

# Louis isadore kahn | architect biography



**ASSIGN  
BUSTER**

Louis Kahn was one of the most renowned personalities of the 20th century Architecture. The impact that he made with some of his works was so remarkable that he was rightly compared with Corbusier and Mies Van Der Rohe. Louis Kahn's work made huge impact specifically on the younger generation who were more willing to try out the non-traditional way of designing buildings. Louis Kahn truly believed that all architects should thrive for unparalleled excellence which would help them make an everlasting impact on the society, as seen by the works of Greeks and Egypt. Keeping this goal in mind, Louis Kahn devoted his entire career in seeking perfection and pursuing excellence.

Louis Kahn's best works are located in India, US and Bangladesh and incidentally they were produced in last two decades of his career. His works represent precise integration and assembly of structure, a silent admiration for materials and lights, a dedication to classical geometry, and a great deal of concern for human values. Louis Kahn was considered a enigmatic thinker or more like a philosopher who wanted to bring out change in the field of Architecture.

## BACKGROUND

Born in 1901 in Estonia, Russia, Louis Isadore Kahn is considered to be one of the most influential architects of the second half of the twentieth century throughout the world. Louis Kahn migrated to the U. S. along with his family in his early years (in 1905). After completing his graduation from the University of Pennsylvania in 1924, Louis Kahn started his career as a draughtsman and later worked as head designer in several other firms in

Philadelphia. He also worked in the offices of Philadelphia's leading architects, Paul Cret (1929-1930) and Zantzinger, Borie and Medary (1930-1932). In the latter half of 1930's Louis Kahn served as a private consultant to the Philadelphia and The United States Housing Authority. His knowledge in modern architecture expanded when Kahn worked with European emigres Alfred Kastner and Oskar Stonorov. In the early 1940s Louis Isadore Kahn associated with Stonorov and George Howe, with whom Louis Isadore Kahn designed several wartime housing projects. Kahn was not only an American architect, but was also an educator and philosopher. Until 1947, Kahn had worked with a series of partners, after which, Kahn set up his independent/private practice. It was during this year, that Kahn also began with his influential teaching career at Yale University as Chief Critic in Architectural Design and Professor of Architecture (1947-1957) and then at the University of Pennsylvania as Cret Professor of Architecture (1957-1974).

## **SIGNIFICANT ELEMENTS OF DESIGN**

Kahn wanted to redefine the bases of architecture through a re-examination of structure, form, space, and light; since his earlier work abstained from the international style modernism.

Earlier works of Kahn had a traditional international style of architecture. However somewhere in the middle of his career, Kahn turned his back on this traditional approach and pursued innovation by redefining the use of structure, light, form and space. " Louis Kahn described his quest for meaningful form as a search for " beginnings," a spiritual resource from which modern man could draw inspiration". It is widely believed that Louis Kahn, who was then a Resident Architect at the American Academy in Rome, <https://assignbuster.com/louis-isadore-kahn-architect-biography/>

was extremely impressed by the astonishing architectural feats of Greeks, Egyptians and the Romans and this triggered the change in his approach of designing the buildings.

Other experts believe Kahn was also influenced by the part of Philadelphia where he grew up. There were many factory buildings with large windows. These brick structures were very solid. This industrial design is apparent in several of Kahn's early works.

The impact of this European experience can be seen in Louis Kahn's latter works. The work undertaken by him in last two decades of his life demonstrated a sincere desire to create a sense of place, showcased the true side of structure, and demonstrated the successful application of Platonic geometry principles. Louis Kahn must be credited for re-introducing various concepts which most of the modern architects had deserted like centralized spaces, using extensive geometric principles and demonstrating solid mural strength. Kahn's buildings are admired for outstanding use of geometric shapes and implementing platonic geometry principles which creates magnificent experience for the users.

Louis Kahn is credited in re-defining modern architecture in more than one ways. For e. g.

Kahn was known to appreciate the appearance and feel of different materials that he used in his work. Kahn is also known to have used brick and concrete extensively and his innovative usage of these materials demonstrated his talent to the world.

Kahn realised the importance of sunlight and was highly impressed by its usage in Egyptians and Greek works. Hence Kahn's works demonstrates wide-scale implementation of sunlight through different kinds of interesting windows and openings.

Egyptian works also inspired Kahn to use extensive geometric shapes and hence we find many of his buildings taking shape of squares, circles or triangles.

Louis Kahn's vision on how an architect can make difference to his design can be seen from the master's own words. " A building is like a human, an architect has the opportunity of creating life. The way the knuckles and joints come together make each hand interesting and beautiful. In a building these details should not be put in a mitten and hidden. Space is architectural when the evidence of how it is made is seen and comprehended."

## **EXAMPLES OF PROJECTS WHERE ELEMENTS OF LOUIS KAHN DESIGN WERE IMPLEMENTED**

All these elements of design philosophy can be seen in all the works of Louis Kahn starting from his first mature work – the addition to the Yale University Art Gallery (New Haven, Connecticut, 1951-1953). This is considered to be Kahn's first architectural masterpiece where one can see that much prominence has been give to the structural innovations demonstrated by hollow tetrahedral concrete ceiling and floor slab system, which was a mater-piece, a fantastic design of placing the mechanical and electrical systems. Kahn's magnificent artistic sense can be seen from the design of the triangle-shaped staircase which sits in a rounded concrete shell, defining the

servant space to be distinguished from the served spaces of the building.

Richards Medical Research Building at the University of Pennsylvania (1957-1965) and the Salk Institute for Biological Studies (LaJolla, California, 1959-1965) demonstrated magnificent use of spaces and is the primarily responsible for the origin of the phrase ‘served and servant spaces’.

Kahn applied his principles to create masterpieces, which made a great deal of sense to the usage of space and light. His buildings, like the Yale Art Gallery extension (1951-53) or the Trenton Boathouse in New Jersey (1954-59) or even the Richards Medical Towers in Philadelphia (1957-62), create astonishing effects with the change in light, all possible due to the intelligent use of space and light. As a result, the user gets an entirely different experience of working in the building during different times of a day. By constructing Salk Institute in La Jolla, California (1959-67), Kahn created another masterpiece which had extraordinarily inspiring sequence of buildings.

Richards Medical Towers – This building demonstrates many key elements of Louis Kahn’s architecture. All these elements have been used before by other architects but not all at the same time. Through this structure, Kahn demonstrates the application of servant and served spaces, overcomes the problem of insufficient lighting and more importantly integrates form, material, and process. As stated by Romaldo Giurgola and Jaimini Mehta, “Richards Medical Towers represents a significant turning point in contemporary architecture.”

Salk Institute in La Jolla – This particular building emphasizes the principle, “Keep it simple and strong”. Through this building, Kahn has achieved astonishing use of space, may it be the space available for Laboratories where research is conducted, or may it be the office space where ideas arise. This institute shows a wonderful collaboration of mind and action. The building’s beautiful concrete surfaces ensure precise detailing and magnificent experience. The structure is created in such a way that it takes care of the need to enclose specific spaces and does not rely on a general envelope to cover such specific space. Paul Heyer, described the central court of the building in a very artistic way. “ The central court, as a typical Kahn-like space of shimmering blue water, a band pointing toward the ocean epitomizing what human endeavour can accomplish at one scale with geometric clarity and authoritative but modest deliberation, to give to the scale less sweep of the ocean, here the Pacific, a poignant gesture.”

Louis Kahn was known for his ability to create epic architectural structures that showcased human scale. He predominantly used brick and bare concrete as his building materials and he used highly refined surfaces like travertine marble for reinforcing the textures. ([http://www. answers. com/topic/louis-kahn](http://www.answers.com/topic/louis-kahn))

Beyond its functional role, Louis Isadore Kahn believed architecture must also evoke the feeling and symbolism of timeless human values. Louis I. Kahn attempted to explain the relationship between the rational and romantic dichotomy in his “ form-design” thesis, a theory of composition articulated in 1959. In his personal philosophy, form is conceived as formless and unmeasurable, a spiritual power common to all mankind. It transcends <https://assignbuster.com/louis-isadore-kahn-architect-biography/>

individual thoughts, feelings, and conventions. (<http://architect.architecture.sk/louis-isadore-kahn-architect/louis-isadore-kahn-architect.php>)

Integral to Kahn's notion of timeless form in the making of significant architectural spaces is the role of natural light. Louis Isadore Kahn described structure as the giver of light. For several projects located in hot sunny climates, such as the U. S. Consulate in Luanda, Angola (1959-1962), the meeting houses of the Salk institute, the Indian Institute of Management (Ahmadabad, India, 1962-1974), and the National Capital at Dhaka, Louis Isadore Kahn developed visually dynamic sunscreens. Great walls with variously shaped openings shield inner rooms from the harsh light. The evocation of a wall in ruins suggests an ancient part Louis Isadore Kahn's handling of light is a central theme in two unrealized synagogue projects, Mikveh Israel (Philadelphia Pennsylvania, 1961-1972) and Hurva (Jerusalem Israel, 1967-1974) as well as in one of his greatest works the Kimbell Art Museum (Fort Worth, Texas. 1966-1972). In the art museum, light enters through narrow slits in the concrete cycloid vaults and is diffused through the gallery interiors, which are rich with travertine and oak.

Kimbell Art Museum – This Louis Kahn's masterpiece in Fort Worth is a beautiful demonstration of utmost perfection which can be compared only to the works done by the Greeks. Kahn used all the tools and available resources with such flawlessness, that it produced a building which had all the components working in a synchronized way and the system as a whole worked perfectly. It is difficult to find any building that does not utilize the materials properly and this one is no exception.



## **INSPIRATION FOR OTHER ARCHITECTS**

Louis Kahn's philosophy and extraordinary work has had influence on quite a number of contemporary architects.

Tadao Ando, in his early twenties, took initiative and travelled throughout Japan, Europe, Africa and the United States for his architectural studies. He never took any formal training in the field of architecture. He would study architecture by observing the actual buildings and reading books of renowned architects such as Le Corbusier, Mies Van der Roher, Louis Kahn, etc. After he had gathered enough knowledge through his journey across different countries, he started his own practice. When asked about defining his style of architecture, Tadao had once said that, " To me, walls are the most basic elements of architecture, and in all my works, light is an important factor". The Benetton Communications Research Center (Italy) and the Naoshima contemporary art museum, (Japan) showed that Tadao Ando was truly inspired and has learned a lot from the works of Louis Kahn.

Renzo Piano (born in 1937) completed his graduation in architecture in 1964 after which he worked in his family business. From 1965-1970, Renzo Piano worked in the offices of Louis Kahn (Philadelphia) and ZS. Makowski (London). Along with Renzo Piano, another famous architect who was greatly influenced by Louis Kahn was Richard Rogers. Renzo Piano met Richard Rogers at the Expo'70 in Osaka and both immediately realized that they had common interests. One of the most famous projects of Renzo Piano & Richard Roger is that of Georges Pompidou Centre in Paris. The building was designed in such a way, as if it were turned ' inside-out', with the services visible on the exteriors of the building making the inside of the building '

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light and airy'. Thus, this building can be said to be made on the similar basic concept which Kahn had applied years earlier in the Arts Centre where because of his theory of 'served' and 'servant' spaces, huge services ducts rose up through the building. Hence, it can be safely concluded that Renzo Piano and Richard Roger were both influenced by Louis Kahn.

Architect Norman Foster is another famous personality influenced by Louis Kahn. Foster happened to study masters in architecture in America at a time when Louis Kahn was designing the extension at the Yale University. Getting influenced by Kahn's designs and philosophy, the two architects have also ended up designing the world's most exciting buildings. For example, Norman Foster's 'Hongkong and Shanghai Bank' project demonstrates Louis Kahn's influence on Norman Foster.

Another architect inspired by Kahn is James Stirling. Stirling was known for his 'experimental approach', which meant that he was not committed to one particular style. Also, this approach meant that Stirling was ready to try out new ideas and that definitely reflected Louis Kahn's quality of designing. Stirling's earlier projects for Oxbridge stressed more importance to the concept than to the artistic and utilitarian needs. Due to this experimental approach and rigid adherence to concept, Stirling was often criticized for not following architectural principles.