The Architecture of Louis I. Kahn

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"Architecture is the thoughtful making of space“(Kahn, 2003).

Louis Khan is the iconic architect. He influenced me by his incredible projects and philosophy. Because of his great works which inspired me in my designs vision especially when he combines between the light and geometric lines.

In 1961 Louis Khan received a grant from the Graham Foundation for Advanced Studies in the Fine Arts to study traffic movement in Philadelphia and to create a proposal for a viaduct system. He truly believed that all architects should thrive for unparalleled lasting impact on society, as seen by the works of Greeks and Egypt. Keeping this goal in mind, Louis Kahn devoted his entire career to seeking perfection and pursuing excellence, which gave me the passion to take inspiration from his design thinking(Lesser, 2017). He described this proposal at a lecture given in 1962 at the International Design Conference in Aspen, Colorado: He described this proposal at a lecture given in 1962 at the International Design Conference in Aspen, Colorado: in the center of town, the streets should become buildings. This should be interplayed with a sense of movement which does not tax local streets for non-local traffic. There should be a system of viaducts which encase an area which can reclaim the local streets for their use, and it should be made so this viaduct has a ground floor of shops and usable area. A model which I did for the Graham Foundation recently, and which I presented to Mr. Entenza, showed the scheme. Kahn was elected a Fellow in the American Institute of Architects (AIA) in 1953. He was made a member of the National Institute of Arts and Letters in 1964. He was awarded the Frank P. Brown Medal in 1964. in 1968 and awarded the AIA Gold Medal,
the highest award given by the AIA, in 1971, and the Royal Gold Medal by the Royal Institute of British Architects (RBIA) in 1972, (Het Nieuwe Institut, 1993 – 2013).

I learned from the Louis Kahn school a lot about the value of history. How the form is universal and the idea is measurable. The stages of the concept go through development to become measurable, it begins from immeasurable (the concept) after that by the design it converts to measurable and from that, we could feel the immeasurable by our five senses. Kahn could have said, “A great building must begin with the unmeasurable, must go through measurable means when it is being designed and in the end be unmeasurable, what is unmeasurable is the psychic spirit.” Or, “The sun never knew how great it was until it struck the side of a building.” Or, “I want to give the wall a consciousness” (Kahn, 2003)

The main element in the architecture design is analysis, my interest in the architecture is philosophy and analysis each detail in the project, I found the amazing element of Kahn architecture philosophy which is Manifested in the Louis Kahn his philosophy in the architecture was not only an American architect but was also an educator and philosopher (Philadelphia City Planning, 2011)

And he was an enigmatic thinker like a philosopher who wanted to bring out the change in the field of Architecture. You get his essence almost as much through his words as his buildings. Both are somewhat spare and cryptic, and both are rich in meaning (Vassella, 2013) we almost certainly would have been less forgiving if his architecture hadn’t been as good as it was. Kahn spent his life in pursuit of the distinct feeling of awe that he believed architecture could instill in others. His rambling, poetic pronouncements were his way of trying to get at the essence of what he sought in architecture: not just to protect us from the rain, but to provide us with a kind of spiritual shelter (List of Royal Gold Medal winners 1848-2008).
Louis Kahn's work infused the International style with a fastidious, highly personal taste, the poetry of light. His few projects reflect his deep personal involvement with each. Isamu Noguchi called him "a philosopher among architects." He was known for his ability to create monumental architecture that responded to the human scale. He also was concerned with creating strong formal distinctions between served spaces and servant spaces. What he meant by servant spaces was not spaces for servants, but rather spaces that serve other spaces, such as stairwells, corridors, restrooms, or any other back-of-house function such as storage space or mechanical rooms. His palette of materials tended toward heavily textured brick and bare concrete, the textures often reinforced by juxtaposition to highly refined surfaces such as travertine marble (Caves, 2004). He is often well remembered for his deliberation about the use of brick, on how it can be more than the basic building material if you think of Brick, you say to Brick, 'What do you want, Brick?' And Brick says to you, 'I like an Arch.' And if you say to Brick, 'Look, arches are expensive, and I can use a concrete lintel over you. What do you think of that, Brick?' Brick says, 'I like an Arch.' And it's important, you see, that you honor the material that you use.. You can only do it if you honor the brick and glorify the brick instead of shortchanging it (Kahn, 2003). When he is widely known for his sense of dimension, Kahn also worked closely with engineers on his projects. The results often were technically innovative and highly creative. In addition to the influence Kahn's more well-known work has on contemporary architects (Tadao Ando), some of his work especially the unbuilt City Tower Project became very influential among the high-tech architects of the late twentieth century, such as Renzo Piano, who worked in Kahn's office, Richard Rogers, and Norman Foster (Caves, 2004).

Kahn’s struggles to get his unusual buildings in a world that favors the tradition, the quick, and the cheap, the heart of her story, the struggle that matters most to her, is the one that Kahn had with himself, as he tried to figure out how to solve architectural problems in a
way that would make his buildings emotionally effects to those around him. Kahn liked to talk about how all of his creative efforts began at “Volume Zero,” as if to say that every time he took on a new project, he tried to peel back everything he’d known or done to that point and figure out some basic, primal way toward a solution. He studied history carefully and, as scholars starting with Vincent Scully have shown, was influenced by his school in the Architecture. His nester of really hard work and his struggle transfer him to the icon architectural through the time. He Influenced by the architect Venturi the father of postmodernism a style, born in the 1960s that blends elements of both historical and modern architecture, and he won the Pritzker Prize, architecture highest honor, in 1991., Khan was inspired by the Venturi school in most of his works how he made the balance between big scale and small scale, but in a genius of Khan way that immortalized through time. That always remember me how much I am proud to learn from Prof. James William's incredible information about the unique architecture especially Pro Louis Prof. James William teach us Khan school as about Khan as a human before Khan as an outstanding architect because Kahn was the one-day teacher for of Prof. James William. Picking between social projects and style was never a loose situation, Kahn constructed essentially institutional and open structures, alongside a bunch of habitations, however none of these positions among his best work. He wanted to structure galleries and community structures, that gave me the passion for interest in the community needs in the first step. Kahn did not find his distinctive architectural style until he was in his fifties. Initially working in a fairly orthodox version of the International Style, a stay at the American Academy in Rome in the early 1950s marked a turning point in Kahn's career. The back-to-the-basics approach he adopted after visiting the ruins of ancient buildings in Italy, Greece and Egypt helped him to develop his style of architecture influenced by earlier modern movements but not limited by their sometimes dogmatic ideologies(Curtis, 1987).
Throughout his late work represents his multifaceted approach to design, attempting to appeal to both the psyche and the materials, themselves, to maintain their ‘trueness to Form’. Kahn was not merely recycling traditionalism, but rather retranslating ‘known’ forms in both assembly and aesthetics – to convey a certain aura –

His works still from 40 years till now because he is the master of light and the architecture was shaped by shadow and his philosophy. As identified by Leonardo da Vinci, we often encounter three types of shadows: Attached shadow, shading and cast shadow. The attached shadow falls on the body itself – like a cantilever roof causing a shadow on the façade. The second type belongs to bright and dark contrasts, which are inherent to the form and depend only on the source of light, e.g. a ball shaped pavilion, which even under a cast sky shows a darker zone in the lower part.

The third, cast shadow, could be the result of a high house generating shadow on the street due to the projection of the building outline (Larson, 2000).

Da Vinci has always been my first inspiration in most fields of art and his ingenious creations. I found this evident in Khan's philosophy and his unbuilt work is also to leave us throughout history and his projects, one of its architectural icons is the greatest proof of its unique artistic excellence. And common similarities between this tow icon

Kahn’s archetypal forms go back to Greek architecture, which he studied in the 1950s: “Greek architecture taught me that the column is where the light is not, and the space between is where the light is. It is a matter of no-light, light, no-light, light. A column and a column brings light between them. To make a column which grows out of the wall and which makes its rhythm of no-light, light, no-light, light: that is the marvel of the artist” (Kahn, 2003).
Louis Kahn's style was so iconic that cannot put him in a category. In 1920, Kahn was completely fascinated by a course that he took in architecture history, after that he decided to change his major from painting to architecture. In his begin the teaching of the architecture school focused on Classical architecture, which is based on Greek and Roman structures (Merrill, 2010). Nineteen fifty-one influenced him the most. Kahn spent a few months as an architect with the American Academy in Rome. He also traveled through other parts of Italy, Greece, and Egypt. There, he saw the ancient Greek and Roman ruins that also it is affect appeared on his projects. He was very affected by the size and shape of these ruins. They helped influence him to develop an architecture that combines both modern and ancient designs, which gives support to complete my vision in the Architecture combing between the start from the past throw present looking to the future. 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. Kahn’s architecture has several defining qualities. For example, Kahn was very interested in the look and feel of the materials he used. He used brick and concrete in new and special ways. Kahn also paid careful attention to the use of sunlight. He liked natural light to enter his buildings through interesting kinds of windows and openings. Kahn’s work can also be identified by his creative use of geometric shapes. Many of his buildings use squares, circles, and three-sided shapes. That gave me support because I am so interested to combine the geometrical line (MoMA.org, 1952).

His architecture was notable for its simple geometric forms and complex play between natural light and materials. How he makes combine between the power of the shadow (silence) and the light. He created a style that was monumental and monolithic.

"At the time of his death, he was considered as "America's foremost living architect. The Timeless, modern design, the feeling the space by three-dimensional incredible
Louis Kahn’s vision on how an architect can make a 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 to 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.” (Kahn, 2003). The impact of this European experience can be seen in Louis Kahn’s later works. The work undertaken by him in the last two decades of his life demonstrated a sincere desire to create a sense of place, which supports my vision in the importance of harmony space, where he showed the real side of the, and successful application of geometry shapes. That is why his projects Withstood through time. Louis Kahn must be credited for re-introducing various concepts that most modern architects had deserted such as centralized spaces, using solid mural strength. Kahn’s buildings are using geometric shapes and geometry principles which creates a magnificent experience for the persons.

Louis Kahn’s vision on how an architect can make a difference to his design can be seen. The Kahn projects strategies showing the structure building and the lines of joints from that everyone can understand how the bulging is built to show the articulation instead of ornament and decoration. None of these are particularly easy works as special. They are not visually spectacular in the manner of Frank Gehry, and they do not dazzle with their sleekness in the manner of Renzo Piano or Norman hard. Kahn’s architecture does not cuddle you. It is not soft, and it is not hard. He designed somber, poetic buildings of stone and steel and wood and glass, and the best of them are brooding and deep, like a Rothko painting. The interior of the Unitarian church in Rochester is made of concrete blocks, and it would feel harsh but for the perfection of its proportions and the sublime way in which the light washes down into the worship space. Kahn led a generation of architects away from the
standard-issue modernism of glass and steel, but his style was gentle, philosophical, and sometimes not clear, that is maybe the reason that he didn't become famous.

Louis Kahn’s philosophy and extraordinary work have influence quite several contemporary architects. Tadao Ando, in his early twenties, took initiative and traveled 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 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”. That was very important for me to realize that the light is a very important element after him the rest of the element will have come. The Benetton Communications Research Center (Italy) and the Naoshima contemporary art museum(Japan) showed that Tadoa Ando was truly inspired and has learned a lot from the works of Louis Kahn (Sisson, 2016).

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 affected by Louis Kahn was Richard Rogers. Renzo Piano met Richard Rogers at the Expo’70 in Osaka and both 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 ‘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 were
because of his theory of ‘served’ and ‘servant’ spaces, huge services ducts rose up through the building. so that, 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 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 reflected Louis Kahn’s quality of designing. Stirling’s earlier projects for Oxbridge stressed more importance to the concept than to the artist. from that, I realize how much his effect continued by the generations.

Modernist structures, spell simplistic in design and matter, hold a difficult level of embedded sense and meaning. While the seek focuses on the performance of Louis I. Kahn – specifically the Norman Fisher house – an understanding of the design intent and overall part of the details inside Mid-Century Modernist designs can add to next preservation practices animated similar structures.

Kahn’s spend of old forms – augmented by the accuracy of new engineering that was vital for me and encouraging my goals. Kahn’s first important project was the Yale Art Gallery in New Haven how he makes incredible combine between the art piece from the past value and modern school like a piece of art. Connecticut in the early nineteen fifties. The outside of the building is very simple. The surface is made of brick and limestone. The inside of the gallery shows Kahn’s great artistic sense. For example, he created a triangle-shaped walkway of steps that sits inside a rounded concrete shell. This building was very popular.
Its completion represented an important step in Kahn’s professional life. He was now a famous architect. However, light was also a central element in Kahn’s philosophy because he regarded it as a “giver of all presences”: “All material in nature, the mountains and the streams and the air and we, are made of Light which has been spent, and this crumpled mass called material casts a shadow, and the shadow belongs to Light.” For him, light is the maker of material, and the material’s purpose is to cast a shadow (The Pacific Coast Architecture Database, 2014). And because Kahn believed that the dark shadow is a natural part of the light, Kahn never attempted a pure dark space for a formal effect. For him, a glimpse of light elucidated the level of darkness: “A plan of a building should be read like a harmony of spaces in light. Even a space intended to be dark should have just enough light from some mysterious opening to tell us how dark it is. Each space must be defined by its structure and the character of its natural light.” As a result, the light as a source is often hidden behind louvers or secondary walls, thus concentrating attention on the effect of the light and not on its origin.

The “mysteriousness” of shadow was also closely linked to evoking silence. For Kahn, while darkness evokes the uncertainty of not being able to see, of potential dangers, it also inspires deep mystery. It is in the hands of the architect to evoke silence, secret or drama "with light and shadow - to create a “treasury of shadows,” a “Sanctuary of Art (Rosa, 2006). Wherefore, moving through with the sequence of openings at the portico of the Salk Institute brings to mind the dark silence of a cloister. Dark shadow lines and holes, from the just outlined molds, present a fine texture on the massive walls. The white stone and the grey concrete walls show a lager third-dimensional canvas for the action of shadows. Shade turns into an important component to reveal the plan and the form of Kahn's massive volumes.

In this way, he learns how he made them follow the function in Unprecedented works. And even though Kahn erected many buildings in the areas exposed to extreme sunlight (such as
India and Pakistan), the designs his buildings to protect the sanctity of the shadow, he used windows and doors in his double walls to direct the light into the interior. From these points, I learned from him how to make the interior design in the successful principles of design.

Kahn created buildings of ancient beauty and great universal symbolism. Also, he today is revered among architects and architectural historians as one of the greatest—perhaps the greatest—American architect since Frank Lloyd Wright. His oeuvre is small by Wright’s standards, but it contains an astonishing number of his most important works are: the Kimbell Art Museum in Fort Worth, Texas, and the National Assembly Building in Dhaka, Bangladesh. The exhibition ‘Louis Kahn — The Power of Architecture’, presented by the Vitra Design Museum, is the first major retrospective of Kahn’s work in two decades. The exhibition encompasses an unprecedented and diverse range of architectural models, original drawings, photographs, and films. All of Kahn’s important projects are extensively documented from his early urban planning concepts and single-family houses to monumental late works such as the Roosevelt Memorial in New York City (74/1973), posthumously completed in October 2012. The view of Kahn’s architectural oeuvre is augmented by a selection of watercolors, pastels and charcoal drawings created during his travels, which document his skill as an artist and illustrator. Highlights of the exhibition include a four-meter-high model of the spectacular City Tower designed for Philadelphia, as well as previously unpublished film footage shot by Nathaniel Kahn, the son of Louis Kahn and director of the film ‘My Architect’. Interviews with architects such as Frank Gehry, Renzo Piano, Peter Zumthor and Sou Fujimoto underscore the current significance of Kahn’s work, which is being rediscovered and made accessible to a wide public audience with this exhibition. The biographic introduction to the exhibition is followed by six thematic areas that illustrate the development of Kahn’s work overtime. The leitmotif of this progress is found in Kahn’s quest for origins: in architecture and art, but also the natural sciences, and
even in the attention of humans and society. The first section of the exhibition, entitled City, is closely connected with Kahn’s career in its testing of the architect’s relationship to Philadelphia, which he came to regard as his home after immigrating to the US, and which became a kind of laboratory for the growing of his contain urbanistic and architectural principles (Leslie, 2005).

He created buildings of old beauty. The second exhibition category, Science, demonstrates how Kahn studied the structural laws inherent in nature as a means of establishing a groundwork for the refilling of architecture, the universal symbolism. In the third section, Landscape, it becomes clear, Kahn’s want to create a stronger connection between architecture and the surrounding environment also formed the basis of his residential designs: he regarded the House as an archetype and starting point for his understanding of architecture and community. Kahn’s increasing success as an architect was accompanied by the evolution of an architecture that was closely linked to the timeless foundations of traditional building, yet radically innovative and future Oriented in terms of technology and connection. The underlying idea of an Eternal Present resulted from Kahn’s intense engagement with architectural history and archetypical structures, something that is documented in his travel drawings from Italy, Greece, and Egypt. The conclusion of the exhibition is represented by the section Community, which demonstrates how essential the social significance of architecture was to Kahn, and how he derived new forms for public buildings from it. The hale museum the seven sections of the exhibition reveal a new view of Louis Kahn’s oeuvre that defies the common classifications of modernism or postmodernism. Kahn’s uniqueness lies in his synthesis of the major conceptual traditions of modern architecture — from the École des Beaux-Arts and the constructive rationalism of the nineteenth century to the Arts and Crafts movement and Bauhaus modernism — enhanced by the consideration of indigenous, non-western building traditions.
Kahn gained important impulses from architectural movements such as return to local resources factors such as air, light, and water. He saw himself as part of a tradition that spanned thousands of years and that understood architecture not only as a means of satisfying utilitarian needs but as an instrument of artistic speculation and a means of contemplating nature, history and human community. The exhibition is a cooperation of the Vitra Design Museum, the Architectural Archives of the University of Pennsylvania, Philadelphia, and The New Institute, Rotterdam (Trachtenberg, 2016).

All of that gave me an amazing example of the importance of the reset of the nature element not the light but also the water and the air. One of Kahn’s other necessary buildings is the Salk Institute, a research center in La Jolla, California. It was built in the nineteen sixties. This structure further shows how Kahn was able to unite form and function. This means his buildings were beautiful and also helpful.

The Salk Institute has two structures that surround a marble garden area or courtyard. This outside marble place is almost completely bare. The only detail is a small stream of water running through the center of the square towards the Pacific Ocean. This simple design is very wonderful. within the building are many suites for laboratories. Kahn was very careful to make They all received natural light and a view of the sea. He coupled the indoor and outdoor spaces in a very beautiful way. How kahn make the connection between the ocean and the building. That gave me inspiration for my architecture designs.

All of that made the way for me in the architecture clear and gave me the passion in the Architecture to provide modern designed efficient and sustainable projects. I love to work on innovation projects that have the potential of creating broad change, and I enjoy with people who share a like-minded vision and truly engaged with the goals and creative outcomes of the projects. The world of architecture and design is a field of presence and
profession, combine analysis and data in the context of human behavioral factors and personality to be always distinctive and successful. Light in the architecture and design is the part of one of my studies for the medical optics, and it is a finer element at all, including natural and artificial light, or both to serve human needs.

My objective is Finding solutions to make space more harmony between the light and geometric lines in an innovative and sustainable format combining between the past and the present looking forward to the future.

“Architecture struck me between the eye and the eyeball ”(Kahn, 2003) .
References


