important ramifications for the Photo-Secessionists and the American modernists affiliated with his gallery. As a result of his pioneer efforts in urban photography, the skyscraper assumed a prominent role in many of their endeavors. The reoccurrence of specific buildings and sites in their paintings and photographs attested to the coherence of the group and their influence upon one another.

Aside from Stieglitz, the most important urban photographer associated with the "291" circle was Alvin Langdon Coburn. In February of 1906, the latter had his first skyscraper images published in the Metropolitan Magazine, a London based periodical. In addition to St. Paul's Church and the Park Row Building, picturing the contrast of religious and commercial architecture, the issue included a nocturnal view of the Flatiron Building in silhouette (Figs. 5 and 43).

Beginning in 1907, Coburn began to relinquish the attitudes associated with the picturesque. In "Portsmouth
U.S.A.,” an image of the lofty Park Row Building surrounded by industrial smoke, and New York, he defined the skyscraper in terms of business and commerce (Figs. 22 and 44). Coburn's avoidance of any devices to manipulate the photograph attested to his desire to interpret the skyscraper on its own terms three years before Stieglitz's own "straight" images of the tall building. Coburn's explanation of the photograph reinforced his desire to divorce it from retrogressive associations in favor of its utilitarian potential. "If I have made the observer feel the dignity of the architecture with its straight lines and practically unornamented and with only the proportions to give it charm . . . I am satisfied," he maintained.26

Coburn was so enamoured with the rapid upward growth of the city that in 1909 he conceived of a book on the subject. Entitled New York, it was a realization of Stieglitz's desire to record the myriad aspects of the city. It included both picturesque and more objective views. Perhaps acknowledging his debt to Stieglitz in this regard, Coburn wrote informing him of the project. "Of course there is no end to the things there are to do. There is New York for example. I have the material for a set of plates that I very much want to do," he reported.27

The following year, Coburn's photographic essay on the metropolis was published simultaneously in New York and London. Featuring a foreword by H. G. Wells, Coburn
explored the skyscraper theme comprehensively. Wells' introductory remarks served to augment the spirit of optimism which pervaded the endeavor:

I WILL confess an unqualified admiration for the skyscraper—given the New York air to reveal it clearly to its summit against the sky. The Flat-Iron I visited again and again . . . , that I might see it at every phase in the bright round of New York day and night . . . the most exquisite of all New York's daily cycle of effects, Mr. Coburn has given a picture of the Singer tower at twilight, in which I verily believe . . . has caught some of the exhilaration in the air.28

The photographs were a frank display of Coburn's enthusiasm for the skyscraper. Of the twenty images comprising the set, almost half pictured the tall office building. These included: The Singer Building—Twilight, The Singer Building—Noon, The Park Row Building, The Flatiron, The Metropolitan Tower, The Skyline, The Battery, The Waterfront, and The Stock Exchange (Figs. 22, 30, 38, 45). The remainder concerned the building of tunnels, images of the city from above, nocturnal views celebrating electricity, and suspension bridges.

While a few were still misty, tonalist endeavors, the majority continued the direction set forth in his photographs of 1907, two of which were included in the current volume.29 Presented in crisp, veristic terms, the skyscraper was rendered as an autonomous entity rather than as an integral part of the natural landscape. Coburn's selection of four well-known office buildings continued Stieglitz's earlier selection of the lone Flatiron Building.
The remainder of images of specific sites displayed Coburn's intention to interpret the skyscraper as a symbol of business and commerce.

Stieglitz's admiration for Coburn's skyscraper views is seen in his inclusion of a photograph entitled New York 1907 in the pages of Camera Work. Yet is it ironic that Stieglitz failed to reproduce any of the images from Coburn's book New York of 1910, aside from a picturesque, nocturnal view of the Singer as an advertisement for the new publication. Instead, the "New York" number of the periodical included an article by Coburn on the suitability of the camera for the rendition of the skyscraper. It appears that Stieglitz wished to claim credit for the fresh approach to the depiction of the skyscraper pioneered by Coburn four years earlier.

Coburn's continued interest in the skyscraper was revealed in an exhibition entitled "New York From Its Pinnacles" at London's Goupil Gallery in 1913. The show featured five new photographs concerning tall office buildings which included The Woolworth Building, The Municipal Building, and The House of a Thousand Windows, a continuation of his interest in specific New York edifices. Trinity Church From Above and The Octopus explored the appearance of the city from distant heights (Fig. 46). Coburn explained:
These five pictures were made from the towers of New York's highest buildings. How romantic, how exhilarating it is in these altitudes, few of the denizens of the city realize, they crawl about in abyss content upon their own small concerns, or perhaps they rise to the extent of pointing with pride to "the tallest building in the world" the Singer.31

The Octopus and The House of a Thousand Windows, which Coburn described as a "Cubist fantasy," were particularly important for their realization of the implications of abstract photography. In surveying the city from above, Coburn became attuned to the multitude of detached and abstract shapes as well as the potential of the camera to record this novel information. A close associate who was exploring the variety of shapes in the city, Max Weber urged the expansion of the boundaries of photography. In an article which appeared in the photographic periodical Platinum Print of 1913, Weber asserted:

Photography is a flat space art, as is drawing, painting or printing. The page or the canvas is empty, but pregnant with birth as space, waiting for the touch of the inspired mind. There is a universe of light and colored form in matter . . . .32

Coburn acknowledged Weber in 1916 for instituting a group of exercises, while the latter was a teacher at The Clarence White School of Photography, with the intention of being "as abstract as it is possible with the camera."33 Coburn's experimentation with the abstract possibilities of skyscraper views and his subsequent development of vortography were inspired by the theories of modern art
articulated by Weber.

Coburn was the most indefatigable photographer of the skyscraper at the turn of the century. By 1907, he developed a more objective approach to the rendition of the tall building which removed it from its previous associations with the picturesque. Perhaps more than any other photographer in the Stieglitz group, his skyscraper views influenced the attitudes of the American modernists recently returned from Europe. Moreover, he was the first to explore the abstract possibilities of the camera art in the rendition of the American city.

The Celebration of the Single Skyscraper: The Flatiron, The Singer and The Woolworth

The selection of skyscrapers with particular idiosyncracies and distinctive personalities characterized a significant component of the Photo-Secessionist's response to the tall building and points to the exchange of ideas between the members of the group, including the painters. It is important to consider the reasons for the repeated appearance of these skyscrapers, their peculiar features and their ability to catalyze an overwhelming response. The acceptance of the skyscraper as a subject suitable for the fine arts was due, in part, to the architect's ability to convey its dramatic features.
The Flatiron, the Singer, and the Woolworth Buildings were the three major skyscrapers rendered by Stieglitz and his compatriots. While the single skyscraper was often criticized by conservative observers, it was also the source of wide public acclaim. Essentially, the Flatiron was lauded for its shape, the Singer for its height, and the Woolworth for its loftiness, dimensions and gothic exterior. The members of the "291" circle were inspired particularly by the special characteristics of these buildings.

The completion of Daniel Burnham's Fuller or Flatiron Building in 1903 on the corner of Twenty-Third Street and Broadway contributed to the artistic recognition of the skyscraper. Perhaps more than any other building to date, it enjoyed the overwhelming attention of the public and the popular press. Its loftiness and unobstructed presence on Madison Square, long recognized as a picturesque site before the erection of the tall building, made the Flatiron seem more formidable than those that were crowded together on the southern tip of Manhattan island. But its most distinctive feature which earned it the nickname "Flatiron" was its eccentric shape which led a critic to refer to it as a "stingey piece of pie."

Its triangular shape was considered the cause of the notorious windstorms churned up around it. These swirling gales provided much titillating amusement for the
voyeurs of the city (Fig. 47). In a contemporary fictional account entitled The Real New York, the antics around the Flatiron affected one of the characters as follows:

She must tuck her chin into her breast to keep her hat from joining the others. As for her skirts, though she clung to them with both hands, they snapped and swirled about her like a flag in a tempest.36

The Flatiron not only endered amusing publicity but hostility as well. Headlines from the New York Times alone from 1903 until 1906 read as follows: "Sues Flatiron Owner—Clothier Says Winds Deflected by Big Building Wrought Havoc," "Wind Causes Boys Death—Blows Him Under An Automobile Near Flatiron," and "High Wind Upset Women and Horse . . . Accident At Park."37

Thus, it is not surprising that Stieglitz was inspired to render the Flatiron during a massive snowstorm when the winds would be the strongest. Despite the initial impetus, however, the resultant photographs stressed its triangular shape, a feature which he compared to a ship's prow in motion. The likening of the Flatiron to a ship was a common contemporary reaction. Rupert Hughes referred to it as a "glorious white ship which starts and moves" while Mary Fanton Roberts saw it as a "gigantic galleon sailing majestically in a shadowy harbor."38

Stieglitz's affection for the building persisted throughout his life. In 1919, he complained about a great
victory arch in front of the edifice. "The poor Flatiron, gosh! how it must suffer," he lamented. And in 1927, he entertained the notion of having his ashes scattered from its pinnacle. 39

His enthusiasm for the Flatiron, its exposure in Camera Work as well as its singular shape and reputation inspired the members of the "291" circle. The photographers Alvin Langdon Coburn and Edward Steichen and the painter John Marin rendered the building in similar terms. The earliest seems to be by Coburn and dates from 1904-5 (Fig. 43). In a letter to Stieglitz, Steichen wrote somewhat critically concerning the new photograph:

Coburn was disappointing. The Flatiron I consider good if you want to show it to someone who knows it. But in London it is simply a black mass—meaningless and badly composed. 40

Despite Steichen's evaluation, Coburn's image was similar to Stieglitz's initial endeavor in its stress on the building's triangular shape and soaring quality. In another version of the Flatiron from his New York series, Coburn's wintery image of the building from Madison Square is remarkably similar to that of Stieglitz.

In 1905, Steichen photographed the Flatiron in response to Coburn's "black mass." In Steichen's multiple renditions of the building, the lone edifice looms out from the dark sky (Fig. 34). A branch is placed parallel to the picture plane, reminiscent of Stieglitz's use of
Japanese principles of composition.

Upon his return to New York in 1909 on the occasion of the exhibition of his paintings at "291," John Marin executed a watercolor of Burnham's popular building, suggesting a direct link between urban painting and photography in America (Fig. 48).41 The work owes much to his Photo-Secessionist colleagues in the static quality of the image and the positioning of the tree in the foreground. Rather than evaluating the formal elements of the painting in the context of Italian Futurism and French Orphism, both of which had not been developed at this early date, it is important to view Marin's early skyscraper views in the context of the ideas and stylistic preferences at "291."42

Shortly after 1908, Ernest Flagg's Singer tower replaced the Flatiron as New York's most popular skyscraper. Nicknamed the Singerhorn, an obvious reference to the Swiss alps, it was the tallest office building in Manhattan, reputed to have exceeded the biblical tower of Babel in height. Its most exciting feature was the new observatory. For a nominal fee, one could ascend to its summit to view the sprawling metropolis below. According to an article in the New York Times, published on the eventful day of its opening, several hundred square miles of New York and its environs could be surveyed. Express elevators catapulted to the tower in one minutes, prompting
a woman to liken the experience to an airship ride.  

The association of the Singer with airships and dirigibles was a common one, and conjured up dreams of the future. Harry N. Petit's cover for Moses King's contemporary Views of New York included the Singer in a prophetic architectural fantasy (Fig. 49). In the midst of mammoth structures and flying machines stood Flagg's tower, dwarfed by the new super skyscrapers. A similar drawing associating the building with air travel appeared in a monograph on the Singer in 1908 (Fig. 50). These interpretations of Manhattan's loftiest edifice may have been prompted by the architect's announcement in the popular press that he was planning a 1000-foot tower at Broad Street and Exchange Place. The fact that the Singer was the only actual building in these imaginary projections on New York supports the notion that its unsurpassed proportions inspired these futuristic drawings.

Like the Flatiron, the Singer captured the imaginations of the members of the "291" circle. In addition to his early renderings of The Flatiron in 1904-5, Alvin Langdon Coburn was the first of the group to photograph the Singer in 1909 (Fig. 38). His visual essay New York included two separate views of the building, the only skyscraper to be singled out for special study.

Coburn continued to hold the Singer in high regard. In 1910, he sent Max Weber a photograph of the building
and a note encouraging him to continue his skyscraper views. Three years later on the occasion of his show "New York From Its Pinnacles," Coburn referred to the Singer as an inspiration for many of his photographs of the city from above. He reported that "only the birds and a foreign tourist or two penetrate to the top of the Singer tower where some of these vistas were exposed." In 1909, John Marin began to render the Singer. Certainly the widespread publicity surrounding the building served as a source of inspiration. Yet a comparison of Marin's first rendition of the tower with Coburn's The Singer Building--Twilight further establishes the link between urban photography and painting (Figs. 38 and 51). In both subject and compositional format, Marin's architectural portraits owe more to his Photo-Seccessionist colleagues than to European modernism.

Marin's treatment of the Singer went far beyond his initial fascination in 1909. A year later, he completed at least seven watercolors in which the Singer figured prominently. The most revealing is Downtown From River, in which the rounded tower rose from a mass of anonymous geometric planes (Fig. 52). Marin encircled the building, imbuing it with the status of a religious icon. In view of the current tensions between church and skyscraper, perhaps the artist wished to portray the tall building as the cathedral of the future.
The same year, Stieglitz photographed the Singer tower, views which were subsequently published in *Camera Work* as *The City of Ambition* and *The City From Across the River* (Fig. 23). His awareness of the identity of the edifice is borne out by its title *Singer Building From the Hudson River* of 1910 in the 1932 exhibition of his photographs of New York at "An American Place." The inclusion of images of both a dirigible and an airplane in the same issue of *Camera Work* suggested that he associated the Singer with the dawn of a new era of urban travel.

The last major building to absorb the collective efforts of the members of the "291" circle was Cass Gilbert's Woolworth Building of 1913. Considered the apex of skyscraper design, it was proclaimed by the prominent architectural critic Montgomery Schuyler, as "the culminating triumph of commercial architecture." Beginning in 1910, three years before the completion of the building, a massive publicity campaign was launched on its behalf. No less than fourteen separate articles appeared in the *New York Times* alone, chronicling its progress and development. Many of the reports stressed its gargantuan dimensions. A typical article entitled "55 Story Building in Lower Broadway" enumerated the following features:

- It will cost $12,000,000 and will cover the block from Park Place to Barclay Street
- Three Stories Underground—
- Twenty Five Stories in the Tower—
- Height 750 Feet—Highest Structure in the World."49
Perhaps more than its immense proportions, it symbolized the rise from rags to riches of Frank W. Woolworth. A commemorative volume was published shortly after the building's completion which praised the dime store magnate in the following terms:

... apart from the Woolworth Building as a marvelous memorial to American creative genius its opening ceremonies merited observance on a national scale, if only for the reason that it towered to the sky as a superb and enduring symbol of the possibilities open to every man in the great American republic, no matter how handicapped by circumstance of birth or early fortune.50

To further augment the building's reputation, it was accorded the same official consideration usually reserved for a public monument. To inaugurate its opening, a sumptuous dinner was held in honor of Cass Gilbert. A message was simultaneously telegraphed to President Wilson in Washington who pressed a button which illuminated the edifice, to the eager anticipation of all the notables present.

As part of the ceremony, a speech was given on "The Woolworth and the Artist," in which the building was likened to the great monuments of the past. According to the writer, "aspiring souls" naturally drawn to the lofty values epitomized by the skyscraper

Will look through nature up to God
And strive, in word and form to speak
The beauty it was born to seek.51
No doubt, the building's association with spiritual concerns was prompted by its gothic design which earned it the nickname "the cathedral of commerce." This was reinforced by a sculpture in the lobby of Cass Gilbert in the guise of the benevolent donor, offering the people of New York a beautiful building rather than an exploitive symbol of business (Fig. 53).

Although the artistic rendition of the building was publically encouraged, Stieglitz chose not to photograph it. However, in later years, he admitted that the Flatiron appeared rather unattractive to him after viewing skyscrapers such as the Woolworth. Despite his decision not to record its lofty tower, he was quick to defend John Marin's numerous renditions of it to the visitors of the "291" gallery in 1913. An interesting anecdote concerned one such viewer who came expressly to examine the paintings. Stieglitz noted the well-dressed man who stood in front of the works appearing profoundly chagrined. Sensing the man's confusion, Stieglitz proceeded to expound on the nature of abstract art, describing the paintings as depictions of the Woolworth in various moods. However, the viewer remained forlorn and exclaimed, "So this is the Woolworth Building?" When he finally left, Stieglitz learned to his surprise that he was addressing Cass Gilbert, the architect. The significance of the occurrence, aside from its humor, is Stieglitz's creation of an environment in which the artistic rendition
of the skyscraper, and more specifically the Woolworth Building, was highly regarded.\(^{54}\)

John Marin was the most enthusiastic admirer of the Woolworth among the "291" circle. Stieglitz described Marin's interest in the building as a passion.\(^{55}\) His treatment of the theme illustrated the versatility of his conception from representation to almost total abstraction. In \textit{Woolworth} \#28 of 1912-13, he rendered the unfinished tower in the process of construction (Fig. 54). The employment of energized brushwork seemed to belie the largely static quality of the architecture. In \textit{Woolworth} \#31 of 1912-13, portions of the completed building began to shift and topple in accord with the surrounding ambiance (Fig. 55). Marin's most radical interpretation of the skyscraper occurred in \textit{Woolworth} \#32 of 1912-13, composed simply of surging, curvilinear lines (Fig. 56). Instead of a literal transcription of the architecture, Marin conveyed the energy of the rising edifice.

Marin seemed to have been influenced by the particular physiognomy of the building as reported in the popular press (Fig. 57). Although the Woolworth was supposed to be 750 feet, the engineers measured it at 42 feet taller. Cass Gilbert claimed that if the calculators were correct, the building must be lopsided, and the builders should be made to straighten it up.\(^{56}\) Marin's tilting of the tower suggested a humorous interpretation of the inadvertent
miscalculation. It is possible that he may have seen Delaunay's renditions of the Eiffel Tower as well.

Coburn completed several views of the Woolworth. Utilizing the smoke of the city, he created the illusion that the building was situated among the clouds, a reference to its unsurpassed height (Fig. 58). In fact, the image of the Woolworth situated in the upper reached of the atmosphere was not an uncommon one. In *Above the Clouds and Old New York*, a book published for tourists, billowing cloud formations literally encompassed the edifice (Fig. 59). The absence of all other buildings suggested that the Woolworth was indeed in a separate realm.

The Woolworth continued to fascinate artists, including those loosely associated with the "291" gallery. Marcel Duchamp proclaimed it a ready-made. Robert Coady featured a full-length article on the building in 1917 in his periodical *The Soil*, including an interview with the chief engineer.

The final homage to the Woolworth by the members of the Stieglitz group occurred in the film *Mannahatta* of 1921 by Charles Sheeler and Paul Strand. In this cinematic treatment of New York, the building is surveyed from top to bottom, perhaps a statement on its unsurpassed height. Not until the erection of the Empire State Building in 1931 was the Woolworth finally eclipsed.
Marin's adoption of the skyscraper was inspired by his contact with the Photo-Secessionists, revealed in the static architectural portraits of 1909-1910. Yet these initial interpretations of the tall building possessed a nascent energy in the nervous, pointillist-like stroke which belied the stability of the stalwart architecture. In *Downtown From River* of 1910, the artist's familiarity with Cubism is discernible in the rectilinear planes which appear to glide over the surface (Fig. 52). Exploiting the viscosity of the watercolor medium, the shifting planes convey the perennial metamorphosis of the city.

Beginning in 1911 and continuing throughout 1912, the paintings revealed his desire to forge a new urban vocabulary. In a letter to Stieglitz, he expressed the difficulties he was experiencing. "As you have no doubt been told . . . the skyscrapers struck a snag, for the present at least, so we have had to push in a new direction, and may be a step forward." In accord with the traditional renderers of the skyscraper like Pennell and Hassam, the painters associated with the "291" gallery recorded the changing character of New York. Marin spoke of piling "these great houses one upon another with paint as they do pile themselves." In *Movement, Fifth Avenue* of 1912, buildings literally shift and collide (Fig. 60). Instead of focussing on the
individual skyscraper, the artists conveys the dynamic aspects of city life. The crowded architecture, congestion, construction, and traffic are interrelated.

In 1913, fourteen of Marin's watercolors of the city were shown at "291" and four were exhibited at the Armory Show. In order to render the works more comprehensible to the visitors of the gallery, the artist included the following oft-quoted explanation:

Shall we consider the life of a great city as confined simply to the people and the animals on its streets and in its buildings? Are the buildings themselves dead? We have been told somewhere that a work of art is a thing alive. You cannot create a work of art unless the thing you behold responds to something within you. Therefore, if these buildings move me, they too must have life. Thus the whole city is alive; buildings, people all are alive; and the more they move me the more I feel them to be alive.

It is this "moving of me" that I try to express, so that I may recall the spell I have been under and behold the expression of the different emotions that have been called into being. How am I to express what I feel so that its expression will bring me back under the spells? Shall I copy facts photographically? I see great forces at work, great movements, the large buildings and the small buildings, the warring of the great and the small, the influences of one mass on another or smaller mass. Feelings are aroused which give me the desire to express the reaction of these "pull forces," those influences which play with one another, great masses pulling smaller masses, each subject in some degree to the other's power.

In life all things come under the magnetic influence of other things, the bigger assert themselves strongly, the smaller not so much . . . .

While these powers are at work pushing, pulling, sideways, downwards, upwards, I can hear the sound of their strife and there is great music being played.
And so I try to express graphically what a great city is doing. Within the frames, there must be balance, a controlling of these warring pushing, pulling forces. This is what I am trying to realize.63

The beginning of Marin's rationale reinforced that he no longer wished to convey the activity of the city in static terms; rather, all the happenings in the vast metropolis impinged upon one another. The artist viewed skyscrapers not as inert, vertical entities but enlivened by the movement in their midst. In one particular etching of the Woolworth Building entitled The Dance, the skyscraper was imbued with life-like characteristics. The anthropomorphizing of the tall building, employed to foster a human identification, figured in the paintings of those affiliated with the "291" gallery.

In accord with Stieglitz, Marin viewed the work of art as the externalization of the subjective emotion which prompted it.64 Rather than "copying facts photographically," Marin employed a formal language that could reconstitute his original feelings before the dynamism of the city.

The artist also indicated that New York was indeed in a state of transition. But rather than viewing "the warring of great and small" as a picturesque rendition of the variegated skyline, Marin conveyed the non-corporeal aspects or the "'pull forces' . . . pushing, pulling, sideways, downwards, upwards" which prompted the change. The utilization of shifting geometric planes, expressive line, and loose brushwork communicated these non-objective
The desire to render the invisible aspects of the city was prompted, in part, by a variety of importations from Europe. As Sheldon Reich, author of the catalogue raisonné on Marin, has pointed out, in 1912, the Futurists proclaimed that "... what must be rendered is the dynamic sensation . . . the particular rhythm of each object, or . . . its interior force." The artist's familiarity with Futurist rhetoric, as Reich noted, may have occurred due to the publication of excerpts from their 1912 exhibition catalogue in the Literary Digest. Moreover, he has pointed to similarities between Movement, Fifth Avenue and Boccioni's Street Noises Invade The House of 1911, and views of the Woolworth Building and Delaunay's Eiffel Tower.

In view of the publication of various articles in Camera Work on the depiction of the internal aspects of nature and the subjective impressions of artist, however, Marin was already well-schooled in the theoretical basis of abstract and non-objective art. The dynamic aspects of city life were commented upon before the introduction of European modernism to these shores. Contemporaries noted the pushing, the congestion and construction, although these phenomena were still rendered in a nineteenth-century vocabulary. Thus, direct knowledge of the Futurist or Orphist visual vocabulary was not a necessary prerequisite.
in Marin's interpretation of New York's office buildings, although he may have incorporated their rhetoric in his statements concerning the city.

From 1914-1919, the skyscraper was all but absent from Marin's oeuvre.66 Beginning in the twenties, he approached his urban milieu anew. Employing coarse, expressionist brushwork and an often harsh delineation of form, he conveyed the vigorous sense of movement in the post-war decade (Fig. 61).

Max Weber

As a result of Weber's brief affiliation with Stieglitz and the "291" gallery from 1909-11, the artist was influenced by the prevailing enthusiasm for skyscraper subjects.67 Significantly, the painter's introduction to the Photo-Secessionist coterie was contemporaneous with the prevailing feeling of urban optimism. In 1910, Coburn's New York was published. The following year, Stieglitz's "New York" issue of Camera Work appeared.

The exhilaration toward the city in these years was conveyed in a fictional account,"Fifth Avenue and the Boulevard Saint-Michel" by Temple Scott. The writer, a frequent participant in the group, based his story on the experiences of Michael Weaver (Max Weber), an American modernist who had recently returned from Paris. Longing for the charm and culture of Europe, Weaver felt alienated
by the rampant materialism and the seething thoroughfares. Yet he admired the "magnificent structures, showing a barbaric daring in the architect-builder" which "appeared to him as broad columns of aspiration."\(^6\)

When he was on the verge of despair, he met Finch (Stieglitz), who showed his paintings at the Gallery of the Golden Disk. Finch often held luncheons at the Dutch House (Holland House) for associates of the gallery, painters, intellectuals, and critics.\(^6\) At one such engagement, Finch turned to the artist John Seaman (John Marin) to inquire about his work. Seaman replied:

> I've been working on the Flatiron building and I think I've got it, once and for all. I've got it floating in the sky, mounting into clouds of gray, and gold, and ultramarine. I was never so pleased with anything I ever did before.

At this Weaver interjected:

> I hope, Seaman, you'll not forget to put into that Flatiron picture of yours the feeling of its fourth dimension quality . . . the consciousness of a great and overwhelming sense of space magnitude in all directions at one time.\(^7\)

The participants continued to debate issues involving the materialistic bent of the American art establishment, the relationship of art to the public, and the superficiality of fame. Leaving the meeting, Weaver was met by Church (Benjamin De Casseres) who identified with his alienation, but encouraged him not to denigrate the United States. Church exclaimed:
Look at the Flatiron building! There it is, stuck in the common rock. But, see, it mounts into heaven itself, a thing of beauty its sordid builders never dreamed of realizing. The sky has taken it unto itself as part of its own pageantry. Let it be the symbol of your life.

And look back at this magnificent perspective! It breathes hopes from every tower and turret . . . . Let that be the symbol of your native land. So long Weaver . . . . Remember, here is your Paris!71

The story is significant on a variety of levels. It reveals the confidence in the skyscraper as an expression of an American sensibility as well as the numerous conversations on the subject by the members of the "291" circle. It also affirms Weber's predilection for the tall building despite his misgivings about other aspects of American culture, an admiration reinforced in his characterization of tunnel, bridges, and towers as realizations of dreams or visions.72 Perhaps the most telling aspect of the tale is Weaver's advice to Seaman to include the fourth dimension in his rendition of the skyscraper. Weber's own contribution is seen in his ability to synthesize his complex theories of painting with the American urban scene.

Weber's admiration for skyscraper subjects was motivated, in part, by his friendship with Coburn. After the painter's altercation with Stieglitz, Weber drew closer to both Coburn and Clarence White. In 1911, Coburn encouraged him to render urban America: "Don't forget that vision of New York from the Harbour. The little sketch
has whetted my appetite for what you will make of it." 73
And a few months later, Coburn sent Weber a photogravure of
a skyscraper.

In the following year Weber heeded Coburn's advice.
A small oil entitled New York pictured the Manhattan
skyline from the bay (Fig. 62). Composed entirely of sharp
edged, geometric forms, it revealed his adaptation of
aspects of Cubism. But like Marin, his interpretation of
the style originated by Picasso and Braque was idiosyn-
cratic. The transparent quality of the faceted buildings
was similar to the artist's "crystal figures" of the
previous year, reinforcing his desire to reinterpret Cubism
based on his own experience. Moreover, the zigzag motif
may also be related to his admiration for Aztec temple
design. 74

The pellucidity of the planes revealed his efforts
to introduce elements of the fourth dimension. In his 1910
essay on the subject published in Camera Work, he discussed
the surrounding ambiance or "the space that envelops" an
object. 75 However, Weber lacked the sophistication of his
French contemporaries who explored the complex relationship
of matter to its surrounding space. His writings were still
more progressive than the works he produced.

Coburn's influence on Weber can be discerned in
another respect. The photographer's show "New York From
Its Pinnacles" was devoted to views of the city from above
and his book *New York* of 1910 included aerial interpretations of the metropolis. Likewise, Weber was interested in the abstract patterns of the city from dizzying heights as seen in *New York* of 1912 (Fig. 63). In another painting, erroneously titled *The Woolworth Building*, Weber rendered Henry Ives Cobb's Liberty Tower from above, the identical structure Coburn photographed in *The House of a Thousand Windows* (Figs. 64 and 65).  

Weber's writings on the nature of abstract art were among the most progressive in America. Beginning in 1910, he published several articles in *Camera Work*, encouraging a reliance on abstraction and primitive art. Recently, it was demonstrated that his article "The Fourth Dimension From A Plastic Point of View" served as an important source for Apollinaire's explanation of the elusive concept in *Les Peintres Cubistes* of 1913.  

By 1913, Weber's urban views and his advanced theories on the nature of painting were congruent. An analysis of his writings serves to elucidate his aims in the depiction of the city.  

*New York* of 1913 illustrated a shift in his perception of the skyscraper (Fig. 66). The static monoliths of previous years were replaced by buildings subsumed in a cataclysmic whirl of energy. No longer based on actual skyscrapers, these buildings reflected the sensations evoked in confrontation with the dynamic metropolis, an attitude markedly different from the endeavors
of the Photo-Secessionists and Marin who based their subjective interpretations on actual sites. The novelty of the painting seemed to coincide with the development of his ideas on the nature of art. In 1913, he stated, "It lies within the domain of the plastic arts to reorganize forms and visions of forms, to reconstruct and interpret nature, to create or realize forms and visions of forms, unit by unit." This synthetic reorganization process required the energy of the inspired mind because "matter" yielded "in measure with and in degree of the intensity of the creative power of the artist." 79

In addition to the reconstruction of physical reality, Weber conceived of art as the rendition of unseen forces or a whole "universe of light and colored form in matter." 80 In his Essays on Art of 1916, based on lectures he had given at the Clarence White School of Photography two years earlier, Weber put forth a more developed view of his conception of art. Present were many of the ideas presented in the 1913 article "The Filling of Space." The artist believed that there was a multitude of invisible processes that could be depicted, divorced from their connection to specific objects. According to Weber, matter was not chaotic but:

Magnetism, energy, cohesion make form. Such forms destine matter and determine its plastic and poetic character. As weight, dimension or energy... are elements irrespective of their specific embodiment... so ought these be dealt with purely as only abstract elements. 81
Weber did not ignore the intervention of the artist who was able to perceive these unseen forces in the "spiritual domain." This terminology may have been borrowed from Kandinsky since Stieglitz published the latter's writings in *Camera Work*. Thus, art came into being through a communion between the imagination of the artist and these invisible elements.

The artist was obviously familiar with current information in physics and science, an area outside the scope of this discussion. In view of his and Marin's employment of similar concepts, these were probably widely discussed issues at "291." An article by Marius De Zayas the Mexican caricaturist and theoretician on modern art, reinforced the popularity of these ideas. He stated:

> Formerly art was the expression of a collective or individual belief, now its principal motive is its investigations. It proceeds toward the unknown, and that unknown is objectivity. It wants to know the essence of things, and analyzes them in the phenomenon of form, following the method of experimentalism set by science, which consists in the determination of the material conditions in which a phenomenon appears. It wants to know that significance of plastic phenomena, and accordingly, it has had to enter into the investigation of the morphological organism of things.

New York of 1913 not only marked the realization of his aesthetic theories but reflected his reaction to the city in a state of growth and transition (Fig. 66). In accord with Marin, he viewed the expansion as the complex interaction of disembodied shapes and forces. "The Eye
"Moment" from his book *Cubist Poems* of 1913, similar in spirit to the writings of Gertrude Stein, served to clarify his reactions to New York:

Cubes, cubes, cubes, cubes
High, low, and high, and higher, higher,
Far, far out, out, out, far
Planes, planes, planes
Colours, lights, signs, whistles,
bells, signals, colours,
Planes, planes, planes
Eyes, eyes, window eyes, eyes, eyes
Nostrils, nostrils, chimney nostrils
Breathing, burning, puffing
Thrilling, puffing, breathing, puffing,
Millions of things upon things,
Billions of things upon things,
This for the eye, the eye of being,
At the edge of the Hudson,
Flowing, timeless, endless
On, on, on, on . . . .

The poem's relationship to *New York* of 1913 is reinforced by a letter from Coburn to Weber. The photographer wrote: "and of course the poem 'The Eye Moment' is to be opposite the frontispiece of New York, and its opening 'Cubes, cubes, cubes, cubes' gives a deeper meaning to the book."86

The terminology employed in the poem illustrated his desire to reconstruct space "unit by unit" as explained in "The Filling of Space." The invisible elements of sound, time and energy were included in his conception of the city. But the most significant aspect of the piece, revealed in the title "The Eye Moment," was the "Millions of things upon things, Billions of things upon things" that could only be perceived by the "the eye of being" or the mind's eye.87
In addition, Weber imbued the skyscraper with human properties. Although "The Eye Moment" referred to the internal interpretation of the artist, it also described the multitude of windows which characterized the skyscraper. The smoke from the numerous buildings was likened to breathing and the chimneys were associated with nostrils. The anthropomorphizing of the tall building accorded with the work of Marin who also wished to have his skyscrapers come to life.

The reference to "high, low, and high, and higher, higher," indicated Weber's interest in the theme of contraction. Describing a painting of New York at Night of 1915, he spoke of the "electrically illumined contours of buildings, rising height upon height . . . ." In a painting entitled Blue New York of 1912, a grid-like structure in the foreground of the composition was meant to evoke a steel scaffold (Fig. 67). A poem entitled the "Workmass," published in 1914, intermingled the various aspects of fabrication:

Tied to the sky mass the workmen,
But the workmass moves, moves, moves
To there where spheres of steam and smoke and buildings outblot,
To there where the buildings from out the workmass grow
The workmass like lava flows
Over the bridge flows, flows
From on high the buildings look on . . . .

Weber's aesthetic response to the skyscraper was not restricted to painting and poetry. In 1916, he completed the
maquette of a sculpture entitled *Abstraction Skyscraper (Tour D'Eiffel)* (Fig. 68). The ambiguity of the title suggested that the vertical, aspiring form could either relate to an office building or the French monument to steel construction. In view of Weber's attitude toward his urban environment as a confluence of intangible elements, the image was probably meant to evoke the soaring movement of skyscrapers rather than a specific structure. The interaction of abrupt diagonals which point upward suggested the city's dynamic growth.

Beginning in 1918, Weber's style took a dramatic turn. Eschewing his experiments on the nature of abstract art, and the influence of both Cubism and Futurism, he returned to the depiction of monumental figures and still life subjects. This seemed to coincide with his teaching at the Arts Students League and the beginning of his role as a husband and father. His assumption of a more conventional lifestyle and the realization of his ethnic identity, seen in his numerous renditions of the vignettes of Jewish life, curtailed his depiction of the modern city.

**Abraham Walkowitz**

Although Walkowitz returned to the United States from Europe in 1908, it was not until 1911 or 1912 that he became part of the "291" circle. The current enthusiasm for the skyscraper that pervaded the group resulted in his
depiction of the dynamism of the city. His prior friendship with Max Weber must have served as an additional impetus to undertake the theme of the burgeoning metropolis.

Walkowitz's cityscapes suggest a logical stylistic progression from loose watercolors, to architectonic structure to tangled, linear skeins, although this development is far from conclusive. As in the skyscraper views of Weber and Marin, the works are linked to his artistic theories as well as his exposure to rapid city building.

Times Square of 1910, executed with an amorphous, Fauve-inspired stroke conveyed the freneticism of urban life (Fig. 69). Humans are reduced to a flurry of activity in the midst of looming vertical forms; all is subsumed in a vast circular motion.

This approach was replaced by architectonic structure. In New York Abstraction (c. 1915), undifferentiated rectilinear or triangular monoliths impinge upon and topple one another, illustrating the artist's response to the realities of urban congestion (Fig. 70). In accord with the earlier works of Weber, these city scenes were not dependent on any specific site but evocative of the general appearance of the metropolis. If we are to accept the interpretations of Oscar Bluemner as an accurate reflection of the artist's aims, the similarity to both Marin's and Weber's ideas concerning the synthetic reconstitution of art are apparent. Bluemner described
Walkowitz's method of work in the following terms: "... he ignores the totality of nature, eliminates all the irrelevancies, dissolves the natural corporation of the remaining features and qualities and arranges them in a new composition . . . ."\(^{91}\)

The inclusion of a human eye within the urban chaos revealed the desire to imbue the city with life and anthropomorphize the buildings, an approach consistent with the other members of the group. Walkowitz was soon to expand upon the concept of the living skyscraper.

**New York Improvisation** of 1915 preserved the structure of the skyscraper but introduced the superimposition of swirling arcs (Fig. 71).\(^{92}\) Walkowitz's predilection for circular motion conveyed the frantic activity which consumed the city like a maelstrom. The title, borrowed from the methods of Kandinsky, indicated that the artist was working in a more spontaneous manner commensurate with the spirit of city life.\(^{93}\) Later, he described one of his urban views as: "the equivalent of what one feels going through from the Battery to Times Square, showing the buildings each saying, 'I must be higher' . . . and the people crowd like mosquitos in the street below."\(^{94}\)

By 1916, Walkowitz was interested in the evocative power of line rather than structure. He exhibited a view of New York's lofty edifices composed predominantly of a
nervous, all-over lattice work, leading in 1917 to frenetic semi-automatic fantasies (Figs. 72 and 73). His explanatory remarks concerning the show illustrated his intent to imbue line with dynamic energy. "When line and color are sensitized, they seem alive with the rhythm which I felt in the thing that stimulated my imagination," he stated. Like Marin and Weber, he believed that art was the product of experiences which engendered sensations. It was the artist's role to translate these feelings into concrete form or the language of art.

Mention must be made of the similarity between Walkowitz's drawings of the dancer Isadora Duncan and his views of New York. The artist met Isadora in Rodin's studio in 1907 and recorded her repeatedly from life and memory until his death. Adopting the method of the sculptor in the St. John, Walkowitz captured Isadora in the process of motion. Many of his abstractions of the dancer are composed entirely of energized line to suggest the essence of movement (Fig. 74). Similar drawings were included in his book Improvisations of New York: A Symphony in Lines of 1948, a collection of his interpretations of the city from his return to New York to the present (Fig. 75). Just as he studied Isadora dancing, he examined the perpetual movement of New York. As a recent biographer of the artist pointed out: "New York City and Isadora Duncan, both of which are treated as studies in motion rather than
form . . . are more interesting cumulatively than as isolated works. In view of the humanization of the skyscraper by his contemporaries, Walkowitz's fusion of people and urban motifs was consistent. His particular contribution was in the exploitation of the electric potential of line as a vehicle to transmit his reactions to the dynamism of the metropolis.

**Duchamp, Picabia, Gleizes and New York Dada**

The brief and questionable manifestation of Dada in New York included the participation and interaction of both Americans and Europeans. The meeting of these diverse groups at the "291" gallery and at the apartment of Walter Conrad Arensberg was significant in its impact on the native valuation of the skyscraper. Rather than providing new insight into our arts and ideas, the Europeans' unabashed enthusiasm aided in the promotion of viewpoints articulated by the members of the "291" circle and various other American commentators. For the first time in the history of American art, Old World inhabitants were travelling to the United States for creative inspiration. New York was regarded as the mecca of futurity. With the arrival of the so-called Dada personalities from abroad, the previous dialogue on tradition versus innovation was settled in favor of the modernity of America.

The prior affiliations and endeavors of Francis
Picabia, Marcel Duchamp, and Albert Gleizes favorably disposed these artists to Manhattan's urban, industrial milieu. Prior to his debarkation, Gleizes had been a member of the Abbaye Crétéil, a communal, utopian group which sought to relate art to contemporary life. The Abbaye's publications, which included Jules Romain's La Vie Unaime and Henri Barzun's Le Terrestre Tragedie, revealed an interest in speed, simultaneity and industry. Many of Gleizes' own paintings were based on aspects of the French urban milieu. Duchamp's mechanomorphic representations of humanity and his experiments in the rendition of motion addressed the impact of the machine. Moreover, the gatherings at Puteaux, which included all three artists as well as Léger, Villon, and Delaunay, involved lengthy inquiries concerning the newest discoveries in science and technology and the social implications of an art which mirrored contemporary society. Thus, their predisposition to New York was forged prior to their arrival.

In January of 1913, Picabia appeared in Manhattan on the occasion of the exhibition of his works in the Armory Show. Two years later, Duchamp and Gleizes arrived for the first time. Almost immediately, these infamous celebrities of the American International Exposition were seized upon by the press as experts on contemporary painting. When questioned about their reactions to the
city, they uniformly responded in glowing terms. In an article of 1915, Duchamp asserted that "New York is itself a work of art, a complete work of art." Gleizes exclaimed that the skyscrapers were works of art, "creations in iron and stone."

Although this view of the office building had been articulated prior to their arrival, their opinions received widespread coverage in the media. Once again, European artists were called upon to validate the American milieu. As a consequence, the skyscraper was thrust into the limelight and reappraised. Fortunately, it was lauded in terms that generated a renewed enthusiasm for the steel-framed structure.

Completely contradicting such traditionalists as Howells and James, they maintained that the modernity of New York was superior to the antiquated character of Europe. In accord with the Italian Futurists, Duchamp stated that the "idea of demolishing old buildings, old souvenirs," was desirable. "The dead should not be permitted to be so much stronger than the living. We must learn to forget the past, to live our own lives in our own time," he asserted. Duchamp claimed that the art of Europe was "finished—dead" and encouraged Americans to cease relying on the Old World. "Look at the skyscraper!" he maintained, "has Europe anything to show more beautiful than these." Likewise, Gleizes proclaimed the skyscrapers and bridges of New York as equal to the most admired Old World creations,
categorizing it as a misconception that "one must go to Europe to see beautiful things."\(^{103}\)

In their search for subject matter that could best express the spirit of modern life, these artists perceived New York as the physical incarnation of the newness of the twentieth century. The height of the buildings, the pace of the crowds, and the pervasiveness of industry was the source of wonder and exhilaration. As Picabia reported to the popular press:

"You of New York should be quick to understand me and my fellow painters. Your New York is the cubist, the futurist city. It expresses in its architecture, its life, its spirit, the modern thought. You . . . are futurists in word and deed and thought."

In another interview two years later, Picabia elaborated on his perceptions on the inherent modernity of America, likening the "boundlessness of our national aspirations" to the creative process itself. He considered America the place where "art and life" discovered "a wonderful consanguinity."\(^{104}\)

Marius De Zayas voiced the same opinion in the pages of 291. Drawing an analogy between the spirit of America and that of the modern artist, he asserted that America had "the same complex mentality as the true modern artist, the same eternal emotions and sensibility to surroundings, the same continual need of expressing itself in the present."\(^{105}\)

Except for Duchamp who explored the complex
relationship of man and the machine, Picabia and Gleizes undertook the theme of the skyscraper. In addition to their own admiration for the city, the efforts of the American modernists must have provided an additional impetus. The skyscraper views of Marin which were exhibited at the Armory Show and the animated discussions concerning the tall building by the members of the "291" group were certainly a source of inspiration.

Picabia began to render the skyscraper, in part, as a response to a request from an editor of the New York Tribune. A subsequent article entitled "How New York Looks To Me" is perhaps the best explication of the artist's approach to the depiction of the tall building. To the question, "What do you think of New York?" Picabia replied that a more appropriate question was, "How are you affected by New York?" Responding that his art was the representation of pure feeling, an attitude which was an important aspect of the creative process of the Stieglitz group, he explained:

You see no form? No substance? Is it that I go out to your city and see nothing? I see much, much more, perhaps, than you who are used to see it. I see your stupendous skyscrapers, your mammoth buildings. . . . But I do not paint these things which my eye sees. I paint that which my brain, my soul sees.

Like the American modernists, Picabia did not view the skyscraper as an isolated entity, but linked to the dynamism of the city, its crowds, commercialism, and
"atmospheric charms."\textsuperscript{107}

In an interview of a month earlier, Picabia was more specific in his explanation of the transmutation of the skyscraper into particular sensations and forces:

I saw what you call your "skyscrapers." Did I paint the Flatiron Building, the Woolworth Building, when I painted my impressions of these "skyscrapers" of your great city? No! I gave you the rush of upward movement, the feeling of those who attempted to build the Tower of Babel—man's desire to reach the heavens, to achieve infinity.\textsuperscript{108}

Despite their improvisational character, the drawings of New York included in both articles evoked the verticality of the skyline and the horizontal scuttling of ships in non-objective terms (Figs. 76 and 77). The recognizability of a number of motifs related to the artist's reference to the New York harbor at night, the mammoth buildings, the harbor showing painted ships, and a multitude of flags.\textsuperscript{109} Moreover, the tenebrous character of many of these drawings suggested that they were meant to conjure up images of nocturnal Manhattan. The astute interviewer of the initial \textit{New York Tribune} article reinforced the selection and transmutation of specific aspects of the city:

\textldots in M. Picabia's pictures of New York \ldots we are to look, not for topography \ldots but for moods expressed in form \ldots if the beholder can recognize in one of these drawings New York's towering heights and sharply cut skyline, a view of its electric power houses and industrial establishments from the East River, it is not because the artist deliberately sought to reproduce them, but because the vividness of their impression has made them a salient part of his mood.\textsuperscript{110}
The mechanomorphic imagery of Picabia and Duchamp was also fueled by their confrontation with the urban, industrial milieu of New York. Although these proclivities were evidenced in Europe, their presence in the highly industrialized ambiance of New York inspired many of their machinist experiments. Although the skyscraper is not blatantly present in some of their works, it is implicitly so.

The inclusion of the skyscraper in the art of Albert Gleizes was more specific. In New York of 1915, the artist superimposed the aggressive lettering of a flashing neon sign on toppling, nondescript monoliths replete with windows (Fig. 78). The use of patterning, verbiage, and overlapping planes indicated that Gleizes had borrowed many of the conventions of synthetic Cubism in his interpretation of the city. Like his American colleagues, however, the use of lettering was inspired directly by the numerous billboards in New York.

Perhaps more than his compatriots, Gleizes was stimulated by particular edifices, indicating the influence of the Stieglitz group in his perception of the skyscraper. The Woolworth and the Flatiron were among the buildings he portrayed. In the latter rendition, an anachronism in 1916, Gleizes fractured the building into a composite of directional forces (Fig. 79). His attachment to specific features of New York is reinforced in a letter to the
collector John Quinn:

... I make long watercolors for prepared New York's picture. I want to paint a big canvas, vision synthetic of my trip in America. I think very much to Wall Street with its buildings ... and the tumultuous harbor.113

His numerous renditions of the Brooklyn Bridge reinforced his admiration for the particularities of New York.

Gleizes was also drawn to buildings in the course of construction. Naissance D'Un Building of 1917 featured an emergent skeleton in the middle of a variety of rectilinear and circular forms (Fig. 80).

However, in 1916, Gleizes' attitudes toward New York began to shift; the tall buildings were referred to as "heavy blocks of cement" and the fire escapes as cages. Criticizing the materialism of America, he inveighed against life in New York. "Modern genius--American genius consisted in persuading the greatest number of individuals to buy, with money they did not possess the greatest quantity of manufactured objects for which they had absolutely no need," he argued.114 Although his canvases through 1917 provided no indication of his change of heart, his opposition to New York increased. He conceived of another utopian community where the dignity of human life would be respected, achieved in 1927 with the formation of Moly-Sabata in Soblon.

However, it was the initial enthusiastic reactions of the émigrés which inspired a number of Americans.
Closely associated with Duchamp, Man Ray expanded on the concept of the ready-made with his constructions which were composed of found objects. *New York* of 1917, the original of which has been lost, was the first work in which Man Ray employed disparate forms in order to create a skyscraper motif (Fig. 81). Formerly composed of wooden strips of alternate lengths which he found in his studio, he fastened them with a carpenter's clamp. The zigzag motif created by the uneven heights suggested the variegated contour of the New York set-back skyscrapers. Another work, a glass jar filled with what appears to be metal ball bearings, featured the words "New York" (Fig. 82). The verticality of the container, the use of metal and glass, and the piling of rounded forms evoked the crowding of skyscraper inhabitants.

Although he was only influenced in part by Dada, Robert Coady, the editor of the periodical *The Soil*, sought to further the reputation of the skyscraper. As the title indicated, *The Soil* celebrated aspects of indigenous American culture, including the machine, folk art, billboards, business, and industry. In the first issue, an article on "American Art" by Coady specifically included the skyscraper, the Woolworth, and the Metropolitan Tower in his list of examples of native aesthetic expression. On the bottom of a page from the same number, Coady asked, "Who will paint New York? When?" and included
a photograph of skyscrapers from above by the commercial firm of Brown Brothers (Fig. 83).

In addition, Coady contrasted an excerpt from Whitman's "Crossing the Brooklyn Ferry," in which the latter predicted that others would recognize New York, with Arthur Cravan's contemporary poem celebrating the technological awesomeness of it. A section from Cravan's work demonstrated his admiration of various aspects of the skyscraper, its grandeur, electric lighting, and elevators:

New York! New York! I should like to inhabit you!
I see there science married to industry,
In an audacious modernity,
And in the palaces,
Globes,
Dazzling to the retina
By their ultra-violet rays
The American telephone
And the softness of elevators.

The next issue included a continuation of Coady's thoughts on American art, in which he defined it as the product of the native artist in his own milieu. Invoking the old versus new dichotomy in favor of the latter, Coady proclaimed, "An Englishman invented the Bessemer Process and we built our skyscraper," thereby encouraging Americans to acknowledge their own creativity.

A lengthy article on the Woolworth Building followed, featuring the opinions of the man who engineered its construction. Discussing the various structural challenges and innovations characteristic of the skyscraper in
general and the Woolworth in particular, he characterized the solutions as "positively an outgrowth of American conditions."¹²⁰

The periodical included numerous reproductions of industrial and urban images. In addition to the illustration of various machines with such captions as "Monument?" or "Moving Sculpture," Coady featured the work of Marin, Weber and Walkowitz. Walkowitz's *New York* of 1916 and *Times Square, New York Night* of 1910 appeared in *The Soil* (Figs. 69 and 72).¹²¹

In many respects, Coady's attitudes concerning the skyscraper encompassed those of the "291" gallery and the Dadaist position. On the one hand, he embraced the machine and the industrial milieu as the American contribution to the creative sphere, expanding the concept to include aspects of American popular culture. Yet, his presentation of the artists affiliated with the Stieglitz circle displayed his unwillingness to offer the work of the Europeans as a stylistic solution.
Chapter IV.
SKYSCRAPER MANIA: THE DEBATE CONTINUES,
1917 - 1931

In the third decade of the twentieth century, the skyscraper was finally perceived as an integral and dominant part of both the American sensibility and topography. Images of the tall building abounded in art, literature, music, furniture, and stage design. The debate concerning the desirability of the skyscraper escalated to new heights, however, due to the actual proliferation of buildings everywhere. The building boom which occurred throughout the United States after the first world war, reaching its peak from 1925-1931, literally thrust the skyscraper into the nation's psyche. No longer relegated to the southern tip of Manhattan, skyscrapers made their way to the mid-town district as well as other major cities.1

The omnipresence of derricks and beams in the urban centers prompted a variety of observers to chronicle and comment on the tall building. An article entitled "Titanic Forces Rear A New Skyline," which included illustrations, asserted that "every uptown thoroughfare from Lexington Avenue to Eighth Avenue has fallen under the spell of reconstruction" (Fig. 84). Not only were a host
of workers striving to complete some 350 new buildings by winter, but 900 extant structures were in the process of rehabilitation.\(^2\) Frederick Lewis Allen noted in *Only Yesterday*, perhaps the best contemporary assessment of the decade, that between 1918 and 1930 office use in large modern buildings in the mid-town district multiplied tenfold.\(^3\) The construction epidemic was not confined solely to New York. "A Census of Skyscrapers" of 1929 which appeared in the *American City* demonstrated that now most of the nation's metropolitan centers possessed tall steel-framed buildings, although Manhattan still took the lead with more than five times the amount of its oldest and closest rival Chicago.\(^4\)

As a result of the domination of the lofty architecture, renditions of its increased dramatically. Several exhibitions were mounted which offered the skyscraper as the veritable keynote theme, attesting to its current popularity. From 1923-1925, the John Wanamaker Gallery of Modern Decorative Art presented three major shows on urban subjects. The first, entitled *Exhibition of Paintings, Watercolors, Drawings, Etchings, Lithographs, Photographs and Old Prints of New York City*, included the works of over fifty artists, from the cityscapes of the Ashcan artists and the abstractions of the early American moderns to the contemporary works of George Ault, Stuart Davis, Charles Sheeler, Joseph Stella, Niles Spencer, Man Ray, and Preston
Dickinson. The following year, a more modest second annual was mounted at Wanamaker's, reiterating the subject of the initial show. Although various aspects of the city were explored, titles indicated that the early and contemporary modernists perceived New York in terms of its skyscrapers.

In 1925, the John Wanamaker store hosted *The Titan City: New York* which summarized the historical orientation of the previous two exhibitions and unequivocally accepted the skyscraper as a reality of the present and the future. Ostensibly, the show was organized to commemorate Wanamaker's new building, but it was also conceived as a "tercentenary pictorial pageant of New York." Although nostalgic views on the settling and development of Manhattan were included, the skyscraper seemed to dominate the exposition. A 60-foot high panel entitled *The Growth of New York* by Willy Pogany pictured grandiose buildings at the tip of the island in equally monumental terms (Fig. 85). Likewise, fantastic, mural-sized renderings by Harvey Wiley Corbett and Hugh Ferriss presented the skyscraper as a solution for the "City of the Future" section, an immaculate, utopian urban landscape composed of multipurpose set-back structures extending entire blocks. The importance of the exhibition, in addition to its optimistic prophetic character, was the wide publicity it provided for the skyscraper. One reviewer noted that: "The most astounding fact is that architecture should be recognized as a subject of popular interest, and
that the administration of the organization had the courage to stage an exhibit of that particular character.\textsuperscript{8}

The presentation of the lofty building as a popular subject of interest was echoed in the Chicago Tribune Competition of 1922. The competition was significant on a variety of levels. Not only did it engender universal interest and enthusiasm concerning the problems of tall building design, but it provided a forum for examining the most progressive ideas concerning architecture in general and the skyscraper in particular. Yet, despite the recognition of its importance as a promoter of the variety of solutions currently available to the architect, its role as a propagandizer and advertiser for the skyscraper has not been explored.\textsuperscript{9} Regardless of one's feeling toward the tall building, the scope of the Tribune Competition engendered discussion. The request for entries took the form of a massive publicity campaign in newspapers all across the nation. Drawings received from the major architectural firms in the United States and 23 countries around the world attested to the extent of the response.

In order to lend the skyscraper additional credibility, prior to the deadline, the Tribune reproduced renowned architecture of the past in their advertisements. Like the Woolworth Building of 1913, which was sheathed in a gothic facade, they sought to imbue the future building with the significance of a public monument or religious
architecture. The announcement for "the most beautiful office building in the world" for the "enhancement of civic beauty" reiterated their professed concern for human values.\textsuperscript{10}

The direct appeal of the competition in both architectural and popular spheres was seen in the numerous requests to exhibit the original drawings from major American museums. The Minneapolis Institute of Arts, the former United States National Museum, the Albright Art Gallery in Buffalo, and the Art Institute of Chicago hosted this comprehensive presentation of the image of the skyscraper.\textsuperscript{11} In May of 1923 alone, the Chicago museum reported an attendance of at least 25,000 people! General enthusiasm was so strong that one art periodical noted the numerous invitations from "commercial clubs, banks, department stores and even private individuals" to show the works.\textsuperscript{12} Despite the fact that these were architectural renderings rather than aesthetic endeavors proper, their placement in a museum or gallery context communicated the topicality of the subject to painters, photographers, and sculptors.

A number of disciplines responded to the physical presence of the skyscraper. At least four novels of the decade, including \textit{The Cubical City} (1926) by Janet Flanner, \textit{Manhattan Transfer} (1924) by John Dos Passos, \textit{Flamingo} (1927) by Mary Borden and \textit{The Skyscraper Murder} (1926) by Samuel Spewack, either presented the skyscraper as a backdrop to the activities of the characters or as a major
force in their lives.  

Notions of design were also influenced by the tall building of the twenties. Paul Frankl's skyscraper furniture, employing the cubical massing of the new setback buildings pointed to the inclusion of the lofty steel-framed structure into the interior and exterior spheres of American life. For the first time, the skyscraper image was made perceptible on a human scale, engendering a grasp of its mammoth proportions.

American music also felt the impact of the skyscraper. Many observers likened the cacophonous, syncopated beat of jazz music to the clatter and rhythm of skyscrapers in the course of construction. In John Alden Carpenter's 1926 ballet *Skyscrapers*, the composer employed a jazz-like idiom to convey the building of an American city. Moreover, the staging of the dance at New York's Metropolitan Opera House pointed to the incursion of the architecture on the conservative bastions of culture.

Carpenter's ballet also suggested the presence of a skyscraper existence, the tall building determining the activities of the city's inhabitants. Workers pantomimed the erection of the city while machine noises heralded and defined their tasks. The notion of one's activities prescribed by the tall building was voiced by a number of critics of the decade, who pointed to the dehumanizing effects of such a mechanized mode of existence.
The seeming domination of the skyscraper over all aspects of American life and art engendered a variability of responses to the tall building. However, most of the art historical scholarship to date has persisted in its appraisal of the decade as a period of acceptance of the skyscraper. Terms such as "urban optimism" and "Precisionism," while useful for their explanation of a portion of the decade's painting, have created a myopic view of tall building imagery. The latter label is particularly inadequate since it often links a formal vocabulary of pristine, machine-inspired forms with an accompanying positive attitude. On the other hand, historians such as Henry May have long perceived the contemporary response to the decade as both "rosy and black." Some were favorable to the business civilization, urban expansion, and the machine. This group included the artists Charles Sheeler and Margaret Bourke-White, the architects Hugh Ferriss and Harvey Wiley Corbett, the historian Charles Beard, and the publisher and writer Jane Heap. In contrast, Lewis Mumford, Waldo Frank, Harold Stearns, Joseph Stella, Paul Strand, and the novelist Mary Borden were suspicious of the standardization of life in the nation's urban centers, settings which negated the needs of the individual. Thus, the debate concerning the viability of the skyscraper reemerged with unparalleled energy. Articles such as "Babel or Boon," "Skyscrapers" and "Towers" in the popular
press, which included both sides of the argument, indicated the widespread nature of these tensions. Unlike the previous polemical discussions concerning the skyscraper, which focussed predominantly on its viability as a building type or its aesthetic merit, the current discussions were concerned with human issues.

In order to assess the image of the skyscraper in the third decade of the century, it is necessary to explore the nature and content of the prevailing attitudes toward the tall building. In many cases, artists reflected the same enthusiasms or misgivings as their counterparts in other fields. Although the stylistic and formal influences on skyscraper images have been identified, the climate of opinion as well as the physical appearance of the city which prompted these responses requires further elaboration.

Aspects of Skyscraper Enthusiasm:
Rationality and Transcendence

The positive response to the skyscraper in the twenties included new rationalizations and adulations concerning its viability. Unlike previous enthusiasts who sought to define its existence in largely nationalistic terms, contemporary supporters viewed the skyscraper as an integral part of the new, sophisticated industrial and business civilization. In order to comprehend the favorable reaction to the steel-framed structure in the years following
World War I, it is necessary to situate it in the context of the larger celebration of American prosperity and technological development.

Economically, the twenties was a decade of boom and expansion. As a result of the monetary plentitude, a host of mechanical, labor saving gadgets became the accepted accoutrements of every American home. As Sinclair Lewis noted condescendingly in _Babbitt_ of 1922, an observation corroborated by Robert and Helen Lynd's study _Middletown_ of 1929, vacuum cleaners, electric fans, percolators, toasters and cars became incorporated irrevocably into the American experience. The necessity for procuring such items was reinforced by sophisticated advertising; newspapers, magazines, and billboards created the desire for more consumer goods. "The Age of the Machine" or the "Machine Age," apppellations assigned by contemporaries, aptly described the decade's mechanical predilections.

Often speaking in utopian terms, supporters of the machine civilization believed that the acceptance of technology would engender a better quality of life, liberate man from baser tasks, and provide for greater leisure and spiritual growth. Henry Ford proclaimed that "for most purposes a man with a machine is better than a man without a machine." Charles Beard elaborated on this point, claiming that the highest human potential
was expanded by the advances in science and technology. It was necessary to accept its inevitability as the wave of the future, he asserted. Sheldon Cheney, art and architectural critic, was perhaps the most positive admirer of the machine's so-called humanitarian potential, envisioning an environment where the elements would be "tamed, weather tempered, transportation . . . effortless," and "cleanliness universal." Machines would ultimately "solve all men's work problems."¹⁹

Critics of contemporary culture were branded as retrogressive and anachronistic; Beard referred to them as "artists of a classical bent and . . . spectators of a soleful temper." Likewise, Edwin Avery Park in New Backgrounds for a New Age (1928) claimed:

> The ancient forms of artistic expression came into being when the non-material aspects of life were alone considered worthy of song and representation . . . . Today, romance and the panoply of heroes are no longer the absorbing thing. Something else compels popular interest. It is the new world of science, industry and business through which the glamour of the past has fallen away.²⁰

In this climate of confidence concerning industrial development, the businessman was lauded as the new American hero, a position reinforced by the administrations of Harding, Coolidge, and Hoover (1920 - 1933). The prevailing Republican ideology articulated by Coolidge was epitomized in the popular slogan, "the business of America is business." Under the laissez-faire policies of the decade, large corporations were protected from the
anti-trust laws instituted during the progressive era (c.1901 - c.1917). Moreover, companies like Ford and General Motors promoted a favorable image of business with the supposed institution of humane conditions in their plants. As a contemporary proclaimed:


Favorable views toward business extended to praise of the products of industrial production. In the twenties, observations on the machine often encompassed the tall building. Thus, any analysis of the response to the skyscraper in the twenties must include the reaction to increased mechanization. In the opinion of the skyscraper optimists, the tall building and the new industrial civilization were inextricably linked. Echoing Le Corbusier's dictum, "the house is a machine for living," Sheldon Cheney described the skyscraper as a "perfect business-machine," focusing on its functional components:

It is simply a series of cubicles piled thirty stories high, with efficient communication lanes between offices and to the street, electric elevators up and down, scientifically calculated halls and aisles, steel frame sheathed and baked clay, concrete floors, tile and plaster walls, metal doors and window frames, plumbing, central heat, central vacuum cleaning, electric lights . . . .

In accord with Cheney, Harvey Wiley Corbett referred to the skyscraper as a "machine—just as definitely as is the typewriter or the printing press." Even as vituperative
a critic as Lewis Mumford characterized the skyscraper as "an imperfect machine."\textsuperscript{22}

The perception that the skyscraper was a mechanical object was realized both ideologically and visually in the 1927 \textbf{Machine Age Exposition}. It was organized by Jane Heap and a distinguished panel of artists which included Charles Demuth, Marcel Duchamp, Hugh Ferriss, Louis Lozowick, Man Ray, and Charles Sheeler. The show featured "actual machine parts, apparatuses, photographs and drawings of machines, plants, constructions etc., in juxtaposition with paintings, drawings, sculpture, constructions and inventions." The most progressive works from the United States, Austria, Belgium, France, Germany, Poland, and Russia attest to its international scope. Among Heap's goals was a desire to establish an interchange between the artist and the engineer. Echoing the Italian Futurist Enrico Prampolini, who had published his ideas in the \textbf{Little Review}, Heap proclaimed:

The men who hold first rank in the plastic arts today are the men who are organizing and transforming the realities of our age into a dynamic beauty. They do not copy or imitate the machine . . . they recognize it as one of the realities. In fact, it is the engineer who has been forced in his creations to use most of the forms once used by the artist. . . . the artist must now discover new forms for himself. It is this "plastic-mechanical analogy" we wish to present.\textsuperscript{23}

Juxtaposed with ventilators, gears, and coffee grinders were models, photographs, and paintings of the
skyscraper. The catalogue for the show revealed the tall building's position. A foreword by the utopian renderer and architect Hugh Ferriss, a major organizer of the American section, entitled "Architecture of the Future" praised the skyscraper in wholly positive terms. Facing the essay was a reproduction of Ferriss' Project for a Glass Skyscraper, a model of which appeared in the exposition. He noted that architecture and superceded the desire for individual aggrandizement. As a result of laws passed in New York City, the shape of buildings had changed from a concern with facades to three-dimensionality. He believed that these new architectural solutions adapted to the particular American situation paralleled developments in other countries. In this age of the machine, Ferriss felt that outworn formulae and anachronistic forms had been rejected in favor of a universal idiom based on technology.

Despite his attempt to link current trends in America to a new international phenomenon, Ferriss reserved special praise for New York's recent skyscrapers and other set-back designs which he viewed as the most modern examples of architecture. These included:

... Corbett's Bush building, Harmon's Shelton Hotel, Hood's Radiator building, Saarinen's Tribune Tower. As these giant structures march with deliberate stride into American cities, it becomes apparent that we are facing a new architectural race.
Because of Ferriss' supervision, the catalogue opened with America's contribution to architecture. The efforts of the most prominent architects of the skyscraper, Alfred Bossom, Buchman and Kahn, Helmle and Corbett, Raymond Hood, William Lescaze, McKenzie, Vorhees and Gmelin, and Eliel Saarinen, were represented by models, photographs, and renderings of their most recent efforts. In his selection of works, Ferriss offered examples of architecture of the present and the future. In addition to his own glass skyscraper, Leonard Cox was represented by an Imaginary Project for a Skyscraper to Cover 4 City Blocks, Raymond Hood showed a plan for multileveled pedestrian traffic ways connecting tall buildings, and Knud Lönberg-Holm revealed a Design for a Radio Broadcasting Station of steel, concrete, and glass.25

Other contributions to the show included Louis Lozowick's paintings of various cities in the United States, his representations of New York and Chicago defined solely by their skyscrapers. Works by Charles Sheeler, Business by Charles Demuth, and photographs by Ralph Steiner attested to the importance of the tall building as an integral part of the machine sensibility.26

Many of the attitudes articulated in the Machine Age Exposition reflected the prevailing belief that technology and the skyscraper were symbols of rationality and transcendence. Heap's exclamation, "THE MACHINE IS
THE RELIGIOUS EXPRESSION OF TODAY," reproduced in aggressive capitals, summed up this philosophy. Whereas the tall building's ability to epitomize these seemingly antithetical concepts was deemed impossible by past and present critics, proponents appreciated the skyscraper's utilitarian properties and otherworldly potential. Thus, the physical height of the lofty structure became a metaphor for the aspiring nature of both the intellect and the quest for the supernatural.

The rationalist's position was manifested in three approaches to the skyscraper which may be categorized as the technical, the philosophical, and the practical. Providing continuity with early observers of the tall building, contemporaries viewed it as the quintessence of logic and utility. Just as the beauty of the machine was praised for its clean, pristine parts, a more modern skyscraper free of decoration was thought to be more efficient. This position was promoted by architectural historians such as Fiske Kimball who referred to the skyscraper as "the citadel of functionalism." Harold Loeb articulated a similar view, referring to the tall building as the physical incarnation of purely utilitarian principles:

Office buildings, lofts and apartment houses realize to a greater degree the magnificent possibilities of steel. . . . The old decorative motifs plastered on their sides, where the windows permit, are strictly subordinated to the design enforced by structural demands . . . .28
The functionalist ethic was so pronounced that a veritable machine aesthetic was encouraged as a result. These ideas were put forth comprehensively in the page of the *Little Review* beginning in the spring of 1923 with the publication of Fernand Léger's "The Aesthetics of the Machine." The artist conceived of a plastic beauty independent of mimetic values and anadronistic styles; instead, he preferred the utilitarian beauty of kitchen utensils and "the mechanical grace of an automobile." Indeed Heap's later call for a "plastic-mechanical analogy" in her announcement of the forthcoming *Machine Age* Exposition echoed Léger's pronouncements. Edwin Avery Park voiced a similar opinion. "There is beauty in . . . the perfect adjustment of the automobile, its parts and its whole . . . . The new shape . . . of motorboats, the body of a submarine are equally beautiful," he noted.\(^2^9\) The confidence in functional designs engendered skyscraper images similarly constructed. Many of the enthusiasts of the tall building praised these qualities in their paintings; they sought to evoke the logic and efficiency of the machine.\(^3^0\) The works of Sheeler, Lozowick, Bourke-White, and Frankl served as analogues for the clean precision of the mechanical counterparts.

A concomitant argument in favor of the logic of the skyscraper was the perception that it was the product of man's highest potential, an incarnation of abstract,
platonic principles. The loftiness of the tall building certainly lent itself to this metaphor. These notions were explored comprehensively by Orrick Johns in the pages of the New York Times. In "The Excelsoir of Architecture," of 1924, Johns regarded architecture in general as the expression of "the highest reach" of "intelligence." Throughout history, he maintained, "we find a surprisingly logical and continuous growth toward certain definite ideals," culminating in the invention of the steel frame which was inspired "with a pure idea."

A third manifestation of the perception of the skyscraper as a symbol of logic was the upsurge of interest in city planning which characterized the decade. Despite their often fantastic musings on the future character of New York, the utopian projections of Corbett and Ferriss were quintessential examples of the current belief that technology could be harnessed and employed to man's advantage if proper foresight was exercised. A prerequisite to this notion was an a priori faith in the machine and a confidence in the human capacity to master it. Even otherwise hostile observers of urbanism like Frank Lloyd Wright noted:

The machine is the architect's tool—whether he likes it or not. Unless he masters it, the machine has mastered him. The machine is an engine of emancipation or enslavement, according to the human direction or control given it.
Matthew Josephson had articulated a similar view in Broom in June of 1922, claiming that the machine was neither flattening nor crushing us but was "our magnificent slave, our fraternal genius."\(^{32}\)

Simultaneous with the adulatory phrases concerning the logic of the skyscraper, observers surveyed it in reverential, wondrous terms. The utopian view toward the tall building encompassed both the rational and otherworldly approach to the tall building. Orrick Johns compared the efforts of contemporary architects to the builders of gothic cathedrals, noting that both shared the "sense of having his building 'hang from Heaven.'" Similarly, in "America's Titanic Strength Expressed in Architecture" of 1925, the author likened contemporary skyscrapers to lofty edifices of the past:

Man enjoys overwhelming effects of extraordinary power. The simpler these titanic expressions are, the more they satisfy him. They appeal to his imagination, to his reverence, they transcend all petty things.\(^{33}\)

Similar panegyric pronouncements accompanied descriptions of business and the machine. Antedating Heap's proclamation that "THE MACHINE IS THE RELIGIOUS EXPRESSION OF TODAY," Harold Loeb, the editor of Broom, spoke of the "mysticism of money" replacing religion as the quest for truth. According to the author, "business and state" were "now as closely knit as church and state in the middle ages." Indeed, the periodical described "The
Age of the Machine" as "an age of spiritual change and
growth as well as economic ascendancy." 34

The sense of awe and wonderment which characterized
the current response to the skyscraper served as an
acknowledgement that America's values were in a state of
transition. It may have also reflected an effort to
further legitimize the tall building by couching it
in religious terminology. As far as the literary and
visual interpretation of the skyscraper were concerned,
it fostered the sublime skyscraper image which was adopted
by optimists and pessimists alike. The numerous paintings
and photographs of skyscrapers rendered from disorienting
perspectives and the single towers which seemed to soar
limitlessly were manifestations of the simultaneous
amazement and inability to grasp its monumental proportions.

Artists and Images

Charles Sheeler and the Functional Skyscraper

Among those artists who undertook the theme of
the skyscraper in the twenties, Charles Sheeler may be
viewed as the quintessential optimist of the urban scene.
His early career as a photographer of Philadelphia's
architecture in 1912, his comprehensive visual essay of
the Ford Motor Company at River Rouge in 1927, and his
persistent use of the tall building throughout his career
reflected his unequivocal regard for the urban-industrial
sphere as the highlight of American civilization. Despite the paucity of verbal praise by the artist, Sheeler's utopian views of the metropolitan scene bespeak of a clean, ordered world where glistening mechanical parts operate efficiently.

The artist's early predilection for the productions of modern technology may be explained, in part, by his affiliation with the members of both the Stieglitz and Arensberg circles. In 1914, Sheeler met and subsequently began a correspondence with the pioneer photographer on the technical aspects of camera art. Sheeler joined these coteries during a period of optimal confidence concerning burgeoning Manhattan. The "New York" issue of Camera Work had recently been published and Stieglitz's letters reflected his unabashed enthusiasm for New York's towering edifices. In many respects, Sheeler's and Strand's film Mannahatta of 1921 paid homage to Stieglitz's prior celebrations of the city.

The machine images of Duchamp, Picabia, and Man Ray, their laudatory statements, and the positive pronouncements on art and science by Marius De Zayas, Max Weber, and Charles Caffin provided an ideological base from which to view the skyscraper. Significantly, the often esoteric symbolism of Duchamp's glass paintings was wholly overlooked by Sheeler. Instead, he praised its mechanical components and constructive logic:
He [Duchamp] built with precision . . . an instrument for making scientific measurements. . . . He planned and executed several notable works on glass . . . . They were abstract forms in space, the outlines defined by a wire-like line of lead and painted on the background of the glass.35

In accord with his contemporaries in the twenties, Sheeler viewed the skyscraper as utilitarian architecture par excellence, focussing specifically on these aspects. Steel frame, windows, curtain wall, and height were explored as optimal solutions to architectural design. Employing a formal vocabulary inspired by the pristine geometry of the machine and constructing his compositions architectonically, Sheeler created visual equivalents to the logic of the skyscraper itself. In describing a photograph of New York (1920), which served as a source for several drawings and paintings, he is quoted as praising its functional adaptation to the metropolitan environment (Fig. 86):

The artist, felt, in the subject before him, the beauty of the architectural forms that have been created in New York to meet the fundamental necessity of providing buildings with the greatest cubic area upon the smallest possible base. He feels that because our skyscrapers and loft buildings have been created with the adequate solution of necessity in mind, they . . . are our most vital contributions to architectural progress.36

Sheeler's interest in the particular features of skyscraper design was explored most comprehensively in 1921 in the film Mannahatta, on which he collaborated with Paul Strand. The film was an exploration of various
aspects of the island, including its ports, skyscrapers, commercial potential, accompanied by excerpts from various poems by Walt Whitman. A description of the film's treatment of the Equitable Building, a still of which appeared in *Vanity Fair*, explained the artists' selection of this particular edifice (Fig. 87). "The photographers were interested in the monotonous repetition of windows and other utilitarian details," the magazine reported. In *Mannahatta*, they achieved this effect by the scanning of the building from top to bottom, enumerating the regular geometry of the windows for the viewer.

A pencil drawing entitled *New York* reinforced Sheeler's fascination with the use of glass in architecture (Fig. 88). Based on an earlier photograph taken from above, the artist further reduced the sleek, precisioned forms, concentrating on the rhythmic patterns of the rectilinear windows (Fig. 86). Whereas the previous photographic image had been a random view of the city, the cropping and reductivism of the subsequent drawing revealed Sheeler's interest in specific aspects of the skyscraper.

In *Mannahatta*, an attraction to the logical features of the skyscraper was extended to a thorough exploration of the entire course of its construction. This segment of the six-minute kinetic poem was introduced by the following verse by Whitman:
The building of cities,—
the shovel, the great
derrick, the wall scaffold,
the work of walls and ceilings.

It concerned the process of tall building fabrication. The scene opened with a view of workmen hammering and digging into the earth, excavating that portion of the land that would ultimately receive the skyscraper's foundation. A brief shot of workers high atop the emergent frame followed. The rise of the steel scaffold dominated the remainder of the sequence, suggested by the thin vertical beams which seemed to point skyward longingly (Fig. 89). Cranes and derricks moved across the screen in contrast to the staticism of the steel frame, evoking the mechanical activity involved in building. From a purely visual perspective, the interaction of moving diagonals and inert verticals displayed Sheeler's and Strand's experimentation with the possibilities inherent in the film medium.

Construction served as the subject of Sheeler's photographs of both the Berkley apartments (1920) and the Shelton Hotel (1924). In the former image, the selection of a point of view from above portrayed naked steel members, similar in spirit to the scaffold in Mannahatta (Fig. 90). By exposing the skeleton of the Berkley apartments, he was commenting on the structural components which engendered the height of the building.

An appreciation of the skyscraper's loftiness and monumentality in Mannahatta, seen in the narrow, aspirant steel, was explored further. In the sequence prior
to that of fabrication, the Woolworth Building was spanned from top to bottom. While the artists may have been commenting on its windows, Cass Gilbert's tower remained the tallest building in Manhattan. Again, Whitman's subtitles reiterated the surging potential of the skyscraper, when he referred to the "High growths of iron . . . uprising toward clear skies."

Sheeler's later view of the Delmonico Building (1927) from below pointed to his continued interest in the loftiness of the skyscraper (Fig. 91). The set-back was perfectly suited to this purpose, as the tapering from base to pinnacle provided the illusion of infinite climbing.

Undecorated backs of skyscrapers were also explored in Mannahatta, perhaps a recognition of the functionalism of the curtain wall (Fig. 91). The Delmonico Building continued this interest in unadorned surfaces which seemed a realization of Sadakichi Hartmann's earlier encouragement to celebrate those aspects not seen from the street. This interpretation seems feasible in view of Sheeler's and Strand's comprehensive exploration of height, windows, and steel frame.

Sheeler's interest in the constructive logic of the skyscraper was echoed in his own method of picture making, approaching his works with the same rigor as an architect might plan a building. The artist conceived
of his productions as architectonic wholes. "I favor the picture that is planned and executed with the same consideration for its parts--within the complete design as is necessary in the building of a watch or an aeroplane," he asserted.  

A concern for structure was manifested in his reduction of his compositions to the interaction of clean, geometric forms. In his explication of Church Street El, a view from the dizzying heights of the Equitable Building, he expressed a desire to simplify all natural forms to the borders of abstraction, retaining only those components "indispensable to the design of the picture." This extended to the suppression of all traces of the human hand, the smooth surfaces seemingly produced by mechanical means.

This had the effect of producing images of anonymity and standardization. Although Sheeler began with specific edifices, the resultant paintings evoked generalized metropolitan scenes. The artist's skyscraper images resembled George Babbitt's description of his hometown:

I tell you, Zenith and her sister-cities are producing a new type of civilization. There are many resemblances between Zenith and those other burgs. . . . The extraordinary, growing and sane standardization of stores, offices, streets, hotels, clothes and newspapers throughout the United States shows how strong and enduring our type is.  

The desire for mass uniformity which characterized the
decade, seen in the attempt of Henry Ford to create a
universal car and the efforts of Ferriss to forge an
ideal city, may have fueled Sheeler's efforts.

Sheeler's skyscraper views which picture an
immaculate, well-functioning machine devoid of human
inhabitants, pollution, noise, and congestion are state-
ments about his unswerving regard for the tall building. In accord with the utopian urban planners of the decade,
Sheeler's cities conveyed an environment of near perfection,
all ills ameliorated by the mechanical precision of the
skyscraper. Indeed, one of the premises of the twenties
among sociologists was that "utopia" was "just around
the corner." Sheeler sought to reflect that belief in
universal logic by the formulation of a standardized
vocabulary, an architectonic compositional structure, and
a flawless view of the city.

Margaret Bourke-White and Fortune Magazine

Margaret Bourke-White's career as a photographer
commenced with the rendition of aspects of the American
industrial scene. From the mid-twenties on, factories,
dynamos, and the skyscraper attracted her attention, a
predilection she attributed to her father's love of
technology. Like her contemporaries, Bourke-White lauded
the architecture of industry and urbanism for its
functional beauty:
To me . . . industrial forms were all the more beautiful because they were never designed to be beautiful. They had a simplicity of line that came from their direct application to a purpose. Industry . . . had evolved an unconscious beauty—often a hidden beauty that was waiting to be discovered.43

Beginning in 1927, the artist began a series of photographs of the Otis Steel Mills in Ohio and the Terminal Tower, Cleveland's newest skyscraper.44 Both were independent, uncommissioned endeavors and reflected her highly romanticized view of America's technology. In a description of the former site, which may apply equally to her perception of the tall building, she spoke of the "fog-filled bowl, brooding, mysterious, their smokestacks rising high above them in ghostly fingers."45 Her numerous depictions of the lofty Terminal Tower shrouded in mist, its monumental proportions dwarfed by the limitless envelope of nature is similar in spirit to the fin de siècle efforts of Stieglitz and his colleagues (Fig. 93).

As a result of her experiments in industrial photography, eight of her images were selected to illustrate The Story of Steel, a project financed by the Otis Steel Mills. This brought her work to the attention of Henry Luce and his associates who, in 1929, were planning the publication of the periodical Fortune. The magazine which appeared in 1930 may be viewed as both a synopsis and a culmination of the decade's celebration of business and industry. In the first issue they set forth their aims
as follows:

Fortune's purpose is to reflect industrial life in ink and paper and word and picture as the finest skyscraper reflects it in stone and steel and architecture. Business takes Fortune to the tip of the wing of the airplane and through the depths of the ocean. . . . It forces Fortune to peer into dazzling furnaces and in the faces of bankers.

To augment their verbal advocacy of issues of finance and technology, they sought a photographer who could convey its aesthetics and provide "the most dramatic photographs of industry that had ever been taken." Thus, Bourke-White's images for Fortune may be viewed as both independent artistic endeavors and visual reinforcements for the philosophies set forth in the periodical.

In particular, Fortune's support of the skyscraper was both extensive and unequivocal. Beginning in July of 1930 and continuing until December, every aspect of the tall building from financing to construction was explored. Appropriately entitled "Skyscrapers," the series served subsequently as the basis for the publication of a separate book on the subject. While claiming to be an objective appraisal of the tall building, the first article commenced with an evaluation of the popular response:

Most Americans are proud of their skyscrapers. Most Americans are familiar with the silhouettes of famous towers. . . . Every Sunday paper with space for an impressionistic drawing in shafts and shadows of light have described it.47

This assessment of the tall building's impact was accompanied
by *Toward the Sun* by Bourke-White, a photograph of the Chrysler Tower before its sheathing in steel (Fig. 94). Taken from a point of view below the building, the sense of dramatic scale is explored; the edifice seemed boundless as it soared to the celestial realm as the title suggested. Viewing the Chrysler through the silhouetted patterns of another structure created an image of iconic importance.

The initial article continued with an appraisal of the skyscraper which was prevalent in the twenties, that it represented the pinnacle of man's intelligence and effort. A single individual could neither comprehend nor physically create the monumental edifice, *Fortune* maintained. Rather, it involved "categories of specialized human knowledge and skill."48 The images of the infinitely surging monolith by Bourke-White and others may be viewed as symbols of the skyscraper's entrance into these unsurpassed realms.

Concomitant with *Fortune's* belief that the skyscraper had metaphorically approximated man's omniscient capabilities was the equally audacious idea that it had triumphed over nature. According to Luce and his colleagues, the tall building had superceded the control of any single individual and had assumed a life and identity of its own. When viewing the skyscraper, one would naturally "imagine young and arrogant and reckless men who delighted in extreme height and great richness of
decoration and were proud of their victories over the strength of the wind."

In addition to the mainstream optimistic notion of standardized and uniform utopian cities seen in the paintings of Sheeler and the renderings of Ferriss, Fortune attempted to revivify the celebration of the individual, idiosyncratic building which reflected the personality of its architects, builders, and financiers. The egotistical cult of the individual gleaned from the above passage was reinforced in the laudatory phrases used to describe the investors. In language reminiscent of the success of Horatio Alger, the efforts of such financial luminaries as Irwin Chanin, A. E. Lefcourt, and Frederick F. French were explored. Moreover, William Van Alen's Chrysler Building and Raymond Hood's Daily News Building, two of the decade's boldest edifices, were singled out for special praise. An entire article entitled "Skyscrapers: The Paper Spires" was devoted to the latter building, tracing its genesis from hypothetical rendering to finished product (Fig. 95). Fortune claimed that the skyscraper was not simply a well-functioning machine but a lasting advertisement for its owners.

By focussing on these bombastic buildings, the periodical displayed its absorption in the current height mania which characterized the reaction to the skyscraper since its inception, and was reintroduced in the twenties.
as a result of the building boom. Accompanying "Skyscrapers: The Paper Spires" was a comparative chart of the prestigious, lofty edifices of the world, including the Eiffel Tower, the Chrysler Tower, and the Woolworth Building, and displaying the Empire State Building as preeminent. The present competition for ever taller buildings was explored sarcastically in the skyscraper novel Flamingo. Referring to a potential customer, the architect of the story exclaimed:

Sam Bottle wanted me to build him the highest building in the world, the highest, mind you, he said, to put that poor boob Woolworth in the shade. It has to be a great big beautiful advertisement for Sam Bottle's hooks and eyes.

Fortune's immersion in the current height competition is further revealed in the instructions given to Bourke-White as to how to photograph the progress of the Chrysler Tower. There was a raging controversy that the Chrysler would not supercede the Bank of Manhattan despite its height of 1,046 feet. Rumor had it that the building would sport an ornamental steel tower applied solely to surpass the world record. In order to prove the falsity of this charge, the artist was directed to photograph the building in the course of construction to demonstrate that the tower was indeed a requisite part of the design. As a result, many of Bourke-White's renditions of the Chrysler focussed predominantly on its loftiness. Often selecting viewpoints from below, as in Toward the Sun, she created the sensation of limitless
soaring (Figs. 93 and 96). The cropping of the image reinforced the sense of scale by paying homage to its rising verticality. Moreover, the interaction of the various geometric members lent the structure an air of logical uniformity which accorded with the wishes of her publishers.

The periodical's interest in all aspects of skyscraper construction owed, in part, to a confidence in the new materials of technology and the mechanical process of building as well as the men who employed these tools. The operation of the steel erector's derrick, steam shovels and riveter's gun were described in detail. Fortune's confidence in industrial methods was justified in language similar to that of the Machine Age Exposition. They insisted that the bemoaning of industrial progress was both anachronistic and counterproductive:

The trouble with all the talk about the decay of artisanship is that it is true. . . . It was true when the last wattle-weaver died and they took to building houses of brick. And it will be true when the tools and machinery of the contemporary arts are replaced by atomic explosions. It is so true that no one takes time to remark that the decay of one kind of artisanship is almost always caused by the growth of another.52

According to the magazine, the new spirit in architecture was technical while the efforts of the engineer were aesthetic.

The last article in the series articulated Fortune's unequivocal regard for the skyscraper. In accord
with the historian Charles Beard, critics like Lewis Mumford were labelled as backward. Dismissing the common complaints that the tall building was symbolic of greed, unaesthetic, and responsible for traffic congestion, Fortune accused the detractors of blaming the skyscraper for the problems which characterized any modern city. Citing both Boston and London as examples, they claimed that these urban centers were equally crowded as New York. Instead, Fortune insisted on viewing the skyscraper as a separate entity or a "tool of industry," the result of America's rapid technological expansion. This idea was at the heart of the optimists' response to the city. To its supporters, skyscrapers were autonomous, well-functioning, mechanical, and modern, and should be viewed isolated from both the people in their midst and the problems engendered by urban living.

The painting Chicago Impression by Robert Hallowell, which was employed to illustrate the article, supported this attitude. He selected a viewpoint high above the metropolitan denizen, picturing a city of calm order, spacious vistas and devoid of human activity (Fig. 97). Likewise, the skyscraper photographs of Bourke-White revealed the tall building as an individual entity, the vertical tower of the Chrysler separated from the surrounding architecture. This purposely myopic vision reinforced Fortune's contention that the tall building
should be evaluated on its own merits, as an efficient, cost-saving, mechanical addition to commerce in the United States.

Fortune concluded the series with a prophecy for the future. This practice was common among skyscraper enthusiasts who wished to identify the tall building as symbol of progress and modernity. As one might expect, a good prognosis was given for its continued existence. Acknowledging the utopian renderings of Ferriss, Corbett, Oud, Gropius, and Mies van der Rohe, Fortune claimed that the realization of these visions would occur in America. Praising the Empire State Building as the quintessence of skyscraper excellence, the editors maintained that their picture of the city of the future included: "a city of free clear columns walled in metal and glass rising forty or sixty or eighty stories into the air, a city from which the gawky totem poles and flat-chested silhouettes of the Grand Central district will be happily absent, a city beautiful from the land and from the sea." 54

This perception of the fantastical skyscraper as the beneficial saviour of society had its roots in the earlier pronouncements and visionary cities of Ferriss and Corbett. Articulated after the fall of the stock market, Fortune's favorable predictions appeared as a futile effort in view of the subsequent economic debacle when rendered the grandiose Empire State Building unrentable.
The new industrial age which created the skyscraper was blamed for the mishap, and the worker replaced the tall building as the wave of the future.

The Utopians

Similar in spirit to the optimistic images of America's painters and photographers, city planners, architectural renderers, and observers of the metropolitan scene expressed an equally positive opinion about the skyscraper. The efforts of Sheeler and Bourke-White were part of a larger movement to transform the urban sphere into a logical, ordered whole by using man's intellect to harness the power of the machine. Responding to the current problems of traffic congestion, lack of sunlight, and pollution, the utopians saw the expansion of monumental skyscraper cities as a panacea to the nation's urban ills. Often, their ideas were elucidated by the use of dramatic images of near perfect cities which provided philosophical and pictorial inspiration to their colleagues in the fine arts.

The utopian projections of Hugh Ferriss, the leading architectural renderers of the decade, were profoundly influential. Beginning in 1921, his drawings were published repeatedly in a wide variety of newspapers, art magazines, and popular periodicals, including the New York Times, Vanity Fair, Arts and Decoration, and the
American Art News. The exposure given his work in major shows such as the 1925 Titan City Exhibition and the 1927 Machine Age Exposition seemed to insure his popularity in the architectural as well as the art communities. A comparison of his depictions of both existent and imaginary edifices with the works of other skyscraper optimists reveals significant similarities. Like Sheeler and Bourke-White, Ferriss' evocative portrayals of the tall building are devoid of human protagonists (Fig. 98). Composed of ordered, geometric elements, they convey both an image of optimal rationality and romantic grandeur. Ferriss' fantastical projections reflect an anonymous metropolis filled with uniform buildings, pointing to the belief that these cities possessed universal applications. While the efforts of those painters favorable to the urban sphere have been cursorily defined as utopian, there has been no attempt to link their works with the endeavors of idealistic city planners such as Ferris. The similarities in their sensibilities suggests a broader context in which to evaluate the painting and photography of the decade.

Ferriss imbued his futuristic musings with a feeling of the supernatural, bordering on what Mumford termed "religious awe and ecstasy." Dramatic diagonals illuminated his buildings, spotlighting their grandeur (Fig. 99). In his numerous drawings and charcoals, his
employment of strong lights and darks and the placement of his skyscrapers in nocturnal ambiances created an air of mystery and wonderment. Referring to the advancement of the dawn on the sprawling metropolis, Ferriss rhapsodized:

There is a moment of curiosity, even for those who have seen the play before, since in all probability they are about to view some newly arisen steel skeleton, some tower or even some street which was not in yesterday's performance. And to one who had not been in the audience before--to some visitor of another land or another age--there could not fail to be at least one moment of wonder. What apocalypse is about to be revealed?60

Ferriss' utterly romantic city views were meant to convince the spectator to adopt the new urban sphere as well as a new cosmological order. Thus, inherent in his metropolis of the future is the dual belief in the superiority of controlled technology and the triumph of a new spiritual order.

At the same time, Ferriss developed a highly rational approach to urban planning in collaboration with the architect Harvey Wiley Corbett. At the beginning of the decade, they developed a workable solution to the 1916 Zoning Ordinance in New York which stipulated that buildings could not exceed a certain height without a gradual decrease in cubic area.61 In a four stage process which commenced with a pyramidal sculptural mass, Ferriss stepped back his building with geometric precision (Figs. 100 and 100a). He claimed that this architectural envelope would afford the maximum amount of light and air
and imbue the skyscraper with a sense of monumental three-dimensionality. The creation of a ready-made solution easily adaptable by other architects was viewed as the first truly American interpretation of tall building design.

However, Ferriss' imaginative visualizations were not only conceived as pragmatic solutions to the restrictions imposed in New York but as a universal solution to urban problems in general, engendering idealistic images of vast city complexes. These were contemporary with the futuristic cities of Le Corbusier, especially the latter's *City For Three Million* of 1922. In "Civic Architecture of the Immediate Future," which appeared in *Arts and Decoration* of 1922, Ferriss maintained that, although his renderings seemed "imaginative and fantastic," most of the crowded business centers would soon resemble his adumbrations. In accord with those who viewed the skyscraper as a symbol of rationality, Ferriss believed that his images would encourage thoughtful city planning. If architects would only build in this orderly fashion, most of the current urban problems could be corrected. He stated confidently:

> Within a generation the congested areas of large cities will be razed. The iconoclasts who will recognize and remove this debris will derive their significance from the fact that with the same gesture they will establish their constructive scheme. Tenements will present a new facade. . . . The typical apartment will include a terrace.
overlooking the distance. Present cubages will be
so massed as to leave ground space to which Nature
will return.62

In *The Metropolis of Tomorrow* (1929), which represented
a summary of a decade of work, he reinforced his belief
in the salubrious effects of the new "architectural
landscape" which would provide "a free access to light
and air on the part of all building whether high or low."63

This position was echoed by a number of American
city planners in the twenties. Reiterating the observations
of decades of detractors, Corbett believed that metropolitan
chaos could be avoided by exercising foresight and
erecting planned skyscraper groupings:

Of all the conglomerate, helter-skelter, jumbled
up, mixed in and scattered about architectural
messes,—New York . . . takes the prize. To be
sure, it is fascinating, it is inspiring, at
points it is exciting,—in certain lights it
has great charm, from certain angles it is almost
appalling—but one has the feeling that if one
could only be screened, sorted, analyzed, separated,
some order brought out of the present chaos, all
that is really worth while [sic] could be retained,
and the joy of it all enhanced by the sense of order
that is only possible through intelligently guided
community effort.64

Despite the ostensible logic of their pronounce­
ments and projected solutions to New York's dilemmas,
Ferriss and Corbett produced visionary images of the
future metropolis. In 1924, the latter published his
"Different Levels for Foot, Wheel and Rail," with
illustrations by Ferriss, which were exhibited at the
*Titan City Exhibition*. Including subterranean and aerial
passageways, these layered districts were designed to alleviate congestion. In the latter Metropolis of Tomorrow, such novelties as apartments on bridges, mooring masts on skyscraper pinnacles, and lofty gardens high above the concrete city were offered as further relief from the effects of overpopulation and centralization, recalling Sant'Elia's Nuova Città of 1914 (Fig. 101).

Ferriss' desire to synthesize the rational and the transcendent was expressed most lucidly in the Metropolis of Tomorrow. He was certain that enlightened artists like himself possessed the vision to fuse these seemingly antithetical modes. "Would it not be surprising if the sense of large actualities, which is lacking in the words of both contemporary scientists and churchman, should be brought to us in the wordless device of the architect," he argued.66

The physical incarnation of these beliefs was realized in Ferriss' employment of the crystal motif. Published in 1926 and exhibited a year later in the Machine Age Exposition, his translucent skyscrapers encompassed the logical and the spiritual (Fig. 102). On the one hand, glass was more functionally sound than other materials, affording minimum weight on the steel skeleton and maximum luminosity. Moreover, the most advanced types of glass which "ingenuity" was "already manufacturing" were sought.68
Yet the mathematically perfect crystal is also found in the natural landscape. This coupled with its irradiant properties suggested divine intervention. Since the middle ages, the crystal had been a symbol of God. The biblical basis was found in the Song of Songs and the final chapters of the Revelation of St. John which spoke of the new Jerusalem as a city of "pure gold, clear as glass" and "the river of the water of life, bright as crystal."69

This luminescent motif was employed extensively by German artists and architects, including Bruno Taut, Peter Behrens, and Paul Scheerbart, who viewed it as a symbol of spirituality and utopian perfection. No doubt, Mies van der Rohe's project for a crystalline office building at Friedrichstrasse served as an important source of inspiration for Ferriss' subsequent fantasies.

In The Metropolis of Tomorrow of 1929, art and science met in a tall vertical glass tower, christened the center of Philosophy. The building was identical to the glass tower exhibited at the Machine Age Exposition. The plan of this skyscraper was based on variations of three superimposed triangles, evocative of the trinity and the rationality of mathematics. Ferriss' fusion of the fantastic and the logical is illustrated in his almost sublime poem "Night in the Science Zone," a celebration of the glass skyscraper:
BUILDINGS like crystals
Walls of translucent glass
Sheer glass blocks sheathing
a steel grill.
No gothic branch: no Acanthus
leaf: no recollection of the
plant world.
A mineral kingdom.
Gleaming stalagmites.
Forms as cold as ice.
Mathematics.
Night in the Science Zone. 70

Another manifestation of Ferriss' spiritual
orientations is illustrated in the role of the church in
his futuristic society. In a photograph of the artist
preparing his murals for the Titan City Exhibition,
Ferriss is seen putting the finishing touches on a tall
beaconed monolith which he described as "a great tower to
which dirigibles will be moored and down the sides of which
will run escalators for passengers" (Fig. 103). 71 Evoca-
tive, concentric rings and diagonal rays underlined the
building's cosmic importance. In The Metropolis of
Tomorrow, the identical structure was employed as a
religious edifice encompassing various denominations, "the
seat of their combined and coordinated activities." Three
towers comprised the edifice and symbolized "the cardinal
functions of the Christian host," according to the
artist. 72

Ferriss' conceptions of the subsequent appearance
of the metropolis seemed to reconcile the prior conflict
of church and tall building. In the architect's ideal
city, the religious structures themselves were skyscrapers
and loomed high above those edifices concerned with monetary matters. Referring to the image of Churches Aloft (Fig. 104), Ferriss asked rhetorically, "might not the office and apartment remain below and the church be raised . . . aloft?"\(^{73}\)

Ferriss' influence on the perception of the skyscraper in the twenties is seen in the widespread belief that it was the building form of the future, removing it from mundane associations and situating it in the context of fantasy. Ferriss imbued it with near perfect elegance which contributed to the belief that it was not only a phenomenon of the present but the symbol of progress and a better society. A wide variety of utopian renderers of the skyscraper accepted Ferriss' assessment on the subsequent appearance of the urban sphere, and others offered their own interpretive predictions on its eventual character. As Fortune so aptly asserted, the vogue of the decade was in "crystal-gazing, palm-reading, prognostication, theomancy . . . and by plain, old-fashioned hope and fear . . . to prophesy by steel and stone."\(^{74}\)

Ferriss' ideas gained wide dissemination in the architectural community; many of the historians of contemporary building either included reproductions of his work or accepted his thesis that carefully planned skyscraper cities would ameliorate all social ills. In
The American Architecture of Today of 1928, G. H. Edgell concluded his study with a hypothesis:

It is fascinating to toy with the possibilities of the future. Speculation is futile, but one fact we can be sure: the era of steel will work a transformation in the physiognomy of our cities which will make its marvelous beginnings look pallid and weak. In conclusion, we reproduce some imaginative drawings of Hugh Ferriss.

And accompanying illustrations by Ferriss in *The New World Architecture*, Sheldon Cheney hoped:

But why not the City as Architecture—that is, as something built for perfect mechanical functioning in the service of man, with an over value of sheer pleasure-giving beauty in the building. . . . Let the vision be of a city beautiful, clean-walled, glowing with color, majestically sculptural, with a lift toward the sky.75

In addition to hypothetical discussions, images of the future metropolis abounded. While many were found in architectural sources, their fantastic, imaginative character belies a strict categorization of them as skyscraper renderings. In accord with the images of Ferriss, these prophetic musings are works of art in their own right.

In *The History of the Skyscraper* by Francisco Mujica, the first monograph on the lofty edifice, the author included a rendering of *The City of the Future: Hundred Story City in Neo-American Style* (Fig. 105).76 Mujica offered gargantuan structures spanning several blocks which served as multifaceted urban centers rather than limited monolithic towers. These geometric set-back
buildings were uniform in design and occurred at measured intervals to allow for space and air. Predictably, the metropolis was divided into various levels to accommodate the diverse transportation requirements.

Perhaps the most ambitious manifestation of the decade's obsession with the subsequent appearance of the city was by The Regional Plan of New York Committee which published the results of nine years of research in 1931. In order to popularize and gain public acceptance for their ideas, they put forth their findings in *Creative Arts*, an entire issue of which was devoted to "New York of the Future." 77

Ostensibly, the conclusions put forth by the committee seemed to conflict with those of Ferriss. In theory, Thomas Adams, the chairman of the project, was opposed to the antiseptic, technologically advanced civilization:

Some proponents of city plans seem to consider that new building of a complete new city on logical and efficient lines would produce beauty. But logic and efficiency may lead them into creating a machine type of city and accepting a monotony of regularity that appears to others to produce ugliness. Logical unity may replace interesting irregularity with a severe and uninteresting formality.

Moreover, Adams did not accept the skyscraper on unequivocal terms. The tall building was blamed for the problems of congestion and lack of light and air. However, skyscrapers were praised as individual entities, such as the Woolworth
or the Telephone Buildings which were isolated and provided "room to breathe," and as groups which suggested "the mass effects of mountains." Adams believed that it was necessary to recognize the tall building's limitations and social ramifications. This required thoughtful city planning rather than continued haphazard growth. But the authors guarded against presenting themselves as futurist prophets. They inveighed against those who concocted "impossible utopias." Adams summed up their attitudes toward these undesirable dream cities:

A utopia can be achieved only on a basis of despotism. . . . Those who proclaim the scientifically organized, the perfectly adjusted, and the logical geometric city as a sound conception of civilization overlook the fundamental conditions of life and growth in a democratic society. These conditions can be subordinated only by the destruction of freedom, which is the greater evil. Art can not be superimposed upon a people from the outside . . . .

Yet Adams' reservations about utopian solutions and machine logic for New York were not reinforced by the fantastic projections of skyscraper cities presented both in the Regional Plan publication and Creative Arts. In addition to views of the city by Corbett and Ferriss were equally inventive images. Two city views by the renderer Arthur J. Frappier of the proposed revampment of Chrystie and Forsyth Streets on the lower east side of Manhattan pictured almost stream-lined geometric towers separated by measured intervals (Fig. 106). Despite the isolated nature of the towers and the wide arcades spotted
with manicured greenery, the projected appearance of the neighborhood seemed as fantastic as any utopian planner.

Concluding the issue of *Creative Arts* were drawings entitled *Imaginative Conceptions of the City of the Future* by Leopold De Postels, picturing a regularized cubical city seen from the lofty heights of a monumental edifice (Figs. 107 and 108). The buildings were reduced to prefabricated, volumetric masses, devoid of all superfluous detail and embellishment. The dramatic perspective and the precision of the skyscrapers reflected the decade's preference for rational, awe-inspiring cities.

Despite Adam's protestations, many of the utopian ideas of Corbett and Ferriss were accepted by city planners and architects. Multileveled transportation, regularity in building and measured intervals between structures became an accepted part of the architectural vocabulary.

Projections on the future skyscraper were so common that they even entered the realm of popular advertising. In the pages of *Fortune*, the Carrier Engineering Corporation lauded the benefits of "manufactured weather," a method to control the internal environment of the office building. The ad created the anxiety that unless one opted for this technology, their "buildings still in blue-print" would become "obsolete." The text described the perennial pulling down of old skyscrapers which gave way to taller, more modern structures.
This suggested that the construction epidemic was responsible for the obsessive projections on the future which characterized the decade. Accompanying the words of caution was an anonymous set-back structure high above the clouds. Its placement in a nocturnal ambiance and the employment of a disorienting viewpoint imbued it with an otherworldly character (Fig. 105). An airplane adjacent to its pinnacle indicated that the forthcoming era would include air travel.
"You have taken the world as it is, and crystallized it in your imagination as a utopia; and in perfecting what was bad you have naturally created something much worse." This was put forth by Lewis Mumford in a fictional dialogue between a critic of urbanism and a utopian city planner. Mumford, at once architectural commentator, social observer, and historian of cities, was perhaps the most vituperative interpreter of the skyscraper throughout the twenties. Articles with such provocative titles as "Is the Skyscraper Tolerable?" "Botched Cities" and "The Intolerable City" attested to his aggressive attacks on the tall building. Yet Mumford was not alone in voicing such harsh complaints. Despite the brief period of acceptance of the skyscraper in the years preceding World War I, the debate concerning its viability reemerged with increased vigor.

The popular journals reflected the current tensions. Often the pros and cons of the skyscraper were put forth in a single article. Or rhetorical inquiries