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# SKYSCRAPERS II: THE HUNGARIAN CONNECTION(S)

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***Abstract:*** *In a previous paper (Justification for 'Scrapping the Sky', Ybl Journal of Built Environment, Vol. 7/1,) I set an overall framework for reviewing the elusive topic from its history to the state-of-the-art, with a particular focus on urban design perspectives. While conducting the research, the subject offered many interesting (sometimes even surprising) findings. One of them is the so-called Hungarian connection: two epic protagonists who played a significant role in shaping the early skyline of Manhattan (Emery Roth and his sons) and Shanghai (Laszlo Hudec), respectively. Although their heritage is still striking on the ground, they seem to be not well known, particularly Roth, even among professional architects. Hence the rationale and the title of this paper.*

***Keywords:*** *skyscrapers, Hungarian architects, Hudec, Roth, Manhattan, Shanghai, history, Art Deco, historicism, modernism*

*'To live is the rarest thing in the world.*
*Most people exist, that is all!'*
*(Oscar Wilde)*

## 1. INTRODUCTION

First of all, besides the general aim to build knowledge, there may be three legitimate reasons to conduct research: 1) to solve a particular problem, 2) to develop and test a theory, and 3) to satisfy one's curiosity. This study, without doubt, falls into the latter category. Secondly, it does not offer an exhaustive review of all works by the two protagonists because the focus is solely on their contribution to the development of skyscrapers. It does however provide summaries of their respective biographies and a brief insight into their other works of architectural importance. Thirdly, they have not been evenly researched: Hudec's life and works are far more known at least by the Hungarian, Slovakian and Chinese architects. Therefore, I more emphasis on discussing Roth's professional achievements. By any standard, they both were great characters with extraordinary lives and left us with important 'marks' in Shanghai and New York City, respectively as their legacy. Their true stories prove again that life is far more interesting that most fictions.

From Hudec's works, I picked one single building (the Park Hotel in Shanghai, Asia's tallest skyscraper between 1934 to 1963) for a brief case study, due to the focus of the paper. From the Roths' portfolio, however, I chose to review several. Without doubt, they have all contributed to the development of world architecture.

## 2. THE CONTRIBUTION OF LASZLO HUDEC (BORN AS HUGYECZ LÁSZLÓ EDE OR WU DAKE IN CHINESE, 1893-1958)

### *2.1. His life and career in a nutshell*

Hudec's life was a real and dramatic odyssey. He was born in 1893 in Besztercebánya (then Northern Hungary, now part of Slovakia) in the fortunate *fine de siècle* period, with Hungarian, Slovakian, and Saxon ancestors. He was the eldest of six brothers and sisters. His father, György Hugyecz (1853-1920) was a prosperous hard working master builder (a real self-made man), involved in major infrastructure developments of the time (including the underground tram of Budapest, the first one in continental Europe). The mother, Paula Scultéty, came from a noble family, she was the daughter of an Evangelist Church minister of Kassa (today Kosice in Slovakia). The well-to-do family lived in Besztercebánya (now Banska Bystryca in Slovakia) and pursued an active social life, including charity, too. They also supported sports and were consecutively regular patrons of the Vienna, the Pozsony (now Bratislava in Slovakia) and the Budapest Opera Houses, respectively.

László spent his secondary school vacations with his father working on building sites. Before entering the Royal Technical University of Budapest, he had already passed the exams of three building trades (that of the bricklayer, the stonecutter and the carpenter), but also travelled on a voyage all around the Mediterranean Sea through Gibraltar to the Netherlands. During his adventure, he made many fine architectural drawings. He studied architecture between 1910 and 1914, from the greatest Hungarian architects of the period like Frigyes Schulek and Alajos Hauszmann. Upon graduation, he immediately got a job with the Ybl Architectural Office.

Still in 1914, with his friends he volunteered into the Austro-Hungarian army. In June 1916, on a mission on the Polish-Russian frontier, he suffered a head injury from the Cossacks and became prisoner of war. Shortly, together with his fellow officers he was moved through Kiev and Moscow to a camp in Khabarovsk, Siberia on a five week journey. There, the young architect spent his time studying French, English and art history. Besides his native Hungarian, he already had a good command of Slovakian, German, Russian and Polish. Due to his professional experience and language skills, he was privileged as a POW to work on architectural designs and building sites. In 1917, he was hospitalized with typhoid. In addition, he had fallen from a horse and suffered a broken leg (for the rest of his life that left him with limping). But at least he managed to survive the tragic war.

In the May of 1918, he was put on a special train, organized by the Danish Red Cross to carry handicapped soldiers back to Europe. But due to the ongoing combats, the train was stranded

for weeks near the Chinese border. Then in the midst of the Civil War, the wounded Hudec had two simple choices: either join the Red Army back in Siberia or try to join the Czech Legion and fight against the Bolsheviks. He did not fancy any of them and made a third one for himself: escape. With a few comrades they stole a rail trolley and with false identity papers fled into the unknown China.

His decision proved to be a good one: in 1918, as a refugee he ended up in the fast developing 2.5 million Shanghai and very soon began working for the American architect Roland A. Curry who ran one of the biggest architecture offices in town. This luck was mainly due to his language skills (in addition, he was learning Chinese) and his excellent professional education (mastering both historical and contemporary architectural styles). Within a year, his boss offered him a business partnership (the company at the time employed two thousand people and was simultaneously working on forty different building projects)!

Despite the fortunate turn of events, he did not plan to stay long He just wanted to save enough money to return to his hometown and build his own company there. But by the time he could do so, due to the political turmoil, he did not really have a place to return to as the area has been annexed by the new state of Czechoslovakia. As a result, his family went bankrupt, his father died in a heart attack in 1920 and the family moved to Budapest. The homesick Architect was shocked by the news and travelled home. There he spent only a month in a disillusioned state. He realised that to support the family he must return to Shanghai (he would continue providing financial security to them in the rest of his life).

Within months of returning to Shanghai, he was promoted first to office manager and then to associate architect of the practice. The city was going through its first period of spectacular development and was a real paradise for architects and real estate investors. Thus Hudec had a great opportunity to take part, besides other projects, in large scale office design jobs of high standard, providing him with valuable experience. He also took part in various design competitions and managed to develop an important network of professional and business contacts. He got integrated into local social life through memberships of the German Garten Klub, the American Club, the English Golf Club and Race Club, the French Cercle Sportif Francais, and even became the President of the Shanghai Hungarian Association.

He owed much of his rapid professional development to the new generation of well-to-do Chinese clients and government officials who gave him freedom in choosing the architectural style to work with. They were content with the globally emerging modernism, in fact they wanted the most modern architecture to demonstrate to the world who they were. (It is quite peculiar that Shanghai managed to mostly avoid the impact of the global Great Depression of the late 1920s.) As a result, he opened his own practice in early 1925. There, he was working on a variety of buildings over the years: offices, apartment buildings, private cottages, shopping facilities, churches (he always designed them free of charge), cinemas, theatres, community halls, factories, a brewery, power stations, hospitals, schools and university buildings.

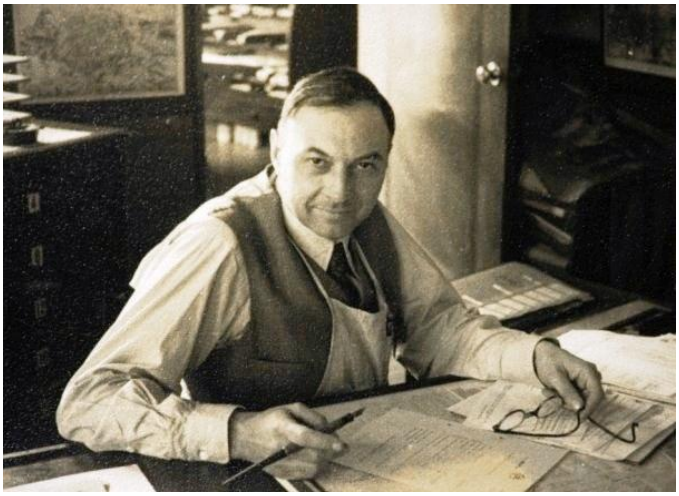

*Figure 1: László Hudec in his Shanghai office (korkep.sk)*

Back in 1922, he married Gisella Meyer, the beautiful daughter of a successful German businessman from Bremen and an English mother, born in Shanghai and educated in Potsdam. Later the couple had two sons and a daughter. In 1927 and in 1928, Hudec shortly visited Budapest again, primarily in an attempt to negotiate his repatriation and to reclaim some of his father's heritage in a legal battle. (In fact, he had to continue his struggle for a Hungarian passport until 1940.)

Besides financially supporting his family in Hungary, he also invited his two younger sisters to become nurses in the Country Hospital (now the Huadong Teaching Hospital of the Shanghai Medical College of Fudan University) designed by him. In 1929 his younger brother, who also studied architecture in the Budapest University at that time, moved to Shanghai, too, to live with and to work for him. He would actually spend the rest of his life there. However, Laszlo's young and pretty wife, Gisella fell in love with the brother soon. To avoid further complications, the brother moved out soon to rent his own place in the Chinese Quarter and stopped working for the Hudec Office. (He got a Chinese girlfriend and became a successful motorbike contestant, but died early of ileus.)

Hudec had so strong emotional links and family ties with Hungary that he kept planning to return home one day with his savings (he once even sent a decent sum to his mother to buy a large estate for his younger son in Northern Hungary, close to his homeland beyond the border). With the growing recession, however, most of his professional commissions evaporated by 1935 and in addition, an war broke out between Japan and China in 1937. The advancing Japanese Army occupied the strategically important Chinese cities, including Shanghai. Most foreigners and developers fled to Hong Kong leaving their wealth and belongings behind. Only a French Jesuit priest managed to negotiate with the Japanese to designate a protected safe zone within China Town of the city which probably saved the lives of several hundred thousand civilians. During the occupation, the Hudec office did not get any substantial commissions and was forced to downsize, operating with four employees only. (Apparently, Hudec did not

worry, he ordered some books on Hungarian history and literature, and studied Italian from an Italian monk.)

After some hesitation in 1943, Hudec became the Honorary Consul of the Hungarian Kingdom in Shanghai By then, Hungary was already involved in the war with Germany against the Soviet Union). In the same time, he was strongly against Nazism and helped many Jewish people escape and travel further to Australia and to the US. In the second half of 1944, he refused to continue his official diplomatic mission. After the war, the new Mao regime took control of the city in 1947 and consequently he was placed into house arrest. After a short while, he bribed his guards and escaped with his family after spending almost 30 years in China, leaving all their wealth behind. The voyage via the Suez Canal took them finally to the neutral Switzerland (Lugano) in 1948. From there, he still made a couple of study trips to Greece and Italy, however, he stopped practicing as an architect.

During his time in Shanghai, he also worked as an architect for the local Jesuit Order. Thanks to his reputation he had the chance to meet Pope Pius XII who invited him (as a structural engineer) into the team of experts excavating St Peter's tomb in Rome. The two year work provided him with a cathartic spiritual experience, and in recognition for his service the Pope granted him (a protestant Lutheran!) a document of absolution of all sins. He started painting and writing on philosophy and theology. Later, he moved to the US (first to New York, later settled in California), and resigned from architectural practice, but gave lectures (including the University of California at Berkeley) on the archaeological exploration of the Tomb. To settle, the couple bought a wooden cottage, which was unfortunately swept away by a landslide while they were not at home.

Hudec also made some income from real estate investments to earn their living expenses and to support his relatives living in different spots around the world. In 1956, his last hope emerged to return to Hungary, but it soon evaporated with the Soviet oppression of the revolution. His last two architectural designs were a new wing of the Californian Lutheran University and their own new family house in Squaw Valley ('Swiss chalet', 1958). He just finished building their house and died soon after in October 1958 of a heart attack after falling off a ladder during an earthquake.

According to his will, he was buried in the family tomb in the cemetery behind the Lutheran Church in Besztercebánya (now in Slovakia). In the Chinese metropolis itself, he designed altogether more than hundred buildings, most of which were built. Some have been pulled down since, but about 44 (all heritage listed) are still standing. In 2014 he, the only foreigner, featured in the '99 classic representatives of Shanghai' selection. His former villa in Shanghai has been turned into a museum and a cultural centre.

### 2.2. *The Park Hotel, Shanghai (170 Nanjing Road, 1931-1934)*

While living in Shanghai, Hudec made several study trips to the US (1929, 1937, 1939; including New York, San Francisco and Seattle). These experiences had an impact on him, clearly visible on his art deco buildings in Shanghai. For example, his Park Hotel, designed in

1934, shows some similarity to New York's Radiator Building of 1924 by Raymond Hood and André Fouilhoux. However, he managed to create a special local (Chinese) art deco style mixed with a modernist flavour.

*Figure 2: the Park Hotel in Shanghai and the Radiator Building in NYC (wikipedia.org,)*

As mentioned earlier, for most of the 1930 Shanghai was a paradise for architects: the real estate market was booming generating a large number of design commissions. Midst this boom came this iconic 24 storey (83.8 m high) mixed-use building in the geographical centre of the City. The developer was the Chinese Joint Saving Society (JSS), established in 1923 by four banks. The company organised a design competition for Asia' tallest building and Hudec's Park Hotel was the winner. (In fact, it had been the tallest structure of Shanghai for more than fifty years, until 1984; the tallest in China until 1966 and the tallest in Asia until 1952.) JSS wanted more than a pure high-rise building, they wanted an iconic landmark of modern China, a gateway of the City visible from every angle.

The construction was completed by the end of 1934. Its uses were varied:

- the basement included a bank vault,
- the front office of the bank and the hotel lobby were situated on the ground floor,
- the back offices on the first floor,
- a large restaurant on the second floor,
- the kitchen on the third floor,
- from the 4$^{th}$ till the 13$^{th}$ floor there were the hotel rooms,
- a floor with a bar and a grill terrace right above them,

- topped up with residential apartments providing nice views of the city.

There was also a ball room/night club up on the rooftop. Its special roof could be opened to provide an open-air dance-terrace. The internal access was assisted by three fast elevators. Due to the vicinity of the Yangce River, the foundation was made up of 33 meter long wooden posts (from Canada), a thick reinforced concrete slab and a robust reinforced concrete frame upon. The superstructure of the house was made of high-tension stainless-steel frame imported from Dortmund, which were filled with in-situ reinforced concrete slab floors. The facades were covered by local stone. This building was the first in China to be equipped with smoke detector and sprinkler system. The Architect personally supervised the art deco interior design works and took part in the design of the furniture, as well.

The Park Hotel immediately earned the Architect well-deserved international attention. The first reconstruction of the building took place in 1989, followed by several others. In 1991, this Hudec masterpiece was listed on the Shanghai Architectural Heritage List. Although since then there are far taller buildings towering over it, the Park Hotel still stands as the symbol of the city's development and architectural elegance. (Allegedly, the world famous architect I. M. Pei decided to become an architect while walking by the Park Hotel in Shanghai.)

## 3. THE CONTRIBUTION OF EMERY ROTH (RÓTH IMRE, 1871-1948) AND HIS SONS

### *3.1 Brief overview of his life and career*

Roth was born in 1871 into a Jewish family, in the northern Hungarian township of Gálszécs (Zemplén county; now in Slovakia) one of eight children. He was a bright little boy particularly fond of drawing. As the parents ran the local pub (i.e. the centre of social life), the family made ends meet reasonably well. Following the death of his father in 1884, this changed however, and they were reduced to poverty. As a consequence, the family decided that it would be better for the 13-year boy to be sent to America to pursue his own fortune in the land of opportunities. He was accompanied by Aladár Kiss, a family acquaintance who was returning to Chicago.

In New York City, Kiss gave the boy some money for the railway ticket to follow him. During the train trip, however, the boy somehow lost his address and found himself on his own in the windy city of Chicago. But as the young Roth was ambitious and resourceful, he did not panic and survived by shining shoes and a variety of other odd jobs to earn a living. While apprenticing in a demanding German architect's office, he found his passion and future vocation. He was working relentlessly. His real career started when he was hired as a skilled draftsman by Burnham & Roots (two distinguished architects of the time) to work on the Chicago World's Columbian Exposition of 1893. The young Roth also designed his first solo job at the Expo: a colonnaded pavilion for the Menier Chocolate Company. (The building was influenced by the ancient Roman Temple of Vesta, a theme that appears at the top of many of his later skyscrapers.) This major project gave Roth the opportunity to show his self-taught skills and to impress Richard Morris Hunt, a high-profile senior architect from NYC.


*Figure 3: the 'Chocolate Pavilion' at the Columbian Expo of 1893 (commons.wikimedia.org)*

Roth relocated to New York and worked for Hunt's studio until his boss' early death in 1895. Then, he moved on to join Ogden Codman Jr., a designer and decorator with a large wealthy clientele. This association gave the young Architect an invaluable insight into the housing aspirations of the wealthy. In 1898, he started his own business by acquiring a modest architectural firm. Soon after, he married Ella Grossman (1877-1943) and subsequently had four children: Julian, Richard, Elizabeth and Kathrin. The two sons later became architects themselves. The Roth family was living near the Broadway: first on West 86th Street and later in a penthouse on West 101st Street.

*Figure 4: Emery Roth around 1930 (wikipedia.org)*

The launch of his new enterprise was not easy. He was an immigrant with no degree. In 1927, after some high profile projects such as the Ritz Tower, he was rejected in his first attempt to join the American Institute of Architects. A few months later, however, he was admitted, due to his influential supporters. His first modest jobs came from the city's Hungarian

community on the Lower East Side. Among his first commissions were the remodelling of a popular Hungarian restaurant and some vacation houses. (Throughout his life, the Architect maintained close ties with his fellow countrymen.) As his reputation was growing, so was his business. The real leap forward was the seven-storey Saxony project on Broadway in 1899. Subsequently, he focused on designing hotels and luxury residential buildings mainly on the West Side of Manhattan, an area popular among newly affluent Jewish immigrants, actors and artists.

One of his earliest major undertakings (in fact his first ever hotel) was the daring Art Nouveau style, luxuriously appointed Hotel Belleclaire (1903) at Broadway. (The 10-storey building with a roof garden, supported by skeleton steel frame with brick facades and limestone, terracotta and metal detailing, was regarded a skyscraper at that time). Although Roth's name was mostly linked to apartment houses and hotels built for the wealthy, he also designed some residential buildings for middle-income earners (such as the Goldhill Apartments in Bronx, 1909), and a number of fine houses of worship (including the Adath Jeshurun of Jessy synagogue on the East Side in 1903 and the First Hungarian Reformed Church of Manhattan in 1915.) From 1903, he became closely associated with the development firm Bing & Bing.

In 1918, he had a couple of severe health hick-ups: due to glaucoma, he lost his eyesight on one side and caught the Spanish flu, too. Nevertheless, by then Roth was established as a leading architect and his practice was one of the largest in the city. (At the height of the 1920s boom, Roth employed some 50 people at his firm.) They delivered some of the most influential examples of apartment houses (the so called 'Roth Towers'). The key to their success was mastering artistic creativity and business pragmatism at the same time:

- his ability to adapt the details of classicism (the Old-World charm, i.e. historicism; he was particularly fond of Italian Renaissance) to more modern building forms/styles (mainly Art Deco),
- his buildings combined functionality (e.g. functional floor plans, more space-efficient new layout) and attractiveness, and
- his understanding of the principles of building costs and operating expenses (to maximise profit for his clients).

He enjoyed working with tight constraints when he had to squeeze in as many apartments as possible (the then prevailing regulations tightly restrained building heights).

In 1938, Roth included his two architect sons Julian (1901-1992, graduated from Columbia University) and Richard (1904-1987, graduated from MIT) as partners (they were involved since the late 1920s, but their names appeared on the logo only from 1947). Between 1915 and 1946 they, delivered 110 buildings (mainly high-rise apartments, hotels and some offices) in New York City alone (they output was altogether about 250!), 105 of which still exist in NYC. In 1948, he was awarded the Apartment House Medal by the New York Chapter of the American Institute of Architects. He died still in the same year and was buried in Ferncliff

cemetery of NY. He was honoured with a memorial bank (chair) in Central Park and a memorial tablet in his hometown.

His sons and grandson successfully carried on the business (as Emery Roth & Sons, later Emery Roth & Partners LLC), concentrating on large number of iconic speculative office towers (including the Pan Am Building, Xerox Building, MGM Building, General Motors Building, One Battery Park Plaza, Citigroup Center or the ill-fated World Trade Center with Minoru Yamasaki) in Manhattan. They also worked in other states and abroad (including Beijing and Shanghai); around 1989, they even opened a Hungarian office. Julian specialized in building technology and construction costs, Richard was the principal architect. Richard's son Richard Roth Jr. (1933) became the third generation in the firm, eventually rising to chief architect CEO. Richard Junior's son (Richard Lee) joined as a chief specification writer and daughter (Robyn) also joined the company as a controller in the 1980s. At some stage, a cousin managed the firm in the early 1990s.

The firm, which remained a family business over the decades, with 300 employees was one of the biggest architectural consulting offices in the western world in the 1980s. As a matter of interest, in a special program between 1986 and 1992, ten young Hungarian architects had the chance to work for leading US architectural firms, among them were György Fazekas and Tamás Noll who worked for Emery Roth and Sons. Due to financial difficulties, the firm ceased to operate in 1996. According to the Department of Drawings and Archives at the Avery Architectural and Fine Arts Library at Columbia University, between 1947 and 1990 they built 122 projects just in New York. Most of these were commercial buildings (office towers and hotels), but also included some apartments and even a high school. The Archives also stores 2286 architectural drawings by Emery Roth from the period of 1907-1949, the bulk produced between 1920-1939.)

### *3.2. Some of the iconic skyscrapers of Manhattan by the Roths*

Emery Roth, with his associates, was involved with building six proper skyscrapers (i.e. ones with a height over 100 meters) in NYC between the two world wars (1925-1931, in fact) and they all exist today. Most of them were apartment hotels, with no individual kitchens in any of the units originally; food was provided by centralized kitchens using dumbwaiters (small freight elevators) to transport it to pantries on each floor. Since apartment hotels were not subject to the same height restrictions as residential apartment buildings that time, developers were able to build taller than would otherwise have been allowed. They were as follows:

- Ritz Tower Apartment Hotel (1925-1926, 165 m, 41 storeys)

Located at the corner of Park Avenue and 57$^{th}$ Street, it was the city's first residential skyscraper and the tallest such building in the world at the time. (Remarkably, it was three

times higher than any residential building before.) Some units were extraordinarily large with up to 18 rooms. Beyond the steel frame, it has classically-inspired design features: numerous setbacks with pilasters, pediments and balustrades, and large stone flèches (spires). The lower floors are highly ornamented, featuring sculpted putti, urns, and rusticated stone. The top of the tower is concluded with a limestone lantern with pyramidal roof and a tall obelisk. The building became a symbol of a then new lifestyle for wealthy New Yorkers, inspired a new generation of apartment hotels and set a precedent in high-rise construction. (Associated architects were Carérre & Hastings.)

*Figure 5: The Ritz Tower on a postcard in 1929 (geographicguide.com)*

- The Oliver Cromwell (1926-1927, 102 m, 30 storeys)

This is another apartment hotel by Roth at 12 West 72nd Street, in a mid-block position. Although the Architect considered it to be the finest building designed by his office, it was not an immediate financial success. The Neo-renaissance building has a steel frame with brick, stone and terra cotta facades. The building has setbacks and the symmetrical design culminates in a pointed terra-cotta lantern on an octagonal drum. The lobby was intimately scaled and embellished with classically inspired polychrome terra-cotta arches and doorways.

*Figure 6: The Oliver Cromwell (nyc-architecture.com)*

- Warwick Hotel (1925-1927, 111 m, 36 storeys)

Located at the corner of 6th Avenue and West 54th Street, this Renaissance Revival building's three-story base is covered with limestone and granite. The brown brick (framed) superstructure has two wings projecting to the street from the property line. (Associated architects were George B. Post and Sons.)

*Figure 7: The Warwick Hotel (structurae.net)*

- Ritz-Carlton Central Park (1929-1930, 113 m, 33 storeys),

Originally designed as St. Moritz hotel on the corner of 6th Avenue and West 58th Street, Roth respectfully set it into a line of buildings that constituted the sharp edge of Central Park. He created a distinct base and a rather straightforward trunk, then from the 22nd floor up, he broke away into a variety of setbacks (complying with the 3D 'envelope' by NYC's distinct Zoning Ordinance of 1916) and a more intricate level of ornamentation. The hotel originally contained between 800 and 1,000 rooms. There were various renovations over the years executed on the building.

*Figure 8: Ritz-Carlton Central Park (ritzcarlton.com)*

- San Remo Apartments (1929-1930, 122 m, 27 storeys)

Situated along the western edge of Central Park, it was the city's first twin-towered building. Later the twinning became a distinctive and often used pattern in skyscraper design all around the world and one of Roth's personal favourites. Each of the tall and slender towers is capped by circular colonnades. The building is a typical fine example of his adaptation of Italian Renaissance features to residential skyscraper design.

*Figure 9: The twin-towered San Remo (tinkmara.com)*

- The Eldorado Apartments (1929-1931, 105 m, 30 storeys).

It is another twin-towered residential building in the finest Art Deco style at 300 Central Park West. It fills the complete block-front facing Central Park. The symmetrical massing of the building, with its terraced setbacks, is strikingly similar to that of the Beresford of 1929. The towers are terminated by ornamented setbacks with abstract geometric spires. However, only the southernmost tower top is habitable, featuring a two-floor, dual-terraced penthouse. The other tower top houses a water tank, but the floors beneath are habitable. (Co-designers were Margon & Holder.)

*Figure 10: The Art Deco twin towers of Eldorado (newyorkitecture.com)*

Emery Roth delivered three more outstanding residential high-rise buildings in Manhattan in that height range (i.e. close to 100 m). As a result, Central Park is surrounded by a number of fine buildings designed by Roth. They are:

- Beresford Apartments (1928-1929, 83 m, 22 storeys)

Found at 211 Central Park West, it is considered as one of the Architect's masterpieces. The triple-towered residential fortress overlooks Central Park. The massive block is opened to west with a U-shape and a central court. Recessions in the high-rise mass are met with balustrades, carved pilasters, and pygmy obelisks. It is crowned by its three distinctive octagonal copper-capped corner towers. It was built in brick with limestone and terra cotta trims ornamented with sculptures derived from late-Renaissance precedents. It has three entrances and the lobbies are detailed in marble and bronze.

*Figure 11: The Beresford (wikipedia.org)*

- Ardsley Apartments (1930-1931, 71 m, 22 storeys)

Close to San Remo and Beresford, it is perhaps the most elaborate Art Deco work on Central Park West. It resembles the massing of a Mayan temple. Above the 15th storey, the heavy mass of the building is punctured by a series of setbacks allowing for multiple terraces and cantilevered balconies. The beige-brick facade of the building is highlighted by vertical and horizontal bands of black brick, interwoven into a rich geometric pattern.


*Figure 12: The Ardsley (cityrealty.com)*

- Normandy Apartments (1938-1940, 79 m, 20 storeys)

Overlooking the Hudson River on Riverside Drive, it was Roth's last pre-World War II grand apartment house project. It was built around a simple H-plan and uniquely combines Renaissance Revival features with Art Deco forms. Windows on the corner follow the structure's curve. It is also a twin-towered building and it was the Architect's choice for his retirement residence.

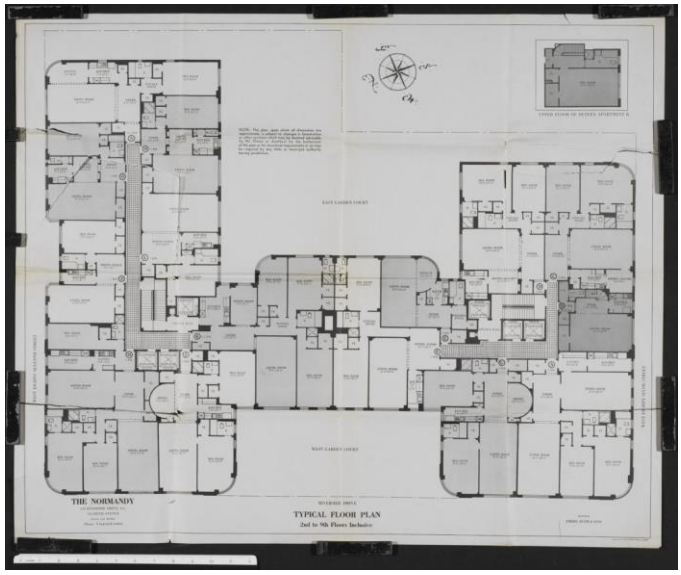


*Figure 13: The Normandy building and its typical floor plan (daytoninmanhatten.blogspot.com, H Col. Lib.)*

San Remo and Beresford were Roth's two most ambitious projects perhaps. They, and some others, too, were built right before and after the NYC stock market crash of 1929, i.e. during the Great Depression. The lender to the projects collapsed, the developers subdivided the largest apartments and had difficulties to find tenants. Eventually, the buildings were sold for 'peanuts'.) Roth however not only survived the economic 'roller-coaster' cycles of two depressions and two world wars, but went on to prosper and design altogether approximately 250 buildings during his career. He managed to become one of Manhattan's most prized residential architects. From Bronx to Brooklyn, he left a long-lasting mark on the entire cityscape of New York.

By the end of the 1920s the massing of the 'setback skyscraper', originally built in response to the 1916 New York City zoning code, became a style that caught on from Chicago to Shanghai. This is perhaps Emery Roth's main legacy. It is striking, however, that the Roth firm took on modernism very slowly. There were a few rather 'schizophrenic' (odd, out of the prevailing architectural style) Roth designs (such as the Normandy) from the 1930s (he loved Italian Renaissance) and only his buildings of the 1940s show a gradual disappearance of the old ornament.

While Emery Roth specialised for residential towers, his sons focused primarily on speculative office buildings, the most notable were the twin towers of the ill-fated World Trade Center. While Emery Roth's legacy lives on in the skyline of New York City, there is one single spot of symbolic importance worth mentioning. On the intersection of Fifth and Park Avenues, one of the most frequented places of Manhattan, three of the four corners have buildings designed by the three generations of Roth architects.

## 4. SUMMARY AND CONCLUSIONS

To conclude, it is worth to briefly compare and to contrast the two architects' professional career and works, respectively. Both of them:

- designed and built a similar large number of buildings,
- more or less in the same period,
- determined the skylines/townscape of two major cities of the East and the West,
- were migrants coming from minority groups with an extraordinary fate,
- successfully combined the classicism of Beaux Arts design with contemporary styles.

However:

- Hudec designed one real skyscraper, Roth did a series of them.
- Hudec was professionally educated in architecture, while Roth was a self-taught (on the job) architect with no degree.
- Hudec's practice was not continued by any descendants, but Roth's one was, even his grandson became an architect.

While the skyscraper has become an essential component and strong design pattern in the urban fabric of CBDs of major cities around the world, their major contribution to the development

of 20th century architecture in general and to that of the skyscraper in particular, is still relatively little known in the international profession and academic literature. Hudec probably has been better documented though, including professional journals of US, UK, Germany, France, Spain, Japan, China and Hungary.) At last, for Hungarians their common basic story is too well familiar: migrating from misery overseas where opportunity for creating something extraordinary in culture, science or technology is abound. And they both managed their respective opportunities.


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