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The Evolution of the Philadelphia Skyscraper 1897-1941

Martin Shore
University of Pennsylvania

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THE EVOLUTION OF THE PHILADELPHIA SKYSCRAPER
1897-1941
by
Martin Shore
A THESIS
in
The Graduate Program in Historic Preservation

Presented to the faculties of the University of Pennsylvania in Partial Fulfillment of the Requirements for the Degree of
MASTER OF SCIENCE
1985

David G. De Long
Supervisor

David G. De Long
Chairman in Historic Preservation
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INTRODUCTION

The purpose of this paper is to re-examine the skyscrapers built in Philadelphia between 1897 and 1941. During this 44 year period, the 1,200-acre area called Center City was enlarged by the construction of over 150 skyscrapers. This vertical explosion of Philadelphia's business and financial district occurred around the civic center of Philadelphia. The skyscrapers represented the rise of commercial architecture. They changed the character of the modern city. Of these 150 buildings, 16 will be analyzed with the intention of showing a cohesive evolution of the skyscraper in the city. These 16 are of the highest significance because they exhibit outstanding characteristics distinguished by the foremost qualities of architectural design, historical value, and a relationship to the environment.

The first part of this report will study the definitions of the skyscraper the Philadelphia skyscraper into a logical framework. The relationship between the skyscraper and its role of the city will be studied with the development along Philadelphia's streets. The skyscraper was integrated into the traditional city grid by balancing the conspicuous commercial intentions with appropriate forms of civic expression. These architectural forms corresponded to a set of established cultural values. The values
responded to the life of the city, its material base, the location of the site, and the needs of the client.

The architecture of the skyscraper necessarily changed during the years 1897 to 1941. These variations indicated a response to the complex issues that the skyscraper in the city presented. The second and third parts of this paper will look at the design-related issues of the skyscraper. This will attempt to explain the causes for the formal changes that occurred. These two parts will be placed into a time sequence. The first period will cover 1897 to 1924. The second will cover 1924-1941.

The skyscraper is a building of great height composed of usable space.¹ Height is achieved through a load bearing metal skeleton. Upper stories are made accessible by elevators. In general, skyscrapers in Center City were designed by architects trained in the tradition of the Ecole des Beaux Arts who responded to the new building technologies.² Though the tall buildings built from 1897 to 1941 were unified in terms of traditionally modern style that characterized the age, a variety of eclectic designs were applied to the steel frame structure. These skyscrapers rose from 8 to 32 stories. Efforts were made to relate the tall buildings to the life of the street as well as to the existing buildings. Cornice lines, belt courses, and window proportions were lined up according to existing buildings. Materials used were sympathetic to local
building traditions in masonry and stone. The color and texture of these materials maintained a consistency as well.

The skyscraper added definition to the street edge and reinforced a sense of enclosure. The base of the skyscraper design added a sense of drama to the city. Because the underlying structure allowed for an increased use of glass throughout the building, the design of the skyscraper could take advantage of this. At the lower stories huge windows opened up the area of the building. This space often was used for public or commercial purposes. The increased use of glass was beneficial because it allowed light and air to reach the upper stories.

The skyscraper was developed within the confines of the grid system. The grid plan for Philadelphia was adapted by William Penn in 1682\(^3\) for vastly different intentions than those represented by the skyscraper. The plan was powerful because it imposed an order that helped predetermine the growth of the metropolis. Although it could control an order that insured a certain monotonous regularity, it could not adequately control scale. Designers of skyscrapers took advantage of the grid and established a scale that was appropriate for the modern metropolis.\(^4\)

The growth of Center City from 1897 to 1941 became an increasingly speculative venture dependent upon the projections of businessmen.\(^5\) The impact of the speculative skyscraper was noticed, particularly in the 1920's, when the growth of the metropolis was at its peak. Due to the nature
of rapid expansion of business and finance in the downtown, problems of social and spatial definitions of Center City were left ambiguous. The order of the street grid appeared to offer guidelines, according to boundaries of lots and blocks; however, the answers to a satisfactory solution of urban growth did not lie in the grid alone. There was needed a plan that enforced the limits of development along that grid. This was a problem that was not addressed properly at the municipal level until the 1930's.

The use of urban land in center city was not strictly determined until 1933. Some patterns had developed but the usage of land was almost always a matter of speculation. Since there was not a framework for urban growth until the 1930's (the zoning laws were passed in 1933), the question of the potential heights of skyscraper and the locations were also unresolved. Business people, those private citizens of Philadelphia largely responsible for the development of the majority of skyscrapers in Philadelphia, felt that future structures could tower over the tallest buildings in the world. Some claimed the development of the tall building in Philadelphia would extend from river to river. The major reasons for this speculation were not based upon rational planning nor were social, economic, political, and aesthetic factors as a guide for growth. Instead development was economically motivated, reinforced by the success of transportation systems in the city which increased availability and value of center city properties.
This inability to agree on building heights and
districts caused a confusion in the spatial organization of
the city. This was particularly apparent between the years
1928 and 1932. Over that four-year period, more than 30 of
the tallest skyscrapers were built in Center City. Though
the buildings were of a more monumental height and mass,
architects, by the use of scale, style, materials and
arrangement of space, designed new skyscrapers to blend
together with earlier examples. Some were intentionally
conspicuous and by their contrasts in design, height and
color were, in themselves, statements about the nature of
the metropolis at that time.

While the skyscraper in Philadelphia represented
"progress" in the modern metropolis to developers and
businessmen, the major ingredient for real progress was
lacking. Skyscrapers in Philadelphia required the guidance
of a public institution that could balance the commercial
forces responsible for skyscrapers with appropriate forms of
civic expression. The skyscraper in Center City required a
public body that would insure that land use, building
height, and siting of buildings was the most efficient
quality for the healthy development of the city at large.
Instead, the tendency for the businessman to take the upper
hand in the development of the downtown environment meant
that the skyscraper truly became the popular symbol of
business. This was not without its architectural
merits. Architects were increasingly style-conscious in the
1920's. The skyscraper in Philadelphia became a conspicuous symbol on the skyline. Underneath the popular image was a sense of private commercial pragmatics that helped the tall building become integrated into the environment.

The quality of the Philadelphia skyscraper that differentiates it from any other skyscraper in the United States is that it conforms to an unwritten code called the "gentlemen's agreement." This legendary code says that no building is allowed to exceed the height of the City Hall tower. On the top of the tower stands William Penn, founder and spiritual leader of Philadelphia, at 548 feet. Businessmen in the 20's argued that the only controlling factor of the height of the skyscraper was practicality. The fact that none of the skyscrapers built in the greatest period of vertical growth in Philadelphia did not exceed the height of City Hall is significant. It reinforces the symbolic intentions of City Hall as the center of the city. The architectural statement made by the adherence to this code, so inherently understood by its citizens that it requires no law, is powerful. It speaks to the original intentions that William Penn had for his city. The city was composed of a community of private individuals representing a unified political body. Within that community there existed a harmony between the individual expression and the pursuit of wealth. The body of individuals shared a belief that the good of the many was of greater importance than the individual pursuit of wealth. The fact that the skyscrapers
built during this period preserved this symbolic connection to the original intentions of the city by not building over City Hall gives insight into the identity of Philadelphia.

Recently there has been a plan by Willlard Rouse, a developer, to build two towers at 17th and Chestnut. These towers will be built taller than City Hall. Rouse's proposal demonstrates the importance for Philadelphia to develop an intelligent plan for the future. In order to develop such a plan, it is essential for architects, planners, businessmen, students, public officials and historic preservationists to become involved in this process. The city needs to redefine its future intentions in a cooperative manner. This paper argues that the skyscrapers built during 1897 and 1941 are significant to the architectural character of Philadelphia in the future. They provide a vital continuity to the past, thus identifying the historical development of Philadelphia. They should remain a vital part of the city. The final chapter will discuss a preservation program that includes the 16 skyscrapers discussed in this paper.
CHAPTER I
DEFINITIONS

The skyscraper is a building type of great height composed of usable space. The great height of the skyscraper is made possible by steel construction and is provided with high-speed elevators. The skyscraper is a building type that was evolved from commercial buildings of the late 1700's. By the 1890's, the skyscraper was a building whose chief characteristic was its height and expression of verticality.¹

Louis Sullivan formulated an idea of skyscraper design that proved influential to the Philadelphia skyscraper. Space is arranged according to a tripartite formula of base, body and capital.² The base, body and capital of the skyscraper each performs a special function. The ground floor is made accessible to the public and addresses issues of ingress and egress. This portion of the building can contain public space, often commercial in nature. It requires easily identifiable entries capable of handling large numbers of people. It is designed with the intention of moving people conveniently through the building in an efficient manner. Placed above the ground floor is a transitional area that acts to complete the base of one unified division of the skyscraper. The base of the skyscraper helps define the scale of the street and adds a stable sense of boundary to the environment.
The body of the skyscraper comprises the majority of the building. Identically planned floors that offer a necessary amount of usable space are placed atop one another. The usable space can be partitioned within the structure of the floor plan. This usable space can function in a variety of ways such as offices, warehouses, apartments, or hotel rooms. Above this area is the capital. It contains mechanical and life-supporting equipment and marks the visual terminus of the skyscraper.³

There is a variety of views of what is the most important feature of a skyscraper. The expression of height is important to Weisman, Condit, Hitchcock and Tallmadge. The means by which the height was made possible is a point of contention. Weisman and Hitchcock believe that the height was realized through the effective and convenient utilization of the elevator.⁴ The elevator made the upper stories commercially feasible. It was developed by Elisha Otis in 1857.⁵ The physical effort exerted in climbing a number of stories became undesirable. It was time-consuming as well. The elevator was placed into the building to make the access to upper stories quick and convenient. This view of the skyscraper supported Weisman's notion that the first skyscraper was built in New York for the Equitable Life Insurance Company in 1866-1870. The 130-foot high-building was designed by Gilman, Kendall and Post.⁶

Condit and Tallmadge mentioned that the skyscraper was based on the creation of the metal skeleton and the economic
potentials allowed by the high-speed elevator. 7 Skeleton construction, according to Tallmadge, was a certain type composed of columns, beams and girders that made a metal framework. The frame supported the internal and external loads and carried them directly to the foundations. The framework was clad with fireproof materials placed in metal shelves that were bolted together to the internal metal forms. Based on Tallmadge's views, the first skyscraper was the Home Life Building by William La Baron Jenny in 1884-1887, in Chicago. 8

These views of skyscrapers take into consideration the important features, height, elevators and skeleton frame. They neglect one important feature that identifies the skyscraper as a building type from other building types. That feature is usable space. 9 The usable space of the skyscraper is that part that is rented out to those people of the organization that occupy that area. This differentiates the skyscraper from a tall monument. A monument such as a church with a steeple or a belfry is not a skyscraper even though it may contain an elevator and be built of skeletal construction. The monument with the steeple or belfry is composed of non-usable space. These vertical elements differ in symbolic intention from the tower composed of usable space. Monuments are, therefore, not considered skyscrapers. The tower of City Hall is a monument, not a skyscraper (Fig. 1).
The position taken in this paper defines the Philadelphia skyscraper in terms of height, which was made economically feasible by the elevator. Based on my definition, the skyscraper in Philadelphia consists of eight or more stories of usable space. The expression of height is initially judged by the perception of the building with respect to its setting. The height of the skyscraper in Philadelphia as being composed of at least eight stories is based on the predominant scale of the city.

The scale of Philadelphia by 1900 was largely determined by the housing unit. Philadelphia was known as the "city of homes" because of the comfortable distribution of three-story residences throughout the city. Center City Philadelphia was included as a residential area at the turn of the century. Philadelphia by 1900 was still influenced by the spatial concept of the city established during the Colonial era. The city did not display the fierce rhythm that New York or Chicago did. Philadelphia instead exuded a calm and contented appearance. This was based on Colonial notions of community. The working-class artisan and the landed aristocrat shared the space of densely packed row houses near the Delaware River, extending westward past Independence Hall to 7th Street. Three-story structures, each displaying similar scale, height and materials, were given definition by the public and ecclesiastical structures of masonry, such as Christ Church, St. Peter's and Independence Hall. The housing reflected the simplicity and
order of the public monuments. A similar contextual architectural response can be connected to the skyscrapers that located around City Hall at Broad and Market Streets. Eight stories of usable space was therefore high in the modern metropolis.

The decision to relocate the civic district from Independence Hall to Center Square did much to change patterns of space and scale within the city. The tower complex was started in 1876 and completed in 1901 by John McArthur. It marked the government center of the city as foreseen by Penn. The scale to which this modern public building aspired did much to define the scale of the industrial metropolis. The portion of City Hall that is organized around the open public court is, in my view, a skyscraper because it consists of eight floors of usable space, achieving a height of 135 feet. Although the building does not utilize steel construction in its structure, this is not essential for the expression of height. The organization of City Hall was influential in the development of the surrounding skyscraper. Its design was inspired by nineteenth-century French sources. Enlarged elements such as windows, columns, portals and doors were adopted to fit the modern program of a public building.

The arrangement of City Hall consisted of two grandly-scaled stories capped by a huge mansard roof. The proportions of the building were generous to the needs of both public and private functions, but it did not represent
a mature expression of height. It is still a tall building, one which Weisman considered a pre-skyscraper. It is Weisman's view that pre-skyscrapers were actually the "first skyscrapers" because the height of a building was realized through the provision of passenger elevators. Although Weisman's definition of the skyscraper lacks the requirement of usable stories, his placement of skyscrapers within certain phases of historical development is acceptable for the purposes of this paper.

The skyscraper initially studied in this paper correspond to the phase of development that occurred in New York and Chicago in the 1890's. This skyscraper is characterized by the tripartite composition of base, body and capital. The essential quality of the skyscraper at this point is its expression of height. In St. Louis, Louis Sullivan's Wainwright Building of 1891 expressed an emphatic articulation of height. Verticality was emphasized by the continuous rise of the piers at the body of the building. Recessed spandrels were subordinated elements at this portion of the building. Sullivan wanted "the force of power of altitude" to create "a proud and soaring" skyscraper. Horizontality was emphasized at the appropriate portions of the skyscraper such as at the two-story base where street scale and flow were identified. Sullivan also capped his skyscraper with a horizontal capital, highly decorative in nature. This marked the clear visual terminus of the tower. Sullivan's skyscrapers are
considered functional because of the clear expression of underlying structure. The masonry exterior wall veneer acted as a decorative articulation of the steel frame as well as a fireproof coating over the metal. This model of the skyscraper influenced the design of Philadelphia's early skyscrapers.

Another aspect of this tripartite phase of skyscraper design was influential in Philadelphia. The American Surety Building\textsuperscript{22} in New York, by Bruce Price, presented an appropriate model to which Philadelphia architects conformed in their designs. The base of the building increased to three stories was eclectically handled in classically inspired models. The body of the building, instead of emphasizing verticality through the structural expression of piers over spandrels, treated the wall plane as either a flat or textured surface. Windows pierced into the wall were seen as openings in the planar surface. The capital of the building was stretched over two or more stories handled in elaborately sculptural designs. This design of the skyscraper was more characteristic of the Philadelphia skyscraper, although often both modes of design were integrated into one building.

Philadelphia was one of the first American cities to reach a mature character and social order.\textsuperscript{23} This character was influenced by a tradition of propriety that struggled to preserve the compromise between the didactic forces of the individual and the public, the forces inherent in the
city. These forces came at odds in the skyscraper. The skyscraper was a building whose origins were commercial in nature. The problem of the skyscraper in the city reflected the problems inherent in the city during the first metropolitan age, from 1876 to 1941.

An understanding of the skyscraper in the city is clarified by looking at William Penn and the plan for his city in the new world. This plan represented a resolution to the conflicting purposes of "privatism" in public domains. In his search for the optimal form he looked to European sources (Fig. 2).

The city of Penn consisted of the area between the Delaware and Schuylkill Rivers, from South Street to Vine Street at the north. Within these 1200 acres of land, Penn laid out the city with a strict regularity of a street grid. The east-west streets started at the Delaware and stretched across the land straight through to the banks of the Schuylkill. The series of numbered streets ran north-south and bisected the streets at right angles. Penn laid down the straight grid over the land to impose order on the land, which made the parcelling out of lots more economically feasible. Penn also placed five squares onto the grid. The plan was a symmetrical gridiron pattern of streets intersecting large squares. Four of the squares were placed in each of the four quadrants created by the bisection of the 100-foot-wide avenues of Broad and Market Streets. The center square was reserved for the civic
building of the city. He envisioned the settlement of the city to spread across the land river-to-river, with the parks to become open spaces for all. The streets east and west were named after trees, and the cross streets were numbered, in keeping with his taste for simplicity and order.²⁷

The source of his designs were European in conception. He was looking to the London plan of 1666, although there is the influence of the Irish towns of Londonderry with their monumental vistas leading to grand open spaces.²⁸ The park integrated into the city may have been inspired by those he had seen at Covent Garden or St. Lincoln in the Fields.²⁹ There is no doubt the placement of the parks within the city added to the variety and texture that differentiated it from other new cities such as Williamsburg. He foresaw a city that obeyed discrete rules in order to form a harmonious balance between public and private space. The town became filled with architecture that reaffirmed his principles. The early building of Philadelphia gave equal consideration to function, arrangement, structural soundness and visual pleasure. The building of Philadelphia exemplified the ideals of commodity, firmness and delight.³⁰ From its conception the City of Philadelphia developed according to Penn's plan with remarkable accuracy. It was given character by architecture that emphasized practicality, utility and accommodation without sacrificing the desire for beauty.
There represented no conflict in Penn in terms of the individual pursuit of wealth. This was a belief shared in secular culture and an important belief in a democratic society. The essence of the belief reflected a maturity in the reasonable mind of Penn. The expression of the individual and the pursuit of wealth were not mutually exclusive; instead they worked as cooperative forces. Within the individual or group of individuals representing a corporate body, there is a harmony between the individual expression and the pursuit of wealth. From this harmony grows a concern for the society as a whole. In the Penn plan for the City of Philadelphia, the placement of green areas as public parks within the rigid geometric structure expressed the tolerant humanistic principles that were followed in the city. The park in the city was a positive compromise between didactic forces (Fig. 3).

As the city developed from a colonial town to an industrial metropolis, the simplicity of Penn's city was replaced with complex organizations of political economic and social institutions. The principles upon which the city was founded manifested themselves in different ways. Still traditions continued and were communicated architecturally.

In the next section attempts are made to understand how the design of the skyscraper in Philadelphia became integrated into the modern society while maintaining a sense of architectural tradition. Then it becomes possible to understand what should be preserved in the design of the
skyscraper and what has been lost. By looking at the skyscraper between 1897 and 1941, comparisons will be drawn to the architecture of the city as an entity because the skyscraper exists not only in and of itself, but within the historic context of the city.
CHAPTER II
SKYSCRAPERS IN PHILADELPHIA, 1897-1924

The evolution of the skyscraper in Philadelphia will be traced from the year 1897 to 1941. During this 44-year period, at least three distinct architectural modes affect the design of the tall building. The technological advances made initially by William LaBaron Jenny and his circle were based in Chicago.¹ This developed the steel framework that made great heights of skyscrapers achievable. Among the group of architects exploring the early Chicago skyscraper was Daniel Burnham. Burnham (as a transitional figure in the history of skyscraper design) was important in bringing the form to Philadelphia. He was not the first, however, to give the tall building a coherent identity. This was the responsibility of Louis Sullivan. His conception of the tall office building being divided into three parts, the base, the offices, and the cornice, was derived partly from humanistic ideals.² This type of skyscraper, organized along the lines of Sullivan, more or less, was followed as the model for the period in question.

Concurrent with the advances made in Chicago that studied the honest structural expressiveness of the skyscraper, a second approach was developed in New York.
The progenitors of the academic reaction were McKim Meade and White. Their attitude towards design was more in keeping with the traditions of Philadelphia. These men were sensitive toward the historical traditions in architecture. They studied the forms of urban architecture in the past, particularly the Italian Renaissance buildings in cities. Through studies of elements such as columns, windows, doors, they reinterpret n the historical forms in order to apply them to modern buildings. The classical modes were applied to urban building to evoke a consistent urban symbol for the American city. They brought their notions of urbanity and classical architecture to Chicago. Achieving concord with Burnham, the New York architects planned the Chicago Exhibition of 1893 according to the principles of Beaux Arts theory.

In 1897, Burnham introduced the modern skyscraper to Philadelphia. Philadelphia, like Chicago, was a city without stylistic modes pertaining to skyscrapers. The skyscraper as a building in itself was not in keeping with the prevailing character of "the city of homes." The growth of the city at this time enabled it to easily absorb the tall building into its proper districts where land prices forced building high. The Land Title Buildings, John Wanamakers Department Store, The Bulletin Building, the Curtis Publishing Company, the Public Ledger and The Bellvue Stratford Hotel were seven significant skyscrapers built between 1897 and 1924. These are important in terms
of architectural design, historical value and their relationship to the environment.

The Land Title Building (Fig. 4) is located at Broad and Chestnut Streets at the southwest corner, on the site of the old Freeman Estate. It was designed by the office of Chicago architect Daniel Burnham in 1897. The skyscraper was built for Philadelphia's oldest insurance company when they moved from their old location at 608 Chestnut Street. Broad and Chestnut was close to City Hall and became the center of finance and business in Philadelphia.

The Land Title Building was the first skyscraper to be built in Philadelphia that displayed a model of a major Chicago architect. The compromise between the commercial style and classical image of the skyscraper was evident. He divided the 16-story, 230-foot building into three parts—the base, the body and the cornice—in much the same manner as he did his Fisher Building of 1896 in Chicago. The difference between the two buildings is noticed in the economy of design of the Philadelphia structure, as well as an increased regard for openness and lightness.

The organization of parts is very closely defined by the architectural treatment of the embellished base and capital that unified the vertical stretch of offices placed in the middle. The ground floor and mezzanine defined the scale of Broad Street. Connecting bays by the granite arcade with windows of the wall deeply recessed into the plane added grandeur to the thoroughfare. This classical
treatment of the base emphasized the symmetry of the entry by applying a collonaded Ionic frame over the arcade. Whereas the rustication of the base added a heaviness that connected the building to the site, the simple transition to the body of the building added a dynamic uplift to the 12 stories of the office portion of the building.

The shift in materials from granite to masonry had an aesthetic appeal as well as being economically motivated. The buildings of Chicago, such as Burnham and Root's Montauk Block from 1881-82, proved that masonry could be important for the development of a new skyscraper aesthetic. Masonry was always a popular Philadelphia material as noted in its housing units. The buff color utilized on the Land Title Building recalled a Ruskinian notion of polychromy as a means of truthfully identifying one material from another. This change in material from base to body also established the hierarchical nature of the functional organization of the building. The purpose of the lower portion was both public and private in nature. The base, crowned by a cornice, defined the scale of the space as well as forming a continual edge along the direction of Chestnut and Broad Streets.

The building worked individually in the environment yet responded to the context in which it was placed. The building pointed to the future of the Philadelphia skyscraper. The connection of Burnham's building with its neighbor offered an insight to how the experienced maker of
the modern skyscraper transmitted his formula to the younger generation. Burnham worked with Horace Trumbauer on the 22-story, 320-foot-high addition to the Land Title Building, located on the northwest corner of Broad and Sansom Streets (Fig. 5).

Trumbauer was an influential Philadelphia architect of the age. He was very adept at handling eclectic modes for tall buildings, particularly in the St. James Apartments, 1904, the Ritz Carlton Hotel, 1914, and the Widener Building of the same year. In the U-shaped Land Title Building of 1902, the height and style echoed the neighboring buildings. The attempt to harmonize the two buildings meant that the cornice lines and window proportions corresponded with each other. The latter design placed an emphasis on the surface quality of the granite mass. This wall treatment was heavier with windows set deeply into the wall. The material was consistently white and expressed a horizontal sweep along Broad Street by alternating bands that decorated the surface of the building.

This stylistic attitude was continued in the John Wanamaker Department store. In 1902, John Wanamaker led the movement of the retail district westward. He decided to place his department store east of City Hall. It was considered a risky move because it extended the retail district far west up Market Street. Wanamaker had confidence that this area would become the center of the
retail district and he was proved correct. To insure this daring risk against failure, he desired a practical design that was right for his purposes. He went to Daniel Burnham. Burnham had designed two buildings in Philadelphia at this point and was working on an addition to Sullivan's, Schlesinger and Mayer Department Store. The department store in Philadelphia was built in three sections between 1902 and 1911 (Fig. 6).

Wanamakers was designed as a monumental block organized around a grand interior court. The skyscraper formula of the tripartite division was maintained over the 12-story, 246-foot-high exterior inspired by Italian palazzos. The solidly constructed granite building with the 450' fronts on Market and Chestnut Streets, and the 250' sides of Juniper and 13th Streets, was held to the site by a continuing collonade of fluted columns defining the bay. Each bay was filled in with huge plates of glass for advertising purposes.

The dignified appearance of the exterior design contrasted with the interior of the department store. A five-story court centered around interior light wells was one of the most dramatic spaces in the city. Unusual features were incorporated in the spaces such as the massive organ acquired from the 1904 Louisiana Purchase Exposition in St. Louis. The most famous feature of the interior court of the store was not architectural, but sculptural. When Wanamaker purchased August Goul's bronze eagle from the 1904
fair to place in his store, he procured a great symbol of the country and sheltered it in his grand interior space. Other amenities in Wanamakers included the Egyptian Hall and the Greek Hall which served as theaters, and the Crystal Tea Room, one of the largest and most posh public restaurants in the city.  

Although this building was urban in style and synthesized the public and private space in a balanced manner, there were several problems. The building treated all facades more or less in the same manner, yet the character of the streets that surrounded it differed. Market Street was capable of handling the flow of people and cars because of its width of 100 feet. Chestnut Street became recognized as a vital retail corridor that competed with Market Street, yet in scale was much smaller. Juniper Street was an extremely narrow street, practically an alley. Its identity as a street was compromised because of the canyon effect of the tall walls of John Wanamakers and the neighboring 13-story, 280-foot Widener skyscraper by Trumbauer. The Widener building was handled in much the same way in terms of organization and material, yet a canyon effect was produced.  

A second problem with the design of this store as a monumental block occurred at 13th Street. It was recognized that one of the features that made this store modern at the time was its sophisticated use of electrical and mechanical equipment. The problem was a question of location.
Wanamakers required so much energy that a utilitarian power plant was built across the street on 13th Street next to an Episcopal Church. The power plants for the store ran 98 elevators, escalators, lights, ventilation and refrigeration systems. Huge tubes underground transmitted the energy to systems in the basement of the store. Placement of the service facilities on 13th Street altered the character of the street. The loading docks, elevators and dumb waiters were placed directly across from the Gothic church. Thirteenth Street was only 50 feet wide at the time, and the congestion was increased by the structure.

The problem of the skyscraper in Philadelphia became apparent in the early 20th century. One complaint that was voiced considered the skyscraper an imposing building that increased the monotonous regularity of buildings conforming to a grid. A simple method of easing the regularity of the grid was achieved by rounding the corner of the building. One of the first skyscrapers in Philadelphia to realize this architectural solution was Edgar V. Seeler's Bulletin Building of 1906 (Fig. 7). The site at the northeast corner of Penn Square opposite City Hall was a precarious one. Tucked into a small lot, this building was virtually eclipsed by the Philadelphia Masonic Temple at 1 N. Broad Street, designed by James Windrim in 1868 in an eclectic High Victorian Gothic mode.

Seller's Bulletin Building was a transitional building in the evolution of the Philadelphia skyscraper, rising 10
stories, reaching 143 feet high. Seeler responded to the immediate context. Just as the corners of City Hall were given an architectural emphasis heightening the effect of the corner, Seeler mimicked this element by placing a vertical pavilion at the pivotal corner of the Bulletin Building. The 12-story French inspired corner tower was crowned with a shimmering green and white terra cotta dome. The building was constructed out of a steel frame and covered with brick curtain walls faced with white enamel terra cotta on the upper stories and Indiana limestone on the ground floor.

The drama of the building on the square was heightened by the conspicuous treatment of the curved corner pavilion and main entrance. The element was practical because it distributed the flow of traffic around the corner. Recalling a similar arrangement at the Carson Pirie Scott store by Sullivan (1899-1904),20 Seeler inset the curved element to differentiate this function of the building from the planarity of the walls next to it.

In other locations in Center City, architects designed significant skyscrapers that were notable because they responded to their context with respect for the local buildings. This response helped to reinforce a strong sense of community through architectural design. At Washington Square, adjacent to the old civic center, a group of skyscrapers was erected starting in 1907. It was interesting to note the relation between Seeler's 1907
design for the Curtis Publishing Company (Fig. 8)\textsuperscript{21} and Horace Trumbauer's 1926 design for the Public Ledger (Fig. 6).\textsuperscript{22} Each block stands next to each other along Sixth Street. The exterior design of each was interpreted in the picturesque Colonial Revival mode. The mode was effectively a pastiche of Independence Hall,\textsuperscript{23} but did no violence to the atmosphere.

The Curtis Publishing Company, a monumental block rising 12 stories and feet, integrated the skyscraper tripartite division of base, body and capital. A masonry veneer was carried on the steel frame and Georgian Revival motifs were generously applied throughout. The building viewed Washington Square to the south, Independence Hall to the east, and Sansom Street to the west. Each of the four facades responded to its setting differently. The building was oriented to Independence Hall, and the facade at this location was treated in a more three-dimensional manner with projecting side pavilions and a porch set into the mass above the base. Entry into the building was set symmetrically into the mass. The entry is given monumental definition set above a base course of marble and reached by wide marble steps flanked by copper candleabras providing electric light during the night. The grand doorway was reached by passing through the double story portico screened by six pairs of composite columns.

The interior of the building continued with the richly decorative and grandly scaled details and materials. The
centerpiece of the public lobby was a spectacularly colorful Maxfield Parrish composition made with thousands of mosaic tiles placed as a backdrop for a fountain.

The model set by Seller was reinforced by Horace Trumbauer 14 years later in 1924. Trumbauer's sensitive design for the second monumental block reflected the scale and design of Seller's Curtis Building. Both buildings maintained a sense of unity in their form, scale and use of materials. Although Trumbauer's building may be considered to be simply articulated on the facade with windows pierced into the wall plane, the interior of the Public Ledger was equally appealing. The attention to detail was an expense that Cyrus H. K. Curtis, publisher of the Ladies Home Journal and Saturday Evening Post, which boasted the largest circulation of any magazine at the time, could afford. The decorative marble coffered ceiling in the lobby with a coffered barrel vault added dignity to the generously scaled public spaces. The richness of materials was carried throughout the commercial building from the general office space to the deeply toned woods in the directors' offices. The planning of the interior spaces organized by grand corridors connecting major rooms had a certain advertising value when handled with care (Fig. 9).

The design of skyscrapers in the Independence Hall neighborhood belied their utilitarian purposes. They became more than simply places to work. They represented the place of work with a sense of grandness. The president of the
company, as well as the worker in the publishing house was treated with the most modern conveniences contained in a palatial monumental piece of design. The architect and the client cooperated on a commercial level, in order to design buildings in a unified manner that respected the neighborhood and its traditions.

Perhaps the most eclectic and grand skyscraper in Philadelphia was the Bellvue Stratford Hotel (Fig. 10). Located at the crossroads of center city at the southwest corner of Broad and Walnut Streets, stylistic modes past were synthesized into this massive free-standing palace. The hotel was built on the site of the Bellevue and Stratford Hotels for George Boldt.25 Boldt, the son of a German immigrant, chose George W. and W. D. Hewitt in 1902 to design a hotel that would serve the heart of Philadelphia's political and social events. The 22-story, 175-foot-high structure was one of the most modern urban images of skyscraper design when it was completed in 1912.26

Started originally by Furness' ex-partner, George Hewitt, in 1902, the Hewitt brothers envisioned a hotel inspired by French and Italian Renaissance models that integrated features from the Chicago skyscraper sources as well. Although comparisons have been made to the Plaza Hotel in New York, built by Hardenbergh in 1907,27 the composition of the Philadelphia hotel with its arrangement of mass, surface detail, and organization of space was much more complex than the pure simplicity of the Plaza. The
hotel was further complicated by the Beaux Arts inspired addition reminiscent of the Singer Tower in New York that was added to the rear of the original building by Hewitt and Paist in 1910-1912.

The solid geometric block was loosely organized into the three divisions of the traditional skyscraper formula outlined down the street by Burnham. The granite base of the building was heavily rusticated stabilizing the structure solidly to the ground. The urban quality of this portion was derived from Italian palazzos of the Renaissance with a palpable texture that pulsated along the horizontal sweep of Broad Street. The upper stories of terra cotta continued along Broad Street. The building was crowned with an elaborate French-inspired mansard roof that recalled the pavilions of City Hall in design. In tall office buildings, the roof was merely designed as an enclosure for the service equipment. In the modern Bellevue Stratford Hotel, this space served as a sun deck where visitors could choose to promenade around a roof garden.

The bulbous mansard roof of the later addition was an interesting as well as picturesque solution to the hotel. Because of the conspicuous nature of the front mansard roof, the later addition became integrated easily into the design. The contrast between the planar and curvilinear enlivened the skyline in a way that played off the undulating Broad Street facade and the planar Walnut Street surface.
Light and air were distributed to the 1,000 guest rooms above the base by means of two courts that pierced into the bulk of the building; the plan of the hotel was E-shaped above the third story, but the designer chose to place the courts out of the public's view.

The Bellvue Hotel similar to the high-rise department store designed a public space in Philadelphia that was of such lavishness using space embellished in the most ornate palatial qualities that it rivaled hotels in Europe and New York in its splendor. The guest rooms of the Bellevue were decorated with the Georgian, French, Italian and Greek details. Also, the public spaces were sumptuously treated. First class restaurants, theater, libraries and ballrooms and a variety of entertaining activities were brought together at the modern hotel. To fuel the building an extensive mechanical plant was located under Broad Street to produce enough steam and electric power to make the hotel self-sufficient. The skyscraper hotel actually became a fantastic city in itself.

South Broad Street developed quickly during the first period of skyscraper growth. By the year 1914, Broad Street was lined with skyscrapers, south to Walnut Street. Although each skyscraper was treated with regard for local materials as well as following a tripartite formula of organization, the mass of the building had the effect of canyonizing one of the widest streets in the country, closing in on City Hall. This effect contradicted the
aesthetic sensibilities of Philadelphia citizens as well as architects.29

David Knickerbocker Boyd, president of the Philadelphia chapter of the AIA, proposed a plan for set-back skyscrapers 13 years before Harvey Wiley Corbett outlined his plans for decongesting the narrow streets of New York.30 Boyd feared the dehumanizing effect of streets canyonized by the skyscraper. In this way he shared a similar social concern with Sullivan. Sullivan mentioned that the tall building "loses its validity when the surroundings are uncongenial to its nature; and when such buildings are crowded together upon narrow streets or lanes they become mutually destructive. The social significance of the tall building is in finality its most important phase."31

Boyd's concern for Broad Street was that the tall buildings lacked harmony with each other as well as the street. In his proposal, he expressed that people on the street were entitled to light and air. He also expressed a dissatisfaction with the projecting cornice that corresponded to the differing height of the row of skyscrapers lining South Broad Street. If there was an earthquake, the loosely secured cornice would drop to the street, perhaps injuring the person walking under it. By 1918, members of Philadelphia's Park Commission were calling for some set of zoning restrictions for skyscrapers in Center City.32
The suggestion of Boyd was futuristic in conception not only because it predated the New York law by eight years. His understanding of the building mass influenced the design of skyscrapers built in Philadelphia during the 1920's (Fig. 11).
CHAPTER III
SKYSCRAPERS IN PHILADELPHIA, 1924-1941

The second age of the Philadelphia skyscraper started in 1924 and reached a plateau by 1928. From 1928 to 1932 there was a resurgence of skyscrapers built in the city. After 1934, the building of skyscrapers virtually ceased until after World War II. The skyscraper changed in terms of form and massing, expression of height and decorative treatment. A new spirit and optimism characterized the age. Some have termed the manner Art Deco, but the Philadelphia skyscraper of the 20's simply rephrased the traditional modes to satisfy modern programs. They maintained an adherence to the tripartite division stretched to greater heights. Placed within a phase of historical development, the design of the skyscraper was characterized by the setback form of a tall tower rising from a base.

Several events occurred prior to 1924 which influenced the form of the skyscraper. In New York, zoning laws had been established in 1916. They enforced height restrictions based on widths of streets. These principles were noted in David Knickerbocker Boyd's early plan for the skyscraper and the street. One of the early skyscrapers that conformed to this 1916 law was the Barclay Vesey
Building designed by Voorhees, Gmelin and Walker in 1923-27. The aesthetic qualities of the setback skyscraper appealed to both architects and clients. This form communicated a modern image of the skyscraper that was identifiable on the skyline. Drawings by Hugh Ferris powerfully portrayed the dramatic form of the 20's skyscraper that conformed to the New York zoning laws.

Philadelphians became aware of the issue of height in the early 20's. A model zoning plan was drawn that contained five height districts. This program was influenced by the distribution of mass of the set-back skyscraper. The greatest height districts were located at the center of the city near City Hall. Outlying districts established a scale that gradually increased in height as the center of the city was approached. The shape of buildings in center city organized the skyscraper into a group that tended to build towards the tallest centrally located point, City Hall. Had this plan been enforced, the shape of the city would today be much different. It would have been architecturally dramatic, however not necessarily beneficial for traffic and movement patterns in the concentrated downtown areas.

The creative treatment of the 20's set-back tower allowed a greater amount of light and air to be distributed to a greater number of people. In the early 1900's and during the teens, the skyscraper was treated as a simple geometric shape. The appearance of utilitarian features of
the building was made obvious in skyscrapers of the earlier phase because they were not contained within the unified form of the tall building. Instead, water towers, chimneys, etc. protruded above the cornice on the roof and were covered in a clasically decorated shelter. Building the modern tower with setbacks was advantageous in this respect, because utilitarian features became incorporated in a unified design. The building was formed in an increasingly more complex series of geometrics.

The design of the tall building was influenced by Eliel Saarinen's entry into the Chicago Tribune Competition of 1922 (Fig. 12). His expression of verticality through an uninterrupted rise of piers synthesized the ideal of American architecture with his personal expression. Saarinen's contribution was considered modern because it evoked the verticality of Gothic architecture, a reflection of past values interpreted in a modern manner. Saarinen's tower was subtle in its personal expression of height. He treated the tower portion of the building integrally within the scale of the typical Chicago building. Carefully proportioned setbacks responded to the New York zoning laws in that they appeared to buttress the continuous vertical mullions of the central portion. These mullions swept up on all four sides and emphasized the building's loftiness. This was one of the only buildings that Sullivan considered worthy of praise from all the entries to the competition. By treating the skyscraper as a symmetrical object, combined
with the plastic expression of mass enlivened with subtle Gothic details, Saarinen presented a model for the Philadelphia architect to derive inspiration from.

There were only two or three entries to the Chicago Tribune competitions by Philadelphians. One in particular, by Simon and Simon (Fig. 12A), showed a very original treatment of the skyscraper. Windows floated between original treatment of alternating bands of piers without spandrels. Vertical strips glowed with electric light, as did the huge lanterns placed at the corners of the setbacks. The white skyscraper resplendent with light symbolizes the newspaper as a shining beacon of truth.

The skyscraper in Philadelphia in the 20's was also influenced by the classical traditions. The chief proponent of the French Beaux Arts School in Philadelphia was Paul Cret, who taught at the University of Pennsylvania from 1902 to 1941. Although Cret was among responsible for bringing Beaux Arts principles of design to the University, his architecture was important in the transition from the archeologically derived classic styles of the past to the more personal interpretations of classicism. His approach to design attempted a compromise between the opposing forces of humanistic design and technological construction.

One major characteristic of the skyscraper between 1924 and 1934 was its exuberant use of ornament, texture and color. A strong union between the craftsmen and the architect remained important. Industry and the efficiency
of the modern machine produced standardized forms for building materials and decorative elements. The role of the industrial designer who could make features to enhance the aesthetics of the tall building cheaply and quickly became a factor in the development of the skyscraper from 1924 and afterwards. Although the Philadelphia skyscraper incorporated new industrial materials, especially at the entry, lobby, windows and decorative details of the attic, the common material used to clad the tower was a brown masonry or white stone. Several skyscrapers were clad with masonry covered with a thin white veneer of terra cotta.

The Elverson Building, located at Broad and Callowhill Streets, was built by Rankin and Kellog in 1924 (Fig. 13). It presented a remarkably bold statement about modern architecture and its relation to the historical past. The form of the skyscraper was a tower on a base. Perhaps the architects based this shape on Louis Sullivan's Odd Fellows Temple of 1891. The building was resolved into a series of setbacks that culminated in a slim central tower. There was a trace of French and Viennese European modern design apparent in its color and texture. The stronger associations were from local traditions where buildings of white marble were employed for Greek Revival architecture.

William Elverson was responsible for changing the image of the Inquirer from an old-fashioned, out-moded tabloid into a thriving newspaper. Born in England, he managed an American Telegraph office in Washington. He came to
Philadelphia and started a newspaper called *Saturday Night*, a literary paper. His business capacity and common sense rejuvenated the ailing paper. Through keen business prowess, which included expansion of facilities while reducing prices of the product, he enlarged the paper. Elverson established the character of the *Inquirer* that maintained a republican slant, but remained independent of municipal affairs.

His son, Colonel Elverson, studied at the Philadelphia Episcopal Academy and then Paris and Berlin. He built the $10 million dollar home of the *Inquirer* in 1924-1925. The 20-story, 256-foot-tall building, with a four-story utilitarian production plant backing it, was the most efficient newspaper plant in America. A well planned system of floors was utilized for specific purposes geared toward the publication of newspapers. One of the unusual features of the building was that the twelfth and thirteenth floors were given over to living quarters for Elverson and his wife.17

The Elverson building responded to the continuous spatial definition of North Broad Street as a space of low volumes. Partly emphasizing the connection to Broad Street, the base of the building was composed as a tripartite division of the base, body and cornice. Continuous vertical strands of white material, similar to Simon and Simon's Chicago Tribune Tower proposal, articulated the steel frame.
This enhanced the scale and function of the street. The windows at the base of the building were huge in order to place the latest press releases for public viewing, and the bronze door and window surrounds revealed a material richness that enlivened the smooth, dignified white veneer of brick and terra cotta.

The tower on a base dramatized the skyline through its eclectic use of Greek decorative motifs, thus drawing associations to the civic role of the Inquirer. The Greek Revival connoted urbanity in the buildings of Philadelphia in the early 1800's. It was concentrated near the old civic center, Independence Hall. Connections to the journal and notions of free press were carried to new locations in the 20th century. An historic line was continued by the 20th-century's architects' search for a national architecture in the readoption of classical forms and the reapplication to modern needs. Rankin and Kellog borrowed the lantern from Strickland's Merchant's Exchange, sculpted it into an octagon and crowned the Elverson Building in a traditional manner. Stylized vases placed at the corners of carefully proportioned setbacks enhanced the skyline.

The design of the Elverson Building helped to draw attention to activity along North Broad Street. This activity was differentiated from the business and financial nature of South Broad Street. North Broad Street was more of a civic corridor. By 1928 skyscrapers for the city's public services lined Broad Street along to Race Street.
The height of these buildings were lower than their northern counterparts. The growth of North Broad Street responded to the expansion of the city northward in the teens, twenties and thirties. Population increased between 1910 and 1928 by over 500,000. Railroads and public transportation lines completed in the 20's extended northward and made center city more accessible to greater areas.

The location of the Elverson tower responded to the expansion of the city. It extended the public realm of the city two blocks north of Penn's northern-most boundary of the original city plan. The Inquirer was independent of City Hall politically, and its location clarified this. But spatial and symbolic connections were established architecturally between City Hall and the Elverson Building. The Elverson's clock tower echoed that public feature of City Hall in its own personal manner. Thus, the Elverson Building, designed in 1924, was built as a contemporary image in Philadelphia whose form, design, ornament, and use of color synthesized traditional notions of urbanism with modern ideals. This makes this tower one of Philadelphia's most significant skyscrapers.

The year 1924 saw the tallest office building in the city built. Five feet taller than Burnham and Trumbauer's Land Title Building of 1902, the Packard Building rose 26 stories and 325 feet in the air (Fig. 14). The slab was built for one of the oldest insurance companies in Philadelphia, the Pennsylvania Company for Insurances on
Lives and Granting Annuities. The architects of the building, Ritter and Shay, were one of the more prolific supporters of traditional modernism. Their eclectic treatment of skyscrapers throughout the decade and into the 30's made them a very popular firm in Philadelphia.

The design of the Packard Building responded to the limitations of a narrow lot at Fifteenth and Chestnut. This setback tower represented the extension of the business and finance district west of Broad Street and south of Market. The setback tower adopted features from the Italian Renaissance and interpreted them in a modern manner. The abstract expression of doors and windows suggested traditional architectural associations. Where the ornamentation was more fully embellished indicated an important functional space. For example, the main entry was extremely well defined with a huge square door that interrupted the massive rusticated base course corresponding to human scale. The door was easily noticed on the narrow lot because its proportions were enlarged, intending to be inviting to potential customers. The huge bronze doors were filled with sculpted panels of allegorical figures that celebrated the notions of thrift and savings of hard-earned money.

Security was essential. The architect called on master craftsman Samuel Yellin to design a huge wrought iron screen that filled the entire space of the door like the screens to a European castle. Yellin also designed the lanterns that
flanked the huge entry. Above the door was a projecting cartouche applied to the smoothly planed walls. Carved into the walls was the name of the bank and a seal of the State of Pennsylvania.

The four-story base of limestone gave way to brown masonry in the plain body of the building. The grouping of windows as vertical strips recessed slightly behind continuous vertical mullions expressed classical symmetry. The transition between general and corporate offices was identified by the setback atop the plain projecting cornice. Sculptural qualities were returned to this portion of the building with the placement of two Ionic columns placed high in the sky, recalling Thomas U. Walters' design for the first PSFS Bank in 1839.23

This building is similar to Rankin and Kellog's Elverson Building in the manner by which it communicated its intentions. The eclectic use of a Greek-inspired treasure house placed high in the sky evoked the image of the modern bank in center city. It drew connections to the images of banking in 19th-century Philadelphia and adopted those forms for the modern purposes. This tower added a distinctive and picturesque image to the skyline.

Classical modes were chosen for a number of bank office buildings. Most conspicuous of these banks was the Fidelity Philadelphia Trust Building24 at Broad Street between Sansom and Walnut Streets (Fig. 15). This skyscraper was designed by the firm of Simon and Simon. The Fidelity Building was
the tallest building in the city when it was completed in 1927; it rose 29 stories with setbacks, 357 feet high. The grandeur of the monumental skyscraper was undeniable. On the inside and out, the command of materials was lavishly displayed with granite, marble and limestone over masonry, all supported on the steel frame.

The design of this skyscraper represented an innovation in form along South Broad Street. To relieve the overbearing mass, a grand light court was placed into the body of the structure. Derived from an H-shaped plan, the light court began at the sixth floor, so greater amounts of light and air were made available to the 14 acres of usable space contained in the body of the building. The top of the building, set back, was used for club rooms, while the five floors occupying the entire site at the base were used for banking and retail space.

The base of the building on Broad Street was treated like a grand Italian pallazo. Theatrical touches made the base of the building seem like a stage set with the boardroom projected over the centrally placed entry. Romantic notions were conveyed with the idealized human figures carved around the three monumental arches along Broad Street. Whereas the Packard Building expressed its base very plainly with a restrained use of sculpted elements, the heavily rusticated white granite base of the Fidelity building was considered appropriate to the context of South Broad Street.
Placed symmetrically along the 221-foot frontage of Broad Street was the main entry to the bank. Due to the enlarged proportion of the site, the banking room was enlarged to 119 feet in length and 55 feet in width. The ceiling was 40 feet high. The banking room was enclosed within the building. Bracketed lighting placed on the marble columns illuminated the space. The other source of light was achieved from Broad Street where a Palladian-inspired stained glass window created by the D'Ascenzo Studios of Philadelphia marked the entry into the banking space. Instead of the window portraying images from Biblical history, the images were devoted exclusively to local secular history.

Local history as a theme conveyed through the decorative elements such as cartouches, medalions and murals was not confined merely to the Philadelphia office building. It was made obvious in these skyscrapers such as the Fidelity skyscraper and Packard Building because these were two of the oldest commercial institutions in the city. One of the oldest residential neighborhoods in Philadelphia also communicated a sense of historical continuity. The local history of Rittenhouse Square emphasized a fashionable residential neighborhood whose development was connected with the westward expansion of Philadelphia. When style-conscious Philadelphians with means began moving west of Broad Street in the mid-19th century, attractive rows of four-story brick and brownstone
dwellings characterized the area. By 1924, the scale of Rittenhouse Square had been drastically altered by the skyscraper apartment, but the area was still largely residential. Time moved slowly in this neighborhood and values changed even less rapidly.

The first skyscraper apartment built on the square was the Wetherill Apartments, a French Renaissance inspired building that featured projecting bay windows at the corners. This was built in 1912 by Milligan and Webber and rose 18 stories, reaching 230 feet. No building built previously reached 85 feet in height. A second tower called 1830 Rittenhouse conservatively replicated the formula of its neighbor but offered greater floor-to-ceiling heights to its residents in 1923.

The impact of World War I had little or no immediate impact upon the design of the skyscraper apartment in Rittenhouse. The implication was that the war had little or no effect on the traditional cultural or social setting of the Square. Perhaps as some historians suggest, Philadelphians tended to ignore these unpleasant events and continue the bucolic life in their neighborhood.

In 1904, Ralph Cram spoke of the sharp architectural contrasts that were sometimes witnessed in Philadelphia. The Rittenhouse Plaza Apartments (Fig. 16) exemplified the contrasts. Placed at the corners of the site, the skyscraper adjoined four-story row houses to the west and north. The firm responsible for the 21-atory, 245-foot-high
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apartment was McLanahan and Bencker.\textsuperscript{31} It was located at 19th and Walnut.

McLanahan and Bencker's apartment reacted against the conservative design that characterized Rittenhouse Square. Placed in a low-rise setting, the design of the tower appealed to the artistic sensibilities of the private citizen. Adherence to traditional forms and materials were integrated with an updated design that related to the cultural and social milieu of Rittenhouse Square. Its placement into this neighborhood symbolized an architecture that was free of direct imitation of historical forms.

The setback tower represented a modern image of an apartment in center city in the 20's. Still McLanahan and Bencker respected the design values of the Rittenhouse Square neighborhood. Noting that Rittenhouse Square was an appropriate environment for residential design, the architects included features that connoted a sense of privacy and picturesque domesticity in an effort to harmonize with existing structures. Holding on to the corner, the Rittenhouse Plaza Apartments utilized an H-shaped plan in order to embrace a landscaped courtyard. The garden, surrounded by the residential apartment recreated a small-scaled environment which echoed the most identifiable feature of this neighborhood, a community park enclosed by residential structures. The synthesis of homes and gardens reinforced traditional conceptions of Philadelphia as a "Greene Country Towne." This was significant at the time
because, while architects were trying to create a new image of residential life in downtown Philadelphia, they looked to regional qualities of Philadelphia architecture of the past.

This regard for historic architectural forms integrated into modern design was noted at all levels of the tower. At street level, a Gothic screen acted as a continuous definer of urban space. Saarinen's design of the Chicago Tribune Tower had used arcades in this manner. Closer sources that this feature responded to was the triumphal entry of Notman's Church of the Holy Trinity across Walnut Street on the Square.

Above the limestone base a fortress-like body of the tower was composed of brown masonry. The color and treatment of the walls harmonized with the neighboring facades. A symmetrical arrangement of windows in the projecting wings contrasted with the intense organization of windows in the central mass. The proportions at this part of the building stretched upward, resolved by a series of limestone piers that appeared to grow out from the masonry.

The top of the apartment house was indicated with setbacks, a mixed use of materials, and a heavily ornamental treatment of the tower. The architects treated the top level of the building eclectically but emphasized the domestic functions of the apartment. This level presented a view of modern life to the skyline of the city in a picturesque manner.
Between the years 1928 and 1932, there was a resurgence of skyscrapers in center city Philadelphia. During a four-year period, over 30 skyscrapers were built. These skyscrapers developed the themes established in the setback towers of the 20's. These themes became emphasized by architects who were increasingly conscious of modern styles. Enobling designs identified the skyscraper as an individual object on the skyline. Architects searched through the gamut of eclectic modes deemed appropriate for modern architecture. This was the period when the design of the tower was pushed to extremes. With it the function, location, height and scale of the skyscraper in Philadelphia was taken in new directions. The skyscraper reflected the complexity and exuberance of the growing metropolitan area.

The first setback tower of the late 20's located east of Broad Street was the Market Street National Bank. Its site directly across from City Hall at the northeast corner of Market Street and Juniper was extremely narrow. It was designed by Ritter and Shay in 1929-30. These architects had proved that their design for skyscrapers made the most practical use of space within a limited area (Fig. 17).

The 24-story, 135' steel frame structure clad with a brick curtain and terra cotta veneer was characterized by a free use of decorative motifs. The pyramidal massing of the tower evoked a new sense of spatial order close to the center of the city. The mass was the prevailing feature of the tower, but it was relieved by the intense concentration
of bright colors and elaborate application of decorated details.

Although the scale, form, expression of verticality, and use of ornamentation contrasted with the surrounding retail buildings that had characterized east Market Street, the design of the tower considered commercial role as well as an attitude towards past history. It borrowed no forms from classical European prototypes or colonial American precedents. In this way the architects infused the building with a singular expression of height. This modern building, inspired by the designs of Saarinen, Ferris, and Goodhue, considered the articulation of height as one important feature of the skyscraper.

The five-story base adapted the forms noted at the Packard Building with a similar sense of scale. A noticeable entry, huge rectangular windows resting on a base course. Stylistic modifications reflected modern European trends. The decorative cornices atop the base indicated the nature of the space as a bank. Reinforcing ideas of security, the motif of an interlocked chain wrapped around the building on three sides. The facets of the entry columns protruded out from the wall plane framed a honoristically proportioned entry along the major axis.

Ritter and Shay responded to the retail nature of Market Street in a pragmatic manner. The architects decided to place a group of shops on the ground floor placed over a Horn and Hardart Restaurant designed by Bencker. The bank
was located above the retail space and occupied the space indicated by the ground windows. The justification of this unconventional decision lay in the understanding that banking was not as impulsive activity as shopping. The bank customer therefore would not be dissuaded by scaling a set of stairs to reach the banking hall. The multifunctional nature of the skyscraper was determined by a restaurant, retail and banking area at the base with business offices that rose gracefully above.

Ritter and Shay were responsible for a number of eclectically designed skyscrapers in the city. The architects handled a variety of forms in a successful manner. One of the most witty designs was for the Drake Apartment Hotel (Fig. 18). Designed in 1928-29 this narrow setback tower rose 34 stories to a height of 362 feet. It was the tallest building in the city when completed. Its location at 1512-14 Spruce Street was the southern-most point of skyscraper development in Philadelphia.

The architects borrowed from Spanish Baroque stylistic modes popular in domestic architecture in the United States. The base and public rooms and lobby were articulated with decorative Spanish motifs. The plain body of the building stretched over the steel frame. Mass, line and color were decorative features of the portion of the skyscraper. The building radiated a pleasant glow because of the use of Pompeian brick curtain wall.
One of the most striking features of the skyline was a tapering silhouette created atop the Drake. An elaborate interconnection of penthouses, porches, and other outdoor amusement areas culminated in a centrally-place dome covered in terra cotta. The mannered gestures of the capital that evoked nautical images and features of sailing vessels represented an attempt to create a distinctive new image on the skyline. This image was not necessarily based upon local historical themes that characterized setback skyscrapers of the early 20's. This was at all levels an individual expression of modern design. In that way it was similar to the Market Street National Bank.

The location and orientation of the building reinforced the individuality of the design. The scale of Spruce Street was determined by the row house in the 20's. Through the Touraine Apartments east of the Drake was a 13-story skyscraper, the modern setback tower overshadowed all structures around it. Its shape was determined by two mid-block city lots so the building occupied the full depth of the lots. The thin slab was oriented to a north-south axis even though the flow of Spruce Street was in the east-west direction. The architects were probably aware that this tower would remain isolated because each facade was completely and consistently designed.

A more effective solution to the skyscraper built in the middle of the block could be noticed along Walnut Street between Broad and 17th Streets. Bencker's Tradesman Bank,
Ritter and Shay's 1500 Walnut Green, and Lavella's Fidelity Bank, and Tilden Register and Pepper's two towers at 1608 and 1616 Walnut were built in a three-year period starting in 1928. These buildings were influenced by Saarinen's Tribune design. The 1616 Walnut Street Building\(^3^9\) represented a logical culmination of ideas advanced by the Finnish architect. Noticed in a rendering in the Architectural Forum (Fig. 19), the suppressed horizontal and the magnificent setback made this building seem more advanced than the others.

A playful reversal of Simon and Simon's Tribune entry portrayed the thin strips of flat masonry clad piers as the light structure. Bearing resemblance to Hood's Daily News Building (1929-31),\(^4^0\) the tall office building on Walnut Street abandoned all sense of sculptured weight. In this way it also differed from the other skyscrapers on Walnut Street whose sculptured qualities were emphasized at the base and setback levels. Tilden, Register and Pepper's building was an abstraction. Its use of color as a means of expressing verticality brought a harmonious unity displayed in each of the buildings, especially to Bencker's Tradesman Bank. Color differentiated it also from Hood's white tower. The principal decorative feature of 1616 Walnut was the four-story high entry with heroically scaled flanking pylons enclosing broad surfaces of plate glass. Streams of light sparkled off the reflective surfaces of polished marble and shimmering metal forms in the lobby. An
international clock was placed at the end of the elevator lobby lit by prismatic shaped electric light. In order to move light and air to all parts of the tower, the architects set the central tower back at the sixth floor. The two six-story pavillions flanking the tower responded to the variety of scales and functional diversity of Walnut Street.

The generous public design of this building is carried throughout all surfaces. Though the rear facade is differentiated from the front in terms of the organization and the color of masonry, the placement of the fire tower at this part of the building was representative of the pragmatic auspices of the architects. Many Philadelphia skyscrapers displayed the fire stairs as part of its public facade; 1616 Walnut cloaked this function into the back part of the building.

The setback tower located at 204 S. 7th Street on Washington Square for N. W. Ayer and Company, the oldest advertisement company in the United States, was designed by Ralph Bencker in 1927-1929 (Fig. 20). This 13-story tower was composed of brick curtain walls faced with dressed limestone ashlar carried on a steel frame. The design of the skyscraper was considered appropriate for the character of this neighborhood.

When Ralph Bencker designed the N. W. Ayer Building with its evocation of medieval ideals of craftsmanship and constructional honesty, he reinforced the tradition of the guild of allied arts in Philadelphia. Integrated into the
design aesthetic was a pervasive pragmatism that organized the publishing spaces in an efficient and coherent manner. The organization of the skyscraper as a tripartite division of base, body and capital was vaguely suggested by this dignified but austere white tower. Like a Greek temple, the tower emerged from the earth, its trunk animated with life emerging from a stone.

The influence of Goodhue's architecture of the 20's was apparent in the 13-story building. Goodhue offered a new interpretation to the Gothic mode. Ribs and mouldings vanished as an expression of a richness of sculped material greeted the public at the base of the building. Plates of glass deeply set into the wall were surrounded by bronze strips of metal.

The body of the building was planed white and tapered inwards. At the setback level of the 11th floor eight sculpted figures grew out organically from the mass. The sculptors, L. Wallace Kelly and Raphael Sabitini, represented the goals and purposes of advertising traditional themes. The human figure stood for the creative mind. The figure of truth upheld honest principles in advertising and the winged bird, a motif that reappears in the lobby, represented the power of advertising.

The planning of the building was a major consideration of the architect and client. The architect worked out an innovative study of each floor so that there was a functional interrelation of departments arranged in an
appropriate hierarchical manner. Bencker's placement of the service core that corresponded to the light court was unusual. In many U-shaped buildings, offices were placed in this portion because greater amounts of light and air reached them. Bencker justified his plans by proving that light courts were seldom desirable spaces. The U-shape of the building was oriented away from the primary view. Bencker's Ayer Building designed the projecting pavillons powerfully because he understood that this portion was easily seen.

An increasing awareness of European functionalist architecture effected a change in the design of the Philadelphia skyscraper.\textsuperscript{45} The awareness of style and its relation to modern technology was a point of contention among Philadelphia architects. The struggle between traditional modernism as represented by Ritter and Shay's design ideals and international modernism influenced by European architects\textsuperscript{46} such as LeCorbusier and Walter Gropius peaked between 1938 and 1932 in Philadelphia. George Howe, with William Lescaze, was the Philadelphia architect who came to espouse the stylistic ideals of Europe in the design of the PSFS Building \textsuperscript{47} (1929-1931) (Fig. 21). Though this skyscraper presented a new image on the skyline and represented a powerful alternative to the design of the traditionally modern skyscraper, the architecture of PSFS was as stylistically conscious as any other tower in the city.
Lewis Shay disagreed with European modernism. He was opposed to modern functionalist architecture because he considered it capricious fashion that ignored the architecture of the past. Shay continued to argue that the direct expression of steel or concrete reduced to its essential dimensions as a means of proportioning space or ordering scale was horrible because of its grotesque qualities. Cret mentioned in 1909 that "truth is demanded, and the eye must be satisfied in matters of construction. Effective strength was not sufficient." As Howe said in 1931, "The gathering of small elements into a gigantic ornamental feature bears no relation to human scale." In the PSFS Building Howe made visible the structure as a means of expressing the realities of modern life. At the time, most Philadelphia architects disagreed with Howe's experiment. But Cret continued to justify Howe. He mentioned that the architect who dared to experiment with new forms gave new life to those forms and created an architecture that embodied the period.

The theory behind the PSFS Building was encouraged by European functionalism, although, as Stern argued, some of its compositional forms were based on the French Ecole des Beaux Arts. The emphasis of the form changed from solid mass to open volume of spaces. Space was moulded so that the life of the internal environment affected the shape of the external shell. The form of the shell was made
beautiful as it expressed the potentialities of the structural technique as opposed to surface ornamentation.\textsuperscript{52}

The application of ornament made architecture beautiful to Shay. He cited Paul Cret as an architect with whom he shared these attitudes. Cret responded by saying that "there was a basis of necessity to get rid of a formula too binding" even if the progenitors of the reaction were extremists. He praised the new architecture because he said it was "necessary to bring us [architects] back to simplicity of form."	extsuperscript{53}

In 1927, James Willcox, President of PSFS, decided to build the bank on the corner of 12th and Market. The retail nature of East Market Street made it a risk to locate a bank in the area. The Market Street National Bank was built across from City Hall in 1930. Its proximity to City Hall was considered advantageous. PSFS was located directly across from the Reading Railroad Terminal. This was an equally desirable location for a tall office tower.

The 32-story, 490-foot tower was divided into a base, body and capital. The base contained a retail shop and the bank. A transitional section of the tower set back on the east clearly separated the base from the body of the building. The office tower was an asymmetrically placed slab setback on both the east and west sides. This tower was serviced by a thin tower placed to the rear of the side. Atop the tower was placed a huge neon sign advertising the bank on the skyline.
The banking room was the main feature of the base and was identified by a broad sweep of curved glass. The concept of external elements defining internal function was Beaux Arts in theory. Howe and Lescaze modernized the window by making it a continuous horizontal glass strip that gracefully rounded the corner. In this way the nature of the internal steel frame was expressed. The glass and grey marble, resplendent with polished surfaces, were merely curtains placed on the structure. The glass for the retail space and the banking room implied an openness of interior volume that was visually accessible. The bold use of polished granite projecting outward six and one-half feet offered the banking customer an image of effortless security. The wide band of granite over the polished curving window expressed the potential of the underlying structure. At the area of the building was a massive truss that carried the loads from above. Also in this area were placed the mechanical systems. This was the first skyscraper in the city to have air conditioning.54

The entries to the PSFS Building were placed asymmetrically at the northwest and southeast corners of the building. The primary entry along Market Street was as much a statement of the building's intentions as was the large neon sign atop the tower. The entry borrowed motifs from modern retail shops. This proved to be a further means of attracting shoppers to the bank. A large and conspicuous window dominated the entry. The name of the institution was
placed in the window frame in a reserved style. The entrance to the banking hall reinforced the values established on the exterior. An escalator and a flight of steps brought the customer to the banking level. The hall was monumentalized due to its spacious volume contained within smooth surfaces of dark polished granite. The somber color scheme contrasted with polished chrome details. Huge windows were brought into the hall along the banking room. Light that filtered through from outside reached the banking room through these windows.

The plan of the building above the base was T-shaped. It was composed of office space and a service core. The service core was visually separated from the offices by its massing and its use of materials. This thin grey masonry tower acted as a backbone to the building. Its massing identified the function of this area as separate from the function of the asymmetrically placed office tower. A solid masonry wall reached up the height of the service tower. Its two-tone color scheme identified the location of the elevators. A similar articulation of a building's vertical transportation core was noted in a number of early tall buildings in Philadelphia, such as Ritter and Shay's Market Street Bank. The use of color was a departure from strict modernist tendencies. The interlocking of the base, service spine and tower slab grew out from the modern T-shaped plan.

Above the bank the executive offices marked the transition from the base to the tower. The first of the
three-story transitional division continued to face the structure with granite and glass, but was set back from the 12th Street facade. The two floors above the executive offices conformed to the slab, but were set back further on the east side. The articulation of structure was made evident at this part of the building. Above this, the office slab was placed asymmetrically over the base. This slab was set back from the east and west sides and ensured light and air to three sides of the offices. The office portion of the slab was located by the interior volume cantilevered five feet from the structural columns. Increased usable floor area justified this projection into space that was made possible by structural steel. Horizontal bands of glass and masonry characterized each floor of the office tower. Just as the base of the building appeared to float on a transparent foundation, the office floors reinforced this effect as they cantilevered out from the structure. The external wall treated as a curtain enabled the architects to turn the corners with aluminum and glass windows placed at right angles to each other.

The emphasis of the northern facade along Market Street was decidedly horizontal. The east and west facades of the tower contrasted between the horizontal slab and the vertical support. The unrelieved horizontals did not satisfy the client, James Willcox, and the final word was his. The skyscraper was a building that expressed verticality. The limestone piers that stretched upward
described the structural system of the slab, but, more importantly, emphasized the identity of the Philadelphia skyscraper, its height. 55

The culmination of the PSFS Building offered a modern solution to a typical problem. The purpose of the capital of the skyscraper was to identify its purpose on the skyline. Looking at Ritter and Shay's Packard Building, the setback tower, associations are communicated architecturally describing the function of the building. The same design intentions were accomplished in Howe and Lescaze's PSFS Building. They simply placed a 26-foot sign that proclaimed PSFS across the skyline in electric neon letters. This was a precise, direct and modern solution that satisfied the practical considerations of the client as well as the stylistic goals of the architects.

The Philadelphia Saving Fund Building was completed in 1932. The tower symbolized a new direction in modern architecture. This direction did not abandon the lessons of the past, as Lewis Shay suggested. The building was a necessary development in the architectural traditions that had characterized Philadelphia skyscrapers. Howe and Lescaze proved that European modernist theories of design could be applied to the typical American building type, the skyscraper. Even though the image was modern, the fundamental principles of the Philadelphia skyscraper were adhered to. These principles were shared among the skyscraper built in center city Philadelphia from 1897 to
1941. Howe and Lescaze synthesized the new attitudes toward design, tempered with a sensitive understanding of values responding to the life of the city, its material base, the location of the site, and the needs of the client. In this way, PSFS was integrated into center city Philadelphia. Not only did this building respond to the demands placed on the modern architect, it was a fitting symbol to the broader contextual issues that confronted Philadelphia skyscrapers through the 44-year period covered in this paper.
CHAPTER IV
CONCLUSION

The skyscrapers built between 1897 and 1941 are important architectural landmarks contributing to the aesthetic quality of Center City Philadelphia. Although each skyscraper can be viewed as an individual object that deserves attention, this paper attempts to prove that skyscrapers were designed in a cohesive manner. Their intentions went beyond merely calling attention to themselves because of their conspicuous height. Skyscrapers in Philadelphia were designed with an apparent intention of becoming integrated into the city.

The determination of a time period, 1897-1941, places the development of the modern building type into a historical framework. The framework can be placed within the continuous evolution and development of architecture in the city. It becomes a chapter in the history of architecture in Philadelphia that corresponds with the growth of the city into a large metropolis.

Although the city was expanding from 1897 to 1941, the locations of skyscrapers were distributed within a specific area of the city called Center City. Skyscraper development was unified in space that more or less corresponded to the
original boundaries of the city of Philadelphia from its founding in 1682. Only the Elverson Building, today the home of the Inquirer, lies beyond the traditional limits of Philadelphia. This building is located within two blocks of the city.

Each of the skyscrapers built in Philadelphia during this 40-year period can be identified through a recognizable system of architectural design. Skyscrapers were given a coherent appearance that conformed to high standards of architectural design. These standards were liberal in that architects practiced with a free use of stylistic modes. This eclectic treatment of the skyscraper reflected an architectural vitality that characterized the age.

Skyscraper forms attempted to become integrated into the city by respecting pre-existing architectural and social traditions in the city. Architects sensitive to issues of scale, material and general aesthetics designed skyscrapers in order to create a balance in the city. As a response to the building traditions and social values, certain regional characteristics surfaced in many skyscrapers.

Center City skyscrapers were characterized by a common use of brown masonry or white stone. Attention was given to the wall surface, decorative elements and ornamentation. On the average, skyscrapers rose from 250 to 300 feet. The number of stories ranged from 15 to 20 floors. Each skyscraper in Philadelphia was built lower than the dominant architectural symbol of the city at the time, City Hall.
With William Penn standing atop the tower, the height limit of the city was understood to be no greater than 548 feet. Only the PSFS Building approached the height as it rose 491 feet. Skyscrapers during this period had recognizable forms and massing which also helped to identify them on the skyline. The use of setbacks in the 20's and 30's changed the form of the skyscraper but the style and the character were retained.

After the Second World War, the skyscrapers that were constructed downtown were of a much different character. These structures represented a departure from the design of the skyscrapers built in Philadelphia between 1897 and 1941. The International Style tower was a glass and concrete box with sheer reflective walls lacking decoration, setbacks or other architectural features that gave greater character to skyscrapers other than merely height. These new skyscrapers added no distinctive features to the skyline. Because their form was consistent throughout, they robbed the street of light and air and added to the congestion of the streets. Many of these buildings were set in front of open plazas, creating tower in the park settings. This increased the confusion of the street instead of adding definition and enclosure to the public spaces.

The loss of older architecturally significant buildings that are replaced by these modern buildings that lack architectural character should be stopped. The new
buildings do not establish historical, architectural or contextual connections to the city as well as the older buildings do. Older buildings can be reintegrated into the city. The integration of historically significant skyscrapers into the city, readapted if necessary to suit modern needs, is a challenge that should produce ideas and sensible actions.

Contrary to the attitudes conveyed in the designs of post-war Philadelphia, the men who build skyscrapers today are looking backward at the role of the skyscraper in the city. The skyscraper is once again becoming a landmark on the skyline, a definable object placed into the city. The historic preservation movement is in large part responsible for this. The importance of the historical viewpoint is stated eloquently by those who maintain the values. The preservation movement has striven to identify and protect the historically significant structures of the city as a means of reaffirming a continuously evolving relationship from the past to the present.

The purpose of this paper was to re-examine selected skyscrapers built in Center City between 1897 and 1941. The 16 skyscrapers discussed represent those of greatest architectural significance. The study of skyscrapers in Philadelphia should be continued beyond these 16 models. Skyscrapers should be studied as parts of a more diversified environment. Skyscrapers were designed to be integrated
into the city and become part of a unified context. They should be evaluated as an important part of a greater whole.

As a start, each skyscraper built prior to 1941 should be evaluated and systematically surveyed by architects, historians and preservationists. They should be evaluated in terms of architectural, historical and contextual qualities. They can then be placed into categories of importance.

There should be no more than three categories. Buildings that are placed in the first category are of the highest significance. These are the definitive skyscrapers of Philadelphia because they strongly display each of the above-mentioned qualities. They represent the model forms of skyscrapers of the age.

The second category will tend to be large. It is composed of skyscrapers that contribute to the overall quality of Center City yet are not as significant as the skyscrapers in the first category. The second category may be divided hierarchically according to the special qualities. For example, a skyscraper may be considered historically important even though it is not architecturally as significant. Contributory skyscrapers can be rated in this manner. If the skyscraper displays two of the three qualities it is more important than the skyscraper that displays one quality extremely well.

The last category is composed of skyscrapers that are of little or no importance.
maintenance and new design. The preservation of notable landmarks is necessary because these skyscrapers exhibit qualities that provide continuity with the past. The criteria of skyscraper preservation should be more fully developed as study continues. They should take into consideration the buildings that surround the skyscraper that contribute to the quality of the overall setting. The preservation of contributory buildings around skyscrapers should be encouraged as well. Perhaps a sale of unused air space from one lot to another could be used as a financial incentive for preserving skyscrapers in their settings. A program of transferable development rights or TDR is outlined in other cities and seems applicable to Center City Philadelphia.

The 16 skyscrapers should be restored to their original appearance. A history of the building and its alterations provides a guide to the architect responsible for the restoration. If alterations were done from 1897 to 1941, then the significance of the alteration should be determined. Ongoing maintenance should be an important part of the preservation of skyscrapers. Maintenance and upkeep of significant buildings should be done according to a reasonable schedule.

The design of new skyscrapers should address architectural, historical, and contextual issues. If new skyscrapers are to be located near significant older skyscrapers, attempts should be made in the new design to
respect the character of the older development. In this way new skyscrapers can more easily adapt into the context into which they are placed. Locations of skyscrapers should be carefully studied. Qualities that characterize the setting should be identified and maintained. If these qualities are merely understood this is a start in creating certain standards of design.

In conjunction with the retention of significant skyscrapers, a preservation plan should include the designation of conservation districts. Districts should be composed of skyscrapers and contributory buildings in areas that established important qualities and characteristics. These qualities add to the ambience of the city and are aesthetically desirable. The grouping of buildings should be preserved as a harmonious ensemble. These districts can help to stabilize the growth and development of Center City. It should determine the proper densities, scales and uses of the area based upon the previous developments. Districts can be determined on a block-by-block basis. They can cover as much or as little area as is seen fit.

In the past, the architect and the client were largely responsible for the appearance of the city. Public interests and private concerns were not conflicting parties but, in fact, shared the values and traditions that added to the character of the city. Architecturally this gave Center City its unique character and order. In terms of building heights, although no law existed, it was understood through
the "gentlemen's agreement" that future buildings should not overshadow the tower of City Hall.

Today the situation has changed. Demands of commercial development along West Market Street and Chestnut west of Broad Street threatens the architectural and social traditions of the city. The development of Center City should not be left in the hands of commercial interests alone. Warner argues that unplanned commercial development in the city has historically resulted in a lack of coherent spatial, structural and social organization. This type of unplanned development should not defeat the pre-existing architectural and social intentions of Philadelphia. A preservation plan that re-examines the architectural character of Philadelphia and retains significant features creates a balance between commercial interests and private concerns. A preservation plan that maintains a balance between these forces continues a function that has important historical implications. A plan merely states that the architecture that has given character and identity to Philadelphia should be preserved. This plan considers the "gentlemen's agreement" an important aspect to the development of Center City and recommends a height restriction that enforces its understood meaning.

It is my view that a height restriction of 491 feet would be satisfactory for Philadelphia skyscrapers. This height limitation should be enforcable throughout all of Philadelphia. Even though the Rouse Towers will be built
beyond William Penn's hat in the near future is no reason to let succeeding developments do the same. If we believe that once Rouse builds his towers the tradition that characterized the tall buildings of Philadelphia is lost forever, then that is to miss the point. Instead of taking an all-or-nothing attitude at this point, let's learn a lesson from Rouse's towers. Pass the proper height restrictions quickly and do so in order to preserve the dominant architectural quality of Center City. Then point to Rouse's towers and say that their development was an important stimulus that led to an improved plan for Center City Philadelphia.
ENDNOTES

INTRODUCTION


2. Ibid., p. 250.


6. Philadelphia Zoning Ordinance (Philadelphia: The Legal Intelligencer, 1933). This identified five classes of districts: residential, commercial, industrial, least restricted and parks. The regulation of use in commercial districts included a wide variety of activities which could include residential and industrial activities. The height and area regulations for towers were based upon the Zoning Laws of 1916 in New York, which required setbacks. For commercial district D, located in downtown Philadelphia, the height of 250' was allowed above the mean curb level measured at the street line. Towers could be built above 250' as long as it was set back. Exceptions to the rule included penthouses, tanks, radio aerials, airplane beacons, flag poles, fire escapes, chimneys and stacks.


9. Bulletin Almanac, 1930 (Philadelphia, 1930), pp. 255, 260-270. This explained that the skyscraper represented a new spirit of progress because it was increasing the scale of Center City Philadelphia.


11. I have not found any primary sources that discuss the height restriction called the "gentlemen's agreement." There are a number of secondary sources. Jordy mentions in "PSFS: Its Development and Significance in Modern Architecture," Society of Architectural Historians Journal, V. 21, N. 2 (May 1962), p. 50, a personal interview with Louis McAllister, an associate of George Howe. McAllister mentioned that Howe gave his word "as a gentleman" to the president of PSFS, James Willcox, that PSFS would be a respectable building to the long-standing traditions of Philadelphia. One might infer that Howe agreed not to build higher than William Penn on City Hall because the tower as a symbol of Philadelphia's government was the highest building in town. Nathaniel Burt suggested in the Perennial Philadelphians that City Hall's control over building licenses might have had an influence in these matters.


13. Thomas Hine, "For Good or Ill, Center City is Being Redefined," Section E, Philadelphia Inquirer, April 21, 1985, p. 18.


3. Ibid.


5. Francisco Mujica, History of the Skyscraper (Paris, 1929). Mujica argued vigorously that the definition of the skyscraper was based on the presence of an elevator and a skeleton frame. He considered the first skyscraper to be the Home Life Insurance Building by Jenny, 1883-1885.


8. Ibid.


18. Ibid., p. 119.


23. Warner, p. 11. By the mid-1700's, Philadelphia achieved orderliness through the informal structure of its community. This community was largely based upon a network of business and economic relationships maintained through daily interactions and sociability.


27. Ibid.

28. Ibid.


26. Ibid.


1. Bulletin Almanac, 1927 (Philadelphia, 1927), p. 106. Based on comparisons over the year of the number of building permits, operations and estimated costs, the first signs of economic recovery after WW I occurred in 1922. The number of building permits increased close to 33% from 1920 to 1921 to 1921-1922. The activity peaked in 1924-1925. Between 1924 and 1926, 15 skyscrapers were built.

2. Cervin Robinson and Rosemarie Bletter, Skyscraper Style: Art Deco New York (New York: Oxford University Press, 1975). Art Deco was a term used to identify an exuberant architectural ornament. This kind of decoration was especially noticed in New York City on skyscrapers such as the Chrysler Building, Chanin Building and many others. This type of ornamentation was popular in the 20's. It made overt references to machine-made forms. It should not be called a style in the correct sense of the word because style characterizes the architecture of an age, i.e., the traditionally modern style. Art Deco is a rephrasing of stylistic modes.


10. Theo White, Paul Phillipe Cret, Architect and Teacher (Philadelphia: Art Alliance Press, 1973), pp. 21-24. Cret was born in Lyon, France and educated at the Atelier Pascal of the Ecole Des Beaux Arts in Paris. He came to the United States in 1903 and taught at the University of Pennsylvania. This school adopted an American Beaux Arts system of teaching design based upon French principles. The basic principle of equisse was maintained where a student prepared preliminary sketches done in a limited amount of time. The student was required to give a "parti," or solution to the design problem. The final rendu had to adhere to the solution of the design problem. Cret taught at Penn until 1937.

11. George Howe, "Samuel Yellin and His Work," American Institute of Architecture Journal, V. 11, N. 5 (May 1923), pp. 200-203. The crafts and allied arts were an integral part of architect in Philadelphia. This is proved in the T-Square Club Journal published year that featured work of Philadelphia architects and allied artists. Samuel Yellin was among the most gifted craftsmen of metal and wrought iron at the time.


17. Ibid.


25. Ibid.


33. White, Philadelphia Architecture, p. 29, pl. 46.


35. Architectural Forum, V. 52 (June 1930), pp. 817, 818.


45. Norman Rice, "The Modern Architecture," *T-Square Club Journal*, V. 1 (April, 1931), pp. 22-23. The T-Square Club was founded in 1883 and consisted of architects interested in the study and practice of architecture and the allied arts. This club presented exhibitions of work throughout the 1890's, 1900's to the early 1930's. In the 30's a rift between members of the club occurred and, with the depression, the publication ceased until the 50's. The controversy of the 30's was described by Rice, who argued for a new functionalist European modernism whose forms were inspired by industrialized products. The opposing side's spokesman was Lewis Shay. He argued for the beauty of traditional and historical forms. The heated discussion between these architects was seen throughout this journal. Rice mentioned that the PSFS Building was the first skyscraper to be designed in the modern mode of architecture. He felt that this development would bring skyscraper architecture to what he considered a more meaningful expression.

46. Ibid.


49. Paul Cret, "The Ecole Des Beaux Arts: What Its Architectural Teaching Means," Architectural Record, V. 23 (May 1908), pp. 367-71. This was a statement of design principles that were similar to Howe's when he described the PSFS Building in 1931.


51. Robert A. M. Stern, "PSFS: Beaux Arts Theory and Rational Expression," Society of Architectural Historians Journal, V. 21, N. 2 (May 1962), pp. 84-104. Stern argues that although PSFS was a modern building of the International Style it owed some of its compositional achievements to Beaux Arts theories of design. Because Howe was educated according to this system at Harvard from which he graduated in 1908, this affected the development of the design.


53. This was mentioned in a letter from Paul Cret to Lewis Shay published in the T-Square Club Journal (February 1931). Cret was sympathetic to the design of Howe and Lescaze. He did not consider the PSFS Building a radical departure from good architecture nor did he consider modernism as fashion. Instead he viewed the building as a development in the evolution of modern architecture that would yield positive results as they were studied in the future.


55. In the appendix of Stern's article there was a correspondence between Howe and Willcox. In a letter marked 3 June 1930, Willcox mentioned that a combination of horizontality and verticality was the solution he wanted in the tower.
BIBLIOGRAPHY

Books


Newspapers and Periodicals

American Architect and Building News (Boston, New York).
Architectural Forum (New York).
Architectural Record (New York).
Bulletin Almanac (Philadelphia).
City Parks Association of Philadelphia.
Inland Architect and News Record (Chicago).
Philadelphia Inquirer.
Philadelphia Real Estate Record and Builders Guide.
T-Square Club Exhibition (Philadelphia).
SOURCES OF ILLUSTRATIONS

1. From Moses King, *Philadelphia and Notable Philadelphians*.
2. From *Philadelphia, A 300 Year History*.
4. T Square Club Exhibition, 1897.
5. From King, *Philadelphia*.
5A Reprinted from *Architectural Record*, July 1915.
5B. Ibid.
6. Ibid.
6A. Ibid
7. T Square Club, 1910
8. Ibid.
10. T Square Club, 1904.
12. From International Competition for a New Administration Building for the Chicago Tribune.
12A. Ibid.
12B. Ibid.
13. T Square Club, 1924.
13A. From *New Philadelphia*.
14A. Ibid.
14B. Ibid.
15. T Square Club, 1927.
16. T Square Club, 1924.
17A. Ibid
18. T Square Club, 1930
19. Ibid.
19B. Ibid.
20. T Square Club, .
21A. Ibid.
FIGURE 1. City Hall, 1874-1901
Broad and Market Sts.
John McArthur Jr. with Thomas U. Walter;
Alexander Milne Calder, sculptor
FIGURE 2. A Portraiture of the City of Philadelphia; the plan of Philadelphia, 1683.
FIGURE 4. Land Title Building, 1897
Broad and Chestnut Streets
D.H. Burnham and Co.

FIGURE 5. Land Title Building, 1902
Broad and Sansom Streets
D.H. Burnham with Horace Trumbauer
FIGURE 5B. Plans for the Land Title Building

FIGURE 5A. Land Title Building
FIGURE 6. John Wanamaker's Department Store, 1902-11
1300 Market St.
D.H. Burnham and Co.

FIGURE 6A. Wanamaker's Grand Hall
1315-25 Filbert St.
Edgar V. Seeler

FIGURE 8. Curtis Publishing Company, 1907
601-25 Walnut St.
Edgar V. Seeler
FIGURE 11. A view of South Broad Street to City Hall
FIGURE 12. Eliel Saarinen, Chicago Tribune Project
1922
FIGURE 13. Elverson Building, 1924
400 North Broad St.
Rankin and Kellog

FIGURE 13A. Elverson Building
FIGURE 14A. Packard Building
15th and Chestnut Sts.
Ritter and Shay

Entrance on Chestnut St.
Samuel Yellin, metalwork
FIGURE 15. Fidelity Bank, 1927
Broad and Walnut Streets
Simon and Simon

FIGURE 16. Rittenhouse Plaza Apartments, 1924
19th and Walnut Sts.
McLanahan and Bencker
FIGURE 17. Market Street National Bank
1929-1930
1-21 N. Juniper St.
Ritter and Shay

FIGURE 17A. Market Street National Bank
Typical floor plans
FIGURE 18. Drake Hotel, 1929
1512-1514 Spruce St.
Ritter and Shay

FIGURE 19. 1616 Walnut St. Building, 1930
1616 Walnut St.
Tilden Register and Pepper
FIGURE 20. N.W. Ayer Company, 1927-29
204-12 South 7th St.
Ralph Bencker

FIGURE 21. Philadelphia Savings Fund Society
1929-1932
12 S. 12th St.
Howe and Lescaze