

De Soto, in addition to designing hospitals, banks, temples, libraries, clubs, and handsome mansions. By 1938 the firm handled about twenty percent of all architect-designed industrial buildings in the U.S. and numerous projects around the world. No other architect had a greater influence on the development of modern industrial architecture. Yet, several generations of Soviet architects never heard Albert Kahn's name, and in the West little has been written or remembered about the remarkable history of his work in Soviet Russia and the impact it had.¹⁸

Kahn was noticed by the Soviet leadership in 1926 due to his work on Ford's River Rouge Plant. It could not escape their attention either that Kahn's firm designed more than \$200 million worth of wartime structures during the First World War and that he was the first American architect who fully integrated his practice to provide clients with what today would be called a one-stop approach. He brought architects and engineers under one roof, introduced teamwork in design, and even maintained his own on-site foremen to oversee the construction. The Soviet leaders appreciated Kahn's design centered on the assembly-line method of mass production and his highly productive design process. His staff of 400 could prepare the working drawings for a major plant in less than a month and facilitate its construction within five months. And for the Soviet industrialization program, time was of the essence. In 1928, after a high-ranking commission of VSNKh had combed the U.S. studying the American industrial scene, it paid a visit to Kahn's firm. This, according to Kahn, was followed by an invitation to visit Saul G. Bron, the head of the Russian trading company, Amtorg, in New York.¹⁹ Kahn's trip resulted in his firm being offered a contract for the design of a \$4 million tractor plant, which, as it was described to Kahn, was only part of a program for \$2 billion worth of industrial buildings.²⁰

The development program presented to Kahn encompassed almost the entire industrial construction under the first and second Five-Year Plans. A significant part of the design of this construction would land on the drawing boards of Kahn architects and engineers.²¹ The Soviet government turned to Kahn's firm because in 1929, despite fascinating avant-garde experimentation by Soviet architects of the Constructivist movement,²² no architectural organization in the U.S.S.R. possessed the experience in large-scale construction required for a task of such magnitude. Nor had any architectural firm in the U.S. designed a comparable number of factories

or specialized in industrial construction to the extent that Kahn had. Despite his dislike of Constructivist architecture, Kahn's industrial functionalism actually was similar, although more pragmatic and devoid of an overarching theory. But architectural style was not the Soviet government's priority, but rather practicality, cost, and speed of design and construction. While Soviet avant-garde architects were heavily involved in debates on architectural theory, Kahn's solutions were grounded in F.W. Taylor's labor management theory combined with the "magical powers" of Ford's moving assembly line. Despite their origin in capitalist enterprise, Soviets considered both Taylorism and Fordism to be "ideologically neutral" techniques that could serve the cause of communism as well as they had served capitalism.²³ In fact, Ford production methods became so popular in the U.S.S.R. that in addition to Lenin's electrification and Stalin's industrialization, the terms *fordism* and *fordizatsia* were coined and, ironically, often used in media and propaganda slogans about the advantages of the Socialist system over capitalism.²⁴

Two contracts: "A commercial relationship of great magnitude"

Kahn was initially reluctant to accept the "dream job" offered by the Soviets. He still had plenty of work in the U.S. with many promising prospects ahead (the stock market would crash six months later), and he "knew little or nothing about the Russian Government." But chiefly he was reluctant because the United States did not recognize the Soviet government. He knew that most of his clients were strongly anti-communist and that anti-Semites in the U.S. "echoed what the Nazis were saying and accused the Jews of fostering Communism." And yet the challenge fascinated him. He believed that "the Russian people—regardless of their form of government—were entitled to help after all their generations of suffering under the czars. It was the right thing to do."²⁵

During the next three years, Kahn's firm became engaged in the industrial building program of the U.S.S.R. under the Five-Year Plan. The work was first done at the Kahn headquarters in Detroit and later—in order to handle a much greater volume of projects—in Moscow, with assistance from the Soviet staff, for whom the Kahn architects and engineers were providing training at the same time. The work was done under two contracts, one signed on May 8, 1929, to design the first Soviet tractor plant; another on January 9, 1930, to become consulting architects for all industrial construction in the So-

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viet Union. The work done by the Kahn architects and engineers under these contracts would make a major impact on the ability of the U.S.S.R. to fulfill its ambitious plan for the country’s industrialization.

On May 8, 1929, through the agreement signed with Khan by Amtorg President Saul G. Bron, the Soviet government granted Albert Kahn, Inc., a monumental contract to design a tractor plant in Stalingrad. Under the agreement, Kahn’s firm, at its Marquette Building office in Detroit, would prepare architectural and engineering drawings of the main buildings, including plumbing, heating, ventilation and electrical systems, and road and railroad access. They would also assist in procurement of American construction materials, machinery, and equipment, as well as the installation work. In addition Kahn’s contract called for providing the key construction personnel—the chief construction supervisor, installation specialists, and key foremen. All the drawings and specifications could be used for construction of that plant only and would remain the property of the firm. For its work on the project Kahn’s firm would be paid \$130,000 (\$1,666,273 in 2012 dollars), plus 4 percent of the cost of additional buildings. All the plans had to be approved by Amtorg, which was responsible for the payments.²⁶

The New York Times described the contract as “the beginning of a commercial relationship between the Soviet Government and the Kahn architectural firm of great magnitude.” It also quoted Henry Ford who, when he learned about the contract, instructed Kahn to tell the Russians that they could have all his patents, designs and specifications, and pledged to send his engineers to Russia and to invite Soviet engineers into his plants to learn about mass production. Said Ford: “No matter where industry prospers, whether in India or China, or Russia, the more profit there will be for everyone, including us. All the world is bound to catch some good from it.”²⁷

In Russia the contract was announced in *Torgovo-promyshlennaia gazeta* (Trade and Industry Newspaper), which was running a regular front-page column under the heading “Foreign Technical Assistance in Construction of the Industrial Giants.” It wrote that Albert Kahn firm’s assistance “would guarantee that the plant would be built on schedule and would benefit from all American modern technical achievements.”²⁸ And less than two months after Kahn signed the contract, on June 30, 1929, the paper reported that the first American con-

struction engineers, John K. Calder and Leon A. Swajian, had arrived in Moscow with preliminary drawings for the assembly building, foundry, and forge, and were expected to depart for Stalingrad on July 2. Six weeks later four more Americans followed with complete plans.²⁹

In April 1929, six months after Stalin announced the Five-Year Plan and two weeks prior to signing the Kahn contract, the chairman of the Council of People’s Commissars of the U.S.S.R. (Sovnarkom), A. I. Rykov, raised an alarm about the technical preparedness of the country to meet the goals set by the Plan:

I feel alarmed by many issues related to our technique and our technical cadres. . . . Shall we be able to cope with organizing man-power, technical cadres, skilled labor? . . . Money alone is not sufficient for the new construction work. . . . We also need technical and organizing cadres, from skilled labor to engineers of the highest qualification. . . . We have to make great efforts to assimilate West European and American technique.³⁰

But with the Kahn firm’s work now in progress, Stalin could confidently announce in a *Pravda* article “The Year of the Great Turning Point” published to boost the Soviet people’s spirit for the celebration of the twelfth anniversary of the Revolution:

By the spring of the coming year, 1930, we shall have over 60,000 tractors in the fields, a year later we shall have over 100,000 tractors, and two years after that—over 250,000 tractors. . . . We are advancing full steam ahead toward industrialization. . . . We are becoming a country of metal, a country of automobiles, a country of tractors. And when we set the U.S.S.R. behind the wheel and get *muzhiks* to drive tractors, then let the capitalists try to catch up with us.³¹

When Stalin made this announcement, he certainly had in mind more than a single plant. Negotiations with Kahn about a contract on a much grander scale had already been under way since July 1929. On November 11, 1929, the chairman of VSNKh, V.V. Kuibyshev, reported to the Central Committee that a major agreement with Albert Kahn firm was approaching conclusion.³² On December 26, 1929, the Sovnarkom approved a draft for a new agreement under which Albert Kahn, Inc., would enter into a contract with the VSNKh’s Building Committee to provide consulting and supervision for design and construction of buildings in all areas of light and heavy industry, to which end the firm would install a design bureau in Moscow under the direct control of Kahn architects and engineers. Kahn’s firm would supply standard factory layouts, detailed drawings, specifications, and