

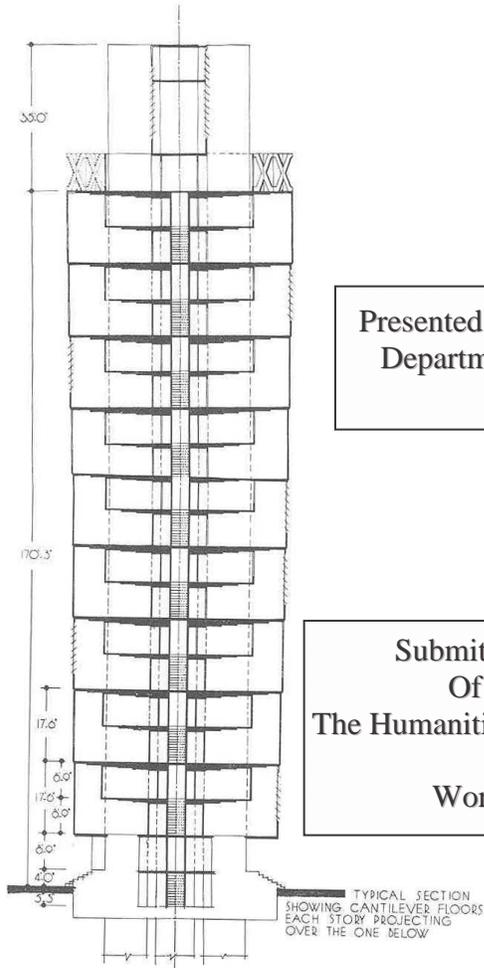
SUFFICIENCY PROJECT TITLE PAGE

Frank Lloyd Wright's Skyscrapers

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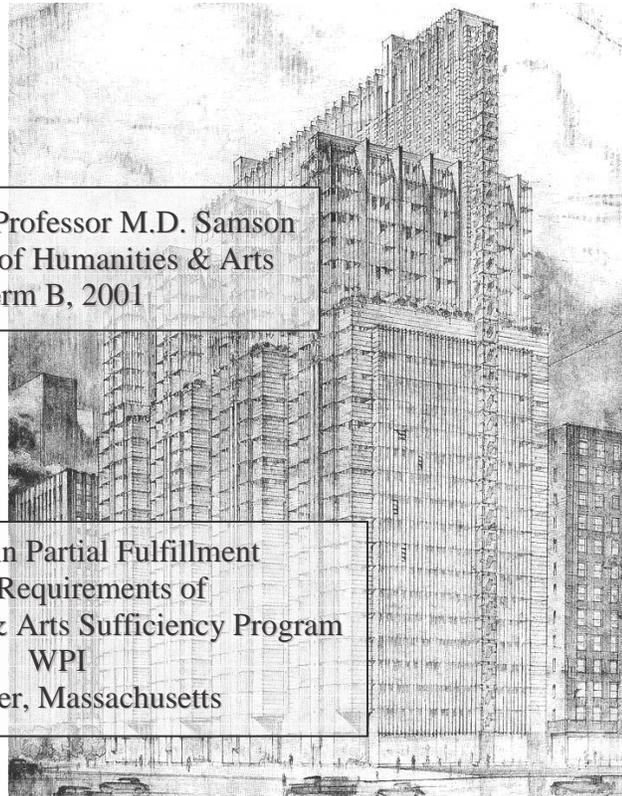
Sufficiency Course Sequence:

<u>Course Number</u>	<u>Course Title</u>	<u>Term</u>
AR1111	Intro to Art History	A00
AR2113	Topics In 19 & 20th Century. Architecture	B00
AR3112	Modernism, Mass Culture And the Avant-Garde	C01
AR2111	Modern Art	D01
HI1332	Intro to History of Technology	A01



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Thomas A.P. van Leeuwen, author of *The Skyward Trend of Thought*, states that skyscrapers are very representative of the civilization that produced them. “They are not only America’s most characteristic representative in the domain of architecture; they are also miniatures of America itself. Whoever studies the skyscraper, studies America.” (1). Skyscrapers show America’s weaknesses, our strengths, and our unbounded imagination (van Leeuwen, 1). Frank Lloyd Wright, despite his belief in the importance of buildings synthesizing with nature, created numerous skyscraper designs for both cities and rural areas. Wright managed to have over five hundred of his designs built during his lifetime, but none of these was an urban skyscraper. The needs of business desiring skyscrapers were very different from those of clients requesting residential housing. Wright’s attributes that helped him toward success in suburban markets deterred him from completion of an urban skyscraper.

Frank Lloyd Wright had an interesting childhood. He was born in Richland Center, Wisconsin on June 8, 1867. His father was a preacher and a musician named William Cary Wright, and his mother was a teacher named Anna Lloyd Jones. The early years of Wright’s childhood were spent living in a variety of places including Wisconsin, Rhode Island, Iowa, and Massachusetts. In 1878 when Frank Lloyd Wright was eleven years old, his family settled in Madison, Wisconsin. Here his father was a pastor of the Unitarian church (F.L.W. Foundation – Bio., Par 1).

Living in the Wisconsin countryside had influenced Wright’s life from a very early age. In his autobiography, Wright wrote: "As a boy, I learned to know the ground plan of the region in every line and feature. For me now its elevation is the modeling of the hills, the weaving and fabric that clings to them, the look of it all in tender green or

covered with snow or in full glow of summer that bursts into the glorious blaze of autumn. I still feel myself as much a part of it as the trees and birds and bees are, and the red barns" (F.L.W. Foundation – Bio., Par 1). All of Wright's buildings reflect in some way this synthesis he felt with nature.

In 1887, Wright left Madison and went to Chicago to work for Joseph Lyman Silsbee for a few months. Wright's timing at arriving in Chicago at the beginning of 1887 could not have been better to obtain a job. The Great Fire of 1871 destroyed much of the city and was followed by an economic depression in 1873. By 1887 Chicago was "in the midst of an unprecedented building boom." (Levine, 3). In 1888, Wright took a drafting job with the firm of Adler and Sullivan (F.L.W. Foundation – Bio., Pars 1, 2).

While working under Sullivan, Wright picks up a few important concepts. Many other architects based their style on refinement and modification of past styles that were widely accepted, such as classical Greek and Roman forms, or Gothic style. Instead of basing designs solely on traditional forms or on styles used in Europe, Sullivan tried to create an American architecture that was more original, based on themes in America (F.L.W. Foundation – Bio., Par 2). Wright later developed this idea, although he did so in a different way. Sullivan's influence can be further seen in the concept he coined, that "Form Follows Function." Wright took this idea and modified it to his own taste, as "Form and Function Are One." (F.L.W. Foundation – Bio., Par 2).

Frank Lloyd Wright, in his work titled "Prairie Architecture," lists concepts that he uses as designing points of reference in his houses. Some of these are general philosophies about building that Wright applied to his designs of skyscrapers. Wright often designed interior space to flow together, with as few separate rooms as possible.

This allowed light and “vista” to permeate “the whole with a sense of unity.” He did not use applied ornament; it came out of the nature of the material, making the building more expressive. Furnishings blended with the building and were simple. (Eaton, 25-27).

According to Leonard K. Eaton in reference to residential housing, “From the standpoint of the client, this approach meant that if he went to Wright, he got a house which *looked* different and *worked* differently from the conventional dwelling of the time.” (28). Like almost any concept that differs greatly from the status quo, it took time before Wright’s designs were accepted. Designs contradictory to the established norm of the time did not sell themselves. However, perhaps related to Wright’s arrogance is his “remarkable powers of persuasion.” (Eaton, 30). He was a great salesman, and knew how to show the superiority of his designs. Wright eventually became so popular that even all the scandals in his private life did not ruin him (Eaton, 30). At the time of his death, he had designed 1141 works, 532 of which were completed, and 409 that are still standing (F.L.W. Foundation – The Man, Par 1). None of these, though, was a skyscraper on an urban site. Wright built up a reputation with his housing designs that clients looking for skyscrapers noticed. The problem was, the attributes of Wright that got attention also caused potential clients to turn away from him.

Before any skyscraper design can be understood, it is important to understand the demand of the market. Leeuwen mentions that skyscrapers were treated by many, for the most part, as mere business propositions, driven by the desire to make money, and realized by practical architects (1-2). He believes, however, that many skyscrapers rival wonders of the ancient world (instead of just being functional and boring), and that there were many imaginative architects and ‘poetic businessmen’ behind these epitomes of

American culture (van Leeuwen, 2). Leeuwen may have overstated his case, for while many skyscraper designs show their roots in American culture, originality, power, expression, and wonder, most were still commissioned for the sake of business.

The function of a skyscraper certainly did not deter its creator from exercising some artistic flexibility in its form and design. Louis Sullivan created the Wainwright building, and dubbed it a “logical and poetic expression of metallic form construction” (Hoffmann, 3). Robert Twombly states the objective of Sullivan’s Wainwright façade



Sullivan’s Wainwright Building

was threefold: he wanted to indicate both the range of functions and the nature of the building’s structural system while expressing verticality. Sullivan’s expression was intended as poetic rather than literal (289).

He considered himself to be the first architect to have created a tall office building that was “authentically expressive”, and also stated that the “modern skyscraper was meant to be a unitary utterance, Dionysian in beauty and every inch a proud and soaring thing” (Hoffmann, 3). As

Donald Hoffmann notes, these statements

are amazing because none of them is valid (3). The truth of the matter is that many building types provide an opportunity to express poetic form, but the skyscraper is the

least among these. Simply stated, “Skyscrapers were built not for sentiment and symbolism, but to make money” (Hoffmann, 3).

Some of the support system of the Wainwright was disguised from the outside, which resulted in comments from modernists like Philip Johnson, who stated “Sullivan’s interest was not in structure, but design” (Twombly, 290).

Twombly dismisses Johnson’s remark as exaggeration, and counters that Sullivan was concerned not with revealing the structure of his building, but

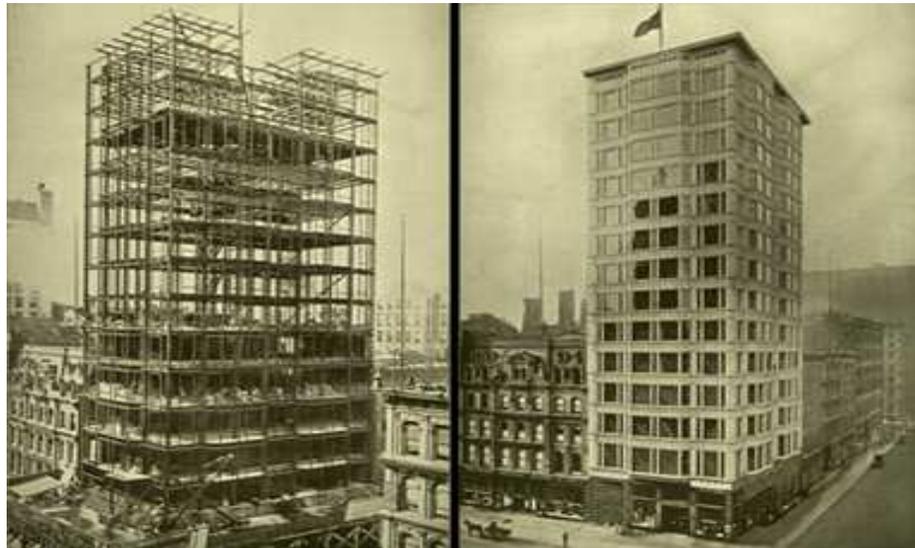


Sullivan’s Wainwright Building – Cornice Detail

rather with expressing the structure through design (290). This was a concept that influenced Wright, who formed his own similar philosophy.

Sullivan wrote, in a tribute to his former partner Dankmar Adler, that William E. Hale was one of the men of Chicago responsible for the “modern” style of office building. He was not an architect but rather was engaged in commercial real estate (Hoffmann, 5). The pressures of business could be seen in Hale’s work with the Reliance Building, whom he commissioned to Burnham & Root. He started with an old commercial block, and modified it in stages. Leases on the upper floors of the building did not expire until 1894, so the upper floors of the old building were supported on jackscrews while the lower story was demolished. The ground floor was built, and immediately leased to Carson, Pirie Scott & Co. Once the old leases ran out, the upper

floors were demolished, and a ten-story steel skeleton was put up in only fifteen days (State Street Project, Par 5).



Burnham & Root's Reliance Building. Upper construction and completion.

Skyscraper construction had to be designed around the business-based life it housed.

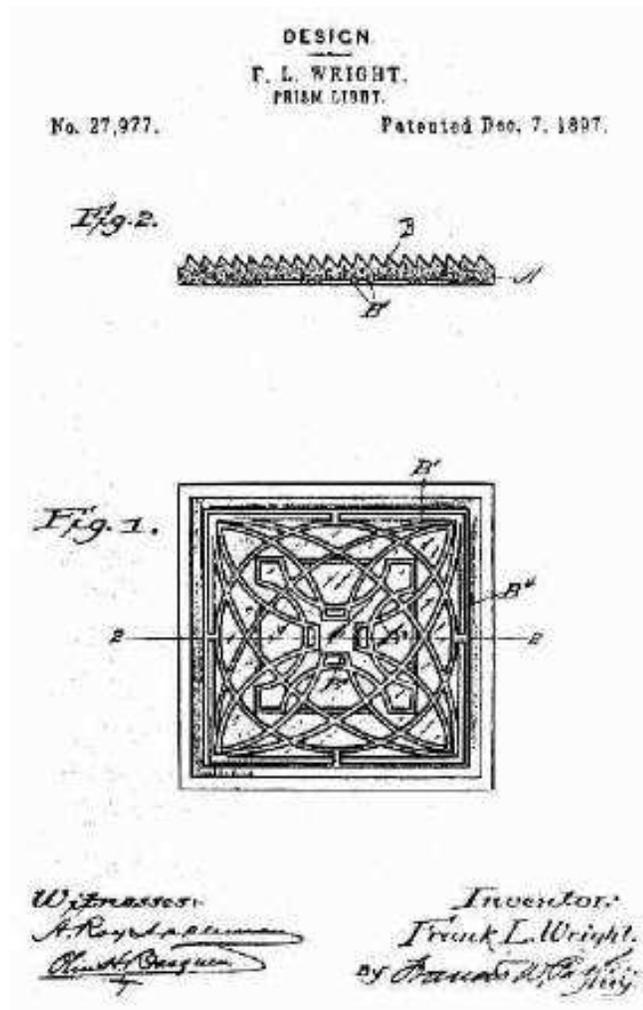
Frank Lloyd Wright may have designed the majority of his works with accentuation of the horizontal, but he understood that the form of a skyscraper should be based around and incorporated with its functionality (Hoffmann, 3). With all of the



Reliance Building – Main Entrance

workspace housed within, one of the most important aspects of skyscraper design is the utilization of natural lighting. Frank Lloyd Wright knew this too: one of the first things he did upon starting out on his own was to remodel his offices in the Schiller building to obtain better natural lighting. The doors were replaced with single clear plates of glass, and he installed a patterned ceiling screen to diffuse artificial light into more natural light (Hoffmann, 43).

Wright's first independent skyscraper project was entirely based on light. It was the Luxfer Prism project, a design that intended to advertise the translucent Luxfer Prisms of which it was composed. Wright logically designed the building using squares within squares, and the design would radiate light throughout the building (Hoffmann, 43). So intrigued by the qualities and uses of light, Wright not only designed the building for the project, he also created and patented 96 separate designs of prismatic glass tile. His designs of 1897 attempted to refract and diffuse sunlight into the building as efficiently as possible (Alexander, Par 1).



Wright's design for a Luxfer Prism Tile

By the start of the twentieth century, Wright had spent the majority of his time in development of his Prairie houses. In 1902, Wright received a commission to develop a business building for the mail-order Larkin Soap Manufacturing Company. The Vice President of the Larkin Co. was impressed with Wright's domestic work, and was curious to see how



Wright could develop a new administration building for them (Levine, 38). With the large scale involved, Wright finally had a chance to get away from the norm of personal sentiments attached to private living spaces, and use more abstracted forms. The site for building was located on the south side of Buffalo, New York, between the tracks of the New York Central Railroad and the Larkin Company's existing warehouse and factory buildings (Levine, 38).

The design for the Larkin Building was basically a brick block trimmed with stone. Wright stated that he conceived the building as an industrial artifact "built to house the commercial engine of the Larkin Company" (Levine, 38). Wright built according to his surroundings. He made the exterior of the building, as he calls it, "a simple cliff of brick hermetically sealed" to keep out the noise and noxious fumes of the



Larkin Building, Light Court.

surrounding factory environment (Levine, 38). The structure was supported by steel and concrete within the outside surface of brick and stone. The design of the interior showed both Wright's emphasis on light, and also how Sullivan had influenced him. Everything was designed around a large open-aided central court, which was brightly lit from above. Wright's intention was to create a 'cozy' atmosphere for the business

associates of the Larkin Company, and asserted that "the top-lighted interior created the effect of a great official family at work in day-lit, clean airy quarters." (Levine, 38).

This central court was flanked with vertical piers traversing the building's five stories of height. These were "plaited with inset spandrels, as Sullivan had done for the main 'beehive' of office of the Wainwright Building and of the later Guaranty (Prudential) Building.." (Levine, 38). Sullivan's Guaranty Building of 1894 was produced in Buffalo from the same model as his Wainwright.

It is important to note that even though aspects of Wright's building design are similar to Sullivan's; his interpretation was with different intentions. Sullivan incorporated vast amounts of ornament within his building's structural design. Twombly states that some of the ornament "served to soften or humanize what might otherwise have been angular and hard" (290). Other parts, such as the "false" piers in the Wainwright are seen by Twombly as Sullivan's devices to "interpret structure, function, and essence poetically" (291). In contrast, Wright uses very simplistic decoration, mostly natural in appearance. His designs proclaim that the form and function of the building are one. In this way, the simplicity of Wright's designs is better suited toward clients desiring skyscrapers. On the other hand, skyscrapers with interior space that is efficiently used do not have the horizontal emphasis of the Larkin building, and they certainly do not leave giant open courts open to promote a family atmosphere, while that precious space could be more effectively utilized.

Wright's intention was for the Larkin Building to achieve an environment embracing the whole of society (Frampton, 61). It was more his wishes than those of the client that showed through in the form of the building. Frampton points out that Wright, after designing the furniture for the building, expressed disappointment that he was not

allowed to restyle the telephones (61). This insistence on having things done his way would serve as a factor in his difficulty getting big business commissions.

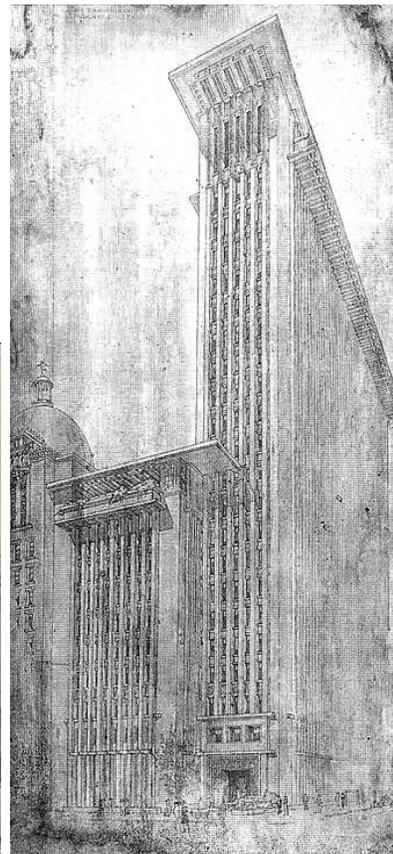
Unlike the site for the Larkin Building, skyscraper sites on crowded city blocks had only a limited amount of horizontal space to build on. Before steel skeleton frames came into use, traditional masonry buildings were limited to about twelve floors. At the end of the nineteenth century, American cities were growing rapidly and the value of center-city land grew tremendously, so demand for taller buildings increased. After the first steel frame office building was constructed in 1885, it became quickly apparent that the use of steel could allow buildings to rise much higher than 12 floors. The center of development for these new steel-framed skyscrapers was in Chicago. (Buitenhuis, 1-2).

Louis Sullivan's influence on Wright really stands out in Wright's first complete design for a skyscraper, the San Francisco Call building. The rhythm of pilasters on the exterior of his design makes it seem similar to Sullivan's Wainwright and Guaranty buildings.

(Hoffmann, 44). His design of the building was with function in mind, and the exterior form that resembles Sullivan's work is drafted as part of the functionality that Wright desires in the building. The use of



Sullivan's Guaranty Building



Wright's S.F. Call Rendering

accentuated horizontal cantilevers also gives the rendering a distinct feeling of Frank Lloyd Wright's prairie-house style, even with the undeniable vertical emphasis of the building. The design made use of reinforced concrete, and if constructed would have been earthquake-resistant. This was especially important after the great earthquake of April 18, 1906 (and three days of fires afterward) that destroyed more than half of San Francisco (Hoffmann, 45 - 48).

Wright's perspective studies show that the Call building would be close to the Claus Spreckels building of 1895-1898. This building was one of the famous buildings to survive the earthquake of 1906. It was designed in part as a home for the Call (Levine, 48). Wright's design would have towered over it and every other building in the city. It would have also been in sharp contrast to the domed and ornate Claus Spreckels building, since Wright's design appeared much more simple and functional, incorporating the outward structure of the building, and not ornament, as its aesthetic attribute.

Wright's design for the Call never progressed beyond the sketch and model stage. John D. Spreckels, owner of the Call and son of Claus Spreckels, often gave commissions to architect Harrison Albright. It was actually Albright, not Spreckels, who asked Wright to design a reinforced concrete skyscraper of about twenty-five stories, and he did this unofficially (Hoffmann, 47-51). It would be speculation to state directly why Wright was rejected. In the end, Spreckels chose the Reid Bros, who had a great advantage over Wright. They had designed the Claus Spreckels building, a newspaper building for the Oregonian in Portland, and mansions in San Francisco for John Spreckels and his father Claus (Hoffmann, 51). To further complicate matters, a competing newspaper called the Chronicle bought out the Call to eliminate it as competition. The Reid Bros. built a

seven-story building for the Call, contrary to the newspaper's original plans for twenty-five stories (Hoffmann, 51). Wright's rejection here could not be pinpointed as a matter of poor building design; it was an unlucky situation, and the Reid Bros. perhaps supplanted Wright because they were more experienced in the field.

Wright continued his emphasis on the importance of light in later buildings. He saw modern machine-made glass as perhaps the greatest difference between modern and ancient buildings: "Once a precious substance limited in quantity and size, glass and its makings have grown so that a perfect clarity of any thickness, quality or dimension is so cheap and desirable that our modern world is drifting toward structures of glass and steel." (Hoffmann, 57). Wright also further explored means of protecting against earthquakes. Rigidity was important in skyscraper design, to prevent cracking and scaling. In an earthquake, what is needed is "tenuous flexibility" as Wright puts it. To achieve this, Wright makes use of cantilevers. This would allow the exploration of the third dimension, and represent "a development from within and not something merely applied from without." (Hoffmann, 55).

"The Commercial Building in Copper, Concrete, and Glass" was the original name given to a project in the first few years of the 1920s, for a huge building in which Wright utilized cantilevers and emphasized light. It was also later referred to as "a cantilever glass office building" and "this structural idea for a skyscraper". The building was organized in a series of parallel fingers – "four main traverse units". The outside of this building design consisted of sheet-copper screens and much glass. Its design was practically the opposite of the San Francisco Call project, and had almost nothing in common with Sullivan. The colossal supports worked together with the cantilevers to

support the entire structure – but those looking upon the building would see only a “screen of glass held within a matrix of beautifully oxidized sheet-copper.” (Hoffmann 55 - 57). Wright designed the exterior of this building completely around its interplay with light. While Sullivan’s beloved Wainwright exposed its supporting structure and interwoven ornamentation, Wright’s work of glass and copper hid its structure beneath radiant waves of reflected light. It can be argued that this design holds more in common with skyscrapers of the present than any other building designs of the time. Wright wrote that a skyscraper’s chief value resided in “the fact that the scheme as a whole legitimately eliminates the matter of masonry architecture that now vexes all such buildings” (Hoffmann, 57).

Wright began to imagine a city entirely composed of glass structures like this. He pictured endless shimmering glass with metal tracery holding it together, that would clean in the rain and have no fire alarms or any glooms. Donald Hoffmann feels that Wright had a tendency to specify details that were beyond the capabilities of technology at the time. He also felt that Wright was a bit optimistic about the thermal properties of glass. Hoffmann states that “[Wright’s] prairie houses stretched into the landscape with long rows of casement windows and glass doors; the occupants suffered accordingly” (57). This gives reason enough for clients to be cautious; workers need to be comfortable just as they need to have plentiful daylight.

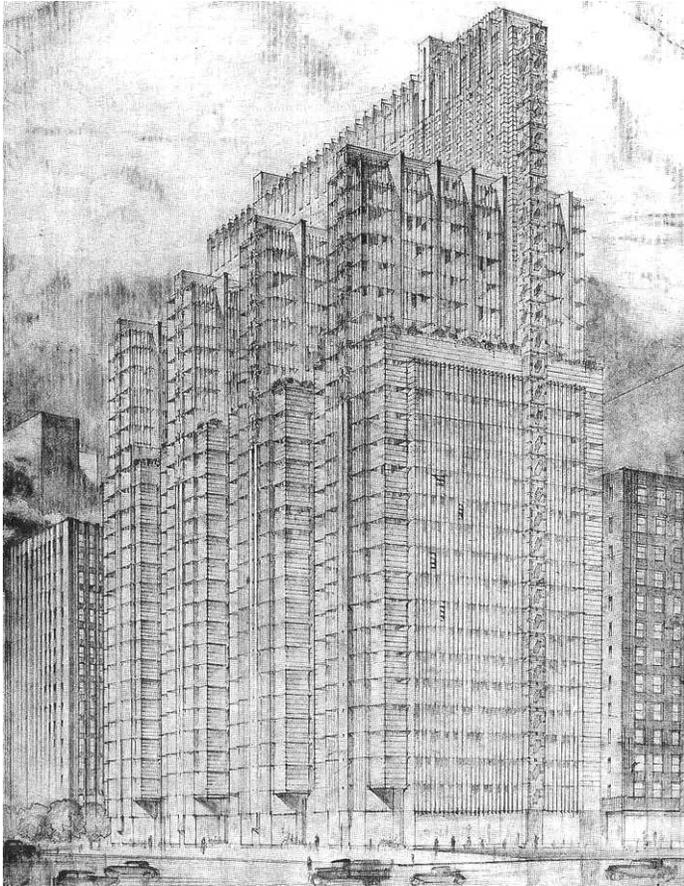
The president of the National Life Insurance Company, Albert M. Johnson, provided Wright a chance to develop his idea of a giant glass skyscraper much further. Johnson was very enthusiastic about this project with Wright. His manner of speech was stimulating, exclaiming things to Wright like “I want a virgin, Mr. Wright – a virgin!”

(Farr, 177). This project was to be a new kind of building, on Water Tower Square in Chicago's North Side. It would use the "cantilevered construction of the Imperial Hotel, with a curtain wall set back in stages and clad in iridescent sheets of copper and glass" (Levine, 175). According to Kenneth Frampton, Wright had taken the "aesthetic" of the last of his textured concrete-block houses of the 1920s and directly translated it into the "scintillating copper and glass façade" of the National Life Insurance Building (186).

In July of 1924, Wright met with Johnson about the National Life Insurance skyscraper project. Richard Neutra's wife Dione wrote her observations of Wright in a letter to her parents. She wrote that he was very hopeful of receiving the commission, and that he spent weeks in preparation for the visit. His office had been enlarged and an annex added for twenty draftsmen. Wright, "such an outstanding man," humbled himself by being amiable and offering hospitality "in order to get a commission" (Hoffmann, 59).

Johnson returned to Chicago and wrote Wright on July 19th that he was "intensely interested" in the progress of the project. He asked Wright for preliminary studies for a building of undetermined height and cost. To make plans at one-eighth scale, a model, and an overall "exhaustive analysis," as Johnson puts it, of all the practical details of the glass skyscraper Wright was to be paid \$20,000 (Hoffmann, 59-60). Wright had shown Johnson his earlier drawings for a glass skyscraper with four main traverse units, and Johnson noted that they provided the possibility that the building be constructed in sections.

The thin pendent wall-screens of the building were to be made of sheet-copper and glass. Johnson was afraid of an excessive use of glass, and Wright later noted in his autobiography that he decided to make the "exterior area of this project about ¼ of



Wright's National Life Insurance Building rendering

copper and $\frac{3}{4}$ of glass... The unit of two feet both ways is small because of Mr. Johnson's fear of 'too much glass'" (Hoffmann, 60). Wright often inaccurately claimed that some aspects of his designs were to cater to the client. In this case, Hoffmann writes that the use of two-foot blocks was Wright's own choice. The small blocks would have expressed Wright's desire to take the giant dimensions of the tall office

building and break them down to details of "a human and intimate scale" (60).

Wright produced intricate interior studies for the building as well. He created a fully modular office system. Interior partitions were to be made up in sections and they could be set in place as desired. These partitions could be created and stored until ready to use. The simplicity of this scheme greatly appealed to Johnson, who was an experienced landlord (Hoffmann, 61). Many businesses followed similar principles in standardization such as this.

Johnson was a very generous and sympathetic client of Wright, and he may have gone through with the skyscraper project, if he had not come upon financial troubles (Farr, 179). The management of his insurance company was criticized and came under

investigation, and Johnson told Wright that the depression had cost him a lot of money. In one case, he had to write out a check for fourteen million dollars in 1932 when the public utilities empire of Samuel Insull collapsed in ruin (Farr, 179). The National Life Insurance Company project was one case in which Wright really appealed to his client; it was Johnson's financial problems that inadvertently blocked his success.

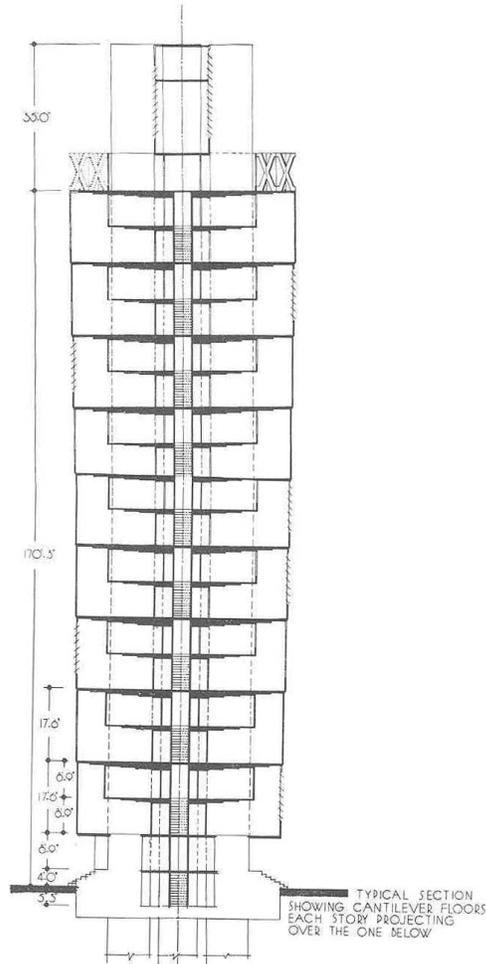
William Norman Guthrie, a friend of Wright's, provided him a chance to explore a new type of skyscraper. Wright often formulated entire building designs in his mind, without writing anything about them down on paper. After his work with the National Life Insurance Building, he further explored the idea of a skyscraper based entirely around light. Guthrie was a "flamboyantly unorthodox Episcopal clergyman" who was the rector of St. Mark's in-the-Bouwerie church in New York (Hoffmann, 63). Guthrie was thinking about producing a tall apartment building that could generate more income for the church. Wright seemed to have clients that were often a bit unorthodox, but Guthrie was also very intelligent and stubborn. His church was in a state of financial crisis, and he had the choice of launching an endowment campaign or constructing an apartment building; he told Wright that he wanted to build. Guthrie was very fond of communicating in written letters (Hoffmann, 63). One such letter, on October 19, 1927, summarizes well why Frank Lloyd Wright had difficulty producing any skyscrapers:

I have had long and perfectly frank consultations. I can get my project through properly without friction provided I give you up. You are not "persona grata" and I have got a nice job now to tell you why without losing your friendship. You blow in breezily, assume everybody knows you are the greatest architect in the world...You appear...egotistical, overbearing, arrogant. Of course, if we undertake the building we propose, there are architects in New York standing in line...who are all equally good, as they can give equally good references for integrity, efficiency, and business backing. Any man who has put up a skyscraper is better than you who haven't put up any. What guarantee have we that you can put up a good skyscraper? We can't afford a mistake... (Hoffmann, 63-64).

Guthrie cited to Wright that a design proposal from a New York architect would cost \$150. Wright wrote back, agreeing with Guthrie about his own egoism and arrogance, and then continued to say that talk about a \$150 sketch implies that Guthrie knows “nothing at all about intensive organic effort in architecture such as mine...” (Hoffmann, 64). Wright cited the \$25,000 that he received for his work with the National Life Insurance Company building, and demanded \$7500 for plans, perspectives, and detail drawings sufficient for estimates of construction cost (Hoffmann, 64). One of the strongest blocks for Wright in receiving successful skyscraper commissions was his insistence on doing things his own way or no way at all. Guthrie still continued to request simple drawings from Wright. He explained his situation: “The bank is the master. Next the building company. Next the architect. That’s our hierarchy. Please do not imagine I like this.” (Hoffmann, 64).

Eventually Wright agreed to work with a New York architect if he could take charge of the design. On Christmas day of 1928, Wright sat down with architect Donald Walker, and made his first sketch for St. Mark’s. He was working on a new focus of using 30-60 degree angles in other designs, and this was incorporated into St. Mark’s as a





St. Mark's Tower project, section

synergy with the surrounding area. The angles in the apartment building were similar to the angled position of the church, and also to the intersection of Stuyvesant Street and Tenth Street, which nearly formed a 30° angle (Hoffmann, 68). Wright's design for the tower's exterior was very unique. He envisioned that the building be eighteen stories tall, and that it would "grow wider as it rose higher." This would allow it to, as Wright explains, to clean itself as water drips clear from each frontage away from the one below. It was also economical since areas higher in the building were more valuable (Hoffmann, 70 – 71). Wright stated "St. Mark's

Tower expressed 'interior space in light,' because light inspired nearly every aspect of the 'modern prismatic-building': the plan, structural system, elevations, and siting." (Hoffmann, 70).

In 1930, amidst Wright's work on St. Mark's, he gave his "Kahn Lectures" at Princeton University. There he spoke of glass as the new modern material for construction. "Shadows were the 'brush work' of the ancient Architect. Let the Modern now work with light, light diffused, light reflected – light for its own sake..." (Frampton, 187). Wright's new obsession with light was also associated with his recent anti-urban city design, that he named "Broadacre City." Farr writes that Wright distrusted

metropolitan concentration, and that Broadacre City was his idea of city reformation so that the land gave the impression of being in the country (221). It is important to keep in mind that Wright's feeling toward the city while he designed buildings to reside in it. Farr states that Wright rationalized his feelings about tall buildings by saying "The skyscraper is no longer sane unless it is in free green space. In the country it may stand beautiful for its own sake" (221).

St. Mark's Tower was another design destined to not being built. Guthrie wrote Wright again on May 20th, 1930 and informed him that "adventures in architectural structure" were not possible. The thought of beauty and a new design was what compelled Guthrie to go to Wright in the first place, but it was the bottom line on finances that forced him away. Guthrie wrote again on June 9th, 1930 that "The more I think of the tower, the more convinced I am that it should not be in the city at all, but in a grove of trees..." (Hoffmann, 70).

After rejection from Guthrie, Wright still tried to get his prismatic skyscraper built for someone else in New York, Chicago, or Detroit. He was unsuccessful, until he was asked by Harold C. Price to design an office building of three stories. Price was a different type of client, with different requirements for his building than financially focused people in big cities had. Price operated an international pipeline company, and he simply desired a little office space in the remote location of Bartlesville, Oklahoma (Hoffmann, 71). It seemed that Wright was destined to have his buildings, skyscraper or not, constructed in rural areas.

Upon being unsuccessful in the city, Wright commented on his Price Tower in Oklahoma as championing "the release of the tall building from congested areas of

monstrous cities to a typical country town.” His building would be beyond a structure of profit alone. It would be, as Hoffmann states, “intrinsically desirable” (71). Even so, Price asked Wright for a building that would contain about 25,000 feet of space on three floors, to be used for business purposes. Harold Price’s two sons, Harold Jr. and Joseph, talked to Bruce Goff, the chairman of the school of architecture at the University of Oklahoma, in Norman. Goff wanted to do the building himself, but he told Joe Price that if they “wanted the best architect in the United States,” they “ought to get Frank Lloyd Wright” (Hoffmann, 72). In this case, it was Wright’s reputation that made him known to Price.

At first Wright showed no interest in their project for a small office building. When Price and sons flew to Wisconsin in June of 1952 to meet with Wright, they came to an agreement. Wright said that 25,000 square feet on three floors was very inefficient, and suggested instead a design with ten floors of about 2,500 square feet each. What he was offering was a ten-story version of his St. Mark’s design from over two decades prior (Hoffmann, 71 – 72). It was possible that in Wright’s arrogance, he was only using Price as a means of building his prismatic skyscraper that had failed to be realized many years before. In a letter dated August 19th of 1952, Price wrote that he had revised his program to “a building of no less than ten stories,” and that he would like to add in some deluxe apartments to the design (Hoffmann, 73).

Wright's St. Mark's design was originally conceived for apartment space, so this change in Price's plan worked in Wright's favor. Wright's work with the building turned out to be very much against Price's favor though. Wright's initial estimate for the building cost started around eighteen to twenty dollars per square foot, this amount Wright assured Price of. Price intended to spend only a half a million dollars on the building, but in the end Wright's design cost fifty two dollars per



Wright's completed Price Tower

square foot, or about \$2.1 million (Hoffmann, 75). Price wrote to Wright that between the tower and two houses that Wright had designed for Price and his eldest son, they yielded an embarrassing cost to the family. He added that the tower, even if fully rented out, could not generate a gross profit of much over \$24,000 per year, which was a return of just over 1% (Hoffmann, 75).

As a further mark against Wright, the interior of the Price tower was criticized. The builders suggested that the interior spaces be designed to be a bit larger, but Wright insisted on keeping his tower tall and slender (Hoffmann, 75). The end product was 19 stories tall, and did not, as Donald Hoffmann notes, offer normal office spaces or deluxe apartments as Price had intended. The apartment areas, “although literally ‘of the light’ – were hardly suited to family life” (75). Even the lighting scheme that formed the basis



Price Tower lit up at night

for the entire design was overbearing, as it could not be properly controlled by the gold-tinted glass and fixed copper fins that were meant to act as sunscreens (Hoffmann, 80).

Kenneth Frampton writes that the Price Tower embodies “the essential polarity that had been evident in Wright’s work ever since his Martin House and Larkin Building of 1904 – the fundamentalist assimilation of the building of the home to the processes of nature and of the work place to the idea of sacrament” (188). But even though the Price Tower may have been a beautiful building in harmony with its surroundings, the interior

space was not effectively laid out, nor did the design stay within the intended budget.

One of the reasons that clients seeking skyscraper designs shied away from Wright was this tendency to put his all into the appearance of a building while working the functionality from his own point of view, and rarely from the client’s. Another example of a non-residential building in which this happened is the Guggenheim museum in New York. Muschamp wrote that the “Guggenheim is notoriously the showplace of its own design, often to the detriment of the paintings it was nominally designed to display...” (53).

Wright was a revolutionary architect, but his building style came at a price. He often achieved his unique forms through the use of new techniques and materials. This tended to drive up building costs. Wright also had the frequent habit of altering a design

well into the construction phase of a building, and usually toward an area of higher cost (Wiseman, 101). Wiseman wrote that “many of Wright’s clients were content to accept leaky roofs and cost overruns as the price of inhabiting a work of art” (101). When confronted once about his disregard toward such practical and simple matters, such as a leaky roof, Wright simply declared “Early in life I had to choose between honest arrogance and hypocritical humility. I chose honest arrogance” (Wiseman, 101).

Wright’s “honest arrogance” may have driven some potential skyscraper clients away. Businesses are run on principles of efficiency, proven methods, and effectiveness. Wright incorporated none of these, so the only clients that paid him interest were those that were a little different. As previously mentioned, van Leeuwen wrote about some skyscrapers that were commissioned by imaginative architects and ‘poetic businessmen’ (2). It may have been just that type of businessman that provided Wright with the few chances he had at creating a skyscraper in a city. Unfortunately, each case of this ended in either financial trouble or opposition from another party involved.

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