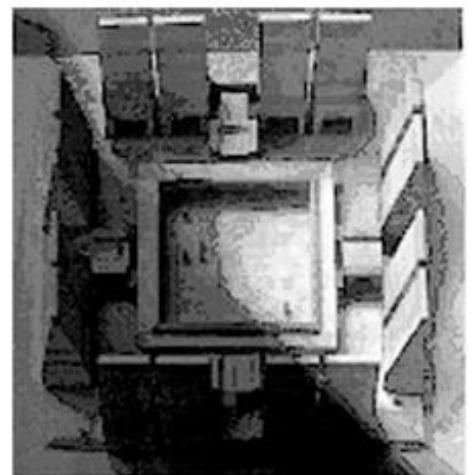
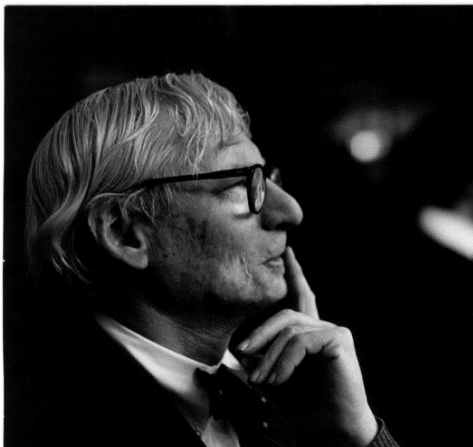


# **Louis I. Kahn - Architectural History as Mediation**

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## **Louis I. Kahn - Architectural History as Mediation**

## ABSTRACT

*Louis I. Kahn - Architectural History as Mediation* investigates the work of one of the most active architects of the 20<sup>th</sup> century who has been acknowledged by scholars as a modern thinker and architect, but is also known for his interest in history, and the clear references to historical precedents in his work. In studying Kahn's architectural training, writings, readings, travel experience, personal contacts, the context in which he practiced, and through investigating his personal drawings and two of his design projects, Kahn's layered approach to architectural history is unveiled.

In describing the architectural context of Kahn's education and work, this thesis deals with important aspects of architectural thought and making, which Kahn was exposed to, and sheds light on the motivation behind Kahn's unique philosophical quest. When investigating Kahn's drawings done during his travelling experiences, the manner in which he embodied historical sites becomes apparent. Studying archival material it tracks Kahn's studies of architectural references, and analyzing his architectural drawings and designs for the Dominican Motherhouse of St. Catherine de Ricci, Media, Pennsylvania (1965-1969, un-built) and the Hurva Synagogue in the Old City of Jerusalem (1967-1974, un-built) it exemplifies the poetic references made by his projects to historical precedents - all while concentrating on hermeneutic and phenomenological concepts relating to perception, memory and understanding of the past.

Thus, through Kahn, this dissertation addresses the contextual debate regarding the use of historical references in modern architecture from the 18<sup>th</sup> century up until the postmodern era, and deals with the importance of continuity of references in the age of fragmentation. *Louis I. Kahn - Architectural History as Mediation* reveals the possible intricate potential lying in the consideration of tradition and history in modern architecture, and sheds light on suitable endeavors in architectural thought and making which at once integrate historical references and promote originality and progress - both fundamental for innovative poetic architectural expressions.

## RÉSUMÉ

Dans *Louis I. Kahn – L’histoire de l’architecture comme médiation*, on explore le travail de l’un des architectes le plus actifs du 20<sup>e</sup> siècle. Il a été reconnu par les intellectuels pour son rôle d’architecte et de penseur moderne, ainsi que pour ses recherches en histoire et ses références aux œuvres historiques importantes. En étudiant Kahn et son éducation, sa formation en architecture, ses écrits, lectures, voyages, contacts personnels, le contexte dans lequel il travaillait, en plus d’examiner ses dessins personnels et deux de ses projets de design, on comprend son approche de l’architecture sous plusieurs angles.

En décrivant le contexte dans lequel Kahn a été éduqué et dans lequel il a pratiqué son métier, la thèse traite d’importants aspects de la pensée et pratique architecturale auxquels Kahn a été exposé, dévoilant ainsi les motivations derrière sa quête philosophique unique. En examinant les dessins de Kahn, la manière dont il incarne les sites historiques qu’il a vus durant ses voyages devient apparent. À travers l’étude du matériel d’archives, la trace des références architecturales que Kahn a étudiées devient visible. Ainsi, dans ses dessins et la conception architecturale pour le Dominican Motherhouse de St. Catherine de Ricci, Media, Pennsylvanie (1965-1969, jamais construit) et le Hurva Synagogue dans la vieille ville de Jérusalem (1967-1974, jamais construit), les références poétiques aux œuvres historiques que sont ses projets sont clairement illustrées, tout en soulignant des concepts herméneutiques et phénoménologiques en relation avec la perception, la mémoire et la compréhension du passé.

Par conséquent, à travers Kahn, cette thèse examinera le débat contextuel concernant l’usage de références historiques dans l’architecture moderne du 18<sup>ième</sup> siècle jusqu’au postmodernisme, et abordera l’importance de la continuité des références dans l’âge de fragmentation. *Louis I. Kahn – L’histoire de l’architecture comme moyen de médiation* dévoilera le complexe potentiel dans l’étude de la tradition et l’histoire de l’architecture moderne. Elle éclairera les efforts acceptables dans la pensée et la pratique de l’architecture qui intègrent des références historiques et promeuvent l’authenticité et le progrès – deux éléments fondamentaux de l’expression architecturale poétique et innovatrice.



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I dedicate this thesis to my beloved family:  
My parents, Ruth and Moshe, my brother, Ariel,  
my spouse, Saar, and my son, Anner.

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## Introduction:

### Louis I. Kahn - Architectural History as Mediation

*"Some argue that we are living in an unbalanced state of relativity which cannot be expressed in a single intensity of purpose" ... "I believe this is so because institutions have lost the inspiration of their beginning."*<sup>1</sup>

The contemporary architectural scene strives for invention from *tabula rasa*. Such architectural expressions base their foundations on constant change and aim to break all limits. The willingness to create anew, usually involving a rebellion against tradition, might risk human desires for references to allow orientation, contemplation and action.<sup>2</sup>

With the collapse of the symbolic image and the demise of mathematical and geometrical proportions as an indication for divine meaning, some other architectural expressions which relate to historical precedents, address them as aesthetic compositions that neglect aspects of myths, dreams and desires and promote architectural expressions which cannot be lived from within. Acting Like signs, they undermine the capacity of wonder and thought, prohibit real participation and communication, segregate the past from the present and foreclose the future.<sup>3</sup>

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<sup>1</sup> Louis I. Kahn, "On Monumentality," in *New Architecture and City Planning: A Symposium*, ed. Paul Zucker (New York: Philosophical Library, 1944), 77-88 .

<sup>2</sup> Hannah Arendt, *Between Past and Future* (London: Faber and Faber, 1961), 26-27, 55-56, 62-85.

<sup>3</sup> David Lowenthal, *Creative Anachronism, The Past is a Foreign Country* (Cambridge: Cambridge Univ. Press, 1985), 399-412.

In both cases historical precedents are addressed as pure means and methods while the meanings they possess are disregarded and the opportunities which could stem out of them are overlooked.

In such an age a reading of architectural precedents which goes beyond formal criteria is essential. I believe that such a reading will shed light on the potential of an integration of architectural history into contemporary design which will preserve continuity between the past, the present and the future and will bestow the feeling of orientation and belonging. Furthermore, it will promote the development of architectural ideas and expressions which address some of the real modern concerns of humanity transcending aesthetics and technology, and will suggest means to overcome nihilism of the past in favor of the construction of places which suit modern civilized cultures.

In an era where originality and invention are praised and progress is idealized how could one create? How could historical precedents be addressed and interpreted with the collapse of the symbolic image? How could the past be recognized yet not copied? Can architectural expressions preserve historical continuities, yet express concepts of modernity while integrating the past, present and the future? How could historical and traditional continuities be used as frameworks to allow questioning rather than give definition? Can architectural expression introduce drastic breaks in concepts of time, place, ritual and religion and promote creative meditative thoughts tied to daily experiences in an era of loss of many shared values? To what extent is architectural expression an unveiling of an existing truth and to what extent should it create a new reality?

Architect Louis I. Kahn's (1901-1974) approach to the role of architectural history in the modern era is layered. The references made by his projects to historical precedents are complicated to articulate and his words concerning modernity and history are poetic and difficult to understand. This thesis investigates Louis I. Kahn's work with the belief that it could offer both architects and architectural historians a unique way to address architectural history as a basis for creation which manages to preserve architectural history as a continuous lived space in modern times - A range of Louis Kahn's thought which unsurprisingly remains unknown when architecture is deteriorating in favor of subjective tastes, ideologies and the eagerness to find new themes for the sake of newness.

Louis I. Kahn was one of the most active modern architects of the 20<sup>th</sup> century. In a comparatively short independent career<sup>4</sup> Kahn built extensively. He worked on projects in the USA, India, Bangladesh and Israel which dealt with modern issues,<sup>5</sup> and made use of modern techniques and materials, some of which he was the first to discover. Kahn was an enthusiastic teacher who was known for his passion for architectural creation and developing new ideas.<sup>6</sup> He was involved in discussions regarding the character of modern architecture, and was exposed to writings and ongoing discussions regarding the reshaping of architecture in modern times.<sup>7</sup> Kahn was definitely a man of the modern era who believed in 'making' and in the active role of the architect as a shaper of a new reality.

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<sup>4</sup> Kahn's independent career started with the opening of his own office in 1947 and ended with his surprising death in 1974.

<sup>5</sup> Kahn dealt extensively with the problems of modern housing mostly in the beginning of his career, during his cooperation with Oskar Stonorov 1929-1947 and his Partnership with George Howe in the 1930's, and with the problems of modern monumentality mainly after WWI Kahn himself contributed with an essay on this issue to Paul Zucker's 'New Architecture and City Planning: A Symposium' published in 1944.

<sup>6</sup> Louis Kahn was a full professor at Yale University ,1947- 1957; and at the University of Pennsylvania,1957 -1974, as well as a visiting professor at Princeton; 1961-1967 and at MIT, 1962.

<sup>7</sup> Various ideas concerning the reshaping of Modern architecture were brought forth by The Smithsons, Le Corbusier, Philip Johnson and Russell Hitchcock, Sigfried Giedion and others.



But Kahn also found interest in history. Some of his work made clear references to historical precedents. Many of his projects dealt with historical issues and some were located in unique historical contexts. Kahn found interest in history and spoke about the past to the same extent as he did about the present and the future. Kahn never had a position in CIAM and did not associate himself with any of the modern movements. He always insisted on trying to connect his ideas to the concepts of the past, or what he termed 'volume zero'. While always happy to share his thoughts regarding the meaningful way of making new architecture, Kahn never proclaimed to hold a clear modern "methodology" of his own.<sup>8</sup>

Scholars aiming to assess the long lasting meaning and qualities that construct the work of Louis Kahn have been led to Kahn's reference to historical precedents. Scholars referring to history as aesthetics have claimed that the use of recognized compositions and typologies, as well as their formal manipulations, are the main criteria used to assess the qualities of Kahn's work.<sup>9</sup> Others, addressing history as technology, claimed that Kahn's inventiveness derives from his unique use of modern structures and materials.<sup>10</sup> Several scholars have discussed Kahn's eternal 'transcendental' and 'spiritual' design qualities which

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<sup>8</sup> Most of Kahn's ideas are compiled in: Alessandra Latour, *Louis I. Kahn : Writings, Lectures, Interviews* (New York: Rizzoli International Publications, 1991); Robert Twombly, *Louis Kahn : Essential Texts*, 1st ed. (New York, London: W.W. Norton, 2003); Dung Ngo Houston, *Louis I. Kahn: Conversations with Students*, 2nd ed. (New York, N.Y.: Princeton Architectural Press, 1998).

<sup>9</sup> Klaus-Peter Gast, *Louis I. Kahn - The Idea of Order* (Basel/Berlin/Boston Birkhauser, 1998); Kent Larson, *Louis I. Kahn, Unbuilt Masterworks* (USA: Monacelli Press, 2000); David D. Brownlee and David G. De Long, *Louis I. Kahn: In the Realm of Architecture* (New York, NY: Los Angeles, CA, New York: Universe Pub. Museum of Contemporary Art, Distributed to the U.S. trade by St. Martin's Press, 1997); Kenneth Frampton, "Louis Kahn and the French Connection," *Oppositions* 22 (Fall 1980).

<sup>10</sup> Leslie Thomas, *Louis I. Kahn: Building Art, Building Science*, 1st ed. (New York George Braziller, 2005); August E. Komendant, *18 years with Architect Louis I. Kahn* (Englewood, N.J. : Aloray, 1975).

carry a sort of feeling that links them to the monuments of the past.<sup>11</sup> Others acknowledged the phenomenological use of materials addressing human perception and promoting personal encounters in familiar abstract historical forms. Sarah Goldhagen pointed out the integration of social democratic American existential characters into historical abstract forms and claimed that this embedded ideology into Kahn's creation, thus demonstrating an integration between the past and the modern.<sup>12</sup>

However, it is my contention that the question of the relation of Kahn's architecture to tradition and history can teach us much more in our present juncture, calling for an investigation of issues relating to concepts in architectural history which lie beyond formalistic arrangements, technological explanations or phenomenological and ideological understandings. This research will aim to address the way in which Kahn's works relate to the past, and transform it into a contemporary work that not only deals with the present, but questions the future by offering a constant state of re-creation and re-interpretation of concepts and ideas.

Most of Louis Kahn's contemporaries looked towards the future, and believed in constant change and new discoveries. They asserted that architecture is by definition an answer to new problems and therefore disconnected from its past. Most advocated a conception of the "modern" understood as synonymous with a re-invention of architecture,

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<sup>11</sup> Alexandra Tyng, *Beginnings: Louis I. Kahn's Philosophy of Architecture* (New York Wiley, 1984); John Lobell, "Between Silence and Light, Spirit in the Architecture of Louis I. Kahn," (Boulder: Shambhala: distributed in the U.S. by Random House, 1979).

<sup>12</sup> Sarah Goldhagen, *Louis Kahn's Situated Modernism* (New Haven [Conn.], London: Yale University Press, 2001); Michael Cadwell, *Strange Details* (Cambridge, Mass: MIT Press, 2007).

so it would suit the new mode of living.<sup>13</sup> Other architects in the US adopted the Beaux-Arts traditional attitude to architectural history and supported a positivistic adoption of architectural precedents. They believed that the "classics" expressed logic and rational elements of architecture which were conceived as superior and stable universal truths. Combinations of elements and forms were extrapolated from historical precedents (without privileging one era over the other) to form historical typologies which were reused in modern programs and aligned according to conservative modern lines.<sup>14</sup> Post-modern architects such as Robert Venturi, Charles Moore and Charles Jencks adopted historicism - a naive positivistic approach which supported the use of historical artifacts as signs to allow the settling of questions within their immediate context and time.

I will aim to show that Louis I. Kahn did not neglect history in the pure belief in technological progress. Nor did he embrace history in the nostalgic, positivistic formal sense which was very typical for the dominant schools of thought during that era and in the Beaux Arts Education. Furthermore, he did not naively and ironically address history as did postmodern architecture. Instead, Kahn offered to use historical references as a basis, a common ground for creation, while challenging concepts of ritual, time, place, religion, and narrative according to contemporary definitions.

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<sup>13</sup> Walter Gropius and Ludwig Mies van der Rohe sought to establish an architecture that could represent modern times. System for scale and architectural proportions were emphasized. Clarity and simplicity, order and balance and a rational approach that would guide the creative process of architectural design were privileged. *Congrès International d'Architecture Moderne* (CIAM) Constantly discussed issues concerning New Housing, New Planning, New Methods for Sketching and Drafting etc; Henry Russell Hitchcock and Philip Johnson discussed notions of space, in their book *The International Style* to coincide with an architectural exhibition at the Museum of Modern Art distinguishing features that made possible a definition of a new "style": emphasis on volume as opposed to mass; regularity as opposed to symmetry; and dependence on the intrinsic elegance of materials as opposed to applied decoration.

<sup>14</sup> Julien Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts* (Paris: Librairie de la Construction Moderne, 1909).

As a humanist, Kahn rejected formal manipulations as the basis for architectural creation and believed that the only real source of architectural meaning was the translation of rituals and beliefs into spatial programs offering the expression of different narratives. As a modern activist Kahn was convinced that he had the capacity to affect and create these rituals and beliefs, thus, to take a creative part in the 'making of history'. Yet, Kahn was critical and modest enough to understand that "our institutions are on trial" (Kahn's words) and that rituals and beliefs in the modern world were under a stage of transformation and hence were incomprehensible and fragmented.

Kahn acknowledged the collapse of the Symbolic Image which depended upon mathematical proportions and logic and was challenged to rethink architecture from within and to draw its reasoning out of Western Culture and its deep spiritual and epistemological roots in antiquity.<sup>15</sup> Modern History in Kahn's approach was no longer viewed in terms of symbolism or analogy, assuming a divine eternal truth which lay outside the building. Instead, history was regarded as a search for a continuum of events leading from the past to the present and into the future - a narrative which recorded and interpreted past events in relation to the present reality and future speculations.

Kahn understood that history from modernity onwards, by definition, also carried a sense of 'making history' and was partly our own creation. The past was regarded as an open field to be changed and transformed according to contemporary ethics, wonder and

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<sup>15</sup> As happened to architecture after it slowly fell into history, at the end of the 18<sup>th</sup> century onwards, as explains Alberto Pérez-Gómez in Alberto Pérez-Gómez, *Built Upon Love, Architecture Longing after Ethics and Aesthetics* (London: MIT Press, 2006), 188-89; also see Friedrich Nietzsche, *All Too Human*, trans. R.J. Hollingdale (Cambridge: Cambridge University Press, 1986). frag. 223, pp. 91, 101, 05.

imagination. The strength of tradition, according to Kahn, lay precisely in its constant living character and it was this notion of change, rather than fixed ideas, which gave it its applicability and importance.<sup>16</sup>

Kahn suggested a different reading of historical precedents and their use in modern architecture. He inquired into beginnings from which he developed his modern interpretations. In this sense, Kahn's attitude to architecture offers a positive interpretation of post-modernity, one which does not call for a naive return to European traditional thought and also does not accept modernity as its pessimistic end. This unique approach accepts that negation of eternal truths or a search for a transcendental dimension through the fetish of the divine cannot lead to a re-appropriation of an alienated essence. Kahn offered to overcome historicity and the reduction of truth as common facts, and suggested revealing the multiplicity of choices lying within historical meaning.<sup>17</sup>

In Chapter One I will situate Kahn within the architectural context in which he was educated and in which he practiced - Between the Beaux Arts orgy towards the past and their call to preserve the architecture of the past as fixed and eternal truth, and between the Modernists' attitude to history as false, their interest in new beginnings and their call to concentrate on new progressive architecture of the eternal and ideal future. I will examine important aspects in architectural thought and making which Kahn was exposed to and will shed light on the motivations lying behind Kahn's unique philosophical quest. I will then show that Kahn's personal background, interests, and activities allowed Kahn to understand

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<sup>16</sup> Lowenthal, *Creative Anachronism, The Past is a Foreign Country*: 399-412.

<sup>17</sup> Gianni Vattimo, *The End of Modernity- Nihilism and Hermeneutics in Post Modern Culture* (Cambridge: Polity, 1988). 31-41, 12-13.

architectural history as a temporal and poetic construction and experience, and helped him to develop a unique philosophy regarding the use of architectural history in his contemporary architectural making. I will also examine Kahn's ideas regarding architectural history as they were expressed in his essay "On Monumentality" (1944), and in his talk that closed the CIAM 1959 meeting.

In Chapter Two I will examine Kahn's drawings and paintings which he produced during his extensive trips to Europe and the Mediterranean, 1928-1929 and 1951-1952, to elucidate the way in which Kahn's understanding of architectural history as a temporal construction allowed him to address its images, programs, and narratives, as raw material for his own creation, paving the way to contemplation, mediation and new architectural making. Emphasis will be put on the use of methods of representation which are similar to those used by Surreal and cubists artists: the challenge of the visual, the fragmentation of reality, and the creation of a hermetic imaginary world which is modified and changed in accordance to human perception and temporal narratives will bring forth the embodiment of historical monuments by Louis Kahn.

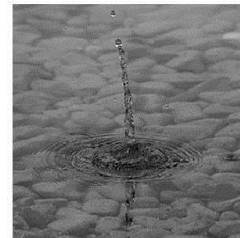
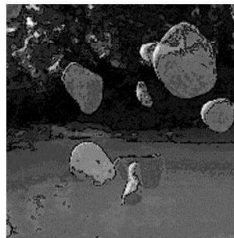
Chapters Three and Four will be devoted to exploring the manner that Kahn addressed architectural history in his designs. Two projects in which Kahn used architectural history as a poetic field of knowledge will be investigated. These allowed him to generate modern architectural expressions that were tied to the shared past, concerned with the present, and were open to interpretations, contemplation, desires and wills of the unknown future – and thus generated meaningful participation. Kahn's design for the

Dominican Motherhouse St. Catherine de Ricci, Media, Pennsylvania; (1965-1969 unbuilt) will be investigated in relation to Benedictine Monasteries, Cistercian Monasteries, and Cloistered Dominican/ Franciscans Convents; Kahn's design proposals for "The Hurva Synagogue" (1967–1974, unbuilt) in the Old City of Jerusalem will be investigated in relation to Archaic Biblical Times' Structures, the Tabernacle, the Temples in Jerusalem, the Historical Hurva Synagogue, and other Rabbinic Synagogues. In both projects I will expose the manner that Kahn dealt with issues related to the conception of time-space, ritual, and religion immanent in the historical precedents which the projects refer to, re-created and re-interpreted by Kahn in his designs.

Based on Kahn's paradigm, the closing chapter of this research will be devoted to a conclusion and concentrate on Kahn's living history, promoting the possibility for poesis in contemporary architectural making. The research will suggest that the use of fragments, apparition, shadows, and traces of decaying architectural history as generators of nostalgic and melancholic feelings about the past, and as promoters of unaccomplished future desires, could channel the way towards reclaiming the lost temporal and erotic space of experience of contemporary architecture. While the first four chapters will be generated by historical (hermeneutic) approach and loyal to Kahn's work and to the "academic facts" as they were revealed through the research in Kahn's archives and in secondary resources (based on the material Kahn read, places he visited, his correspondences, architectural designs, and personal sketches), in the fifth chapter I expand on the relevance of the research findings using theoretical lenses of philosophers Friedrich Wilhelm; Paul Ricœur;

Octavio Paz; and Hans Georg Gadamer (Kahn's contemporaries, but none of which Kahn read).

It is my hope that my present research will unveil possibilities of embodiment and interpretation of architectural history, to channel ways to deal with the potential future. It will shed light on the importance of memory, narratives, storytelling, dreams, and pondering in architectural creation, their ability to bring once again historical references to life. I hope to emphasize the power of bounded imagination and to reveal the reliance of freedom on limits. Thus, this dissertation will bring forth the importance of the continuity of references in the age of fragmentation, as a basis for invention, and the possibility of history to become a continuous lived space as that of a story.





## **Chapter One:**

### **Developing an Architectural Philosophy -**

#### **The relationship between Architectural History and Contemporary Design**

*We're living in an era of new space demands, new things which are so fresh and unfamiliar that most minds are unable to direct them in a way which gives an imagery of a truer way. And the fact that we have such wonderful resourcefulness to boot- no limits – produces naturally a kind of individual approach...It produces a great deal of permissiveness, and the result is really chaotic... The whole thing is a mess of copying and recopying and wrong attitudes and misinterpretations of things very well considered...Does this individualism in architecture, which now seems to be permitted an unprecedented existence – an architecture where men are given freedom to express themselves in a way that, stylistically, is apparently uncontrolled, undirected, and unmotivated - help these institutions? Will it help future generations to understand what we did, and will they believe that we performed an act of new freedom, the likes of which we still can't define, or will they consider it irresponsibility?<sup>1</sup>*

This chapter is built upon aspects of architectural thought and making which Kahn was exposed to during his training. It will thus serve as background to the following chapters, and assist in understanding the motivation and thought behind Kahn's drawings of historical sites and his designs for the Motherhouse for the Dominican Sisters and the Hurva Synagogue – drawings and projects in which Kahn addressed architectural history as a poetic field of knowledge, allowing him to generate modern expressions that used architectural history to bring forth the significant temporality of existence.

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<sup>1</sup> Louis I. Kahn, "The Sixties – A P/A Symposium on the State of Architecture: Part 1, 1961," in *Louis I. Kahn: Writings, Lecture, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 121.

During Louis Kahn's career, architecture in the United States was situated between the Beaux Arts' empathy towards the architecture of the past and the International Style's call for new beginnings.<sup>2</sup> Beaux Arts theories regarded architectural history as a source of fixed truths. They sought progress via excelling in the use of past architectural models, and advocated a formalistic, tight, and direct relationship with the past. The International Style, on the other hand, regarded history as false, and believed that the architecture of the past must be forgotten in order to begin anew. It sought progress by erasing all traditions, and promoted the use of "open aesthetics" to express the unknown future of modern culture.<sup>3</sup> It was through Kahn's readings, travels to historical sites, and conversations with clients, that he became acquainted with the importance of architectural history. Acknowledging the modern crisis of identity, and the difficulty of defining as-yet undefined ideas, beliefs, rituals, and desires, Kahn found his own unique way to combine the Beaux Arts' and the International Style's approach to architectural history to develop a theoretical framework which assisted him to design "Institutions on Trial" in an era of transition - places that reconciled the decaying past with the potential, anticipated, and unknown future, and thus reclaimed potentially lost meanings in the modern architecture through the use of architectural history.

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<sup>2</sup> Sigfried Giedion, *Space, Time and Architecture, The Growth of a New Tradition* (Cambridge, Massachusetts: Harvard University Press, 1963), Introduction, p. XXVI.

<sup>3</sup> Robert Stern, "A. M., PSFS: Beaux-Arts Theory and Rational Expressionism," *The Journal of the Society of Architectural Historians* 21, no. 2 (1962): 94.

## Architectural History as Truth – The Fixed Eternal Past

### The Call to Preserve Architectural History in Contemporary Design

Louis I. Kahn was schooled in the Beaux Arts tradition at the school of architecture at the University of Pennsylvania (1920-1924) where his teachers, primarily Paul Philippe Cret, the head of the architectural program and Kahn's critic in his final year of studies, as well as George Howe and John Haberson, acquainted him with Beaux Arts architectural theories of Jean-Nicolas-Louis Durand, Julien Guadet, and Auguste Choisy.<sup>4</sup>

Beaux Arts theories regarded architectural history as united whole presenting continuous stable truths, and advocated a tight and direct relationship between contemporary architectural design and architectural history, while seeking progress via excelling in the use of past architectural model by using modern syntactic methods of design.<sup>5</sup> Architectural history was described in an encyclopedic manner, as a linear,

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<sup>4</sup> Beaux Arts architectural design methods taught at L'Ecole des Beaux-Arts in Paris were imported to the U.S. in the late 19th century, and dominated architectural education in the U.S. until World War II. Mark Jarzombek, *Designing MIT: Bosworth's New Tech* (Cambridge, Massachusetts: Northeastern University Press, 2004).

Paul Phillippe Cret came to the United States in 1903 to teach architectural design at the University of Pennsylvania where he taught and headed the Department of Architecture for more than thirty years, from 1903 until 1937.

Paul Philippe Cret Theophilus White Ballou, "Paul Philippe Cret: Author and Teacher," ed. Harbeson F John (Philadelphia PA The Art Alliance Press, 1973), 21; David Gilson De Long David B. Brownlee, *Louis I. Kahn: in the realm of architecture* (Museum of Contemporary Art, 1997), 14.

The first American textbook on the Beaux-Arts methods was an expansion of articles that John F. Harbeson had written for **Pencil-Points** magazine. The book appeared in 1926 (after Kahn's graduation). Thus, it is reasonable to argue that Kahn's sources of information were the French books rather than their English translations.

Kahn did not read French fluently, so it is probable to believe, that Beaux Arts books were used by Kahn mainly as sources for architectural images. However, it had been pointed out that Paul Cret used to quote Julien Guadet in Kahn's class, it is unknown whether Cret quoted the French source or used his own free translation into English.

Joseph A. Burton, "The Aesthetic Education of Louis I. Kahn, 1912-1924," *Perspecta* 28, no. Architects (1997): 212-14., Paul P. Cret, "The Ecole des Beaux-Arts and Architectural Education," *The Journal of the American Society of Architectural Historians* 1, no. 2 (1941): 7, 12.

<sup>5</sup>Guadet asserted: "*Le classique c'est l'équilibre stable*"... »Mais ce beau titre de classique qui, en art, est la canonisation définitive, n'est pas affaire d'origines ou de dates, de siècles ou de latitudes. Est classique tout ce qui de temps, de pays, d'école. Le classique ne se décrète pas il s'impose; on ne peut que le constater et l'enregistrer. Le classique, c'est tout ce qui est resté victorieux dans les éternelles lutes des arts, tout ce qui est resté en possession de

progressive, organic and harmonious “meta-narrative” leading towards modern culture, encompassing a process in which building elements (such as columns, doors, tiles etc) building types, (such as libraries, churches and monasteries, houses, halls, and so on) and building structures developed like zoological species, each testifying a movement from formal simplicity to greater complexity while preserving taxonomies that pleased the eye and the mind and defined beauty along centuries, and hence provided useful architectural knowledge to be implemented in contemporary practice.<sup>6</sup> Jean-Nicolas-Louis Durand presented historical building as a development of functions, and showed how the architecture of the ancients and the moderns were composed from the same elements, which were manipulated according to needs but remained similar in their governing principles. Julien Guadet, described architectural history as a development of aesthetics, and demonstrated how an increasing sophistication over the centuries in compositional methods led each era to create buildings with a growing number of spaces while maintaining the governing appearances of the historical prototypes from which they originated. Auguste Choisy, followed their footsteps and presented architectural history as a development of architectural structures which became more complex along the centuries.<sup>7</sup>

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*l'admiration universellement proclamée. Et tout son patrimoine affirme, à travers l'infinie variété des combinaisons ou des formes, le même principe invariable, la raison, la logique, la méthode."* Julien Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts* 4ed. (Paris: Librairie de la construction moderne in Paris, 1910). Livre 2, Principes Genereaux, 83.

<sup>6</sup> Gabriela Śeitek, *Writing on Fragments, Philosophy, Architecture and the Horizons of Modernity* (Warsaw, Poland: Warsaw University Press, WUP, 2009), 83, 128-29. On architecture as type, see Jean Nicolas Louis Durand, *Precis of the Lectures on Architecture* (Los Angeles: The Getty Research Institute, 2000). These lectures were given in a basic architectural course for engineers studying in the École Polytechnique, which became a popular text in architectural education in the 18<sup>th</sup> and 19<sup>th</sup>. Building types included: Palaces (154-157), Public Treasuries (156), Courthouses (157), Town and City Halls(157-158), Colleges (158-159), Buildings for Assemblies of Scholars (159), Libraries (160), Museums (161); Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts* and especially Livre 2, Principes Genereaux, 84-91., Auguste Choisy, "Histoire de l'Architecture," (1899).

<sup>7</sup>Burton, "The Aesthetic Education of Louis I. Kahn, 1912-1924," 212-14, Cret, "The Ecole des Beaux-Arts and Architectural Education," 7,12, Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts* Livre 2, Principe Genereaux, 83, 85.

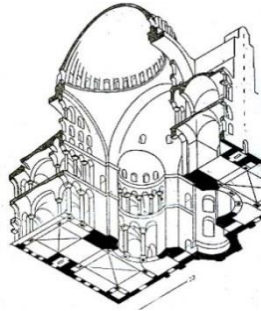


Fig 01a



Fig 01b

Fig 01a: Hagia Sophia presented in axonometric illustrations in Auguste Choisy's *Histoire de l'Architecture*, 1899 (From <http://www.arthistory.upenn.edu>, 16/07/2012)

Fig 01b: Fragment of a gallery vault at the Palatino, Rome perceived from a worm's-eye view in Auguste Choisy's, *L'art de bâtir chez les Romains*, Paris, 1873 (From <http://www.etsavega.net/dibex/Choisy-e.htm>, 16/07/2012)

Believing in architectural history as a source of fixed truths, Beaux Arts theories believed that history could be known through its architectural images.<sup>8</sup> Cret believed his students should and could know the historical architectural “orders” directly from buildings’ appearances, as if they were an inherited language. His students were encouraged to memorize historical buildings’ elements, typologies and structures as they were described by Durand, Guadet and Choisy,<sup>9</sup> and analogues to the manner in which they believed architectural history was experienced— as objective scientific images, experienced via accurate optics, perceived by the a Cartesian rational apparatus using accurate Hegelian optics, promoting a scientific semblance of the idea, and allowing to disclose truth without interference from any other senses - then restored in the mind and memorized - as “appearances” which were in complete alignment with the real “presence”, and projected upon the daily lived environment as holistic, unified

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<sup>8</sup> Richard Kennington, "On Modern Origins: Essays in Early Modern Philosophy," ed. Pamela Kraus and Frank Hunt (Lanham, Md: Lexington Books, 2004), ch 1, 4. Guadet argues to be platonic. However, nothing in Plato saw beauty as truth in a western scientific modern sense that the Beaux Arts adopted.

<sup>9</sup> Cret, "The Ecole des Beaux-Arts and Architectural Education," 12.

impressions.<sup>10</sup> Kahn mentioned that he used to trace the images of the historical buildings in copies of the Beaux Arts treatise that he held, already as a student, in his personal library (and used to refer to in his office later, when designing his projects) - as architectural images depicted by accurate fine ink lines, and placed in a mathematical space, which was sometimes accompanied by a grid or a scale.<sup>11</sup> Durand accurately presented elements, plans, elevations, and sections, of buildings of the past, Guadet followed in his footsteps, and Choisy presented the buildings of the past and their elements with the aid of axonometric illustrations, perceived from a worm's-eye view, placed in a X, Y, Z space, encompassing the entire building - its interior and exterior (plans, sections and elevations) in one image, and by doing so, did not take into consideration the embodied and gravity bounded human perception, and brought the objectification of the architectural image to an extreme (Fig 01a, Fig 01b).

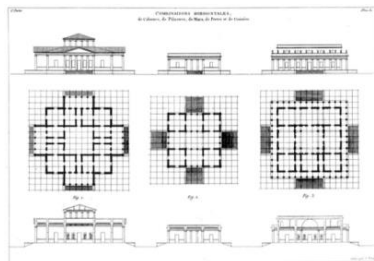


Fig 01c

Fig 01c: Jean-Nicolas-Louis Durand's "Composition Horizontale" - Variation of compositional arrangements in alignment with the main aesthetic characteristic distribution of forms and the location of axis) of historical buildings (From Jean-Nicolas-Louis Durand, *Précis des leçons d'architecture données à l'École polytechnique*, Paris, France, 1823)

Following Durand and Guadet, Cret held that the modern architect's responsibility was to restore the "beautiful architecture" of the past, by re-organizing and composing spaces within unified structures in alignment to historical precedents, while

<sup>10</sup> See Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts* Livre 2, 98-99, 84-85.

<sup>11</sup> Stern, "A. M. PSFS: Beaux-Arts Theory and Rational Expressionism," 85; Burton, "The Aesthetic Education of Louis I. Kahn, 1912-1924," 214., Durand, *Precis of the Lectures on Architecture*: 40-42, 85.

using advanced modern systematic, synthetic, and analytic methods. A good modern “program”, according to Cret, had to include a multiplicity of modern spaces in a good-looking, familiar, and well-organized “beau plan,” while omitting elements which could harm this impression, so it resonated with the truthful arrangements of the past, and enabled the final plan to preserve the distribution of forms, governing axis, and relationships between parts and the whole – and expressed justness, balance, coherence, and conformity with the architectural precedents (Fig 01c).<sup>12</sup>



Fig 01d

Fig 01d: Zantzinger, Borie and Medary’s (with Horace Trumbauer) Philadelphia Museum of Art, Philadelphia, Pennsylvania, US, 1930-1932 – A Beaux Arts building with direct relationship to architectural history.

(From <http://www.philamuseum.org>, 16/07/2012)

Kahn was further exposed to the emphasis on the direct relationship between architectural history and present design while working as an architect before opening his own practice: At John Molitor's firm Kahn assisted with the buildings of the Sesqui-Centennial International 1926 exposition (in 1924); At the office of William Lee, Kahn was part of a team working on Beaux Arts theatres (in 1927);<sup>13</sup> at Paul Cret's office, together with his former teacher John Haberson, Kahn was exposed to the working on

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<sup>12</sup> Cret claimed: *"Modern architecture can then no longer aspire to the simplicity of the Antique or the Mediaeval. A modern plan provides a multitude of rooms for various uses distributed generally over several floors, and the external and internal appearance of the building faithfully renders this complexity (...) We may say that the more modern a program is, the more complicated it is: and we cannot speak of this complexity as a fault chargeable to the architect, when it is only the expression of our use and custom."* Paul P. Cret, "Modern Architecture," in *Significance of the Fine Arts* (Boston: Morsholl Jones Company, 1923), 181-243.

<sup>13</sup> The Sesqui-Centennial International Exposition of 1926 was the world's fair hosted in Philadelphia. Kahn was the senior draftsman for the design of the exposition buildings in John Molitor's office. Robert McCarter, *Louis I. Kahn* (London, New York Phaidon, 2005), 24-25.

Beaux Arts museums and civic buildings (from 1929 to 1930),<sup>14</sup> and then he was working at the firm of Zantzinger, Borie and Medary, who at the time, (with Horace Trumbauer) had built the Philadelphia Museum of Art (from 1930 to 1932, Fig 01d).<sup>15</sup> In addition, the Beaux Arts movement heavily influenced US architecture in the period from 1880 to 1920. Philadelphia, the city where Louis I. Kahn's life was firmly rooted was filled with Beaux Arts buildings that must have affected Kahn's memory.<sup>16</sup>

During his residency at the Academy in Rome (1950-1951) Kahn became good friends with Frank Brown, resident archeologist in the Academy since 1947, who pursued archaeological fieldwork in Italy, and was Kahn's colleague from Yale, who took Kahn through Rome, Ostia, and possibly through Pompeii, and shed light on the role of rituals in shaping the forms of historical sites. Brown likely helped Kahn to understand architectural history as living space- manifestations of physical imprints paving rituals and actions, through which humans took part in narratives and beliefs. In his writings Brown demonstrated how historical architectural forms and their matrix - arrangement, sequence, size, shape, polarization, and hierarchy of volumes, variety of materials, lighting effects, and the use of architectural elements such as steps, vaults, ramps,

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<sup>14</sup> Theophilus White Ballou, "Paul Philippe Cret: Author and Teacher," 21.

Some important buildings designed by Cret include the Rodin Museum, Philadelphia (with Jacques Elizabeth Greenwell Grossman, *The Civic Architecture of Paul Cret* (Cambridge, USA: Rhode Island School of Design, Cambridge University Press, 1996), 165-83.

<sup>15</sup> Tom Crane Roger W. Moss, *Historic landmarks of Philadelphia*, (Philadelphia, PA: University of Pennsylvania Press, 2008), 292.

<sup>16</sup> McCarter, *Louis I. Kahn*: 16-17, 20. Some important buildings in Philadelphia known to Kahn included Philadelphia's City Hall (designed by John McArthur between 1871 and 1901, in the Second Empire Style), Philadelphia's Independence Mall (designed by Edmund Woolley and Andrew Hamilton, 1732-1753, in the Georgian Style), the Philadelphia Museum of Art (designed by Horace Trumbauer and the firm of Zantzinger, Borie and Medary, 1919-1929, and inspired by the South Kensington Museum in London), and 30<sup>th</sup> Street Station (designed by Graham Anderson, Probst and White, 1929-1934), to mention but few. Important Beaux Arts buildings in the United States that Kahn must have been familiar with include the Palace of Fine Arts at the Chicago World's Columbian Exhibition (designed by Charles Atwood, 1893), the New York Public Library (designed by John Carrère and Thomas Hastings, 1911), and The Pennsylvania Station in New York (designed by Charles F. McKim, William R. Mead, and Stanford White, 1910). David P. Fogle Marylin Klein, *Clues to American Architecture* (Washington, DC: Starrhill Press, 1986), 38.



terraces, arches, columns, stairs, views, frames created climaxes, and promoted experiences through movement, transformed actions and “raw stuff of experience and behavior,” “embodied in the act itself or stamped on the nervous system of the agent,” into “formal patterns of action and reaction” and “fixed, habitual forms of conduct,” and therefore served as stages both encasing and enforcing rituals.<sup>17</sup> He regarded ancient architecture and the rituals it encased as providers of the basis for spiritual order, orientation, and thought, which bestowed a feeling of security and identity, which became sources of inspiration for the following generations. In addition, each epoch hailed earlier architectural experiences, and hence continuities within architectural structures, dating from different periods could be found.<sup>18</sup>

Kahn who believed that architecture reflected a way of life and regarded architecture an offering of “a spirit which knows no style, knows no technique, no method,” possessing the “meaning of philosophy, the meaning of belief, the meaning of faith,” found delight in Brown's explanations.<sup>19</sup>

### **Architectural History as False- The Eternal Progressive Future**

#### The Call to Erase Architectural History in Contemporary Architecture

During Kahn's career modern architecture concerned mainly with aesthetics, arrived at the United States. The belief in a unified continuous history was dismissed in

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<sup>17</sup> Frank E. Brown, *Roman Architecture* (New York: George Braziller, 1975), 9-21.

<sup>18</sup> *Ibid.*, 28.

<sup>19</sup> Louis I. Kahn, *Conversations With Students*, 2nd ed. (Princeton Architectural Press, 1998), 31-32.

Kahn's conversations with students date to the 1960's however, Kahn spoke about architecture in a similar way already in the 1940's see Louis I. Kahn, "On Monumentality," in *New Architecture and City Planning, A Symposium*, ed. Paul Zucker (New York: Philosophical Library, 1944).

favor of the relative approach of historicity which regarded history as false, and was based on the assumption that once history had been freed from the dominion of God, and control was to be given to the modern architect, whose authority was to follow his independent actions in order to express modern culture. Progress was cherished, a return to any other time was perceived as evidence of a sort of decadence, and it was believed that the representation of the unknown new future by definition required erasing traditional orders, forgetting the past, and destructing its memories.<sup>20</sup>

Henry-Russell Hitchcock and Philip Johnson, Siegfried Giedion, George Howe, Joseph Hudnut, and other architectural historians and theoreticians whose work was known to Kahn sounded the call to create from a *tabula rasa* and to invent a new “architectural language” that would break with the architecture of the past and bring forth the spirit of the age while emphasizing the open, progressive and anticipated future.<sup>21</sup> Siegfried Giedion advocated to put aside the traditional architectural manifestations expressing cyclical time, and, to implement the new relationships between time and space in contemporary design.<sup>22</sup> Siegfried Giedion, George Nelson, Philip L. Goodwin, Ernest Feine, Fernand Léger, and architect J. L. Sert criticized attempts to address the

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<sup>20</sup> Sarah Williams Goldhagen, *Louis Kahn's Situated Modernism* (New Haven [Conn], London Yale University Press, 2001), 50.

<sup>21</sup> Henry Russell Hitchcock was part of Kahn's architectural circle at Yale University; Siegfried Giedion published Kahn's essay "On Monumentality" in the Zucker Symposium. George Howe and Louis Kahn were collaborating already in the 1930's and became partners later.; Kahn and Hudnut were corresponding. Ibid., 29. In 1946 Hudnut offered Kahn a teaching position at Harvard University. Hudnut to Kahn "U.N.O", Box 63, Kahn Collection; Hudnut and Kahn were also considering producing a film together., David B. Brownlee, *Louis I. Kahn: in the realm of architecture*: 34, 48, n.72.

<sup>22</sup> Giedion, *Space, Time and Architecture, The Growth of a New Tradition* XXVII. Giedion's philosophy of history was influenced from the Swiss historians, his mentor Heinrich Wölfflin and Wölfflin's own teacher, Jakob Burckhardt, and supported by the Hegelian tradition, he regarded history as "a moving process of life," a succession of *zeitgeists* that were each centered on a major constituent idea. Jacob Burckhardt, *Force and Freedom: Reflections on History*, 2nd ed. (New York, 1964), 82. On Giedion's philosophical heritage see Spiro Kostoff, "Architecture, You and Him: The Mark of Siegfried Giedion," *Daedalus* 10(1976): 192-93; Giedion, *Space, Time and Architecture, The Growth of a New Tradition* XXVI-XXXII, 2-3. The book was an outgrowth of the 1938-39 Charles Eliot Norton lectures and seminars given by Giedion in Harvard University, went through five editions, and became a well-known text for a generation of architects.

architecture of the past as bearer of truths, and called for the finding of new means to express forces of contemporary society,<sup>23</sup> and George Nelson went even further and insisted that there was no place for monuments that aimed at commemorating ideals (“immortal monuments”) in modern, cynical, and pseudo-ideal societies which were no longer governed by shared religious beliefs, social organizations, or agreed upon ideas, and claimed that modern architecture had to find means to deal with the constantly changing.<sup>24</sup>

The “Modern Architecture – International Exhibition,” curated by Alfred H. Barr and mounted at New York’s Museum of Modern Art in 1932, and Henry-Russell Hitchcock and Philip Johnson’s publication, *The International Style*, which followed, defined a new aesthetic language for modern, future-directed architecture.<sup>25</sup>

Elucidating aesthetic principles exhibited in the works of American and European architects (such as Le Corbusier, Oud, Mies van der Rohe, Howe, Hood, Howe & Lescaze, and Neutra, the most significant being Mies ) while neglecting their specificity and multilayered meanings, Hitchcock and Johnson defined the modern contemporary style as an aesthetic language to be based on volumes in opposition to closed spaces; masses, solidity and regularity, in opposition to symmetry and balance; and elegance and honesty, in opposition to decoration and ornament.<sup>26</sup> The spaces of buildings of the contemporary style had, according to Hitchcock and Johnson, to be composed from

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<sup>23</sup> Paul Zucker, *New Architecture and City Planning, A Symposium* (New York: Philosophical Library, 1944).

<sup>24</sup> “Stylistic Trends in Contemporary Architecture” in *ibid.*, 569-76.

<sup>25</sup> Philip Johnson Henry Russell Hitchcock, *The International Style* (New York: W.W.Norton & Company, 1996; repr., first printed in 1932). VII-XIII, 11 .

<sup>26</sup> *Ibid.*, 13-26, 17-24, 28-34, 56-58.

clean forms, simple lines, and consistent rooms monotonously distributed, to enclose open and translucent interiors, loosely defined by continuous detached walls and flat floating roofs, while using imaginary geometrical webs upon plans and elevations to help in arriving at these desired fluid patterns;<sup>27</sup> and the architectural elements of buildings should be built from thin smooth, non-textured materials such as stucco and glass.<sup>28</sup>

The aim of the new aesthetic language was to bring forth “plain” architectural forms, elements, and volumes, emptied from spatial networks, in order to break from traditional rules and to negate obsolete values, and to produce architectural images and programs that did not allude to recognized historical building. Thus, as Gideon explained the new spaces were free from familiar meaning and association, did not allow calling the passer to recollect its memories, and became a stages open towards futuristic articulations and developments.<sup>29</sup> In his article "The International Style Twenty Years After" (published in 1951) Hitchcock claimed that the New Style “cured historical-revival disease,” and set the stage for the varied approaches to architecture that took place after it, was a "frame of potential growth, rather than a fixed crushing mould."<sup>30</sup>

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<sup>27</sup> Spaces encasing different functions were to be defined by similar units. Three different kinds of rooms were to be used to impart a modern sense of space: large volumes would incase the buildings' major spaces, smaller volumes would flow into each other without restricting partitions to allow connection between the parts, and some ordinary closed spaces would be used to allow for more intimate needs.

Ibid., 22-28, 69-84. Henry-Russell Hitchcock, "Twenty Years After," in *The International Style* ed. Philip Johnson Henry-Russell Hitchcock (New York: W.W.Norton & Company, 1996), 249.

<sup>28</sup> Henry Russell Hitchcock, *The International Style*: 40-45, 69-88.

<sup>29</sup> Ibid., 22-28, 40-45, 69-88., Giedion, *Space, Time and Architecture, The Growth of a New Tradition* introduction, XXVII.

<sup>30</sup> H. R. Hitchcock's article was published in August 1951 in the *Architectural Record*. It addressed some of the important statements in the 1932 *International Style* publication and expanded on the developments which took place in modern architecture in relation to them. Hitchcock, "Twenty Years After," 237 -55.



Fig 02a

Fig 02a: George Howe and William Lescaze's Philadelphia Savings Fund Society building (The PSFS building), Philadelphia, Pennsylvania, US, 1929-1932- A modern building whose Aesthetics, form, material and program) does not allude to any architectural precedents.  
(From <http://www.yale.edu/opa/arc-ybc/v33.n1/story8.html>, 20/07/2012)

Paul Cret, Kahn's former teacher and employer, was already engaged with creating modern architecture characterized by abstract aesthetics in 1923, and George Howe had already been distancing himself from formal historical precedents when he collaborated with Kahn in the 1930's considered the first major American architect of the modern movement who made use of abstract architectural elements and materials (largely by virtue of his work, from 1929 to 1932, with William Lescaze on what was later considered to be the first modern skyscraper, the Philadelphia Savings Fund Society building, Fig 02a).<sup>31</sup>

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<sup>31</sup> David B. Brownlee, *Louis I. Kahn: in the realm of architecture*: 21; McCarter, *Louis I. Kahn*: 32.

In the 1940's Howe was also expressed his ideas about the open space in which "aggregates of planes of references defining the movements, whether in or out or through, of certain portions of universal cantilevered space," arguing that in modern times the "flow of space can neither be enclosed nor excluded – not even limited by thought or fact. It can only be directed." George Howe, "Flowing Space: The Concept in Our Time," 1948, quoted in Michael J. Lewis Eugene J. Johnson, Ralph Lieberman, *Drawn from the Source: The Travel Sketches of Louis I. Kahn* (Williamstown, Mass.: Cambridge, Mass: MIT Press 1996), 74.

*Eternity has to be revealed: I believe that it is revealed by circumstances,  
but I also believe that one cannot search for truth ...truth is always changing.*<sup>32</sup>

During his architectural education and training Kahn became familiar with the aesthetics and structure governing the appearances of historical monuments, and became acquainted with some continuous beliefs and ideas which shaped rituals that took place in the monuments of the past. As Kahn stated "Architecture came to me through examples of the great work....I can still see those examples after so many years, as the most resounding influence ... the most resounding reflections of powerful commonality... with trueness."<sup>33</sup> He was also exposed to the perception of architectural history as a procession of periods, in which important continuous characteristics were preserved. As many have already acknowledged, Kahn became adept in analyzing existing buildings; he grew to understand their separation into discrete elements and saw the architects role as a composer obliged to re-compose them into new spatial entities that brought forth aesthetic configurations and transmitted meanings as Kahn stated: "I think architects should be composers of elements" which were both "entities in themselves and "related to something" and were parts "of the way of life."<sup>34</sup>

More importantly, Kahn accepted that the knowledge of architectural history was essential to contemporary design. In 1961 Kahn stated that although "we're living in an era of new space demands, new things that are so fresh" and despite the fact that "we have such wonderful resources to boot no limits" the chaotic individualistic approach to

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<sup>32</sup> Louis I. Kahn, "Harmony Between Man and Architecture, 1974," in *Louis I. Kahn: Writings, Lecture, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 338.

<sup>33</sup> Louis I. Kahn, "How'm I Doing, Corbusier?, 1972," in *Louis I. Kahn: Writings, Lecture, Interviews* ed. Alessandra Latour (New York: Rizzoli, 1991), 299.

<sup>34</sup> Louis I. Kahn, "Address by Louis I. Kahn, 1967," in *Louis I. Kahn: Writings, Lecture, Interviews* ed. Alessandra Latour (New York: Rizzoli, 1991), 213.

architecture should be avoided, and claimed that “architecture has a certain nature ... you can’t just pick and say ‘I am doing my doodles on my own piece of canvas.’”<sup>35</sup> As a teacher he, therefore, stressed to his students that “the forms of expression are here...after all, an architect doesn't dish it all out of his pocket,” and encouraged them to learn from the past.<sup>36</sup> In a talk he gave few years later, in 1969, he re-stated that “The time of a work holds its own validity from which the sense of truth can be drawn to inspire another work” he stated.<sup>37</sup> Kahn came to understand that architectural experiences were not locked within the immediate present but were connected to the past, and that the architect can “realize a spirit of his art and the emerging of orders only when the problems before him are considered as part of a whole.”<sup>38</sup> Therefore Kahn claimed “we dare not discard the lessons these buildings [historical precedents] teach for they have the common characteristics of greatness upon which the buildings of our future must, in one sense or another, rely,” and as he admitted was always “looking for a source, a beginning” that “confirmed continuation” and without which he believed “nothing could be or would be.”<sup>39</sup>

Kahn accepted memory as an important part of human existence (a role often denied to it in his century). Through his Beaux Arts education Kahn understood the importance of history as providing narratives to follow, and accepted the importance of the historical architectural images in constituting knowledge, constructing memory, and promoting common grounds for the perception of beauty, that was governed by sight and

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<sup>35</sup> Kahn, "The Sixties – A P/A Symposium on the State of Architecture: Part 1, 1961," 121.

<sup>36</sup> Kahn, *Conversations With Students*: 53.

<sup>37</sup> Kahn, "Foreword, 1969," 247.

<sup>38</sup> Kahn, "Architecture: Silence and Light, 1970," 253.

<sup>39</sup> Kahn, "I Love Beginnings, 1972," 285-86.

controlled by the mind. Already in the 1950's he stated that "Imagery is the memory – the Form,"<sup>40</sup> and told his students that "architecture does exist in the mind."<sup>41</sup>

Through Brown Kahn was introduced to the reading of historical architectural monuments not only as monoliths,<sup>42</sup> but as physical traces that allowed the dwelling of the entire human body in space and paved the way for actions in the environment, through which humans took part in ritualistic orders representing narratives and beliefs. He conceived architectural history as places for the performance of rituals where certain acts related to "primitive" desires could be followed, and understood architectural memory to be composed of spatial and dynamic imprints that included gestures and postures gathered by the body and formed by the environments which it previously moved through - A sort of memory which fused the body and the forces of the building that acted upon it, and understood that contemporary buildings should resonate with these past experiences. As a result, Kahn saw architectural making both as a form of art-making, which aspired to allude to the memories of images of the architecture of the past, as a form of program-writing, which aspired to resonate with the memory of bodily actions which were encased by the architecture of the past. Thus, Kahn regarded the historical architectural elements as parts to be employed "to make the environment a place" serving "a certain activity"<sup>43</sup> and asserted that "measurement and association with dimension must be part of the room."<sup>44</sup>

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<sup>40</sup> Louis I. Kahn, "Perspecta," The Yale University Magazine of Architecture, 3, 1955.

<sup>41</sup> Kahn, *Conversations With Students*: 31.

<sup>42</sup> Louis I. Kahn, "Architecture and the University," in Louis I. Kahn, *Louis I. Kahn: Writings, Lectures, Interviews* (New York: Rizzoli, 1991), 55.

<sup>43</sup> Louis I. Kahn, "1973: Brooklyn, New York," in *Louis I. Kahn: Writings, Lectures, Interviews*, ed. Alessandra Latour (New York: 1991), 324.

<sup>44</sup> Kahn, *Conversations With Students*: 61.



While Kahn was respectful to the manner in which images and rituals were expressed in architectural history, and while he understood that they were engrained in human culture and hence should not be disregarded in contemporary architecture, he also “noticed the size of the revolution,”<sup>45</sup> was aware of modernity’s great cultural, social, and religious changes, understood that architectural history could not be revived by progressive culture, and warned architects against the use of historical architectural tools and methods for their own sakes, while being “distrustful of the institutions of man.”<sup>46</sup>

Kahn advocated bringing forth the “inspiration to express”, the “inspiration to question,” the “inspiration to learn” and the “inspiration to live.”<sup>47</sup> He believed that “the inspirations that are really within us ...are completely unstated, as our desires.”<sup>48</sup> Thus, Kahn acknowledged the superficiality of modern architecture that elevated the historical past to obsolete truth, aimed to re-iterate the past, reproduced institutions in the form of an already lived past in which previous rituals, beliefs and ideas were not critically considered and the cultural stagnation it implied. Already in the 1944 architectural symposium on Monumentality Kahn stressed that “no architect can build a cathedral of another epoch embodying the desires, the aspirations, the love and hate of the people whose heritage it became.”<sup>49</sup> He explained that “the images we have before us of monumental structures of the past cannot live again with the same intensity and meaning. Their faithful duplication is un-reconcilable,” and argued that “Nostalgic yearning for the

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<sup>45</sup> Ibid., 14.

<sup>46</sup> Ibid., 24.

<sup>47</sup> Louis I. Kahn, "Remarks, 1965," in *Louis I. Kahn, Writings, Lecture, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 197.

<sup>48</sup> Louis I. Kahn, "Our Changing Environment, 1964," in *Louis I. Kahn Writings, Lecture, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 153-54.

<sup>49</sup> Kahn, "On Monumentality," 586-87.

ways of the past will find but few ineffectual supporters."<sup>50</sup> Twenty years later, Kahn warned that copying the architecture of the past would result in architecture that was "stereotypical and uninspiring .... not in harmony with the nature of Man."<sup>51</sup>

Already in 1944 Kahn criticized the use of historical formal imperatives on the basis of utility, nicety, or correctness, without contemplating the content and meanings which they aimed to bring forth.<sup>52</sup> Later on Kahn expressed his understanding that the architect "must have an instrument to work with" and therefore he "uses whatever he understands as a means," but explained that "a significant architect could not use the method of copying."<sup>53</sup> Towards the end of his career Kahn claimed that "You live to express, there is no other reason for living,"<sup>54</sup> asserted that "by imitation you destroy the wonderful gift of being a singularity,"<sup>55</sup> and moreover, noticed that "as soon as it [architectural history] becomes measurable it becomes very limited" placing aside the architect's role as a shaper of modern goals.<sup>56</sup> Believing in the architect "with the mark of the individual" as "the maker of society,"<sup>57</sup> Kahn acknowledged that architectural history must not be aestheticized and that its expressions could not be addressed as mere formal compositions governed by an arrangement of solids along axes in a mathematical space.

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<sup>50</sup> Ibid.

<sup>51</sup> Kahn, "Form and Design, 1961," 114-21.

<sup>52</sup> Kahn, "On Monumentality," 548-604.

As Goldhagen points out in his formative years Kahn mainly tried to distance himself from the "historical vocabulary". See Goldhagen, *Louis Kahn's Situated Modernism*: 1-40.

<sup>53</sup> Louis I. Kahn, "On the Responsibility of the Architect, 1953," in *Louis I. Kahn: Writings, Lectures, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 53-54.

As Goldhagen points out during the 1950's Kahn used 'historical' forms for different reasons. On the different reasons and methods used by Kahn in this period see Goldhagen, *Louis Kahn's Situated Modernism*: 41-136.

<sup>54</sup> Louis I. Kahn, "Transcript of a lecture by Louis I. Kahn, given at the American Library in Beels," ed. Curator and Collections Manager Transcribed by William Whitaker (Belgium: The Architectural Archives, University of Pennsylvania, May [7 or 8], 1973), Track 3.

<sup>55</sup> Kahn, "Our Changing Environment, 1964," 154.

<sup>56</sup> Kahn, "Architecture, 1972," 282.

<sup>57</sup> Kahn, "Our Changing Environment, 1964," 154.

He believed that “a creative architect was one who brings about the new image”<sup>58</sup> and gave “spaces to an institution which evoke new meanings.”<sup>59</sup> He condemned the fact that “institutions are not being defined” today but “are being taken as given”<sup>60</sup> and believed that “our institutions need spaces which will evoke greater sense of dignity, a greater sense of loyalty,”<sup>61</sup> pointing out that if architects designed “spaces which would more fully express the activity of man” many institutions “would sense the importance of changing their programs.”<sup>62</sup> Thus, Kahn saw himself responsible for creating architectural images and programs that would bring forth the spirit of a new progressive age, aspired to envision an ideal society, and to create architecture that would express desires that were “not around,” and bring forth “the yet not said” and “the yet not made.”<sup>63</sup> Kahn admitted that his willingness to create made him also think that “all things that were very greatly” were ... “of no consequence” and what took over was the desire “to go away from it” and the willingness “to begin all over again.”<sup>64</sup> Thus, Kahn acknowledged the importance to depart from the past, and regarded architectural making and experience as an extension of memory not only by its affirmation but also by its negation and its erasure, as he pointed out: “I studied at the University of Pennsylvania and, although I can still feel the spiritual aspects of that training, I have spent all my time since graduation unlearning what I learned.”<sup>65</sup>

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<sup>58</sup> Kahn, “A Statement, 1962,” 147.

<sup>59</sup> Kahn, “The Nature of Nature, 1961 ” 142-43.

<sup>60</sup> Kahn, *Conversations With Students*: 19.

<sup>61</sup> Kahn, “The Nature of Nature, 1961 ” 142-43.

<sup>62</sup> Kahn, “On Form and Design,” 105.

<sup>63</sup> Louis I. Kahn, *Transcript of a lecture by Louis I. Kahn, given at the American Library in Brussels, Belgium*, (The Architectural Archives, University of Pennsylvania: Transcribed by William Whitaker, Curator and Collection Manager, 1973) Track 4.

<sup>64</sup> *Ibid.*, Track 13.

<sup>65</sup> Kahn, “Architecture and the University, 1953,” 57.

Kahn asserted: “To think of new rules is much more important than to think of remembering or working with, the rules that are now in play,”<sup>66</sup> and indeed acted as the president of the T-Square Club, the founder of the Architectural Research Group, (1931), a member of Philadelphia's Citizens' Council on City Planning, as well as the American Society of Planners and Architects, an organization modeled on the Congrès International d'Architecture Moderne (CIAM during the 1920's), all organizations that promoted modern design.<sup>67</sup> As an architectural teacher at Yale, the University of Pennsylvania, Princeton, and MIT, Kahn was perceived as a mentor who believed in the active role of the architect as a shaper of a new reality,<sup>68</sup> that admired the real artist “who looks with not too tedious eye at what others have done,” and the architect “who possesses the will to grow with the many angles of our development” and held that “such a man finds himself far ahead of his fellow workers.”<sup>69</sup>

Kahn's appreciation for the modern architect and his willingness to take an active part in creating architecture for the future oriented culture was not naïve. He looked at design for the future oriented culture as an “amusing bit of history,” and pointed out that future inspirations and desire were not yet stated in modern architecture since “it is

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<sup>66</sup> Kahn, "How'm I Doing, Corbusier?", 1972," 310.

<sup>67</sup> The T Square Club was founded in 1883 by thirteen Philadelphia architects to serve as a meeting place for informal design competitions and professional fellowship. Together with the Philadelphia Chapter of the American Institute of Architects, the Club helped organizing a series of annual contemporary architectural exhibitions, most of them held at the Pennsylvania Academy of the Fine Arts or the Art Club. McCarter, *Louis I. Kahn*: 56; Goldhagen, *Louis Kahn's Situated Modernism*: 19.; David B. Brownlee, *Louis I. Kahn: in the realm of architecture*: 25-26.

<sup>68</sup> Hiring Kahn to teach at Yale University was part of Charles Sawyers efforts to the re-organize the faculty and to change its Beaux Arts educational program to a more modern one. Goldhagen, *Louis Kahn's Situated Modernism*: 46-47, 226, n.4 Kahn was considered one of the more inspiring teachers in Yale's School of Architecture. McCarter, *Louis I. Kahn*: 56. Kahn was one the first architects to teach continuously through his architectural career: 1947- 1957 Prof. of Architecture at Yale University, 1957 – Prof. of Architecture, University of Pennsylvania, 1962 – Prof. of Architecture and Planning – MIT, 1961-1967 – Visiting Prof. Princeton University. By the 1950's most of the architectural schools in the East Coast distanced themselves from historical routes.

<sup>69</sup> Kahn, "On the Responsibility of the Architect, 1953," 54.

impossible to satisfy either.”<sup>70</sup> He acknowledged that one can do “only what can be made now,” “not what will be the forerunner of what will things be tomorrow,” since “you cannot anticipate” and because “tomorrow is based on circumstance.”<sup>71</sup> As he explained: “if you know what a thing will look like fifty years from now, you can do it now. But you don’t know, because a way that a thing will be fifty years from now is what it will be.”<sup>72</sup> He admitted that “the nature of space is something which we really don’t know much about,”<sup>73</sup> and as he claimed one “cannot predict the architecture of the future. We can only work with the laws we comprehend now.”<sup>74</sup>

However, Kahn also felt quite uncomfortable with the preoccupation with *Zeitgeist* as truth, and differentiated himself from those who argued that “we are living in an unbalanced state of relativity which cannot be expressed in a single intensity of purpose,”<sup>75</sup> were willing to create from a *tabula rasa*, were “prepared to make things look entirely different from the way they look now, if they only had the opportunity to do so” to arrive at a clean state in which things will start anew.<sup>76</sup> For him disconnecting completely from the past was “not the opportunity” because he held that it would not prepare the way for an unknown future. He warned that such an approach would lead to the design of open spaces that would not assure the exercise of freedom as expected, but their uniformity, lack of limits and particular details that express individual and local values, would turn them to “look alike,” detach them from the reality of existence, and

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<sup>70</sup> Kahn, "Our Changing Environment, 1964," 154.

<sup>71</sup> Kahn, *Conversations With Students*: 37-39.

<sup>72</sup> Ibid.

<sup>73</sup> Kahn, "Architecture and the University, 1953," 55.

<sup>74</sup> Louis I. Kahn, "Not for the Fainthearted, 1971," in *Louis I. Kahn: Writings, Lecture, Interviews*: ed. Alessandra Laour (New York: Rizzoli, 1991), 262.

<sup>75</sup> Kahn, "On Monumentality," 574.

<sup>76</sup> Kahn, *Conversations With Students*: 38.

make them “insensitive to any activity,”<sup>77</sup> so that they would disallow embodiment, leave beholders alienated in space and incapable to occupy them as active subjects, and as he claimed “there was not the existing will of this floating around.”<sup>78</sup> Kahn held that “our [modern] institutions and their programs must be attacked”. He believed that “this realm of spaces belongs to this activity, another realm of spaces belongs to another activity,”<sup>79</sup> and that “the tall room, the low room, the one with the fireplace, and the one without” created “events” that brought forth life, and argued that modern architects should “invent environments” that were not “prototypes” taken out of “the book of standards” but nevertheless conveyed specific meanings.<sup>80</sup> Thus, Kahn issued a call to combine architecture of absence and motion with architecture of presence and repose, to design “empty spaces” that would “both be things of life and ways of life,” and thus to create modern architecture that would allow humans to interact with it.<sup>81</sup>

Kahn condemned the erasure of history in the name of formalistic progress, which resulted in the diminishing of the architect’s genuine creativity and his responsibility to address rituals, narratives and ideas in his designs.<sup>82</sup> He accused the lack of “wonder” in the “revolt against our [traditional] institutions and ways” which could give birth to meaningful “desire” and “need”. He asserted that revolt which does not deal with such content “can rise only to the trade of old lamps for new without geni.”<sup>83</sup> Kahn claimed

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<sup>77</sup> Kahn, "On Form and Design," 107.

<sup>78</sup> Kahn, *Conversations With Students*: 102. Excerpt from a panel discussion with participation of Lawrence B. Anderson, John M. Johanes, Louis I. Kahn and Dr. Morton White, first published in "On Philosophical Horizons", AIA Journal, Vol. XXXIII, No. 6, June 1 960pp. 99-101

<sup>79</sup> Kahn, "On Form and Design," 107.

<sup>80</sup> Kahn, "1973: Brooklyn, New York," 324-25.

<sup>81</sup> Kahn, "On Form and Design," 107.

<sup>82</sup> Kahn, "On Monumentality".

<sup>83</sup> Kahn, "Space and Inspiration, 1967," 229.

that modern “institutions of our city are rotten from the core.”<sup>84</sup> He believed that the “spirits of beginning were forgotten”<sup>85</sup> and that contemporary institutions were too “far from the original phenomenon” which they aimed to serve.<sup>86</sup> He therefore held that “it is the duty of the architect ... to develop something which the institution itself can realize is valid,” “to take every institution in the city and think of it as his work” and to “redefine the progress brought by these institutions.”<sup>87</sup>

Kahn believed that architecture should respond to the fact that “feeling and dream has no measure, has no language,” and that the “desire for expression is without words, without a name, without weight.”<sup>88</sup> Holding that “everyone’s dream is singular,” and that “man can never fully express his aspirations,” he appreciated the drive to come up with “places of availabilities” for the future culture that were “full of wonder.”<sup>89</sup> However, Kahn understood that “to express oneself” one should make something that uses materials, and “measurable means of composition or design,” that would allow “light to burn itself out” into material - “you have to work through the natural work if you want to achieve something.”<sup>90</sup> Kahn stated that “buildings start as a kind of recognition that there must be a place for concentration where the mind and the body are somehow given play” and understood that architecture must allow interacting with it, so it could be owned or serve as background for projection.<sup>91</sup>

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<sup>84</sup> Kahn, "On Philosophical Horizons, 1960," 101.

<sup>85</sup> Kahn, "Form and Design, 1961," 114.

<sup>86</sup> Kahn, "On Form and Design," 104.

<sup>87</sup> Kahn, "On Philosophical Horizons, 1960," 101.

<sup>88</sup> Kahn, "Harmony Between Man and Architecture, 1974," 338-39.

<sup>89</sup> Kahn, "Form and Design, 1961," 112.

<sup>90</sup> Ibid.

<sup>91</sup> Louis I. Kahn, "Silence and Light, 1969," in *Louis I. Kahn: Writings, Lectures, Interviews*., ed. Alessandra Latour (New York: Rizzoli, 1991), 240.

Kahn was critical of “spaces that rise and envelop flowing without beginning, without end, of a joint-less material white and gold.”<sup>92</sup> He held that “everything that is made should possess qualities which defy measurement” and give “a sense of life.”<sup>93</sup> Therefore, Kahn stated that “in the making of rooms” which had the potential to establish “vectors of performance” was “the core of architecture.”<sup>94</sup> He explained: “The Psyche desires things and challenges ... to make that which expresses the inexpressible, that which cannot be defined, that which has no measure, that which has no substance ... the psyche wants to express just that and cannot without an instrument,” but “Without a knowledge of the law, without a feeling for the law, nothing can be made,” and hence insisted that “architecture must have limits.”<sup>95</sup> Kahn understood that it is only in relation to what we already know that we can experience the world; that to be engaged with something, and to know it, it has to appear; that thinking must direct an intention towards something; or as Heidegger writes “phenomenology means ... to let that which *shows* itself be seen from itself in the very way it shows itself from itself,”<sup>96</sup> and therefore the unknown anticipated future could only be defined through existence.

Kahn believed un-measurable future “will always remain unmeasurable” but asserted that if one recognized “that you’ll never get it by the tail,” i.e. that there will never be one truthful way to present it, it would “become much closer to you.” He was also convinced that by admitting a weak knowledge of the future “you’ll know it much

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<sup>92</sup> Kahn, “Form and Design, 1961,” 112.

<sup>93</sup> Kahn, “Harmony Between Man and Architecture, 1974,” 341.

<sup>94</sup> Kahn, “Architecture, 1972,” 274.

<sup>95</sup> Kahn, “Not for the Fainthearted, 1971,” 262.

<sup>96</sup> Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962), 58.



more that way than you will be assuming that you'll never ever know it."<sup>97</sup> Thus, unwilling to create architecture in the form of an already lived past, and opposing to create from tabula rasa, and alienate the future by displacing it in a realm out of reach, Kahn aspired to come with architectural means to design places that would remain open to multiplicity of future developments but would allow embodiment and participation. He acknowledged that "circumstance is both unpredictable and continuous."<sup>98</sup> Thus, Kahn searched for suitable means to create future oriented architecture in the form of "thresholds" in which the movement from silence to light and to material could be recorded.<sup>99</sup> He advocated the need to create designs in which "lines on paper" would serve as "measures of what cannot be expressed fully" and provide a tradition of sense of place that one could project oneself into.<sup>100</sup>

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<sup>97</sup> Kahn, "A Statement, 1962," 148.

<sup>98</sup> Kahn, *Conversations With Students*: 39.

<sup>99</sup> Kahn, "Harmony Between Man and Architecture, 1974," 339.

<sup>100</sup> Kahn, "Form and Design, 1961," 112.

## Architectural History as Weak Truth – Temporal Architectural History

### The Call to Re-Create Architectural history in Contemporary Design

*Everything that lives cannot live again, and any action which has happened cannot be re-acted. Forms simply are still ... An old encrusted mirror in which you cannot see your image any more still lives, and you can anticipate and imagine the image of a beautiful person in it.*<sup>101</sup>



Fig 03a

Fig 03a: The Ruins of Ostia - Architectural history remains providing fragments and traces of memories (From: Brown Frank, *Roman Architecture*, plate 15).

It is through Kahn's travels, his acquaintance with Archeologist Frank Brown, reading of Le Corbusier's texts, and his conversations with clients that Kahn became familiar with architectural history, with its manifestation as "thresholds"<sup>102</sup> and "measures of what cannot be expressed fully,"<sup>103</sup> which offered themselves towards embodiment (Fig 03a).

On his travels in Europe and the Mediterranean, first, after his graduation from school, between 1928 and 1929, and later as Architect-in-Residence at the American Academy in Rome, between 1950 and 1951, (and briefly again when he participated in the CIAM meeting in Otterloo, in 1959) Kahn found the monuments of the past lying in ruins. In the environment of ruination Kahn found a means to integrate the Beaux Arts

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<sup>101</sup> Kahn, "Address by Louis I. Kahn, 1967," 209.

<sup>102</sup> Kahn, "Harmony Between Man and Architecture, 1974," 339.

<sup>103</sup> Kahn, "Form and Design, 1961," 112.

orthodoxy about the past's preservation, and the modern disregard of history in favor of the unknown future, and acknowledged the temporality of architectural history and its presence as fragments and traces of memories.<sup>104</sup> The Forum in Rome, the cities of Pompeii and Ostia, and the Acropolis in Athens, to mention but a few were destroyed or severely damaged. Architectural history was revealed to Kahn as incomplete knowledge.<sup>105</sup> Traditional architectural typologies could not be experienced in their totality; recognizable compositions were blurred; architectural elements were broken and missing many of their parts; defining walls were partly diminished and segmented; enclosed places were semi-open and seemed to be dissected; boundaries were blurred; directions and axes were distorted, yielding instead a multiplicity of paths and gaps; strict formal composition gave way to open-ended spaces; ornamentation had disappeared; bricks, stucco, stones, and tiles were peeling off, framings had fallen apart; openings had been closed up by dirt and vegetation; colors had faded. The original historical architectural image could not be restored, but neither could it be ignored; it was revealed in the state of constant becoming. The monuments and buildings of the past remained as scattered parts encasing memories and emotions, and signified the continuation of the past into the present and future. The historical ruins rejected certainty, disrupted consensus, and undermined a belief in rational progress, their state of ruination pointed towards the loss of certainty and the transitory state of tradition, acknowledged evolution, and gave the feeling that history could be remade.<sup>106</sup> As Kahn explained: "When the

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<sup>104</sup> As McCarter notes on his first trip Kahn toured Britain, The Netherlands, Germany, Denmark, Latvia, Czechoslovakia, Austria, Hungary, Greece, Switzerland, France, and Italy (including Positano, Capri, Amalfi, Paestum, and Pompeii). On his second trip Kahn toured Rome, Ostia, and Pompeii, Siena, Florence, Venice, and Paestum in Italy, and also traveled to Egypt and Greece. McCarter, *Louis I. Kahn*: 25-26, 57-58.

<sup>105</sup> Kahn, *Transcript of a lecture by Louis I. Kahn, given at the American Library in Brussels, Belgium*, Track 6.

<sup>106</sup> On the openness of ruins see also Seitek, *Writing on Fragments, Philosophy, Architecture and the Horizons of Modernity* 113-15, 19-20.

building stands complete and in use, it seems to want to tell you about the adventure of its making. But all the parts locked in servitude make this a story of less interest. When its use is spent and it becomes a ruin, the wonder of its beginning appears again. It feels good to have itself entwined in foliage, once more high in spirit and free of servitude.”<sup>107</sup>

In addition, the architectural images of the historical sites, when conceived as a result from body-centered experiences, and not from an academic methodological and analytic studies, could not be revealed as mere graphic reconstructions or as fixed pictures, nor could they be discounted, but were modified by the location of the body in space, and revealed that memory of “form in the mind of one is not the same as in the mind of the other.”<sup>108</sup>

Frank Brown who took Kahn through the ancient sites shed light on the temporality of architectural history as bodily experiences that were shaped by the constantly changing rituals. He explained how fluctuation in behavioral patterns, appetites, sensibilities, meaning, and beliefs, which were also affected by social, cultural, and political circumstances, generated a re-discovery and re-definition of rituals. These moments were followed by self-criticism, and needs for self-assurance that gave birth to restless of architectural creativity - to the “remaking of the forms of space,” the

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<sup>107</sup> Kahn, "Architecture: Silence and Light, 1970," 248.

<sup>108</sup> Ibid., 252.

In this sense Kahn's understandings were similar to 20<sup>th</sup>-century's phenomenological theories regarding perception. Gibson defines five senses which allow perception without the involvement of intellectual processes – in addition to visual, auditory, taste-smell, he includes orientation and haptics. James Jerome Gibson, *The Senses Considered as Perceptual Systems*, (Boston: Houghton Mifflin Co., 1966), 97-98; Anthropologist Harley Alexandre defined seven psychological coordinates representing the human bodies, which are projected on the world, when it is experienced. In contrary to neutral mathematical coordinates cherished by aesthetic perception, these coordinates assist humans to map the environment and to acquire its meaning from the participation of the entire body. Harley Alexander, *The World's Rim* (Lincoln, Neb: University of Nebraska Press, 1953), 9; Merleau Ponty discusses in length the role of the body in the act of perception and the flesh of the world discovered by meaningful bodily interaction with the environment. See for example Eye and Mind Maurice Merleau-Ponty, *Phenomenology, Language and Sociology* (London: Heinemann Educational Books, 1974), 283-86.

adjustment, rejection, and re-organization of the architectural elements which once evoked authority, and brought about the development of new forms.<sup>109</sup> Brown also explained to Kahn that the orders reflected in Roman architectural structures were analogous to the well-defined, limited, bounded, and fixed rituals. Each program "took shape from the formal action that occurred in it," and allowed the ritual to be repeated, enabling humans to establish identities deriving from collective rituals, related to religion and cultivation of God, the life of the family and the ordering of a community, resonating with the order of the cosmos, and symbolizing ideas that they shared.<sup>110</sup> Thus, the Romans could enjoy triumphal well-articulated architectural expressions typified by clear geometry, well-defined spaces, clear axes, fronts, backs, and centers, firm boundaries, heavy masses, and solid lasting materials (such as can be seen in the Pantheon) - An architectural language which changed in following epochs due to changes in observations.<sup>111</sup> Brown pointed out to Kahn that traditional programs could not be re-lived as they existed in the past, but only as traces which were left behind as memories for generations to come of a "world they had lost" that "awed them [following generations] with the fullness and finality of life they could neither comprehend nor experience, as fullness and finality of form they could not repeat."<sup>112</sup>

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<sup>109</sup> In his writings, Brown unpacks the transformations of the buildings' elements – their size, location, role, materiality, etc. – due to the redefinition of rituals and the spaces where they were carried out, and shows how changes which occurred in important institutions caused transformations in the shaping of the entire environment.

Thus, for example, one could trace the development of the Greek Temple into the Hellenistic Temple, then the Roman basilica and eventually the Christian Church; the old theatre developed into the amphitheater and then the race course; the simple hut became the private house and then the Roman Villa. Such developments are traces along the entire book. See for example: Brown, *Roman Architecture*: 22-23, 28-29, 33-34, 42-47.

<sup>110</sup> *Ibid.*, 100-01.

<sup>111</sup> *Ibid.*, 10, 16-17, 35-38, 43.

<sup>112</sup> *Ibid.*, 11, 48. Quote is from p.48

In addition to the lessons learned from Brown, Kahn's literary interests and his conversations with clients allowed him to break with the view of history as an organic systematic united and progressive meta-narrative. As a child, Kahn was exposed to the works of Romantic German philosophers, and mainly to the writings of Johann Wolfgang von Goethe (1749–1832), that his mother, Bertha, read and discussed with him.<sup>113</sup> Later, as a mature architect, Kahn read Goethe himself, and particular Goethe's biography, "Truth and Poetry", and found "wonder in it."<sup>114</sup> Goethe used subjectivity, freedom, and intuitiveness of thought to construct modern scattered narratives.<sup>115</sup> In his writings Goethe used a variety of textual devices to combine interrelated scattered parts and to create open and apparently disordered works, lacking clear beginnings and endings, suggesting continuations of themes, that were nevertheless enriched by sudden narrative turns, which problematized the authorial voice, and promoted subjective interpretation, thus shedding light on the possibility of unfastened scattered details to bring forth poetic metaphorical knowledge.<sup>116</sup> Kahn noted that Goethe's biography was "a wonderful realization of life and a course of living" because "though he reported what happened to him, he always avoided confining it to the circumstantial ... but reflected on its meaning which transcends his own life." He also was impressed by Faust in which he discovered that "two people [i.e.– charterers in the novel] can't have the same sense of soul." Kahn added that the pleasure in reading Goethe's writings derived particularly from the fact that "when you read it ... you feel restraint" and a narrative "is not imposed on you."<sup>117</sup>

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<sup>113</sup> Jeffry Kieffer, *Readings from the Architecture of Louis I. Kahn* (University of California: Xlibris, 2001), 99; *ibid.*

<sup>114</sup> Kahn, "Remarks, 1965," 193.

<sup>115</sup> See Johann Wolfgang von Goethe, "Goethe's Collected Works," in *Wilhelm Meistres Journeyman Years* (New York: Suhrkamp, 1989), 294-312.

<sup>116</sup> Šeitek, *Writing on Fragments, Philosophy, Architecture and the Horizons of Modernity* 19-22.

See Goethe, "Goethe's Collected Works," 294-312.

<sup>117</sup> Kahn, "Remarks, 1965," 193.

Goethe also wrote on architecture explaining that a meaningful architectural work would be in the form of “a living whole” promoting a chain of subjective readings, independent of pre-established assumptions.<sup>118</sup>

During his architectural career Kahn was attracted to literature, particularly novels. Balkrishna V. Doshi has attested to his fascination with books such as the *Arabian Nights* and *Alice in Wonderland*.<sup>119</sup> Kahn explained that it was precisely fairytales that appealed to him since from them came “the dialogue, and the locomotive, and the wonderful instruments of our mind.”<sup>120</sup> Believing that “everything must begin with poetry”<sup>121</sup> Kahn compared the work of an architect to that of an author and a poet who both “choose at random ... in building a story that has its own life” and compared the work of architecture to a book containing “the presence of life.”<sup>122</sup>

As Doshi pointed out, Kahn was also receptive to the non-linear and fragmented aspects of narratives as they were delivered by his clients and spent considerable time listening to them tell their memories, realizing that for people the past, the future, and the present were never permanent and closed totalities. “The horizon of the past, out of which all human life lives and which exists in the form of tradition, is always in motion.”<sup>123</sup>

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<sup>118</sup> Johann Wolfgang von Goethe, “Essays in Art and Literature- On German Architecture (1772),” in *Goethe's Collected Works* ed. John Gearey (New York: Suhrkamp, 1986), 3-10. Also see on Goethe at Šeitek, *Writing on Fragments, Philosophy, Architecture and the Horizons of Modernity* 33.

<sup>119</sup> Balkrishna V. Doshi, “Le Corbusier and Louis I. Kahn, The Acrobat and the Yogi of Architecture,” (Vastu Shilpa, Ahmedabad: Foundation for Studies and Research in Environmental Design, 1992).

<sup>120</sup> Kahn, *Conversations With Students*: 15.

<sup>121</sup> Kahn, “Architecture: Silence and Light, 1970,” 258.

<sup>122</sup> Kahn, “Our Changing Environment, 1964,” 154.

<sup>123</sup> Balkrishna V. Doshi- An Indian architect, educator and academician. After initial study in Bombay, he worked with Le Corbusier in Paris (1951-1954) as senior designer; He closely worked with Kahn when Kahn designed the campus of the Indian Institute of Management, Ahmedabad. Doshi, “Le Corbusier and Louis I. Kahn, The Acrobat and the Yogi of Architecture,” 26-31.

Finding interest in the “odyssey of life” as a source to discover “man through the circumstance” rather than to understand “the dates or what happened.”<sup>124</sup> Kahn was not sympathetic about people who “speak in categorical terms” and about “men who speak objectively,” asserting that people of this sort acted “truly as scientists” and were “not necessarily as creative men.”<sup>125</sup> Kahn admitted that he himself did not have a sequential mind either, “I rather think cryptically ... I tend to relate things that are not really immediate, that are way back there somewhere,” but stressed that for him such a way of thinking was nevertheless “continuous.”<sup>126</sup> In addition, Kahn may have read books on the philosophy of time and history that shed light on the forgetfulness, confusion, and diversity of arrangements of historical facts in the construction of historical truth.<sup>127</sup>

Thus, while accepting history as providing a record to follow, and aware of the methodological 19<sup>th</sup>-century organization of architectural history, his anti-scientific approach to history made him question this rational approach. Kahn recognized that when history was told and experienced by humans, the linear meta-narrative imposed in encyclopedic treatises was always distorted and manipulated. The self was a mutable entity in constant fluxes whose memories were neither bounded nor linear and therefore could not be divided, erased, organized, or stored as separated or continuous entities.<sup>128</sup>

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<sup>124</sup> Kahn, “Silence and Light, 1969,” 237.

<sup>125</sup> Kahn, “A Statement, 1962,” 145, 47.

<sup>126</sup> Kahn, “How’m I Doing, Corbusier?, 1972,” 299.

<sup>127</sup> When interviewed in 1962 on television Kahn stated: “The exhilaration of getting the assignment of course makes you want to go and talk to people, you can’t just sit back and merely wrap yourself up with yourself.... From talking to people you get a sense of their radar about this problem and from that a sense of beginning for yourself.” Kahn in an interview with WFIL-TV quoted by Goldhagen, *Louis Kahn’s Situated Modernism*: 13.

<sup>128</sup> Kahn explained: “I’m really interested in reading Volume Zero, and maybe when I get through this Volume Minus-One. History could not have started at those places. History was much much preceded. It just isn’t recorded.” Kahn, “1973: Brooklyn, New York,” 329.



It is through Le Corbusier, Kahn's favorite architect, whom Kahn frequently referred to as his mentor, that Kahn was exposed to a call to re-create rituals, beliefs and narratives offered by architectural history, through embodying traces and fragments of memories, in contemporary architectural making<sup>129</sup> – a call based on the belief that innovation which was indeed necessary to bring forth the spirit of the age did not have to result from a complete break from the past, but that invention could be promoted while “revolution should be avoided.”<sup>130</sup> Le Corbusier's ideas appeared in his first important publication, *Vers une Architecture*, read by Kahn already in 1925, and of which Kahn owned a used and worn-out copy that frequently referred to during his work.<sup>131</sup>

In *Vers une Architecture* Le Corbusier expressed his fascination with the new age, and called for architectural invention in the new spirit.<sup>132</sup> However, while issuing a call to redefine modern architecture, Le Corbusier believed that the new spirit could be expressed in architecture which did not overlook the past.<sup>133</sup> Le Corbusier mocked tendencies to impose or manipulate historical images or rituals, in modern designs.<sup>134</sup> He asserted that such an approach to architectural history killed imagination and made the architect “the God of recipe,” and a mere seeker of tricks. However, he held that an understanding of the real aspects of meaning expressed in architectural history and

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<sup>129</sup> Kahn asserted that “a great architect like Le Corbusier is making society today ...From the lessons of le Corbusier, one sets up inspiration of man. Individuals get a direction in what they do.” Kahn, “Our Changing Environment, 1964,” 154. He admitted: “I often say to myself ‘how am I doing, Corbusier?’” Kahn, “How’m I Doing, Corbusier?”, 1972,” 307.

<sup>130</sup> Le Corbusier, *Towards a New Architecture* (New York: Dover Books 1986). VIII-X.

<sup>131</sup> In addition Paul Cret gave a favorite review of the book, in front of the T. Square club, of which Kahn was a member, once it was published in English as “Towards a New Architecture”, in 1927. Goldhagen, *Louis Kahn's Situated Modernism*: 31, 223 n.91.

<sup>132</sup> Corbusier, *Towards a New Architecture*: 17, 25, 31, 88, 216 .

<sup>133</sup> Ibid., VIII-X.

<sup>134</sup> Ibid., 17, 25, 47, 72, 88, 160. Corbusier stated: “Architects work in ‘styles’ or discuss questions of structure in and out of season; their clients, the public, still think in terms of conventional appearances, and reason on the foundation of insufficient education.” *ibid.*, 17.

related to human feelings, emotions, beliefs, desires, narratives, rituals, faith, and ideas (properties that had been disregarded in the last hundred years, in favor of mathematical concerns), and their re-definition in a manner that they would be relevant to modern life, could give birth to inventive and poetic modern architecture.<sup>135</sup>

In order to understand architectural history in such a meaningful manner, Le Corbusier called to dismiss the academic in favor of experiential and hermeneutic study of architectural history. He called to put aside mathematical analysis of historical buildings, that regarded architectural history as if it was generated by and experienced as a product of scientific vision, and suggested to read historical spaces through experiential lenses, from the inside out, while understanding the relationships between architectural elements, rhythms, movements, axes, and views as tactile imprints suggesting intentions, destinations, and aims, and thus animating human actions in space, and to consult "iconographical documents, steles, slabs, incised stones, parchments, manuscripts, printed matter" to come closer to the architecture of the past.<sup>136</sup>

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<sup>135</sup> Ibid., VIII-X,17, 37, 47-51, 184, 220-21 quotes are from p. 17.

<sup>136</sup> Ibid., 47-51,73,153-54,60,91, 72,1 80, 204-05, 13.Quotes are from p. 73.

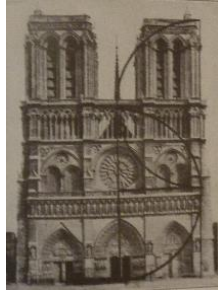


Fig 03b



Fig 03c



Fig 03d

Fig 03b: An aesthetic study of Notre Dame, Paris using syntactic methods of analysis

Fig 03c: One of Le Corbusier's photographs of architectural elements as they are brought together in light providing embodied and inter-subjective experiences.

Fig 03d: One of Le Corbusier's drawings of the Acropolis, Athens depicting embodied and inter-subjective experiences.

(All from Le Corbusier, *Vers Une Architecture*, 77).

The photographs and drawings included in Le Corbusier's book depicted embodied experiences of historical buildings and their elements and presented the inter-subjective relationships they generated (in opposition to objective experiences displayed in the beginning of the text, Fig 03b, Fig 03c, Fig 03d).<sup>137</sup>

Corbusier held that the adoption of experiential and hermeneutic studies, would reveal the great chasm between our period and the past, expose transformations of the history of civilization, would bring forth modernity's confusion, its moral crisis, and its false conception of ideas of liberation, comfort, and progress, would shed light on the impossibility of living according to previous codes, and would bring forth the necessity to put past architecture into question, to re-nourish the historical content extending into the present, and thus give birth to new observations. He held that such a process would not cause good modern architects to depend on mere chance, and to break with the aesthetics or the rituals presented by architectural precedents, since geometric attributes signifying the "language of man" and allowing the eye to recognize, measure, and familiarize, as

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<sup>137</sup> Ibid., 37, 47-51, 184, 220-21.

well as some ideas, and beliefs that stemmed from human questions rooted in the very beginning of humanity, had to be preserved - architecture as manifestation of culture had to allow their selection, rejection, pruning, cleansing, and transforming but not their complete change as it went forward.<sup>138</sup>

Le Corbusier pointed out that while a re-consideration of historical forms would indeed bring about uncanny, strange, bizarre, and disagreeable forms it would create unique architectural expressions that would yet be "in tune with [a] universe whose laws we obey, recognize and respect,"<sup>139</sup> and hence such a re-consideration of architectural history as offered by Le Corbusier would bring about architectural forms and programs that would be "foreign to us and disturbing, at first view" while in the long run would express "curious affinity with those of a similar function in any good period in history."<sup>140</sup>

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Kahn was fascinated by Le Corbusier's observation. Kahn asserted that "one could put life into existing institutions" by "creating new connections and by redefining everything" and not by inventing them from tabula rasa.<sup>141</sup> He expressed his appreciation to projects in which Le Corbusier demonstrated this theoretical approach later in his life (relevant to this thesis, as would be explained in the second chapter, is Kahn's admiration

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<sup>138</sup> Ibid., 25-26, 47-51, 69-73, 153-54, 60, 91, 38, 180, 204-05, 13, 86-89 quotes are from p.72- 73 .

<sup>139</sup> Ibid., 19.

<sup>140</sup> Ibid., V-VI.

<sup>141</sup> Kahn, "The Nature of Nature, 1961," 143.

to Le Corbusier design for the Dominican Convent in La Tourette), and often asked himself: "How am I doing Le Corbusier?"<sup>142</sup>

Following Le Corbusier Kahn understood that the past had things to tell us, but to do so it had to be temporally embodied and manipulated to suit contemporary life. Already in 1944 Kahn issued a call to conduct "an internal inspection of the [historical] spaces to be read," to deal with their "sense of form," and to rethink the organization, scale, and position of historical forms and elements in modern architecture, in relation to the orders and rituals of contemporary life in order to arrive at meaningful architecture in which architectural elements of the past would re-appear in an authentic manner.<sup>143</sup> During the 1950's Kahn continued pointing towards the possibility to address architectural precedents "from the standpoint of how they can make beginnings for us."<sup>144</sup> Towards the end of his career he clearly advocated that institutions of man were already established but "need new vitality, conscious recognition," and had to be redefined;<sup>145</sup> Such an approach to architectural history, he believed, would reveal that "from the revolution will come more wonderful things, and more simply, a redefinition of things."<sup>146</sup>

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<sup>142</sup> Kahn explained: An architect must be able to love someone, someone whom he truly cares about. I often say to myself "How am I doing Le Corbusier?" I don't mean that I copy Le Corbusier's work, but this is the way I feel towards the man who had made something to bestow, whose perception of architecture was different than that of the other architects." Kahn, "Harmony Between Man and Architecture, 1974," 340.

<sup>143</sup> Kahn, "On Monumentality." Quote is from p. 580. In this manner Kahn recognized the lost Aristotelian role of the architect as poet whose responsibility was the ethical plotting of verses – which was well acknowledged by architects until the 18<sup>th</sup> century when architecture was reduced to problem solving and décor. On the Aristotelian role of the architect see Šeitek, *Writing on Fragments, Philosophy, Architecture and the Horizons of Modernity* 134-35.

<sup>144</sup> Kahn, "Architecture and the University, 1953," 56.

<sup>145</sup> Kahn, "Architecture: Silence and Light, 1970," 256.

<sup>146</sup> Kahn, *Conversations With Students*: 24.

Kahn's encounter with the architecture of the past as it existed in the world of experience – through his visiting of historical ruins; his acquaintance with archaeologist Frank Brown; his readings of Le Corbusier and conversations with clients, lead him to depart from the scientific approach that regarded architectural history a source of knowledge expressing eternal criteria for design. Kahn understood that architectural history, its images, and the rituals, beliefs and narratives it expressed, were constructions that belonged to the past, but nevertheless constituted a part of a personal and communal memory. He also realized that desires to create anew while neglecting the past were superficial. Kahn claimed that “nothing is destroyed” and hence “you can’t think of anything as destroyed but in terms of great continuity, a great continuum.”<sup>147</sup> He understood that memories of the past were part of the world of appearances, part of our body-image, and constituted narratives that were part of our inherited culture – constituting a “the psychic record” and the “physical record” which direct us “to what we are now.”<sup>148</sup> But Kahn also noticed that these things “that happened a long time ago ... and are wonder in general,”<sup>149</sup> were experienced, remembered and stored as scattered, non-linear traces and fragments that were composed into weak truths describing personal “odysseys.”<sup>150</sup> Kahn explained: “I believe that truth is everything that happens... it is an unmeasurable quality... You can’t seek the truth, it is always newly revealed, it’s a living thing.” He added “you don’t know the truth except through living” and hence “it cannot be written down as being the truth,” “knowledge is your own knowledge, and the way you reveal it,” “even the same event is recorded differently, responds differently, *records*

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<sup>147</sup> Kahn, "Architecture, 1972," 256.

<sup>148</sup> Kahn, "I Love Beginnings, 1972," 287.

<sup>149</sup> Kahn, *Conversations With Students*: 58.

<sup>150</sup> Kahn, "How'm I Doing, Corbusier?, 1972," 308.

*itself* differently in every singularity,” “knowledge is accumulated as fragments of order,” and therefore “knowledge remains an incomplete book ... gathering always more and more pages” and “truth is really your truth.”<sup>151</sup>

As such historical memories burst into embodiment and shed light on the possibility to search within architectural history means to design modern environments that aspired to allow meaningful participation – environments that would relate to the past yet acknowledge progress. Kahn saw architectural design as a circumstantial order.<sup>152</sup> When Kahn was asked “what is tradition” he answered “it’s what man makes in his quest for expression” i.e. “what he writes, his paintings, his music” that “falls as golden dust” containing “the essence of his nature.”<sup>153</sup> Kahn believed that “if you know this dust, and trust in it,” “then you are really in touch with the spirit of tradition” and argued that through this dust one gains “the powers of anticipation” and from it “you know what will last when you create.”<sup>154</sup>

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<sup>151</sup> Ibid., 299-300.; Also see Kahn, "1973: Brooklyn, New York," 327.

<sup>152</sup> Kahn, "Architecture and the University, 1953," 54.

<sup>153</sup> Kahn, "Silence, 1968," 232.

<sup>154</sup> Kahn, "Space and Inspiration, 1967," 230. Kahn also gave a paper Kahn, "How'm I Doing, Corbusier?, 1972.".

## **Kahn's Ideas about Temporal Architectural History on Trial**

*Where is architecture going? You might ask yourself where are you going. Architecture can wait thousands of years because its presence in this world is indestructible. If you want to not feel the edges of its inspiration, that's your hard luck.*<sup>155</sup>

*A man working with me said ...How would you describe this epoch? ...I pondered his question because, somehow, it fascinates me to answer questions to which I do not know the answer.*<sup>156</sup>  
*Only from wonder can come our new institutions.*<sup>157</sup>

While willing to follow Le Corbusier's call to re-interpret historical memories, so that they could encase new ideas, rituals, beliefs and narratives which would suit modernity, Kahn noticed the problem to do so in an era marked by a crisis of identity; he held that there was not yet a clue of "what event or philosophy shall give rise to a will to commemorate its imprint on our civilization," and that would allow to "determine what effect would such [yet not defined] forces have to our buildings,"<sup>158</sup> the extent that progress be expressed in contemporary buildings, and the degree "the achievements and aspirations of our time" should be restrained by precedents and "be built to resemble Chartres, Crystal Palace, Palazzo Strozzi, or Taj Mahal."<sup>159</sup> He stated that "we are living in an unbalanced state of relativity which cannot be expressed with a single intensity of purpose," "I think that it is a time of our sun on trial", recognized architects were like "poets who were trying to write poems without words," and pointed out that it was for this reason that "all of our institutions are on trial."<sup>160</sup>

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<sup>155</sup> Kahn, "Architecture, 1972," 277.

<sup>156</sup> Kahn, *Conversations With Students*: 13.

<sup>157</sup> *Ibid.*, 14-15.

<sup>158</sup> Kahn, "On Monumentality," 577-78.

<sup>159</sup> *Ibid.*, 583.

<sup>160</sup> *Ibid.*, 577.



Kahn accepted that progress entailed that the world and the self – its culture, beliefs, desires, orders and actions – were constantly changing and hence non-determinable. He acknowledged the difficulty to discern “what kinds of spaces now represent the enclosure or the enclosing character of activities of man.”<sup>161</sup> Holding that “you don’t know what a building is, really, unless you have a belief behind the building, a belief in its identity,” he questioned the possibility of creating meaningful architecture when “there is nothing that you feel is somehow a light which shines on the emergence of a new institution of man, which makes him feel a refreshed will to live.”<sup>162</sup>

However, Kahn did not agree with his colleagues that “we are psychologically constituted to convey a quality of monumentality to our buildings” and was not willing to give up the possibility of the architect, whom he perceived as a talented figure capable of and responsible for shaping new realities, and creating new meaningful places.<sup>163</sup> Kahn understood that the task of coming up with contemporary architecture that would define future orders and the re-definition of architectural history had to be postponed, but was motivated to search for ways that architectural orders could “enter creation so that the psyche can be more closely expressed.”<sup>164</sup> Kahn “warned that to remain in Feeling” / in the “Psyche” - in the state of anticipation - and “away from thought” - the “presence of order” - meant “to make nothing” and asserted that “to live and make nothing is

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<sup>161</sup> Kahn, "On Form and Design," 107.

<sup>162</sup> Kahn, "Remarks, 1965," 194.

<sup>163</sup> Kahn, "On Monumentality," 577.

<sup>164</sup> Kahn, "Form and Design, 1961," 113.

intolerable.”<sup>165</sup> He believed that “man cannot proceed in a society ... without having certain inspirations” and must “be given a place for their exercise.”<sup>166</sup>

Kahn suggested those who were willing to “feel the new spirit which must develop the days to come” to exploit the time by preparing themselves “to use intelligently the knowledge derived from all sources.”<sup>167</sup> He held that modern, open, yet not defined “personal feelings” had to “transcend into Religion,” “Thought” and “Philosophy” to open up “realization of what may be the existence will,” and what would be the “particular architectural spaces” in the future.<sup>168</sup> Kahn believed that growth was possible “if you can refer to something around which you can grow from” and something “from which you can understand which way you’re going.”<sup>169</sup> Thus, he issued a unique call to address the modern era as an era of transition, and encouraged architects to take pleasure in trying to answer questions to which they had no answers.<sup>170</sup> He asserted: “when there isn’t anyone who is the leader who can tell you the spirit of one quality or the other,” “to look for the spirit and find it is the key,”<sup>171</sup> and claimed: “only from wonder can come our new institutions.”<sup>172</sup> As would be shown in the next section Kahn inclined that an intelligent manner to use architectural history would be by contemplating its ideas, rituals, beliefs in architectural expressions that would at once bring forth the uncertain temporality of modern existence, and thus would also have the potential to pave

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<sup>165</sup> Ibid., 112-13.

<sup>166</sup> Kahn, “Silence and Light, 1969,” 242.

<sup>167</sup> Kahn, “On Monumentality,” 586-87.

<sup>168</sup> Kahn, “Form and Design, 1961,” 112-13.

<sup>169</sup> Louis Kahn, “Architecture - Fitting and Befitting, 1961,” in *Louis Kahn: Writings, Lectures, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 141.

<sup>170</sup> Kahn stated “it fascinates me to answer questions to which I do not know the answer”. Kahn, *Conversations With Students*: 13.

<sup>171</sup> Ibid., 63 .

<sup>172</sup> Ibid., 15.

the way to the creation of more definite architectural expressions which would take place in the future.

### **Kahn's Call to Mediate Architectural History to reclaim a lost Temporality**

It was in the CIAM 1959, a meeting in which forty-three architects from more than twenty countries<sup>173</sup> suggested directions for modern architecture so it could promote institutions that would express modern ways of living, and to which Kahn was invited to make closing remarks, that Kahn, shared in the global scene, his unique understatings about the potential to create meaningful relationships between architectural history and contemporary design. Kahn ideas stood out in the meeting whose most participants held either historicist or modernist positions.<sup>174</sup>

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<sup>173</sup> The meeting included 43 participants from Europe, the Americas, and Asia: John Voelcker, André Wogenscky, Alfred Roth, Ernesto Rogers, Blanche Lemco, Sandy van Ginkel, Ignazio Gardella, Vico Magistretti and those who later were the important members of Team 10 Alison Smithson, Jaap Bakema, Aldo van Eyck, Georges Candilis, Shadrach Woodsm and Giancarlo De Carlo. Other less known architects such as José Coderch (Spain), Jerzy Soltan (Poland), Radovan Niksic (Yugoslavia), Wendell Lovett (USA), Viana de Lima (Portugal) and from Japan Kenzo Tange, also presented their projects. All architects which took part in the meeting reached maturity in the Postwar era (were about 40 in age), and their work was considered vital to architectural practice at the time. All architects, except Louis I. Kahn, were active in the previous CIAM meetings.

The architects who lead the meeting in Otterlo belonged to a middle generation of Modern architects, who practiced in the second half of the 20th century, primarily in Europe, mostly from the UK, France, Italy, the Netherlands, and Switzerland. Team 10 did not share any common theory and did not create any mutual projects. They acted as individuals who met together, maintained their autonomous standpoints, and exposed them before there colloques. Each was in search for his own individual truth. They wrote one manifesto, the Doorn Manifesto of 1954, which included disputes between its Dutch and English members, in 1961 they published the 'Paris Statement' and 'The Aim of Team 10', but none of them were a program for a 'new architecture'. However, the work and ideas of all of Team 10's members challenged CIAM's pre-war modern doctrines.

Edited by Jürgen Joedicke, "Documents of Modern Architecture" (paper presented at the CIAM 1959- Group of research of social and visual inter-relationships, Otterlo, 1959), 6-7., Kenneth Frampton Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960* (Massachusetts, Cambridge: MIT Press, 2000), 260-162.

<sup>174</sup> Or as was defined in the meeting, would embrace the idea of *Gestaltung*. *Gestaltung* - an "expanded concept of art." Design as a creative process which includes a meaningful intervention in the environment, deals with the design 'of life', and transcends the occupation with aesthetics appearances alone. In this sort of design the context is of real importance, and the design confronts with it. Gestaltung aspires not only to record, but to express, to distort, to irritate, to question, or to intervene with the internal, external, subjective and objective realities. The purposes of the meeting were declared in its opening by Dr. C. H. Van der Leeuw, Staatssecretaris Mr. Y. Scholten, and Jacob B. Bakema. Joedicke, "Documents of Modern Architecture," 20-22.



Fig 04a



Fig 04b



Fig 04c



Fig 04d

Fig 04a: A picture depicting the organic patterns and traditional materials characterizing the city of Matera.

Fig 04b: Giancarlo de Carlo's design for shops and apartments buildings in the southern Matera, Italy as a translation of traditional city of Matera into new abstract structures.

Fig 04c: A picture of Medieval and neoclassical historical Italian towers.

Fig 04d - Ernesto Rogers' design for an apartment building in Milan resonating with Medieval and neoclassical historical Italian towers.

(From: Jürgen Joedicke, *Documents of Modern Architecture*, CIAM 1959 in Otterlo, 87-92).

The group of Italian historicist architects claimed that contemporary architects should promote progressive symbols that were “tied to a continuous reality,”<sup>175</sup> and were “in association with the past,”<sup>176</sup> to avoid schizophrenic architectural environments<sup>177</sup> and to remain “in contact with the people.”<sup>178</sup> Giancarlo de Carlo from the historicists' group presented his design for shops and apartments buildings in the southern city of Matera, where he translated the organic patterns and traditional materials characterizing the traditional city into new abstract structures using modern and economical materials,

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<sup>175</sup> Ibid., 88.

<sup>176</sup> Ibid., 148.

<sup>177</sup> Giancarlo de Carlo criticized progressive approaches which sought to create new objective realities practiced by the Chicago School (F.L.Wright, Sullivan), the Middle-Europe proto-rationalism (Berlage, Behrens), Adolf Loos and German Rationalism of the first post war period, as well as alternative approaches aiming for subjective architectural expressions practiced by Avante Garde trends of the 20ies such as futurism, expressionism, Neo-plasticism etc.) The first approach rejected possible connections between a creative architectural image and reality, promoted architecture that followed economic and productive architectural criteria, and treated architecture was regarded as a mode of production lacking artistic value. The second approach rejected any connections between reality and a creative image, emphasized subjective expression, pursued variety of artistic solutions, disregarded ideas of progress, and treated architecture as plastic art. Ibid., 81-85 .

<sup>178</sup> Ibid., 219 .

while preserving functions and activities that the people of Matera were familiar with from their old neighborhoods (Fig 04a, Fig 04b).<sup>179</sup> Ernesto Rogers offered an office and apartment building in Milan that projected “clarity and sincerity” and met modern aesthetics, and structural requirements, but whose forms and materials resonated with medieval and neoclassical historical Italian towers (Fig 04c, Fig 04d).<sup>180</sup>

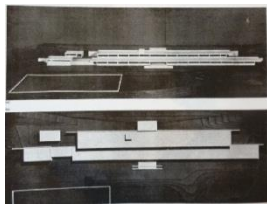


Fig 05a

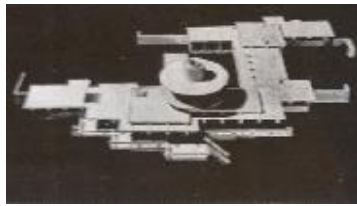


Fig 05b



Fig 05c

Fig 05a: Grung's design for Vetre School in Asker, Holmenkollen, Oslo, Norway

Fig 05b: Grung's plan for Dwelling in Holmenkollen, Oslo, Norway

Fig 05c: Bakema Van der Broek and J. M Stolka's design for forms of living for the growing population in the North-Konnemerland district, Amsterdam, The Netherlands

(From Jürgen Joedicke, *Documents of Modern Architecture*, CIAM 1959 in Otterlo, 108-213)

Modern architects, (who did not form any organized group), on the other hand, asserted that the only way to address modern ideas was to enable the architect to "give evidence of a power of imagination" and to allow him to act as "a constructive and alert mind" and create in an "impressive manner" "from a *tabula rasa*."<sup>181</sup> Architect Bakema, (with Van der Broek and J. M Stolka), presented the manner in which participation, self-

<sup>179</sup> In the buildings in the southern Matera apartments were located above shops so that merchants could run their businesses; a covered portico surrounding the shops on the ground floor allowed outdoor shopping areas and cafes; the apartments on the second floor opened to balconies, and the apartments of the top floor opened to inner courtyards, and even openings were similar in scale and detail to those of older buildings.

Ibid., 88., Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960*: 258-63.

<sup>180</sup> The office building in Milan included two underground floors of garages and eight stories of offices, above which were placed eight stories of cantilevered apartments. It was constructed out of concrete and made use of pre-fabricated elements and standard windows; it projected a simple compositional arrangement and made use of simple construction ideas; It smoothly met the ground, and was designed so that it rose elegantly towards the sky yet was clearly defined by a terminating roof; its corners were cut to create a feeling of the volume's continuity. Its use of brick carried medieval echoes; its use of stone resonated with structures of the neo-classical era. The form created was also similar to Italian medieval towers, whose upper floors were cantilevered due to a lack of street space in fortified medieval cities.

Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960*: 258-63.

Joedicke, "Documents of Modern Architecture," 81-83, 93.

<sup>181</sup> Joedicke, "Documents of Modern Architecture," 108.

expression, and freedom could be achieved in the use of flexible patterns of living for the growing population in the North-Kennemerland district (in Amsterdam in The Netherlands) (Fig 05c).<sup>182</sup> Grung, presented designs for the Vetre School in Asker (Fig 05a) and a plan for a dwelling in Holmenkollen (in Oslo, Norway, Fig 05b), where he used forms without any previous connotation, whose "structural nuts and bolts" were unfastened, and into which light penetrated from different directions, to imbue them with an un-situated feeling so they remained flexible to adapt to the constant alterations of modern times.<sup>183</sup>

Historicist and modernist architects were criticized by participants in the meeting – and, in this sense, the meeting brought about the acknowledgment that progressive architecture, based on pure invention, and nostalgic architecture which naively adopted the past were obsolete and issued a call to come up with a theoretical framework that would allow to rethink historical forms in a manner that architectural history could assist in meaningfully defining modern space.<sup>184</sup>

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<sup>182</sup> Ibid., 141-44.

<sup>183</sup> Ibid., 111-13.

<sup>184</sup> The historicists' manner to address architectural history was criticized by several architects who took part in the conference. Peter Smithson advocated the need for a theoretical framework that would suggest a manner to rethink historical forms enabling architects to arrive at a definition of space that meaningfully integrated past and present ideas. He noted that the historicist members used casual formal links between new buildings, the context in which they were built, and the architecture of the past. Thus, he stressed that they avoided the confrontation with real content embedded in the forms they used, did not assess the relevance of historical forms to contemporary situations, ignored contemporary freedom of choice and the modern architect's role in shaping new realities, re-imposed the content of the past on new environments, and did not invent an authentic vocabulary for modern architecture. Ibid., 88-95; Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960*: 258-63.

It is interesting that De Carlo fell into the pit which he himself criticized. In his lecture, Giancarlo de Carlo also criticized the misuse of architectural history in eclectic and revivalist architecture where past forms were emptied from their meaning, and used as majestic technical and artistic expressions in architecture. He believed that these aesthetic trends which claimed to be progressive were conservative and restorative, and argued that past aesthetic expressions could not be transferred "with the aim of proposing their underlying contents anew" since in doing so "the dialectic relationship existing between the facts and their expression" was neglected.

According to him an aesthetic renewal of the past disregarded any other attribute of past architecture related to its essence and content, and by doing so artificially restores pre-modern conceptions, and reduced them to a stylistic language, which was detached from reality. Joedicke, "Documents of Modern Architecture," 84-85.



Fig 06a

Fig 06a: Kahn in Otterloo

(From Jürgen Joedicke, *Documents of Modern Architecture*, CIAM 1959 in Otterloo, 206).

Kahn's comments were in line with ideas he expressed on other occasions. Kahn criticized historicist and modernist architects for concentrating on means of expression, and for not contemplating essences of things and their relevance to modern culture. He stated: "I believe that man must realize something before he has the stimulation within himself to design something. I believe that there are many in our profession who rely entirely upon the actual design and very little on the way of thought of what a thing wants to be, before they start to develop a design – the solution of the problem." He also repeated his calls to read historical buildings, their elements and characteristics as expressions of orders bringing forth contents and engendering behavioral patterns, rituals, and ways of life.<sup>185</sup> However, he stressed that since "our problems are all new, our spatial

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According to Peter Smithson the use of a plastic vocabulary in Rogers' building took no moral responsibility. While the building's silhouette made a direct connection to the medieval fortresses of Northern Italy, and its aesthetic structure resonated with modern skyscrapers, expression of any doubts, hesitations, or sense of contradiction that might have resulted from such an integration of different elements and the location of a new architectural program being in an historical context were avoided. Ibid., 95-97.

Jacob B. Bakema added that the historicists need to arrive quickly at an architectural language, resulted in the fact that the buildings they suggested failed to express of modern life. Ibid., 97., ibid., 90.

Jacob B. Bakema explained that Italian medieval fortresses came into being because they served small, disciplined communities that had to defend itself against attacks, and thus the architectural form embodied context-specific situations. He argued that contemporary towers should communicate different ideas relating to current issues – not merely accommodating present requirements while being enveloped in the appearances of the past. Ibid., 97.

Other remarks criticized aesthetic parameters of the historicist projects: Georges Candilis criticized the historicist architects of the use of rigid forms and suggested more contemporary, flexible forms which promoted openness and freedom; André Wogenscky called to integrate conception of modern space by replacing the fixed geometry with plastic, non-Euclidian forms.

<sup>185</sup> Kahn explained: "Orderliness is nothing tangible about order, it is simply a state of comprehension about existence, and about a sense of a sense of existence. From it you can get a sense of the existing will of something. The existence-will, let us say of a form, of a need, which one feels. The existence will of this need can be sensed through a realization. From the realization you can get much richness of design." Joedicke, "Documents of Modern Architecture," 206-07.

demands are new” and therefore contemporary architects should not revive historical spaces, but use architectural history to open doors for new creations, while taking upon themselves to redefine essences, rituals and orders that would express existence-wills and aspiration related to contemporary and bring them forth in new designs for better institutions (Fig 06a).<sup>186</sup>

This was, however, the first time that Kahn expanded upon the manner in which contemporary architects could address architectural history so that its naïf quotation and its nihilistic erasure in the name of obsolete truths would be avoided. He suggested strategies to overcome the difficulty to interpret history in the modern era, expressing the uncertain temporality of the contemporary era and the possibility to contemplate the progressive future. Kahn called to address past and future orders neither as opposed dichotomies, nor as mutual prototypes, but as interrelated models, or in other words, to treat historical orders as entities whose validity had almost perished, but which were not that far from the unknown orders which would replace them. For Kahn history was to be read as “a start” / “a beginning” and its architecture as a “pre-form” / “proto-form”- an archaic expression of a spirit / essence / symbolic aspect of something, encompassing “all that ever can come from it,” and in which laid “the seed for all things [realizations] that must follow.” The original essence spirit (contained in the proto-form) re-appeared in an historical realm of spaces that expressed its various realizations / interpretations along the different epochs.<sup>187</sup> For example, Kahn explained that the institution of school started

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<sup>186</sup> Ibid., 205-15. Quotes are from p. 211.

<sup>187</sup> Kahn claimed: “Modern space is really not different from Renaissance space.... But they are not the same in character because a space today demands different things.... It must be quiet. A Renaissance dome can talk back to me, and it's alright, but not a modern one. So therefore something in the fabric of making this thing is already the ingredient



when a man was sitting under a tree and people gathered near him to hear what he had to say. Back then there were no definitions of who were the teachers, who were the students, where and what place had been created, but there was certainly a sense of order, which carried a certain meaning and an essence from which the institution developed.<sup>188</sup>

Kahn explained that while the historical “proto-form” “may not be a beautiful thing in the eyes of the beholder,” “to the artist it is a beautiful thing” because it could serve as a beginning upon which all other things could develop. The acquaintance with what belonged to another epoch, when regarded as something estranged from reality yet appreciated due to the truth it once held, could generate original realizations of what something wanted to be today. Such architectural making did not reduce the creative act of design, but strengthened its applicability. As he stated: “There is such a thing as the phenomenon of the man who somehow can do the unfamiliar thing and that it be right. The unfamiliar thing, however, cannot exist without already “feeling that you need it.” He suggested that the knowledge of the existing world and its manifestations be manipulated by architects, offering them as a basis for fantasy and imagination, to assist in a re-definition and re-creation of a contemporary institution, and that could be

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of making it not speak back to us.” He stressed: “When I went to school we had a reference library divided into various architectural periods: Egyptian, Greek, Roman, Gothic and so on, and this was my realm of architecture.”

Ibid., 207-13. First quote is from p.211, second quote is from p.213.

<sup>188</sup> As he explained: “Think about a man under a tree, talking to few people about a realization he had – a teacher. He did not know he was a teacher, and those who listened to him did not consider themselves pupils or students. They were just there, and they liked the experience of being in the presence of one who had a realization – a sense of order. This is the way it began. But around such a man there was a need that also grew. You felt that his existence also had a need content. Around him were people who realized that they would like to send their children to this man too – that it was nice to know, to realize the things he realized. So therefore, a need was automatically felt for this thing – for this phenomenon, for this need, for this beginning, which is called ‘teacher’ and ‘student.’” “I think schools, for instance, have not gotten away from the original spark or the existence will or seed of ‘school.’” “Now therefore, that moment under a tree was the beginning of an institution of ‘school’ which has gone completely hay-wire because it has been handled by too many men who assumed a feeling for it, but who have long lost the meaning of it, and the architect must constantly be there to revive the existence-will sense of this thing.” Thus, the occupation of an architect who designed a school was “to change the programme, to make the programme alive to the very existence will which started the school.” Ibid., 206-07.

recreated as a poetic product - which at once preserved its analogy to the existing and would carry traces of the original institution, yet transcended it, by giving it new and unique definitions relevant for today's life. <sup>189</sup>

Kahn explained that as a student he wrongly addressed architectural realizations, that appeared in his architectural history books as prototypes as answers for his own designs. But, later, he realized that it was precisely the foreignness of an historical example that confronted him with "a good question" that touched upon future realizations proper to contemporary civilization that assisted him to arrive at his own creative spaces. Thus, Kahn explained "I never really got to architecture by simply taking convenient things; it was through the unfamiliar that I learned and realized what architecture really was." <sup>190</sup>

Kahn's comments in CIAM were in many ways enigmatic. He did not describe concrete strategies which would apply to the kind of creative architectural making that he believed in; nor talked about philosophical approaches that would help to recreate the essences that resided in the proto-form. He did not suggest means to use historical architectural manifestations as spaces that might give rise to meaningful and mentioned that modernity could not express itself in singular entities, but had to be expressed

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<sup>189</sup> Ibid., 211-15. Quote from 212.

<sup>190</sup> *ibid.*, 211. Kahn explained: "When I got through with school, I walked around the realm and I came to a little village, and this village was very unfamiliar. There was nothing here that I had seen before. But through this unfamiliarity – from this unfamiliar thing – I realized what architecture was. Not right then, because I was then dealing with answers, but Le Corbusier raised the question for me, and the question is infinitely more powerful than the answer. So through the question – the power of it – the real thing was brought out." Kahn stressed: "When I went to school we had a reference library divided into various architectural periods: Egyptian, Greek, Roman, Gothic and so on, and this was my realm of architecture." But he believed that a good question was "greater than the most brilliant answer" because the answer, "is very fragmentary in comparison to it." *Ibid.*, 213.

through a symphony of places bringing forth variety of ideas.<sup>191</sup> However, in CIAM Kahn certainly provided hints regarding the kind of creative architectural making that he believed in.



Fig 07a



Fig 07b



Fig 07c



Fig 07d

Fig 07a, Fig 07b: Van Eyck's Orphanage - The Dual image comes forth through forms and architectural elements that are perceived differently when viewed from various angles.

Fig 07c, Fig 07d: Van Eyck's Orphanage - The Dual Program is promoted by in-between spaces distorting the coherence of space and demanding choices.

(From Jürgen Joedicke, *Documents of Modern Architecture* CIAM 1959 in Otterlo, 29-39)

Kahn expressed appreciation for Aldo Van Eyck, who condemned a false search for truths promoting “sterile and academic” architecture<sup>192</sup> and warned of the possibility that alternating loyalty from one polarity to the other may lead to schizophrenia;<sup>193</sup> he

<sup>191</sup>As he stated: "I do not wish to imply that monumentality can be attained scientifically or that the work of the architect reaches its greatest service to humanity by his peculiar genius to guide a concept towards monumentality. I merely defend, because I admire, the architect who possesses the will to grow with the many angles of our development. For such a man finds himself far ahead of his fellow workers." Kahn, "On Monumentality," 583-86.

<sup>192</sup> Unlike modern architects, who narrowed the human experience, modern artists (such as Picasso, Klee, Mondrian, Brancusi, Le Corbusier, Schönberg, and Bergson) did not succumb to formalistic aridity but addressed emotional issues and engendered meaningful experiences. Joedicke, "Documents of Modern Architecture," 26-27.

"Each period requires a constituent language – an instrument with which it tackles the human problems posed by the period, as well as those which, from period to period, remain the same, i.e. those posed by man – by all of us as a primordial being. The time has come to gather the old into the new; to rediscover the archliberal principles of human nature. To discover anew implies discovering something new. Translate this into architecture and you'll get real new architecture- real new architecture." *ibid*.

<sup>193</sup>"You can't just split dual phenomena into polarities and alternate your loyalty from one to the other without causing despair". Van Eyck warned against the pitfalls of eclecticism, regionalism, and modernism and their seeing as 'shortsightedness that continually alternate.' He called architecture to breathe in and out as humans do. In his opinion

was empathic to Van Eyck's suggestion to address architecture as a constant rediscovery of human beings' concerns and its artifacts as complementary rather than opposing alternatives;<sup>194</sup> was intrigued by his call to create "in-between" architectural expression that would embrace "la plus grande réalité du seuil," allow opposites within the same phenomena, such as the conscious and the unconscious, reality and myth, change and consistency, and past and future to come together; supported the need to design spaces that promote conflict, self-critique and self-expression, express the emotional and spiritual conditions of modern humans deriving from the crisis in identity,<sup>195</sup> and bring forth vague truths that served as sources for modern poetics. Kahn was impressed by Van Eyck's design for the Children's Home in Amsterdam in which architectural elements were organized so that they were perceived differently when viewed from various angles yet could be recognized as a whole from a distance (Fig 07a, Fig 07b), and made use of gaps, voids, paths, courts, and non-continuous enveloping walls that distorted the overall coherence of space, situated the beholder between inside and outside, allowed him to choose and to determine the direction in which he should go (Fig 07c, Fig 07d) – hence brought forth the dual phenomenon - its image and program.<sup>196</sup>

Kahn also explained that artists such as the Renaissance painter Giotto who used fantasy by painting "the skies black in the day time, and painted dogs that could not run

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"Modern architecture has been trying hard to breath only out without breathing in", and as he mentioned "you can't open up unless you enclose." Ibid., 27.

<sup>194</sup> Van Eyck protested that while "we must evolve a richer tool – a more effective way of approach – to solve the environmental problems our period poses today," it was important to keep in mind that "these problems will not remain the same, but they concern the same man and that is our cue." Man, he claimed, "is everywhere essentially the same. He has the same mental equipment, though he uses it differently according to his cultural or social background, according to the particular life patterns of which he happens to be a part." Ibid.

<sup>195</sup> Ibid., 27, 33-34. Van Eyck referred in his talk to the ideas of Martin Buber. See Martin Buber, *Between Man and Man*, trans. Ronald Gregor-Smith (London: Routledge, 2002). 250-51.

<sup>196</sup> Joedicke, "Documents of Modern Architecture," 27-35.

and birds that couldn't fly, and people who were larger than buildings” but “also satisfied the need being true to the allegory, let us say, of St. Francis in this case” so “people understood it” (Fig 08a) as well and Chagall and some “modern painters who have the same freedom,” shed light on ways in which the existing reality, when treated as a “proto form” open to wonder and imagination could assist in bringing forth new observations. <sup>197</sup>



Fig 08a

Fig 08a: Giotto's painting of St. Francis giving coat to beggar, presented by Kahn in his closing talk at CIAM, 1959 as manifestation of fusion between fantasy and recognized allegory (From Jürgen Joedicke, *Documents of Modern Architecture*, CIAM 1959 in Otterlo, 211).

The 1959 CIAM meeting marked a beginning of new awareness about the importance of architectural history, not for matters of nicety or correctness, but for the purpose of designing meaningful places which would promote new healthy environments that might address the totality of human life, including people's culture, beliefs, behavioral patterns, emotions, desires, and well-being, and put an end to the belief in modern architecture based on progress *per se*. Oscar Newman stated: "We have come to understand historically that no new movement is ever born of itself but is inevitably linked with previous groups and ideas." <sup>198</sup> At the end of the meeting the death of CIAM was officially announced, during the 1960's new architectural approaches rejecting scientific methods of architectural making emphasizing the ephemeral, on the one hand,

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<sup>197</sup> Ibid., 211- 212.

<sup>198</sup> Ibid., 7-10.; Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960*: 263. Quotes from Joedicke, "Documents of Modern Architecture," 7.

and tradition, on the other, started to appear.<sup>199</sup> Kahn's contribution to the understanding outlined above was acknowledged by several participants in the meeting. The Swiss architect Alfred Roth explained that Kahn "pointed out where the source of true architecture was" and shed light on the need "going deeper into the problems and the questions which architecture had to address." Peter Smithson praised Kahn for showing that design could not arrive from formal processes and for shedding light on the need to re-find the "point from which realization could arise," and to address the pre-concepts which were placed in history, in order to re-define human institutions.<sup>200</sup>

While Kahn's ideas remain vague when discussed only in a theoretical framework, Kahn's paintings and projects, to be explored later in this thesis, will hopefully reveal some of his intentions. Through an investigation of Kahn's drawings, the following chapter will try to address how architectural history was addressed as a temporal construction, allowing him to stimulate "a good question" which as he asserted was "greater than the most brilliant answer"<sup>201</sup> and to generate contemplation of institutions of progressive modern society. The second chapter of this dissertation will concentrate on the manner in which Kahn used architectural history as beginnings, essences, and generators of meaningful contemporary designs.

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<sup>199</sup> Leading new architects were figures such as the Smithsons, van Eyck, Aldo Rossi, Giorgio Grassi, and Robert Venturi. Eric Mumford, *The CIAM Discourse on Urbanism 1928-1960*: XIV-XV, 264-69.

Peter Smithson recommended abandoning the name CIAM, since it contained the word "Moderne," and suggested the name Team / Team Meetings instead. CIAM's 11<sup>th</sup> meeting in Otterlo was named CIAM 1959, to express the break with the old CIAM; philosophical discussions concentrating on selected modern issues were avoided. Ibid., 263.

<sup>200</sup> Joedicke, "Documents of Modern Architecture," 219.

<sup>201</sup> Kahn, "Form and Design, 1961," 112.

As the two following chapters will demonstrate, acknowledging that “what a thing will look like” in the future “will not be the same,” Kahn held that “what it is answering will be the same.”<sup>202</sup> Thus, first in his drawings, and later in his architectural designs Kahn found his own unique and poetic way to contemplate architectural history. The very same historical elements that were conceived by the Beaux Arts as vessels of truth, were presented by the International Style as false; called to be re-interpreted by Le Corbusier, they were used by Kahn as temporal fragments and traces of memories, whose original meanings were condemned to die, and upon which Kahn contemplated truths that were composed together into what Van Eyck defined as dual images and dual programs, enabling Kahn to bring forth the idea of contemporary institutions on trial through the use of architectural history.

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<sup>202</sup> Kahn, *Conversations With Students*: 38.

## Chapter Two:

### Mediating Architectural History in Drawing<sup>203</sup>

*A few years ago I visited Carcassonne. From the moment I entered its gates, I began to write with drawing, the images which I learned about now presenting themselves to me like realized dreams. I began studiously to memorize in line the proportions and the living details of these great buildings. I spent the whole day in courts, on the ramparts, and in the towers, diminishing my care about the proper proportions and exact details. At the close of the day I was inventing shapes and placing buildings in different relationships than they were.*<sup>204</sup>

*A new sort of air flooded my soul.  
I have heard a new song, and the whole world now seems completely transformed to me.  
The Autumn afternoon has arrived with its long shadows, clear air and cloudless skies.  
In a word, Zarathustra has arrived. Do you understand?*<sup>205</sup>  
(Giorgio De Chirico)

Kahn drew constantly during his entire life, and thought of himself as a reasonably accomplished painter. He enjoyed the exposure to works of modern artists in museums in Philadelphia (where he lived), New Haven (where he taught) and New York (where he often travelled), and since teaching at Yale belonged to a social, cultural, and academic circle of artists.<sup>206</sup>

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<sup>203</sup> Most of Kahn's drawings are included in two publications: Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn.*, Jan Hochstim, *The paintings and sketches of Louis I. Kahn* (New York Rizzoli, 1991).

<sup>204</sup> Kahn, "Not for the Fainthearted, 1971," 258.

<sup>205</sup> Giorgio De Chirico to Fritz Gratz, quoted in Magdalena Holzhey, *Giorgio de Chirico, 1888-1978 : the modern myth* (Köln, Los Angeles: Taschen, 2005). 21.

<sup>206</sup> Goldhagen, *Louis Kahn's Situated Modernism*: 45-49.



Already in 1931 Kahn made it clear that while regarding drawing as an important tool to serve the architect <sup>207</sup> he disliked drawings which aimed at depicting merely optically correct phenomena, asserting that “we should not imitate when our intention is to create – to improvise.” Kahn explained: “It is a pity to allow our impressions to be dominated by the...styles of architectural representation. Why most of the drawings can only be expressions in terms of stylistic Ernest Born, or the shallow Chamberlain is more than I can understand. If these are the only vocabularies with which one can record the masterpieces of Europe, I hold but little regard for those who blow their heads off about the feeling and grace of Rheims, and then show a flabby sketch of some buttresses as a proof for their understanding.” <sup>208</sup> On another note Kahn remarked that “if a painter was to faithfully duplicate the sunset, the sunset will laugh at him”, he claimed that man should paint the sunset as a reaction because “the psyche is conscious, demands life, and gives life.”<sup>209</sup> Kahn asserted that ““You cannot make a drawing unless you are joyfully engaged”<sup>210</sup> and Kahn regarded drawing as medium “employed by all the masters of the various forms of art” in their own particular ways”<sup>211</sup> whose “mind is different,”<sup>212</sup> and whose intuition was “rich, so rich, that no knowledge could ever encompass it.”<sup>213</sup> He asserted that one should be “less selective and more probing” when drawing, but did not

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<sup>207</sup> Kahn, "The Value and Aim in Sketching, 1931," 10.

<sup>208</sup> Ibid., 10-12.

Samuel V. Chamberlain (1895-1975) was an American artist. Ernest Born (1898-1992) was an American architect, artist, and illustrator. Who devoted a decade to illustrations of the Plan of St. Gall in a book he co-authored with author Walter Horn. <http://www.ced.berkeley.edu/cedarchives/profiles/born.htm>, 04.11.2011.

The Environmental Design Archives, University of Berkeley .

<sup>209</sup> Kahn, "A Statement, 1962," 146.

<sup>210</sup> Kahn, "1973: Brooklyn, New York," 321.

<sup>211</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

<sup>212</sup> Louis I. Kahn quoted by Sharad Jhaveri Birkhauser Heinz Ronner, *Louis I. Kahn- Complete Work 1935-1974*, Second revised and Enlarged Edition ed. (Basel, London1987), 302.

<sup>213</sup> Kahn, *Transcript of a lecture by Louis I. Kahn, given at the American Library in Brussels, Belgium*, Track 5.

care much about artistic style of a drawing either, stressing that “it makes no difference whether a watercolor is tight, loose, or flabby.”<sup>214</sup>

While enjoying the “realization of beauty” as a “total harmony” which took place in what Kahn termed “the first moment of sight”, Kahn held that such a recognition that was “without reservation, without criticism” did not imply “knowing.” For him, knowing had to engage a “response to the intuitive,” to promote “wonder” and to encourage “realization” about what you “want to express,” which in turn would bring one towards a “sense of singularity” expressed through an “odyssey of our making” and thus could channel towards “design.”<sup>215</sup> Kahn, therefore, held that a drawing must “disclose a purpose” to be of value. He regarded drawings as valid if they helped “to learn to see” things for themselves, in order to “develop a language of self-expression;” he was convinced that “the more one looks, the more one will come to see,” and regarded drawing as a form of “analyzing our reactions to what we look at, and their significance as far as we are concerned.”<sup>216</sup> He called to use drawing to bring forth the singularity of experience, to consider authentic ideas, and channel the way towards creative making.<sup>217</sup> While differentiating between drawing and the making of architecture, Kahn claimed that the finding of “new rules” and the joy of creation deriving from it were “shared by all those who write, paint, or design.”<sup>218</sup>

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<sup>214</sup> Kahn, "The Value and Aim in Sketching, 1931," 10.

<sup>215</sup> Kahn, "1973: Brooklyn, New York," 321-22.

<sup>216</sup> Kahn, "The Value and Aim in Sketching, 1931," 10-11.

<sup>217</sup> Ibid.

<sup>218</sup> Kahn, "Harmony Between Man and Architecture, 1974," 338.

Kahn appreciated painters like Chagall who “paint people upside down”<sup>219</sup> and contemplated the manner in which drawing can subvert meaning. In his drawings he indicated “the nature of something and something else,”<sup>220</sup> as he explained: “in my sketches I try not to be entirely subservient to my subject but to have respect for it, and regard it as something tangible – alive – from which to extract my feelings” and “regard it as no physical impossibility to move mountains and trees, or change copulas and towers.”<sup>221</sup> Indeed, when drawing Kahn embraced the visible and the invisible, the known and the unknown, the finite and the infinite using drawings as acts of re-thinking, re-creating, and re-interpreting the existing.



Fig 01a



Fig 02a

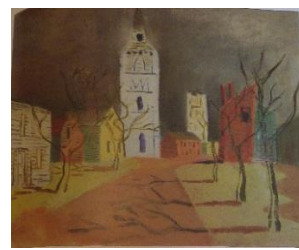


Fig 02b

Fig 01a: Postcard, View of Rockport, Rockport, Massachusetts, 1930-1936. Collection of Esther I. Kahn - A truthful representation of the environment as depicted by the mathematical representation of photography.

(From Eugene J. Johnson, Michael J. Lewis, Ralph Lieberman, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*, 20)

Fig 02a: Louis I. Kahn, *The White Church No. 4*, Rockport, Massachusetts, 1930-1936, Charcoal on Paper, 14.9 X 17.5 Cm, Collection of Sue Ann Kahn - Drawing bringing forth the embodiment of the site.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 195)

Fig 02b: Louis I. Kahn, *The White Church No. 3*, Rockport, Massachusetts, 1930-1936, Oil on Canvas, 60.9 X 76.2 cm, Collection of Mrs. Esther I. Kahn - Drawing bringing forth the embodiment of the site.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 195)

<sup>219</sup> Kahn, "Silence and Light, 1969," 232.

<sup>220</sup> Kahn, *Conversations With Students*: 43.

<sup>221</sup> Kahn, "The Value and Aim in Sketching, 1931," 10.

Kahn's drawings demonstrate a "sheer delight" deriving from "the rapport between subject and thought" which took place while he was drawing.<sup>222</sup> While drawing Kahn engaged with the world, the objective distance from it was broken, and distortions, the workings of the imagination, feelings, and other subjective modes of perception and interpretation – constituting an important part of personal human knowledge – were brought forth.<sup>223</sup> In *White Church of Rockport, Massachusetts* (~1930-1936) (Fig 02a, 02b) for example, Kahn abandoned the perspectival objective point of view, documented in a photograph of the site (Fig 01a), acknowledged the final view of the interpreter, shattered the drawings horizons, to create a bracketed space, into which his body was projected, and documented experiences in the form of what he termed "interwoven relationships" between him and the environment, which took place while drawing.<sup>224</sup> In the charcoal drawing (Fig 02a) Kahn moved the white church and "factory building" with its chimneys to the middle of the drawing, darkened the skies, moved the buildings on the sides of the road closer to the middle of the canvas and omitted the bushes which were located in front of them, and shortened the length of the fence located on the right side of the road, to disclose an intimate space that allowed the enigmatic moment of perception to take place. Then Kahn removed the windows of the buildings of the right side of the road, added textures to the building located on the right (Fig 02b), and added some trees in the foreground, to name but few changes in which Kahn manipulated and transformed the site. In the oil painting Kahn repeated the act of closing the drawings horizons, but

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<sup>222</sup> Kahn, "Not for the Fainthearted, 1971," 258.

<sup>223</sup> On drawing as depicting temporal bodily engagement see Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, Mass: MIT Press, 1997), 283, 316.

<sup>224</sup> Kahn, "The Value and Aim in Sketching, 1931," 11. On the bracketing of the horizons to bring forth inter-subjective experiences see Pérez-Gómez and Pelletier, *Architectural Representation and the Perspective Hinge*: 335. also see Maurice Merleau-Ponty, *Phenomenology of Perception*, trans. Colin Smith (New York: The Humanities Press, 1962). 100-04, 38-40.

loosened the space between the buildings located on the left side of the road, and omitted the fence which was located on its right side, instead of which he located some large trees that through shadows on the road, to depict an anonymous empty space, and them playfully altered the scale and colors of the buildings.

On his travels to Europe and to the Mediterranean Kahn used drawing to experience, analyze and rethink the visual appearances, the programs and narratives suggested by architectural history.<sup>225</sup> Kahn concentrated on the temporality of the environment, and took delight in the uncertain enigmatic spirits, the state of transition, and epistemological openness that the historical sites presented.<sup>226</sup> Kahn stated: "The Mediterranean is full of *wonder* and beauty,"<sup>227</sup> "there is so much to see and feel here which can influence the work of any architect."<sup>228</sup> He explained: "You are passing things that dangle before your eyes, and they tempt you in a way to stop your mind. But there are things that happened a long time ago...and are just a wonder in general".<sup>229</sup> Thus Kahn's drawings of historical sites during his travels were "an opportunity I have looked for to develop thoughts I have on architecture of to-day. These thoughts are about the frames and enclosures of new architectural spaces... their significance to the people and their place in the continuing evolution of traditional forms."<sup>230</sup>

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<sup>225</sup> On the pleasure of ruins see Rose Macaulay, *Pleasure of Ruins* (London: Weidenfeld and Nicolson, 1953), XV.

<sup>226</sup> Hochstim, *The paintings and sketches of Louis I. Kahn.*, Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn.*

<sup>227</sup> Louis I. Kahn, *Louis Kahn to Anne Tyng: the Rome letters, 1953-1954* (New York: Rizzoli, 1997), 16, my italics.

<sup>228</sup> Taken from a postcard sent by Kahn from Rome to his office in Philadelphia, 1950, Quoted in Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*: 71.

<sup>229</sup> Kahn, *Conversations With Students*: 58.

<sup>230</sup> Kahn quoted in Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*: p.73, n.146.

This chapter will demonstrate that Kahn's drawings of historical landscapes, their monuments and relics - many produced off site (some upon his return to his hotel or at the American Academy in Rome, and some upon his return to Philadelphia), and some so ambiguous that they could not be identified, brought forth the strange visual, haptic, and dis-orientating experiences which semi-familiar, ruined architectural sites evoked in the modern beholder.<sup>231</sup> Architectural history was perceived by Kahn as neither familiar nor as a series of completely alien constructions; its orders were regarded neither as possessing simplistic syntaxes that could be clearly understood by the modern Cartesian ego, nor as orders having nothing to do with modern being. Kahn looked at ruined historical sites as mysterious and ambiguous structures which prompted associations, ponderings, and the exercise of imagination, and generated active participation in their orders. In drawing Kahn questioned the status of historical images, rituals, and narratives as eternal truths, documented their fragments and traces, and represented them as seeds bursting forth into embodiment. Depicting the unfamiliar, surreal, and imaginative worlds of shadows, illusions, dreams, and memories, which lay within decaying, semi-familiar realms of a shared antiquity, Kahn brought forth the weak truth resulting from temporal embodied experiences that were at once subjective yet tied to existing categories, Kahn drew in a poetic manner while using "the hidden potentialities of the medium [drawing],"<sup>232</sup> to shed light on the manner in which the "mind, brain and psyche wonder the universe and question why anything?"<sup>233</sup> Kahn was drawing while thinking

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<sup>231</sup> J. Johnson points out that many of Kahn's drawings were drawn off-site. Ibid., 70.

<sup>232</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

For drawing as a poetic tool which is at once subjective yet tied to fixed categories see Pelletier, *Architectural Representation and the Perspective Hinge*: 290-294, 303-316.

<sup>233</sup> Kahn, "Remarks, 1965," 197.

“of constructing, as an architect who draws to build”<sup>234</sup> and produced impressions that brought forth “true visions of the creator,” and contemplated images and rituals encased in architectural history as memories that could pave the way to original contemporary architectural design.<sup>235</sup>

### **Memory as Fragments and Apparitions of Images**

Although equipped with Beaux Arts skills and methods of representation, Kahn did not attempt to reconstruct historical sites so they would be described as typologies in their wholeness, lucidity, or ideal heroic condition, and did not aim to give the impression that architectural history stood still. Instead, Kahn concentrated on the decaying nature of architectural history, which was affected by the passing of time, and the manner in which memories such as broken typologies, scattered elements, ruined envelopes, semi-erased structures, and destructed materials, could appeal to the architect’s mind, eyes and emotions.

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<sup>234</sup> Kahn, "Not for the Fainthearted, 1971," 258.

<sup>235</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.



Fig 03a



Fig 03b



Fig 03c

Fig 03a: Louis I. Kahn, *Ruins with Dead Trees, Greece*, 1951, Crayon on paper, size not available. Present whereabouts unknown - Depicting ruins' decaying validity as obsolete truth.

(From Jan Hochstin, *The Paintings and Sketches of Louis I. Kahn*, 263)

Fig 03b: Louis I. Kahn, *Italian Landscape with scattered ruins and cypresses*, Italy, 1951, Charcoal on Paper 21.9 x 24.8 cm, Collection of Sue Ann Kahn – Depicting the fragmentary, ghostly, and vague presence of destructed structures. (From Jan Hochstin, *The Paintings and Sketches of Louis I. Kahn*, 242)

Fig 03c: Louis I. Kahn, *Ruins, Rome-Ostia*, Italy, 1951, Pastel on Paper, 19 x 22 cm, Collection of Sue Ann Kahn – With sightseers examining incomplete structures that could not be fully comprehended (From Jan Hochstin, *The paintings and sketches of Louis I. Kahn*, 244)

In *Ruins with Dead Trees, Greece* (1951) the ruins were depicted an incomplete isolated and out of use structure with dead vegetation that brought forth its decaying validity as obsolete truth (Fig 03a). In *Italian Landscape with scattered ruins and cypresses* (drawn either in Pompeii or Ostia, 1951), Kahn used dark cloudy colors to emphasized the fragmentary, ghostly, and vague presence of the destructed structures (Fig 03b); and in *Ruins, Rome-Ostia* (1951), Kahn included a few figures that seem to be anxious awed sightseers, examining and pondering the fragmented incomplete structures that they could not fully comprehend (Fig 03c).





Fig 04a

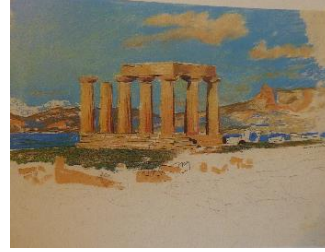


Fig 05a

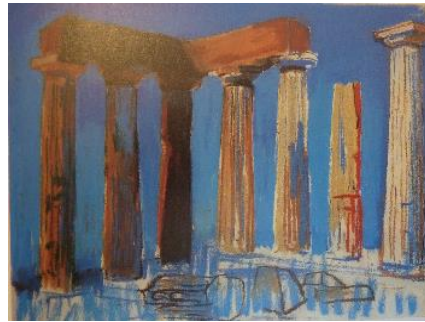


Fig 06a

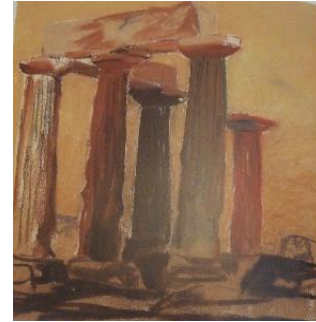


Fig 07a

Fig 04a: Photograph of the Ruins of the Temple of Apollo, Corinth by Ralph Lieberman

(From Eugene J. Johnson, Michael J. Lewis, Ralph Lieberman, *Drawn from the Source*, 113)

Fig 05a: Louis I. Kahn, *Temple of Apollo*, Corinth, Greece, 1951, Pastel and Charcoal on Paper, 27.5 x 26 cm, Shown in a travelling exhibition organized by the, Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn – Depicting decomposition of the Temple.

Fig 06a: Louis I. Kahn, *Temple of Apollo*, Corinth, Greece, 1951, Pastel and Charcoal on Paper, 28.6 x 36.8cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn – Depicting decomposition of the Temple.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 281)

Fig 07a: Louis I. Kahn, *Columns, Temple of Apollo*, Corinth, Greece, 1951, Pastel and Charcoal on Paper, 27.5 x 26 cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn - Depicting decomposition of the Temple.

(From Jan Hochstim, *The paintings and Sketches of Louis I. Kahn*, 280)

In a series of works depicting the Temple of Apollo at Corinth (Fig 04a), Kahn further decomposed the remaining parts of the historical site, to express dreamlike mediations that a traveler might have when encountering ruins. In the drawing depicting the Temple from afar (Fig 05a), Kahn detached the Temple from its surroundings, by unpointing the site on which it was located, and treated it as an alien, independent remnant in a natural context. In a sketch depicting the interior of the Temple (Fig 06a), Kahn disconnected the Temple's columns from the ground, colored the area beneath the

columns the same color as the sky, and made them seem as if they were floating in the air. In another sketch from inside the Temple (Fig 07a) he depicted only five of the Temple's columns, painted them in different imaginative colors – blue, green, and red – and made the sky yellow. Slowly the Temple's structure was decomposed; no reference to the landscape or the Temple remained; the manipulated Temple's elements floated on the painting's surface, and the historical structure was depicted as an imaginary scene.<sup>236</sup>

Kahn also documented the remnants of the historical structures on the landscape, and the erasure of the spatial architectural elements that complemented them (in section and elevation) prior to their destruction. The *ichnographia* as deliberate component (detached from its related *orthographia* and not necessary indicative of the building's *scenographia*) was only a trace - imprint of the absent original architectural image.<sup>237</sup>



Fig 08a



Fig 08b

Fig 08a: Louis I. Kahn, *Pyramids, Giza, Egypt*, 1951/55, Ink brushed on paper, 32.3x43.2 cm, Private Collection – Depicting traces of ruins.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 297)

Fig 08b: Louis I. Kahn, *Delphi from Marmaria*, Charcoal on paper, 29.2 X 36.8 cm, Present whereabouts unknown. Depicting traces of ruins.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 297)

<sup>236</sup> Eugene J. Johnson, Michael J. Lewis, Ralph Lieberman regard the different colors as a true recording of light conditions expressing Kahn's to natural effects. I would however like to suggest that Kahn's intentions succeeded representing truthful light conditions and used colors to express his own perception on the site. Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*: 84-85.

<sup>237</sup> I owe the understanding of a trace as *ichnographia* detached from its *orthographia* and not necessary indicative of the *scenographia* to Alberto Pérez-Gómez and Louise Pelletier. See their discussion in Pérez-Gómez and Pelletier, *Architectural Representation and the Perspective Hinge*: 104-05.

In drawings the pyramids at Giza Kahn used black ink strokes in a manner which made it difficult to differentiate between the pyramids and the surrounding landscape. The sketch gave the impression that the images of the pyramids were engrained in their surroundings (Fig 08a). In Kahn's charcoal drawing of *Delphi from Marmaria* he depicted the dispersed positions of the ruins, emphasizing the shadows the ruins cast on the landscape. The traces were illustrated in dark black, while the ruins themselves were left white and undetailed (Fig 08b).



Fig 09a



Fig 09b

Fig 09a: Fernand Leger, *Umbrella and Bowler*, 1926 Water Color on paper 31.4 x 23.7 cm, Exhibited in The Yale University Art Gallery Kahn designed – Depicting objects from multiple angles at once.

(From Jennifer R. Gross, *The Société Anonyme, Modernism for America*, 177)

Fig 09b: Umberto Boccioni, *Development of a Bottle in Space*, 1913, Metropolitan Museum of Art – Depicting objects from multiple angles at once.

(From Sigfried Giedion, *Space Time and Architecture: The Growth of a New Tradition*, 446).

Respecting historical evidence and believing that “the rules of aesthetics...constitute professional knowledge” made Kahn collect postcards of the monuments he visited.<sup>238</sup> Fascinated with new creation and calling to “seize the passion for truth” and “find beauty in the most ordinary objects”<sup>239</sup> Kahn acted as “an artist who senses the meaning of a new point of view ... which others are not in possession of” from

<sup>238</sup> Kahn, *Conversations With Students*: 31.

<sup>239</sup> Kahn maintained that there was “no value in trying to imitate directly” when using drawing since “photographs will serve you best of all, if that is your aim.” Kahn, “The Value and Aim in Sketching, 1931,” 11.

which he could see “different things and make images which are different.”<sup>240</sup> In similarity to Cubist and Futurist artists, such as Fernand Leger, Pablo Picasso, and Umberto Boccioni, whose work was well known to Kahn (Fig 09a, Fig 09b), he claimed that “we should be less selective and more probing.”<sup>241</sup>

In his drawings Kahn concentrated on depicting temporal architectural images which expressed the fact that “the presence of our own individuality” caused something “to appear differently than it would to others.”<sup>242</sup> Kahn, who held that “the senses could be really considered one thing” in a sense that when “you see so well ... you hear too” and when “you hear so well ... you see too,”<sup>243</sup> and noted that “the first feeling must have been touch”, that “our whole sense of procreation has to do with touch” and that “eyesight came from touch,”<sup>244</sup> depicted impressions as they were perceived by him during synesthetic body-centered experiences as he moved through the historical

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<sup>240</sup> Kahn, "A Statement, 1962," 147.

<sup>241</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

Kahn must have seen some of cubist art works exhibited in the Galleries in New York (a city to which he commuted often) and at the Art Gallery of Yale University (which Kahn himself designed, and close to which he taught so many years) Goldhagen, *Louis Kahn's Situated Modernism*: 45-49.

Kahn also might have been acquainted with Siegfried Giedon, painter Fernand Léger and architect J.L. Sert article in *New Architecture and City Planning* in which they expressed their respect for the works of Paul Cézanne, Picasso, Braque, and Léger, that introduced the condition of relativity into art. Giedon, Sert and Leger emphasized the importance to break the authority of one vantage point, and to acknowledge the importance of different viewpoints of human spatial perception, in discerning objects' characteristics. Fernand Léger Siegfried Giedon, J.L. Sert, "The Need for New Monumentality," in *New Architecture and City Planning, A Symposium*, ed. Paul Zucker (New York: Philosophical Library, 1944).

In *Space Time and Architecture* Giedon dwelled on the success of cubists and futurist artists (such as Picasso and Boccioni) in the embracing of relativity into art. Giedon, *Space, Time and Architecture, The Growth of a New Tradition* 443-49., 443-449. They called to put aside scientific Newtonian objectivism and to celebrate ways of perceptions, transcending rational qualifications, and taking into consideration the stimulus aspects of vision, tactility, and orientation in gathering knowledge. Picasso's *Still Life* of 1914 and Braque's *Collage* of 1913 were described as successful works which grouped temporal human experience of objects, when experienced from above, from below, from aside, from inside, and from outside, into a collage symbolizing the in-totality of human experience, which was always tensed and fragmented. Ibid., 434-39.

<sup>242</sup> Kahn maintained that there was “no value in trying to imitate directly” when using drawing since “photographs will serve you best of all, if that is your aim”. Kahn, "The Value and Aim in Sketching, 1931," 11.

<sup>243</sup> Kahn, "Silence and Light, 1969," 234.

<sup>244</sup> Kahn, "1973: Brooklyn, New York," 321.

environments.<sup>245</sup> Embracing the possibility of the eye to deceive the mind, and accepting vision as part of a spatio-temporal perception, Kahn's drawings depicted images in which "the simplest form" turned into "a part of a creative process," promoting memories in the form of phenomenological appearances, rather than objective presences.<sup>246</sup>

When drawing the pyramids in Egypt (Figs 10a-Fig 10f), Kahn did not adopt singular Cartesian perspectival, axonometric, or isometric points of view, to reveal the environment as a coherent and objective structure seen from a distance, but actually drew the pyramids when he was passing through them by his car.<sup>247</sup> As Kahn described the "desire to express" was promoted by the fact that while driving the pyramids were revealed "in full presence," their ruined condition bestowed a "feeling of silence"<sup>248</sup> and when moving through them they "crane their neck following you trying to draw your interest."<sup>249</sup> Indeed Kahn altered the images of the environment in the process of absorbing it and vice versa. Merleau Ponty explains that the ambiguity of perception results from the fact that "the map of the visible overlaps that of my intended motions" and that this "extraordinary overlapping ... makes it impossible to consider vision as an operation of the mind that erects in front of it a representation of the world."<sup>250</sup> Pérez-Gómez and Pelletier add: "This overlapping of visions and motion blurs the traditional

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<sup>245</sup> As Kahn claimed: "architecture *does* exist in the mind" Kahn, *Conversations With Students*: 32.

<sup>246</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

<sup>247</sup> Hochstim, *The paintings and sketches of Louis I. Kahn*: 244.

<sup>248</sup> Kahn, "Architecture: Silence and Light, 1970," 248.

<sup>249</sup> Kahn, "Transcript of a lecture by Louis I. Kahn, given at the American Library in Beels," Track 8.

<sup>250</sup> Merleau Ponty, quoted by Pérez-Gómez and Pelletier, Pelletier, *Architectural Representation and the Perspective Hinge*: 335. note 94.

opposition of contemplation and action, vision and visibility, activity and passivity. As a result the body is at the same time decentered and centering."<sup>251</sup>



Fig 10a



Fig 10b



Fig 10c

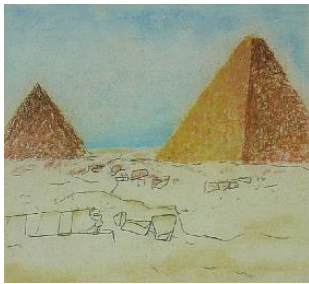


Fig 10d



Fig 10e

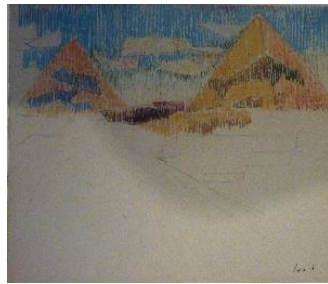


Fig 10f

Fig 10a: Louis I. Kahn, *Pyramids*, Giza, Egypt, 1951.

Pastel and charcoal pencil on paper, 17.5 X 25.4 cm, Private Collection.

Fig 10b: Louis I. Kahn, *Pyramids*, Giza, Egypt, 1951

Pastel and charcoal pencil on paper, Present whereabouts unknown.

Fig 10c: Louis I. Kahn, *Pyramids*, Giza, Egypt, 1951, Pastel on paper, 11.8x15.7cm, 11.8x15.7cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts.

Fig 10d: Louis I. Kahn, *Pyramids No. 7*, Giza, Egypt, 1951, Pastel and Charcoal pencil on paper, 17.5 X 25.4 cm, Collection of Mrs. Esther I. Kahn, Pennsylvania.

Fig 10e: Louis I. Kahn, *Pyramids Studies*, Giza, Egypt, 1951, Pastel on Paper 29 x 37.5cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts, Present whereabouts unknown.

Fig 10f: Louis I. Kahn, *Pyramids No. 6*, Giza, Egypt, 1951, Pastel and Charcoal pencil on paper 19 x 22.6 cm, Shown in a travelling exhibition, organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

All drawings are depicting the struggle to render lived spatiality through drawing  
(All From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 296- 299)

Kahn examined the pyramids from different angles, and depicted them from a multitude of viewpoints. In thirteen sheets of drawings of the pyramids, ten of them of the pyramids of Giza alone, Kahn documented the pyramids from different positions,

<sup>251</sup> ibid.

celebrating temporal, relative, and partial dimensions of human vision.<sup>252</sup> In drawing 10a the pyramid of Chephren stood out between those of Mykerinos and Cheops, in drawing 10b Kahn illustrated the pyramids as two-dimensional graphic surfaces while in the drawing 10d he depicted one pyramid as if it occupied three dimensions and the other as a two-dimensional flat surface. In painting 10e Kahn playfully adjusted and manipulated the gaps between the pyramids as revealed from different directions and in drawing 10f he added cloud shadows that fell on the pyramids' surfaces and blend into their façades,<sup>253</sup> taking into consideration not only the temporality a bodily centered experience, but the temporality of weather and lightening conditions that affected the architectural experience, its perception, and memories.

Opposing pure retinal perception, Kahn's drawings of the pyramids bring forth impressions which did not rely solely on vision. In drawing 10a Kahn applied color only to one surface of the two-dimensional graphic surfaces; in drawing 10c Kahn made use of striking colors to bring forth only some of the pyramids' components.<sup>254</sup> He also playfully distorted the angles, the sizes, and the dimensions of the pyramids, rendering them as they were embodied through him – not in some objectified condition. Kahn's drawings of the pyramids with all their variations reveal his struggle to render lived spatiality through drawing, one which as we may realize in the case of such monuments

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<sup>252</sup> Most scholars agree that it is a relatively large group of drawings for the same subject. Hochstim, *The paintings and sketches of Louis I. Kahn*: 244, 98; Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*: 76.

<sup>253</sup> Hochstim, *The paintings and sketches of Louis I. Kahn*: 298.

<sup>254</sup> *Ibid.*, 298-99. Jan Hochstim claims that Kahn did not complete the drawing, however, I would like to suggest that the drawing incompleteness was intentional.

is impossible to communicate photographically, drawing from synesthetic experiences - impressions that derived from several senses and not only sight.<sup>255</sup>

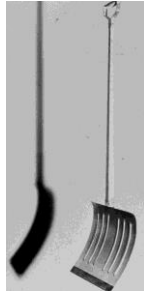


Fig 011a



Fig 011b

Fig 11a: Marcel Duchamp, *In Advance of a Broken Arm*, 1915, 121.3 cm, Yale Art Gallery, New Haven, CT, Yale University Art Gallery, USA (Exhibited in a gallery Designed by Kahn)

(From <http://web.mnstate.edu/gracyk/courses/phil%20of%20art/duchamp2.htm> , 20.01.2012)

Fig 11b: Marcel Duchamp, *Readymade*, 1913, bicycle wheel, diameter 64.8 cm, mounted on a stool, 60.2 cm high, Private collection, Original lost, Replica.

(From [http://www.marcel Duchamp.net/Bicycle\\_wheel.php](http://www.marcel Duchamp.net/Bicycle_wheel.php), 20.01.2012)

Both ready-mades are depicting the tension between “true” appearances and their apparitions.

Like surrealist artists of his time, whose work had been given wide exposure in galleries in the United States (including the Yale University Art Gallery which Kahn designed and in the Philadelphia Museum of Art, holding the world’s largest holdings of Duchamp (for example Fig 11a, Fig 11b), and with whose work Kahn must have been familiar), Kahn addressed the “sanctuary of art” of the architecture of the past as “the treasury of shadows.”<sup>256</sup> He maintained that “White light does not exist, Nor does black shadow exist,” Kahn looked beyond historical objects, sought the invisible within the

<sup>255</sup> Synesthesia is a term defined by Marco Frascari (Greek syn = together, and aisthesis = sensation/perception) as a condition of perception which combines "the associations of two or more physical senses and other sense modalities. Called synesthetes, the individuals with synesthesia ‘smell’ colors, ‘see’ sounds and ‘feel’ tastes. In these cross-modal associations, the elicited sensations are both emotional and noëtic and the phenomenon of synesthesia interfaces virtual perceptions with normal sensory perception, rather than replacing one perceptual mode for another." Marco Frascari, uses this term to define the drawings of Architect Carlo Scarpa, which I would like to offer that would be appropriate also to the drawings made by Kahn. Marco Frascari, Architectural SYNAESTHESIA, a hypothesis on the makeup of Scarpa's modernist architectural drawings, [http://art3idea.psu.edu/synesthesia/documents/synesthesia\\_frascari.html](http://art3idea.psu.edu/synesthesia/documents/synesthesia_frascari.html), 22.08.2011.

<sup>256</sup> Kahn, *Transcript of a lecture by Louis I. Kahn, given at the American Library in Brussels, Belgium.*



visible, and dwelled on the distance between architecture's "true" appearances and their apparitions.<sup>257</sup>

In his own art works the images of the represented objects collapsed, and their enigmatic aspects were brought forth. Like Duchamp, Kahn showed single objects depicting different appearances of the same reality and bringing forth what Paz defines as "Anamorphosis in the literal meaning of the word; to see this work in its successive forms is to return to the original form, the true source of appearances."<sup>258</sup>



Fig 12a



Fig 12b

Fig 12a: Louis I. Kahn, *Hypostyle Hall, Temple of Ammon, Karnak, Egypt*, 1951, Charcoal on paper, 29.2 x 37.5 cm, Shown at the traveling exhibition organized by the Pennsylvania Academy of the Fine Arts, 1978-1979, Collection of Sue Ann Kahn. (From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 290)  
Fig 12b: Louis I. Kahn, *Column Capital No. 1, Karnak, Egypt*, 1951, Pastel on Paper, 28.6 X 36.2 cm, Present whereabouts unknown. (From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 292)  
Depicting the invisible within the visible.

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<sup>257</sup> Kahn, *Conversations With Students*: 14.

<sup>258</sup> Octavio Paz, Quoted in Alberto Pérez-Gómez, *Built Upon Love: Architectural Longing after Ethics and Aesthetics* (Cambridge, Massachusetts MIT Press, 2006), 103.

Octavio Paz defines Marcel Duchamp work as poetic since as he explained: "Everything he did revolve around a single object, as elusive as life... his life's work can be seen as different moments – the different appearances – of the same reality. Anamorphosis in the literal of the word: to see this work in this work in its successive forms is to return to the original form, the true source of appearances. An attempt at revelation, or as he used to say 'ultrarapid exposure'. He was fascinated by a four dimensional object and the shadows it throws, those shadows we call realities. The object is an Idea, but the Idea is resolved at last into a naked girl: a presence."

Octavio Paz, *Marcel Duchamp- Appearance Stripped Bare*, trans. Rachel Phillips and Donald Gardner (New York: Viking Press, 1978).



Fig 12c



Fig 12d

Fig 12c: Louis I. Kahn, *Column Capital No. 2, Karnak, Egypt*, 1951.

Pastel on Paper, 28.6 X 36.2 cm, Present whereabouts unknown.

Fig 12d: Louis I. Kahn, *Column Capital No. 3, Karnak, Egypt*, 1951.

Pastel on Paper, 28.6 X 36.2 cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

Depicting the invisible within the visible.

(Both from Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 292-293).

In four renderings of columns from Karnak Kahn focused on the light effects of shadows and light which fell on the columns. In the first drawing Kahn managed to emphasize the difference between the space of the columns and the space created by their shadows (Fig 12a). In the three other colored drawings (Fig 12b, 12c, 12d) Kahn concentrated on the patches of light and shadow blended with the columns' lintels, capitals, and shafts. Kahn used imaginative colors, which make it difficult to differentiate between the actual objects and their shadows. In addition, while at first (Fig 12b) Kahn was relatively faithful to the spatial position of the columns (the closer columns were colored dark brown, the more distant columns light brown), the second drawing (Fig 12c) was less realistic (Kahn left the closer columns white and colored the more distant column in brown) in the third work (Fig 12d) he departed from the objective illustration and colored the closer columns and one of the distant columns in red, and left one of the columns in the front in light beige, the further back beam in red, and the front beam in dark black. By doing so he allowed himself to deceive the mathematical sense by being playful in his indication of depth.



Fig 13a

Fig 13a: Louis I. Kahn, *The Acropolis from Olympieion, Athens, Greece*, 1951, Pastel and charcoal pencil on paper, 28 X 35.5 cm, Shown in the traveling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

Connections between buildings of the same typology, and from different eras and places.  
(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 273).

Kahn's drawing *Acropolis from Olympieion* from Athens, Greece (1951, Fig 13a) demonstrates that regarding architectural history as an organic development of historical buildings, Kahn sought connections between impressions of buildings of the same typology, and from different eras and places. In the drawing, Kahn depicted the ruins of the Temples on the Acropolis (housing the Temple of Athena Nike and the Temple of Athena Parthenos, The Parthenon, built between the 4<sup>th</sup> and 5<sup>th</sup> century BC), and in the foreground the Roman Temple at Olympieion located 500m south-east of the Acropolis (housing the Temple of Olympian Jupiter, built gradually between the 6th century BC and the 2<sup>nd</sup> century AD and destroyed in the 3<sup>rd</sup> century AD <sup>259</sup>), both as painted structures that stood out in their uncolored context, and were connected by yellow and blue brushstrokes in the background - to describe a collection of fragmented memories that took into consideration the lapses of space and time.

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<sup>259</sup> Hans Rupprecht Goette, *Athens, Attica and the Megarid: An Archaeological Guide* (Athens, Greece: Routledge, 2001), 100.

## The Supra Historical Mnemonic Images as Collage

While the drawings examined above demonstrate the personal way in which Kahn experienced, interpreted and memorialized the architecture of the past, the manner that Kahn sought of using fragmented memories to construct new progressive architectural images is left obscure. In this connection Kahn's choice to hang over his office desk a copy of Giovanni Battista Piranesi's *Ichnographia Campi Martii* of 1762 may be significant (Fig 14a).<sup>260</sup> Kahn's abstract compositions from 1948-1950 that carried similarities to surreal collages, both using fragments to compose open future oriented totalities that promoted participation, may also shed light on Kahn's intentions.



Fig 14a



Fig 14b

Fig 14a: Giovanni Battista Piranesi, *Ichnographia Campi Martii*, antiquae Urbis, 1762.

(From <http://www.quondam.com/26/2691c.htm>, 30.01.2012)

Fig 14b: Giovanni Battista Piranesi, *Fragment of the Severan marble plan, Le Antichità Romane*, 1756.

(From [http://www.imageandnarrative.be/inarchive/thinking\\_pictures/small.htm](http://www.imageandnarrative.be/inarchive/thinking_pictures/small.htm) 30.01.2012)

The Supra Historical Mnemonic Images as Collage.

Giovanni Battista Piranesi's six-plate map *Ichnographia Campi Martii* of 1762 that closed Piranesi's *Campo Marzio* was composed from different layers containing data of Rome's historical monuments during the different epochs, from antiquity until the

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<sup>260</sup> Kenneth Frampton, "Kahn and the French Connection," *Oppositions* 22(1980): 28; Vincent Scully, *Louis I. Kahn* (New York: George Braziller, Inc., 1962), 37-38.

imperial epoch.<sup>261</sup> Unlike the *vedute* which documented historical sites as they existed in a specific time and place, and similar to the *capricci* (images that composed half-remembered archeological scenes and were drawn freely from different times and places, and therefore brought forth fictional environments and bizarre patterns that stimulated imagination and wonder), the *Ichnographia* was composed from fragmented layers and information that derived mainly from speculative archeological studies, on the basis of ancient marble maps that were discovered at the time (Fig 14b). Piranesi could himself question the accuracy of the map to serve as a truthful historical description of specific Roman monuments, but valorized it as a document that by embracing the lapses of memory in time and place and by expressing the human temporal perception of history, created spaces that lied between real and imagined realms that were open to participation and offered themselves to endless developments.<sup>262</sup>

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<sup>261</sup> On *Ichnographia Campi Martii* see John Wilton-Ely, *The Mind and Art of Giovanni Battista Piranesi* (London Thames and Hudson, 1978) 48-53, 73-78; Also see Heather Hyde Minor Editor Mario Bevilacqua, Fabio Barry, *Essays on G. B. Piranesi, Supplements to the Memoirs of the American Academy in Rome*, vol. Supplement No. 4 (Michigan: University Michigan Press, 2006). 222-23. The *Campo Marzio* opened with an aerial topographic view of the site, surrounded by many archeological parts) on which only the important monuments as they existed in antiquity, were shown. The aerial view was followed by a sequence of maps plotting the development of each of the ancient sites from the contribution of Romulus, the Tarquins and the early consuls, to the imperial times of Augustus, and the six-plate map composed all the maps before it together and closed the *Campo Marzio*. Wilton-Ely, *The Mind and Art of Giovanni Battista Piranesi*.

<sup>262</sup> On *capricci* see Wilton-Ely, *The Mind and Art of Giovanni Battista Piranesi* 10-13, 20-23, 28-29, 45.

Piranesi was himself an archeologist who appreciated the new findings revealed in his era. But unlike the ancients, did not aim to recover the glories of Classical architecture and to revive the Golden Age in which those structures were built. Unlike the moderns he was not ailing to begin a new, but found an interest in the confusion, ambiguity, and richness that historical edifices revealed, and used it neither to confirm the past, nor to alienate it but contemplated and questioned it, and thus paved the way towards new creation. Piranesi stated: "I am rather afraid that parts of the Campus which I describe should seem figments of my imagination and not based on my evidence: certainly if anyone compares them with the architecture of the ancients he will see that they differ greatly from it and are actually closer to the usage of our own times. But before anyone accuses me of falsehood, he should, I beg, examine the ancient (Marble) plan of the city.... He should examine the villa of Latium and that of Hadrian at Tivoli, the baths, the tombs and other ruins outside the Porta Capena and he will find that the ancients transgressed the strict rules of architecture just as much as the moderns. Perhaps it is inevitable and general rule that the arts reaching a peak should decline, or perhaps it is part of man's nature to demand some license in creative expression as in the other things which we sometimes criticize in buildings of our times." Piranesi quoted in *ibid.*, 67.

Kahn knew Rome, and must have noticed that Piranesi's *Ichnographia* did not depict a rational, linear, development of the city, but created a document in a form of a collage celebrating the complexity, contradictions, and richness of the architectural image in a "supra-historical" context which aroused from the compilation of fragmented historical images, taking into consideration lapses of time (and demonstrating that an ideal constant image was doomed to failure). In this sense, Vincent Scully was right to argue that Piranesi brought before Kahn "the capacity to combine and recombine the ruined fragments of a lost heroic past - ruined both by time and by the delirium of the imagination - and to posit these fragments, recomposed *en miettes*, as viable models for a disjunctive future."<sup>263</sup>

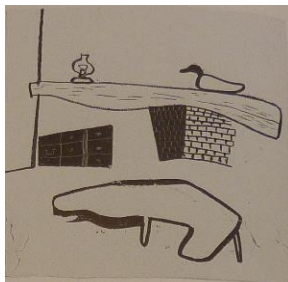


Fig 15a

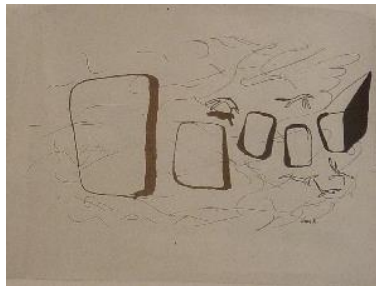


Fig 15b

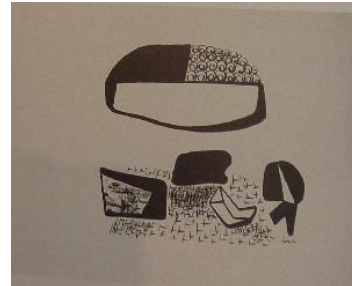


Fig 15c

Fig 15a: Louis I. Kahn, *Abstract with Duck and a Lam*, 1948-1950, Black Crayon with Scratched lines on Paper, Collection of Sue Ann Kahn.

Fig 15b: Louis I. Kahn, *Abstract with Figure*, 1948-1950, Black Crayon Pen and Ink on Paper 29.8 X 40cm, Shown in the traveling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

Fig 15c: Louis I. Kahn, *Abstract*, 1948-1950, Pen and Ink on Paper 27.6 x 37.8, Shown in the traveling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of the Pennsylvania Academy of the Fine Arts, Gift of Mrs. Louis Kahn.

Depicting the fragmented, heterogeneous reality of perception.

(All from Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 324-326).

<sup>263</sup> Kenneth Frampton, "Louis Kahn and the French Connection," *Oppositions* 22 (1980).



Fig 16a

Fig 16a: Marcel Duchamp, *Tu m'*, 1918, Oil on canvas, with bottle brush, three safety pins, and one bolt, 40.1 x 30.8CM, Gift from the Estate of Katherine S. Dreier, The Yale University Art Gallery. Depicting the fragmented, heterogeneous reality of perception. (From Jennifer R. Gross, *The Société Anonyme, Modernism for America*, 19).

Kahn did not use his fragmented memories of historical sites to create collages. But his abstract compositions from 1948-1950, indicate that Kahn, like surrealist artists of his time who were interested in the fragmented, heterogeneous reality of perception, experienced in drawing montages and collages which brought forth such a reality (Fig 15a, 15b, 15c). Kahn might have been familiar with Marcel Duchamp's *Tu m'* (Fig 16a) commissioned by the art collector and educator Katherine Dreier and donated to the Yale University Art Gallery, where it received a place of great prominence. In the *Tu m'*, considered one of Duchamp's most important works, the artist depicted shadows of a bicycle wheel, a corkscrew, and a hat rack - representing missing objects, some shadows and traces of silhouettes, and some "real" found objects - a bottle brush, some safety pins, and a bolt, and composed all of the elements deliberately on a canvas.<sup>264</sup>

In *Abstract With Duck and a Lamp*, *Abstract with Figure* and in *Abstract* (Fig 15a, 15b, 15c) Kahn studied the nature of relationships between fragments, shadows, and apparitions of semi-recognizable objects and forms when extracted from their original contexts and combined together in a neutral, modern space between them. In *Abstract*

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<sup>264</sup> Jennifer R. Gross (editor), *The Société Anonyme, Modernism for America* (New Haven and London: Yale University Press, 2006), 18-20.

*With Duck and a Lamp* (Fig 15a), Kahn freely composed two dark shadows and one oblique contour of a missing object, elevations of a lamp, a roof, and a duck, and a wall built from stones, as well as a perspectival view of another white plain and, like Duchamp, demonstrated that when objects were depicted mysteriously in various positions and scales, and were brought together in free non syntactic ways, they both complemented and negated each other, and created uncanny, unfamiliar, and enigmatic wholes, that invited the participation of the spectator to move around discover their multiple "secrets", and promoted spaces of metaphoric tension that were open to multiple interpretations.<sup>265</sup>

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Kahn's drawings express that historical architectural images could not be remembered as entire wholes, and that there was no clear methodological system to describe figurative memory. The third and fourth chapters of this dissertation, concentrating on Kahn's projects, will show the continuity between these aspects of Kahn's artistic activity and his architectural understanding: the past could not be meaningfully re-lived through its re-representation and would be incorporated in architectural images mostly in the form of metonymy.<sup>266</sup>

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<sup>265</sup> I owe my understanding of Kahn's collages as spaces of metaphoric tension to Pérez-Gómez and Pelletier who describes in these words the Duchamp's *Tu'um*. See Pelletier, *Architectural Representation and the Perspective Hinge*: 328. On the poetic modern work of art as collage, functioning as a metaphoric transitory image see Charles Baudelaire literary definition: "By modernity I mean the transitory, the fugitive, the contingent" Charles-Pierre Baudelaire, *The Painter of Modern Life: "Le Peintre de la Vie Moderne" and Other Essays by Charles Baudelaire*, trans. Jonathan Mayne (London: Phaidon press 1964), 13.

<sup>266</sup> Switek presents the idea of *fabriques* as it appears in English Gardens and defines *fabriques* as metonymic verbal expressions. Gabriela Switek, *Writing on Fragments. Philosophy, Architecture, and the Horizons of Modernity* (Warszawa: Warsaw University Press, 2009), 141-44.



## **Memories as Traces of Rituals, Belief, and Narratives**

*I have learned to regard it as no physical impossibility to move mountains and trees, or change cupolas and towers to suit my taste. I try to evolve a composition and make every sketch count for as much value to me as may be gotten out of a design problem...You must then get away from it all to work over and crystallize your thoughts in order to develop the picture in the form of a readable design.<sup>267</sup>*

Kahn used drawings to depict the historical sites as places of human activities, to embody and question their validity as memories to be used in contemporary architectural making. While using a critical, creative, and suspicious eye, he offered to interpret their significance for modern beholders. The state of ruination which put into question the scale, position, height, and materiality of historical elements, and suggested particular forms of action: erasure, elimination, the diminishment of some elements of the strict programmatic arrangement, and the turning of traditional plans to more modernist, fluid arrangement which allowed Kahn to realize that while he was able to return to a physical place, he could not return in time and experience the prior use of a site. The experience of physical complexes detached from their original context, was followed by feelings of estrangement and incompleteness. Kahn's drawings demonstrate that he found pleasure in conflict and in the pain resulting from attempts to situate himself in a shared reality which has passed. Kahn noted "life to me is an existence with a psyche; and death is an existence without a psyche" and explained that he thought about the psyche "as a kind of prevalence from which each one of us always borrows part."<sup>268</sup> David Polk, one of the architects who worked with Kahn (and the architect in charge of several important projects designed by his office, including the design for the Motherhouse of the Dominican Sisters), pointed out that Kahn was fascinated with historical spaces in which

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<sup>267</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

<sup>268</sup> Kahn, "A Statement, 1962," 145.

the conducting of rituals seemed impossible.<sup>269</sup> Kahn took advantage of the ruins to question, blur, manipulate and make his own choices within historical programs. Choosing non-normative and personal trajectory of movement through traditional spaces, and looking at architectural spaces using non-conventional perspectives, Kahn's drawings expressed traditional rituals in which architectural rhythms, sequences, views, repose, expectations, brought forth feelings of awe, mystery, confusion and disorientation. In his drawing Kahn also defied traditional orientation by eliminating, enlarging, and reducing traditional details guiding human habits and customs. In so doing Kahn aimed "to evolve compositions" that would "count for as much value to me as may be gotten out of a design problem."<sup>270</sup>

In Greece, Kahn documented two important sites of worship in antiquity - the first, the Acropolis in Athens, housing the Temple of Athena Nike, the Temple of Athena Parthenos (The Parthenon) and the Erechtheion; The second - the Sanctuary of Apollo at Delphi, that housed the Temple of Apollo, and served as a place for pilgrimage to visit

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<sup>269</sup> David Polk interviewed by David Brownly, Nov 2, 1983, Tape Casette, Louis I. Kahn's Archives.

<sup>270</sup> Kahn, "The Value and Aim in Sketching, 1931," 11.

One could speculate as to the extent to which Le Corbusier's belief in "architecture promenade", his concern that modern society has to learn how to "habiter" in space, and his will to assist people in the process of "savoir habiter" influenced Kahn. On Le Corbusier's "architecture promenade" see Le Corbusier, *Precisions on the present state of architecture and city planning : with an American prologue, a Brazilian corollary followed by The temperature of Paris and The atmosphere of Moscow / Le Corbusier*. trans. Edith Schreiber Auiame (Cambridge, Mass: MIT Press, 1991). 128-33., Le Corbusier, *Le Corbusier et Pierre Jeanneret : œuvre complète*, vol. 2, 1929-1934 (Zurich Editions d'architecture Erlenbach, 1946-1970). 24.) On Le Corbusier's discussion of "savoir habiter" see (Le Courbusier, *When the cathedrals were white* (New York McGraw-Hill, 1964, c1947) XVII.)

Flora Samuel points out that Le Corbusier's concern to assist people in the process of "savoir habiter" lead him to draw historical sites (like those of the Acropolis in Athens) in a manner which did not depict them as places offering their original plots but as networks and territories offering other plots to be built. She also demonstrates how Le Corbusier used his explorations of historical sites to create his own architectural promenade. Flora Samuel, *Le Corbusier and the architectural promenade* (Basel, London: Birkhäuser, 2010), 10-11. For Le Corbusier's drawings of the Acropolis as a network offering other plots see Corbusier, *Towards a New Architecture*.

the oracle (while rituals associated to the worship of the goddess Gaia took place there already in antiquity).

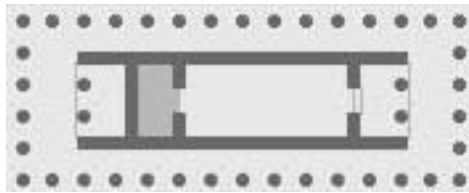


Fig 17a



Fig 17b



Fig 17c

Fig 17a: A typical Adyton - An area restricted to entry by the audience and the seat of the oracle, usually located in the rear of the Cella, and behind the God's statue.

(From <http://commons.wikimedia.org/wiki/File:Peripteros-Plan-Adyton-bjs.png> 20.01.2012).

Fig 17b: The Adyton in Apollo's Temple, Delphi - An area restricted to entry by the audience and the seat of the Pythia sunken in the ground and located on top of what was believed to be the egg stone, marking the navel of the world.

(From <http://commons.wikimedia.org/wiki/File:Peripteros-Plan-Adyton-bjs.png> 20.01.2012).

Fig 17c: Pythia at Delphi sitting on tripod poet recording and translating her voice on a Greek Vase, 450BC. (From [http://www.nationmaster.com/encyclopedia/Temple-of-Apollo-\(Delphi\)](http://www.nationmaster.com/encyclopedia/Temple-of-Apollo-(Delphi)), 20.01.2012).

In drawings from 1951 Kahn depicted Delphi as an important place for pilgrimage for the people of ancient Greece who sought to consult Apollo, the God of revelation and inspiration through the Oracle, the holy Pythia, a virgin who dedicated herself to prophesying, who sat in the sunken Adyton (an small ~3m x 4 m restricted area to which the audience was not allowed to enter) on a tripod, above an egg shaped stone making the navel of the world. From a crack into which the Python that Apollo slew had fallen, spiritual vapors arose and took possession of Pythia, putting her into trance during which she delivered her cryptic prophesies that were then translated by poets on duty in the Temple, to deliver Apollo's words to the pilgrims (Fig 17a, Fig 17b, Fig 17c).



Fig 18a



Fig 18b



Fig 18c



Fig 18d



Fig 18e



Fig 18f

Fig 18a: Louis I. Kahn, *Arachova (on the way to Delphi)* Greece, 1951, Crayon on paper, size not available, Present whereabouts unknown.

Fig 18b: Louis I. Kahn, *Peak of Arachova No. 1* (Drawn in Philadelphia), Greece, 1951/1955, Brush and india ink on paper, 32.1 x 43.8 cm, collection of Sue Ann Kahn.

Fig 18c: Louis I. Kahn, *Panorama, Delphi*, Greece, 1951, Pastel on Paper, 25.7 X 36.5cm, Shown at a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts, 1978-1979, Collection of Sue Ann-Kahn.

Fig 18d: Louis I. Kahn, *Peak of Arachova No. 2*, Greece, 1951/1955, Brush and india ink on paper, 31.8 X 43.2cm, Exhibited at Max Protexh Gallery, New York, June 1981, Collection of the Architectural Archives, University of Pennsylvania.

Fig 18e: Louis I. Kahn, *Peak of Arachova No. 3*, Greece, 1951/1955, Brush and india ink on onionskin paper, 15.2 X 25.4cm, Shown at a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts, 1978-1979, Collection of Sue Ann-Kahn.

Fig 18f: Louis I. Kahn, *Peak of Arachova, The road to Delphi*, Greece 1951, Crayon on Paper, 26.7 x 20.3cm, Present whereabouts unknown.

All depicting the long difficult and dramatic way from Athens to the Temple of Apollo.

(All from Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 258-262).

In a series of six drawings (Fig 18a - Fig 18f), Kahn used dark crayons, pastel, brushes and ink to depict the bare rocky landscape with its violent cliffs and mountains ranges, the pilgrims encountered along the 120 km long difficult and dramatic way from Athens to the Temple of Apollo, situated on the slopes of mount Parnassus.



Fig 19a



Fig 19b

Fig 19a: Louis I. Kahn, *Sanctuary of Apollo*, Delphi, Greece, 1951, Charcoal Pencil on Paper 28.9 X 36.2 cm, Exhibited at Max Protetch Gallery, New York City, June 1981 - Depicting the walkway leading to Apollo's sanctuary from the side, concealing the sacred path.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 266)

Fig 19b: The sacred way leading to the Temple of Apollo at Delphi as it was experienced by the many pilgrims who queued before arriving at the temple.

(From <http://www.palehorseblog.com/?p=96>, 20012012)

In four more drawings Kahn depicted the elements of the Temple that were associated with the act of worship which took place in the Temple in a unique manner. In *Sanctuary of Apollo* (Fig 19a) Kahn did not draw the walkway leading to Apollo's sanctuary from the point of view that it was experienced by the many pilgrims who queued during the day, before arriving at the Temple (Fig 19b), but depicted it from the side, emphasizing the horizontal layers of the landscape, concealing the sacred path. In addition, while Kahn emphasized the embedment of the walkway and the Temple's platforms in the ground, he only loosely articulated the elements of the Temple situated above the platforms, leaving the very aim of the procession, and the expectation, out of reach.



Fig 19c

Fig 19c: The preserved ramp and the Doric colonnades in the entrance of the Temple of Apollo at Delphi. (From <http://travelcontest.mytwu.ca/contest/2008/2/23> , 09052011).

It is interesting that Kahn did not draw the entire route of the procession; none of his drawings documented the ramp culminating in the sacred walkway and leading into the Temple's entrance, nor the entry to the Temple through the Doric columns, both ruins which were comparatively well preserved (Fig 19c), or even the interior ruins of the Temple as they could be experienced from inside.



Fig 20a



Fig 20b



Fig 20c

Fig 20a: Louis I. Kahn, *The Oracle, No. 1, Delphi*, Greece, 1951, Charcoal Pencil on Paper 28.9 X 36.2 cm, Collection of Sue Ann Kahn, Collection of the Architectural Archives, Univ. of Pennsylvania.

Fig 20b: *The Oracle, No 2, Delphi*, Greece, 1951, Charcoal Pencil on Paper 28.9 X 36.2 cm, Present whereabouts unknown.

Fig 20c: *The Oracle, No 3, Delphi*, Greece, 1951, Charcoal Pencil on Paper 28.9 X 36.2 cm, organized by the Pennsylvania Academy, of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

All depicting the imprints of the sanctuary while obtaining a dramatic, distant, reserved, and critical point of view.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 264-265).

Instead, in three drawings, *The Oracle No.1*, *The Oracle No.2*, *The Oracle no. 3*, (whose names alone testify that Kahn was mostly interested in the rituals which took place in the site rather than in its formal characteristics) Kahn documented the imprints of the sanctuary's plan in the landscape from an opposite direction from which they would have been experienced during the traditional ritual, while obtaining a dramatic, distant, reserved, and critical point of view (Fig 20a, Fig 20b, Fig 20c).



Fig 20d

Fig 20d: Traces of the Temple of Apollo in Delphi in as they were revealed by excavations which took place in the site from 1890 until 1930 with no clue to the sunken Adyton, the egg shaped rock or the fissure on which the Pythia sat (From [http://en.wikipedia.org/wiki/File:Temple\\_of\\_Apollo\\_Delphi.jpg](http://en.wikipedia.org/wiki/File:Temple_of_Apollo_Delphi.jpg) 09052011).

Furthermore, Kahn did not depict the ruins of the sanctuary as they existed when he visited the site, which although excavated from 1894 until the 1930's, included no remains from the sunken lower chamber, the egg stone and the fissure on which the Pythia sat, and from where the oracle once spoke (Fig 20d). While the disappointing archeological findings lead many scholars to question the spirituality of the site, Kahn's drawings demonstrate that he was not bothered by the scientific proofs, but found delight in contemplating the mystery of the Adyton, its emptiness, and the feeling of loss that resulted from the modern discoveries. In the first drawing (Fig 20a) Kahn omitted most of the Temple's ruins, depicted only few traces which he chose, took the artistic freedom to re-arrange them, and added a trace of what might be the missing egg shaped stone marking the navel of the world. In the second and third sketch (Fig 20b, Fig 20c), which

might had been produced upon his return to Philadelphia, Kahn omitted most of the traces included in the first sketch (Fig 20b) and left only the trace of the egg shaped stone, contemplating the mysterious origin around which the ritual of consulting the oracle emerged (whose truthfulness was put into question by modern silence).<sup>271</sup>

1. Parthenon
2. Old Temple of Athena
3. Erechtheum
4. Statue of Athena Promachos
5. Propylaea
6. Temple of Athena Nike
7. Eleusinion
8. Sanctuary of Artemis Brauronia or Brauroneion
9. Chalkotheke
10. Pandroseion
11. Amphiionion
12. Altar of Athena
13. Sanctuary of Zeus Polieus
14. Sanctuary of Pandion
15. Odeon of Herodes Atticus
16. Stoa of Eumenes
17. Sanctuary of Asclepius or Asclepeion
18. Theatre of Dionysus Eleuthereus
19. Odeon of Ptolemy
20. Temenos of Dionysus Eleuthereus
21. Aglaureion

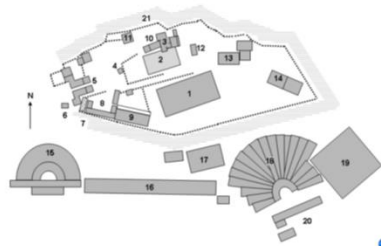


Fig 21a



Fig 21b

Fig 21a: Site plan of the Acropolis

(From [http://en.wikipedia.org/wiki/Acropolis\\_of\\_Athens](http://en.wikipedia.org/wiki/Acropolis_of_Athens), 09.05.2011)

Fig 21b: Acropolis as it would appear in the 5<sup>th</sup> century BC

(From Fletcher, Banister. *A History of Architecture on the Comparative Method*, 105)

In Athens, Kahn made at least dozen drawings, in and around the Acropolis. With great affinity to the drawings of his mentor, Le Corbusier, Kahn did not document the traditional routes in the Acropolis, and did not aim to revive the moods rituals stimulated in the past, but shed light on the uncanny feelings the ruins elicited in the modern beholder, and addressed them as ready-mades open to be used in a new manner suiting contemporary life.

<sup>271</sup> Hochstim, *The paintings and sketches of Louis I. Kahn*: 264.

It is interesting to mention that since 1980 teams of archeologists, geologists, and chemists are working on proving that vapors of gases which might have caused Pythia to go in trance do exist in the site, and thus to justify the ancient rituals and reclaim truthful confidence in tradition. JR Hale JZ De Boer, J Chanton, "New evidence for the geological origins of the ancient Delphic oracle," *Geology, Geological Soc America* 29, no. 8 (2001).



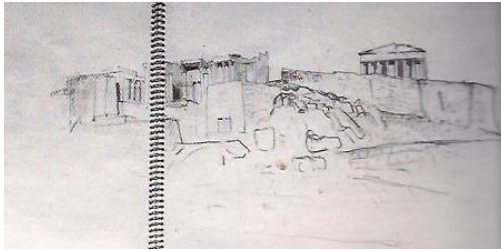


Fig 22a

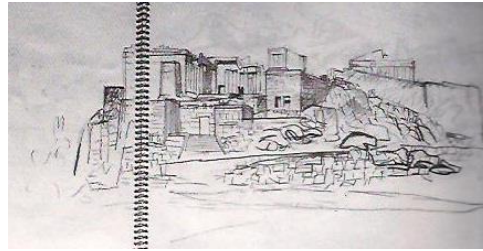


Fig 22b

Fig 22a: Louis I. Kahn, *Acropolis approached from the west, No. 1, Athens, Greece, 1951*, Charcoal pencil on sketchbook paper, Size not available, Present whereabouts unknown.

Fig 22b: Louis I. Kahn, *Acropolis approached from the west, No. 2, Athens, Greece, 1951*, Charcoal pencil on sketchbook paper, Size not available, Present whereabouts unknown.

Depicting the structure of the Acropolis as it appeared to those who ascended to it during the rituals from the city below.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 270).



Fig 22c



Fig 22d



Fig 22e

Fig 22c: Louis I. Kahn, *Acropolis (from North), Athens, Greece, 1951*, Pastel and charcoal pencil on paper, 28.5 X 37.5cm, Shown in a travelling exhibition organized by the Pennsylvania academy, of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

Fig 22d: Louis I. Kahn, *Acropolis from Southwest, Athens, Greece, 1951*, Pastel on Paper, 13 X 20cm, Private Collection.

Fig 22e: Louis I. Kahn, *Acropolis Frankish Walls (from East), Athens, Greece, 1951*, Charcoal and black crayon on paper, Shown in a travelling exhibition organized, by the Pennsylvania Academy, of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

All depicting the Acropolis as a closed, distant, monument located out of reach.

(All from Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 272- 275).

Kahn devoted only two pencil sketches, which seem relatively small and quick, to depict the dramatic, hierarchical structure of the Acropolis as it appeared from the West to those who ascended to it during the rituals from the city below. The other three, more thoroughly developed crayon and pastel drawings, depicted closer views of the Acropolis from the North (Fig 22c), South-West (Fig 22d), and East (Fig 22e) – in all Kahn used advancing angles which sliced the lines of vision, suggested only glimpses of the

Temples, and disturbed to conceive the Acropolis in its glory. The Acropolis was not depicted as an inviting structure calling to be used, but as a closed, distant, monument located out of reach.



Fig 23a



Fig 23b

Fig 23a: The Propylaea, Parthenon, Acropolis looking towards sea.

(From [http://atheism.about.com/library/FAQs/religion/blgrk\\_athens39.htm](http://atheism.about.com/library/FAQs/religion/blgrk_athens39.htm), 09.05.2011).

Fig 23b: Louis I. Kahn, *Propylaea, Pantheon, Acropolis Athens*, Greece, 1951, Pastel on Paper, 29.8 x 23.5 CM, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn.

Depicting the view from the Propylaea using a diagonal, nonconventional perspective.

(From Eugene J. Johnson, *Drawn from the Source*, 271).

The view from the Propylaea to the Parthenon was drawn by Kahn when standing inside it and looking through its eastern portico towards two of its broken doors on the western side. Kahn stood close to the right of the central bay, almost exactly aligned with the column on the right, and depicted the view using a diagonal, nonconventional perspective. In Kahn's drawing the role of the Propylaea as an orienting part was subverted; the axuality of the Propylaea's space was disrupted, and (like de Chirico's arcades in the painting *The Anxious Journey*, 1913), the element whose main purpose was to organize the space turned into a disorienting architectural feature, whose original role was further subverted by disconnecting its columns and walls from the ground (Fig 23b, compare to Fig 23a).<sup>272</sup>

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<sup>272</sup> Eugene J. Johnson, *Drawn from the Source: The Travel Sketches of Louis I. Kahn*: 81-82.



Fig 24a



Fig 24b



Fig 24c



Fig 24d

Fig 24a: The Temple of Nike from eastern façade.

(From <http://www.greekislands.com/athens/temple.htm>, 09.05.2011).

Fig 24b: Louis I. Kahn, *Nike Temple, Acropolis, Athens, Greece*, 1951, Charcoal on paper, 29 X 36.3 cm - Depicted from a disorienting point of view point.

(From Eugene J. Johnson, *Drawn from the Source*, 83).

Fig 24c: Louis I. Kahn, *Erechtheion and Parthenon, Acropolis Athens, Greece*, 1951, Charcoal on paper, Size not available, Present whereabouts unknown - Depicted as two structures equally important.

Fig 24d: Louis I. Kahn, *View from the Parthenon, Acropolis Athens, Greece*, 1951, Pastel and Charcoal pencil on paper, 27.3 X 34 cm, Private Collection.

The Acropolis depicted as a guiding element.

(From: Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 276).

From inside the Acropolis complex, Kahn drew *The Temple of Nike* (Fig 24a, 24b), *The Erechtheion and Parthenon* (Fig 24c), *A View from the Parthenon* (Fig 24d, Fig 24c),<sup>273</sup> but none of them were taken from the processional Panathenaic Way (which begun in the lower city lead to the acropolis and culminated in the center of the complex), neither were any of the Temples depicted from their representational direction (i.e.- from the West) as they were to be reached during traditional rituals. The Temple of Nike was depicted from south west together with the south wing of the Propylaea, a disorienting point of view point which made it difficult to recognize the structure (Fig 24a, Fig

<sup>273</sup> Ibid., 80.

24b);<sup>274</sup> The Erechtheion and Parthenon were depicted almost symmetrically from an in between, unpainted, and undetailed area with some scattered ruins, as two structures equally important, leaving the beholder confused and disoriented, in a deserted ground and under dramatic surreal pink skies, and approached by small figures who seemed to have lost their way, exiting the Parthenon (Fig 24c). The Parthenon and the Propylaea were depicted by Kahn when standing on the north stylobate of the Parthenon, looking West. The Parthenon that functioned as the central and most important place in the Acropolis, was manipulated by Kahn and depicted in his drawing as a guiding element, whose colonnade seemed like an abstracted plain pointing towards nothing more than the Propylaea – the exit from the sacred site – to the infinite horizons (Fig 24d).



Fig 24e



Fig 24f

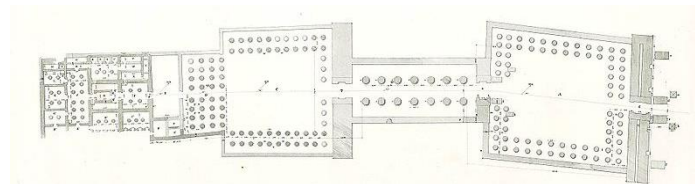


Fig 24g

Fig 24e: Louis I. Kahn, *Composition, Temple of Ammon, Luxor, Egypt*, 1951, Charcoal on Tracing Paper, 27.x 35.7, Private Collection - Depicting an enigmatic view of the Temple of Ammon.

(From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 294).

Fig 24f: Temple of Ammon, Luxor, Egypt - View from courtyard the open courtyard towards the columns halls.

(From [http://en.wikipedia.org/wiki/Luxor\\_Temple](http://en.wikipedia.org/wiki/Luxor_Temple), 04.04.2011).

Fig 24g: Temple of Ammon, Luxor, Egypt - Plan, showing axial arrangement of the complex.

(From [http://commons.wikimedia.org/wiki/File:Lepsius-Projekt\\_tw\\_1-2-084.jpg](http://commons.wikimedia.org/wiki/File:Lepsius-Projekt_tw_1-2-084.jpg), 04.04.2011).

<sup>274</sup> Ibid., 83.

In his drawing, *Composition, Luxor, Egypt* (1951) (Fig 24e), whose name alone suggests Kahn's intentions to interpret rather than to truthfully document the site, Kahn depicted an enigmatic view of the Temple of Ammon. The Temple of Ammon in Luxor served as a place to where Ammon could stay with his partner Mut in a celebration of fertility. The couple stayed in the concealed part of the Temple which was located at the end of a sequence of courtyards that culminated the long axial procession on which the statue of Ammon was paraded during the Opet Festival, from the Karnak Temple, along the Nile, and into the complex of the Temples in Luxor. Kahn used black charcoal to depict an unconventional view, when standing unsymmetrically in one of the hypostyle halls and moving towards another hall or to an open courtyard. The axial view was shuttered, the horizons were bounded, the proportions, scale and angles of elements such as the columns and a statue were distorted, and dramatic shadows were included, all to subvert the axial balanced traditional procession to a disorienting un-situating event (Fig 24e compare to Fig 24f, Fig 24g).



Fig 25a



Fig 25b

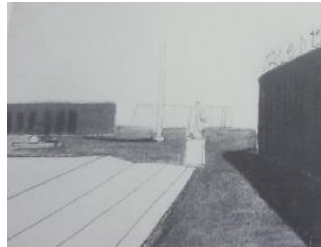


Fig 25c



Fig 25d

Fig 25a: Piazza San Pietro, Veduta Dell'in Signe Basilica Vaticana Col Porticato e La Piazza, Postcard Sent by Kahn from Rome to his office, 1951 (From Eugene J. Johnson, *Drawn from the Source*, 72)

Fig 25b: Photograph by Ralph Lieberman, Piazza San Pietro from Atrium of St. Peter's. (From Eugene J. Johnson, *Drawn from the Source*, 71).

Fig 25c: Louis I. Kahn, *Piazza San Pietro from Atrium of St. Peter's, Rome*, 1950, Pastel on Paper, 19 x 22 cm, Shown in the travelling exhibition, By the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn - Depicted as modern, enigmatic and fluid space of loss of authority and self-discovery. (From Jan Hochstim, *The paintings and sketches of Louis I. Kahn*, 245).

Fig 25d: Giorgio de Chirico, *The Delight of the Poet*, Oil on Canvas, 1912, 69.5 X 86.3cm, Private Collection. Evoking the lost classical past and bringing forth the enigmatic modern space (From Magdalena Holzhey, *Giorgio de Chirico, 1888-1978: The Modern Myth*, 32).

In Rome, Kahn depicted the Vatican's Church of St. Peter's from the south bay of the atrium near the south campanile (Fig 25c). Kahn aimed to question the axial configuration of the historical complex and the authority of the Vatican Church (documented in the postcard he sent to his office from Rome, Fig 25a). He turned the symmetrical clear composition into a tensed disorienting arrangement- to the right appeared Bernini's statues, on the left the stairs to the church; in the corner of the steps, St. Peter's statue; in the middle, at a distance, the obelisk; on the left at a distance the fountain and, further on, one of St. Peter's colonnades.<sup>275</sup> Moreover, Kahn lowered the buildings surrounding the Piazza, reduced their heights, enlarged the spaces between

<sup>275</sup> Ibid., 70-71.



them, abstracted their façades, lowered the majestic steps leading to the entrance of the Church and shrunk the statues in piazza (compare Kahn's drawing, Fig 25c to a picture from the site, Fig 25b), by evoking the lost classical past, and depicting contrasting shadows falling from different angles on the open deserted ground— he turned the well-articulated and bounded Piazza, into a more modern yet enigmatic and fluid space of loss of authority and self-discovery (calling into the mind Giorgio de Chirico's painting, *The Delight of the Poet*, Fig 25d).

Kahn acknowledged the frustration felt due to the death of tradition and its meanings, and the void left in its absence, and depicted places of rituals and spaces of communal agreement - sanctuaries, public piazzas, and their surrounding arcades - as silent emptied-out areas, emphasizing the feelings of loneliness, anxiety, loss, melancholy and nostalgia experienced in them.



Fig 26a



Fig 26b

Fig 26a: Interior of Parthenon with ruins of the Cella Acropolis, Athens, Greece.  
Photograph depicting ruins of the Cella.

(From [http://www.mlahanas.de/Greece/Cities/AthensParthenonInterior1850\\_80.html](http://www.mlahanas.de/Greece/Cities/AthensParthenonInterior1850_80.html), 10.04.2011) .

Fig 26b: Louis I. Kahn, *Interior Parthenon, Acropolis, Athens, Greece*, 1951, Pastel on Paper, 28.6 x 35.6 CM, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn - Depicted as a void waiting for a future embodiment.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 277).

When drawing the interior of the Parthenon (the only interior view that Kahn drew in the Acropolis) Kahn depicted the once bounded interior sacred place of the Parthenon, surrounded by the mountains in the horizons, as an empty uncovered space, loosely bounded by brownish columns which seemed as hovering in the middle of the drawing, between the blue sky and the Temple's blue floor, open to the infinite horizons.<sup>276</sup> To further emphasize the loss of tradition he eliminated the ruins of the Parthenon's Cella which remained in the site (Fig 26a compare to Fig 26b). Thus, the Pantheon was drawn by Kahn as a void waiting for a future embodiment.

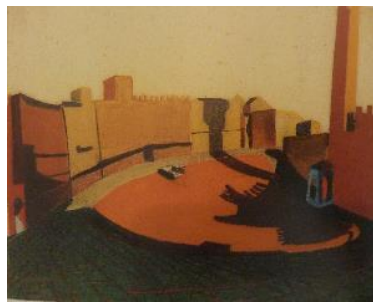


Fig 27a



Fig 27b

Fig 27a: Louis I. Kahn, *Piazza Del Campo, Siena, Italy*, 1951, Pastel on Paper, 29 x 37.5cm, Private Collection – Depicted as vast, empty, gloomy and silent area causing feelings of estrangement.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 246).

Fig 27b: Giorgio de Chirico, *The Nostalgia of the Infinite*, 1913, 123.5 x 52.5 cm, Museum of Modern Art, New York – Scene depicted from an oblique, non-realistic view point.

(From <http://www.wikipaintings.org/en/giorgio-de-chirico/the-nostalgia-of-the-infinite-1913>, 10.04.2011).

The *Piazza Del Campo of Sienna* (1951) (Fig 27a), calling to mind de Chirico's painting *The Nostalgia of the Infinite* (1913) (Fig 27b) was depicted by Kahn as a vast, empty, gloomy and silent area, from an oblique, non-realistic view point, causing dizziness – bringing forth the feelings of estrangement of a modern being from the traditional world. The buildings surrounding the Piazza Del Campo seemed enormous

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<sup>276</sup> Eugene J. Johnson claim that this was a failure of techniques. This research suggests that the manipulation is intentional. Ibid., 81-82.



and silent, and their purpose remained vague – their abstracted facades with shattered windows, stripped of elements that would determine human customs or behavior, soaring deserted towers, made them seem like cardboard backgrounds that could not be entered or used. Slanted shadows, whose length did not correspond with the time of the day as depicted in the drawing, casted enigma on the place of communal consensus, and melancholy, loss, sadness, and void took over the space of human action.<sup>277</sup>

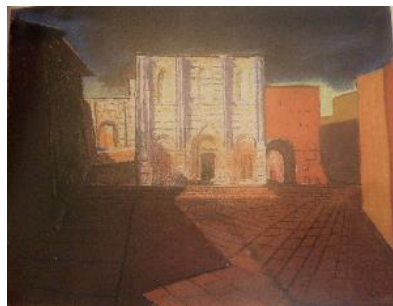


Fig 28a



Fig 28b

Fig 28a: Louis I. Kahn, *Baptistry of St. Giovanni*, Sienna, Italy, 1951, Pastel on Paper 28 x35.5cm, Shown in a travelling exhibition organized by the Pennsylvania Academy of the Fine Arts (1978-1979), Collection of Sue Ann Kahn – Depicting a scenario in which different places and times co-exist.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 247).

Fig 28b: Giorgio de Chirico, *Ariadne*, 1913, Oil and Graphite on Canvas, 135.6 x 180.5 cm, New York, The Metropolitan Museum of Art, Bequest of Florence M. Schoenborn, 1995.

Banal linear time left behind the depicted scene.

(From <http://www.metmuseum.org/toah/works-of-art/1996.403.10>, 10.04.2011) .

Kahn who claimed that art did not aim to disclose time as if “one thing started at one time, another thing at another time” but “was of no time,” disclosed poetic rather than scientific rational spaces in his drawings.<sup>278</sup> In addition, inclined to search for a multiplicity of narratives, Kahn drew historical sites as if they were open to reading, interpretation, and organization by individuals. In the *Baptistry of St. Giovanni* (1951,

<sup>277</sup> Some of the very same characteristics used by De Chirico to create his enigmatic spaces. On De Chirico see Holzhey, *Giorgio de Chirico, 1888-1978: the modern myth*: 17-18, 23-34.

<sup>278</sup> Kahn, "1973: Brooklyn, New York," 322. Here Kahn speaks on the work of art in similar ways that Octavio Paz spoke about poetry - Both belonging to the realm of another time. For Octavio Paz's discussion on the poetic as belonging to “another time” Octavio Paz, *The Bow and the Lyre: The Poem, the Poetic Revelation, Poetry and History* (Texas, USA: University of Texas Press, 1987), 3-18, 84-100, 01-40.

Fig 28a), akin to what happens in De Chirico's painting *Adriadne* (Fig 28b), Kahn bracketed space, left banal linear time behind the depicted scene, used a diversity of vanishing points, and included shadows that fell from different sources (which contradicted the laws of nature) to disclose the environment. His drawing depicted a scenario in which different places and times co-existed – a place that could not possibly exist yet revealed the deep poetic truths behind varied individual readings of the same historical shared universal reality.<sup>279</sup>

### **The Supra Historical Mnemonic Program and Narrative as Labyrinth**

The drawings examined above demonstrate that Kahn perceived historical architectural sites that carried memories of traditional rituals, beliefs and narratives as places of unease, where the incomplete modern being was felt partially placeless and disembodied. They also shed light on Kahn's belief that feelings of anxiety resulting from historical rituals, beliefs and narratives could promote authenticity through their contemplation, and thus history had the potential to open up to new possibilities for freedom.<sup>280</sup> However, the manner that Kahn sought of using such impressions to construct new progressive yet not defined architectural programs is left open. Kahn's sketch, *Form Drawing Not a Design* (Fig 28c), and his drawing, *Interior View with Statue* (Fig 28d), calling to mind De Chirico's painting *Anxious Journey* (1913) (Fig 28e) might shed light on Kahn's intentions.

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<sup>279</sup> Holzhey talks in similar terms about the work of De Chirico. Holzhey, *Giorgio de Chirico, 1888-1978: the modern myth*: 28.

<sup>280</sup> On the feeling of anxiety leading to Design see Heidegger's discussion.

For Heidegger when "We 'hover' in anxiety". Martin Heidegger, *Basic Writings from Being and Time* (London: Harper & Row, 1977). 97. Heidegger indicates: The "Dasein" is being held out into the Nothing," and adds: "In the clear night of the Nothing of anxiety the original openness of being as such arises: That they are being and not Nothing". Ibid., 105.

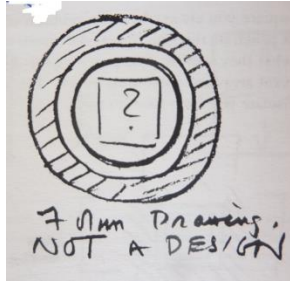


Fig 28c

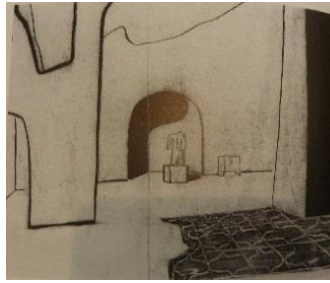


Fig 28d



Fig 28e

Fig 28c: Louis I. Kahn, *Form Drawing, Not a Design*

(From Louis I. Kahn, *Writings, Lectures, Interviews*, 133).

Fig 28d: Louis I. Kahn, *Interior View with Statue*, 1951/ 1959 , Charcoal on Paper, 27.9 X 14. cm, Private Collection – Suggesting an anxious route within a disordered and confusing structure.

(From Jan Hochstim, *The Paintings and Sketches of Louis I. Kahn*, 290).

Fig 28e: Giorgio de Chirico, *The Anxious Journey*, 1913, 74.3 x 106.7 cm, Museum of Modern Art, New York, USA - Anxious routes within the disordered and confusing structure.

(From <http://www.wikipaintings.org/en/giorgio-de-chirico/the-anxious-journey-1913>, 10.04.2011).

On his Form Drawing *Not a Design* (Fig 28c) Kahn wrote: “I made a form drawing, a drawing which indicates the nature of something and something else”<sup>281</sup> - “I made a square center in which I placed a question mark. Let us say I meant it to be the sanctuary. This I encircled with an ambulatory ... around the ambulatory I drew a corridor which belonged to an outer circle enclosing a space” Kahn explained that the drawing left the central space as “a place which for the moment is left undescribed” and whose program was contemplated by “the wall which surrounds question.”<sup>282</sup> The abstracted nature of this sketch is difficult to understand on its own, but its relevance to Kahn’s thought about the use architectural history in contemporary design could be understood when coupled with his drawing *Interior View with Statue*. The fact that neither a specific name nor a specific date were articulated on the drawing *Interior View with Statue* might point towards the possibility that the drawing did not serve Kahn to depict a certain environment or a specific experience but was a conceptual representation,

<sup>281</sup> Kahn, *Conversations With Students*: 43.

<sup>282</sup> Kahn, “Form and Design, 1961,” 115.

similar to his *Form Drawing*, which summarizes the different manners that Kahn addressed traditional rituals, beliefs and narrative and in which Kahn expressed his general ideas embodying the potential to use his impressions to create new compositions.

In *Interior View with Statue* (Fig 28d) traces, fragments, ruins, and abstracted elements were used to create a non-hierarchical, disorienting space, which nevertheless called for its embodiment. Kahn depicted a vacant central space, with some traces on the ground, and with two insignificant scattered sculptures or ruined relics whose anonymity called for participation. Surrounding the central space by layers of fragmented abstract ruined planes that were stripped from details concealed any specific point of reference, shuttering its horizons. Non-matching openings that were pierced in the planes prohibited any axial clear experience of it. Instead, like in Giorgio de Chirico's drawing *The Anxious Journey* (Fig 28e) angles of vision were sliced, a coherent reading of the space was disturbed, and the beholder that was suggested a complex series of pathways was inquired to find his personal anxious route within the disordered and confusing structure. Shadows falling from two opposite directions – from the left side and from the right side –pointed towards the many different existing options open to experience.

The next two chapters will follow up on Kahn's artistic activities through two architectural projects that engage memories of rituals, beliefs and narratives to construct progressive future oriented modern programs. I will attempt to show how Kahn used the richness of architectural historical forms, voids, materials, joints, textures, shadows, light etc. as extensions of memory in his designs. By proposing the experience of historical

images, rituals, and narratives as vague twilight memories, in the form of illusionary apparitions - absent entities, shadows, fragments, and traces, animating activities in space in the background of Kahn's designs usually inaccessible for instant use, gave rise to silence, called for embodiment, awaited the unknown future, and enabled something new to come alive that was nevertheless tied to a continuous past.

## **Chapter Three:**

### **Mediating Architectural History in Design**

#### **The Dominican Motherhouse of St. Catherine de Ricci,**

#### **Media, Pennsylvania 1965-1969**

In 1965 Kahn was assigned to design the Mary Queen of all Saints Motherhouse for the Dominican Congregation of St. Catherine de Ricci, in Media, PA.<sup>1</sup> He worked on the commission between 1965 and 1969; however none of his three proposed design schemes were built.

The nature of St. Catherine's de Ricci's congregation was unique. It was shaped over the years and resulted from its layered history, its affiliation to the Dominican Order, and its future aspirations in the contemporary American context. The typical Monastery / Convent prototypes did not suit the Sisters' beliefs and ways of life, but they also did not have a clear idea about the proper Motherhouse they desired. Kahn was not acquainted with the congregation's nature, and neither was he informed about the Dominican Order. The design process served both sides – the Sisters matured as clients, while Kahn came to apprehend the nature of the as-yet un-known institution to better serve the congregation. However, as will be shown, both arrived at their understandings via different paths. The Sisters slowly defined their position while re-considering their history in relation to their future aspirations. Simultaneously, during the design process, Kahn became familiarized

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<sup>1</sup> Letter from Mother Emmanuel OP of the Mary Queen of All Saints Dominican Congregation of St. Catherine de Ricci to Louis I. Kahn, 26<sup>th</sup> March 1965, received by Kahn on the 29<sup>th</sup> of March 1965, The Louis I. Kahn Collection, Box 32.8.

with the Dominican Order's character, which he considered in relation to his previous knowledge of Monastic Benedictine and Cistercian life, though he never seemed to attain complete familiarity with St. Catherine's history. However, although the Sisters and Kahn followed different paths in which they reconsidered history in the present to re-define their future aspirations, mutual understanding regarding an architectural expression to suit the congregation was reached, and at the end of the process Kahn managed to propose a unique design scheme for a Motherhouse which the Sisters seriously considered building.

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In this chapter I will describe Kahn's fascinating designs for the Dominican Motherhouse of St. Catherine de Ricci in Media, PA and examine their relation to historical precedents.<sup>2</sup> I will demonstrate that through his consideration of ideas and concepts in relevant precedents which Kahn was acquainted with prior to his work on the project, and their integration with the history of the Dominican congregation of St. Catherine de Ricci, Kahn developed a unique architectural program for the Dominican Motherhouse, in which changes in Christian monastic and Conventual rituals were embraced and experienced as conceptual pairs within an architectural creation conveying contentious beliefs. Thus, I will claim that Kahn's design addressed the past, dealt with

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Ricci to Louis I. Kahn, 26<sup>th</sup> March 1965, received by Kahn on the 29<sup>th</sup> of March 1965, The Louis I. Kahn Collection, Box 32.8.

<sup>2</sup> While the Motherhouse has been published the knowledge of Kahn's designs remained limited. Michael Merrill was the first to expand on the Motherhouse, to study and publish important archival material. However, unlike this research, which aims to tie theory, history and practice, as Merrill himself stresses out, "theory is not the prime goal" of his book, rather, Merrill discussed the "goals, procedures, tools and craft/ culture thinking architecture" involved in the journey of architectural making of the Motherhouse. Through a close investigation of sketches, architectural drawings, models and the notes Merrill sheds light on the slow development of the Motherhouse from abstract spatial "simple beginnings," their maturing through the consideration of site and budget conditions, material and building codes considerations, as well as the clients' requirements, to the their wearing of concrete forms. Michael Merrill., *Louis Kahn: on the thoughtful making of spaces: the Dominican Motherhouse and a modern culture of space* (Baden: Lars Müller, 2010), 1-114. Quote is from page 13.

the present, and was open towards the developing rituals of the potential, unknown future.

First I will present the history of St. Catherine de Ricci's congregation and the new architectural challenge of designing its Motherhouse. I will elucidate the many reasons that rendered a typical Convent / Monastery unsuitable to the needs of the congregation, shedding light on the unique architectural challenge which Kahn confronted in designing the Motherhouse. I will briefly present Kahn's three design schemes for the Motherhouse,<sup>3</sup> and will thoroughly discuss Kahn's study of historical precedents as well as the manner in which they influenced the project. I will present how Kahn's awareness of historical precedents in terms of monastic and Conventual concepts and compounds enriched with his developing acquaintance with Dominican ideas through his long dialogue with the Sisters along the design process assisted him in developing a unique program, and will show how these historical precedents were decomposed and recomposed into Kahn's designs for St. Catherine de Ricci Motherhouse. I will then re-examine the mnemonic historical image and program in Kahn's three design schemes. I will assess the degree to which each of the historical precedents, as studied by Kahn, affected the different stages and will aim to characterize Kahn's poetic de-structuring of history in each design scheme. I will show that the final design promoted an architectural event that related to the memories and traditions of the past, was tied to the present by calling for engagement and self-expression, and addressed the future by being open to

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<sup>3</sup> It is important to mention that the division into the three stages is done according to my own observation of the archival material at hand, mainly drawings and sketches (some of which are not dated) and is done in order to assist my theoretical presentation of Kahn's design in this research. None of the stages was officially submitted by Kahn for final approval. Moreover, as an un-built project it is quite difficult to know how the design would have proceeded had it been built. However, this does not hinder research of this kind, whose main interest is precisely to deal with the recreation and re-interpretation of historical ideas in architecture.



wonder and imagination. I will sum up with a discussion of the decisions taken by the congregation to terminate Kahn's involvement in the project in 1969<sup>4</sup> and to sell the land in Media in 1989 – a disappointing process which dismissed a unique opportunity for architecture to help in preserving past tradition and culture and redefining it according to present and future ideas.

### **Part 1: A Brief History of St. Catherine de Ricci's Congregation** **and the New Architectural Challenge**

The History of St. Catherine de Ricci's congregation is layered, and its affiliation to the Dominican Order has changed over the years. The congregation was founded in Albany, NY, in 1880, by Lucy Eaton Smith.<sup>5</sup> Lucy converted to Catholicism at the age of 21, spent three years of novitiate training in Dominican Convents in Europe,<sup>6</sup> and following the suggestion of Father Aquilanti, a Dominican Prior whom she met in Europe and who became her spiritual guide, she returned to United States to found an organization that would be devoted to active work within the community.<sup>7</sup>

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<sup>4</sup> Letter from Mother Marry Bernadette OP, Prioress General of the Dominican Congregation of St. Catherine de Ricci, sent to Kahn on the 8<sup>th</sup> of March 1969, Received in Kahn's office on the 20<sup>th</sup> of March 1969, Box 32.8, The Louis I. Kahn Collection.

<sup>5</sup> Lucy Eaton Smith grew up in a house where religion did not play an important role (her father was humanist who declared himself as desist and her mother was an Episcopalian).

<sup>6</sup> Sister Carolyn Krebs from the St. Catherine de Ricci, who wrote her dissertation on Lucy Eaton, and read Lucy's dairy as well as 400 letters which Lucy wrote to her sister, explains that in both, Lucy does not mention the names of the Dominican Convents and monastic compounds that she visited. Conversation with Sister Carolyn Krebs, The Dominican Motherhouse of St. Catherine de Ricci, 27<sup>th</sup> April 2010.

<sup>7</sup> Father Aquilanti was determined that Lucy should not join the Cenacle Sisters or the Cloistered Dominican Sisters. The Sisters of the Cenacle are a Roman Catholic Congregation that was founded in 1826 in France, grew into an international religious congregation, and founded its first Monastery in the in the United States in New York in 1892. The Nuns of the Cenacle congregation aim first and foremost at their own personal sanctification and then to the salvation and perfection of their neighbor, through perpetual prayer, the recitation of the Divine Office daily Exposition of the Blessed Sacrament and giving spiritual services within their secluded Cloistered monasteries. Religious of the Cenacle, *Congregation of Our Lady of the Retreat in the Cenacle, Otherwise Called Our Lady of the Cenacle* (Chicago: Paulist Press, 1953), 5-7.

Established in the 13<sup>th</sup> century, the Mendicant Dominican Order aimed to serve urban communities that were searching for a spirituality to express their new, dispersed way of living.<sup>8</sup> The Order's main goal was to preach the word of God in the newly established cities. Following a Monastic, contemplative life (Constitution 1932, No. 4), its members studied the Holy Scriptures and spread its Word through active preaching. Thus, the Dominicans supported two different ideas of Christianity – contemplation and action. Dominican contemplative monasteries were built to serve as scholarly training centers for the Friars, while non-priorial houses were founded in the cities and in the surrounding parishes as bases from which missionary activities to the communities could be executed.<sup>9</sup>

The Dominican Order has consisted of three different segments. The first were an Order of preaching Friars that were sent on variety of missions within Europe and used Convents only as bases from which they went on their missions;<sup>10</sup> the second, an Order of Contemplative Nuns<sup>11</sup> who took upon themselves the vows of poverty, chastity, and obedience, were prohibited from actively practicing asceticism and preaching,<sup>12</sup> and devoted themselves to personal sanctification while praying for divine help for the Dominican Friars. Controlled by the Friars, the Nuns followed a strict penitential Monastic life in Cloistered secluded monasteries closed to outside visitors where manual

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<sup>8</sup> C.H. Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* Third ed. (Harlow, England: Pearson Education Limited, 2001), 239-41.

<sup>9</sup> "The New Catholic Encyclopedia," (Washington DC: The Catholic University of America, 1967), 974-77.

<sup>10</sup> Missions of the Friars included serving as inquisitors, confessors, managers of sacred places, reformers of monasteries, and administrators of Convents. J.Leonard Callahan, *The Dominican Nuns in their Cloister* (Philadelphia, PA: The Dolphin Press, 1936), 148; "The New Catholic Encyclopedia," 977-79.

<sup>11</sup> The Nuns were the first followers of St. Dominic. Dominic set the first Monastery for the Nuns, which was completely adapted to Monastic life, in Pouille, France, in 1206.

<sup>12</sup> Lutz Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities* (Pennsylvania, USA The Pennsylvania State University Press, 1998), 90 .

work, prayer, and silence were emphasized.<sup>13</sup> The third, an Order of Lay Brothers and Sisters composed of secular members who lived in the outside world or chose to a live communal life while partially carrying the Dominican vows. As such they were the first to institute the idea that salvation could be reached also by those living outside the Cloister.<sup>14</sup> Late Medieval Dominican compounds were composed of Cloistered Convents for the contemplative Nuns, next to which the Convents for the preaching friars in charge were located.<sup>15</sup> However, the quick growth of the Second Order made the control of the Friars difficult to maintain and by the 18<sup>th</sup> century, Cloistered compounds in which Nuns practiced independent mystic life had become established all over Europe.<sup>16</sup>

During the 18<sup>th</sup> and the first half of the 19<sup>th</sup> centuries communality disappeared, giving way to more private modes of life. Consequently, most of the Dominican Monasteries promoting mutual study, prayer, and decision-making fell into ruin.<sup>17</sup> During the second half of the 19<sup>th</sup> and the 20<sup>th</sup> centuries the Dominican Order made efforts to recover. Missionaries from France, Germany and Ireland were sent to the United States, where the Order experienced significant growth. The province of St.

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<sup>13</sup> The house in Toulouse, where the brethren who joined St. Dominic conducted quite regular life, was founded only in 1215; Callahan, *The Dominican Nuns in their Cloister*: 2-9; "The New Catholic Encyclopedia," 980-85.

Dominican Friars were assigned to each Monastery to be responsible for and guide the Nuns. Ibid., 180-82.

Until the end of the 13<sup>th</sup> century the keys for the Monasteries of the Second Dominican Order were taken by the popes who, literally, locked the Nuns behind iron grills, within the walls of the Monastery. Callahan, *The Dominican Nuns in their Cloister*: 7. Lawrence argues that "It was an inescapable paradox that the two Mendicant Orders, which had broken out of the Monastic tradition of enclosure and segregation from the world, originated two female Contemplative Orders which observed a regime of strict enclosure." Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 269.

<sup>14</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 270. , "The New Catholic Encyclopedia," 980-85.

<sup>15</sup> Callahan, *The Dominican Nuns in their Cloister*: 148.

<sup>16</sup> Condom and Marseilles, 1236; Barcelona, 1259; Metz, 1290; Saint doux near Perigueux, 1293; Montpellier, 1295; Saragossa, 1299; Poissy, 1304; Avignon, 1347; and Nay in the 17<sup>th</sup> century, to mention only few. Ibid., 154-59.; "The New Catholic Encyclopedia," 180-82.

<sup>17</sup> After the French Revolution, the Dominican Order in Europe decayed. Many of its members were killed or sent to prison, and most of its monasteries, together with the first Monastery in Prouille, fell completely into ruin, and were turned into stone quarries. Callahan, *The Dominican Nuns in their Cloister*: 167-71, 79; "The New Catholic Encyclopedia," 180-82.

Joseph, founded in 1805 and whose headquarters were located in New York, alone grew from 80 members in 1876, to 763 members in 1963.<sup>18</sup> Using Conventional life as a means of bringing strict beliefs to the new Protestant continent of America and following the Dominican Order's tradition, the Friars were assigned to preaching and teaching. Meanwhile the Sisters were prohibited from moving from place to place or taking part in pastoral work; they lived in segregated organizations, were restricted from speaking even with people with whom they worked and prohibited from establishing strong relationships with one another. They promoted sacrificial life through the practice of mystical victimhood in the name of Mary, under hierarchical masculine authorities.<sup>19</sup> Hence, for a long time there were no congregations of Dominican Sisters and no institutions such as Motherhouses. Dominican women had no choice but to take solemn vows and live in Cloistered Convents of the Second Dominican Order. Dominican women were, nevertheless, encouraged to work outside the Cloister: Friars asked Sisters to help in apostolate tasks, adapting Monastic constitutions to enable Sisters to teach, nurse, and "proclaim the Word of God" within the communities. Thus, women had to constantly cross the line between contemplative Cloistered and apostolate missionary active life. With no real foundation behind them, they usually followed their own initiative, and the ambiguous status of the Dominican Sisters thus remained unsolved.<sup>20</sup>

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<sup>18</sup> Mary Nona McGreal, *Dominicans at Home in a Young Nation 1786-1865*, vol. 1: The Order of Preachers in the United States: A Family History (Editions du Signe 2001), 207, 14.

Many Friars joined the Order; the Second Order of Cloistered Nuns grew immensely (by 1963 there were 210 Monasteries of the Second Order in the United States) and by 1963, 21 Convents of the Third Order existed in the US alone (out of 26 Convents worldwide), in addition there was a growth in the number of Conventual Brothers and Sisters who organized together in communities and dedicated their lives to education, to taking care of the needy and the sick and to other charitable work, in schools, orphanages and hospitals). "The New Catholic Encyclopedia," 980-82.

<sup>19</sup> Rebecca Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971" (McGill, 1999), 49-50.

<sup>20</sup> McGreal, *Dominicans at Home in a Young Nation 1786-1865*, 1: The Order of Preachers in the United States: A Family History: 220-25, 29. The American Dominicans Friars also carried out missions in China, Pakistan, Chile, Peru,

Around 1880, when Lucy returned to the United States from Europe (and after taking the name of Catherine De Ricci, a Dominican Mystic she adored), her aspirations to found an active Order of Sisters<sup>21</sup> were turned down by the Priests of the Dominican Provincial in New York. With no choices left, Lucy joined the Order of the Contemplative Sisters (known today as the Dominican Sisters of Sparkill New York), and begun working in Cloistered Convents (with children and orphans).<sup>22</sup>

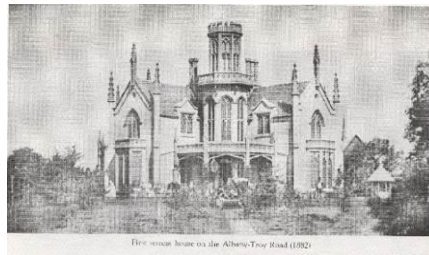


Fig 01a

Fig 01a: Albany Troy Road Retreat House - A private house that served the congregation but was not built to serve its activities (From the Dominican Sisters of St. Catherine de Richi's Archives).

Finding the work in the Cloisters unsatisfying, she bought a small house in Albany where retreats for women were offered to women from New York, Boston, Washington, and Troy. Happy with Lucy's project, the bishop suggested that her newly founded organization should move into the city of Albany, and assisted in buying a building on the Albany-Troy post road, which then served as the Order's Motherhouse (Fig 01a). As long as the congregation did not function as an authorized Order it was not

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Kenya, Bolivia and Nigeria. Many Sisters asked the pope to settle their ambiguous status - (Pic X example of letter to the pope from 1848, p.222-223), but their petitions were usually not answered. Ibid., 228.

<sup>21</sup> Katherine Burton, *In No Strange Land - Some American Catholic Converts* (Freeport, New York: Books for Libraries Press, 1942), 159-66.

<sup>22</sup> For few months Lucy joined two Dominican Sisters with whom she could start taking care of orphans, in a small house on Second Avenue in New York City. Afterwards Lucy became active in Staten Island where she took care of parish children, founded study groups, and formed sewing clubs. Later, Lucy convinced the pastor of a church to buy a small house in Glen Falls and convinced the Bishop of Albany to establish a foundation there. Lucy took the vows to serve as a Conventual Dominican tertiary for three years and the two other Dominican Sisters joined her; after a while they moved to West Troy where they were doing the same sorts of jobs. The Priests tried to keep them away from any other jobs. Ibid., 166-68.

subjected to any canon rules; yet its members were required to follow imposing Monastic life and were not permitted to establish real contact with the people whom they served.<sup>23</sup>



Fig 01b

Fig 01b: Madison Avenue Motherhouse and Novitiate - A building that served the congregation but was not built to serve its activities (From the Dominican Sisters of St. Catherine de Richi's Archives).

In 1880, official approval to found the congregation of St. Catherine de Ricci and its affiliation within the Dominican Order was given, and a formal novitiate in Albany was founded by Lucy right after.<sup>24</sup> In 1900, Pope Leo XIII recognized men and women who took simple vows as members of the Church.<sup>25</sup> In the early 20<sup>th</sup>-century efforts to revive medieval Catholic thought while avoiding the challenges posted to Christianity in Modern times were criticized.<sup>26</sup> Mirroring American women's efforts to become more liberated, receive high educations, and pursue professional careers, the Sisters aspired to gain independence from male authority and to be active and vibrant. Similarly to American women who were affected by nostalgic calls for traditional aspects of

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<sup>23</sup> Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 50.

<sup>24</sup> Burton, *In No Strange Land - Some American Catholic Converts*: 168-70.

<sup>25</sup> McGreal, *Dominicans at Home in a Young Nation 1786-1865*, 1: The Order of Preachers in the United States: A Family History: 230. See also James R. Cain, *The Influence of the Cloister on the Apostolate Congregations of Religious Women* (Rome: Pontifical University of the Latern, 1965).

<sup>26</sup> A romantic turn during the 19th century towards the Middle Ages promoted the revival of Monastic Orders all over Europe, the United States and Canada. Most Orders revived traditional, and established Cloistered congregations where communities lived austere, devoted, and secluded lives. For more details about the revival of the 19<sup>th</sup> century see David Knowles, *Christian Monasticism* (London: World University Library, 1969), 170-76, 84-90.

As Karl Rahner explains the call against Neo-Scholasticism derived from theologians' belief that by the resuscitation of a philosophy which was long since invalid, the very essential character of medieval thinking, based on *questio* and *disputatio* in order to explore theological issues, through diversity of theories, was ignored. Furthermore, the theories and philosophies used were read out of their initial context, as Cartesian dogmas, making them ahistorical and ill equipped to be appropriate to contemporary times. Theologians such as Karl Rahner S.J, Michael Herbert and John Courtney Murray sought ways to integrate between Christianity and modern human experiences. Karl Rahner, *The Trinity*, trans. Joseph Donceel (New York: the Crossroad Publishing Company, 1967), Introduction: VII.

femininity and adjusted their lifestyle to follow them, the Sisters aspired to present themselves as spiritual and devoted – as the last pure "Victorian Ladies". Thus, the Sisters replaced Dominican historical feminine ideals of obedience, discipline, and hierarchy with ideals of compassion, togetherness, and belonging, and carried a double sided image – a symbol of the tense relationships between progress and tradition as expressed in the identity and the role of women in the United States. The Dominican Convent was feminized – like the American suburban house it offered some degree of freedom but encouraged women to preserve a traditional life style.<sup>27</sup>

The Sisters of the congregation of St. Catherine de Ricci embraced the values of sacrifice and of Catholic service, conducted a communal Conventual life routine (similar to that of the Second Order), but were involved in the missionary work of education within urban and suburban communities. The novitiate in Albany was built along the lines of Cloistered European Dominican Convents but included a guesthouse where they ran services such as retreats and catechism classes for outside visitors (Fig 01b).<sup>28</sup> In 1920 the Catholic Church demanded that the St. Catherine de Ricci congregation decide whether they were to be considered as an active or as a contemplative congregation, and the Sisters decided to be active.

In the second half of the 20<sup>th</sup> century the congregation of St. Catherine de Ricci experienced major changes. These were influenced by four main factors: First among

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<sup>27</sup> Burton, *In No Strange Land - Some American Catholic Converts*: 168-70.

<sup>28</sup> Conversation with Sister Carolyn Krebs, The Dominican Motherhouse of St. Catherine de Ricci, 27<sup>th</sup> April 2010. In addition to it Lucy founded a Motherhouse for the active sisters in Saratoga Springs. After Lucy's death her sister, Lillie, joined the congregation and with her help other centers of activities were opened in Philadelphia, New York City, Dayton, and in Elkins Park. Burton, *In No Strange Land - Some American Catholic Converts*: 170-71.

these was the Order's aspiration to strengthen its position in America that brought the Catholic Church's recognition of the power of the Sisters; second the influence of feminist and social values which encouraged the Sisters to rethink their way of life;<sup>29</sup> third, the revival of a more secular religion after World War II; and fourth, the renewal of the Catholic Church which took place after the Second Vatican Council.



Fig 01c

Fig 01c: The mansion in Elkins Park that served the congregation of St. Catherine de Ricci - a private mansion that served the congregation but was not built to serve its activities (From the Dominican Sisters of St. Catherine de Ricci's Archives).

In the 1950s the Sisters freed themselves from motherhood and gained their feminine identity and independence through religious devotion,<sup>30</sup> and following the recommendations of the American Sisters Formation Conference of 1954, American Sisters acquired high levels of education, becoming the most learned group in the

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<sup>29</sup> Sullivan, "Revolution in the Convent : women religious and American popular culture, 1950-1971," 46., Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities*, 73-75.

For life of Dominican Nuns during the Middle Ages see also Janes Tibbets Schulenburg, "Women's Monastic Communities, 500-1100: Patterns of Expansion and decline" in Elizabeth A. Clark Judith M. Bennet, Jean F. O'Barr, B. Anne Vilen, and Sarah Westphal-Wihl, *Sisters and workers in the Middle Ages* (Chicago: University of Chicago Press, 1989), 208-39; "Strict Active Enclosure and its Effects on the Female Monastic Experience (ca. 500-1100), in *Medieval Religious Women*, vol. 1 (Kalamazoo, Michigan: Cistercian Publications), 51-86. For the opening of the Cloistered world of sisters in modern times in the USA see Mary Ann Ewens, *The Role of the Nun in Nineteenth Century America* (USA: Ayer Co Pub, 1978); Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 1-12, 359-67.

<sup>30</sup> Unlike American women, who in the 1950s were torn between taking part in the free workforce (by 1951, 30% of the American workforce were women) to take up the role of managing a family life (working part-time in more low-skill routinized and low-paying jobs) and gaining satisfaction from the contribution to their families. Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 67-70.



Catholic Church and were generally far more educated than most of American women. Following the suggestion of the Conference of Major Superiors of Women of 1956, the Sisters became more mobile and involved than many other women in their activities, and developed a network of communication outside the Convents, where they shared their ideas.<sup>31</sup>

During the 1950s with more work to pursue outside of Albany, most of the St. Catherine de Ricci congregation's Sisters moved South and West, and the congregation relocated to Elkins Park (a suburb of Philadelphia) to a private mansion to which no adjustments were made and that was never officially named a Motherhouse served the Sisters' needs (Fig 01c).

After World War II, the United States experienced a religion revival accompanied by ideas of "pluralism" and "tolerance for diversity". From around 1950, liberal Catholics criticized "Catholic separatism" and what they believed was their "ghetto mentality," and called to integrate Catholicism into the social national life of the country, and to cooperate with members of other religions welcoming more liberal ideas.<sup>32</sup>

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<sup>31</sup> Until the 1950s the Sisters were perceived as defenders of a higher, external, absolute truth, related to the supernatural, and removed from contemporary worldly concerns. However, there were debates about the extent of contact that Sisters should have with the external world. Ibid., 64-74.

<sup>32</sup> Phillip Gleason, "The Catholic Church in American Public Life in the Twentieth Century," *Logos: A Journal of Catholic Thought and Culture* 3.4(2000): 88-93. Also see: Philip Gleason, *Contending With Modernity: Catholic Higher Education in the Twentieth Century* (New York: Oxford University Press, 1995), 274-82, chapter 13. For discussion of diversity see Philip Gleason, *Speaking of diversity: language and ethnicity in twentieth-century America* (Baltimore: Johns Hopkins University Press, 1992), 63-69.

The Second Vatican Councils of the Roman Catholic Church (11 October 1962 – 21 November 1965) convened by Pope John XXIII and continued under Paul VI,<sup>33</sup> put into question the functions and institutions long viewed by Catholics as vital to their faith.<sup>34</sup> Their call for renewal and reconsideration of the Church's place in the modern world were accepted with enthusiasm in America (unlike in Europe) by the Sisters who saw it as a formal approval to reconcile American values, such as democracy and individualism, with religion.<sup>35</sup>

The first session (Autumn 1962) dealt with the need and means to promote people's participation in the Christian religion in Modern times. It called for a reform of the liturgy to recognize the variety of cultural origins and accept democracy in Christian practice. The second session (Autumn 1963) formed the Constitution on the Sacred Liturgy to encourage the participation of lay people in the Christian service; promoted a less distanced relationship between the Priesthood, the congregation and the Laity; permitted the nomination of younger Priests and even discussed the nomination of women Priests (a possibility never officially sanctioned by the subsequent popes);<sup>36</sup> and promoted a more open attitude to moral issues and social restrictions such as homosexuality, abortion, and artificial birth control.<sup>37</sup> The third session (Autumn 1964) resulted in the Dogmatic Constitution on the Church that supported collegial relationships between the Catholic Church and Protestants, and the union between Western and Eastern Catholic Churches, based on the idea that Virgin Mary was the "Mother of the

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<sup>33</sup> Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 78.

<sup>34</sup> Gleason, "The Catholic Church in American Public Life in the Twentieth Century," 94-96.

<sup>35</sup> Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 79-80.

<sup>36</sup> Jacqueline E. Wenger Dean R. Hoge, *Evolving Visions of the Priesthood: Changes from Vatican II to the Turn of the New Century* (Collegeville, Minnesota: The Liturgical Press, 2003 ), 13, 59.

<sup>37</sup> Ibid., 194-95.

Church". Perceiving themselves as part of the society and not as external to it, so that congregations became open to members who only loosely followed traditional rules, Sisters were considered almost an integral part of the Laity, and newly founded lay organizations slowly replaced traditional religious congregations.<sup>38</sup> The final session (Autumn 1965) issued the Dogmatic Constitution on Divine Revelation and the Pastoral Constitution on the Church in the Modern World and advocated a call to allow members to conduct their religious life so that it would be in harmony with the present's day physical and psychological, social, economic conditions.<sup>39</sup> The Vatican council also issued a call to reject religious life as supernatural and to build more open and flexible Churches. In addition, with the blurring identity of religious congregations, and the acceptance of religious life styles as differing from one congregation to another, congregations were encouraged to search for their authentic past and future take upon tradition and to unique institutions that brought them forth.<sup>40</sup>

Enthusiasm of renewal was followed by confusion regarding the future of the Church, its ideals, the identity of Catholic believers, and their lifestyles. The three declarations issued in the closure of the council called for the necessity of acknowledging

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<sup>38</sup> The *Lumen Gentium* stated: "This form of life (i.e., vowed religious) has its own place in relation to the divine and hierarchical structure of the Church? Not, however, as though it were a kind of middle way between the clerical and lay conditions of life. Rather, it should be seen as a form of life to which some Christians, both clerical and lay, are called by God so that they may enjoy a special gift of grace in the life of the church and may contribute, each in her own way, to the saving mission of the Church." *Lumen Gentium* (composed in the second session of the Vatican Council, released in Nov. 21<sup>st</sup> 1964), VI: 43, in Flannery 1975:403, quoted by Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 87.

<sup>39</sup> In the *Perfectae Caritatis* it was stated: "The manner of life, of prayer and of work should be in harmony with the present day physical and psychological condition of the members. It should also be in harmony with the needs of the apostolate, in the measure that the nature of each institute requires, with the requirement of culture and with social and economic circumstances." *Perfectae Caritatis* (composed in the third session of the Vatican Council, released in Oct. 1965) I:3, In Flannery 1975:613, quoted in *ibid.*, 89.

<sup>40</sup> *Ibid.*, 89-90.

the changes in time and culture, but avoided rigid definitions.<sup>41</sup> It was agreed that Christianity could be practiced by withdrawing from the world in various ways, and that Monastic rules could be changed and suspended, but their abolishment was prohibited. Conventual institutions were called to search their for their ways within written Rules in which traces of the ancient Benedictine canon existed so that the spiritual essence of Monastic values – communal fulfillment, non-possession of material things, agreed upon routine taking power over personal needs, obedience of silence, and concentration on the spiritual aspect of life – would remain apparent.<sup>42</sup>

The changes of the second half of the 20<sup>th</sup> century brought a shaking of the Monastic world as never felt before. Congregations which continued to preserve traditional approaches were criticized,<sup>43</sup> divergence of Monastic bodies was welcomed, and religion turned to a sort of religiosity, as Will Herberg explains: "American religiousness has been growing increasingly vacuous – a religiousness of belonging,

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<sup>41</sup> Knowles, *Christian Monasticism*: 224-27; Gleason, "The Catholic Church in American Public Life in the Twentieth Century," 94-96.

<sup>42</sup> Knowles, *Christian Monasticism*: 230-40.

<sup>43</sup> Two important books on the subject include St. Charles Borromeo, *The Changing Sister*, 1965 and *The new Nuns*, 1967, both supported by the Conference of Major Superiors of Women. Another important source was a survey conducted by the Conference of Major Superiors of Women between 1965-1967 in which almost 180,000 American Sisters participated, that examined the changes which took place in religious life, educational background of the Sisters, property and ownership issues, physical and psychological health and the reaction to the Vatican Council. Sullivan, "Revolution in the convent: women religious and American popular culture, 1950-1971," 76-78.

Suenens's book, *The Nun in the World: New Dimensions in the Modern Apostolate* (1962) gave an account for the reform process developed by the American Sisters, and was also a sort of their manifesto of independence. The book expanded on the status of women in the religious Catholic congregations from the foundation of Monasticism to the present day, and the second half dealt with the steps which had to be taken in the Sisters' religious life: the increase in education, the easiness of obedience, and the strict daily routine, as well as the acceptance of their independence within the Catholic Church and in society. Yet it stressed the Sisters' role of presenting compassion and morality in the American society, and their role in maintaining the connection between human suffering and divine salvation. Thus, on one hand the book expressed the need of the Catholic Church to embrace many of the values presented later by the Feminist Movement in the United States, on the other hand it remained loyal to traditional gender ideas. Suenens wrote: "To revalue the religious life of today means, therefore, to bring the religious life into harmony with the evolutionary state of the world and womankind, to retain from the past the everything of lasting value that can be adapted to circumstances, and to accept the positive contribution of feminism in order to improve the apostolic yield". Suenens, *The Nun in the World: New Dimensions in the Modern Apostolate* (1962), p.35, quoted in *ibid.*, 77.

In addition Suenens criticized the traditional of "*aut maritus aut murus* (a husband or a wall) Suenens, *The Nun in the World: New Dimensions in the Modern Apostolate* (1962), p.48, quoted in *ibid.*

without religious commitment, religious concern, or religious passion....Consequently, religion enjoys a high place in the American scheme of things, higher today, perhaps, than at any time in the past century. But it is a religion thoroughly secularized and homogenized, a religion,-in-general that is a little more than a civic religion of democracy, – the religionization of the American Way."<sup>44</sup> As a result American congregations, including the congregation of St. Catherine de Ricci witnessed a drastic rise in the membership of Sisters (by 1963 St. Catherine de Ricci included 175 Sisters<sup>45</sup>).

As Hitchcock stresses, the new spiritual liveliness promoted a search for new frameworks of understanding, encouraged Catholic orders to seek personal fulfillment, promoted union between religions and relationships with non-believers, brought about an active participation of the church in the lived world and a more humanistic integration of religion in a democratic nation.<sup>46</sup> However, the throwing away of existing frameworks also had a destructive dimension: The fact that congregations allowed their members to live a life only partially bounded to the Cloister where only part of the vows were followed (with easements in dates, timings and the manner in which services should be conducted) blurred the conditions of affiliation to coventual congregations.<sup>47</sup> The acceptance of lay people into the religious orders and the increase in the measures in which the orders depended on secular clergy brought about an aversion to observance, put religious identity into question, and resulted in a decline in religious faith that at times

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<sup>44</sup> Will Herberg quoted in *ibid.*, 86.

<sup>45</sup> St. Catherine de Ricci was not the only congregation which saw increased membership during these years. The increase of Dominicans in the United States was quick, in 1895 there were 55 congregations, out of which 20,000 were Sisters, in 1960 there were 128 congregations with 44,550 Sisters, and in 1963, in the US, alone there were 30 Motherhouses with 16,479 Sisters. "The New Catholic Encyclopedia," 983.

<sup>46</sup> Gleason, "The Catholic Church in American Public Life in the Twentieth Century," 94-96.

<sup>47</sup> Knowles, *Christian Monasticism*: 238.

lead to "total secularization."<sup>48</sup> Other events such as the Vietnam War and the drug culture further affected the destabilization caused by Vatican II and showed the way to anti-traditional, anti-authoritarian, and anti-institutional inclinations.<sup>49</sup>

The changes in religious thought and practice had a direct impact on the re-evaluation of Christian art and architecture. In a series of Liturgical Conferences in the United States the architectural consequences of the Second Vatican Council renewal were discussed.<sup>50</sup> Kahn himself was a member of the Art and Architecture panel in the 24<sup>th</sup> Catholic Liturgical Conference assembled in Philadelphia in 1963, and spoke on the 26<sup>th</sup> Liturgical Conference concentrating on Church Architecture in 1965 in Chicago.<sup>51</sup> It was clear that there was a need to rethink the character of Christian places of worship. The Modern Liturgical Movement itself called for a loosening of archaic frameworks, to depart from 19<sup>th</sup>-century architectural revivals that left believers as passive spectators of religious events, and called for new places of worship that would embrace liturgical changes that would allow reformation to take place.<sup>52</sup> Yet it acknowledged that existing

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<sup>48</sup> Ibid., 224-27; James Hitchcock, *The Decline and Fall of Radical Catholicism* (New York: Herder and Herder, 1971), 100, 07, 15, 21-23.

<sup>49</sup> Gleason, "The Catholic Church in American Public Life in the Twentieth Century," 95-96.

<sup>50</sup> Ibid. Also see "The Renewal of Christian Education, The Twenty-fourth North American Liturgical Week", (paper presented at the Liturgical Conference Philadelphia, PA, August 19-22, 1963), xv-xvi; "Jesus Christ Reforms his Church, The Twenty-Sixth American Liturgical Week", (paper presented at the Liturgical Conference, Chicago, Illinois, August 30- September 2, 1965), xii-xiii.

<sup>51</sup> David G. De Long; introduction by Vincent Scully David B. Brownlee, *Louis I. Kahn: in the realm of architecture* (Los Angeles, Museum of Contemporary Art, New York Rizzoli, 1991), 110.

<sup>52</sup> Henry C.F. Arnold, "Religious Building: Satbility After the Boom," *Architectural Record* 134, no. 18 (1963); Mark A. Torgerson, *An Architecture of Immanence: Architecture for Worship and Ministry Today* (Michigan Wm. B. Eerdmans Publishing Co., 2007), 30-35, 69-75.

The Second Vatican Council was preceded and followed by numerous publications on the topic. Already before Vatican II conversations evolved around the manner in which architecture could express the liturgical renewal. Emphasis was put on the need to embrace modern and authentic ways of worship, to relate more to the believers of the congregation. Other important publications included: Peter Hammond's *Liturgy and Architecture*, 1960; André Biéler's *Architecture and Worship*, 1965; Donald J. Bruggink and Carl H. Droppers' *Christ in Architecture*, 1965; and Frederic Debuyst's *Modern Architecture and Christian Celebration*, 1968; Harold Walter Turner, *From Temple to Meeting House* (Mouton: The Hague 1979), 5; Torgerson, *An Architecture of Immanence: Architecture for Worship and Ministry Today*: 80.

architectural structures must stay intact with the basic concept engrained in Christianity.<sup>53</sup>

Ultimately though, the manner in which the great philosophical–liturgical changes should be brought forth in architectural expressions that nevertheless conveyed traditional values was only vaguely addressed.<sup>54</sup>

## **Part 2: Kahn's Three Design Schemes for the Motherhouse**

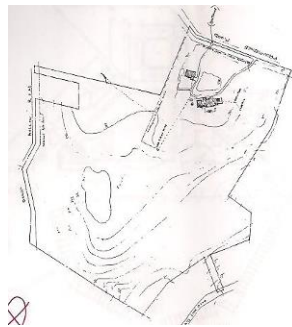


Fig 02a



Fig 02b

Fig 02a: Survey plan, April 1966 showing the land chosen for the Motherhouse between Media and Newton Square with the approach from Providence Road on the North (From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 302)

Fig 02b: Aerial photograph of the site today showing the nature of the wooded landscape with the chosen area marked with red dots (from Google maps and author's photomontage of the survey plan).

In March 1965, Mother Emmanuel OP contacted Louis I. Kahn and asked him to design the Motherhouse for the Congregation, making it big enough to facilitate the expansion of congregation's activities – it was to include a chapel, a refectory, a school (a novitiate), a library, a novitiate for the newly trained Sisters, and living quarters for the official Sisters – on a fifty-five acre wooded brow lot, located on Providence Road,

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<sup>53</sup> Knowles, *Christian Monasticism*: 227-28.

<sup>54</sup> "The Renewal of Christian Education, The Twenty-fourth North American Liturgical Week," Panel III, Art and Architecture, 92-111; "Jesus Christ Reforms his Church, The Twenty-Sixth American Liturgical Week," 119-24.

midway between Media and Newtown Square, in the Southwestern suburbs of Philadelphia, with view towards the North West (Fig 02a, Fig 02b).<sup>55</sup>

Kahn was recommended to Mother Emmanuel OP by the Rev. Thomas Phelan, from Rensselaer Polytechnic Institute in Troy, NY (a scholar, teacher and entrepreneur, known for his interests in history, culture and tradition, specifically in the manner in which they were addressed in the context of modern times in the United States<sup>56</sup>) after he visited the Unitarian Church in Rochester New York designed by Kahn<sup>57</sup>— a building that, as Goldhagen pointed out, successfully addressed the distinctive Unitarian tradition and history, integrating it with contemporary observations.<sup>58</sup> Shortly thereafter, Architect

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<sup>55</sup> Letter from Mother Emmanuel OP from the Mary Queen of All Saints Dominican Congregation of St. Catherine de Ricci to Louis I. Kahn, 26<sup>th</sup> March 1965, received by Kahn on the 29<sup>th</sup> of March 1965, The Louis I. Kahn Collection, Box 32.8; Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn Complete Work 1935-1974*, ed. Second Revised and Enlarged (Basel, London: Birkhauser, 1987), 302.

<sup>56</sup> Rev. Dr. Thomas Phelan (1925- 2010) was interested in art, architecture and theology. He wrote extensively on historical theology and the manner in which it was affected by contemporary thought, and ideas regarding democracy, mechanization and industrialization, and believed in the integration of the tradition and culture of the past with the changes of the present. Phelan taught courses in art, architecture, and history of art and architecture and became the Resident Catholic Chaplain of the Rensselaer Polytechnic Institute in 1959. Since 1963 Phelan was involved in founding educational corporations that would provide non-degree courses in theology, philosophy and related subjects. Phelan took part in the Gateway, dedicated to the preservation of the region's architectural and cultural heritage. Phelan consulted on church building in the Albany District. Since 1965 he was involved in building a new Chapel and a Cultural Center (the "C+CC") which was designed as a multi-purpose facility drawing together the sacred and the secular, religious services and performing arts, educational and social events. The multi-purpose model of the foundation expressed the changes which took place in the Catholic Church in America, and embraced the Second Vatican Council's liberalization of the liturgy and the role of the Church in the secular world (the building received the highest award then given for religious buildings by the Liturgical Conference). Phelan and Kahn were both fellows of the Society for Religion, the Arts and Contemporary Culture, together with hundred others that contributed to these realms. Editor B. Bloy Myron, *Community on Campus: Its Formation and Function* (New York: Seabury Press, 1971).

<sup>57</sup> Letter from Mother Emmanuel OP from the Mary Queen of All Saints Dominican Congregation of St. Catherine de Ricci to Louis I. Kahn, 26<sup>th</sup> March 1965, received by Kahn on the 29<sup>th</sup> of March 1965, The Louis I. Kahn Collection, Box 32.8.

<sup>58</sup> Sarah Williams Goldhagen, *Louis Kahn's Situated Modernism* (New Haven [Conn], London, Yale University Press, 2001), 136-62. Chapter 6: Rethinking Modernism, Authenticity and Community in the First Unitarian Church of Rochester.

Mother Emmanuel OP and the Dominican congregation respected Rev. Phelan and accepted his recommendation concerning Kahn. Even before they visited Kahn's Unitarian Church in Rochester more than a year later, Mother Marry Emmanuel reported: "we have had the opportunity of inspecting the First Unitarian Church you designed in Rochester. We are happy to have had this experience to see another way in which you develop your theories. The building seems uniquely adapted to its purpose." Letter from Mother Marry Emmanuel OP to Louis I. Kahn, sent on the 7<sup>th</sup> of September 1966, Received in Kahn's office on the 8<sup>th</sup> of September 1966, The Louis I. Kahn Collection, Box 32.8.



David Windsor from Kahn's office replied:<sup>59</sup> "I am sure that he would be pleased to help you." Windsor also informed Mother Emmanuel of Kahn's involvement with the Benedictine Order in Valeyrmo California, and welcomed her to come and visit the office, as did the Benedictine Father Frederic Debuyst.<sup>60</sup>

As has been suggested, the compounds of the Dominican Congregation of St. Catherine de Ricci in Albany, New York and in Elkins Park, Philadelphia, were not designed specifically according to their way of life and philosophy. The houses in New York were casual buildings used for the Sisters' needs; the house in Albany, although designed specifically for the congregation, followed the model of European Dominican Cloistered Convents; while the house bought in Elkins Park was a private mansion bought by the congregation to serve its temporary needs. The St. Catherine de Ricci congregation, which considered itself semi-Cloistered till 1920, and chose to be an active congregation only after the Pope's ultimatum, had never been endowed with a Motherhouse whose architecture was a suitable expression of its rule and mission.

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<sup>59</sup> At the time Kahn was in what was then East Pakistan, working on the design of the Second Capital in Dhaka.

Letter from David Wisdom from Kahn's office, sent on the 2<sup>nd</sup> of April 1965, The Louis I. Kahn Collection, Box 32.8.

<sup>60</sup> David Wisdom explained that Kahn was looking forward to working on the development of a building and site for St. Andrew's Priory in Valyermo, California, and that he had several conversations with Father Vincent Martin, although no actual planning work had been started. Letter from David Wisdom from Kahn's office to Mother Marry Emanuel OP sent on the 2<sup>nd</sup> of April 1965, The Louis I. Kahn Collection, Box 32.8.

Father Frederick Debuyst was a Benedictine Monk and philosopher, an architect and author, the Director of "Art d'Eglise," Abbey de Saint Andre, Bruges, who was interested in present problem of sacred art and architecture and wrote extensively on the subject.

Frederick Debuyst, the Belgian Benedictine has often used the word "domestic" in pointing to the virtues of the new sacred buildings. He asserted that sacred contemporary buildings should suggest habitation and invite the presence of people by allowing a continual conversation with their inhabitants (rather than addressing them oratorically). Frederick Debuyst, was one of the most perceptive voices for and critics of the new Church-building. Two important publications of Father Frederic Debuyst include: *L'Art d'Eglise*, 1961; *Modern Architecture and Christian Celebration*, 1968.

The nature of the conversation between Kahn and Debuyst when Debuyst visited the office is unknown; however, the fact that Father Frederic Debuyst, developed an interest in Kahn's work is interesting. Father Frederic Debuyst visited the drafting rooms in Kahn's office, and had the opportunity to view some of the projects in progress (including drawing and models). Letter from David Wisdom from Kahn's office, sent on the 2<sup>nd</sup> of April 1965, The Louis I. Kahn Collection, Box 32.8.

Kahn was assigned to design a Dominican compound which included two different services that were usually separated from each other: An enclosed novitiate, where the members who just joined the congregation would be trained before taking their vows, and a more open Motherhouse, to be the base for the active Sisters of the congregation who devoted their time to work within the community.

The design of the Dominican Motherhouse of St. Catherine de Ricci in Media was a great opportunity for Kahn to design a structure for Christian worship that would resonate with the Monastic traditions of the past, would be applicable to their way of life of the present, and open towards the potential expected transformations the future would likely bring. Kahn worked on the design of the Motherhouse and created three schemes for the project from March 1965 to March 1969, when the project was terminated by the congregation.<sup>61</sup>

### Preliminary Sketches

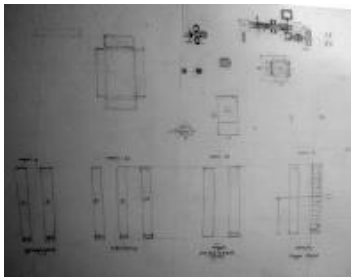


Fig 03a

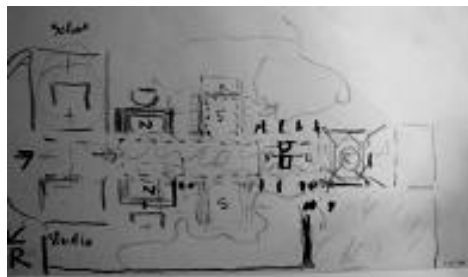


Fig 03b

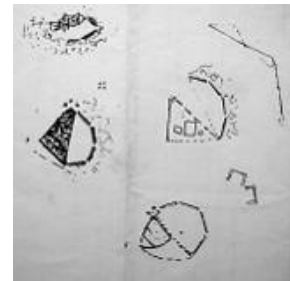


Fig 03c

Fig 03a: Kahn's preliminary sketches of the Sisters' cells.

Fig 03b: Kahn's preliminary sketches of the public functions.

Fig 03c: Kahn's preliminary sketches of the Cloister.

Decomposing and pondering the typical Monastic program into different elements.

(All from the Kahn's personal sketches of the Dominican Sisters Motherhouse, The Louis I. Kahn Collection).

<sup>61</sup> Letter from Mother Marry Bernadette OP, Prioress General of the Dominican Congregation of St. Catherine de Ricci, sent to Kahn on the 8<sup>th</sup> of March 1969, Received in Kahn's office on the 20<sup>th</sup> of March 1969, Box 32.8, The Louis I. Kahn Collection.

For the entire first year Kahn did not even meet the Sisters and only produced some preliminary sketches in which he studied the different elements of the compound such as the Sisters' cells (Fig 03a), the public functions (Fig 03b), and the Cloister (Fig 03c);<sup>62</sup> Kahn worked on the first elaborate design scheme from April 1966, when he first met the Sisters, to the summer of 1966; on the second design scheme from Fall 1966 to Winter 1967; and on the third design scheme from Winter 1967 to Winter 1969. All schemes were described in scaled drawings and models, and were accompanied by numerous fragmentary sketches of the various elements that would compose the Motherhouse compound, most of which were not dated and were drawn on loose pieces of paper.

### **The First Design Scheme, Summer 1966**

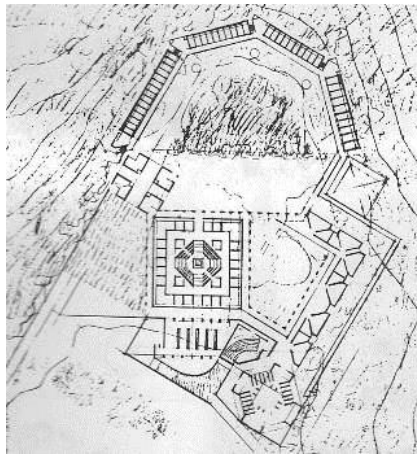


Fig 04a

Fig 04a: First-floor level of the first design scheme presented to the Sisters, showing four wings of Nuns' cells following the contours of the hill's brow and forming a big court and the public buildings grouped around a small court. (From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 302).

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<sup>62</sup> See Kahn's drawings in Box 30 and files regarding communications with the Sisters of St. Catherine de Ricci in Louis I. Kahn Collection. Also see *Louis I. Kahn, Buildings and Projects* vol. 6 (New York & London: Garland Publishing Inc., 1987), 317-29; Drawings 700.1 (not dated), Drawing 700.2 (1966), Drawing 700.4 (not dated), Drawing 700.5 (June 1966), Drawing 700.21 (1966); and also Memorandum from the 7<sup>th</sup> of July 1966, The Louis I. Kahn Collection, Box 32.8.

The plans for the first full scheme of the Dominican Motherhouse, including a residential area and a service area, were prepared by David C.S. Polk and David Windsor, who worked in Kahn's office. It was sent to the Congregation's representatives on the 22<sup>nd</sup> of June 1966, while Kahn was in India.

In general, the built structures of the first design scheme are spread over a vast area of land; The compound was situated as far as possible from the surrounding roads and was located on the lower areas of the site, hidden and protected by the vicinity of the wooded brow. The residential area was composed of four wings of cells connected by a surrounding ambulatory area enclosing an interior large wooded Cloister, and the service area included a refectory, a library, and a chapel that were connected to each other by a covered arcade enclosing a small public Cloister. The private residential area was approached through a path which originated at the nearby planted forest and terminated with an impressive gate through which one entered the Cloister. The public service area was entered via a path leading from Residential Road leading into the public Cloister, from where the entrance to the different services was enabled. The design formed an enclosed compound, and suggested a Monastic segregated life style (Fig 04a).<sup>63</sup>

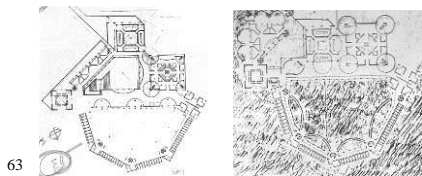


Fig 04b

Fig 04c

Kahn also produced some alternate sketches of the same scheme.

Fig 04b: First floor plan with altered arrangement of public buildings and a direct relationship between the courts; Fig 04c: First floor plan with public buildings in linear arrangements and a direct relationship between the courts.

Jhaveri, *Louis I. Kahn Complete Work 1935-1974*: 302-03.

## The Second Design Scheme and the Collages, Fall 1966 – Winter 1967

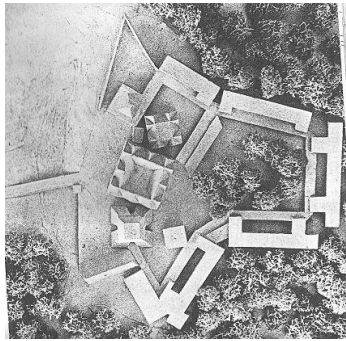


Fig 05a



Fig 05b

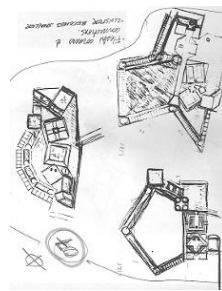


Fig 05c

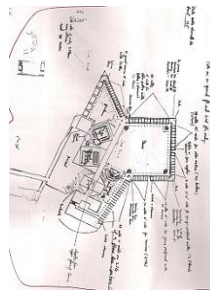


Fig 05d

Fig 05a: Clay model of the Second design scheme presented to the Sisters.

Fig 05b: Collage studies in Kahn's office - composed from pieces of the first design scheme.

Fig 05c, Fig 05d: Drawings testing the new compositional arrangements of the entire complex.

(Fig 05a, Fig 05c, Fig 05d - From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 304. Fig 05b: From the Louis I. Kahn Collection).

The second design proposal was presented (as a clay model) to the Congregation's representatives in October 1966.<sup>64</sup> The compound as a whole was inward oriented, and well hidden by the surrounding forest from its external environment. The residential and the public areas together enclosed a joint planted Cloister with a water fountain in its northwestern part, where a surrounding ambulatory region linked all functions. The arrangement was more dynamic and the enclosed Cloister was much smaller than the Cloister suggested in the first design proposal. Areas with built structures in the first scheme were now gently articulated with landscape architectural elements, such as terraces and low walls (Fig 05a).

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<sup>64</sup> David B. Brownlee, *Louis I. Kahn: in the realm of architecture*, 178.

The second scheme was a result of design studies, which took place in the fall of 1966, by cutting the first design scheme into the pieces of its different elements, followed by their shifting, twisting, rotation and reassembly into a collage (Figs 05b), and was also followed by a series of personal sketches produced by Kahn and others testing the new compositional arrangements of the entire complex (Fig 05c, Fig 05d).

### The Third Design Scheme, Winter 1967 - Winter 1969<sup>65</sup>

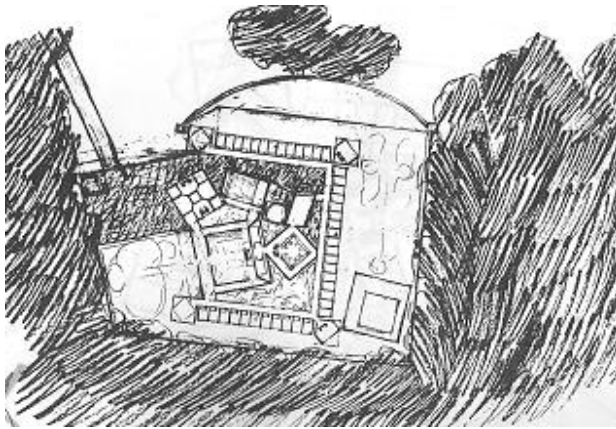


Fig 06a



Fig 06b

Fig 06a: Sketch of the third design scheme presented to the Sisters.

Fig 06b: Working drawing of the third design scheme presented to the Sisters.

(From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 307).

On February 16<sup>th</sup> 1967 Kahn's office architect David C.S. Polk presented a reduced design scheme to Mother Emanuel and five other Sisters (Fig 06a).<sup>66</sup> In this version, the compound was entered via a gate through which one could enter either into a "dead ended Cloister" or to other public services. The built areas of the compound, which in the previous schemes were situated on the lower parts of the landscape, were now

<sup>65</sup> Kahn's first sketch of this scheme already appears in Kahn's notes from the meeting of LIK+DCSP+ 7-8 Sisters + mothers, on the 16<sup>th</sup> of February 1967, the Louis I. Kahn Collection, Box 32.6. March 1967 is the Earlier date appearing on larger drawings of this scheme, The Louis I. Kahn Collection, drawing 030.I.C.700.004.

<sup>66</sup> Minutes by Polk, February 16th 1967, The Louis I. Kahn Collection, Box 32.

located on the brow of the hill itself. The area surrounding the compound including a pool of water, was left open and unplanted and was defined by landscape interventions, from the Southern, Eastern and Western sides (in some of the drawings they seem like a row of trees, and in others like a low wall, a terrace or outline in the ground) leaving the Northern facade of the compound exposed to the surroundings.

The built structure included only three wings for the Sisters' residences, and the public components were integrated into the residential part, reducing the open area enclosed by the buildings. The open Cloister had almost completely disappeared, and only small open left-over spaces between the public components remained, while the ambulatory surrounding the fragmented interior Cloister connected only the residential wings, and the buildings containing the public services had their backs to the Cloister. The public areas surrounded a small open area connected by a narrow opening to the chapel in the South-Eastern corner, while the corridors connecting the public services were omitted, and the public components dissected each other in their corners, relating to each other in varied oblique angles.<sup>67</sup> The third scheme was slowly developed into detailed working drawings (Fig 06b) – a design process through which the compound's compositional arrangement and its positioning in the landscape, as well as the programs, materials of the different functions were constantly transformed and adjusted.

The three schemes for the Motherhouse which have been briefly introduced will be thoroughly discussed following an examination of Kahn's study of historical ideas.

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<sup>67</sup> It is interesting to mention that also in other projects such as Erdman Hall Dormitories, Bryn Mawr, Pennsylvania (1960-1965), The Fisher House, Hatboro, Pennsylvania (1967), The Indian Institute of Management Ahmedabad, Indian (1962-1975) Kahn designed buildings whose corners dissected each other but for different reasons.

This strategy will enable an understanding of the differences between the three schemes, which at a first glance might seem formal, thereby demonstrating maturation in Kahn's determination of what a modern Dominican place of worship should be. Moreover, it will appear that the three schemes could be conceived as layers, composed together into the final design proposal – to offer a space full of depth and rich in its historical meanings, rather than being three different suggestions.

### **Part 3: Kahn's Knowledge of Historical References** **and their De-composition and Re-Composition into his Designs**

It seems clear that at the inception of this project Kahn was neither familiar with the history of St. Catherine de Ricci's congregation, nor with the history of the Dominican order, their liturgy and rites. Furthermore, busy as he was with several other important projects,<sup>68</sup> Kahn's contact with the Sisters was fragmented at best. As I have suggested, during the first year of work David C.S. Polk and David Wisdom were in charge of the relationship.<sup>69</sup>

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<sup>68</sup> When assigned to design the Motherhouse for the Dominican Sisters Kahn was working on the Indian Institute of Management, Ahmedabad, India 1962-74, Kimbell Art Museum, Fort Worth, TX; 1966-72, National Capitol of Bangladesh, Dhaka, Bangladesh; 1962-83, Salk Institute for Biological Studies, La Jolla, CA; 1959-65, to mention only the built projects, and numerous others which did not reach the final stages of construction).

<sup>69</sup> See the communication between David Wisdom and Mother Mary Emanuel, Letter from David Wisdom to Mother Mary Emanuel, April 2<sup>nd</sup> 1965, The Louis I. Kahn Collection, Box 32.8. Letter from Mother Mary Emanuel to David Wisdom, April 8<sup>th</sup> 1965, The Louis I. Kahn Collection, Box 32.8. Kahn, associated by Galen Schlosser, met Sisters Jane and Monte from St. Catherine de Ricci Congregation, for the first time on April 26<sup>th</sup> 1966. Notes from meeting, 26<sup>th</sup> of April 1966, The Louis I, Kahn Collection, Box 32.8. On June 22<sup>nd</sup> 1966, while Kahn was in India, a plan prepared by David C.S. Polk and DW was sent to the congregation. Memorandum from the 7<sup>th</sup> of July 1966, The Louis I, Kahn Collection, Box 32.8. Kahn, together with David C.S. Polk met the representatives on the congregation on July 22<sup>nd</sup> 1966, to discuss the first scheme prepared by David C.S. Polk and David Wisdom. Notes from meeting, July 22<sup>nd</sup> 1966, The Louis I. Kahn Collection, Box 32.6. The revised design scheme, in which Kahn worked with together with his staff after he returned from India, was presented to the congregation only on the 10<sup>th</sup> of October 1966. Meeting notes from the 10<sup>th</sup> of October 1966, The Louis I. Kahn Collection, Box 32.7



Yet, as a believer in beginnings, Kahn was fascinated by the aesthetics and the origins of the Monastic institution as he asserted, "there cannot be other things so marvelous as the emergence of the first Monastery, for which there was no precedence whatsoever. It was simply that one man realized that a certain realm of spaces represents a deep desire on the part of man to express the inexpressible in a certain activity of man called a Monastery."<sup>70</sup>

During his architectural training Kahn had acquired some knowledge of the way of life and architecture of Monastic Orders: On his trip to Europe between 1928 and 1929 Kahn visited and documented Sant' Ambrogio's Monastery in Milan that served Benedictine Monks already in 739 AD (one of the few remnants of the orders' medieval compounds).<sup>71</sup> In 1961 (four years before he received the commission to design the Motherhouse for the Dominican Sisters), Kahn was asked to consult the Benedictine congregation of St. Andrew in Valyermo, California,<sup>72</sup> about a design of a new compound, established strong relationships with the Monks, visited the Priory, spent some time at the congregation, and took part in their activities, and in 1965 he was assigned to design their new priory— a project which he worked on until 1967.<sup>73</sup> It was

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<sup>70</sup> Kahn quoted by David B. Brownlee, *Louis I. Kahn: in the realm of architecture*, 106.

<sup>71</sup> Michael J. Lewis Eugene J. Johnson, *Drawn from the Source - The Travel Sketches of Louis I. Kahn* (Cambridge, Massachusetts, London, England: MIT Press, 1996), 39.

<sup>72</sup> The congregation was founded by Prior Raphael Vinciarelli who escaped from China. After the Second World War, while the idea of Monasticism had vanished from all the countries which were under communist regimes, the United States experienced an outstanding growth of the Benedictine Order. Every state in the United States had some Benedictine activity represented by an Abbey, priory, school, parish, mission station or chaplaincy. Shari Wigle, "The Word, the Arts, and Father Raphael," *Los Angeles Times West Magazine* Sept. 18, 1966; Knowles, *Christian Monasticism*: 203-04.

<sup>73</sup> It was Father Frederick Debuyst (a Benedictine Monk and philosopher, an architect and author, the Director of "Art d'Eglise", Abbey de Saint Andre, Bruges who was interested in present problem of sacred art and architecture and wrote extensively about the subject, and visited Kahn's office in 1963, he looked at some of Kahn's drawings and models, and had a conversation with Kahn regarding sacred Benedictine architecture) that led to his suggesting Kahn for the project. Letter from David Wisdom from Kahn's office to Mother Marry Emanuel OP sent on the 2<sup>nd</sup> of April 1965.

then that Kahn became familiar with the philosophy and the rituals of the Benedictines as it was shaped by the Rule of St. Benedict (a rule constituted already in the 6<sup>th</sup> century that provided the first theoretical base for ascetic Monastic life in the West). The rule promoted a stable, ordered, secluded communal life, which was based on uniformity of practice, and a strict routine (including prayer, and manual work).<sup>74</sup>

Already as a student Kahn had been introduced to the Cistercian Monastery of Clairvaux, presented by J. Guadet, in his architectural treatise *Elements et Théorie de L'Architecture* (in the chapter on "Eléments de la Architecture Monastique") as an architectural structure expressing the Monastic ideal.<sup>75</sup> In a liturgical conference in which he participated Kahn expressed his fascination with the 12<sup>th</sup>-century Cistercian Monastery of Thoronet.<sup>76</sup> Reacting to the expanded involvement of monasteries in

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When assigned the commission, Kahn, who was enthusiastic about the nature of the commission and appreciated Prior Raphael Vinciarelli's (the founder of the congregation's approach) wrote: "It is rare that the client of an architect feels the inspiration to express the realm of architecture" and waived the fee. Letter from Kahn to Father Philip Verhaegen (Prior, St. Andrew Priory), November 26<sup>th</sup> 1965, "St. Andrew's Priory Vlyermo, California", The Louis I. Kahn Collection, Box LIK 81.

On Kahn's visit to the priory and communication with the Benedictine Monks see Louis I. Kahn Collection, Box 32.8; David B. Brownlee, *Louis I. Kahn: in the realm of architecture*, 107.; Letter from Father Philip Verhaegen (Prior, St. Andrew Priory) to Kahn, November 26<sup>th</sup> 1965, "St. Andrew's Priory Vlyermo, California", The Louis I. Kahn Collection, Box LIK 81.; Letter from John Ducan (property's attorney) to father de Morchoven, April 26<sup>th</sup> 1996, The Louis I. Kahn Collection, Box LIK 81.

<sup>74</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 17, 34.

<sup>75</sup> The Cistercian Monastery of Clairvaux also known as one of the "Old Sisters of Citeaux" (in addition to the monasteries founded in La Ferte, Pontingny) founded by St. Bernard of Fontaine. St. who joined the first Cistercian Monastery at Citeaux in Burgundy in 1112, established the Monastery in 1115, and functioned as its Abbot until his death in 1153. Chapter on "Elements de la Architecture Manistique, Conclusion de l' Etudes de la Architecture Religieuse", in Julien Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts*, vol. 3 (Paris: Librairie de la Construction Modern 1910), 648.

<sup>76</sup> Wolfgang Braunfels, *Monasteries of Western Europe, The Architecture of the Orders* (London: Thames and Hudson, 1972), 91. Lewis interview with Sister Irene, in David B. Brownlee, *Louis I. Kahn: in the realm of architecture*, 114, note #24.

Unfortunately, both the publications of the 24<sup>th</sup> North American Liturgical Week and of the 26<sup>th</sup> North American liturgical Week, both in which according to D. Brownlee and D. De Long Kahn actively participated (ibid., 110) do not document Kahn's contribution, and the people who participated in the art and architecture panels in these liturgical conferences are no longer alive (Rev. H. A. Reinhold, Member of the Board of Directors of the Liturgical Conference; Author and Consultant died in 1968; Rev. Peter Hammond, Noted Anglican Author and Authority on Church Architecture, Cottingham, East Yorkshire, England died in 1999; Rev. Robert Lechner, C.P.P.S. died in 1999; Sister Margaret Mary Hoffman S.N.D., Chairman, Department of Art, College of Notre Dame, Belmont, California, died in 2007).

worldly life, aspiring to erase centuries of external influences on Monastic life and seeking to revive the original Monastic model, the Cistercians promoted a way of life based on the Rule of St. Benedict in its pure sense – they reinforced a strict routine, prohibited any connection with the outer world, and observed strict enclosure. While the order followed ideas that were already around the Christian world, their monasteries surpassed in size and architectural qualities previous Monastic architectural achievements – Le Thoronet being one of the only Cistercian monasteries which remained, as it was built in the 12<sup>th</sup> century.<sup>77</sup>

Kahn was fascinated by and appreciated the values of communality, solitude, contemplation, and manual work, and by the architectural structures relevant for restrictive Monastic organizations.<sup>78</sup> Yet as a participant in Liturgical Conferences in the United States, and as a member of the Art and Architecture panel in the 24<sup>th</sup> Catholic Liturgical Conference assembled in Philadelphia in 1963 and speaker in the 26<sup>th</sup> Liturgical Conference which concentrated on Church Architecture in 1965 in Chicago,<sup>79</sup> he was aware of the changes in rituals and liturgy, of the Vatican II call for renewal, and of the need for architectural programs to incorporate modern thinking and thus to allow active participation within places of worship.<sup>80</sup> As Mother OP and other Sisters have

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<sup>77</sup> Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts*, 3: 648. On the Monastery see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages 172-75*, 84; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 80-82. On the Cistercian Order see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 172-82.

<sup>78</sup> Letter from Mother Marry Emanuel OP to Louis I. Kahn, sent on the 16<sup>th</sup> of December 1966, The Louis I. Kahn Collection, Box. 32.8.

<sup>79</sup> David B. Brownlee, *Louis I. Kahn: in the realm of architecture*, 110.

<sup>80</sup> "The Renewal of Christian Education, The Twenty-fourth North American Liturgical Week," Panel III, Art and Architecture, 92-111; "Jesus Christ Reforms his Church, The Twenty-Sixth American Liturgical Week," 119-24.

mentioned, Kahn was keen to learn about the Dominican Orders.<sup>81</sup> Blessed with unusual communication skills, Kahn listened to the Sisters closely and slowly understood their own take upon religion.<sup>82</sup> Kahn's acquaintance with the Convent in Assisi built to serve the Franciscan Order, which he visited and painted on his first travels to Europe (1928-1929), allowed him to understand the manner in which Mendicant ideas were expressed in historical Convents, and served as another means for contemplation.

As Kahn worked on the Motherhouse he came to understand the manner in which ideas about the relationship between the individual and the communal, the daily routines, the importance of work and study, the degree of contemplation and action, the relationships between the congregation's members and the Laity, and the importance of poverty and wealth differed between Benedictines' and Cistercians' Monastic Orders on the one hand, and the Dominican Convent Orders on the other. He understood how such differences expressed changes in liturgy and rituals that took place in history, were affected by temporal conditions, and nevertheless aimed to serve continuous beliefs rooted in Christianity. Kahn's understanding of the different orders' rituals as expressions of continuous beliefs enabled him to avoid the fetish of Monastic/Conventual theories and the clichéd misuse of historical architectural precedents; they also gave him the freedom to search for virtues within temporal constraints, to address historical architectural manifestations as analogous expressions, and thus to use them as

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<sup>81</sup> Letter from Mother Mary Emmanuel to Louis I. Kahn, the 16<sup>th</sup> of December 1966, Note 4, The Louis I. Kahn Collection, Box 32.8.

<sup>82</sup> Letter from Mother Mary Emanuel OP to Louis I. Kahn, sent on the 16<sup>th</sup> of December 1966, The Louis I. Kahn Collection, Box 32.8; Balkrishna V. Doshi, "Interview on Kahn conducted by Maktirajsinhji Chauhan," in *Le Corbusier and Louis I. Kahn, The Acrobat and the Yogi of Architecture* (Ahmedabad: Vastu Shilpa Foundation for Studies and Research in Environmental Design, 1992), 22-29.

memories offering possibilities to pave the way for the yet-unspecified Motherhouse desired by the Sisters.<sup>83</sup>

Kahn decomposed the Benedictine, Cistercian, and Dominican traditions and re-composed them into a contemporary space as recollections of memories of fragments of images and traces of rituals through which he re-defined his unique architectural proposition: A Dominican Motherhouse that suited the Sisters while bringing forth poetic architectural experiences in which banal linear time was left behind. Kahn's vision for the Motherhouse alluded to images of various monastic and Conventual places of worship, and the spaces for ritual it offered were encompassed traces of the rituals of contemplative life as it had been practiced throughout history, from the Middle Ages to the present.

It is interesting to observe that while working on the project, Kahn discussed with the Sisters and with Father Phelan Le Corbusier's Dominican Convent of La Tourette (1956-1960), also famously inspired by Le Thoronet – the very same Cistercian Monastery so that fascinated Kahn himself.<sup>84</sup> In La Tourette, a Dominican Convent offered a space in which contemporary Dominican values were reconciled with their French origins in a unique manifestation of modern architecture, in which historical

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<sup>83</sup> Doshi has stressed that Kahn avoided misuse of historical architectural precedents as clichés. Ibid.

<sup>84</sup> The fact that Thoronet was discussed with the Sisters is mentioned in Note No. 6, Notes from meeting of Louis I. Kahn and David Slovic with Mother Mary Emmanuel, Father Phelan, and the Sisters of the Order, November 12<sup>th</sup> 1966, The Louis I. Kahn Collection, Box 32.8.

Le Corbusier followed Father Coutourier suggestion to visit Thoronet, where he could “find the essence of what a Monastery must have been like at the time it was built; a place where men lived by a vow of silence, devoted themselves to reflection and meditation and a communal life which has not changed very much over time.” Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 226-27.

memory is addressed whilst contemporary ideas and beliefs are also expressed.<sup>85</sup> This project bears significant similarities to Kahn's design for the Motherhouse.

## **Communality**

Kahn was aware of the variety of structures in which meditative life had been pursued throughout history. He appreciated the early Monks who conducted lives of complete solitude and saw the origins of the monastery in the individual cell.<sup>86</sup> Kahn was aware of the "idea of socializing elements, of bringing them together into a single self-complement" that brought about the transition from solitary life of the hermits into a shared form of Monastic life. He cherished the communal ascetic life style adopted by the Benedictines, with which he became familiar when he spent time at the Convent of St. Andrew. During the design process Kahn learnt that communality was not the most important value for the Dominican Sisters. While the Sisters chose to live together, once the novitiate training was finished each sister could choose the extent to which she was involved in communal life, and indeed, the Sisters requested Kahn to respect their privacy. This derived from three reasons. The first had to do with the fact that as Mendicants they pursued a much more individual way of living; the second was the impact of American calls for freedom on the idea of seclusion and contemplation; the third was a consequence of the Second Vatican council's acknowledgement of individuality that brought about the putting aside of communal responsibility, inspired the

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<sup>85</sup> Ibid.; Louise Pelletier & Alberto Pérez-Gómez, *Architectural Representation and the Perspective Hinge* (Boston, Massachusetts MIT Press 2000), 361-68.

<sup>86</sup> In 1965, Kahn assigned a project of a Monastery to his students at the University of Pennsylvania and was very much impressed by one of his student's remarks regarding the origins of the Monastery in the individual cell, and the fact that from it stemmed the right to all other functions to exist. Louis I. Kahn & Dung Nego, *Louis I. Kahn: Conversations with Students* (Princeton: Princeton Architectural Press, 1998), 20.

Sisters to conduct a personal lifestyle only loosely tied to the congregation, while some chose to live outside of it.<sup>87</sup>

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As explained by Lawrence and Knowles, between the 3<sup>rd</sup> and the 4<sup>th</sup> Centuries AD when Christianity was still a persecuted cult with no fixed rules, hermits had to adopt complete solitude in order to pursue their new belief within the Pagan Roman Empire. Hermits lived in dispersed, isolated, unorganized, caves which were served only by few public spaces for public prayers, so that their Monastic compounds were dynamic and picturesque and lacked any organized programs.<sup>88</sup>

By the 5<sup>th</sup> century, finding ascetic life difficult to follow in solitude, and enjoying the security of the authorization of Christianity as a leading religion, more formal communal organizations were founded. St. Basil believed in conducting a solitary life ruled by many constraints that differed from those followed in the exterior world, which allowed the work of the divine within supportive isolated communal organizations. In the 6<sup>th</sup> century, after the Eastern Monastic practices were translated in the West and the first formal rule of St. Benedict was constituted, communality within the monasteries was adopted as an important criterion for ascetic life. The Cistercians re-emphasized communal Monasticism, and conceived the different Abbeys as an enlarged 'family', connected to each other and to the mother house in liturgy, and joined under one General

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<sup>87</sup>Sullivan observations are based on a survey conducted by the Conference of Major Superiors of Women between 1965-1967 in which almost 180,000 American Sisters participated, which examined the changes which took place in religious life, the educational backgrounds of the Sisters, property and ownership issues, physical and psychological Health, and the reaction to the Vatican Council. Sullivan, "Revolution in the Convent: women religious and American popular culture, 1950-1971," 115 .

<sup>88</sup> The word Monasticisms derived from the Greek word *monos*, meaning 'alone'. On the origins of Monasticism, and its ideas and architectural structures in the Eastern areas of Egypt, Palestine and Greece, with the ancient hermits see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 1; Knowles, *Christian Monasticism*: 9-12, 98-99; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 9-10.

Chapter. The importance of communal life suited the life of the middle ages, based on agriculture and economic cooperation, that depended on the sharing and managing of land and resources.<sup>89</sup>

During the 13<sup>th</sup> century, with the breaking of the communal feudal system and the rise of the bourgeoisie in new evolving towns, the conception of the individual as an ethical and intellectual being evolved, and ideas of individualism emerged in theology and philosophy. The Dominican Order emerged in the social and political context of the exogenous cities and served the bourgeois, a social class that promoted individuality and independence. Dominicans were assigned to different missionary tasks, and each of the friars was in charge of his own business, and the earlier communal routines broke apart. Thus, the Dominicans gave up communal stability and chose individual mobility and participation in secular affairs.<sup>90</sup>



Fig 07a

Fig 07a: Louis I. Kahn, *Sant Ambrogio, Milan*, 1928, pencil on paper.  
(From Eugene J. Johnson and Michel J. Lewis, *Drawn from the Source*, 39).

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<sup>89</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*, 185-86; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 68.

<sup>90</sup> Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities*, 80-82.



Kahn was familiar with the architectural elements that served Benedictine and Cistercian monasteries to enable the communal way of living as stipulated by the Benedictine rules, such as that of the Cloister – the most important and organizing feature around which all other elements of the Monastery were grouped, as well as other communal spaces including the dorters – shared halls, located on the second floor for communal dormitories.<sup>91</sup> In 1928 Kahn painted the impressive Cloister of Saint Ambrogio's in Milan.<sup>92</sup> By using more than one vanishing point, exaggerating the height of the church and the width of the ambulatory's columns, Kahn emphasized the nature of enclosure framed by the Cloister (Fig 07a).<sup>93</sup>

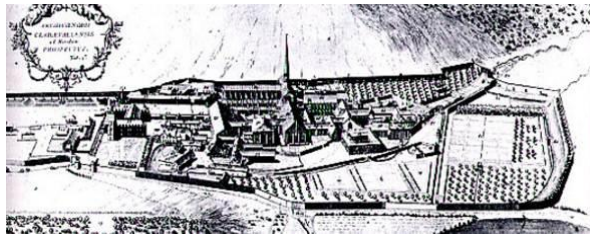


Fig 07b

Fig 07b: Plan of the Cistercian Monastery of Clairvaux - a complex bringing forth the Monastic ideal. (From J. Guadet, *Elements et Theorie De L' Architecture* chapter on "Elements de la Architecture Monastique, Conclusion de l' Etudes de la Architecture Religieuse", V. 3, 648).

The Cistercian Monastery of Clairvaux analyzed by J. Guadet in his architectural treatise *Elements et Theorie De L' Architecture* (Fig 07b) and the Monastery at Thoronet which Kahn was enthusiastic about (Fig 07c, Fig 07d) were built around communal Cloisters that functioned as their centers and were surrounded by impressive ambulatories

<sup>91</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 9-10.

<sup>92</sup> While Saint Ambrogio's compound has changed several times along history and most of its remnants date to the 11<sup>th</sup> century, the general layout of its Cloister has remained intact. Knowles, *Christian Monasticism*: 98-99.

<sup>93</sup> Eugene J. Johnson, *Drawn from the Source - The Travel Sketches of Louis I. Kahn*: 39.

that connected the compounds' buildings (the Cloister of Thoronet being the oldest existing Cistercian Cloister dating from 1175AD) (Fig 07c, Fig 07d).<sup>94</sup>



Fig 07c



Fig 07d



Fig 07e



Fig 07f



Fig 07g

Fig 07c: Bird's eye view of the Monastery of Thoronet – showing relationship between private and public areas, and the position of the Cloister in the center of the compound, organizing around it the various functions (From <http://www.sanary.com/abbaye-du-thoronet>, 10.03.2011).

Fig 07d: The Cloister in Thoronet (From <http://marc-haegeman-photography.com>, 10.03.2010).

Fig 07e: The ambulatory surrounding the Cloister in Thoronet.

Fig 07f, Fig 07g: Communal dormitories in Thoronet – located on the second floor, connected with stairs to the communal spaces beneath, with marks on the floor for the position of the Monks' mattresses and with windows opening towards the inner Cloister.

(From [http://commons.wikimedia.org/wiki/File:Le\\_Thoronet\\_Dormitorium\\_62.JPG](http://commons.wikimedia.org/wiki/File:Le_Thoronet_Dormitorium_62.JPG), <http://www.beyond.fr/sitephotos/thoronetP11.html>, 10.03.2010).

The dorters in Thoronet were connected by stairs to the communal parts of the complex – the Cloister, the chapter house and the church, and the Monks' mattress positions were marked by the paving stones, and lit by a semicircular window overlooked the communal Cloister (Fig 07e, Fig 07f, Fig 07g).<sup>95</sup>

<sup>94</sup> The Cistercian Monastery of Clairvaux also known as one of the "Old Sisters of Citeaux" (in addition to the monasteries founded in La Ferte, Pontigny) founded by St. Bernard of Fontaine, who joined the first Cistercian Monastery at Citeaux in Burgundy in 1112, established the Monastery in 1115, and functioned as its Abbot until his death in 1153. Knowles, *Christian Monasticism*: 104-05.; Guadet, *Éléments et théorie de l'architecture; cours professé à l'Ecole nationale et spéciale des beaux-arts*, 3: 648.

<sup>95</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 76, 103.



Fig 07g



Fig 07h



Fig 07i

Fig 07g: Birds' view of the Mendicant Franciscan Monastery of San Francesco in Assisi - showing relationship between private and public areas and the fragmented Cloister.

Fig 07h: The lower Cloister of San Francesco in Assisi with the dormitories surrounding it.

Fig 07i: The upper Cloister near the church of San Francesco in Assisi.

(All from Braunfels, *Monasteries of Western Europe*, 138).

In contrast, Kahn was familiar with the means by which the individual was valorized in in Mendicant complexes. In the Franciscan Convent of San Francesco in Assisi the private parts gained more importance than the public functions; the heart of the Monastery moved from the public Cloister and the communal spaces to the private cells, and the importance of the main Cloister as an organizing element of the compound was reduced. Multiple cells, whose total built area was almost identical to that of the public functions, were arranged in several stories around two independent courtyards, with the upper Cloister near the church and the lower Cloister behind it, while the areas of the church, refectory, and the chapter house were composed in squeezed arrangements. In addition the private cells were enriched by worthy works of art, and functioned not only as places for sleep but as places where the Monks worked and contemplated the word of God and thus were mystified, while public spaces such as the church and the chapter were secularized (Fig 07g, Fig 07h, Fig 07i).<sup>96</sup>

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<sup>96</sup> Santa Maria Novella, for example had 7 courts of this kind. In San Marc in Florence for example, the Church was located on the eastern side, while the cells surrounded all three sides of the Cloister and ran on top of the communal buildings. Ibid., 133-39.



Fig 07j



Fig 08a

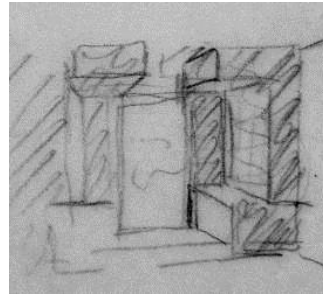


Fig 08b

Fig 07j: Caves of early hermits, Ein Ovdar, Israel (From <http://www.panoramio.com/>, 10.03.2011)

Fig 08a: Kahn's personal sketch of the Sisters' cells defined by thick surrounding walls and curved ceilings so they seem as if they disappear.

Fig 08b: Kahn's personal sketch of the Sisters' cells defined by thick surrounding walls and curved ceilings so they seem as if they disappear.

(Fig 08a, Fig 08b: Kahn's Personal Sketches of the Dominican Sisters Motherhouse in the Louis I. Kahn Collection).

Kahn's design for the Motherhouse reiterated the tension between individual and communal contemplation as expressed through the centuries. Kahn explained that he believed that "the nucleus is the very beginning", that "Monastery was not its loss but a new realization that came to it by considering [its] spirit" and that "it is for this reason my interest is in the nucleus."<sup>97</sup> Indeed, Kahn's sketches demonstrate that he depicted the Sisters' cells as individual, intimate, modest and minimally equipped units (with a built in closet, a wooden desk and a bed), bounded by thick walls with arched ceilings that "seem as if they tend to disappear," creating spaces that resonated with the primary isolated caves of the hermits (Fig 08a, Fig 08b) and recalled the historical memory of ascetic solitude in the desert (Fig 07j).<sup>98</sup>

<sup>97</sup> Louis I. Kahn quoted by Jhaveri, *Louis I. Kahn Complete Work 1935-1974*: 304.

<sup>98</sup> Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, The Louis I. Kahn Collection, Box 32.6.



Fig 08c

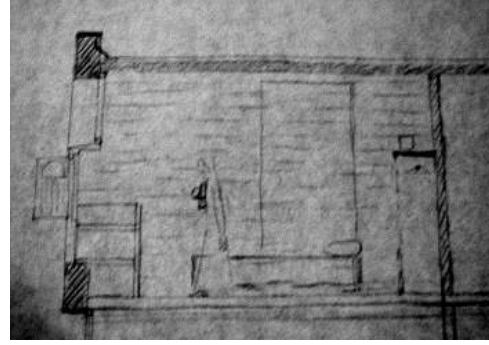


Fig 08d

Fig 08c, Fig 08d: Kahn's personal sketches of the detailed window allowing controlling the quality and quantity of light into the sister's cell. (Kahn's Personal Sketches of the Dominican Sisters Motherhouse in the Louis I. Kahn Collection).

However, Kahn composed the windows in cells of a permanent part and several moveable wooden screens allowing the control of light penetration into the cell, permitting each sister to choose the light ambience for her contemplation, and define her degree of exposure and relationship with the outer world – thus Kahn suggested cells that both resonated with the ascetic past and were open to the Sisters' desires for a life less bounded to the Motherhouse and more outwards looking (Fig 08c, 08d).<sup>99</sup>

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<sup>99</sup> Notes from Louis I. Kahn and Galen Schlosser's meeting with the Dominican Sisters Jane and Monte, 26<sup>th</sup> of April, 1966, The Louis I. Kahn Collection, Box 32.8; Notes from Louis I. Kahn and D.C.S. Polk meeting with Mother Mary Emmanuel and the Dominican Sisters Jane and Monte, 22<sup>nd</sup> of July, 1966, The Louis I. Kahn Collection, Box 32.6; Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, The Louis I. Kahn Collection, Box 32.6; Notes from Louis I. Kahn's meeting with the Sisters, 12<sup>th</sup> November 1968, The Louis I. Kahn Collection, Box 32.12; Louis I. Kahn quoted in Jhaveri, *Louis I. Kahn Complete Work 1935-1974*: 305.



Fig 09a

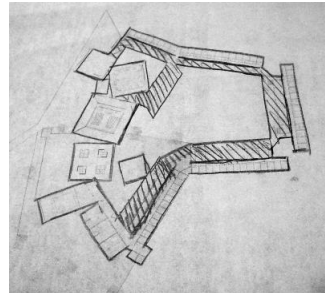


Fig 09b

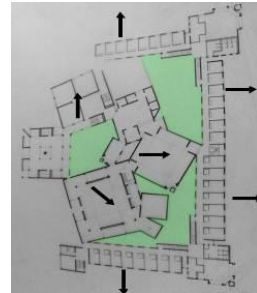


Fig 09c



Fig 09d

Fig 09a: Kahn's first introverted communal design scheme with rooms connected by wide corridors and an ambulatory surrounding a large planted interior communal Cloister.

Fig 09b: Kahn's second introverted communal design scheme with rooms connected by wide corridors and an ambulatory surrounding a large interior communal Cloister.

Fig 09c: Kahn's third extroverted design scheme with rooms connected by narrow corridors surrounding fragmented small interior spaces.

Fig 09d: Fragment from a detailed plan showing the juxtaposition between the cells' doors, windows and the openings in the corridors overlooking the fragmented Cloisters.

(All from The Dominican Sisters' Motherhouse working drawings in the Louis I. Kahn Collection with authors' marks in green).

In the first and second schemes Kahn connected the cells with long corridors and located an ambulatory around the large communal Cloister to connect between the different wings in a manner similar to the Cistercian and Benedictine monasteries which he visited and documented (Fig 09a, Fig 09b, Fig 07c, Fig 07d, Fig 07e). In the third scheme, the public functions of the Motherhouse were pushed into the communal Cloister, the shrunken communal space was fragmented and dissected into several smaller Cloisters. As in those Mendicant Convents visited by Kahn (Fig 07g, Fig 07h, Fig 07i), the surrounding ambulatory was omitted, and the cells were connected only by narrow corridors along which small openings, positioned so that they were not completely parallel to the cells' windows or doors, allowing limited views to the interior spaces bounded on the other side by blank continuous concrete walls (Fig 09c, Fig 09d). Thus the historical memory of communal socialization of the cells was only vaguely hinted at.

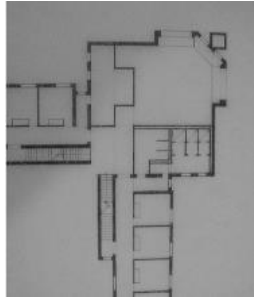


Fig 09e

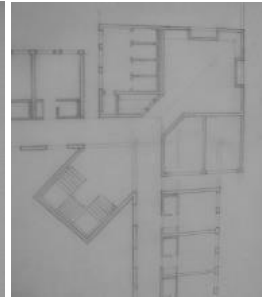


Fig 09f

Fig 09e: Fragment of detailed working drawing showing the novitiates' small cells located on the ground floor, near the Cloister, served by communal bathrooms in the joints located between the wings of rooms.

Fig 09f: Fragment of detailed working drawing showing the qualified Sisters' big cells located on the second floor, far from the Cloister, served by bathrooms within the rooms and the empty spaces in the joints.

(All from the Dominican Sisters' Motherhouse working drawings in the Louis I. Kahn Collection).



Fig 09g

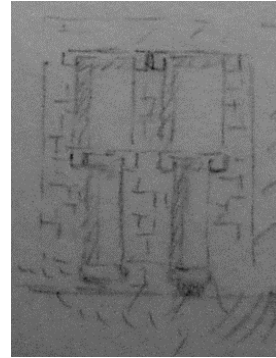


Fig 09h

Fig 09g: Fragment of façade showing the narrow openings in the novitiates' cells, wider openings in the qualified Sisters' cells and the upper openings of the open space on the third storey.

Fig 09h: Fragment of façade showing the narrow openings in the novitiates' cells and wider openings in the qualified Sisters' cells located above.

(From Kahn's personal sketches of the Dominican Sisters Motherhouse in the Louis I. Kahn Collection).

Following the Sisters' requirements to vary and design the cells according to the Sisters' "degree" in the order, Kahn suggested the ground floor, close to the Cloisters, to locate cells for novitiates who were still bound to communal obedience. These cells were to be small (measuring 10 X 8 feet), and enjoyed bounded views of the surroundings and used shared bathrooms placed in the links connecting the wings (Fig 09e, Fig 09g, Fig



09h).<sup>100</sup> Further away from the Cloister, on the second floor, Kahn suggested locating the cells for the qualified older Sisters who could choose their affiliations to the Motherhouse. These cells were bigger (measuring 12 X 15 feet), and they enjoyed openings allowing open views of the surroundings, and had their own bathrooms while the communal spaces in the links connecting the rooms remained empty (Fig 09f, Fig 09j, Fig 09h).<sup>101</sup>

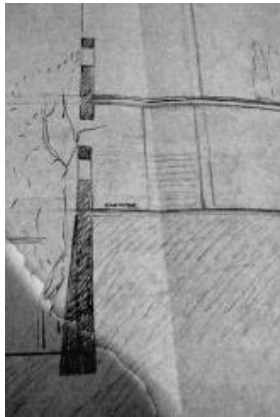


Fig 09i

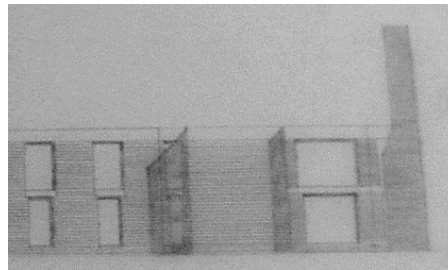


Fig 09j

Fig 09i: Fragment of working drawing showing the extension of the exterior wall of the cells' to define an upper open space on the roof.

Fig 09j: Fragment of drawing showing a sister walking towards the openings on the open roof allowing views to the infinite horizons.

(From the Dominican Sisters' Motherhouse working drawings in the Louis I. Kahn Collection).

In addition, on the third floor, above the Sisters' cells Kahn located a large unroofed open courtyard bounded by the extended exterior walls of the cells beneath, in

<sup>100</sup> Community Sisters – young professed- novices- and postulants. Notes from meeting with the Dominican Sisters, July 22<sup>nd</sup> 1966, p. 1, The Louis I. Kahn Collection, Box 32.6; Notes from Louis I. Kahn and Galen Schlosser's meeting with the Dominican Sisters Jane and Monte, 26<sup>th</sup> of April, 1966, The Louis I. Kahn Collection, Box 32.8.

<sup>101</sup> Already in Kahn's notes from one of the first meetings with the Dominican Sisters he writes: "Monastery – Right of cell" (p.2) and then "Environment different – Social rooms P; N; YS; OS" (Postulates, Novitiates, Young Sisters, Old Sisters) (p.4), hinting about his intentions to at once preserve the equality within the Convent but also give attention to the individuality of each of the sisters. Notes from Louis I. Kahn and Galen Schlosser's meeting with the Dominican Sisters Jane and Monte, 26<sup>th</sup> of April, 1966, The Louis I. Kahn Collection, Box 32.8. The Sisters were happy with this hierarchical organization. Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, Notes 5-7, The Louis I. Kahn Collection, Box 32.6.



which openings allowing wide views to the far distant horizons, above the surrounding trees, and away from the Motherhouse and its communal Cloister were located. The courtyard's anonymity called for its future embodiment but its exposure to rough weather conditions made it difficult to use. It at once pointed towards a potential future in which contemplation would be possible even without being part of the communal congregation, and resonated with Cistercian communal dormitories (such as those in Thoronet, Fig 07f) representing a decaying lost Monastic ideal that had almost passed (Fig 09i, Fig 09j).

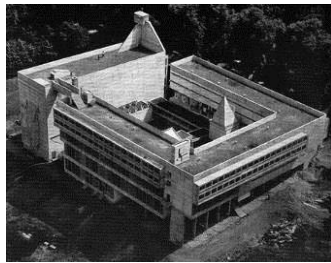


Fig 09k

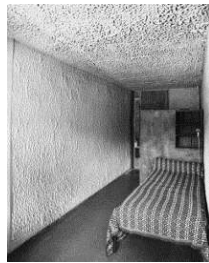


Fig 09l



Fig 09m

Fig 09k: Exterior view of Le Corbusier's design for Sainte Marie de La Tourette, showing the narrow openings towards the fragmented Cloister from in the corridors connecting the rooms and the open view to the far horizons from the cells' private balconies.

(From <http://openbuildings.com/buildings/the-monastery-of-sainte-marie-de-la-tourette>, 10.03.2011).

Fig 09l: Interior view of a Monk's cell in Sainte Marie de La Tourette.

(From <http://www.artandarchitecture.org.uk/images/conway/a8841355.html>, 10.03.2011).

Fig 09m: View from the balcony of a Monk in Sainte Marie de La Tourette.

(From <http://openbuildings.com/buildings/the-monastery-of-sainte-marie-de-la-tourette>, 10.03.2011).

The unique detailing of the Sisters' cells, their connections to each other, their relationships to the Cloister, and to the exterior surroundings, as well as to shared service areas enabled Kahn to bring out the tension between communal and individual modes of meditation as they came forth throughout history – the same tension expressed in Le Corbusier's design of Sainte Marie de La Tourette where the Monks' cells were linked together by a surrounding narrow gallery that provided narrow views of the fragmented

Cloister and enjoyed open views from their private balconies (Fig 09k, Fig 09l, Fig 09m).<sup>102</sup>

## **Routine and Order**

Kahn became acquainted with the strict routines followed by Monastic Orders, which were aimed at following the heavenly order on earth, when working with the Benedictine Monks of St. Andrew's. At Valyermo the daily schedule was a modern adaptation of the daily cycle prescribed by St. Benedict in his Rules. It was composed of common and private prayer, *lection divina* (a slow contemplative reading of the scriptures) manual labor, and study all served as means for divine praise (as indicated below).

6:00 a.m. VIGILS, the first communal prayer of the day

6:30-7:30 *lectio divina*

7:30 LAUDS, (Morning Prayer)

8:00 Silent breakfast

8:30-11:30 Class and study for the formation group; assigned work for others

12:00 CONVENTUAL MASS

1:00 p.m. Lunch with the guests

1:30-4:00 Assigned work

4:00-5:30 Study, rest, or exercise

5:30 *lectio divina*

6:00 VESPERS, (Evening Prayer)

6:30 Dinner in silence

8:00-8:30 Community recreation

8:30 COMPLINE, (Night Prayer) *with Benediction of the Blessed Sacrament on Mondays*

the beginning of the Grand Silence, which lasts until after breakfast of the following morning.<sup>103</sup>

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<sup>102</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 229.

<sup>103</sup> St. Andrew's site at <http://www.valyermo.com/> 16112009

During his work on the Motherhouse Kahn learnt that the Dominicans' routine, which emphasized action and alluded to earthy patterns of life, was much more flexible and depended on the Sisters' tasks inside and outside the congregation.<sup>104</sup> He might have also been aware of the fact that in the Vatican Council it had been acknowledged that obedience must be loosened in order to allow the Sisters to better express themselves, and that the traditional structure of the Convent as well as the ideas of feminine sacrifice were questioned.<sup>105</sup>

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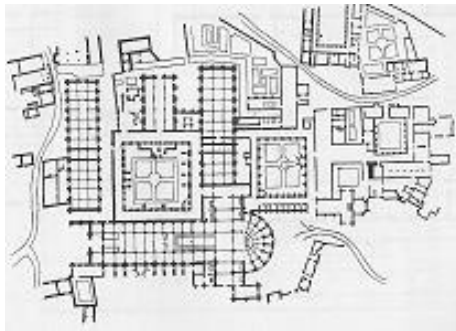


Fig 10a

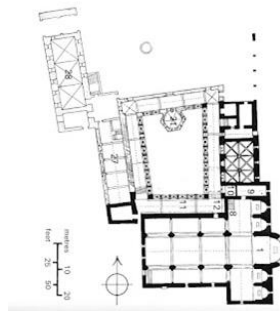


Fig 10b

Fig 10a: Plan of the Cistercian Monastery of Clairvaux bringing forth the Monastic ideal. (From J. Guadet, *Elements et Theorie de L' Architecture*, chapter on "Elements de la Architecture Monastique, V. 3, 648).

Fig 10b: Plan of the Monastery of Thoronet.

(From [http://voussoirs.blogspot.co.il/2012\\_05\\_01\\_archive.html](http://voussoirs.blogspot.co.il/2012_05_01_archive.html), 10.03.2011).

Kahn must have noticed the cosmological platonic geometries of the Cistercians' monasteries. Clairvaux – the ideal Monastery about which Kahn was educated<sup>106</sup> – was described by Bernard as the recreation of the ideal world of heaven on earth as he explained: "If you would know, it is Clairvaux. She is Jerusalem, joined to what is in

<sup>104</sup> The Sisters explained to Kahn that even the chapel should be organized and lit in a manner which would allow the Sisters to pray alone if they asked to do so). Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, note 1, the Louis I. Kahn Collection, Box 32.6.

<sup>105</sup> Sullivan, "Revolution in the Convent : women religious and American popular culture, 1950-1971," 99-100.

<sup>106</sup> The plan of Clairvaux appeared as the Monastic ideal of composition in the Beaux Arts Treatise of J. Guadet, through which Kahn was educated.

heaven with all the power in her mind; she imitates the life above, she shares it by spiritual kinship. This is his rest, as the Lord promised, for ever and ever; he has chosen it for himself as his dwelling; for there he finds, if not the vision, yet at least the expectation of true peace, even that peace of which it is written: the peace of God, which passes all understandings."<sup>107</sup> Thoronet maintained a geometric unity expressing an ideal order, despite its location on uneven ground, by using an elongated trapezoid Cloister. Its unified and harmonious appearance was enhanced by the use of stones all of the same in kind and color, matching the stone of the ground around, thereby attributing a harmonious appearance to the monastic compound.

Thoronet and Clairvaux were composed of spaces that designed to be used in a sequential manner and at specific times of the day. Their balanced, oriented plans were arranged around the Cloister according to the Monks' daily schedule; their interiors emphasized the nature of the rituals they contained, and permitted light to enter them in a unique manner suiting the specific times of day when services were to be carried out in them. Kahn must have understood that such spaces articulated sequential activities and provided controlled programs serving as spatial organizers allowing the members of the contemplative orders to carry on both their religious services and their "regular life".<sup>108</sup>

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<sup>107</sup> St. Bernard quoted in Knowles, *Christian Monasticism*: 90.

While the Benedictines were not privileged to choose their sites, they had to adapt their monasteries to the site they were given and its restrictions. The Cistercians on the other hand, had the privilege to choose remote and open sites, which they molded according to their own will. Their Abbeys appear as complete wholes. Ibid., 103-05.

<sup>108</sup> On the importance of the geometrical arrangement of Cistercian monasteries to allow ordered routines see *ibid.*, 214-16, 22-23; Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 16, 21-26, 31-32, 107-11; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 73-75, 110.



Fig 10c



Fig 010d



Fig 10e

Fig 10c: Thoronet's Church illuminated by light penetrating through openings in its oriented apse.

Fig 10d: Thoronet's Chapter House illuminated by light penetrating through openings on the East.

Fig 10e: Thoronet's Parlour illuminated by light penetrating through openings on the East.

(All from [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 10.03.2011).



Fig 10f



Fig 10g



Fig 10h

Fig 10f: Thoronet's Cloister (From [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 10.03.2011)

Fig 10g: View in the middle of day towards the sun in the sky (randompic).

Fig 10h: In-built benches surrounding Thoronet's Cloister.

(From [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 10.03.2011).



Fig 10i



Fig 10j

Fig 10i: Thoronet's Refractory.

Fig 10j: The basin located in front of Thoronte's Refractory.

(From [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 10.03.2011).



Fig 10k



Fig 10l

Fig 10k: Thoronete's church and the light penetrating into it at sunset.

Fig 10l: Thoronete's bell tower.

(From [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 10.03.2011).

Thoronete's north-south aligned Cloister was composed of an oriented church in the south, connected to the Monks' dormitories by a stairway, allowing direct access to the morning services (Fig 10b). The church's windows in the apse, facing the direction from which Christ was expected to return to earth, caught the morning light rays at time of the sunrise, when the first important service of the *Laude* was given (Fig 10c). In the East were placed the Chapter House in which St. Benedict's rules were read (Fig 10d), the library, and the parlor (the "speaking place" where issues were discussed and shared) – all with openings to direct rays of light onto the Abbots who sat on the East and conducted their services in the morning hours (Fig 10e). The Cloister, positioned in the center of the Monastery and accommodating the pursue of manual tasks in the middle of the day, allowed opened views up to the sky and the sun (Fig 10f, Fig 10g). In the north, the refectory permitted light through openings on its south elevation during the afternoon when the main meal was served, (Fig 10h, Fig 10i). In the west an ambulatory lead from the refectory back to the church, where the evening services, *vespers*, were conducted at sunset, when light entered through four small windows in the transept (Fig 10j); Kahn

also must have noticed the impressive thirty-meter high Thoronet bells' tower located on the church's roof to mark the times of day and the sequence of activities in the Monastery, ensuring adherence to the desired routine (Fig 10l).



Fig 11a

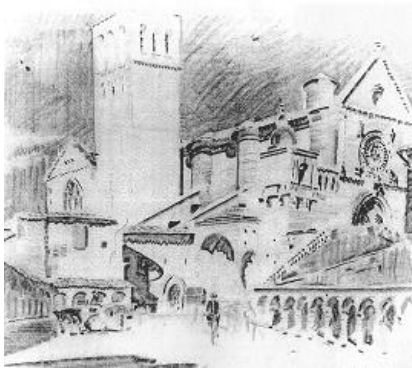


Fig 11b



Fig 11c

Fig 11a: Exterior view of San Francesco in Assisi showing its picturesque character.

(From [http://en.wikipedia.org/wiki/File:Assisi\\_San\\_Francesco\\_BW\\_2.JPG](http://en.wikipedia.org/wiki/File:Assisi_San_Francesco_BW_2.JPG), 01.03.2011).

Fig 11b: Louis I. Kahn, *San Francesco from Piazza Inferiore, Assisi*, 1928 Graphite on paper, 35.3 x 37cm, Deutsches Architektur-Museum, Fankfurt.

Depicting the picturesque character of the building.

(From Eugene J. Johnson and Michel J. Lewis, *Drawn from the Source*, 43).

Fig 11c- Louis I. Kahn, *Street and Tower, San Gimignano*, 1928, Graphite on paper

Showing San Gimignano streets as they were winding between the squares.

(From Eugene J. Johnson and Michel J. Lewis, *Drawn from the Source*, 46).

Kahn was also familiar with the manner in which Mendicant Convents, like the Convent of St. San Francesco that he documented on his strip to Europe in 1928, were more freely arranged to allow personal behavioral patterns; these were developed outwards, creating picturesque compounds (Fig 11a, Fig 11b), allowing a conduct of life in many ways analogous to the life seen in the surrounding dynamic medieval cities



enriched with winding streets, cathedrals, and squares, as in San Gimignano and Sienna, also depicted by Kahn in 1928 on the same trip (Fig 11c).<sup>109</sup>

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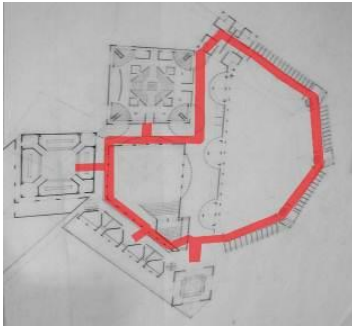


Fig 12a

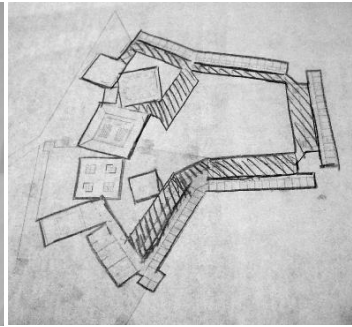


Fig 12b



Fig 12d

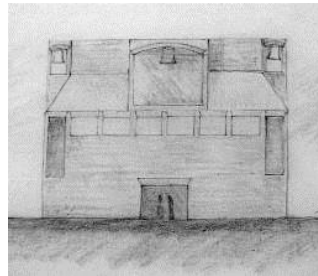


Fig 12e

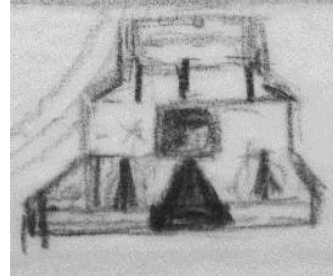


Fig 12f

Fig 12a: Plan of the first scheme of the Motherhouse with author's marks in red showing the route connecting the Motherhouse buildings, which were distributed so they could be experienced in a sequential manner.

Fig 12b: Kahn's sketch showing the process of changing the Motherhouse's program into a more dynamic organization.

Fig 12d: Plan of the third scheme of the Motherhouse with the author's marks in pink showing the proposed routes in the final proposal for the Motherhouse, and in red dots the traces on the ground commemorating the strict ordered organization of the monastic compound.

Fig 12e: A working drawing depicting the Motherhouse's tower with the bell to mark the time.

Fig 12f: Kahn's personal sketch showing the Motherhouse's tower with the missing bells.

(Working drawings are from working drawings for the Motherhouse for the Dominican Sisters the Louis I. Kahn Collection, Sketches are from Kahn's personal sketches for the Motherhouse for the Dominican Sisters the Louis I. Kahn Collection).

Kahn's three design schemes for the Motherhouse demonstrate that during the design process he was contemplating the extent to which the project should provide a

<sup>109</sup> For Mendicant Convents see Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 145. On Kahn's trips see Eugene J. Johnson, *Drawn from the Source - The Travel Sketches of Louis I. Kahn*: 30, 46, 74.



program to allow an ordered “heaven like” routine balanced against a freer “earth like” conduct.

In his first proposal Kahn initially offered to organize the buildings of the Motherhouse so as to allow the Sisters to follow a route passing from the church, to the library, through the Cloister, the refectory, and the dormitories, and to enter these buildings via an axis perpendicular to the surrounding ambulatory, following the sequential monastic activities (Fig 12a). He also located a bell within the Motherhouse's tower, like he did in the design for the Benedictine Monastery in Valyermo, to denote the activities which took place during the day (Fig 12e).<sup>110</sup> Becoming aware of the Dominicans' freer routine and the Sisters' desire be able to pursue chosen activities according to their personal schedules, Kahn came to an understanding that “all possible ways to move within the building were good”<sup>111</sup> and slowly changed the program into a much more dynamic organization – the surrounding ambulatory leading from one building to another was omitted, the squeezed public functions dissected each other in their corners so that each building was connected at least to two other buildings allowing the Sisters to choose their own path within the complex (Fig 12b, Fig 12c), and the bells were removed from the tower (Fig 12f).<sup>112</sup> However, while the importance of a communal strict schedule and the denotation of accurate time was put aside, remnants of the monastic program as a spatial organizer of time remained – traces on the ground

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<sup>110</sup> Jhaveri, *Louis I. Kahn Complete Work 1935-1974*: 312, ANP 5-6-7, p.312, ANP 5-6-7.

<sup>111</sup> Notes from meeting, 16<sup>th</sup> Feb 1966, The Louis I. Kahn Collection, Box 32.6. The Sisters explained Kahn that even the chapel should be organized and lit in a manner which would allow the Sisters to pray alone if they ask to do so) Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, note 1, The Louis I. Kahn Collection, Box 32.6.

<sup>112</sup> See note 67.

marked the omitted ambulatory (Fig 12d), and the bell's frame in the tower was left empty (Fig 12f).

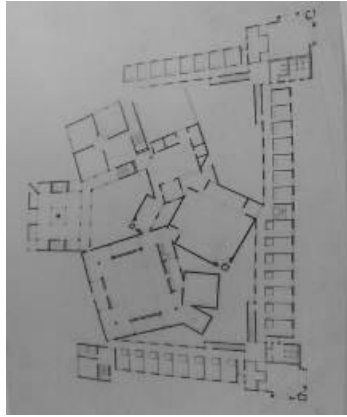


Fig 12g

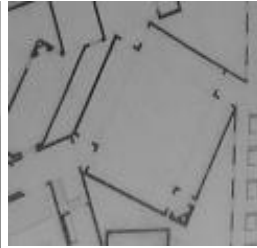


Fig 12h

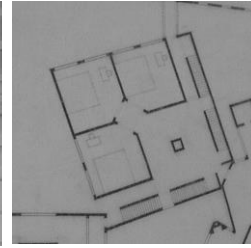


Fig 12i

Fig 12g: General plan of the Motherhouse with the Library on the North and the refectory on the East.

Fig 12h: The refectory and the openings in its corners through which light penetrates into the space.

Fig 12i: The library and the windows along its walls.

(Working drawings for the Motherhouse for the Dominican Sisters in the Louis I. Kahn Collection).

Kahn not only changed the general arrangement of the Motherhouse but skillfully distorted the alignment of its buildings. The refectory, which was positioned on the north side of the Cloister, was moved close to the church on the East, while the library was moved to the north (Fig 12g). Light, which usually penetrated to the library via the East and the refractory via the South, was allowed into these buildings via openings located in their corners and along their facades, thus blurring the importance of time in conducting the activities which they framed (Fig 12h, Fig 12i). Even the church was obscured and the architectural elements used to determine the timing of when it should be used were transformed.

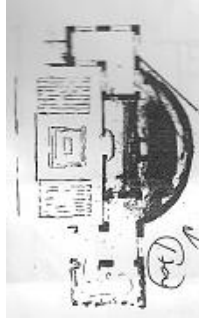


Fig 12j

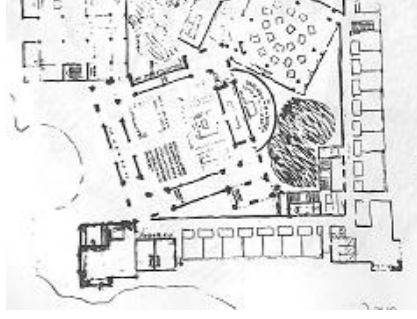


Fig 12k

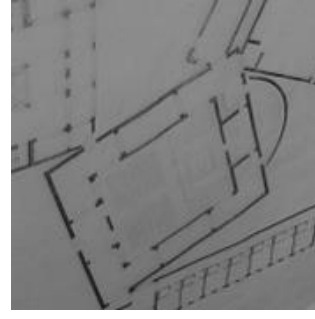


Fig 12l

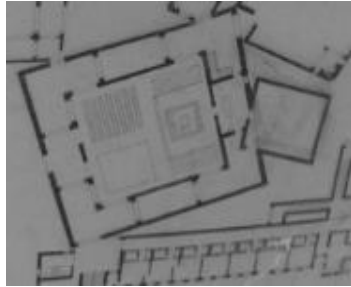


Fig 12m

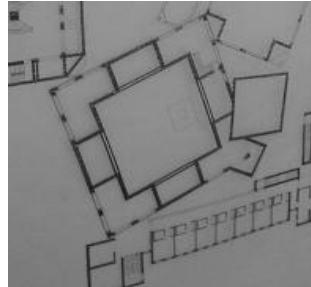


Fig 12n

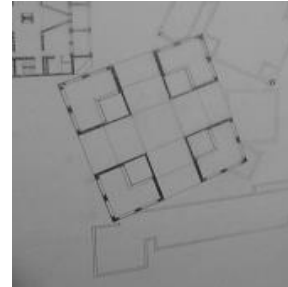


Fig 12o

Fig 12j, Fig 12k: A sketch showing the oriented, abstracted cross-like church with an apse on the East, three doors on the East, and a processional route in its center.

Fig 12l: A sketch showing the cubical centrifugal church with a twisted North-East – South-West alignment and access from a door on the West and areas of dissection with the tower and the refectory.

Fig 12m: Working drawing showing the oriented, abstracted, relatively shallow dark square functioning as the church's apse separated and concealed from the church's main space, and the author's marks in yellow showing the light falling on its interior and exterior walls.

Fig 12n: Working drawing showing openings in the church's third floor through which light entered the church.

Fig 12o: Working drawing showing openings in the church's ceiling through which light entered the church.

(All from Working Drawings for the Motherhouse for the Dominican Sisters in the Louis I. Kahn Collection).

The oriented church – in the form of an abstracted cross, with an entrance on the West, a lit apse on the East, and three traditional doors on the West with a clear processional route in its center (Fig 12j, Fig 12k) – slowly changed to a more cubical centrifugal form with a twisted North-East – South-West alignment (Fig 12k, Fig 12l). The bisecting of the church's corners with the Sisters' rooms, the entrance tower, and the refectory provided additional secondary entrances, allowing the Sisters to take shorter routes to conduct the rituals and placing the believer in a disorienting position in relation

to the main axis of the church (Fig 12n, Fig 12o). Kahn also studied the possibility of transforming the apse it into an abstracted, relatively shallow (about two stories high), dark (with no windows) square that would be detached from the main part of the building, and moved to the north, so that it was no longer aligned with the central procession axis of the church but concealed by the ambulatory's wall (Fig 12m). The light penetrated the church from the upper openings in the corner of the ceiling (Fig 12n, Fig 12o) and through a series of non- parallel openings along the main axis of the church, which allowed its entry in an oblique indirect manner so that the alignment between the earthy time and the rituals practiced in the church with the heavenly order was blurred and the freedom of the Dominican Sisters' schedule was brought forth.<sup>113</sup> Yet, the memory of the importance of the heavenly order was still manifested in the church – the abstracted dark apse was positioned so its spaces would be aligned to the East-West; its Eastern exterior façade, which was washed by light during the morning, stood out between other walls of the “Cloister”; a small window in the upper part of the sanctuary's Eastern wall allowed a few rays of light which were blocked by the wall surrounding the church's ambulatory to enter, and light that penetrated into the abstracted apse via a crack in its western wall created a narrow mark of light that fell on the interior of its Eastern façade in the afternoon – all experienced as traces of the traditional axis, marking the lost importance of the Eastern sacred direction (Fig 12m, Fig 12n).

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<sup>113</sup> Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, the Louis I. Kahn Collection, Box 32.6.

## Work, Study and the Connection to the Terrain

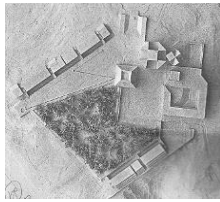


Fig 14a



Fig 14b



Fig 14c

Fig 14a, Fig 14b, Fig 014c: Model depicting the wooded large Cloister Kahn offered in his design for the Benedictine Monastery in Valyermo (From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 312).

Kahn knew that much of the routine of the Benedictine Monks was devoted to manual work,<sup>114</sup> and in the Benedictine Monastery at Valyermo he designed a large landscaped wooded Cloister (Fig 14a, Fig 14b, Fig 14c).

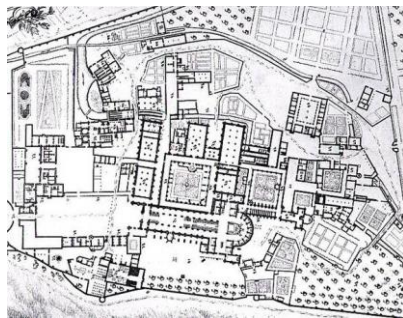


Fig 14d



Fig 14e

Fig 14d: Clairveaux's Monastery and the wall built around the area surrounding it, where supporting facilities such as mills, grains, and yards were located (From J. Guadet, *Elements et Theorie de L' Architecture*, chapter on "Elements de la Architecture Monastique, V. 3, 348).

Fig 14e: Aerial view of the Cistercian Monastery of Thoronet in Province showing the open valley in which it was located (From <http://www.deplantis.com/4655.html>, 15.03.2011).

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<sup>114</sup> Kahn's visited the Benedictine's Abbey at Velyrmo California in 1961.



Fig 14f



Fig 14g

Fig 14f: The open fields surrounding Thoronet Abbey, where the *Conversi* worked. (From Claude Jean-Nesmy, *Les Sœurs Provençales*, Cover).

Fig 14g: The planted Cloister in Thoronet, where the Monks pursued manual work. (From [http://en.wikipedia.org/wiki/Le\\_Thoronet\\_Abbey](http://en.wikipedia.org/wiki/Le_Thoronet_Abbey), 15.04.2011).

He was also familiar with the plan of Clairvaux depicting the supporting facilities for labor such as mills, grains, and yards located in the area surrounding the Monastery (Fig 14d); he also must have also noticed the fertile land at Thoronet, and the surrounding big open fields and the large Cloister that were planted and cultivated by the *Conversi* and Monks as a path towards salvation (Fig 14e, Fig 14f, Fig 14g), compared to the relatively small public spaces, such as the 3m X 3m library.<sup>115</sup>

Even though disciplined labor removed from worldly life was conceived in traditional Monasticism as a means to transforming non-religious spheres of life into transcendental matter,<sup>116</sup> during the design process Kahn learnt that while the Sisters

<sup>115</sup> The Monks of Thoronet first settled at Notre-Dame de Florielle, on the Florieyes River near Tourtour, but since the site was not satisfactory for their system of agriculture, they moved south to the area of Thoronet. Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 85-86.

<sup>116</sup> As Lawrence explains, the importance of manual work derived from the hermits' belief that bodily acts, the conquest of sensuality, and obedience unto death, would allow following Christ's scarifying actions and to come closer to the divine. St Benedict adopted this tradition as he stated "they are true Monks if they live by labor of their hands" and his Order took over mortifications, followed ascetic acts and harsh physical restrictions (including hours of sleep, and ingredients of meals), emphasizing manual labor also as a means to avoiding boredom and laziness. The importance given to manual labor also suited for Eastern Monasticism when agriculture was merely the only way to secure the hermits' survival in the remote areas of the desert; and for the Benedictines in Europe, in the early and middle ages in the Barbarian and Feudal centuries (after the fall of the Roman Empire) when manual labor was considered the important and main criterion for strength, survival and profit. On the importance of manual labor also see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 27-32; Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities* 65-66, 94; Pierre Mandonnet O.P., *St. Dominic and his Work*, trans. Sister Mary Benedicta Larkin O.P (London: B. Herder Book Co., 1945 ), 6-7.

devoted some time to manual crafts such as painting, sculpting, and to other recreational activities; they were not engaged in manual labor, but following the Dominican doctrine, aspired to gain charisma through the acquisition of knowledge, and thus were teaching or studying rather than ‘laboring’ most of the time.<sup>117</sup>

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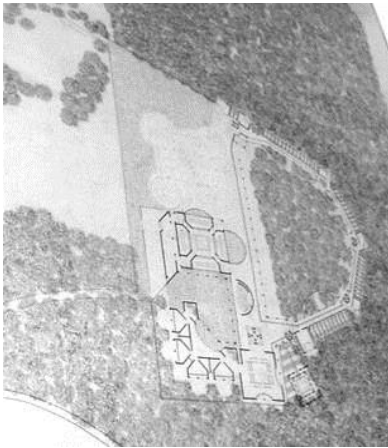


Fig 15a

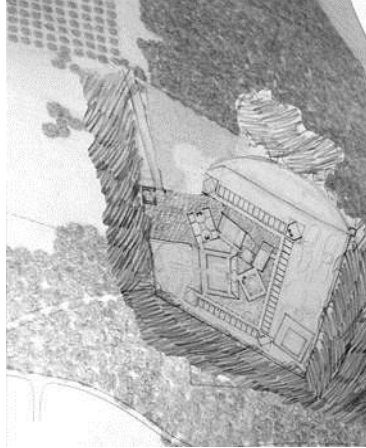


Fig 15b

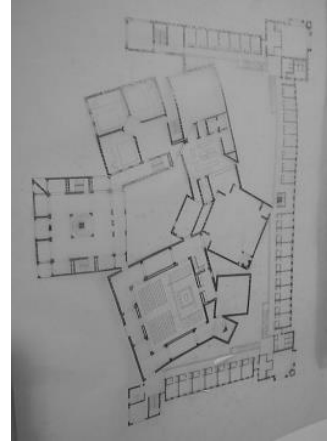


Fig 15c

Fig 15a: Working drawing showing the plan of the first scheme for the Motherhouse located on a vast area of uncultivated land with a large wooded Cloister in its center.

Fig 15b: Author's photomontage of a sketch of the plan of the third design scheme for the Motherhouse with its fragmented interior courtyards and its deserted surrounding fields on the site plan of the first scheme for the Motherhouse.

Fig 15c: A working drawing of the plan of the third scheme for the Motherhouse depicting the location of the Motherhouse's library as a central element in the building.

(Working drawings of the Motherhouse for the Dominican Sisters in the Louis I. Kahn Collection).

In his first proposal Kahn located the Motherhouse on a vast area of uncultivated land and incorporated into it large wooded Cloisters to serve as places where manual labor could be carried and the cultivation of the body and soul could be promoted, as was the practice in Benedictine Abbeys in the Early and Middle Ages (Fig 15a). Later on, the

<sup>117</sup> Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Monte. 26<sup>th</sup> April 1966, p.3, The Louis I. Kahn Collection, Box 32.8.

The emphasis placed on preaching and teaching were routed in the establishment of the Dominican Order in the 13th century as an Order serving the newly founded educated Laity in the cities. On the importance of preaching and education in the Dominican Order see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 239-42, 52-58; Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities* 86-87, 94-96.

indoor functions of the church, the library, and the chapter house, were meant to serve the Sisters in the salvation of their souls – a practice that became prevalent in the Mendicant Orders by the end of the 13<sup>th</sup> century (when the educated bourgeois became an important power in social life) – took over the outdoor areas. Small, difficult to access fragmented piazzas were left from the interior wooded Cloister, and large cleared surroundings remained from the uncultivated surrounding land, echoing the lost importance of manual work (Fig 15b).<sup>118</sup>

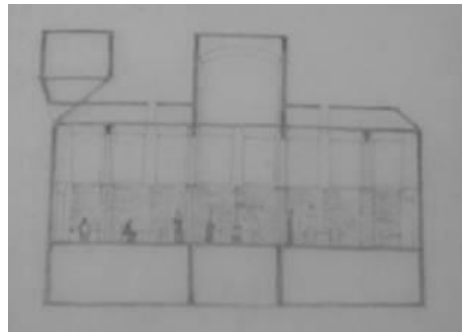


Fig 15d

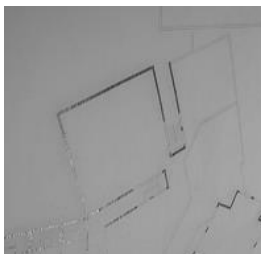


Fig 15e



Fig 15f



Fig 15g



Fig 15h



Fig 15i

Fig 15d: Section through the Motherhouse's library showing the main reading chambers on the second floor and the ramp allowing views from its top to the inner courtyards and to the surrounding fields.

Fig 15e: The Motherhouse's library 1st floor.

Fig 15f: The Motherhouse's library 2<sup>nd</sup> floor.

Fig 15g: The Motherhouse's library 3rd floor.

Fig 15h: The Motherhouse's library 4th floor.

Fig 15i: The Motherhouse's library exit to the roof.

(Working drawings of the Motherhouse for the Dominican Sisters in the Louis I. Kahn Collection).

<sup>118</sup> On the diminishing of outdoors areas see Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, Note 4, The Louis I. Kahn Collection, Box 32.6.



In addition, following the Sisters' request, the library was designed as an important building<sup>119</sup> – spanning over four stories storeys (the first floor serving as an empty podium, the fourth as an attic, (Fig 15e, Fig 15f, Fig 15g, Fig 15h, Fig 15i), it reached the height of the Motherhouse's tower (in which some of its functions were contained) (Fig 15i). Dissected in three of its corners, easy access to the library was allowed from all the other important parts of the complex – the Motherhouse's tower (Fig 15e, Fig 15f) the Sisters' cells (Fig 15g, Fig 15h), the church, and the refectory (Fig 15c). The central position of the building was symbolic and emphasized the importance given by the order to the acquisition of knowledge. However a ramp leading from the library's fourth floor upwards allowed distant views of the fragmented inner courtyards and the deserted surrounding fields, which as traces resonated the monastic tradition and its emphasis on manual labor (Fig 15d). Thus Kahn's final design emphasized the value the Dominicans placed upon the training of the intellect, but also hinted towards traditional monasticism's valuation of asceticism and manual work.<sup>120</sup>

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<sup>119</sup> Already at the beginning of the design process the Sisters emphasized the importance of the school, the library, and the auditorium in their compound. In Kahn's notes from one of his first meetings with the Dominican Sisters he writes: "Orchard – Farm – Gardens and adds Garden of mind," manifesting his understanding of the privilege given to the mind over the manual by the Dominicans and the manner in which this might be manifested in his design. Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Monte. 26<sup>th</sup> April 1966, p.3, The Louis I. Kahn Collection, Box 32.8. In a later meeting Kahn discussed "the enclosed woods developing into woods garden more actively part of the Convent" and its school. Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Emmanuel, Sister Jane and Sister Monte, 22nd July 1966, p.1, The Louis I. Kahn Collection, Box 32.6.

<sup>120</sup> On severe and moderate modes of embodiment towards spiritual fulfillment see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages 175-77*; Knowles, *Christian Monasticism*: 87-88, 102-03.

## Contemplation, Action and the Connection to the Exterior World



Fig 16a



Fig 16b

Fig 16a: Thoronet located in the remote forested hills between Draguignan and Brignoles.  
(From Lucien Hervé, François Cali, *Architecture of Truth: The Cistercian Abbey of le Thoronet in Provence*, Cover).

Fig 16b: Thoronet Cloister with the lavado in its center (in blue), its gate (in red), library (in yellow) and wing for guests (in green).

(From <http://www.planetware.com/map/le-thoronet-cistercian-abbey-map-f-thor.htm>, 10.03.2011).



Fig 16c

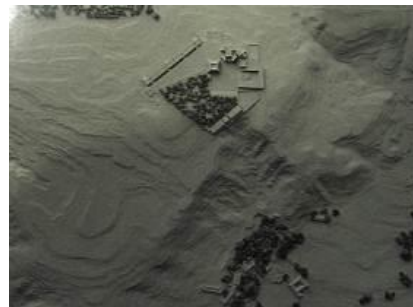


Fig 16d

Fig 16c: The vast Desert of Los Angeles, Valyermo where St. Andrew's Priory was located.

Fig 16d: The location of Kahn's design for St. Andrew's priory on the ridge of the mountains.

(From photographs of St. Andrew's Priory in the Louis I. Kahn Archives, University of Pennsylvania).

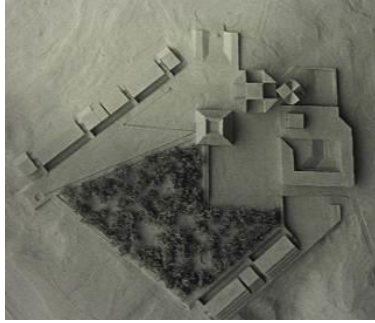


Fig 16e

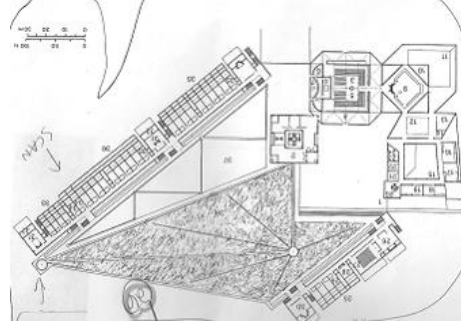


Fig 16f

Fig 16e: Model of Kahn's design for the St, Andrew's priory with a fountain in the Cloister providing water to the compounds buildings.

(From photographs of St. Andrew's Priory in the Louis I. Kahn Collection).

Fig 16f: Plan of Louis Kahn's design for St. Andrew's priory showing the central location of the water feature from which water was channeled to the compound's buildings.

(From Heinz Ronner, Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, 311).

Kahn appreciated how the walled, Cloistered and secluded Cistercian monasteries suggested contemplative self-sufficient lifestyles and, allowed putting aside worldly concerns, enabling the inhabitants to concentrate on contemplation and their unification with God.<sup>121</sup> Thoronet, located in the remote forested hills between Draguignan and Brignoles, just below the Argens River, typical of other Cistercian monasteries, was placed far from any settled area but next to sources of water, in a barren valley perceived as "valleys of God / of the virgin".<sup>122</sup> The Monks of Thoronet channeled water from the springs in the valley to the Monastery's lavabo, located inside the Cloister and in front of the entrance to the refectory, from which running water was provided for: drinking and cooking, washing, powering the mill, for working the fields, and for religious ceremonies, allowing for the presence of life in the deserted area so that the valley was sanctified – 'tamed by civilization' – and turned into a living organ with blooming

<sup>121</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 175; Knowles, *Christian Monasticism*: 87-88, 102-03.

<sup>122</sup> While the Benedictines were not privileged to choose their sites, they had to adapt their monasteries to the site and its restrictions. The Cistercians on the other hand, had the privilege to choose remote and open sites, which they molded according to their own will. Knowles, *Christian Monasticism*: 103-05; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 73.

gardens, and terraces of vines and fruits (Fig 16a).<sup>123</sup> In his design for the Benedictine priory of St. Andrew, on a site located in the vast Desert of Los Angeles, Valyermo, 40 miles northeast of California – an area that was almost inaccessible and uninhabited until the second half of the 19<sup>th</sup> century – Kahn located the new compound on the ridge of the rock formations to emphasize the feeling of solitude and remoteness (Fig 16c, Fig 16d).<sup>124</sup> He also located a water feature from which water was channeled to the compound's buildings placed around it in the center of the priory symbolizing the existence of precious water, around which a heavenly world could be constructed (Fig 16e, Fig 16f).<sup>125</sup>

In Thoronet the library, like in other Cistercian monasteries, was entered through the Cloister, and was located by the church so it could be used only by the Monks. Books could be taken out from the library to the Cloister and read while sitting on the benches located in between the Cloister's columns, and along the church's wall.<sup>126</sup> The Monks' only contact with the outside world was through caring for the poor, who received food, clothes, oil, and wine at the Monastery's gates. By the 12<sup>th</sup> century guests (such as princes and other clergy and rulers) were allowed in the Monastery and were housed in a

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<sup>123</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 74-75.

<sup>124</sup> While designing Kahn consulted a geological map of the Valyermo and vicinity (Levy F. Noble, Geologic Quadrangle Maps of the United States, Geology of the Valyermo Quadrangle and Vicinity, Department of the Interior, United States Geological Survey, Published by the U.S Geological Survey, Washington DC, 1954, Received in Kahn's office on Oct. 26<sup>th</sup> 1966, The Louis I. Kahn Collection, Box 31.13.

<sup>125</sup> Kahn claimed: "only then" after placing the water source "should you think in terms of placing your buildings, your chapel and your Church and the place of meditation and rest", Kahn, "Law and Rule" (RIBA, 1961) in Louis I. Kahn, *Essential Texts* (New York: Norton & Company, 2003), 124.

<sup>126</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 76.

guest wing, usually in the west side of the Cloister, separated from the other buildings (Fig 16b).<sup>127</sup>



Fig 16g



Fig 16h

Fig 16g: An aerial view of the Franciscan Monastery of San Francesco in Assisi showing its location on the high ridge in the edge of the city.

(From <http://www.sacred-destinations.com/images/sat/assisi-basilica-francis.jpg>, 10.03.2011).

Fig 16h: The picturesque organization of the Franciscan Monastery of San Francesco in Assisi fitting into the unique urban and topographic location and its noticeable presence in its context.

(From <http://www.web-books.com/Classics/Books/B1/B1572/MAIN/images/assisi.jpg>, 10.03.2011).

It was during the design process that Kahn learned that, in contrast to the Benedictines and the Cistercians, the Dominican Order and the St. Catherine de Ricci's Sisters, were an outer-oriented Apostolic Order, whose spirit of action was nourished by contemplation, and that they acquired intense spiritual training, and received and gave services to the exterior world, mostly related to education.<sup>128</sup> Indeed until the end of the 19<sup>th</sup> century the Sisters lived in seclusion and were in charge mainly of the spiritual realm

<sup>127</sup> On the Dominicans as an outer oriented Apostolic Order see Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 118-20; Knowles, *Christian Monasticism*: 100-02.

<sup>128</sup> In his notes, from one of the first meeting with the Dominican Sisters Kahn writes – "Intense training – Spiritual" (p.1) and later "Service to the outside" (p.2). Notes from Louis I. Kahn and Galen Schlosser's meeting with Sisters Jane and Monte, 26<sup>th</sup> of April, 1966, The Louis I. Kahn Collection, Box 32.8; Letter from Mother Mary Emmanuel to Louis I. Kahn, 16<sup>th</sup> December 1966, Note No. 4, The Louis I. Kahn Collection, Box 32.8.

In his notes, from one of his first meetings with the Dominican Sisters Kahn writes – "School close – Novitiates have intense training, spiritual" (p.1), "School: Service to the outside" (p.2) Notes from Louis I. Kahn and Galen Schlosser's meeting with Sisters Jane and Monte, 26<sup>th</sup> of April, 1966, The Louis I. Kahn Collection, Box 32.8.

The outer-oriented character of the Sisters' was rooted in the foundation of the Dominican Order as an Order that acknowledged the earthy part of Jesus' life, encouraged spiritual inwardness and mental withdrawal, but rejected physical solitude and the ideal of seclusion as guarantee for a successful serving of the divine and a strengthened Apostolic life. Dominicans opened themselves to their surroundings, operated outside the Cloister, adopted the idea *Vita Apostolica*, promoted pastoral work within the communities, preached all over the provinces (in Churches, and public areas such as markets and city squares), acquired knowledge outside the Convent, taught and studied in secular schools and universities), and became part of the educated of the cities, showing that salvation of the soul was possible within the ordinary world. Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 137-42, 238-42; Piers Compton, *The Great Religious Orders* (London: Richard Clay & Sons, 1931), 133-35, 40-41.

within the Cloister, but already from 1932, when they decided to declare themselves as an active Order they had started to become engaged in pastoral work outside their Convent.

129

Memories from the Franciscan Monastery of San Francesco in Assisi, situated on a high ridge on the city's edge (like other Mendicant complexes, Fig 16g), supported by buttresses from the valley below, and noticeable from afar, must have also influenced Kahn's final design proposal (Fig 16h).<sup>130</sup>

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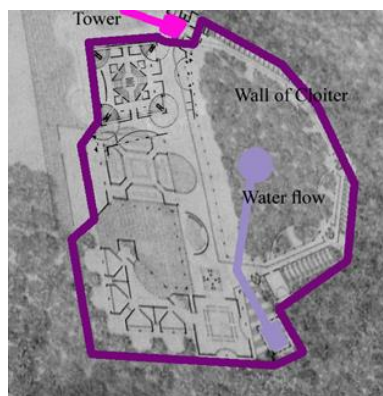


Fig 16i

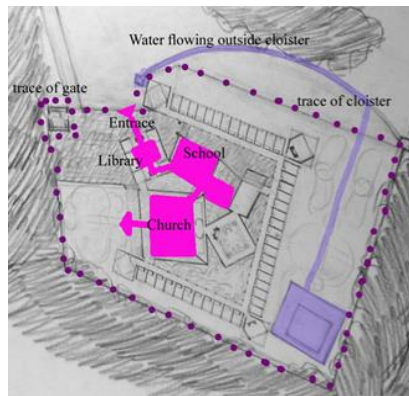


Fig 16j

Fig 16i: Kahn's first design proposal for a self-sufficient, contemplative, secluded compound with a large Cloister, bounded by the buildings' exterior protective tall facades (in purple) including a massive layered gate (in pink), and source of water located inside the Cloister (in light purple) from which water is channeled to the buildings.

Fig 16j: Kahn's final design proposal for a Conventual outward-oriented compound bounded by a low terrace in the ground (purple dots) including an entry gate from which access is enabled to all the other public functions (in pink), a source of water located outside the Cloister functioning as an exterior pool in a leisure park including other recreation facilities (in light purple).

(Author's compilation from Kahn's first and third schemes for the Motherhouse, from working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

<sup>129</sup> After Second Vatican Council (1962-1967), the Sisters became active even in the public sphere in the United States, while taking part in even in activities related to civil and women rights. Sullivan, "Revolution in the Convent : women religious and American popular culture, 1950-1971," 43, 90-92.

<sup>130</sup> As Braunfels mentions the Franciscans, the wandering Friars, never tried to be Monks and to withdraw from the world into monasteries. San Francesco Monastery was built for St. Francis after his death (although, as a Franciscan who never searched for a permanent shelter, St. Francis asked that after his death his body be buried on a rubbish-dump outside the city. The means to manage an order, which grew immensely, when its leader died, remained difficult with no suitable organization to allow it, and the Monastery was built for this purpose). Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 125, 29-33.





Fig 16k



Fig 16l

Fig 16k: The plan of the secluded Motherhouse with the source of water in its Cloister, its exterior walls situated on the lower parts of the land, and a planted area surrounding them making it hard to make out the compound from afar (top- abstract plan; bottom – abstract section).

Fig 16l: The Conventual outward-oriented Motherhouse with its source of water outside of it, situated on the top of an unplanted brow, and surrounded by an open leisure ark, making it much more noticeable from afar (top- abstract plan; bottom – abstract section).

(Author's schemes above from a compilation of : The Motherhouse's lot, the layout of Kahn's first and third design schemes for the Motherhouse, and a Google map of the site).

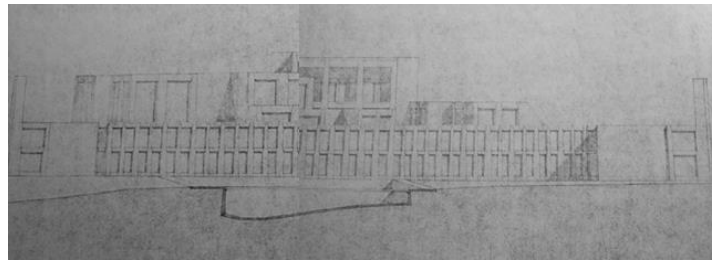


Fig 16m

Fig 16m: North-South section looking west through the exterior pool looking towards the Eastern façade of the Motherhouse with its suspended exterior walls.

(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).



Fig 16n



Fig 16o

Fig 16n, Fig 16o: The leisure garden surrounding the mansion in Elkin Park (Author's photographs, Spring 2009).

Kahn's first design proposal offered a self-sufficient, contemplative, secluded, well-protected compound, which as the Sisters mentioned was geared more to the needs of Trappist or Carmelite Orders, for whom contemplation and solitude were an ultimate end.<sup>131</sup> In this first scheme the Motherhouse was located by a water spring on the lower parts of the site, enclosed with thick walls, surrounded by woods, well protected from the environment and entered only via a well-protected massive gate (Fig 16i, Fig 16k). During the design process and after Kahn better understood the liturgy of the Sisters, his idea of the Cloistered world was flipped over. The Motherhouse was moved to the upper part of the brow and became exposed to its surroundings; the sacred source of water, previously located within the compound, was removed to the outside, and water was channeled by gravity towards it and outside the compound and Cloister. The sacred source of water was turned to functioning as a pool,<sup>132</sup> and the contemplative Cloister was turned into a leisure park, as the Sisters had asked, and now included outdoors recreation areas for different sport activities (tennis, swimming, basketball and croquet)

<sup>131</sup> Letter from Mother Mary Emmanuel to Louis I. Kahn, the 16<sup>th</sup> of December 1966, Note 4, The Louis I. Kahn Collection, Box 32.8.

<sup>132</sup> Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, The Louis I. Kahn Collection, Box 32.6. Kahn's notes – "Springs- Water"; "Swimming Pool" – hint about his understanding of the secularization of the role of the sacred water of the Cloister; Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Sister Monte, the 26<sup>th</sup> April 1966, p.4, The Louis I. Kahn Collection, Box 32.8.



(Fig 16j, Fig 16l, Fig 16m), similar in nature to the leisure garden which surrounded their Motherhouse in Elkin Park mansion (Fig 16n, Fig 16o).<sup>133</sup> Yet, memories of the walled compound remained in form of traces and fragments – a low terrace and a canal were placed to commemorate the tall exterior walls of the Cloister (Fig 16g),<sup>134</sup> and free walls extending from the upper parts of the exterior facades of the cells remained, like weak skins commemorating the monumental protecting walls (Fig 16m).



Fig 17a



Fig 17b



Fig 17c

Fig 17a: Plan of Kahn's third design proposal for the Motherhouse showing: 1. The location of the gate allowing access directly to the other public buildings and views towards the barren interior courtyard. 2. The location of the library and the direct access enabled to it via exterior staircases.

Fig 17b: Plan of Kahn's first design proposal for the Motherhouse showing: 1. The location of the gate allowing controlled access to the secretive Cloister.

(Author's schemes on working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

Fig 17c: Kahn's personal sketch showing the traces of the contemplative Cloister and of the massive gate which he suggested in the first design scheme (both marked in red) left on the land in the third design scheme.

(Author's schemes on Kahn's personal sketch of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

<sup>133</sup> Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Mary Emmanuel, Sister Jane, and Sister Monte, the 22<sup>nd</sup> of July, 1966, p. 3, The Louis I. Kahn Collection, Box 32.6.

<sup>134</sup> List sent by Mother Mary Emanuel to Louis I. Kahn, 13<sup>th</sup> March 1967, The Louis I. Kahn Collection, Box 32.7.

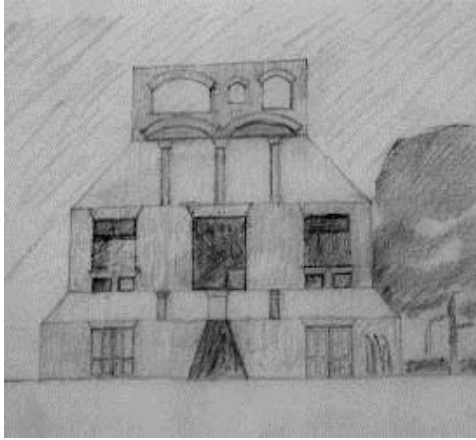


Fig 17d

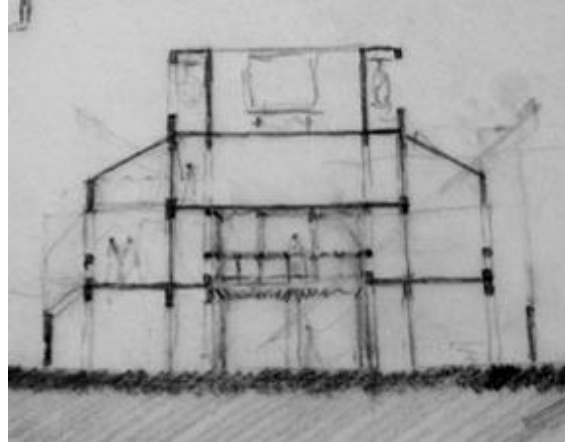


Fig 17e

Fig 17d: Façade of the semi-open structure of the gate in Kahn's third design scheme.

Fig 17e: Section through the gate in Kahn's third design scheme showing the multiplicity of functions in the gate and its use by Sisters and outside visitors.

(Working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

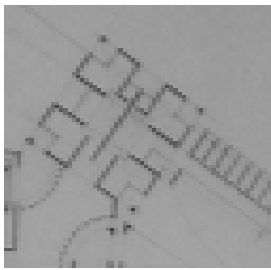


Fig 17f



Fig 17g



Fig 17h

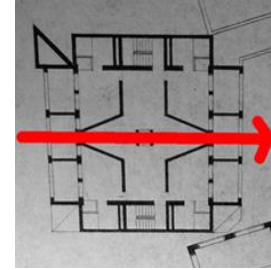


Fig 17i

Fig 17f: The protective traditional fortress-like sealed structure of the gate in Kahn's first proposal.

Fig 17g: First option for first floor of the semi-open Gate in Kahn's third design proposal, showing the views enabled through it to the barren courtyard and access enabled from it to the Library on its northern corner and to the church on its southern corner.

Fig 17h: Second option for first floor of the semi-open Gate in Kahn's third design proposal, showing the views enabled through it to the barren courtyard and access enabled from it to the Library on its northern corner and to the church on its southern corner.

Fig 17i: Second floor of the gate in Kahn's third design proposal for the Motherhouse, with the narrow openings allowing segmented views of the inner courtyard.

(Working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

From here the protective traditional fortress-like structure of the gate – an element sealed by a moving screen from which Sisters entered into the mystical, secretive, monastic, secluded Cloister leading to the compound's spiritual buildings that Kahn offered for the first design proposal (Fig 17b, Fig 17f) – gave way to a more open

structure which was accessible to all, containing different functions like guests' and fathers' rooms, reception, receiving, and meeting rooms. From these visitors and members could access the Motherhouse's buildings such as the school, the auditorium, the archives room and information center, the library, and even the church that dissected the gate in three of its corners (Fig 17d, Fig 17e, Fig 17g, Fig 17i, Fig 17h, Fig 17a).<sup>135</sup> In addition, outside visitors could reach the library via a public staircase located on its North-Eastern end and continue on to the other buildings in the Motherhouse without even using the gate (Fig 17a) – all these modifications symbolized the congregation's openness, relationships, and association with the outside world.<sup>136</sup> However, traces of the contemplative Cloister and the massive gate were left on the ground (Fig 17c), and openings – wider in the lower floors and narrower in the upper floors of the tower – allowed views into the inner deserted courtyards leading to nowhere, and onto which all buildings turned their backs, reminding visitors about of solitude and enclosure, the heart of the lost historical enclosed life carried within the monastic tradition (Fig 17c, Fig 17a).

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<sup>135</sup> In Kahn's notes he writes: "Locate administrative near gate" (p.2), "Guests - The towers or gatehouse" (p. 4). This hints about his understanding of the opening of the gate and its transformation from a protective element of a tower to a welcoming element of a gateway. Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Sister Monte, 26<sup>th</sup> April 1966, The Louis I. Kahn Collection, Box 32.8.

The Sisters liked Kahn's ideas about the gate as a special place where offices of all sorts, guest rooms, fathers' rooms, reception rooms, receiving rooms, and meeting rooms will be located. Notes from Louis I. Kahn and D.C.S. Polk meeting with Mother Mary Emanuel, Sister Jane, and Sister Monte, July 22<sup>nd</sup> 1966, p. 1, The Louis I. Kahn Collection, Box 32.6. In Kahn's notes from one of the first meeting with the Dominican Sisters Kahn writes: "School Close – Novitiates have intense training – Spiritual" (p.1) "School – Service to the outside" (p.4); "Auditorium could be part of school" (p.3) Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Monte. 26<sup>th</sup> April 1966, The Louis I. Kahn Collection, Box 32.8. Also see Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, Notes 9-11, The Louis I. Kahn Collection, Box 32.6; Changes in Covent Program after meeting, 7<sup>th</sup> August 1967, The Louis I. Kahn Collection, Box 32.7.

<sup>136</sup> The Convent of La Tourette, designed by Le Corbusier, which Kahn has discussed with the Dominican Sisters during the design process, had some similar features to Kahn's design in it: access of the public was allowed to the second floor containing the scholastic functions, classrooms, lecture rooms, common rooms for study, an oratory and a large room for the library (all located above the ground floor containing a Cloister, a Church, a refectory and a chapter house), and all this emphasizes the scholastic exchange between the Dominican Covent and the outer world. Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 229-30.





Fig 18c



Fig 18d

Fig 18c: The western wing of Thoronet's Cloister separated by a solid wall.

(From [http://fr.wikipedia.org/wiki/Abbaye\\_du\\_Thoronet](http://fr.wikipedia.org/wiki/Abbaye_du_Thoronet), 10.04.2011).

Fig 18d: Thoronet church's Western façade with its small entrance, and the recess built into its South wall.

(From <http://www.kerhornou.com/LE%20VAR.htm>, 10.04.2011).

In both the monasteries of Thoronet and Clairvaux, which Kahn was familiar with, the *Conversi* who lived outside the compound, and were not allowed to enter the Cloister, used their own refectory, which was located on the West side of the Cloister. This refectory was separated from the Cloister by walled passages running parallel to the Cloister's west wings; thus, the Monks could neither see the *Conversi* nor hear them even when they used the monasteries' facilities, and met them only when both groups used the passage to go outside the Cloister and work the fields (then the passage served as a place where they could speak, discuss each other's tasks, and share responsibilities, Fig 18a, Fig 18b, Fig 18c).<sup>137</sup>

The churches of Clairvaux and Thoronet expressed the hierarchies within their Monastic Orders. A wooden screen separated them into two parts – to be used separately by the Choir Monks, the novitiates, and the *Conversi*. The first, the eastern part and its sacred altar, was entered from the Monastic Cloister or from the staircase connecting it with the Monks' dormitories above, where only one mass was held per day, and it was

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<sup>137</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 28-29, 176; Knowles, *Christian Monasticism*: 92-93; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 76-77. The separating lane was first introduced in the Cistercian Monastery of Clairvaux Ibid., 79, 82-83.

used only by the choir to conduct service. The second, the western part including an alternative altar which was located on the dividing wooden screen in the middle of the church, was entered from the novitiates' wing (separated from the Cloister) or from a small door in the unwelcoming western façade, and was to be used by the novitiates and the *Conversi* (Fig 18a, Fig 18b, Fig 18d).



Fig 18e



Fig 18f

Fig 18e: The hierarchical seating in Thoronet's chapter house.

(From <http://www.architectural-review.com/the-big-rethink-learning-from-four-modern-masters/8630900.article>, 30.05.2012).

Fig 18f: The refectory of Royaumont, Roissy, France (1225) with its raised pulpit.

(From [http://www.royaumont.com/fondation\\_abbaye/the\\_refectory.546.0.html](http://www.royaumont.com/fondation_abbaye/the_refectory.546.0.html), 15.04.2012).

Kahn was also familiar with the chapter house at Thoronet, which served for meeting, reading the rules, and confessing sins. Sitting on the East facing the entry, the Abbots who conducted the service were lit by rays of light entering from the window on the East. The Choir Monks, the only ones who were allowed to speak, sat on benches aligned to the walls, while the novitiates sat on the floor (Fig 18e). In the refectory, the superior Priest / Abbot entered the room last, sat by a raised pulpit table in the center of the room and gave the blessing before the meal started. The other Monks sat around according to their seniority and remained silent – an arrangement which echoed the

historical hierarchical organizations around Christ in his preaching and in the Last Supper (Fig 18f).<sup>138</sup>



Fig 18g



Fig 18h

Fig 18g: The way leading into the upper church of the Franciscan Convent of San Francesco in Assisi.  
 Fig 18h: The western façade of San Francesco's upper church with its large openings and welcoming piazza. (From [http://en.wikipedia.org/wiki/Basilica\\_of\\_San\\_Francesco\\_d'Assisi](http://en.wikipedia.org/wiki/Basilica_of_San_Francesco_d'Assisi), 15.03.2011).



Fig 18i



Fig 18j

Fig 18i: The open large interior space of San Francesco's upper church in Assisi.  
 (From [http://en.wikipedia.org/wiki/Basilica\\_of\\_San\\_Francesco\\_d'Assisi](http://en.wikipedia.org/wiki/Basilica_of_San_Francesco_d'Assisi), 15.03.2011).  
 Fig 18j: A fresco from San Francesco's church presented by Kahn in his closing talk at CIAM, 1959.  
 (From Jürgen Joedicke, *Documents of Modern Architecture*, CIAM 1959 in Otterlo, 211).

In contrast to the sanctified nature of the Cistercian spaces, the Mendicant structures with which Kahn was familiar as well were different in nature. Their spaces dedicated to worship were more secular, avoiding hierarchical arrangements and allowing access to the Laity. In 1928 Kahn visited the Franciscan Convent of San Francesco in Assisi and documented the manner in which its noticeable cathedral, with its large square and its Western façade with its large openings, faced the city to welcome pilgrims and visitors. Thus the church, which in a Cistercian Monastery was the Monks' most private

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<sup>138</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*: 33, 114.  
 Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 76-77, 98, 103.



space, turned out to be a public arena (Fig 18g, Fig 18h, Fig 11b).<sup>139</sup> At the same time, Kahn might have visited the interior spaces of the Convent, which, in contrast to the strictly constructed stone Monastic interiors, and in similarity to Mendicant ones, were freer in their organization, with minimal furniture. Transmitting the feel that surface took over structure, the massive architecture was replaced by delicate shells, and the interior spaces were similar in character to assembly and preaching halls encouraging the participation of Friars and the Laity alike. Frescos, which covered the spaces, such as the one shown by him at the closing talk in CIAM 1959, included figures and elements in one-to-one scale blurred with reality, giving a real impression of the rituals in the Cloister, cells, church, refectory, and the chapter house. Frescos and paintings functioned as a "picture bible", creating the right atmosphere, and providing symbolic meanings, taking over some roles of monasteries' compositions and constructions, elucidating inherited traditions that could be followed less rigorously (Fig 18i, Fig 18j).<sup>140</sup>

\*

Kahn's attempts to incorporate hierarchy as a theme in his early proposals for the Motherhouse's church, chapter house, and refectory interiors out of stone and to equip them with built-in structures were turned down by the Dominican Sisters. During the design process Kahn replaced the stone structures with concrete, and supplemented them with minimal movable furniture to create less classified spaces in which no divisions

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<sup>139</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 125, 33, 38, 42.

<sup>140</sup> Empty spaces of the refectory for example were covered with frescos describing the last supper. Cells were illustrated with painting depicting the crucifixion of Christ, the Church depicted his journey in life, the Cloister depicted scenes of manual work and saints, the chapter house depicted the assembly around Christ when crucified, and the refectory depicted the last supper (see the cells in San Marco, painted by Fra Angelico; and in the chapter house; the paintings of Luca Signorelli in the Cloister of St. Oliveto near Siena; The painting in the Spanish Chapel in Santa Maria Novella, Florence by Andrea da Firenze; and of the refectory in Santa Croce, Florence ; Leonardo da Vinci's last supper in the Dominican refectory of Santa Maria delle Grazie in Milan, 1497; the last supper by Castagno for the refectory of S. Apollonia in Florence; and by Ghirlandaio in the Ognissanti in Florence. see detailed analysis and images in *Ibid.*, 138-51.



were made between the congregation's members and could thus also serve as assembly halls.

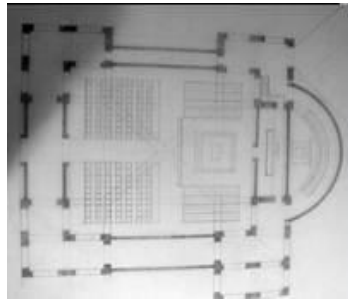


Fig 19a

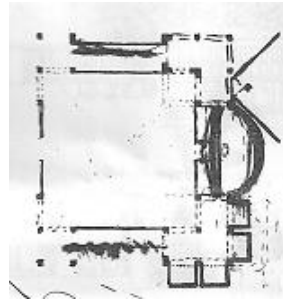


Fig 19b

Fig 19a: The stone chapel in the form of a basilican long abstracted cross with an elevated sanctuary in the apse, benches on its two sides, and two pews of seats in front of it.

Fig 19b: The stone chapel in the form of a basilican long, abstracted cross with three large doors in its western façade to serve the Laity and a separate entrance in its North-East corner to serve the Sisters.

(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

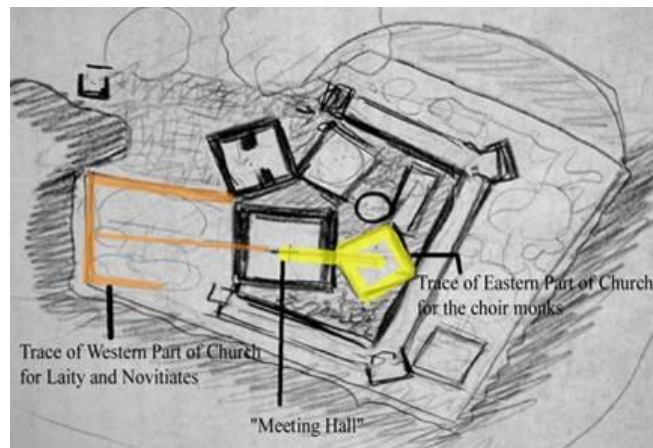


Fig 19c

Fig 19c: Plan of Kahn's third scheme for the Motherhouse with the author's scheme showing the traces of the chapel's western part on the ground in front of the church's entrance (in orange) and the separate sanctuary behind the church's main prayer space (in yellow).

(From Kahn's personal sketches of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

For the chapel, Kahn first proposed a stone building in the form of a basilica, a long, abstracted cross with three large doors in its western façade to serve the Laity, and a separate entrance in its North-East corner to serve the Sisters. He also suggested locating an elevated sanctuary in the apse, on the eastern end of the church, and providing seating

for the Sisters – benches on its two sides, and for the novitiates two pews of seats in front of it, with a gap between the two (Fig 19a, Fig 19b).

The Sisters asked his design to reflect a more democratic church. In August 1967 they invited Father Phelan to consult with Kahn on the project and assist in arriving at a design of the church which would bring forth their unique conception of the ritual.<sup>141</sup> Considering Phelan's advice, Kahn altered the church design by integrating into it some of the Mendicant architectural characteristics which he was familiar with, and taking into consideration the ideas of Father Frederick Debuyst, a Monk, philosopher, and architect who believed that the church must not overwhelm the people who occupied it<sup>142</sup> and held that it should function more as the "house of the people of God" than the "house of God," conceiving it as "a great living room, a place where the faithful come together to meet the Lord and one another in the Lord."<sup>143</sup> These were ideas which Debuyst explained to Kahn when he visited his office in 1963;<sup>144</sup>

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<sup>141</sup> Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Mary Emanuel, Sister Jane, and Sister Monte, The 22<sup>nd</sup> of July 1966, pp.1-2, The Louis I. Kahn Collection, Box 32.6.

<sup>142</sup> Frederick Debuyst, *Modern Architecture and Christian Celebration* (Richmond, VA: John Knox Press, 1968), 30-41.

<sup>143</sup> Frederick quoting Monsignor Bekkers in Torgerson, *An Architecture of Immanence: Architecture for Worship and Ministry Today*: 155.

<sup>144</sup> Frederick Debuyst discussed with Kahn the nature of sacred architecture in modern times when he visited Kahn's office. Frederick Debuyst, "Menaing of Places," *Revolution, Place, and Symbol* (1969): 158-59.

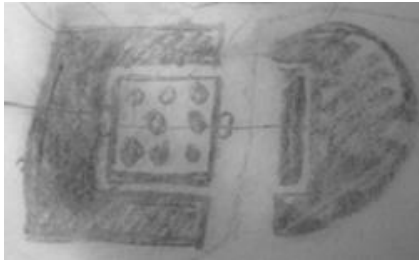


Fig 19d



Fig 19e

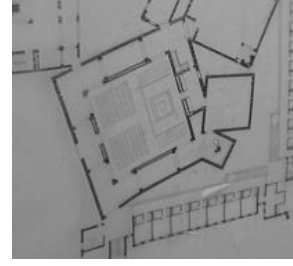


Fig 19f

Fig 19d: Moving the sanctuary to the center of the church's main space and creating a separate sanctuary behind the public prayer area.

(From Kahn's personal sketches of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

Fig 19e: The church's plan with author's scheme showing the symbolic division of the church into two areas - in orange the more secular public area, in yellow the more private sanctified area.

Fig 19f: Plan of the church showing the entrances to the chapel for the lay people from the doors on the south-western façade, and for the Sisters through the corners dissecting the refectory, the tower and the cells.

(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

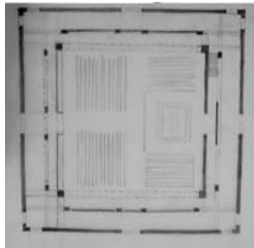


Fig 19g

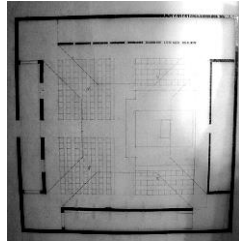


Fig 19h

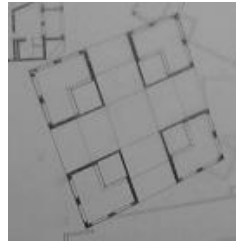


Fig 19i

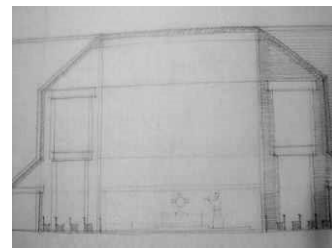


Fig 19j

Fig 19g: Plan of the church showing the more even squares of seating located in the church.

Fig 19h: Plan of the church showing the separation of the main area of the church by movable wooden screens and the paving marking the traditional seating on the floor.

Fig 19i: Roof plan of the church showing location of openings allowing light into the church marking the omitted seating in the chapel.

Fig 19j: Section through the church showing the position of the seats in the church's perimeter, and the brick construction encasing this area and the central concrete empty space with the elevated sanctuary in its middle.

(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

Hence, Kahn altered the church so that it would be less hierarchical in character and more flexible in use. The long church was transformed by Kahn into a centralized cube, and following the Sisters' request he moved the sanctuary of the church from its location on the East to the center so that the clergy member conducting the service would be closer to the rest of the community – a setting that conformed with the norms set down

in the constitution of the sacred liturgy in March 1965.<sup>145</sup> As well, using movable screens he suggested separating the main area of the sanctuary from the narthex and the ambulatory, thus giving the central space of the church a form of a lecture hall (Fig 19g).<sup>146</sup> However, Kahn was not willing to completely give up the hierarchical Monastic organization – he marked on the ground, in front of the church's entrance, traces of the chapel's western part, creating a space that could serve as a plaza for people who did not enter the church, commemorating the traditional social Monastic separation from the Laity. To allow the Sisters to conduct services in the chapel separated from the Laity and hence to preserve their traditional role of being in charge for communing with the divine, Kahn also located another separate sanctuary behind the church's main prayer space (Fig 19c, Fig 19d, Fig 19e).<sup>147</sup> He also created separate entrances to the chapel for the Laity from the doors on the south-western façade and for the Sisters through the corners dissecting the refectory, the tower and the cells (Fig 19f).<sup>148</sup>

Following the Sisters' request to provide seating for the entire community in the church, including the postulants and laypersons,<sup>149</sup> Kahn replaced the two benches and two pews with four, non-hierarchical, square groups of seating (Fig 19g), and then following Father Phelan's remark that pews in the Chapel might be inappropriate for an Order that believed in action, Kahn suggested storing portable chairs that would be used

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<sup>145</sup> Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> December 1966, note 1, the Louis I. Kahn Collection, Box 32.6; List sent by Mother Mary Emanuel to Louis I. Kahn, 13<sup>th</sup> March 1967, The Louis I. Kahn Collection, Box 32.7.

<sup>146</sup> Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, the Louis I. Kahn Collection, Box 32.6.

<sup>147</sup> Minutes, August 7, 1967, "Dominican Sisters Mother House", Box LIK 32, The Louis I. Kahn Collection; Changes in Covent Program after meeting, 7<sup>th</sup> August 1967, The Louis I. Kahn Collection, Box 32.7.

<sup>148</sup> Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, the Louis I. Kahn Collection, Box 32.6.

<sup>149</sup> Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Mary Emanuel, Sister Jane, and Sister Monte, The 22<sup>nd</sup> of July 1966, pp.1-2, The Louis I. Kahn Collection, Box 32.6.

when needed and leave the space empty.<sup>150</sup> However, once again, reluctant to completely erase the traditional seating arrangements, Kahn decided to leave some of the seats along the perimeter and marked the traditional seating area by embedding paving on the floor and the natural light penetrating through the church's ceiling. As well he suggested casting in concrete the interior cubical space in contrast to its surrounding ambulatory (where the seats were located), its narthex, and the abstracted apse which were to be built out of brick (Fig 19h, Fig 19i, Fig 19j).

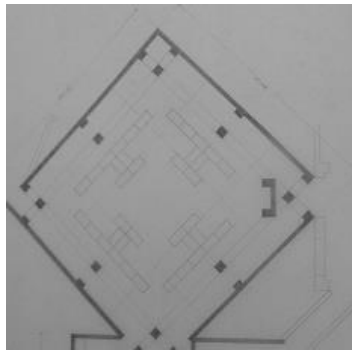


Fig 19k

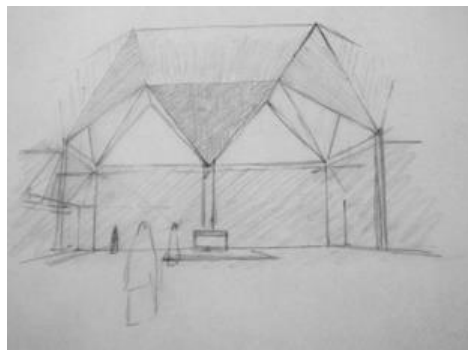


Fig 19l

Fig 19k: A plan of the chapter house showing the inbuilt stone elevated podium and surrounding benches .  
Fig 19l: The empty concrete interior space of the chapter house with the stone elevated podium in the east and the openings in the ceiling's perimeter.  
(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

In the chapter house, Kahn first proposed to locate on the East end an elevated podium from which the rule was read, and to surround it with stone benches aligned along the room's perimeter (Fig 19k). Later on, he omitted the stone benches and suggested using mobile temporal chairs instead. Again, light which penetrated through the chapter house's ceiling marked the area of the missing benches on the floor, and the

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<sup>150</sup> "Changes in Convent Program", Aug 7<sup>th</sup> 1967, Dominican Sisters Mother House, Box LIK 32, Louis I. Kahn Collection.

elevated stone podium remained intact so that the traditional seating arrangement was symbolically manifested in space (Fig 19j, Fig 19k).

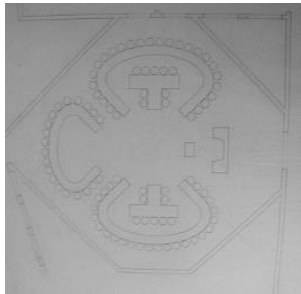


Fig 19l

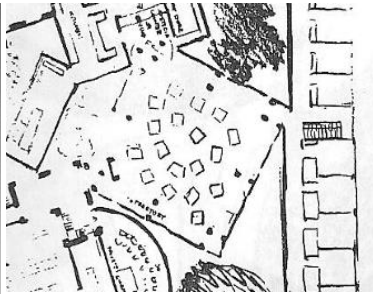


Fig 19m

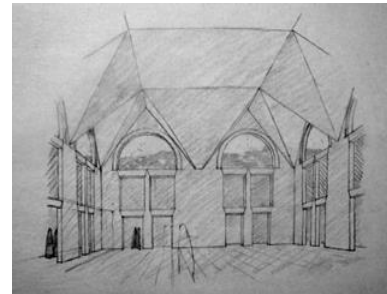


Fig 19n

Fig 19l: Plan of the refectory showing the raised pulpit on the east and the communal stone tables around it.

Fig 19m: Plan showing the movable dispersed coffee tables in the refectory.

Fig 19n: View showing the interior concrete empty space of the refectory with semi secular windows in its ceiling.

(From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

In the refectory, Kahn suggested locating large communal tables surrounding a central elevated pulpit for the member reading the blessing (Fig 19l). Following the Sisters' request Kahn offered to leave the refectory's space empty and to replace the communal stone tables with dispersed movable coffee tables allowing conversation to take place, which would be stored and used only when needed.<sup>151</sup> However, Kahn's drawings show the refectory as an empty space in which light entering from the semi-secular openings in the ceiling mark the traditional seating he offered (Fig 19l, Fig 19m).<sup>152</sup>

<sup>151</sup> List sent by Mother Mary Emanuel to Louis I. Kahn, 13<sup>th</sup> March 1967, The Louis I. Kahn Collection, Box 32.7 Already in the notes from one of his first meetings with the Dominican Sisters Kahn writes that the refectory should "be keeping with double life: a. silence, b. Communication, conversation." Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Monte. 26<sup>th</sup> April 1966, p.4, The Louis I. Kahn Collection, Box 32.8.

<sup>152</sup> Notes from Louis I. Kahn and David Slovic's meeting with Mother Mary Emmanuel, Father Phelan, and other Sisters of the Order, 12<sup>th</sup> Nov, 1966, The Louis I. Kahn Collection, Box 32.8.

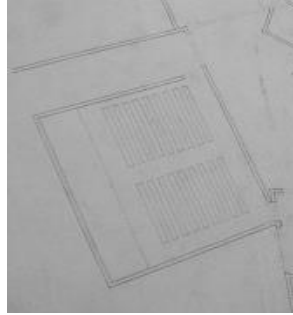


Fig 19o

Fig 19o: The Motherhouse's auditorium (From working drawings of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

In the auditorium designed for lectures, concerts, and other informal gatherings, Kahn suggested that chairs would be easily stacked and clamped together or hung on the surrounding walls (Fig 19o).<sup>153</sup>



Fig 19p



Fig 19q

Fig 19p: Kahn's mural in the Trenton Community Center (1954).

(From Susan Solomon, *Louis I. Kahn's Trenton Jewish Community Center*, Book cover).

Fig 19q: Kahn's murals he offered in the Jefferson National Expansion Memorial competition (1947).

(From Sarah Goldhagen, *Louis I. Kahn's Situated Modernism*, 37).

The manner in which Kahn intended to treat the empty concrete interiors remained unspecified – were they planned to stay blank, open for change to present paintings by the Sisters, which might describe the activities in the Motherhouse's

<sup>153</sup> List sent by Mother Mary Emanuel to Louis I. Kahn, 13<sup>th</sup> March 1967, The Louis I. Kahn Collection, Box 32.7; Notes from Louis I. Kahn and DCSP's meeting with 7-8 Sisters, 16<sup>th</sup> Feb 1966, The Louis I. Kahn Collection, Box 32.6.

interiors, like the frescos in the Franciscan Convents and churches such as those he saw in San Francesco in Assisi (Fig 11d, Fig 11e)?, Or did Kahn intend to offer himself to paint some of the walls with murals as he had in the Jefferson National Expansion Memorial competition (1947), or in the Trenton Community Center (1954, Fig 19p, Fig 19q)? In any case, Kahn's suggested strategy to reconcile Monastic tradition with a desired modern Dominican Motherhouse is remarkable.

## Poverty



Fig 20a

Fig 20a: Vaulting in Thoronet.

(From <http://paulgilbertphoto.com/wp-content/uploads/2012/01/BW-Thoronet-arches.jpg>, 10.02.2012).

During the design process Kahn learnt that the Sisters restrained themselves from the magnificence projected by the Cistercian compounds he had always admired, regarding it as denial of poverty, and saw architecture as spiritual rather than a physical pursuit, thus setting a framework in favor of more modest architecture.

It is interesting to note that both the Benedictines and the Cistercians regarded poverty as an important value to be followed by one who aspired to serve the divine. The



Benedictines denounced personal property including one's own body.<sup>154</sup> The Cistercians respected austerity, rejected donations, avoided holding any possessions including churches, alms and other resources (which were usually obtained by Benedictine monasteries) as described by one of the Cistercian Abbots:<sup>155</sup> "Our food is scanty, our garments rough; our drink is from the stream and our sleep often upon our book. Under our limbs is but a hard mat; when sleep is sweetest we must rise at a bell's bidding... Everywhere peace, everywhere security, and a marvelous freedom from the tumult of the world. Such unity and concord is there among brethren, that each thing seems to belong to all, and all to each...To put all in brief, no perfection expressed in the words of the gospel or the apostles, or in the writing of the fathers or in the sayings of the Monks of old, is wanting to our Order and our way of life."<sup>156</sup>

Such poverty, however never implied a rejection of embodiment and physical beauty perceived through the senses as a way to God. Originally, Cistercian houses were simple, usually built from bare monochrome stone, lacked extravagant aesthetic expressions, ornamentation and sculptures, and figurative decoration which could distract the soul from working God.<sup>157</sup> The Monks' rooms were colorless, equipped with few pieces of wooden furniture, and some had a small sculpture of the Madonna in

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<sup>154</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*: 26-28.

<sup>155</sup> St. Bernard, the founder of the Order, preached towards the victory of spirit above physical weakness of the flesh. Even his appearance testified about these ideals. He was a thin and tall figure, who suffered gastric disorder that gave him a weak and fragile look. Ibid., 174- 81. Also see Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities* 75-76; Louis J. Lekai, *The Cistercians: Ideals and Reality*, Kent, Ohio: Kent State University Press, 1977, pp. 13-14, 44; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 67-70.

<sup>156</sup> A Cistercian Monk quoted by Knowles, *Christian Monasticism*: 90-92.

<sup>157</sup> Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*: 174-75., Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities* 75-76; Louis J. Lekai, *The Cistercians: Ideals and Reality*, Kent, Ohio: Kent State University Press, 1977, pp. 13-14, 44; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 67-70.

them. As Bernard himself commented on Romanesque columns' capitals: "What are those laughable monstrosities doing in the presence brethren reading in the Cloister, such extraordinary perverted beauty and such accomplished ugliness?" Others expressed their aversion to the unclean apses, wall paintings, composite human and animal figures and the richness worldly elements in all sculpture.<sup>158</sup> However, the spread of the Monastic Orders resulted in an abundance of endowments, including land and property. The praising of hard work, devotion, and personal denial resulted in the development of agricultural skills in farming, fishing, mining, and smelting, craftsmanship, and building skills.<sup>159</sup> Endowments brought about the enlargement of the monasteries' properties and to the unification of land estates. Mastering of agricultural skills promoted the production of high quality goods and their marketing (by those who were restricted to consume them) leading to the accumulation of wealth; and building skills at impressing art and architecture.<sup>160</sup>

In the 13<sup>th</sup> century, to associate itself with the secular urban communes that rebelled against the feudal lords and to stand in opposition to the church's occupation with materialized life, their holding and management of property and land, the Dominican Order declared itself as a fervent, moral, and poor Order. They followed the

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<sup>158</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 70-72. St. Bernard quoted and translated by Braunfels.

<sup>159</sup> The Benedictines gave clerical services in return for which the nobility gave donations, and the Benedictines slowly turned into a rich order. "Gift Giving in the Great Tradition: The case of Donations to Monasteries in the Medieval West", *European Journal of Sociology* 36 (1995), 209-243.

The *Conversi* gave the Cistercians donations of land and assistance in labor to assured their proximity to the sacred life. Kaelber, *Schools of Asceticism - Ideology and Organization in Medieval Religious Communities*: 72-73; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 67-73.

<sup>160</sup> As the rule itself indicates: "If there are craftsmen in the Monastery, they should exercise their craft – if the Abbot allows it – with all modesty. If one of them is overweening on account of his skill in his craft, let them be removed from this activity. He should not apply himself to it unless he has humble himself and the Abbot given him leave". Document No. I, Ch. 57, in Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 11.

idea of the Gospel, emphasized the evangelist wandering life style, rejected the importance of manual labor, denounced craftsmanship and decoration, and adopted begging as a means to earn money, choosing to be supported by alms.<sup>161</sup>

The Dominican Order was not supposed to possess any land, base venues, and impressive traditional Monastic architecture was questioned. The architecture of the Dominicans was, to a great extent, determined by the art donation, alms, and money given by the urban bourgeois. The urban guilds took an important part in shaping the Convent, and in many ways took over the role of the Cistercian Monks and the *converse*, while the Friars concentrated on their spiritual tasks. In a way, the Dominican friary was the work of the town – it was built of additive parts, and was always ready to accept additional courts and buildings. Stone building elements, exquisitely used by the Cistercian Monks, were abandoned and most of the spaces were covered with wall paintings and other artistic donations.<sup>162</sup>

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<sup>161</sup> O.P., *St. Dominic and his Work*: 8-10 .On the importance of poverty: "If you would be perfect, go, sell what you possess and give to the poor, and you will have treasure in heaven; and come follow me" (Matt. XIX. 21, quoted by Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages* 33, 142; Knowles, *Christian Monasticism*: 115-16; George Zarnecki, *The Monastic Achievement* (New York: Thames and Hudson Limited, 1972). 112-14. Indeed, until the 15<sup>th</sup> century the Order almost had no property or possessions, and it was only later that Pope Martin V and Sixtus the IV permitted the Order to hold immovable property. Compton, *The Great Religious Orders*: 140.

<sup>162</sup> Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 125-26, 31, 40-45.

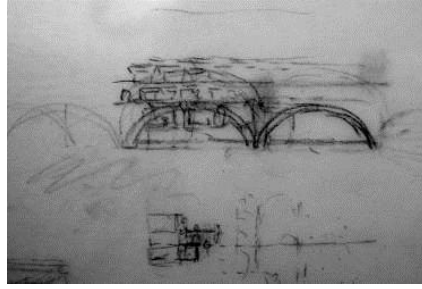


Fig 20b

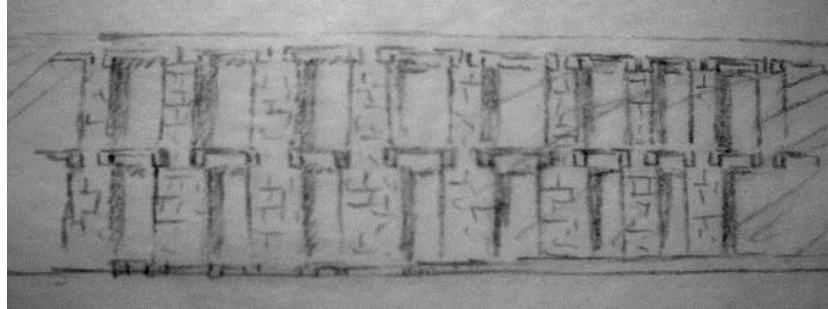


Fig 20c

Fig 20b: Kahn's drawings of magnificent structures, endowed with arches and circular windows, enriched with exquisite elaborated details.

Fig 20c: Kahn's drawings of brick walls, giving the impression that within them was a restraint desire to overcome abstraction.

(From Kahn's personal sketches of the Motherhouse for the Dominican Sisters, the Louis I. Kahn Collection).

With his appreciation of austere Monastic architectural elements like those of Thoronet with its thick walls, double arcades, and vaulted ceilings as well as plainly and carefully cut stones, Kahn envisioned the Motherhouse as a magnificent structure endowed with arches and circular windows, enriched with exquisite elaborated details, built mostly of stone (Fig 20a, Fig 20b).<sup>163</sup> The Dominican Sisters explained to Kahn that the articulated details he was offering did not suit the Dominican philosophy of poverty.<sup>164</sup> As the dialogue on the offered designs progressed, it was agreed that brick

<sup>163</sup> In his notes from one of the first meetings with the Dominicans Sisters Kahn writes: Materials: Stone and concrete; Arches – Structure, Notes from Louis I. Kahn and Galen Schlossers' meeting with Sisters Jane and Monte. 26<sup>th</sup> April 1966, p.4, The Louis I. Kahn Collection, Box 32.8.

<sup>164</sup> Letter from Mother Emmanuel Mary to Louis I. Kahn, 16th Dec. 1966, The Louis I. Kahn Collection, Box 32.8.

Sullivan adds that the value of poverty also became a way of the Sisters to still identify themselves from the American culture of materialism. Sullivan, "Revolution in the Convent : women religious and American popular culture, 1950-1971," 50.

and concrete would replace stone.<sup>165</sup> Vaulting arcades and circular windows turned into simple, measured, and austere rectangular openings. However, remnants of the magnificent buildings' aspirations remained in the intriguing assemblage of the brick walls, giving the impression that they contained a restrained desire to overcome abstraction and transform themselves into tactile walls enriched with detailing (Fig 20c).

The Sisters also expressed their dissatisfaction with the size and extravagance of the compound, and were concerned with its overall cost.<sup>166</sup> Kahn's first estimation of July 1966 for the 160,660 sq. ft project (14,456 m<sup>2</sup>, excluding basement) was \$3,999,000, while the budget for the project was only \$1,500,000.<sup>167</sup> In September 1966, due to economic constraints, and in accordance with the Dominican life dedicated to voluntary Poverty,<sup>168</sup> the Sisters decided to suspend the project.<sup>169</sup> In December 1966 Kahn was asked to reduce the size of the building and to prepare drawings for the first stage with a budget of \$1,000,000.<sup>170</sup> In Feb 1968 Kahn reduced the total area of the compound to 60,327.5 sq. ft. and the cost to \$1,954,175,<sup>171</sup> and then in August 1968 he managed to reduce its size to 55,800 Sq. ft., and the estimated cost to \$1,592,036, reducing the

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<sup>165</sup> List sent by Mother Mary Emanuel to Louis I. Kahn, 13<sup>th</sup> March 1967, The Louis I. Kahn Collection materials considered in the cost estimate dated 13<sup>th</sup> August 1968, The Louis I. Kahn Collection, Box 32.8.

<sup>166</sup> Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Mary Emmanuel, Sister Jane, and Sister Monte, the 22<sup>nd</sup> of July, 1966, p. 4, The Louis I. Kahn Collection, Box 32.6; Notes from Louis I. Kahn and D.C.S. Polk's meeting with Mother Mary Emmanuel, Sister Jane, and Sister Monte, the 10<sup>th</sup> of Oct, 1966, p. 1, The Louis I. Kahn Collection, Box 32.7.

<sup>167</sup> Kahn made efforts to squeeze the size of the project and reduce its estimated costs. In July 1966 Kahn offered to reduce about 35,000 sq. ft. (3,252 m<sup>2</sup>) of the project but estimated cost was still very close to the initial one. In December 1966, using a different price-per-square foot, Kahn estimated the project cost as \$3,500,000. Merrill., *Louis Kahn : on the thoughtful making of spaces : the Dominican Motherhouse and a modern culture of space* 68-48, 58.

<sup>168</sup> Letter from Mother Emmanuel Mary to Louis I. Kahn, 16th Dec. 1966, The Louis I. Kahn Collection, Box 32.8.

<sup>169</sup> Letter from Mother Emmanuel Mary to Louis I. Kahn, 7<sup>th</sup> Sept. 1966, The Louis I. Kahn Collection, Box 32.8.

<sup>170</sup> Letter from Mother Mary Emmanuel to Louis I. Kahn, 28<sup>th</sup> Dec. 1966, The Louis I. Kahn Collection, Box 32.6

<sup>171</sup> Calculation of sq. ft. and costs, 28<sup>th</sup> Feb 1968, the Louis I. Kahn Collection, Box 32.7.

architects' fees.<sup>172</sup> However, the Sisters were not even willing to promote the building of the reduced scheme, while Kahn insisted that he could not reduce his scheme more than he had already done. Taking into consideration that Kahn waived his own fee for the project from the beginning, it is likely that his unwillingness to reduce the scheme was not related to its financing but rather a result of a sincere conviction that further tampering with the project would harm the Monastic characteristics of the compound, which although serving a rather modest Order, in his opinion had to remain in touch with its historical precedents.

#### **Part 4: The Mnemonic Historical Image and Program** **in Kahn's three Design Schemes**

In all of the three design schemes Kahn suggested what he believed would serve as an appropriate Motherhouse for the Dominican Sisters. The differences between the three designs, which at a first glance might seem to be exclusively formal, express different propositions about the extent to which historical memory should be embedded in the new structures, and the degree of erasure and remembrance offered in each design proposal was largely affected by Kahn's own knowledge of the Sisters' concepts and practice of religion and their Conventual life. The differences between the three design proposals reflect a process that spanned over four years, in which Kahn had modified his ideas on what the Motherhouse should be in the complicated cultural, social, and religious context of the 20th century, in view of the past historical traditions, present events, and future aspirations of the Sisters' congregation.

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<sup>172</sup> Principal materials considered in the cost estimate dated 13<sup>th</sup> Aug. 1968, The Louis I. Kahn Collection, Box 32.8; Notes from Louis I. Kahn's meeting with Dominican Sisters, 12<sup>th</sup> Nov. 1968, The Louis I. Kahn Collection, Box 32.12.

Thus, the first proposal submitted to the congregation before Kahn even met with them and before the enriching dialogue and discussion with the Sisters had taken place. Kahn's first design scheme was based mainly on his acquaintance with the architectural characteristics of Cistercian monasteries and with the life of the Benedictine Monks. On the whole it was mostly an interpretation and re-institution of historical Monastic complexes which Kahn was familiar with, in which Kahn artistically and skillfully re-composed the different parts of a typical Monastery.

The second scheme was offered by Kahn after meeting with the Sisters and learning about their unique perception of Christianity and specific lifestyle. In it Kahn also started taking into consideration the worldwide changes in Christian liturgy and Monastical life-styles introduced by the Second Vatican Council. In it, Kahn rethought his first proposal so that it would suit the Sisters' up-to-date specific needs and desires.

The third scheme was presented by Kahn after the first and second proposals were discussed and criticized by the Sisters. In it Kahn both detailed the different components of the Motherhouse according to the specific rituals of the Sisters, while additionally finding the means to creatively weave the Sisters' specific needs and desires and the memories of past traditions into the architectural spaces, programs and materials of his proposed Motherhouse. While Kahn's fuller understanding of the layered historical context allowed him to suggest a mature architectural structure, the Sisters at this point were already exhausted from the philosophical discussion and were asking Kahn to provide a simple practical solution for their needs.

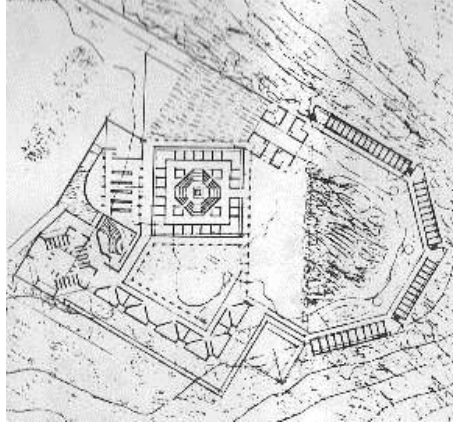


Fig 04a

Fig 04a: First floor level of the first design scheme presented to the Sisters in Summer 1966  
 (From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Works 1935-1974*, 302).

In the first scheme for the Motherhouse, Kahn recommended a relatively balanced, harmonious architectural structure with a large planted inner courtyard surrounded by massive masonry buildings, of which the largest and most recognizable ones were the tower and the church, and whose image resonated with historic Monastic compounds. The building suggested a communal, introverted, secluded, and contemplative lifestyle, segregated from the outer world, whose architecture provided a strict framework for the following of sequential activities that resonated with Christ's life and with the heavenly order.



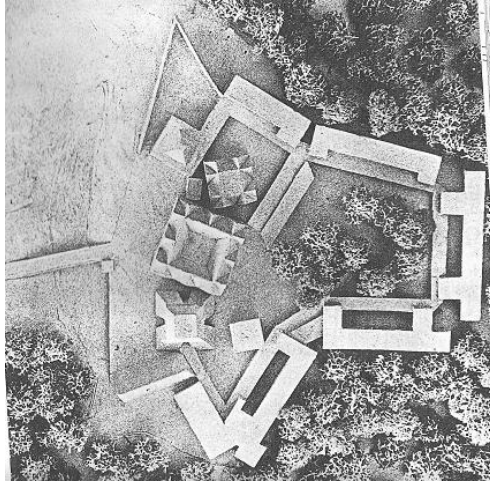


Fig 05a

Fig 05a: Clay model of the second design scheme presented to the Sisters in Winter 1967 (From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Works 1935-1974*, 304).

Kahn's second design scheme expressed his understanding that the Dominican Sisters take on belief differed from that of Monastic Orders with which he was familiar, and brought forth his willingness to reconsider his architectural proposition in relation to the Sisters' unique way of life and worship. The structure suggested by Kahn, with its reduced Cloister and public buildings, and its large number of residential units, looked more like a communal neighborhood than a familiar Monastery. The design suggested a moderate communal way of life, and its more dynamic organization offered a framework to pursue activities in flexible, individual manner.

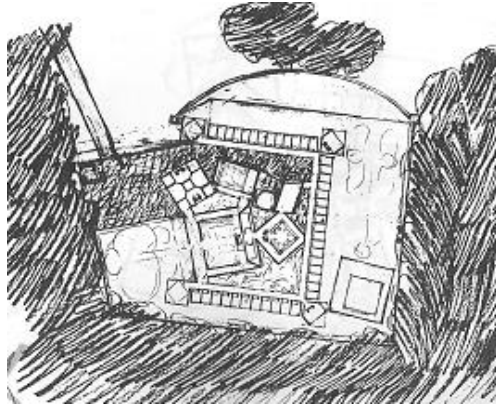


Fig 06a



Fig 06b

Fig 06a, Fig 06b: The third design scheme, Winter 1967-Winter 1969.  
(From Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Works 1935-1974*, 307).

Kahn's third design scheme and the detailing of each of its buildings expressed his efforts to integrate his knowledge of Monastic compounds with his understanding of the Sisters' take on belief and their specific requirements by offering architectural places and spaces in which the Monastic image and way of life were experienced as lost memories upon which the desired new Motherhouse and the life encased in it could be offered and materialized. Traces on the ground, such as those of the square contour surrounding the complex, the rectilinear contour in front of the church, the dark marks in the north western corner in front of the tower, and the exterior walls of the cells which extended to form free standing frameworks, are but some of the fragments Kahn used to allow a reading of the structure as a Monastic compound. Kahn did not talk about the architectural treatment of the traces mentioned above, and unfortunately his drawings remained too abstract for us to come to any firm conclusions. Nevertheless, taking into consideration the fact that Kahn did not regard landscape architecture and plantation as "a drawing" in which one puts or stamps trees "here and there," but as a means that "should

make the plan as an instruction from something that will grow into being,”<sup>173</sup> Kahn’s unfinished work provides a fascinating ground for our architecture hypothesis – were the traces were to be built in stone, brick, concrete, or other solid material, and if so, were they to be projected above the ground or carved / sunken into it? Were the traces to be planted, and if so with what kind of plants – with evergreens or seasonal plantation, with low bushes or high trees? Did Kahn consider the possibility that the traces on the ground and the open, suspended free frames above the Sisters’ cells, in the top of the library, and the open frameworks of the bells in the tower, would become suitable places for the growth of vegetation such as hyssop or climbers? All these considerations would have affected the manner in which the mnemonic architectural image would be experienced – as a permanent structure or as a fleeting apparition whose appearance would differ according to the time of the day, the seasons of the year, and the passage of time, and thus would further emphasize the temporal aspect of history, but, at the same time would challenge its superficial conception as linear and progressive.

The third scheme also proposed a program in which traces of a lost, Monastic, communal Cloister-oriented way of life could be re-experienced as tactile imprints in the proposed Motherhouse. To mention but a few incidents: when entering the imposing structure of the gate, one was exposed to fragmented views of a deserted small inner courtyard – remains of the cultivated large Monastic Cloister. Entering it one realized that the courtyard was but a dead end towards which the Motherhouse’s buildings turned their

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<sup>173</sup> Louis Kahn “Silence and Light, 1969” in Louis I. Kahn, *Writings, Lecture, Interviews* (New York: Rizzoli, 1991), 239.

backs – a nostalgic experience of the lost role of the place as an organizer of Monastic life. Ascending the tower one reached its top, encountering an empty hollowed structure whose bells were missing, a memorial for the ordered Monastic routine. From the tower one was invited to enter the library and the church, the most private functions of the Monastic Orders, which had been turned into places for the most public functions in the Motherhouse. However, from the library's roof one could see the remains of the Monastic Cloister and be reminded of its historical past. The church was experienced as a non-oriented cubical building, a lecture hall with a raised podium at its center, open for participation by whoever was willing to take part, but light which penetrated from the ceiling washed the paving on the floor, marking the isles of the missing seating, hinting that it once functioned as a traditional church. In addition, in the Eastern part of the church, behind the moving wooden screens, was a sanctuary which could be used when needed. When circulating the ambulatory located behind the screens and defining the interior space, and arriving at the church's south-eastern corner one found a secretive entry to two little, dark oriented rooms – one serving as a confession room, the other as a private oriented chapel with marks of light on its eastern façade – a memory of the church's oriented sanctuary. From the church one could enter the refectory, an open structure with movable tables whose past communal traditional character was experienced via the raised stone pulpit on the East, with the lights entering from the semi-secular openings in the ceiling marking the position of the communal Monastic tables. When going to the Sisters' cells, designed as individual private rooms with large windows, allowing private views onto the woods, views of the deserted inner courtyard were experienced from the corridors connecting the cells. In addition, between the wings

and on the cells' roofs Kahn located open empty spaces that stood for the memory of the shared Monastic way of life.

### **Part 5: Kahn's Poetic De-Structuring of History in the Motherhouse**

During the design process Kahn became familiar with the temporal dimensions of monastic and Conventual architectural expressions, and the manner in which these were related to the Orders' liturgy, rules, values, and ways of life. He also became acquainted with their behavioral patterns, and the extent to which they were affected by the particularities and needs of the era in which the different Orders crystalized in the societies that they served.

Kahn was acquainted with the differences between Monastic Orders. There were those that emphasized solitude as essential for getting as close as possible to the ideal kingdom of Christ in heaven, and for these he suggested monasteries in which life could be carried in seclusion from the worldly activities, while putting serious obligations and limitations on those who wished to join them. Other Conventual Orders emphasized the importance of brotherhood, companionship, evangelism, and pastoral work within the community as essential to get as close as possible to Christ's ideal life on earth, and for these were suggested Convents and houses that promoted integration with the outside world. Yet, Kahn also realized that all Orders' compounds aimed to allow people who wished to devote themselves to Christianity to experience life close to the life lived by

Christ, and that ultimately they all found their justifications in the Gospel, the Old and New Testaments.<sup>174</sup>

All of Kahn's three design schemes show he was highly motivated in his search to create a new, original institution for the Dominican Sisters, one that would be appropriate to the modern era, and hence he constantly altered his design while taking into consideration the Sisters' ideas, needs, thoughts and doubts. However, while Kahn accepted that modern Conventual life would not be of the same nature as it had been in the past, he also insisted that the Motherhouse must maintain certain historical continuities with its Monastic and traditional Conventual habits and traditions; otherwise the meaning of modern Conventual life would decay. In his designs for the Motherhouse Kahn preserved some of the basic chords embedded in the Monastic ideal: a certain degree of isolation required in order to withdraw from the worldly matters, some degree of communal participation, some degree of incitement towards spiritual occupations, and some degree of an ordered routine. Kahn carefully echoed these chords as fragments of images and as traces of rituals whose validity had weakened, but which nevertheless provided an essential and suitable ground for the reconsideration of new aspirations, for the development of a desired Motherhouse. Through his work, Kahn promised not to give up essential ideas reflected in canonical traditions, related to the life of Christ – ideas that have always founded the basis of spiritual Monastic / Conventual life.

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<sup>174</sup> Knowles, *Christian Monasticism*: 7-11; Giles Constable, *Culture and Spirituality in Medieval Europe* (Aldershot, Hampshire, Great Britain: Variorum, 1996), 33-35; Lawrence, *Mediaeval Monasticism - Forms of Religious Life in Western Europe in the Middle Ages*: 290-92.

Moreover, when the Sisters, who were short of a sufficient budget, suggested building the cells, recreation rooms, laundries, kitchen and refectory first, and the other parts in later stages, Kahn insisted that the tower, the library and the church, which he saw as essential elements of the compound, must be built in the first stage, and suggested using the plantation to mark the elements which would be built in following stages. This, he believed was the only way to promise that “that which is built” would “invite construction of the whole” that would “express the real meanings of the parts.”<sup>175</sup>

Finally, when Kahn realized that the destruction and erasure of historical ideas had reached such a degree that the very essence, (or what Kahn termed the “proto form”) of the Monastic idea, which included a degree of seclusion and contemplation, had ceased to exist, and that his design was turning into a compound that did not reflect this essence, he was unwilling to change his proposed designs any longer. Always aiming at a new poetic narrative constructed from historical fragments, Kahn acknowledged that a multi-layered reading of the project's ideas was possible, but only without ever giving up on the original proto-form of the Monastic situation.

## **Part 6: The Motherhouse after Kahn**

On March 18<sup>th</sup> 1969, Mother Mary Bernadette OP, from the Dominican Congregation of St. Catherine de Ricci, sent Kahn a letter informing him about the termination of the project. She thanked Kahn for the “enriching experience and great

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<sup>175</sup> Notes from Louis I. Kahn and David C.S.Polk's meeting with Mother Emmanuel, Sister Monte, and Sister Jane, the 10<sup>th</sup> October, 1966, pp.1-2, The Louis I. Kahn Collection, Box 32.7.

pleasure to have been associated” with him and his staff “in this venture”, and that the Sisters had “enjoyed and profited from” and expressed their “sincere appreciation to you for your [Kahn’s] understanding, patience and wisdom,” but emphasized that the Sisters did not intend “merely delaying our project for a year or two” and suggested that hence would be best for Kahn’s and the Sisters “to conclude our mutual agreement now.”<sup>176</sup>

Mother Mary Bernadette OP explained that “after soul-researching and discussion” the congregation had decided to discontinue the plans for a new Motherhouse. She explained that “aside from money which is, of course a very real factor, we face at the moment constantly changing attitudes towards the manner and setting of religious life, which opens up distinct forms this life is taking, and will continue to take in the future. In these days of re-evaluation, re-newal and re-study, we feel that the complex building we originally envisioned would dictate decisions on our form of life rather than permit us to vary our life to fulfill our vocation amid the needs of today. We are in unanimous agreement that we cannot proceed with the original plans at this time,” and added that “for the present” the congregation “have decided to provide for our aging Sisters at one of our other Convents” and that “at Media we shall make some renovations to meet immediate needs.”<sup>177</sup>

The St. Catherine de Ricci congregation did not differ from many other Conventual congregations in the United States at the time. Embracing the reforms

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<sup>176</sup> Letter from Mother Mary Bernadette OP. to Louis I. Kahn, sent on the 18<sup>th</sup> of March, 1969, received in Kahn's office on the 20<sup>th</sup> of March 1969, The Louis I. Kahn Collection, Box 32.8.

<sup>177</sup> Letter from Mother Mary Bernadette OP. to Louis I. Kahn, sent on the 18<sup>th</sup> of March, 1969, received in Kahn's office on the 20<sup>th</sup> of March 1969, The Louis I. Kahn Collection, Box 32.8.



suggested by the Second Vatican Council resulted in their opening their Cloister and the creation of strong ties between the Sisters and the Laity, so that many Sisters renounced traditional practices. The extreme involvement of the Sisters in the secular sphere in which values of justice, freedom, and equality of life were cherished, were not supported with new structures of religious life. This brought about a questioning of the religious orders, and promoted a hybrid spirituality that supported a humanistic, authentic way of life, caused the democratization and decentralization of religious congregations, to an extent that prevented many of the congregations from achieving stability, and brought about profound questioning, debates, and struggles.<sup>178</sup>



Fig 21a



Fig 21b

Fig 21a: The Dominican Sisters back when all Sisters of all Orders wore habits.

(From <http://gesulord.wikispaces.com/Dominican+Brother+and+Sisters>, 10.04.2011).

Fig 21b: Dominican Sisters today.

(From <http://ct.dio.org/diocesan-life/diocesan-life-articles/merged-dominican-organizations-hold-first-conference.html>, 30.01.2012).

Religious institutions slowly lost their authority and importance, their role in society was questioned, and many of the congregations experienced a decline in enrolment and some were closed. The crisis of identity was followed by a crisis of representation (Fig 21a, Fig 21b). The manners in which Sisters should be represented

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<sup>178</sup> Sullivan, "Revolution in the Convent : women religious and American popular culture, 1950-1971," 102-03. Sisters themselves spoke about their confusing new identity: "For the time, people are a bit fascinated by the 'new nun'. We like the attention and the approval. When some persons or groups challenge us or question us about our values, we do not like to answer in a way that shatters our image or result in disapproval. Integrity may be more difficult for us than we would have suspected. In our eagerness to maintain approval, we may forego witness." O'Brien quoted in Ibid., 103.

and recognized in the society were debated, and the relevance of the Sisters' habits and institutions, which embedded ideas of obedience, hierarchy, discipline, order, and unity, were also placed in doubt. Creating structural frameworks in which individuality, freedom, and action were more important than communal responsibility, social belonging, and contemplation put into question the formation of any viable institutions.<sup>179</sup> Thus, the democratization of the Convent, in a way, brought about its slow disappearance. Some congregations adopted objective typological structures that did not reflect the rules and the ideas that determined the way of life of their Orders, while others founded new buildings that looked like domestic compounds and could not be differentiated from secular institutions.<sup>180</sup>



Fig 21c

Fig 21c: Media Motherhouse (From the Dominican Sisters of St. Catherine de Ricci's Archives).

For a while the Dominican Sisters of St. Catherine de Ricci used the house in Media, located on the lot on which Kahn's design was sited, but in 1989 the Sisters decided to sell the lot and the house they had used (Fig 21c).<sup>181</sup> The Sisters of St.

<sup>179</sup> Ibid., 105-07.

<sup>180</sup> Ibid., 6, 43, 57, 104, 10,12-15, 17, 29. See also Table 3, p.113 & Table 4, p.115 – Number of Sisters from 1967-1971; Braunfels, *Monasteries of Western Europe, The Architecture of the Orders*: 221-26.

<sup>181</sup> The process of selling the property in Media took about eight years to be finalized due to an economic downturn in the US right after we signed the contract with a developer. The developer put up ten upscale homes and also sold the main house (Motherhouse) and garage-cottage complex "as is" with no renovations (leaving that up to the buyers). One of the benefactors of our congregation bought the last new house just to bring the whole thing to a

Catherine de Ricci still use the mansion in Elkins Park. No other “venture” aiming to redefine the character of a modern Motherhouse for the Sisters has been undertaken since. The unique design process that Kahn and the Sisters took part in, and the opportunity to come up with a new desired institution – one that would bring forth future aspirations, put aside obsolete religious ideas, acknowledge the physical ruination and secularization of Benedictine and Cistercian monasteries, but would still be tied to a shared past – was dismissed, and the possibility of using architecture as a framework to create a common ground for belonging on the one hand, yet triggering meaningful action on the other was, unfortunately, suspended.

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close. I am happy to report that he sold it at a nice profit several years later. Conversation with Sister Carolyn Krebs, The Dominican Motherhouse of St. Catherine de Ricci, 18<sup>th</sup> January 2013.

## Chapter Four:

### Mediating Architectural History in Design

#### The Hurva Synagogue, the Old City of Jerusalem

1967-1974



Fig 02a



Fig 02b



Fig 02c

Fig 02a: The Ashkenazi Hurva Synagogue in the Old City together with the Holy Sepulcher before its destruction in 1948.

Fig 02b: The Hurva Synagogue in ruin 1948-1967.

(From pictures of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 02c: The Hurva Synagogue in 2010.

(From [http://www.jerusalemshots.com/Jerusalem\\_en129-14213.html](http://www.jerusalemshots.com/Jerusalem_en129-14213.html), 15.03.2011).

Right after the 1967 Six-Day War, Louis I. Kahn received a commission to design a Synagogue in the midst of the Jewish Quarter, on the ruins of the historical Hurva Synagogue, and within a walking distance from Temple Mount and its remaining Wailing Wall.<sup>1</sup> Building a new Synagogue in the intricate historical surroundings of Jerusalem's Old City, with its monuments and its ruins, was a singular opportunity for Kahn to develop his unique approach to architectural history.<sup>2</sup> Kahn worked on the commission between 1967 and 1974. Of the three designs proposals for the Synagogue, none were built.

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<sup>1</sup> Larson Kent, *Louis I. Kahn, Unbuilt Masterworks* (New York: The Montacelli Press, 2000). 127-28.

<sup>2</sup> Ibid.; Yehuda Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site," *Ha'aretz* 1968.

The history of the Hurva Synagogue and the nearby Synagogues were affected from both worshippers' Diasporadic heritage, and Jerusalem's foreign reigns throughout history. The location of the Synagogue in the Holy Land, in the new established Israeli state brought forth the importance to consider ancient Hebraic heritage and the developing Zionists' ideas. The typical Rabbinic Synagogue prototype, which Kahn was familiar with, did not suit the new Israeli context and did not reflect the desires of the founded state. The design process served Kahn and his clients as a means to apprehend the nature of a yet un-known modern Synagogue. Kahn slowly defined his position via studying relevant historical precedents, and considering them in relation to present critiques and what he believed would be Israel's future aspirations, while the clients' were constantly searching for ideas which would reflect the complicated layered religious and national context in which the project was developed. Although the design process was complicated, and followed by many obstacles, Kahn managed to propose unique design schemes for the Synagogues, one of which could have been built if Kahn did not pass away suddenly after his design was, at last, accepted.

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In this chapter I will highlight Kahn's intriguing and fascinating designs for the Hurva Synagogue, and examine their relation to historical precedents.<sup>3</sup> I will demonstrate that through Kahn's consideration of ideas and concepts in relevant precedents, which he became acquainted while working on the project, and their integration with the history of the Hurva Synagogue and its environs, Kahn developed a unique architectural program for the Synagogue, in which changes in Jewish rituals were proposed deriving from conceptual ideas and even contentious beliefs. Thus, I will claim that Kahn's design addressed the Hebraic and Diasporadic past, dealt with the unstable present, and was open towards the developing rituals of the potential, unknown Israeli future.

First I will present the history of the Hurva Synagogue and the architectural challenges of designing a new Synagogue on its site. Shedding light on the variety of reasons for which a typical Synagogue did not suit Israel's needs. Having briefly acquainting the reader with the three design schemes Kahn proposed, I will discuss Kahn's studies of historical precedents, including ancient structures dating back to biblical times, the Tabernacle, the Temples in Jerusalem, post-exilic Synagogues, and the historical Hurva Synagogue, and the ideas that have shaped them throughout history. A thorough examination of Kahn's models and personal sketches will demonstrate how the historical ideas, and the rituals practiced during different epochs Kahn absorbed found

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<sup>3</sup> While the Hurva Synagogue has been published the knowledge of Kahn's designs remained limited. Larson Kent uses virtual reality to construct the unbuilt Hurva Synagogue, to give more vividness to Kahn's designs, and to shed light on the manner in which the Hurva's materiality, light and structure give the impression of a ruin. Kent, *Louis I. Kahn, Unbuilt Masterworks*. Yasir Sakr dwells mostly on the political aspects of Kahn's design for the Hurva Synagogue. He stresses out the many ways in which it served as an anti-Temple differing itself from the Historical Temple and the Al-Aqsa Mosque and offering a new place of worship for a new modern secular Israeli state. Yasir Sakr, "The Subvertive Utopia – Louis Kahn and the Question of the National Jewish Style in Jerusalem" (The University of Pennsylvania, 1996). Eric Orozco was the first to suggest a connection between Kahn's designs to ancient biblical structures in which the oracle was consulted. Eric Orozco, "Hurvat haMidrash—the Ruin of the Oracle, The Hurvah Synagogue of Louis Kahn and the Semantics of Nationalism," *With the MIT Jerusalem 2050 Lecture Series: "Cities against Nationalism: Urbanism as Visionary Politics"* (2004). This work will further elaborate the relationship between the Hurva Synagogue and historical precedents.

new life in his designs. Then, I will re-evaluate the differences between the three design proposals, explore the degree to which memory was manifested in them, and assess Kahn's poetic de-structuring of history. I will show that Kahn's designs for the Hurva resonated with memory by being integrated into past traditions, bonded with an existential modern present and addressed the future, by offering a "temporalized space," providing poetic experiences being open to wonder and imagination and combining vast possibilities of embodiment within a finite, historical context. I will also present the discussions concentrating on the role of historical precedents for the future development of Jerusalem, as they were expressed in the Jerusalem International Committees convened in Jerusalem between 1969 to 1973, in which Kahn took an active part. Finally, I will address the work on the Hurva which took place after Kahn's death in 1974: The design of the commemorative arch constructed at the site in 1978, and the reconstruction of the former Hurva Synagogue by architect Nachum Meltzer, completed in April 2010, both, disappointing architectural manifestations, which were unfortunately adopted in Jerusalem.

### **Part 1: The Architectural Context and the New Architectural Challenge**

The site of the Hurva Synagogue had served the Jewish community since the 13<sup>th</sup> century. A Synagogue building erected in 1864 was, until its destruction in 1948, the tallest structure in the Old City (dominating its skyline, together with the Dome of the Rock and the Church of the Holy Sepulcher) and the largest, most active Ashkenazi Synagogue in Jerusalem (Fig 02a). Destroyed during the War of Independence, the Synagogue lay in ruins during the period of Jordanian rule over the Old City, 1948–1967

(Fig 02b).<sup>4</sup> Reconstruction of the 19<sup>th</sup>-century Hurva Synagogue began in 2005, and since April 2010 it has been open to the public (fig 02c).<sup>5</sup>

Ya'akov Salomon, the grandson of the Jewish leader Zalman Zoref, who initiated the foundation of the 19<sup>th</sup>-century Hurva Synagogue, visited the site soon after it came under Israeli control in 1967, and came up with the initiative to reconstruct the Synagogue.<sup>6</sup> Salomon contacted the Israeli architect Ram Karmi for the commission, who, together with his sister, the architect Ada Karmi, recommended hiring Louis I. Kahn for such a significant project. Kahn, who had been engaged with the Israeli project and involved in architectural discussions concerning the reshaping of Israel as a Jewish state since 1949 (when he volunteered to the Israel Housing Survey Committee, to advice on ways to cope with the housing of the waves of immigrants who were arriving to the young state), was familiar with the importance of the Hurva Synagogue and not surprisingly immediately accepted the offer.<sup>7</sup> Salomon reported: "Kahn was enthusiastic. He regarded my offer as an honor, even as an opportunity to execute the noblest of his commissions. With emotion and joy he agreed to come to Jerusalem as soon as possible to see the site.... He waived the fee and asked only to be reimbursed for direct

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<sup>4</sup> Aaron Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls* (Jerusalem Hemed Press, 1997), 74. Ibid.

<sup>5</sup> Abe Selig, "Old City's Hurva shul reopens," *The Jerusalem Post* (14032010).

<sup>6</sup> Ya'acov Salomon, *In My Own Way* (Haifa: Gillie Solomon Foundation, 1980), 284. Ya'acov Salomon was a descendant to the Hebrew community in Jerusalem and a fifth generation in Israel. He was the Son of Haim Salomon and the grandson of Yoel Moshe Salomon - the grandson of Mordechai Salomon, the son of Shlomo Zalman Zoref, who arrived in Jerusalem in 1812. Ibid., 24.

<sup>7</sup> Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

Salomon first consulted the minister of religious affairs, Dr. Zerah Wahrhaftig, who promised to take responsibility for the task and take action, but as Salomon indicates, did nothing. Thus, Solomon contacted a private architect himself. Salomon, *In My Own Way*: 249.

As Solomon points out since 1919 Kahn always stood for the service of Israel. Susan G. Solomon, *Louis I. Kahn's Jewish Architecture* (Waltham Massachusetts, Hanover and London: Brandeis University Press, University Press of New England, 2009), 13-29.



expenses.”<sup>8</sup> Kahn wrote: "Let me express my gratitude for your letter and the faith in the promise of this historical project"<sup>9</sup> – adding, a few months later, "I have received your letter with joy to know that I have been honored to express the spirit of history and religion of Jerusalem through my design of the Churbat Rabbi Yehuda Hachasid and its environs.”<sup>10</sup>

While working on the project Kahn tried to determine how his design for the Synagogue should relate to the multifaceted Israeli context, encompassing Diasporic heritage, ancient Hebraic memory, and a desire to create a new Israeli reality.

Diasporic memory has been an important component of the identity of the waves of immigrants who fled to Israel from all over the world, and aimed to preserve the rituals of the Diaspora. On the other hand, the establishment of a new state that was to serve as a melting pot for all exiles was followed with a unique desire to unite all people under one identity, either tied to an ancient, shared Hebraic past or based on a secular, new, spiritual Zionism. In addition, in the new Jewish state, Jews that for a long time had to strictly follow traditional rituals in order to preserve their identity in the Diaspora were no longer obliged to do so. As a result the concept and practice of Judaism in Israel was much more flexible and freer than in other places around the world. Most Israelis have continued to follow some fragments of inherited rituals, others have practiced several rituals in order

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<sup>8</sup> Salomon, *In My Own Way*: 285.

<sup>9</sup> Letter from Louis Kahn to Ya'acov Salomon from the 13<sup>th</sup> of August 1968 (Mayor Teddy Kollek & Architect Ram Karmi CC'd), Louis Kahn Collection, Box 39.1.

<sup>10</sup> Letter from Louis Kahn to Mr. Yehuda Tamir from the Ministerial Committee for Jerusalem (Mayor Teddy Kollek, Ya'acov Salomon and Ram Karmi CC'd), 28<sup>th</sup> of March 1969, Box 39.2, The Louis I. Kahn Collection.

to preserve their tradition, and more than a few considered Jewish in their cultural affiliation but have defined themselves as secular.<sup>11</sup>



Fig 04a



Fig 04b



Fig 04c

Fig 04a: The historicist exterior view of the Belz Great Synagogue, Jerusalem.

Fig 04b: The traditional Ashkenazi organization of the Belz Great Synagogue, Jerusalem.

Fig 04c: The structure that the first Belzer Rebbe, built in Belz, 1843.

(From [http://en.wikipedia.org/wiki/Belz\\_Great\\_Synagogue](http://en.wikipedia.org/wiki/Belz_Great_Synagogue), 15.03.2011).



Fig 05a



Fig 05b



Fig 05c



Fig 05d



Fig 05e

Fig 05a: The Goldstein Synagogue by Heinrich Heinz Rau and David Resnick, Givat Ram campus, the Hebrew University of Jerusalem, 1957.

(From [http://en.wikipedia.org/wiki/Rabbi\\_Dr.\\_I.\\_Goldstein\\_Synagogue](http://en.wikipedia.org/wiki/Rabbi_Dr._I._Goldstein_Synagogue), 23.10.2011).

Fig 05b: The Synagogue by Joseph Neufeld Synagogue in Hadassah Hospital in Jerusalem, 1962.

(From <http://www.worldcat.org/title/hadassah-hebrew-university-medical-center-synagogue-view-of-entrance-facade/oclc/670908688>, 30.04.2011).

Fig 05c: The Synagogue by Zvi Hecker and Alfred Neumann, at Officers School Training Base I, Mitzpeh Ramon, Israel, 1969.

(From <http://www.grahamfoundation.org/grantees/4853-space-packed-architecture-alfred-neumann-s-alternative-modernism>, 15.03.2010)

Fig 05d: The Ohel Aharon Synagogue by Aharon Kashtan in the Israel Institute of Technology, Haifa, 1969. (From <http://www.ynetnews.com/articles/0,7340,L-3606866,00.html>, 10.02.2010).

Fig 05e: The Hechal Yehuda Synagogue by Yitzchak Toledano and Aharon Russo in Tel-Aviv 1980.

(From [http://en.wikipedia.org/wiki/Hechal\\_Yehuda\\_Synagogue](http://en.wikipedia.org/wiki/Hechal_Yehuda_Synagogue), 10.02.2010).

<sup>11</sup> Geoffrey Wigoder, *The Story of the Synagogue* (London: Wedenfeld and Nicolson, 1986), 197-98.

With this polarized context designs for two types of Synagogues emerged. In the first type, the aspirations to commemorate Diasporic tradition were expressed in Synagogues that reproduced Synagogues of the Diaspora.<sup>12</sup> Known typical examples are the Belz Synagogue in Jerusalem which was built according to the Synagogue in Belz, Ukraine, and the four Ben-Zakkai Synagogues in Jerusalem's Old City were heavily influenced by their originals in the Diaspora (Fig 04a, Fig 04b, Fig 04c).<sup>13</sup> In the second type, aspirations to create a new unified identity based on secular spiritual Zionism, but yet tied to a shared ancient Hebraic past were expressed in the design of Synagogues having abstract exteriors and interiors decorated with ancient biblical "symbols" such as the Star of David, the Tablets of the Law, and the Menorah.<sup>14</sup> Known examples are the Heinz Rau's and David Reznik's modern dome structure of the Goldstein Synagogue at the Hebrew University in Jerusalem in 1957 (Fig 05a), and Joseph Neufeld's designed of a box roofed with a series of linear vaults, for the Synagogue at Jerusalem's Hadassah Hospital in 1969 (Fig 05b), or Zvi Hecker 's design of a structure composed from a series of hexagons for the Synagogue for the Israel Defense Forces base in Mitzpeh Ramon (Fig 05c); Aharon Kashtan's design of a pure rectangular raised above the ground for the Ohel Aharon Synagogue at the Israel Institute of Technology in Haifa in 1969 (Fig 05d); and in 1980, Yitzchak Toledano and Aharon Russo's design of the shell like building for the

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<sup>12</sup> Ibid.

<sup>13</sup> Ibid., 196-202. Moreover, many interior and furniture elements in these Synagogues were, literally, brought from their geographical origins, and commemorated their cultures before they arrived in Israel. Briande de Breffny, *The Synagogue* (Lonson: Weidenfeld and Nicolson, 1978), 202.

<sup>14</sup> Uri Kaploun, *The Synagogue* ed. Raphael Posner, trans. Ltd. Israel Program for Scientific Translations, First published by Keter Books ed. (Philadelphia: Jewish Publication Society of America, 1973). 96-97, 39; Wigoder, *The Story of the Synagogue*: 196-97. These symbols were also adopted by the state, and were put as free standing objects, sculptures and illustrations, around Israel and especially in Jerusalem. Ibid., 200.

Other Synagogues took place in ordinary small rooms of converted buildings and carried no unique architectural / symbolical characters. Breffny, *The Synagogue*: 202.

Hechal Yehuda Synagogue in Tel-Aviv (Fig 05e).<sup>15</sup> All in this category present the search for new formal expressions suitable for modern Zionist Judaism with abstract symbolism.

Salomon, a secular Sabra whose values growing up were those of respect toward tradition, and whose Jewish identity was based on spiritual Zionism, aspired to "continue a tradition" through the reconstruction of the Hurva Synagogue hoping that the project would become "a national asset to the entire Jewish people."<sup>16</sup> Kahn, though born into Judaism and connected with its culture, was not affiliated with a Synagogue of any Jewish congregation; he was quite suspicious of any sort of organized religion, and regarded Judaism with a remote empathy.<sup>17</sup> Most of the newly designed Synagogues in Israel did not manage to meaningfully reconcile ancient Hebraic heritage, Diasporic memory, and the quest for a new and evolving Israeli identity.<sup>18</sup>

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<sup>15</sup> Wigoder, *The Story of the Synagogue*: 196-200.

<sup>16</sup> Salomon, *In My Own Way*: 248, 85. Ya'acv Salomon recalled that at home there was an emphasis on the importance of tradition and of on the reading of the Bible. However, his father did not wear traditional garments like some of the other orthodox Jews and was not strict about fulfilling certain Jewish customs. Salmon was sent to the *Heder* (a religious elementary school) which was adjacent to the first Ashkenazi Synagogue outside the city walls. From the *Heder* Salomon moved to the Hadar Torah School, a school which was established in Jerusalem by his father and his father's friends, and was the first institution to teach 'Hebrew in Hebrew'. When he was seven his family moved to Jaffa, where he was sent to the Municipal School of Boys, which he indicates was much more advanced to the studies in the *Heder* and included both secular and religious studies. Between 1915-1917 his family escaped from the Turks and left to Petach Tikva, and Salomon and his brother went to study on the Alliance Israelite School in Rotchild Boulevard in Tel Aviv. In 1917, when the Turks retreated, he returned with his family to Jerusalem and to Hadar Torah. *Ibid.*, 1-20.

<sup>17</sup> Solomon, *Louis I. Kahn's Jewish Architecture*: 4-5, 58.

<sup>18</sup> Kaploun, *The Synagogue*, 97.

## Part 2: Kahn's Three Design Proposals for the Hurva

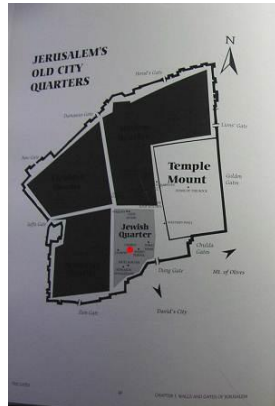


Fig 06a



Fig 06b

Fig 06a: Map showing location of the Hurva Synagogue in the Old City of Jerusalem. (From Ya'acov Beir, *For the Sake of Jerusalem*, 48)/

Fig 06b: Kahn's chosen site for the Hurva Synagogue and its connection via the Route of the Prophets to and Temple Mount. (A wood model showing the Hurva Synagogue designed by Kahn in its context, from pictures of the Hurva Synagogue, the Louis I. Kahn Collection).



Fig 06c



Fig 06d

Fig 06c: Drawing of section (in a 1:500 scale) of the Hurva, the ruins of the Old Hurva, and to Temple Mount. (From Larson Kent, *Louis I. Kahn: Unbuilt Masterworks*, 126-127).

Fig 06d: Photo of a 1.5sqm long model (in a 1:500 scale) of the Hurva, the ruins of the Old Hurva, and to Temple Mount. (Picture of the model, The Louis I. Kahn Collection).

Believing in new creations, Kahn opposed the idea of restoring the 19<sup>th</sup>-century Hurva Synagogue.<sup>19</sup> He asked that the ruined Synagogue on the site be left untouched, and suggested that a new building, four times bigger than the previous Hurva building, be

<sup>19</sup> "דמות כתר לבית- כנסת "החורבה", תכניתו של אדריכל פרופ' לואי קאהן הוצגה במחיצאון ישראל", *Maariv* 29th July 1968.

built on an adjacent lot.<sup>20</sup> Kahn claimed, "You are living in the present and not in the past."<sup>21</sup> He explained: "I visualize the Hurva as a new building, mainly because I am an artist and not an archaeologist. Certainly I don't want to build the new Hurva over the old one, but I picture the walls of the old Synagogue being used to enclose a garden area for the new building, adjoining it but remaining a separate entity."<sup>22</sup> Kahn proposed to adjoin the ruins of the ruined Hurva Synagogue to his new design, and link the Hurva with the nearby Wailing Wall (supporting the Temple Mount) by a promenade housing Jewish institutions, which he named "The Route of the Prophets"<sup>23</sup> (Fig 06a, Fig 06b). Kahn explained: "This would be a precious building, placed in front of the Western Wall, as part of a larger Synagogue of the Wall, framed by the Wilson Arch and the Robinson Bridge."<sup>24</sup> Kahn aimed to create an architectural event which related to the ruined Hurva and the ruined Temple, but was nonetheless distinct and bearing its own identity (Fig 06a, 06b, Fig 06c, Fig 06d).<sup>25</sup>

Between 1967 and 1974, Kahn came up with three different proposals for the Hurva. On the first design proposal Kahn worked from 1967 to 1968 (Fig 07a, Fig 07b, Fig 07c, Fig 07d); on the second from 1969 to 1972 (Fig 08a, Fig 08b, Fig 08c, Fig 08c); and on the third from 1973 to 1974 (Fig 09a, Fig 09b, Fig 09c).<sup>26</sup> Kahn's three design proposals follow mutual governing arrangements. All are cubic structures whose corners

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<sup>20</sup> Letter from Louis Kahn to Ya'acov Salomon, the 19<sup>th</sup> of August 1968, Box 39.2, Louis I. Kahn Collection

<sup>21</sup> Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

<sup>22</sup> Kahn quoted by Larson Kent. Kent, *Louis I. Kahn, Unbuilt Masterworks*: 198.

<sup>23</sup> Letter from Louis Kahn to Ya'acov Salomon, the 19<sup>th</sup> of August 1968, Box 39.2, Louis I. Kahn Collection. The promenade lead (lead from the North Eastern Corner of new Hurva Synagogue towards the remaining fragments of Wilson Arch, in the Southern corner of the Wailing Wall.

<sup>24</sup> Kahn, July 1968, quoted in Sharad Jhaveri Ronner Heinz *Louis I. Kahn Complete Work 1935-1974*, Second revised and enlarged edition (Basel, London: Birkhauser, 1987), 364.

<sup>25</sup> Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

<sup>26</sup> Sharad Jhaveri Heinz Konner, *Louis I. Kahn Complete Work 1935-1974*, 2nd revised and enlarged ed. (Basel & London: Bir Khauser, 1987), 362-67.

are cut out;<sup>27</sup> All have plans composed of two spatial layers symmetrically enveloping an interior space – the first an ambulatory and the second a thick wall built from small cubical spaces;<sup>28</sup> and all present a rich interplay between mass and void pointing towards the understating that the light penetrating the buildings has a great role in the design.<sup>29</sup> For the un-informed reader the designs seem to subtly differ from each other mainly in the shapes and element used to define their interiors spaces. None of Kahn's designs looked like 'typical' Synagogues, neither were they completely “modern” buildings shorn of traditional attributes, but all exhibit intricate and mysterious combinations of the two.

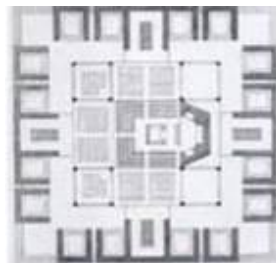


Fig 07a



Fig 07b



Fig 07c

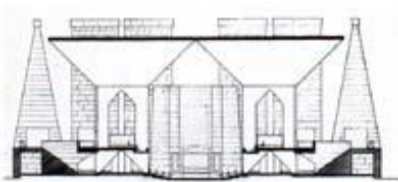


Fig 07d



Fig 07e

Fig 07a: First Floor plan of Kahn's first design proposal for the Hurva Synagogue.

Fig 07b: Second Floor Plan of Kahn's first design proposal for the Hurva Synagogue.

Fig 07c: Interior view of Kahn's first design proposal for the Hurva Synagogue.

Fig 07d: Section of Kahn's first design proposal for the Hurva Synagogue.

Fig 07e: Exterior view of a wood model of Kahn's first design proposal for the Hurva Synagogue.

(Pictures of the Hurva Synagogue, from the Louis I. Kahn Collection).

<sup>27</sup> It is interesting to point out that Kahn cut out the corners also in his design for the Phillips Exeter Academy Library in New Hampshire, U.S (1967-1972). One could speculate about the conceptual relationship between the library and the Hurva Synagogue, however, this would be beyond the scope of this research.

<sup>28</sup> Kahn used a concentric plan divided into sequential rings that surrounded a central area in other projects, such as in his design for the First Unitarian Church at Rochester, New York (1959-1967) and in the National Assembly in Dacca Bangladesh (1962 -1974) for different reasons, as well as in the Phillips Exeter Academy Library in New Hampshire, U.S (1967-1972) which, I believe, has similar symbolic connotation to the Hurva Synagogue.

<sup>29</sup> The interplay between solid and void allowing light to richly penetrate into the building is present in many other of Kahn's designs such as the Kimbell Museum at Fort Worth, Texas, U.S (1967-1972), the First Unitarian Church at Rochester, New York (1959-1967) and in the National Assembly in Dacca Bangladesh (1962 -1974) to mention but a few. However, in each of these projects, this is done for different reasons and in different manners.

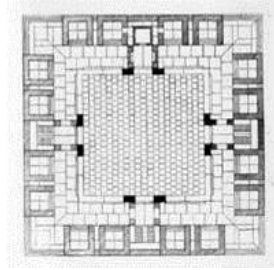


Fig 08a

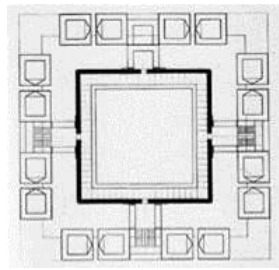


Fig 08b

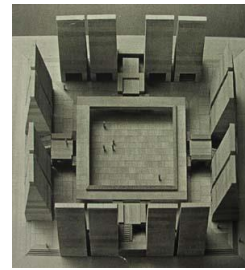


Fig 08c

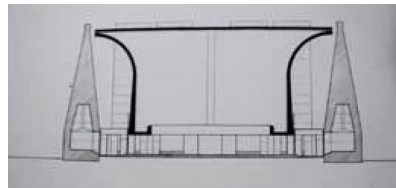


Fig 08d



Fig 08e

Fig 08a: Floor plan of Kahn's second design proposal for the Hurva Synagogue.

Fig 08b: Second Floor Plan of Kahn's second design proposal for the Hurva Synagogue.

Fig 08c: Interior view of Kahn's second design proposal for the Hurva Synagogue.

Fig 08d: Section of Kahn's second design proposal for the Hurva Synagogue.

Fig 08e: Exterior view of a wood model of Kahn's Second design proposal for the Hurva Synagogue.

(Pictures of the Hurva Synagogue, from the Louis I. Kahn Collection).

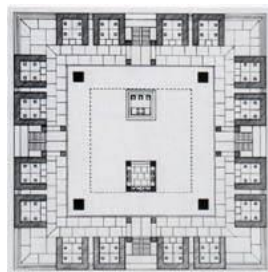


Fig 09a

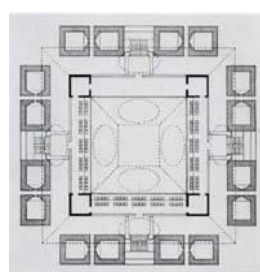


Fig 09b

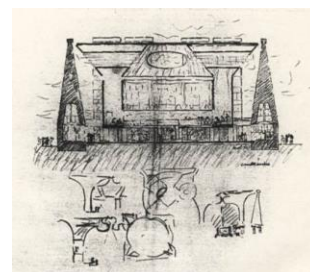


Fig 09c

Fig 09a: Floor plan of Kahn's third design proposal for the Hurva Synagogue.

Fig 09b: Second Floor Plan of Kahn's third design proposal for the Hurva Synagogue.

(Pictures of the Hurva Synagogue, from the Louis I. Kahn Archives, University of Pennsylvania).

Fig 09c: Section of Kahn's third design proposal for the Hurva Synagogue.

(Kahn's personal drawing, from the Louis I. Kahn Collection)

Tracing Kahn's studies of historical precedents – architecture, rituals and practices and the abstract and immediate concept of place, investigating his personal sketches, and re-reading his design proposals will reveal how Kahn arrived at the governing criteria for all of his designs for the Hurva Synagogue, which undoubtedly expressed "the spirit of history and religion of Jerusalem," and brought the memory of the past to an institution



aspiring to new beginnings.<sup>30</sup> I will try to show how Kahn's three design propositions express a different understanding of what a modern Synagogue in Jerusalem should be, taking into consideration desires and critiques from Israeli civilians, politicians and architects, while always involving a historical memory he thought should be embedded in the programs of worship, its form, space and images.

### **Part 3: The Study of Historical References and their De-composition and Re-Composition into Kahn's Designs**

Generally believing that the study of trustworthy historical references was essential for good, original, and contemporary design, Kahn consulted material collected for him by attorney Ya'acov Salomon, by architect Ram Karmi, and by the Mayor of Jerusalem Teddy Kollek, read texts in his library and texts fetched for him by the librarian of the Jewish Theological Seminary in New York.<sup>31</sup> In parallel Kahn also studied and was highly concerned with the archeological findings of excavations in the area surrounding Temple Mount conducted from 1967 to 1974, which concentrated on the history of the Hurva Synagogue and Rabbinic Synagogues next to it, the ancient biblical First and Second Temples of Jerusalem, and other biblical structures. Hence Kahn became familiar with historical ideas, rituals and metaphysical concepts that shaped traditions and practices in the Jewish religion and the Jewish religious structures from

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<sup>30</sup> Letter from Louis Kahn to Mr. Yehuda Tamir from the Ministerial Committee for Jerusalem (Mayor Teddy Kollek, Yaacov Salomon and Ram Crami CC'd), 28<sup>th</sup> of March 1969, Box 39.2, The Louis I. Kahn Collection.

<sup>31</sup> Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

biblical times to the present, all laid the foundation and attributed a rich starting point for his personal understating of modern design for the Hurva Synagogue.<sup>32</sup>



Fig 10a

Fig 10a: A photograph from Kahn's office with the Hurva and its immediate surroundings including other Synagogues that served the Sephardic and Ashkenazi congregations in ruin, 1968. (Pictures of the Hurva Synagogue, from the Louis I. Kahn Collection).

When Kahn received the commission to design the Synagogue, the site was still in a state of ruin (Fig 02b). With the help Ram Karmi, who collected for Kahn details of the remnants left from the burned Hurva Synagogue and documented its traces on the site, and with the assistance of architect Michael Seelig, a member of Kahn's staff for the Hurva Synagogue, who on his travel to Jerusalem in August 1968 collected more information about the immediate surroundings and the four Sephardic Synagogues adjacent to it, in all Kahn became familiar of the physical attributes of the Ashkenazi and Sephardic Rabbinic Synagogues (Fig 10a).<sup>33</sup> Kahn learned that a first Hurva Synagogue was built by Rabbi Moshe ben Nahman who arrived in Jerusalem from Spain in 1267, but

<sup>32</sup> On the help of these sources to Kahn see: Letter from Louis I. Kahn to the Mayor of Jerusalem Theodore (Teddy) Kollek, the 18<sup>th</sup> of March 1968, The Louis I. Kahn Collection, Box 39.1; Letter from Louis I. Kahn to Mrs. Serata, the Librarian of the Jewish Theological Seminary in New York, the 2<sup>nd</sup> of July 1968, The Louis I. Kahn Collection, Box 39.1. In this letter Kahn thanked the librarian for collecting the helpful information about the Old City of Jerusalem for him.

<sup>33</sup> Salomon hoped that after the ground was cleared of debris, some remnants of the prior Synagogue would be used in Kahn's design. Letter from Ya'acov Salomon to Kahn, 9th October 1967, Box. 39.1, The Louis I. Kahn Collection. Michael Seelig - an Israeli architect who conducted his apprenticeship at Kahn's office in the United States, and came for a visit in Israel Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site.", Letter from Louis Kahn to Michael Seelig, 12<sup>th</sup> of August 1968, Box 39.2, Louis Kahn's Collection. However the archival materials makes it difficult to know what was the information about the history of the Hurva and his surrounding that Kahn has had before Seelig's travel and after. It is however, reasonable to assume that Kahn has read about the area and the surrounding Synagogues prior to Seelig's visit.

in 1589 it was closed under the order of the Ottoman governor and turned into a warehouse. From the 16<sup>th</sup> century onwards a few other Synagogues, serving the Sephardic and the Ashkenazi communities were built on and near the Hurva site - The Sephardic community was served by the Eliyahu HaNavi Synagogue, built in the 16<sup>th</sup> century and destroyed in the mid-18<sup>th</sup> century, the Yochanan ben Zakkai Synagogue, built in the 17<sup>th</sup> century, the Istanbul Synagogue, completed in the second half of the 18<sup>th</sup> century and destroyed in 1787, and the Middle Synagogue, also known as the Kahal Tzion Synagogue, built in the 18<sup>th</sup> century. In 1835 Muhammad Ali, ruler of Jerusalem, allowed the refurbishment of all the Sephardic Synagogues mentioned above, but in the 1948 war they were all burned, together with the original Sephardic Ramban Synagogue. In 1700, the Ashkenazi Hasidic Jews tried to build their own Synagogue on a lot next to the Ramban Synagogue but since the community's Rabbi, Judah the-Hasid Segal, died, the construction of the Synagogue was never completed and its creditors burned the unfinished structure. The site remained in ruins for the next 140 years, and thus it was called the "Hurva," meaning "The Ruin" in Hebrew. In 1837, the Ashkenazi leader Rabbi Solomon Zalman Ztoref managed to get permission from Ibrahim Fesha, the son of Muhammad Ali, to build the Hurva Synagogue, but only a small Synagogue not large enough to hold the growing Jewish population there, called Menachem Zion, also named "The old Temple," was built on the site. In 1857, the Ottoman ruler, Sultan Abdülmecid, granted permission to rebuild the Hurva, commissioned his own architect, Assad Effendi for the project and an Ashkenazi Synagogue called Beit Ya'acov, which was the largest Synagogue in the Old City, was erected on the site (completed in 1864).<sup>34</sup>

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<sup>34</sup> Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls*: 50-52, 72-75; Kaploun, *The Synagogue* 48; Abraham Ezra Millgram, "Jerusalem Curiosities," *Jewish Publication Society* (1990): 109-14; Uzi

Consulting Rabbis in Jerusalem and referring to the knowledge he acquired prior to the *Hurva Synagogue* commission (while working on other Synagogues the *Ahvat Israel*, Love to Israel, Synagogue at Pennsylvania for the East European Orthodox-Conservative congregation in West Oak Lane, 1936-37; the *Adath Jeshurun*, fondness to *Jeshurun Synagogue* designed for an Ashkenazi congregation following Conservative rituals but holding to a Reform philosophy in Philadelphia, 1954-1955 and the *Mikveh Israel Synagogue* for the Sephardic Orthodox congregation in Philadelphia, 1967) Kahn was acquainted with differences between the rituals carried by Ashkenazi and Sephardic communities in Rabbinic Synagogues.<sup>35</sup>

Kahn also relied on two important texts to learn about the history of the Temples in Jerusalem, the Tabernacle, and ancient structures dating to Biblical times. In the section JUDEA from James Fergusson's *History of Architecture* (a book belonging to Kahn's library, that opened with a "CHRONOLOGICAL MEMORANDA CONNECTED WITH ARCHITECTURE" listing the important dates related to Jewish architecture - Moses – 1312 BC; Solomon – 1013 BC; Ezekiel – 573 BC; Zerubbabel – 520 BC; Herod – 20 CE; Titus – 70 CE - which according to Fergusson were necessary "in order to anticipate the chronological sequence of events and in order not to separate the Temples of the Jews from one another") Kahn found a brief on "Jewish architecture", describing the development of the "Jewish Temples" – including the Tabernacle,

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Benziman, "How was the Hurva Built," *Ha'aretz*, 02/08/1968, Box 39.5, Louis I. Kahn Collection. The new Synagogue was called "Beit Yaakov," meaning "The House of Jacob" although it was still called "The Hurva." James and Elizabeth Anne Blumberg Arnold & Finn, *A View from Jerusalem, 1849-1858* (Fairleigh Dickinson University Press, 1981), 62-63.

<sup>35</sup> Dan Mirkin, "לאי קאן נגד אדריכלים בעלי דת סולל-בונה," *Ma'ariv* 29th July 1968; Susan G. Solomon, *Louis I. Kahn, Trenton Jewish Community Center* (New York: Princeton Architectural Press, 2000), 5-7, 36-46; Solomon, *Louis I. Kahn's Jewish Architecture*: entire book and especially 1-2,80-82,107-14.

Solomon's Temple around 1000BC, the Temple which appeared in Ezekiel's dream while the Jews were in exile, the Temple reconstructed by Zerubbabel around 520BC, and the Herodian Temple constructed under Roman rule and destroyed by Titus in the year of 70 AD. Pointing out the difficulty in discerning the characteristics of buildings which had already ceased to exist, Fergusson referred to speculative woodcuts reconstructions taken from his *Dictionary of the Bible*, and used verbal descriptions of the Bible and of Josephus.<sup>36</sup>

In Chancellor Louis Finkelstein's New York's Jewish Theological Seminary article, "The Origins of the Synagogue,"<sup>37</sup> Kahn found a narration of the history of the

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<sup>36</sup> On using Fergusson see Kent, *Louis I. Kahn, Unbuilt Masterworks*: 135. The developments were organized by Fergusson linearly, promoting a progressive evolutionary narration of history, like most architectural history books of the 19<sup>th</sup> century. James Fergusson, *History of Architecture from the Earliest Times to the Present Day*, Second Edition ed., vol. VI (London: London, Murray, 1874), 218.

Fergusson explained that the deficiency of Jewish monuments, as with all other Semitic nations, made it very difficult to discern the characteristics of buildings which had already ceased to exist. He argued to use the only reliable reconstructions existing. *Ibid.*, 209-10. Fergusson also explained that he was working on a monograph in which more accurate reconstructions of the Jewish Temples were included, however, he mentioned, these required a dissertation of the own, and were not of interest for the chapter off his current book. *Ibid.*, 214., note no. 2.

<sup>37</sup> Rabbi Louis Finkelstein (1895-1991) was a Talmud scholar and an expert in Jewish law. He taught at the Jewish Theological Seminary of America, the first American seminary of Conservative Judaism. He was awarded a doctorate from Columbia in 1918, became a Rabbi in 1919, and after many years as professor of theology at the Jewish Theological Seminary he was appointed Chancellor in 1940.

Kahn asked the Theological Librarian of New York for Finkelstein's Louis article "*The Origin of the Synagogue*," Proceedings of the American Academy for Jewish Research, Vol. 1 (1928 - 1930), pp. 49-59. Letter from Louis I. Kahn to Mrs. Serata, the Librarian of the Jewish Theological Seminary in New York from, 2<sup>nd</sup> July 1968, Box 39.1, The Louis I. Kahn Collection. On the 8<sup>th</sup> of July 1968 the article that Kahn requested was sent to him and on the 19<sup>th</sup> of July 1968, it was accepted in his office. Letter to Louis Kahn from Mrs. Serata, the Librarian of The Jewish Theological Seminary in New York, 8<sup>th</sup> of July 1968, Box 39.1, The Louis I. Kahn Collection.

Larson Kent holds that Kahn did not read the article. (Kent, *Louis I. Kahn, Unbuilt Masterworks*: 135.) However, I would suggest that Kahn would not put such an effort in fetching it, hasn't he meant to read it. Furthermore, as will be shown later in this chapter, Kahn's design proposals and his explanations regarding their modifications, definitely demonstrate his exposure to important concepts which derived from his readings.

Kahn may have consulted this article due to the lack of remnants from Synagogues dating before the destruction of the Second Temple, and the fact that the earliest literary descriptions of Synagogues date from the 1<sup>st</sup> century CE.

Kaploun, *The Synagogue*: 6; Breffny, *The Synagogue*: 12; Lee I. Levine, *Ancient Synagogues Revealed* (Jerusalem: The Israel Exploration Society, 1981), 3-5.

Philo was the first thinker who called the houses of Jewish worship Synagogues (Quid omnis probus liber). The historian Josephus also used the word Synagogue three times (Ant, XIX, 6, 3, B.J. II, 14, 4, 5: VII, 3,3). In the New Testament, the word Synagogue was frequently used. Although Josephus and the New Testament clearly mention the existence of Synagogues, their form and their structural character are not described and the belief is that they looked much like domestic architecture of the time). Josef Gutman, "Prolegomenon " in *The Synagogue: Studies in Origins, Archeology and Architecture*, ed. Harry M. Orlinsky (New York: Ktav Publishing House INC, 1975), XI-XIII.

Synagogue from ancient times to the present, based on evidence drawn from fragments of information from the Jewish Bible, describing prayer rituals, communal assemblies, and worship of the divine practiced by the ancient Israelites.<sup>38</sup> While most scholars agreed that the Synagogue became important as an institution during the exile to Babylon (i.e., after the destruction of the First Temple, in 586 BC); and other researchers claimed that the Synagogue had already originated in the First Temple era, and before the centralization of Jewish worship in Jerusalem, in parallel to the establishment of other local sanctuaries for the worship of YHWH and sacrifice (the *Bamot* במות), Finkelstein, argued that the Synagogue was already a well-established institution in the Second Commonwealth Era (530 BC-70 CE). Finkelstein asserted that the origins of the Synagogues were "hidden from us by the mists that gather about the horizon of Jewish history, no matter in which direction we look". His article pointed towards the existence of the Synagogue in an ancient mythical past, and demonstrated that the Synagogue was associated with the search for divine communication in ancient biblical times and preceded the development of the Temple and even the establishment of the Tabernacle. He also argued that for at least 500 years the Synagogue and the Temple developed side by side and complemented each other; when certain services took place in the Temple, parallel ones took place in the Synagogue. Drawing the linkage between the different

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The most ancient remnants of Synagogues in Palestine date from the 2<sup>nd</sup> and the 3<sup>rd</sup> centuries AD. The architecture of Synagogues dating from the time after these eras depended on the region and on the intricate cultural context - Hellenistic, Greek, Roman and Byzantine - in which the Synagogue was built as well as under which ruler it functioned. As such the Synagogues are characterized by variety of their structures, plans, ornamentation, openings, and thus are in no way representative of a specific stage in the chronology of ancient synagogal development. editor Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman* (New York Ktav Publishing House INC, 1975), XIII; Levine, *Ancient Synagogues Revealed*: 4-10. From the 3<sup>rd</sup> to the 19<sup>th</sup> century the architectural structures of the Synagogues changed according to Christian and Muslim restrictions and influences, and adjusted liturgical requirements to fit the foreign culture and their requirements, and as such and once again were very much a reflection of the traditions in which they developed. See Breffny, *The Synagogue*: 57-172; Kaploun, *The Synagogue*: 82-96.

<sup>38</sup> Louis Finkelstein, "The Origin of the Synagogue " *The Origin of the Synagogue* Vol. 1 (1928 - 1930): 49-58.

religious structures, based on etymological links between their names, Finkelstein's article suggested that in biblical times the religious structures – the Tabernacle, the Temples in Jerusalem, and the Synagogues – were alluding and corresponding to one another in the rituals and in the concepts they emphasized.<sup>39</sup>

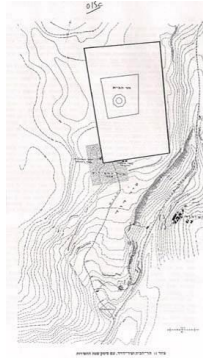


Fig 11a



Fig 11b

Fig 11a: A map depicting the excavated area near Temple Mount in 1968.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, 163)

Fig 11b: General view of the excavated area around Temple Mount in 1968.

(<http://www.basarchive.org/bswbPrintPage.asp?PubID=BSBA&Volume=2&Issue=4&ArticleID=1&UserID=2>, 10.09.2011)

<sup>39</sup> Scholars claiming that Synagogue became important during the exile to Babylon include: E. Rivkin, "Ben Sira and the Nonexistence of the Synagogue," in *the Time of Harvest: Essays in Honor of Abba Hillel Silver*, ed. D.J. Silver (New York, 1963); G.F. Moore (Judaism, p. 283) claims that the origins of the Synagogue could be traced back to spontaneous gatherings in exile in which Prophets such as Ezekeil and Isaiah confessed the Jews' signs and encouraged them for the future restoration of the Temple in Palestine; Bacher (J.E. Art, Synagogue. Comp. Meg 29a) claims that the origin of the Synagogue is in Babel where the Jews built themselves a little sanctuary. Zeitlin (in his article "The Origin of the Synagogue") argued that it was established in post exilic times. Solomon Zeitlin, "The Origins of the Synagogue, A study in the Development of Jewish Institutions," *First published in Proceeding of the American Academy for Jewish Research*, no. 2 (1930-1931).

Levine argues that the Synagogue originated in the First Temple Era Levine, *Ancient Synagogues Revealed* 1-3.

Filckenstein points out that in Psalms it is said that the Synagogue was destroyed together with the Temple:

Thus pointing out that though "Synagogue" – *Bei Kneset* בֵּית כְּנֶסֶת – did not appear in the Bible, this does not mean that the Synagogue was an institution which developed only later, in the Hellenistic period. Finkelstein, "The Origin of the Synagogue," 49.

Psalm 74:2-8: <sup>2</sup>Remember Your congregation, which You have (A)purchased of old, Which You have (B)redeemed to be the (C)tribe of Your inheritance; And this Mount (D)Zion, where You have dwelt. <sup>3</sup>Turn Your footsteps toward the (E)perpetual ruins; The enemy (F)has damaged everything within the sanctuary. <sup>4</sup>Your adversaries have (G)roared in the midst of Your meeting place; They have set up their (H)own standards (I)for signs. <sup>5</sup>It seems as if one had lifted up His (J)axe in a forest of trees. <sup>6</sup>And now all its (K)carved work They smash with hatchet and hammers. <sup>7</sup>They have (L)burned Your sanctuary to the ground; They have (M)defiled the dwelling place of Your name. <sup>8</sup>They (N)said in their heart, "Let us completely subdue them." They have burned all the meeting places of God in the land."

The aftermath of Israel's control of Jerusalem's Old City in 1967 triggered fascination with its ancient Hebraic past and its buildings. Excavations (conducted by Israel's Exploration Society, with the cooperation of the Archeological Department of the Hebrew University, The Israel Academy of Science and Humanities, and Israel's Nature and Parks Authority, and directed by Dr. Binyamin Mazar, with the assistance of Meir Ben Dov).<sup>40</sup> Since February 1968 the excavations mostly in the southern and the western areas surrounding Temple Mount aimed to trace and affirm Jerusalem's ancient history through the investigation of its archaeological layers (Fig 11a, Fig 11b). As Dr. Mazar pointed out the feeling was similar to that described in the Jewish hymn:<sup>2</sup> "Day unto day uttereth speech, and night unto night sheweth knowledge."<sup>3</sup> There is no speech nor language, where their voice is not heard" (Psalm 19, 2-3).<sup>41</sup> The excavations triggered scholastic discussions, followed by articles in Israel and abroad, and brought about three international committees, "The Jerusalem Committees", summoned by Mayor Teddy Kollek in Jerusalem between 1967 and 1974, which also discussed and evaluated the archeological findings. Kahn sent his remarks to one committee and actively participated in the other two.<sup>42</sup> In the 1970 meeting of the second committee Prof. Benjamin Mazar

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ארץ ישראל, מחקרים בידעת הארץ, in "בנימין מזר, 'הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ח' 161-63 ועתיקותיה (ירושלים: החברה לחקירת ארץ-ישראל ועתיקותיה, תשכ"ט), 161-63.

The layers excavated dated from: Arab Period (A), the Byzantine Period (B), The Roman Period, until the declaration of Jerusalem as Elia Capitolina by Adrianus (R) and the Period from Herod to the destruction of the Second Temple (H), as well as historical layers from the Solomonic past. Binyamin Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," in *The Excavations in the Old City of Jerusalem Near Temple Mount*, (Jerusalem: The Institute of Archeology, The Hebrew University; The Israel Exploration Society, 1971), 1.

In 1968, The Jerusalem Committee stated: "We found the city already deeply engaged in rehabilitation and reconstruction work as well as in archeological exploration, with people of all ages from all over the world contributing their knowledge and their energy to the task." The first statement of the Jerusalem Committee from July 4<sup>th</sup> 1969, Kahn received a copy on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection.

מזר, "הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ח", 161-63.

Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 1.

מזר, "הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ח", 162.

Psalm 19, 2-3, quoted by Dr. Mazar. Ibid.

"יום ליום יביע אמר, ולילה ללילה יחווה-דעת.

אין-אמר ואין דברים בלי נשמע קולם." תהלים יט:ג

<sup>42</sup> The first Article reporting on the excavations in Jerusalem appeared already on the 12<sup>th</sup> of July 1968



presented his archeological findings and Louis Kahn chaired the panel on Jerusalem.<sup>43</sup> A few years later, in 1973, Kahn received an article written by Prof. Mazar, which summed up and evaluated the findings of five years of excavations at the Temple Mount site.<sup>44</sup>

The fragmented and speculative evidence pertaining to Jerusalem's Herodian, Solomonic, and ancient Hebraic past, brought about by the excavations appealed to Kahn's imagination. The excavations revealed how each period used the remnants of the past to construct a new environment. Among the more significant examples, mile stones in Jerusalem's history are - the Romans use of elements from the destroyed Temple to build Elia Capitolina; the Byzantines' use of materials and elements from Herodian times to build the city and the church of the Holy Sepulcher; and early Arab regimes' use of

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Terence Smith, "Traces of Second Temple Found," *The New York Times*, 12th of July 1968.

Since the return of East Jerusalem to Israeli Rule, in 1967, several advisory forums have been created to discuss Jerusalem's development. The international Jerusalem Committee, established in 1968 by the mayor of Jerusalem, Teddy Kollek, met for three times between 1967 and 1974. The Committee comprised about seventy architects, urban planners, historians and academics, who review and advise on municipal plans, consult about the restoration and development of Jerusalem so that it will preserve its specific character and heritage. List of Members as of May 25, 1969, The Jerusalem Committee, Received by Kahn on the 12<sup>th</sup> of January 1969, Box 39.1, The Louis I. Kahn Collection. Teddy Kollek thanked Kahn for his contribution in the advising committee in a letter to Kahn to which he attached the First Statement of the Jerusalem Committee from July 4<sup>th</sup> 1969, written by the drafting committee composed of Mr. Btienne Boegner, Sir Phillip Hendy, Dr. Willem Sandberg, Sir Gerge Weidenfeld and Prof. Yigael Yadin, and the article published on the New York Times on the 6<sup>th</sup> of July, all received in Kahn's office on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection; Out of Jerusalem, News and Views, issue of September 1970, a journal that aimed to update about the events in Jerusalem and the city's future plans, and an issue that gave a short summary of issues which were raised in the first international committee meeting in Jerusalem, gave some details on the second meeting (which was supposed to assemble in the Winter if 1971 or in the Summer 1972) and brought forth a short summary of the Jerusalem Master Plan and the Outline Town Planning Scheme (*Mita'ar Plan*) to be discussed in it was received by Kahn. Out of Jerusalem, News and Views, The Jerusalem Committee, September 1970, Received by Kahn on the 24<sup>th</sup> of September 1970, Box 39.13, The Louis I. Kahn Collection.

Kahn participated in the Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970 where he chaired the panel which dealt with "The Theme of Jerusalem" (The Panel on the Old City was chaired by Sir Nicholas Pevsner). The Jerusalem Committee Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970, sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis Kahn Collection; General Schedule for Jerusalem Committee Meeting June 18<sup>th</sup> – 21<sup>st</sup>, 1973, Received by Kahn on the 29<sup>th</sup> of May 1973, Box 39.7, Louis Kahn Collection; General Schedule for Jerusalem Committee Meeting June 18<sup>th</sup> – 21<sup>st</sup>, 1973, Received by Kahn on the 29<sup>th</sup> of May 1973, Box 39.7, Louis Kahn Collection. Kahn was thanked for his contribution to the Third International committee in a Letter from the mayor of Jerusalem, Teddy Kollek, to Louis Kahn from the 9<sup>th</sup> of July 1973, Received by Kahn on the 17<sup>th</sup> of July 1973, Box 39.4, The Louis I. Kahn Collection.

<sup>43</sup> The Jerusalem Committee Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970, sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis Kahn Collection.

<sup>44</sup> Letter from Tamar Eshel, from the Jerusalem Committee to Louis Kahn from the 9<sup>th</sup> of May 1973, The Louis Kahn Collection, Box 39.7, The Louis Kahn Collection.

Byzantine remnants to build their new structures in the city and in Temple Mount. The archaeological findings revealed structures composed from fragments of different eras which were joined together into new hybrid forms, an environmental collage in which the past was at once recorded and transformed. The findings, however, were never clear enough, and the past could not become completely known.<sup>45</sup> Mazar asserted: "We must note that this report is being written in the course of current work, in a period where finds daily reveal new data, and increasing material is gathering on our shelves which we have not yet been able to process or analyze." The work which has to be done, he added, "is naturally lagging behind the actual field work and registration. Thus the present report can be regarded only as preliminary, it being prepared under the assumption that specific problems will find their solution with the continuation of work."<sup>46</sup> He continued: "In reviewing the results of the extensive excavations in the area to the West of the Western Wall, it is impossible even briefly to summarize all the numerous problems raised in connection with the occupational stratigraphy and the general character of the area in the various periods." However, he claimed, "altogether, these features provide a picture of magnificent monumental architecture"<sup>47</sup>; the excavations "have revealed an instructive picture of the stratigraphy of the area, which for many generations had been one of the centers of occupational activity and public building in Jerusalem."<sup>48</sup> Mazar stressed that "as the excavations progressed to the west of the Western Wall, a clearer picture of the unique character of this area was obtained concerning the drastic changes it underwent over the years as a result of continuous building activities and the accumulation of debris

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<sup>45</sup> מזר, "הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ה", 164-65, 74.

Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 23-25.

<sup>46</sup> Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 1-2.

<sup>47</sup> Ibid., 13.

<sup>48</sup> Ibid., 22.

over the years.”<sup>49</sup> He claimed that although the findings were complicated, “the general outline of events here is already becoming clear, and the large quantities of pottery and coins will be of considerable service in ascertaining the chronology of the various building phases now being uncovered.”<sup>50</sup> As would be shown later in this chapter, Kahn was intrigued with the imaginative, blurry, non-scientific aspect of the data revealed in the archeological excavations (rather than with the scientific data that the archeologists aimed to reveal). As scattered images and as evidence of fragmented past rituals they appealed to Kahn’s imagination and served as raw material upon which he could speculate a future desired Synagogue which would be tied to a chain of Hebraic temporal historical events.

The potential of the historical heritage, which was for the first time literally “within reach,” was met with hopes that it would shape the city’s physical and spiritual identity and positively affect its future development. Jerusalem’s advisory International Committee of July 1969 stressed the importance of planning the future evolution of Jerusalem “with full consideration of the archeological excavations; for each new discovery helps relate the future form of the city to the past.”<sup>51</sup> In 1970 Jerusalem’s Sub-Committee suggested that the Old City should be treated in accordance with archeological findings.<sup>52</sup> However, it announced that because of the abundance of buried unexcavated historical, archeological, and artistic remains in the Old City, courageous decisions would be required; each case would have to be examined on its own merit to

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<sup>49</sup> Ibid., 24-25.

<sup>50</sup> Ibid., 34.

<sup>51</sup> The first statement of the Jerusalem Committee from the 4<sup>th</sup> of July 1969, Kahn received a copy on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection.

<sup>52</sup> Recommendations of the Sub-Committee on the Old City from Dec 1970, sent to Kahn by Mayor Teddy Kollek on January 1971, Box 39.1, The Louis I. Kahn Collection.

determine what should be kept exposed, what should be built over but kept accessible, and what should be excavated, documented and covered over.<sup>53</sup>

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Drawing from the above-mentioned resources, I will now summarize some central concepts in Jewish belief and the changes in rituals practiced over the course of history that shaped the Jewish historical structures which most concerned Kahn. The discussion will present how this knowledge was decomposed, weaved, and recomposed as traces and fragments into his design proposals. Rather than following the chronological order in which Kahn gained the relevant information (most of which he gained prior to the presentation of his first design proposal) or the specific sources that Kahn consulted, I found it more appropriate to divide the following section according to the themes that Kahn became exposed to during his study and to exemplify how he contemplated them in his personal sketches. I will attempt to demonstrate how historical ideas and changes in religious rituals, expressing abiding Jewish concepts in Jewish religious structures, were brought forth in Kahn's design. At the same time, this thesis acknowledges that there is a maturation process of knowing, understanding, and critique that shapes design and decision-making processes. Thus, towards the end of this chapter I will aim to assess the degree to which the different sources that Kahn consulted, and the critique that he was exposed to, affected his design proposals.

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<sup>53</sup> The Jerusalem Committee Town planning Subcommittee of the 19<sup>th</sup> -21<sup>st</sup> of December, 1970, sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis I. Kahn Collection.

*Synagogue is a spirit continually expressing what it wants to be; To be a place to meet under a tree; to become great center of communication – a place under many trees. Free from a single traditional plan, free from space everyone remembers as typical and bound to no continued association with a powerful style, 'Synagogue' is freer to become what it wants to be.*<sup>54</sup>

Kahn's investigations shed light on several concepts at the heart of Jewish belief: the emblematic concept of place and the orientation of the divine; the preference of the verbal and an aversion to the visual and the tactile; the establishment of borders so as to define degrees of purity; the importance of ascension; and a unique perception of time. Kahn realized that these ideas, shared continuously across history, were immanent in all Jewish religious structures, their means of expression depended on the changing contexts of Jewish worship, spanning more than three thousand years from antiquity up through the Rabbinic era, and realized the important aspect of temporality embedded within the continuous dimension of history.

In his three design proposals Kahn attempted to address prevailing concepts in Jewish theology as had been expressed in traditional worship and rituals as well as their manifestation in places of worship throughout history. The following examination of these concepts will hopefully assist in the understanding and comparative evaluation of the three design proposals. Some of these concepts relate to form, placement, program

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<sup>54</sup> Kahn quoted by S. G. Solomon, Solomon, *Louis I. Kahn, Trenton Jewish Community Center*: 48.

From a review Kahn wrote in 1955, called "Synagogue Architecture in the United States: History and Interpretation," in which Kahn expressed his unique understanding about the design of Synagogues.

Kahn's review followed two articles concerning the architecture of the Synagogue, the first, the article "The problem of Synagogue Architecture in 1947" published by Rachel Wischnitzer's in the journal 'Commentary' in 1947, in which she expressed her hope that Jewish architects would "provide an insight into what was inherently Jewish," and get rid of the 'historical imagery' imposed on early Synagogues by 19<sup>th</sup>-century Christian architects; The second, the article "Modern Synagogue Style" published by Ely Jacques Kahn, Percival and Paul Goodman, in the same paper, 3 months after and equated Synagogues to other modern buildings. Ibid., 33-34.

and spatial organization in the three proposals while the other stand beyond place and matter and relate to abstract concepts inherent in the base of Jewish belief and practice.

### Placement and the Concept of God's *ShKciNah* (שכינה)



Fig 12a

Fig 12a: Dispersed geographical places in the wild open desert.  
(From <http://idoizsak.blogspot.co.il/2010/06/israeli-desert.html>, 15.03.2011).

Kahn learned that in early biblical times, divine consultation was sought for (*Lidrosh*, לדרוש) by individuals who asked for personal guidance in remote, geographically luminal places in the wild, open desert. Communities receiving divine guidance gathered in sporadic "assembly convocations" (*Mikraei Kodesh* – מקראי קודש – described in the books of Leviticus and Numbers), which took place outdoors, in insignificant places (Fig 12a). During the Israelites' exodus from Egypt, around 1500BC, communal communication with the divine took place in the Tabernacle, a dynamic space which moved with the Israelite tribes during their journey in the desert. However, individuals could still require personal consultation from the oracle in remote, luminal places.<sup>55</sup> This practice continued in different places in Judea and Israel for nearly 2500 years after Jerusalem was chosen by King David to be the center of the united Kingdom

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<sup>55</sup> As Filkenstein mentions, in the book of Kings the Shunamite woman, went to visit the prophet, when she found her child dead (the place to which she went and the date of her visit are not mentioned). Shunamite's husband, who did not know about the catastrophe, asked her: "*Wherefore wilt thou go today, seeing that it is neither new moon, nor sabbath*" (II Kings 4, 23), quoted by Filkenstein, Finkelstein, "The Origin of the Synagogue " 50-51, 54, 56. Also see Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 218.

of Judea and Israel. The First Temple, built by his son, King Solomon in the 10<sup>th</sup> century BC, was the first permanent place for divine communication. However, in the 8<sup>th</sup> and 7<sup>th</sup> centuries BC (in the days of prophets Isaiah and Jeremiah, 740 BC – 650 BC), worship also took place in collective assemblies named *Mikraeha* מקראה, convocations that came together also in dispersed open areas.<sup>56</sup> In the 7<sup>th</sup> century BC, when the First Temple was contaminated (according to the Torah) and foreign worship extensively practiced in Judea (during the reigns of King Manasseh, 686-642 BC, Amon, 642-640 BC, and during the first years of the reign of Josiah, 640-609 BC, as described in II Kings 21.7) the sporadic *Mikraeha* מקראה remained the only places to practice monotheist worship. King Josiah turned the *Mikraeha* מקראה into authorized institutions in the hope that receiving the divine's mercy and forgiveness in diverse places would encourage the Israelites to reunite and cease worshipping other gods. After the destruction of the First Temple, in 586 BC, and with the exile of the Jews to Babylon, the *Mikraeha* מקראה, known today as the Synagogue, remained the only places for Jews to worship.<sup>57</sup> Upon the return from Babylonian Exile to the land of Israel, in 516 BC, the Second Temple in Jerusalem was built, and numerous Synagogues all over the region were constructed. Thus, during the era of the Second Temple the Synagogues and the Temple co-existed harmoniously. After the destruction of the Second Temple in 70AD, Jews were not permitted to live next

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ה וּבְרָא יְהוָה עַל כָּל-מִכּוֹן הָרָצִיז עַל-מִקְרָאָהָ, עָנָן יוֹמָם וְעָשָׂן, וְנִגְהָ אֵשׁ לְהַבִּיחַ, לְיָלֵלָה: כִּי עַל-כָּל-בְּבוּד, חִפָּה. וְנִסְכָּה תִּהְיֶה לְצֵל-יוֹמָם, מִחֹרֶב; וְלִמְחֹסָה, וְלִמְסַחֲרוֹ, מִזֶּרֶם, וּמִמְּקָטָר. {פ}, 25092009 ישיבה, פרק ד

According to Casuto (notes to phrases 3-6, Chapter 4) Isaiah the prophet, explains the Israelites that when they will once again behave according to the laws of justice, God will re-appear in mount Zion and in their gathering places (מִקְרָאָהָ), in a similar manner that he appeared during exodus in the desert. As a canopy – A *Suca* (סוכה) providing God's shadow and light.

<sup>57</sup> In Deuteronomy (7<sup>th</sup> century BC) the authorized sacrifices which took place together with divine communication in the Temple are contrasted with the prohibited places which allowed only sacrifices in the *bamot*. Filkenstein emphasizes that this evidence indicates that the Temple was hardly a place of sacrifice and that the altar occupied, only a secondary place in it. Its most important function was to serve as an avenue through which the prayers of men might come to God. Thus, the Temple originated from the lofty conception of divine communion. Finkelstein, "The Origin of the Synagogue," 52-54, 58-59.

to Jerusalem. Once a year, on a memorial day, the 9<sup>th</sup> day of the month of Av (early in August), they mourned near the Temple's remaining Wailing Wall commemorating the destruction of the Temple. The dispersed Synagogues, called in Rabbinic literature (such as in the writings of Ben Sira 180–175 BC) *Beit Midrash* בית מדרש (places of seeking), again became the only places for worship.<sup>58</sup>

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Fig 13a



Fig 13b

Fig 13a: Dispersed chambers for private spiritual activities from Herodian and First Temple periods.  
(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, Plate XVI).  
Fig 13b: Fragments of vessels bearing Hebrew inscriptions found in the chambers.  
(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, Plate XX).

Archeological findings have revealed differences in the typologies of places of Jewish rituals during the different epochs. In evidence to the First Temple era, in dispersed intimate chambers of 3.4X 2.8 meters built into the natural bedrock, interconnected by openings 1.0 x 0.75 meters wide (Fig 13a), fragments of vessels bearing Hebrew inscriptions, that served individuals for their spiritual activities were discovered.<sup>59</sup>

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<sup>58</sup> In 70AD the Second Temple was destructed by Titus, the Menorah, which provided its illumination, the sacred trumpets, the vessels, the sensors and the Torah scrolls were taken by the Romans. Breffny, *The Synagogue*: 9-11, 22.

<sup>59</sup> Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 34.

More chambers, most likely tombs from the 7<sup>th</sup> and 8<sup>th</sup> centuries BC, were found in Silwoan, in the Kidron brook and on the slopes of Temple Mount. Some of the rooms had openings in their ceiling near to which an engraving saying "נפש" meaning 'soul' was inscribed. The chambers included bowls, jars, lamps, pottery and other vessels that carried





Fig 13c



Fig 13d



Fig 13e

Fig 13c: The magnificent structure of the walls surrounding Temple Mount.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, Plate IX).

Fig 13d: The Foundation Stone, where the Holy of Holies on Temple Mount was located.

(From [http://en.wikipedia.org/wiki/Foundation\\_Stone](http://en.wikipedia.org/wiki/Foundation_Stone), 15.07.2011)

Fig 13e: A stone ossuary carrying the Hebrew inscription "Simon, the builder of the Temple."

(From Terence Smith, *"Traces of Second Temple Found"*, 18)

As for evidence dating to the Second Temple, archaeologists discovered the massive walls that supported the permanent communal structure (Fig 13c), few gates which served as entrances to the magnificent complex, the 15M by 15M area of the Foundation Stone, where the Holy of Holies on Temple Mount was located (Fig 13d), and some evidence pertaining to the services which took place in the temple, such as a utensil used for sacrifice bearing the Hebrew word "sacrifice," and a stone ossuary with the Hebrew inscription "Simon, the builder of the Temple" (Fig 13e).<sup>60</sup>

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Hebrew inscriptions such as: "Belonging to Isaiah," "Belonging to Eshyahu" and the work God "יְהוָה" (יהוה), all of them predated the times of the First Temple. Ibid., 7-10.

On the 12<sup>th</sup> of July 1968 in the article "Traces of Second Temple Found" the New York Times reported on these discoveries. Inscriptions included such "Shalom," "Yechohanan ben Hezekel" and "Yehonatan Qoreh" (meaning a learned man and "Nicanor the Alexandrian, who made the doors," which according to Talmudic reference applies to Nicanor who donated the gates for Herod's Temple). Smith, "Traces of Second Temple Found". Box 39.2, The Louis I. Kahn Collection.

<sup>60</sup> Inscriptions included such "Shalom," "Yechohanan ben Hezekel" and "Yehonatan Qoreh" (meaning a learned man and "Nicanor the Alexandrian, who made the doors," which according to Talmudic reference applies to Nicanor who donated the gates for Herod's Temple). On the 12<sup>th</sup> of July 1968 in the article "Traces of Second Temple Found" the New York Times reported on these discoveries. Smith, "Traces of Second Temple Found"., Box 39.2, The Louis I. Kahn Collection.

Kahn's investigation of the historical precedents mentioned above pointed towards the emblematic concept of sacred place in Jewish religion, deriving from the belief in an infinite God whose existence could not be bounded by a particular place. As Gutmann stresses, Jewish sacred spaces have always enabled God to dwell within the Jewish people.<sup>61</sup> Kunin explains that Jewish sacred spaces have come into being according to the situation and the activities of the Jewish people.<sup>62</sup>

In early biblical times sacred spaces were those that fit a nomadic community. Divine revelations in the wilderness were the personal experiences of early biblical characters, mostly to the fathers and mothers of the Jewish people – Abraham, Isaac, Jacob, Rebecca, Sara, Rachel, and Leah. The places where personal divine revelation were experienced had no uniqueness, and it was only after the divine experience that some were declared sacred (As Beth El was associated with Jacob, see Genesis 28.10-22; 35.1-14).<sup>63</sup> Communal guidance that took place in the *Mikraek* and the *Mikraei Kodesh* related to the activities of the Jews' agricultural society, and took place on important dates during the month.<sup>64</sup> The changing place rather than a permanent location for one centralized space of the Tabernacle Tent of Meeting (described in Exodus, Leviticus, and Numbers) emerged when the Israelites moved into the wilderness as a united community. The Tent of Meeting was not situated at a given geographical locale, and its locations were not related to certain events or religious experiences. Thus, the Tabernacle was a

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<sup>61</sup> According to the Jewish tradition "as a gazelle leaps from place to place, and from fence to fence, and from tree to tree and from booth to booth, so God Jumps and leaps from Synagogue to Synagogue so that he may bless Israel" (Numbers, Rabbah 11.2). Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman*: XI.

<sup>62</sup> Seth D. Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism* (London & New York: Cassel, 1998), 21-22.

<sup>63</sup> Ibid., 21-22, 27-28.

<sup>64</sup> Finkelstein, "The Origin of the Synagogue," 54.

cognitive structure rather than an actual space; the wilderness, too, signified an abstract space, removed from any specific physical reality.<sup>65</sup> Kochan and Mintz explain that the Tent of Meeting enforced the feeling that God dwelled (*ShaKhaN* שכן) with the people (Exod. 29.42-46, Lev. 26.11-17, Nu 35.33), was constantly part of them (Dt. 32.9), and could be consulted any time (Lev. 16:22 ff).<sup>66</sup>

When the Israelites became a civilized nation and settled in the land of Cna'an, the sacred dynamic spaces that served them as a nomadic community were transformed into permanent static structures. The static model of sacred space of the Temple in Jerusalem and the fixation of the mobile Ark at a permanent location came into being with the foundation of the Kingdom of Israel, after King David's decision to locate its capital in Jerusalem. As Finkelstein explains, the idea of a permanent dwelling place for the divine was emphasized by the use of the name *Beit* - house, *Mikdash* – sanctity (*Beit Mikdash*) for the Temple. When each of the tribes was given a part of the Promised Land, the sacred place was located in the area of the tribe of Judah. The erection of the Temple took place as other permanent institutions of the Israelites were being established, such as a bureaucracy, a standing army, a taxation system, and a royal harem. Thereafter, the Temple also acquired political significance, united the kingdom and strengthened its identity. Thus, the Temple became the place that bonds between the people and the land, perceived as the center of the universe. With the erection of the Temple, a permanent physical place was for the first time associated with the presence of God. When the

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<sup>65</sup> Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 21-23, 27-28.

<sup>66</sup> Lionel Kochan, *Beyond the Graven Image- A Jewish View* (New York: New York University Press, 1997), 18-19; Adam Mintz and Lawrence Schiffman, *Jewish Spirituality and Divine Law*, ed. Robert S. Hirt (New York: Yeshiva University Press, 2000), 43-44.

sacred space was institutionalized, its relationship to the community was formalized and structured; the Temple was to be visited on the three established pilgrimage festivals (Ps. 73.29, 145.18). Mintz and Schiffman explain that the Temple also offered personal intimate relationships between God and man, and that any sort of discord between God and humanity led to the destruction of the Temple. Thus, the Israelites' journey through the desert could be regarded as the path to achieve intimacy with God, through successions of encounters first in the Tabernacle and then in the Temple. Mintz and Schiffman point out that God's definition as transcendental (Ex. 25.2) was not challenged with the foundation of the Temple's earthly habitation. Neither King Solomon himself nor the important prophets of the time believed in reducing God's abstract existence to particularized entity associated with a certain place. Solomon stated: "Will God really dwell on earth? Even the heavens to their uttermost bounds cannot contain you. How much less this house that I have built" (1 K. 27.8). Nathan, one of the Israelites' prophets (around 1000BC) brought God's words to the Israelites: "From the day I brought the people of Israel out of Egypt to this day I have not dwelt in a house but moved about tent and tabernacle מִשְׁכָּן, אֹהֶל מוֹעֵד. As I moved about whenever the Israelites went, did I ever reproach any of the tribal leaders...Why have you not built me a house of cedar?" (2 Sam. 7.4 ff) The prophet Isaiah reported, in the name of God, "I will not give My weight/glory/substance to another, nor My renown to idols" (Is. 42:8) Thus, even in the Temples' era it was agreed that God dwelled in the heavenly palace and in the earthly Temple simultaneously (Ps. 11.4; 79.1). However, from that time onwards, into exilic and post-exilic times, adds Kunin, Jerusalem became the most important place of all, and all other places were secondary to it.<sup>67</sup>

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<sup>67</sup> Finkelstein, "The Origin of the Synagogue," 55; Kunin, *God's Place in the World, Sacred Space and Sacred Place in*

After the destruction of the Temples, and each time the Israelites left the Holy Land, their sacred spaces returned to being dynamic and flexible and followed them into exile.<sup>68</sup> Jews who had left Jerusalem far behind found comfort in regarding the *Shekinah*, an omnipresent divine, as being present everywhere at once.<sup>69</sup> In exile, a small group of ten men who had reached the minimum age of thirteen (a *minyan* מניין) were considered a sufficient community to conduct religious services.<sup>70</sup> Klein explains that every community and sub-community had a Synagogue, and whenever a Synagogue was not available, any appropriate clean area could be used as a place to meet God, as written in Psalms 4: "When you pray, pray in the Synagogue of your town. But if you are prevented from praying in the Synagogue, pray in the fields; and if you cannot pray in the fields, pray at home."<sup>71</sup> Hence, the fluid, uniquely Jewish notion of sacred space suggests that any space can become sacred by the presence of the people and God.<sup>72</sup>

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Kahn's work revealed his aspirations to bring forth the intricate concept of the placement of the divine in the Jewish tradition, demonstrating that the Jewish God always dwelled within the Israelites. The feelings of situation, centralization, and orientation, rooted in the acknowledgment of Jerusalem as the city chosen by the Jewish God, were constantly blurred, negated, and loosened by countervailing feelings of non-situation, multiplicity, dynamics, and rotation, to express the un-situated nature of divine existence

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*Judaism*: 11-39; Kochan, *Beyond the Graven Image- A Jewish View*: 18; Schiffman, *Jewish Spirituality and Divine Law*: 43-45.

<sup>68</sup> Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 21-22.

<sup>69</sup> Franz Landsberger, "The Sacred Direction in Synagogue and Church," in *The Synagogue: Studies in Origins, Archeology and Architecture* ed. with a Prolegomenon by Joseph Gutmann Harry M. Orlinsky (New York Ktav Publishing House INC, First published in Hebrew Union College Annual, 28 (1957), 1975), 240.

<sup>70</sup> Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 48-49.

<sup>71</sup> Earl Klein, *Jewish Prayer: Concepts and Customs* (Columbus Ohio: Alpha Publishing Company, 1986), 31.

<sup>72</sup> Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 21-22.

and to bring forth the memory of its presence in the biblical wilderness and in exile.<sup>73</sup>

Kahn's sketches and models (presented below) well demonstrate his investigations and varied attempts to echo these concepts and abstract ideas in form and space.

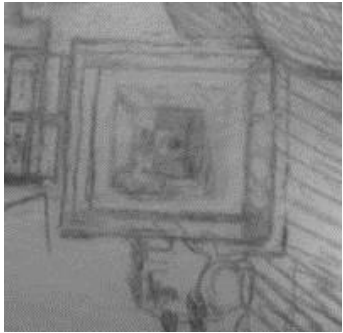


Fig 14a

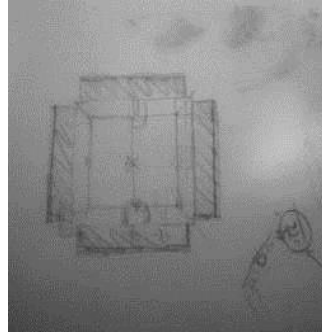


Fig 14b

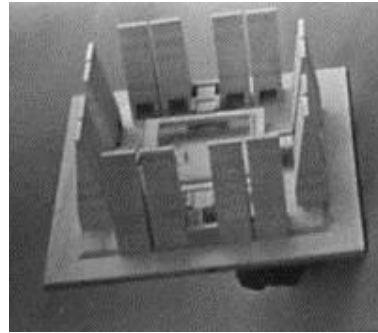


Fig 14c



Fig 14d

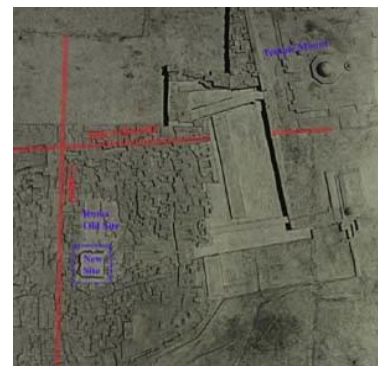


Fig 14e

Fig 14a: Kahn's sketch for the Hurva Synagogue as a solid cube with a dark spot in its center, anchoring the structure in its environment.

Fig 14b: Kahn's personal sketch of the Synagogue drawn as floating abstract structure, neglecting its urban environment.

Kahn's personal sketches of the Hurva Synagogue, the Louis I. Kahn Collection).

Fig 14c: Kahn's models for the Synagogue photographed as objects floating in space.

Fig 14d: Picture of wooden model showing Kahn's Hurva Synagogue as significant in the Old City.

Fig 14e: Picture of wooden model showing the location of the proposed site for the Hurva in relation to the main axes of the Old City (the Cardo and the Decumanus- marked in red), Temple Mount and the ruins of the Old Hurva.

(Photographs of working models for the Hurva Synagogue, the Louis I. Kahn Collection).

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<sup>73</sup> As Solomon has pointed out, in his design for Jewish institutions in the United States Kahn brought enclosed nature and light into interior spaces, embedded the suburban in the urban, disassociated buildings from their environments, to bring forth the tension between the situated nature of built institutions and the un-situated nature of Jewish belief. Solomon, *Louis I. Kahn, Trenton Jewish Community Center*. This research will show that the elements developed for the Trenton Bath house, were also implemented to a certain extent in Kahn's design for the Hurva Synagogue to express Jewish ideas. However, when dealing with other projects (such as the design for the Motherhouse for the Dominican Sisters, to be examined, later, in this dissertation) Kahn freshly investigated ideas regarding placement and situation and developed unique architectural expressions to suit these programs.

In one of his initial sketches Kahn marked the center of his structure with a dark spot to emphasize the importance of its location and to anchor it in its environment (Fig 14a). Another sketch shows the Synagogue drawn on plain pieces of scratch paper in which the intricate context of the building was not even hinted at and the center was only gently marked by a light spot from which arrows were stretched towards opposite directions to hint at the dynamics that should be ingrained in the structure (Fig 14b). Most of the models of the Synagogue were photographed as if they were unanchored free objects in space trying to relate to the concept of place nowhere and everywhere at once (Fig 14c).

Indeed, while the Synagogue was designed as a structure well situated in its environment, and seemed as if it competed with the other monuments in the city (Fig 14d), the site chosen for the Synagogue was not special by any means. It was not situated on any important axis in the Old City, nor was it related to any important historical monument or event (Fig 14e), and the feeling of its situation was blurred.<sup>74</sup>

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<sup>74</sup> Letter from Louis Kahn to Ya'acov Salomon, the 19<sup>th</sup> of August 1968, Box 39.2, Louis I. Kahn Collection. The Hurva Synagogue was located between the ruins of the Old Hurva and Temple mount and as will be presented later in this research, it is only towards the end of the project, and due to the request of the Minister of Jerusalem, Teddy Kollek, that Kahn started working on integrating the ruins of the Historical Hurva Synagogue, as a garden in memory of the historical Hurva's destruction, with his new building. "דמות כתר לבית- כנסת "החורבה", תכניתו של אדריכל פרופ' לואי ". Box 39.5, The Louis I. Kahn Collection.

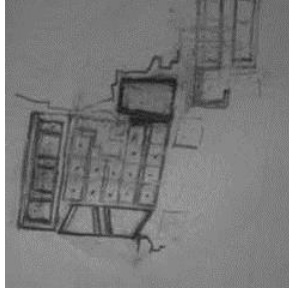


Fig 14f



Fig 14g

Fig 14f: Kahn's personal sketch showing the Synagogue as composed from a multiplicity of small cubes. (From Kahn's personal drawings of the Hurva Synagogue, the Louis I. Kahn Collection).

Fig 14g: A wooden model showing that the Synagogue's structure could be depicted either as a united structure or as a multiplicity of dispersed unites, depending on light conditions and on the position of the one's body and the eye. (From pictures of working models of the Hurva Synagogue, the Louis I. Kahn Collection).

While in some sketches Kahn depicted the Synagogue as a solid cube (Fig 14a), in others he showed the Synagogue as composed of a multiplicity of dispersed cubes (Fig 14f). In all of Kahn's designs the pylons making up the Synagogue's exterior wall and containing the individual units, were spaced so that from certain viewpoints and light conditions the Synagogue seemed to be a unified structure, while from others it looked like a collection of dispersed elements (Fig 14g).

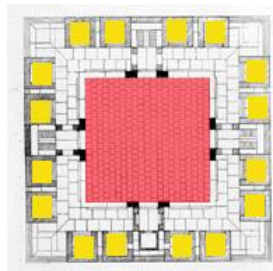


Fig 14h

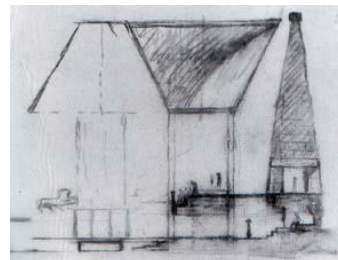


Fig 14i

Fig 14h: Author's scheme showing the 21M by 21M interior space (in Red) and the 3M by 3M dispersed rooms wrapped around it (in yellow) in Kahn's design. (Plan from working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 14i: Kahn's personal sketch of the first design proposal for the Hurva Synagogue showing a person situated in the in-between space, positioned between the Synagogue's center and the multiple dispersed units. (From Kahn's personal drawings of the Hurva Synagogue, The Louis I. Kahn Collection).



As previously mentioned, all of Kahn's design proposals were composed of an interior space of 15M by 15M (Fig 14h) to define the area surrounding the Foundation Stone (the stone on which the Holy of Holies in the Temples was located, Fig 13d), and of 3M by 3M separate rooms that wrapped around it (Fig 14i), similar in size to the chambers that had served individuals for their spiritual rituals, as revealed by the excavations in Jerusalem (Fig 13a). In all schemes, when entering the Synagogue one was caught in an in-between space, positioned between the Synagogue's center and its perimeter, on the threshold between the centralized structure and the multiple individual units. One could either use the separate rooms, recalling the dispersed places of worship in ancient times, without even entering the interior space of the Synagogue, or enter the Synagogue's centralized interior space, recalling the Temples in Jerusalem, without using the individual rooms (Fig 14h, Fig 14i). Thus, all three schemes placed an emphasis on reconciling multiplicity and unity.

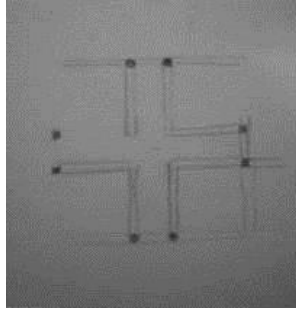


Fig 14j

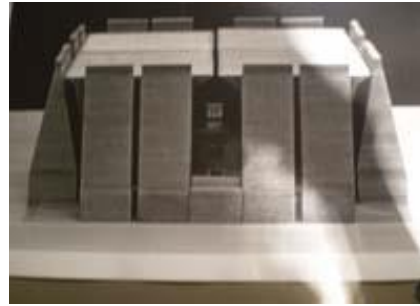


Fig 14k

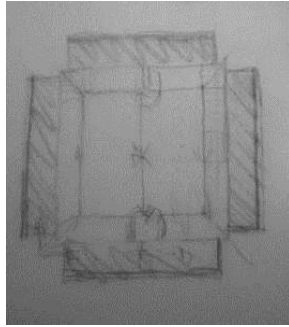


Fig 14l

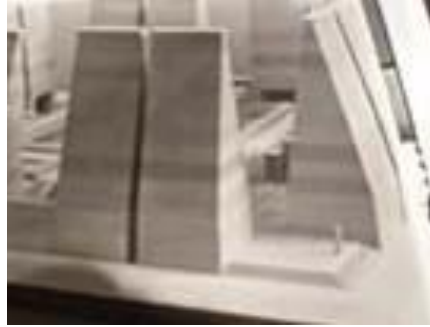


Fig 14m

Fig 14j: Kahn's personal sketch showing East-West and North-South axis in the Synagogue's interior giving a feeling of orientation.

Fig 14k: A photograph of a working model showing the symmetrical openings on the Synagogue's exterior facades.

Fig 14l: Kahn's personal sketch showing subtraction of the Synagogue's corners.

Fig 14m: A photograph of a working showing the diagonal axes into the building.

(Kahn's personal sketches and photographs of working models of the Hurva Synagogue, The Louis I. Kahn Collection).

In one sketch Kahn conceived the Synagogue's space as being crossed by two perpendicular axes, east-west and north-south (Fig 14j), forming symmetrical openings on the Synagogue's exterior facades, hinting on the gates which served as entrances to the Temples in Jerusalem, as discovered in the excavations, but which could not be used to enter or exit the Synagogue (Fig 14k). In another sketch Kahn subtracted the Synagogue's corners to create diagonal axis into the building on its four missing corners

(Fig 14l), maybe aiming to suggest the notion of presence and non presence at once (Fig 14m).<sup>75</sup>

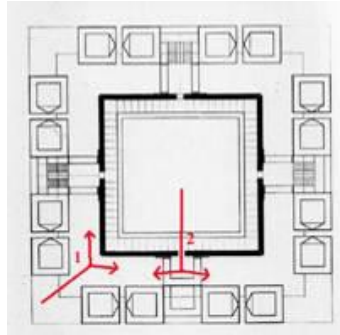


Fig 14n

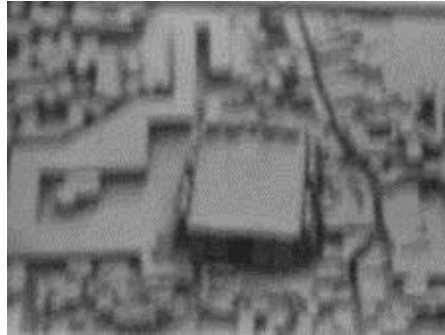


Fig 14o

Fig 14n: A plan of the Hurva Synagogue with author's scheme showing the entrance to the Synagogue via the diagonal axis (no.1) into the ambulatory surrounding the Synagogue's interior spaces and the East - West axis created within its central space (no. 2).

(From working drawing of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 14o: Photograph of a wooden model of the Hurva Synagogue showing the location and presence of the building addressing the route of the prophets.

(From photographs of models of the Hurva Synagogue, The Louis I. Kahn Collection).

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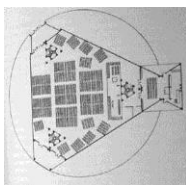


Fig i



Fig ii



Fig iii,



Fig iv

In the Adath Jeshurun Synagogue, 1954-55 (unbuilt) Kahn enabled two diagonal axes into the chapel that was placed in a centralized triangular (Fig i). Solomon, *Louis I. Kahn, Trenton Jewish Community Center*: 35-38; *ibid.*

In the Trenton Jewish Community Center, 1954-59 (partly built) the entrance to the complex was located on the side to give it a sense of dynamic rotation (Fig ii). *Ibid.*, entire book.

In the Adath Jeshurun Synagogue, 1954-55 (unbuilt) Kahn used corner columns (Fig i) and in the Mikveh Israel Synagogue, Philadelphia; 1961-72(unbuilt), Kahn used cylinder wells surrounding the main building to allow the passage of indirect light into it the structures, disassociated them from their environment and bring a feeling of lightness and movement into the chapels (Fig iii, Fig iv). Solomon, *Louis I. Kahn's Jewish Architecture*: 130-34.



Fig 14p

Fig 14p: Authors scheme on a fragment of a photograph of a wooden model of the Hurva Synagogue showing the main East-West, North - South axis, in dark red, and the diagonal axis to the Synagogue, in dots - together creating a sense of rotation of the structure – presence and non-presence. (From photographs of models of the Hurva Synagogue, The Louis I. Kahn Collection).

The worshipper entered the Synagogue from its subtracted corners and so was caught in an ambulatory that surrounded the Synagogue's sanctuary, being required to circulate in the Synagogue's interior. Where the perpendicular axes crossed the surrounding ambulatory, one could enter the inner sanctuary to follow its axis (Fig 14n). When exiting the Synagogue one found oneself immediately in the city, in insignificant places— neither in alignment with the perpendicular axis inside the Synagogue, nor aligned to the *Cardo* or the *Decumanus*, the Roman City's two main axis, nor in front of the route of the prophets, designed by Kahn, leading to Temple Mount (Fig 14o, Fig 14p). Thus, the senses of permanence and orientation were constantly blurred by feelings of dynamic rotation.

### **Orientation in Jewish worship and the Concept of God's *ShKciNah* (שכינה)**

Kahn's investigations also pointed towards the emblematic idea of orientation in Jewish religion. Yet, as Breffny points out, the belief in an abstract omnipresent God

made orientation in Jewish worship superfluous during most periods of history. The Jewish God constantly dwelled within his people and moved with them to wherever they went. God, represented by his spokesmen – a prophet, or by the Tablets in the Holy Ark, was always situated in the midst of the Israelite communities.<sup>76</sup>

Divine guidance received by individuals in ancient biblical times was mediated by the Oracle, and communal services in the religious assemblies of the *Mikraea* and the *Mikraei Kodesh* were mediated by the prophet.<sup>77</sup> When the Holy Ark was carried by the Israelites during their exodus in the desert, it was located in the middle of the procession, so that an equal number of tribes walked in front of it and behind it. In the Tabernacle the Holy Ark was placed in the center and members of the twelve Israelite tribes surrounded it. In the Temples in Jerusalem the Ark was located in the Cella and was surrounded by a number of courtyards.<sup>78</sup> When the Temple was contaminated, and after the Temple was destroyed, worshippers could not visit Jerusalem and prayers in the *Mikraei Kodesh* during the 7<sup>th</sup> and 5<sup>th</sup> centuries BC were directed by the community's representatives (such as the prophets Jeremiah, Zephaniah, Habakkuk, Nahum, and Huldah, and later by Malachi and the Second Zechariah) towards the Temple in Jerusalem.<sup>79</sup> The orientation of the Synagogues and prayer depended on their location in relation to Temple Mount,

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<sup>76</sup> Breffny, *The Synagogue*: 25-31.

<sup>77</sup> Finkelstein, "The Origin of the Synagogue," 50.

<sup>78</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 213-16.

In the brochure given to the members of the 1970 International Committee, a 17<sup>th</sup> century illustration of the Temple was presented. The procession towards the Holy of holies through the numerous gates and courtyards surrounding it, spreading on the slopes of Mount Temple were emphasized. The light shining on Jerusalem is well manifested with the illustration of the sun in the background, behind the Holy of Holies. Kahn did not read French. However, the images in the brochure must have drawn his attention. *La Terre Sainte, Jérusalem Juin-Juillet 1970, Dix-Neuvième Centenaire De La Ruine Jérusalem (70-1970)*, Box 39.13, The Louis I. Kahn Collection. Finkelstein, "The Origin of the Synagogue " 53-54, 58-59; See Deut 12.5 ff and I Kings 8, 28f. Thus, the book of Daniel (from the 2<sup>nd</sup> century BC) prohibited any obstacles between the prayers and the Temple and suggests facing big openings towards Jerusalem when conducting prayers. Ibid., 51. note 8 refers to Daniel 6, 11 and addresses Mishna Berakot 4,5; and the Tosefta 3,15.

with no spaces in the form and space of the Synagogues.<sup>80</sup> After the destruction of the Second Temple, in 70 AD, Synagogues began to function not only as places for prayer, but as treasuries of the holy scrolls, commemorating the Holy Ark which had disappeared when the Temple was destroyed. In the beginning, a chest with the holy scrolls that was kept outside the Synagogue, was brought inside when the services took place, and with the help of the congregation it was oriented towards Jerusalem when prayers were recited.<sup>81</sup>

It took nearly 100 years for the portable Ark to become the stable chest (*Aron*, ארון) which, together with a stage (*Bima*, בימה) for the community's representative, were permanently located in the Synagogue.<sup>82</sup> With these developments, orientation became an issue in Synagogues' forms and spaces. In Israel the location of the Ark depended on the Orientation in relation to Jerusalem.<sup>83</sup> In Exilic Synagogues the location of the *Aron*, and

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<sup>80</sup> Landsberger, "The Sacred Direction in Synagogue and Church," 239-40.

<sup>81</sup> The becoming of the portable Ark a stable chest in Synagogues was in many ways, similar to the changes of the status of the portable Ark carried by the Israelites in Exodus and its permanent location later in the Temple in Jerusalem. In both cases the Holy scrolls were kept originally outside the Holy place and only later were they given a permanent location. Thus the Holy portable Ark of the Covenant (*Aron Habrit* ארון הברית) slowly became a permanent Holy Ark *Aron* – ארון in the Tent Meeting *Teva*- תיבה. Rachel Wischnitzer, *The Architecture of the European Synagogue* (Philadelphia: The Jewish Publication Society of America, 1964), 13-15.

<sup>82</sup> Ibid.

<sup>83</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 213. Also see Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman*: XIX.

The Tosefta required that the Ark's back would turn towards the Temple in Jerusalem, so that the believers will turn towards the Holy Scrolls "When the chest (תיבה) is set down, it has to stand with its front toward the people and its back toward the sanctuary (קדש)." Breffny, *The Synagogue*: 25.

The Tosefta also mentioned that the gates of the Synagogues should open towards the East as did those of the tent of meeting. "Synagogue gates should open towards the East as did the gates of the tent of meeting; for it is written: 'round about the tent of meeting...those that pitch on the east side towards the surmising' (Num 2.2,3)." (Meg. IV, 22) Landsberger, "The Sacred Direction in Synagogue and Church," 246.

However, the relative condition of location of Synagogues in relation to Jerusalem resulted in the fact that different kinds of Synagogues could be found in Israel from the era after the destruction of the Temple, depending on their location. Had Kahn researched some other forms of Synagogues he must have noticed that in the Synagogues located south to Jerusalem, the niche was in the North, in those located north to Jerusalem, and the niche was in the south. Breffny, *The Synagogue*: 15-39; Levine, *Ancient Synagogues Revealed* 5-9; Gutmann, "The History of the Ark," 23-30. In Synagogues which were west to Jerusalem, the doors could open to the East and the Ark could be located in front of the entrance and face Jerusalem, however, in other places, the entrance from the East meant that the Ark was not necessary located in front of the entrance (such in the Synagogue in Irbid, in the Galilee, in Yafa in the Galilee, and in

the *Bima* and the orientation of prayer were influenced by the regimes under which Judaism was practiced in the Diaspora.<sup>84</sup> Synagogues for Ashkenazi communities were influenced by the Christian concept of orientation as expressed in church services at basilicas, where the presiding priest and the altar were situated in an apse at the eastern end of the church, with the congregation in the nave facing them. Hence, in Eastern European Synagogues (as in Russia and Ukraine) the Ark was situated at the end of the Synagogue's interior chamber, so its back was directed towards Jerusalem, the *Bima* was located next to it, and the interior space of the Synagogue was divided into three parts, so that the congregation sat in two naves facing the Ark and the *Bima*.<sup>85</sup> The organization of Sephardic Synagogues was influenced by Islamic mosques, where a small niche, a *Mehrab*, was placed in the wall facing Mecca. In Mediterranean Synagogues (in Italy, Greece, Spain, and Turkey) serving the Sephardic congregation, the Ark was placed in a modest niche on the wall facing Jerusalem, the *Bima* was located in the middle of the Synagogue, and the congregation was seated along the outer walls, to surround the *Bima*. In addition, the niche facing Jerusalem was usually not big enough to permanently house the Ark. The Ark was kept outside the Synagogue and brought inside only once the ritual

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Eshtemoa, Judea. Moreover, in some of the Synagogues the sacred wall was the same wall of the entrance (like in Bar'am, K'far Birim) in Caphar Nachum in the Northern Galilee, where the worshippers turned back towards the portals, when they prayed towards Jerusalem). Breffny, *The Synagogue*: 25-31.

The relativity of orientation in relation to Jerusalem derived in the fact that sometimes when worshippers exited the Synagogue, they turned their backs to the scrolls and desecrated the Torah. Thus, in the 3<sup>rd</sup> century (in the orient) and in the 5<sup>th</sup> and 6<sup>th</sup> centuries (in the west), the location of the Ark moved to the wall opposite the entrance (such in the Synagogues of Beth Alpha, Naaran in Jericho and in Hammath by Tiberias), so that the Ark's back, the conductor of the service and the audience all faced Jerusalem. Slowly, the Ark became more important as an object and was given a permanent place in the Synagogue, on the Eastern end, replacing the windows with the view towards the Temple. At the beginning, a small niche was created in the wall to contain the Holy scrolls (and sometimes carried images of the Temple of Solomon, to emphasize the sacred direction), and the portable Ark was placed in it, afterwards, an apse developed and the Ark was permanently left in the Synagogue, and the wall which contained them, that pointed towards Jerusalem, was considered the sacred one. Landsberger, "The Sacred Direction in Synagogue and Church," 242-46.

<sup>84</sup> Kahn consulted Rabbis to understand the differences between Rabbinic Synagogues.

Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

Landsberger explains that orientation in Rabbinic Synagogues derived from external Roman, Christian, and Muslim concepts. Landsberger, "The Sacred Direction in Synagogue and Church," 240.

<sup>85</sup> Wischnitzer, *The Architecture of the European Synagogue*: XXVIII-XXIX, 17, 44-56.

had begun; it was moved to the *Bima*, from where it was read, and then taken out of the Synagogue once the service was over.<sup>86</sup>

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Fig 15a



Fig 15b

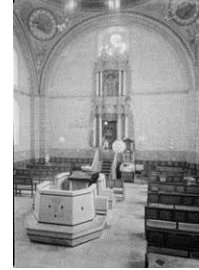


Fig 15c

Fig 15a: The Hurva Synagogue, the Holy Ark, the *Bima*, and the rest of the utensils used in Jewish worship in a state of ruin, in 1948.

(From photographs of the Hurva Synagogue's site, The Louis I. Kahn Collection).

Fig 15b: The Sephardic Yochanan ben Zakkai Synagogue with the Ark and the *Bima* at two different poles and seating surrounding them.

(From Aaron Bier, *For the Sake of Jerusalem*, 54)

Fig 15c: The Ashkenazi Hurva Synagogue and its Ark on the Eastern Wall, with the seating in front of it, prior its destruction in 1948.

(From Aaron Bier, *For the Sake of Jerusalem*, 73)

When Kahn received the commission to design the Hurva, the ruined Synagogue's Holy Ark, the *Bima*, and the rest of the utensils used in Jewish worship were buried under the Synagogue's broken roof, so the orientation of the Synagogue was put in question (Fig 15a). The history of the Hurva Synagogue and the Synagogues surrounding it demonstrated the differences in orientation between the Ashkenazi and the Sephardic ways of worship.<sup>87</sup>

<sup>86</sup> Landsberger, "The Sacred Direction in Synagogue and Church," 250-51., In addition, in Muslim countries, Jews usually enjoyed a greater freedom of religious practice, and the original ritual surrounding the portable Ark in early biblical times was preserved to a greater extent. Wischnitzer, *The Architecture of the European Synagogue*: 18-43.

<sup>87</sup> The Ramban Synagogue of the 13<sup>th</sup> century was located in an old deserted structure, found in Jerusalem, and hence its architecture could not be regarded as significant for the Jewish congregation. Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls*: 50.



The Hurva Synagogue built by Rabbi Moshe ben Nahman in 1267 served the entire Jewish community of the Old City, and was located in a building which he found when he arrived in Jerusalem that had not been built to serve as a Synagogue, and hence its orientation was not relevant to the Jewish service. The four Sephardic Synagogues adjacent to the Hurva's site were built after the *Ramban Synagogue* was closed by the Sultan: the *Eliyahu HaNavi Synagogue*, built in the 16<sup>th</sup> century (1570) to serve the *Mouskos* (מוסקוס), Arab Sephardic Jews who had been in Israel for a long time, the *Yochanan ben Zakkai Synagogue* (known also as Kahal Kadosh Gadol), built in the beginning of the 17<sup>th</sup> century to serve the European Jews who managed to escape the Inquisition in Spain and Italy; the *Middle Synagogue*, built in the 18<sup>th</sup> century to serve the growing Sephardic community; and the largest Sephardic Synagogue, the *Istanbul Synagogue*, completed in the second half of the 18<sup>th</sup> century (1764), built to serve the Turkish Sephardic Jews who immigrated to Jerusalem, and served the entire European Sephardic Jewish community on the Sabbath. All of these Synagogues were designed to accommodate the Sephardic mode of ritual, with the Holy Ark and the *Bima* located at two different poles of the spaces, and the seating arranged along the exterior wall, so that the congregation surrounded them (Fig 15b).<sup>88</sup>

Ashkenazi Synagogues were also built on the site of the *Hurva* according to Ashkenazi ways of worship. There was the unfinished structure designated to serve the Orthodox Jewish Hasidic Jews who followed Rabbi Eliahu, the Gaon of Vilna, from Lithuania to Jerusalem, in the 17<sup>th</sup> century, and the *Beit Ya'acov Synagogue* (completed in 1864), initiated by Rabbi Solomon Zalman Ztoref, the leader of the Ashkenazi

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<sup>88</sup> Ibid., 52-57.

community that fled to Jerusalem from Zfat, and constructed by the Sultan's architect Assad Effendi. Kahn was supplied with photographs which testified how the Hurva Synagogue looked just prior to its destruction during the War of Independence (1948). The two-story Ark (made by an artist from eastern Poland, and brought over from Niocoliavi, Charaosn, Russia, to Jerusalem, by Rabbi Chaim Kovner) was located on the eastern wall, with the *Bima* placed next to it. Seating was arranged in two pews facing the eastern wall, and the hall of the Synagogue was entered through three large gates (which like the Ark were moved from their original location in Russia (Fig 15c)).<sup>89</sup>

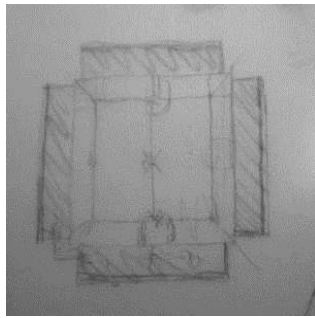


Fig 16a



Fig 16b

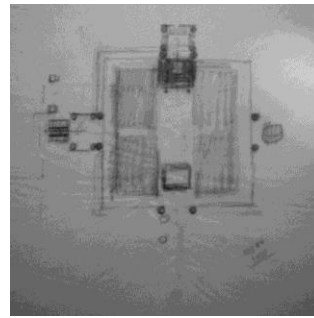


Fig 16c

Kahn's sketches exploring the locations and arrangements of the Ark, *Bima*, and seating:

Fig 16a: Kahn's personal sketch for the Hurva Synagogue as a centrifugal cubical form with an X in its center from which two arrows stretch towards two opposed nodes.

Fig 16b, Fig 16c: Kahn's personal sketches contemplating the distance between the Ark and the *Bima*.  
(From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

Kahn's sketches exploring the locations and arrangements of the Ark, the *Bima*, and the seating in the Synagogue reveal his fascination with the orientation of Synagogues.

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<sup>89</sup> Ibid., 72-75; Blumberg Arnold & Finn, *A View from Jerusalem, 1849-1858*: 62-63; Benziman, "How was the Hurva Built."

The emblematic concept of orientation was addressed in all of the three design proposals for the Synagogue.<sup>90</sup> Kahn's sketches reveal that he found it difficult to determine the orientation of the new Synagogue. He was contemplating how much the new Synagogue should allude to biblical places of worship with no orientation, how much it should commemorate Diasporic traditions of orientation (reflected in the History of the Ashkenazi and Sephardic Synagogue), and to what extent it should attempt to predict the new orientation of a Synagogue design to serve the *Zabars* (Israeli born Jews) of both Ashkenazi and Sephardic origin. Kahn suggested that the Hurva Synagogue be enclosed in a centrifugal form, and he explored the locations and arrangements of the Ark, the *Bima*, and the congregants' seating. In one of his initial sketches, Kahn marked the center

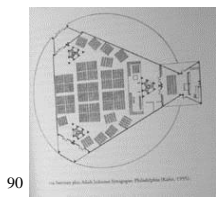


Fig i.

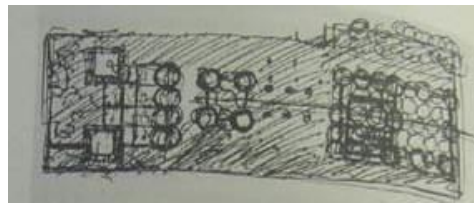


Fig ii



Fig iii

As Solomon has demonstrated, Kahn was familiar with the differences between the orientation of Ashkenazi and Sephardic Synagogues before he drew up his designs for the Hurva. In the Ahvat Israel Synagogue for the Eastern European Orthodox-Conservative congregation (1936-37) and in the Ashkenazi Adath Jeshurun Synagogue, both in Philadelphia (1954-1955), Kahn placed the Ark and the *Bima* together near the eastern wall, and provided pews in front of them. Orientation in the Adath Jeshurun Synagogue was also expressed in its general plan which was composed from two entities: an oriented part which included a double row of classes arranged in a rectangular form (which lead to a secular auditorium), and a more ideal triangular separate sanctuary (fig i). In the Mikveh Israel Synagogue for the Orthodox congregation in Philadelphia (1961-1972), serving an old Sephardic congregation (founded in the United States in 1740) which had some members of Ashkenazi (German or Eastern European) origin, Kahn managed to integrate the Sephardic and the Ashkenazi modes of ritual by offering an hierarchical plan composed of distinct spaces (a school, a Synagogue, a chapel, a museum, and a Booth – *Sukka* סוכה) experienced from west to east, alluding to the Ashkenazi mode of ritual. The interior of the sanctuary had modestly detailed seating located parallel to the northern and southern walls and surrounding the Ark and the *Bima*, and was surrounded with light towers linked together by ambulatories two stories high, allowing light into the Synagogue and transforming its rectangular plan into an oval arrangement to create a space that alluded to the Sephardic mode of ritual. (fig ii, iii). Kahn was familiar with previous Synagogues of the congregation, and their appreciation of the unique Sephardic arrangement of their interior space. In the congregation's first Synagogue (on Cherry Street near 3<sup>rd</sup> Street), designed to accommodate the Sephardic ritual, the Synagogue had an oval interior, the Ark was located on the Eastern wall (facing Jerusalem) and the Bimah on the opposite wall, and two semicircle seats facing each other surrounded them. During the service the sacred scrolls were taken from the Ark to the *Bima* from where they are read out loud. In 1860, the benches, were taken to the congregation's second building (designed by John McArthur, on 7<sup>th</sup> and Arch street), to preserve the Sephardic ritual. In their third building (designed by William G. Tachau from the firm Pilcher & Tachau, 1911) the congregation sat on pews facing each on the main floor. Solomon, *Louis I. Kahn's Jewish Architecture*; Solomon, *Louis I. Kahn, Trenton Jewish Community Center*: 5-7, 36-46.

of the cubical space with an X and drew two arrows stretching from it towards two opposed nodes in the Synagogue's interior chamber (Fig 016a). In other sketches Kahn contemplated the proper distance between these two nodes (fig 016b, c).

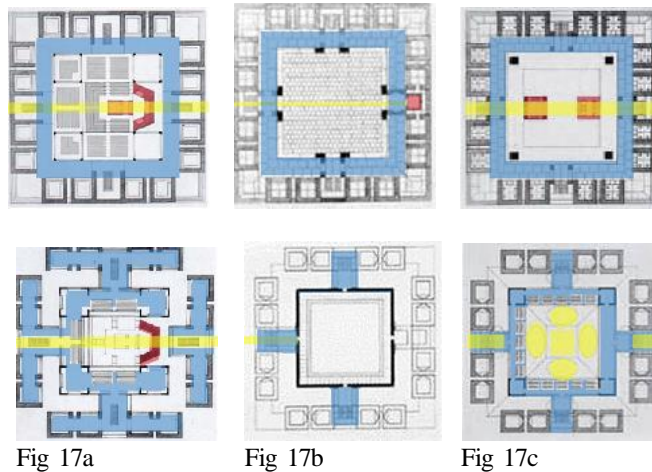


Fig 17a: Plans of the Hurva Synagogue with author's scheme showing the Ark (red), and the light directed to it (yellow), the *Bima* (red), the ambulatory (blue) and the seating (gray) in Kahn's first design proposal.  
 Fig 17b: Plans of the Hurva Synagogue with author's scheme showing the Ark (red), and the light directed to it (yellow), the ambulatory (blue) in Kahn's second proposal.  
 Fig 17c: Plans of the Hurva Synagogue with author's scheme showing the Ark (red), and the light directed to it (yellow), the *Bima* (red), the ambulatory (blue) and the seating (grey) in Kahn's third design proposal.  
 (All from working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

In all of the three design proposals Kahn positioned the Ark on the eastern side of the Synagogue. Light that entered from the Synagogue's openings on the eastern façade was directed towards it, alluding to the orientation of the Synagogue typical of Second Temple and Diasporic times. In all proposals the center of the Synagogue was marked by the surrounding ambulatory, the mushroom-like interior concrete wall, and by light which entered through the roof, to commemorate biblical religious structures with no orientation. In the first and third proposals, where a *Bima* was provided it was located closer to the western end. The U-shape seating, in the first proposal, the square seating in the third proposal, and no seating in the second proposal negotiated between Ashkenazi

and Sephardic traditions. The worshippers' attention was constantly attracted to the center of the Synagogue, and eastwards towards the *Ark* and Temple Mount (Fig 17a, Fig 17b, Fig 17c).

### **The Preference of the Oral and the Suppression of the Visual and the Tactile**

Kahn's studies taught him that in the Jewish tradition oral expression had always been preferred as a means of divine communication. In ancient biblical times the oracle communed with God in the name of individuals. Later on, in assembly convocations of the *Mikraea*, the prophets delivered God's words to the Jewish communities. In the Tabernacle and in the First Temple era, services were centered on the Ark and the priests communed with God in the name of the Israelites. When the priesthood was suppressed (in the time of the First Temple, during the reigns of Manasseh and Amon 7<sup>th</sup> century BC) later prophets, such as Jeremiah, Zephaniah, Habakkuk, Nahum and Huldah, re-adopted principles of oral communication with the divine. After the destruction of the First Temple and the diminishing in those eligible to commune with God and give divine guidance, saintly psalmists and hymn writers flourished and brought the heavenly words to the Jews.<sup>91</sup> Later on, in Diaspora Rabbis helped to communicate with God by giving authoritative explanations of the divine words, in the form of a *Midrash* (מדרש), a prophetic book, or what we would call today a "lecture," in a place bearing the form of a lecture hall, the *Beit Midrash*.<sup>92</sup> Finkelstein also did not oppose Leopold Loew's

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<sup>91</sup> In ancient biblical times God spoke to the Israelites directly as individuals and as a collective (Ex. 29:19, ff ; Ex. 20:19). Later, the divine words of the Jewish God were inscribed on the boards of the Covenant (Dt. 4:12). Jeremiah's role was mainly to pray for his people and his book included a number of prayers offered by him on different occasions (Jer. 10, 23 ff.; 12, 1; 14, 7; 17, 12; cf. also Deut. 8, 10; 26, 3; 26, 12). Finkelstein, "The Origin of the Synagogue " 50-54, 58-59.

<sup>92</sup> Filkenstien mentions Ezekiel 14, 2-3 and the *midrash* of Iddo (II Chron. 13, 22.) Ibid., 55-58. Levine adds that Synagogues from Second Temple times and after its destruction were mostly used to read the Torah and study it, as has

suggestion that this place was also called, by Jeremiah, then later in the *Talmud* (220 AD), the *Mishna*, and the *Gmara* (500 AD), *Bet Ha-Am* (בית העם), the People's House, a structure in the form of a lecture hall, where believers gathered.<sup>93</sup>

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The oracles, the prophets, the priests, the later prophets, the psalmist, the hymn writers, and the Rabbis were responsible for delivering God's words to the Israelites. As Breffny explains, from ancient biblical times up through the Second Temple period humans encountered God through speech (Dt. 1.30; 4.3,9). God's divine cognition developed into modes of prayer in prophetic epochs, when the prophets observed the words they uttered (Is. 2.1; Amos 1.1). Then, those who listened to the divine words were revived (Is. 55.3) and those who did not were condemned (Jer. 7.24). Slowly, speech and prayer via the prophets and the priests was converted into a mode of teaching and into the study of the holy texts. Prayers and scriptural study were regarded as experiences

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been inscribed in the Greek description which was found in the excavations in Jerusalem in 1913-1914: "*Theodotus, son of Vettanos, the Priest and archisynagogos, son of archisynagogos, who built the Synagogue for purposes reciting the law and studying the commandments, and the hostel, chambers and water installations to provide for the needs of interments from abroad and whose father, with the elders and Simonides, founded the Synagogue.*" Levine, *Ancient Synagogues Revealed* 11. Franz Landsberger explains that while in the Temple the priests concentrated on the Pentateuch, the Rabbis already were adding to it commentaries and interpretations and also dealt with stories and narratives, which were not directly related to the Bible but were given validation through biblical concepts and ideas.

Franz Landsberger, *The Sacred Direction in Synagogue and Church*, First published in Hebrew Union College Annual, 28 (1957), 181-203.

<sup>93</sup> <sup>1</sup>In the ninth year of Zedekiah king of Judah, in the tenth month, came Nebuchadnezzar king of Babylon and all his army against Jerusalem, and they besieged it. <sup>8</sup>And the Chaldeans burned the king's house, and the houses of the people, with fire, and brake down the walls of Jerusalem. (Jeremiah 39).

א בשנה התשעית לצדקיהו מלך יהודה בחדש העשרי, בא נבוכדנאצר מלך בבל וכל חילו אל ירושלם, ויצרו, עליה. ח ואת בית המלך ואת בית העם, שרפו הפשדים באש; ואת-המזות ירושלם, נתצו. (ימיהו לט)  
תניא ר' ישמעאל בן אלעזר אומר בעון שני דברים עמי הארצות מתים על שקורין לארון הקודש ארנא ועל שקורין לבית הכנסת בית עם B.Sab. 32a מסכת שבת פרק ב, דף לב, א גמרא

The importance of the Synagogue as a place of study was described in the Talmud when R. Pinhas quoted R. Hoshaya saying: "*There were four hundred eighty Synagogues in Jerusalem, each of which had a school and a bet Talmud; The school was for (the study of) Bible and the Bet Talmud for (the study of) Mishna; and Vespasian destroyed them all*" (J Megilla, III, 1, 73d). Levine, *Ancient Synagogues Revealed* 12.

The reestablish divine service and liturgy in the Holy land was also followed by the foundation of the Sanhedrin in the Galilee, which regulated Jewish Law, customs and education. Rabbi Akiba (50-153CE) arranged *Halakhic* teaching which continued in the codification and the compilation of the Oral Torah in the form of the *Mishna*. He also developed the importance of *Midrashim*, literal interpretations of the Bible, putting attention to the details of the texts. The center for Rabbinic teaching was in Jabneh, and thus the centralized holiness of Jerusalem moved to include Synagogues outside the Holy city which concentrated on study and prayer. Breffny, *The Synagogue*: 20-22.

through which the soul was trained to ascend to God.<sup>94</sup> It was believed that God's word was heard when it was read; the congregants expressed themselves in silent prayers, and the leaders rewarded them with God's words.<sup>95</sup>

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Kahn understood that the preference of the oral as a means of communication with the divine was expressed in all Jewish religious structures. Fergusson explained that all Jewish religious structures were built "in a character of a shrine or of a treasury" to house God's Divine Word.<sup>96</sup>

Kahn must have been acquainted with the Torah's description of God's revelation before the Israelites in and the manner in which his oral guidance, serving the basis for Jewish belief and ethics, slowly changes into concrete elements to create sufficient basis for worship and ritual. After God's divine word was orally transmitted to Moses and his people (Exodus 20) Moses ascended to the mount Sinai where the divine words were inscribed by the finger of God in the form of Ten Commandments (*Asereth ha-Dibroth*, עשרת הדברות) with hollowed letters on two stone tablets (Exodus 24: 16-18),

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<sup>94</sup> Kochan, *Beyond the Graven Image- A Jewish View*: 16,23; Schiffman, *Jewish Spirituality and Devine Law*: 43; Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman*: XVII.

<sup>95</sup> Breffny, *The Synagogue*: 8-9; Finkelstein, "The Origin of the Synagogue " 57-58 .

The importance of studying the Torah was already mentioned by Ezra who came to Jerusalem in 450 BCE (before the destruction of the Temple) and was committed to the teaching of the people in the city: "And you, Ezra, according to the wisdom of your God which is in your hand, appoint magistrates and judges who may Judge all the people in the province Beyond the River (i.e., the Euphrates), all such as know the laws of your God; and those who do not know them, you shall teach." (Ezra 7:25) Josephus linked the importance of the reading of the text of the Holy Scriptures, the most important ritual that took place in the Synagogues of his times to the times of Moses. "He pointed the Law to be the most excellent and necessary form of instruction, ordaining, not that it should be heard once for all or twice or on several occasions, but that every week men should desert their other occupations and assemble to listen to the Law and obtain a thorough and accurate knowledge of it, a practice which other legislators seem to have neglected" (Josephus, *Against Apion* 2, 175 (LCL, p.363). The same idea is again mentioned by Josephus when he says: "Nor do we make a secret of the precepts that we use as guides in religion and in human relations; we give every seventh day over to the study of our customs and law..." (Josephus, *Antiquities* 16:43 (LCL,p.225). In the book of Acts (dating from around 45AD) the Synagogue is already known as a place of reading: "For from early generations Moses has had in every city those who preach him, for he is read every Sabbath in the Synagogues" (Acts 15:21).

<sup>96</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 213.

transforming the abstract ideas into subtle concrete reality.<sup>97</sup> When Moses descended the mountain (after spending forty days on it) he found the Israelites worshipping a Golden Calf – a more concrete artifact (Exodus 32: 1-8). Upset with his people, Moses broke the tablets (Exodus 32:19). Thereafter, God revealed himself again to Moses and instructed him to rewrite on replacement stones the Ten Commandments, to give them to the younger generation entering the promised land of Cana'an, and place them in the Ark of Covenant (אֲרוֹן הַבְּרִית *'Ārōn Habbərît*) – a portable, intricately detailed and lavish chest built according to the accurate instructions given to Moses, which could be carried in the desert and from which God could communicate with his people – a more physical testimony, yet comparatively modest for the revelation.<sup>98</sup> After its creation the Ark, covered with a curtain, concealing its beauty even from the priests, was carried by the Israelites during their 40 years of wandering in the desert, and whenever they camped it was placed in the Tabernacle. Since the revelation on Mount Sinai, The Ark of the Covenant containing the Divine Word and encased with protective layers was the most important element in Jewish worship.<sup>99</sup> In the Tabernacle, the Ark of the Covenant containing the Table of Moses was covered with an adorned curtain and kept in the Holy of Holies – a small precious space of 10 cubits or 15 cubits in size, illuminated by rays of

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<sup>97</sup> As inscribed in the Torah Moses said: "the LORD delivered unto me two tables of stone written with the finger of God; and on them was written according to all the words, which the LORD spoke with you in the mount out of the midst of the fire in the day of the assembly" (Deuteronomy 9:10).

The ten commandments include matters of fundamental importance: the greatest obligation (to worship only God), the greatest injury to a person (murder), the greatest injury to family bonds (adultery), the greatest injury to commerce and law (bearing false witness), the greatest intergenerational obligation (honor to parents), the greatest obligation to community (truthfulness), the greatest injury to moveable property (theft). Herbert Huffmon, *"The Fundamental Code Illustrated: The Third Commandment," in The Ten Commandments: The Reciprocity of Faithfulness* (Kentucky, USA: Westminster John Knox Press, 2004), 205–12.

The detailed instructions on how the Ark is to be constructed including sizes, materials – plated and crowned with Gold with Four rings of gold are to be attached to its four feet, with a golden cover, adorned with golden cherubim, all placed behind a veil (פִּרְכֵּת Parochet) (Exodus 25).

<sup>98</sup> As attested in the Torah: the LORD told Moses, "Hew thee two tables of stone like unto the first: and I will write upon these tables the words that were in the first tables, which thou broke." (Ex. 34:1) "And he wrote on the tables, according to the first writing, the Ten Commandments, which the LORD spoke unto you in the mount out of the midst of the fire in the day of the assembly: and the LORD gave them unto me" (Deuteronomy, 10:4).

<sup>99</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 219.



light entering from the Eastern facade.<sup>100</sup> In the First Temple the Ark of the Covenant, covered by an adorned curtain, was located in the Cella – a 20-cubit structure illuminated by light entering from a narrow opening in the Western façade, and located in the center of the Temple.<sup>101</sup> The Temple according to Ezekiel's vision housed the Holy of Holies at its center. In the Second Temple, the Holy of Holies, lacking the Ark and the Covenant that were stolen when the First Temple was destroyed, remained the center of the Temple, and was illuminated by the rays of light entering from the West.<sup>102</sup> Kahn knew that in Rabbinic Synagogues the Ark and the *Bima* were the central and most important elements. He was aware that in modern times the importance of the holy text and the community's Rabbi had diminished and that the Ark and the *Bima* became more modest and less adorned. The Synagogue became more of a democratic meeting-place for the Jewish community oriented around its leader, who was acknowledged as a man of the word.<sup>103</sup>

Kahn learned that while the oral was always preferred as a means of communication in Jewish tradition, and the Divine Word was given important attention in religious Jewish structures, the visual and the tactile were suppressed as mediums to relate and communicate with the divine, and that while the physical appearance of religious Jewish structures was supposed to be secondary, they were used in a unique manner to encourage rituals and worship, whose origin was of course oral but could not

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<sup>100</sup> Ibid., 214.

<sup>101</sup> The Jewish Bible, *Kings* 5,6,7 and 8 as well as description in 2 *Chronicles* 3,4,9 and 15.

<sup>102</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 218.

The influence of the Roman ideas could also be found in the Temples details, such as in the Gate of Hulda, whose proportions reached those of the sections of churches, and in the roof of the compartments of the Gate of Hulda artistic decoration. Ibid., 218.

<sup>103</sup> For discussion of these issues see: Wischnitzer, *The Architecture of the European Synagogue*: 278-79; Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 51-52; Levine, *Ancient Synagogues Revealed* 7-10.

exists without its framing in space. No physical attributes were associated with the acts of individual divine guidance in ancient biblical times, yet as Kunin points out some events of this sort were followed by the establishment of simple constructions, taking the form of a ladder, a stone, a pole, an altar, of other non-significant traces, to commemorate the Divine's appearance (for example, Jacob was associated with Beth El, Genesis: 28:10-22; 35:1-14).<sup>104</sup> In outdoor communal "assembly convocations" (*Mikraei Kodesh* מקראי קודש) in the *Mikraeha* מקראה God's participation was manifested by a canopy of shadow, in the form of a cloud or smoke during the day, and a canopy of light, in the form of fire, at night, as described by Isaiah:<sup>5</sup> "Then the LORD will create over the whole site of Mount Zion and over her assemblies a cloud by day, and smoke and the shining of a flaming fire by night; for over all the glory there will be a canopy and a pavilion.<sup>6</sup> It will be for a shade by day from the heat, and for a refuge and a shelter from the storm and rain." (Isaiah 4.5)<sup>105</sup>



Fig 18a



Fig 18b

Fig 18a: Fergusson's plate of the Jews' "First Temple" - A tent built from such wood and cloth.

(From James Fergusson, *History of Architecture from the Earliest Times to the Present Day*, 213)

Fig 18b: Fergusson's plate of the Herodian Second Temple - the only impressive Jewish religious structure.

(From James Fergusson, *History of Architecture from the Earliest Times to the Present Day*, 216)

<sup>104</sup> Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 27-28.

<sup>105</sup> ה' וברא יתהוה על כל-מכון ה'ר-ציון ועל-מקראתה, ענן יומם ועשן, ונגה אש ללילה, לילה: כי על-כל-כבוד, חפה. ונסכה תהיה לצל-יומם, מחרב; According to Casuto (notes to phrases 3-6, Chapter 4) Isaiah the prophet explained the Israelites that when they would return to behave according to the laws of justice, God would put his canopy of shadow and light over mount Zion and over their gathering places (מקראתה) to indicate that they were once gain chosen by him. He also mentioned that the Canopies would be similar in character to the structures God created during exodus in the desert when he appeared in front of the Israelites.

Fergusson shed light on the fact that since God was never associated with important physical attributes, the religious structures in which he revealed himself were quite humble forms, modest in dimensions and materials; their importance lay not in their appearance but their content. He explained that that "The Jews, like other Semitic races, were not a building people and never aspired to monumental magnificence as a mode of perpetuating the memory of their greatness. Their first Temple was a tent (Fig 18a), their second depended almost entirely on its metallic ornaments for its splendor, and it was not till the Greeks and Romans taught them how to apply stone and stone carving for this purpose that we have anything that can be called architecture in the true sense of the term."<sup>106</sup> Fergusson described the Tabernacle as a modest structure built from wood and cloth. He also mentioned that the Palace of Solomon was wholly of cedar and wood and must have perished from natural decay in a few centuries, if it escaped fire and other accidents to which are prone such temporary structures. The First Temple in Jerusalem was built (957 -587 BC) from well-polished stones and cedar wood.<sup>107</sup> The Temple in Ezekiel's vision on the banks of the Chebar was built from materials even inferior to those used for the Solomonic Temple, and The Herodian Second Temple (516 BC – 70AD) was the only large and impressive Jewish religious structure that took some of its characters from the "impress of the architectural magnificence of the Romans." (Fig 18b) Its magnificence was an external influence, and in it were still the desire to preserve modesty and abstraction.<sup>108</sup>

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<sup>106</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 209.

<sup>107</sup> The Jewish Bible, *Kings* 5,6,7 and 8 as well as description *2 Chronicles* 3,4,9 and 15.

<sup>108</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 218.

However, affiliated with the Jewish tradition Kahn might have read the description in the Torah challenging Fergusson's simplistic conception of Jewish abstraction, through which he could have become aware of the tension between the willingness to prefer the oral and the need to supply tactile attributes to encourage worship and enable ritual. In Exodus the Tabernacle is described in excruciating detail as a colorful, textured, and luxurious structure. Few examples for such descriptions include: "Make the tabernacle with ten curtains of finely twisted linen and blue, purple and scarlet yarn, with cherubim woven into them by a skilled worker" (Exodus 26:1); "Make for the tent a covering of ram skins dyed red, and over that a covering of the other durable leather" (Exodus 26:14); "Overlay the frames with gold and make gold rings to hold the crossbars. Also overlay the crossbars with gold" (Exodus 26:29); "Hang it with gold hooks on four posts of acacia wood overlaid with gold and standing on four silver bases;" (Exodus 26:32) "Make all its [the altar's] utensils of bronze—its pots to remove the ashes, and its shovels, sprinkling bowls, meat forks and firepans. Make a grating for it, a bronze network, and make a bronze ring at each of the four corners of the network." (Exodus 27:3-4)<sup>109</sup> Also Solomon's Temple is described in Kings as a lavish structure: "And Solomon overlaid the inside of the house with pure gold, and he drew chains of gold across, in front of the inner sanctuary, and overlaid it with gold. And he overlaid the whole house with gold, until all the house was finished. Also the whole altar that belonged to the inner sanctuary he overlaid with gold." (1 Kings 6: 21-22); "Around all the walls of the house he carved engraved figures of cherubim and palm trees and open flowers, in the inner and outer rooms. The floor of the house he overlaid with gold in the

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<sup>109</sup> For further reading see *Exodus* 25-27 and 35-40.

inner and outer rooms (1 Kings 6: 29-30); “All these were made of costly stones, cut according to measure, sawed with saws, back and front, even from the foundation to the coping, and from the outside to the great court. The foundation was of costly stones, huge stones, stones of eight and ten cubits. And above were costly stones, cut according to measurement, and cedar.” (1 Kings 7: 10-12)<sup>110</sup>

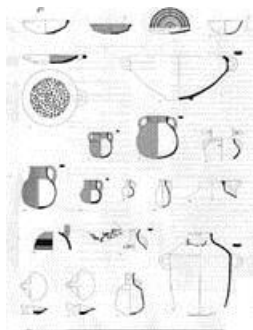


Fig 19a

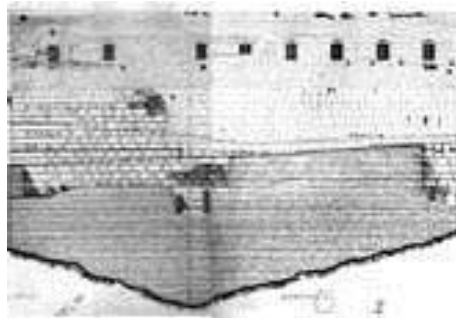


Fig 19b



Fig 19c

Fig 19a: Mazar's plate depicting fragments from First Temple Times.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, 29).

Fig 19b: Mazar's image of the exposed walls that supported the Second Temple un-hewn stones precisely layered one on top of the other.

(בנימין מזר, חפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על חפירות תשל"ח, ציור 2)

Fig 19c: Mazar's drawing of the exposed walls that supported the Second Temple un-hewn stones precisely layered one on top of the other.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, cover).

The archeological excavations in Jerusalem revealed no monumental buildings from First Temple era and preceding periods, but there have been unearthed fragments of pottery, clay pieces, stone weights (one with the word “sacrifice” [לוח קרבן *Korban* 5:מה]) stamps (one which said "to the King" [למלך, לוח מ:2]), and handles (one which said “Jew” [לוח מ:3 יהד]) (Fig 17d). The exposed walls that supported the Second Temple revealed excellence of construction in the manner of Roman monumental buildings, penetrated into the natural rock of Jerusalem, and reached a thickness of 4.60M, but were

<sup>110</sup> For further reading see 1 Kings 6, 7, 8.

composed of un-hewn 9-10-meter long stones (אבני גזית), precisely layered one on top of the other without the use of any connecting material. The Second Herodian Temple was built on the ruins of Solomon's Temple, whose characteristics are not well known.<sup>111</sup> According to Josephus Phlavious who based his assumption on the work of the philosopher Hecataeus of Abdera, (who lived in the 4<sup>th</sup> and 3<sup>rd</sup> centuries BCE) the First Temple and its altar were built from wood and un-hewn stones, and in it there was “no image, nor any thing, nor any donations therein; nothing at all is there planted, neither grove, nor anything of that sort.” (*Apion* 1.22; 198-99). The First Temple was refurbished several times since its destruction but was always built from “un-hewn stones, as the [biblical] law directs” so as to reduce their tactile attributes (*Macc* 4.36-51). Josephus explains that Herod hired 10,000 skilled workmen and trained 1,000 priests as masons and carpenters to build the Second Temple, for only priests could build the Temple proper (*Ant.* 15.11.2; 389-90), and thus the monumentality of the most splendid structure of the Jews was diminished to suit Jewish ritual (Mazar pointed out the difference between the wall that supported Temple Mount and the more tactile, detailed layers on top of it dating from other eras, mostly Byzantine (3<sup>rd</sup>- 5<sup>th</sup> centuries AD) and Muslim (7<sup>th</sup> -11<sup>th</sup> centuries AD), to suit other non- Jewish rituals of worship (Fig 19b, Fig 19c).<sup>112</sup>

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<sup>111</sup>163-70 "הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ח", מזור, Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 2.

<sup>112</sup>163-66 "הפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על הפירות תשכ"ח", מזור.

Mazar described the grandeur of the Second Temple and mentioned that according to Josephus its exterior was covered with Gold, as described by Josephus: *'Now the outward face of the Temple in its front wanted nothing that was likely to surprise men's minds or their eyes, for it was covered all over with plates of Gold of great weight and at the first rising of the sun reflected back a very fiery splendor and made those who forced themselves to look upon it to turn their eyes away, just as they would have done at the sun's own rays. But this Temple appeared to strangers, when they were at a distance, like a mountain covered with snow, so as per those parts of it which were not gilt, they were exceeding white...of its stones, some of them were forty-five cubits in length, five in height and six in depth'* (*War* V, 222).

William Barclay, *The Gospel of Mark*, The New Daily Study Bible, quoted by Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 4.

Many scholars have attempted to resolve the evolution of the preference given to verbal communication and the suppression of the use of other means and mediators to communicate with the Divine in Jewish places of worship throughout history. Kahn carefully considered this problem in his designs.

Kochan explains that the preference given to the oral in Jewish worship and the concurrent suppression of other senses such as the visual and the tactile derives from the Jewish belief in a God that stands in opposition to the any other entity of existence. The Jewish God is defined as a divine being separated from the world of matter, detached from the enchanted physical realm of appearances, residing beyond the phenomenological world of perception (in contradiction to other idols, which included all of the "strange gods of the soil," "the stars," and other natural phenomena, all being existences which are part of the earthly world of matter), thus God's anonymity becomes a central concept in Jewish tradition. The Jewish God defines himself with pronouncements such as "I am what I am," "I shall be what I shall be," "I shall cause to be what I shall cause to be." (Ex. 3:13) He appears and disappears, and freely chooses how He will manifest Himself to the Israelites. The Torah scarcely speaks about God in figurative language, there is no inclination to clearly describe his existence (while other gods are perceived to be artifacts of "wood and stone," i.e., idols), and attempts to reduce him to matter are condemned by the prophets and the psalmist (Hosea 8.5-6, Isaiah 44.9-

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Mazar also quoted the Talmud description: "*The outer doors opened into the inside of the entry and covered the thickness of the wall, and the inner doors opened into the inside of the House and covered the space behind the doors, for all the House was overlaid with gold, save only behind the doors*" (Mishna, Middot, 4:1) The Mishna, transl. Herbert Danby, Oxford Univ. Press, 1933 quoted by Ibid.

20, Ps. 115.5-7). Once in a while the Torah speaks of God's hands, feet, fingers, eyes, ears, etc. (Dan 7.9; Ex. 15.3; Is. 63:1) but God's essence remains impossible to grasp. Thus, even when the Torah makes use of the language of human attributes, it is unable to completely articulate the divine.<sup>113</sup>

Scholem points out that God appears in the Torah as light, fire, smoke, flames, clouds, and other modes of opaque representation. During Exodus, God led the Israelites as a column of smoke by day and fire at night; on Mount Sinai, God appeared in front of the Israelites as fire: "And to the eyes of the sons of Israel the appearance of the glory of the LORD was like a consuming fire on the mountain top" (Ex. 24.17), and later in Deuteronomy: "Then the LORD spoke to you from the midst of the fire; you heard the sound of words, but you saw no form -only a voice" (Dt. 4.12) "So watch yourselves carefully, since you did not see any form on the day the LORD spoke to you at Horeb from the midst of the fire (Dt. 4.15-19). When God revealed himself in the Tent of Meeting he appeared as a cloud, and in the Temples in Jerusalem God appeared as a shining light between the two golden angels (*chruvim*, כְּרוּבִים) atop the shrine; in messianic times, it is believed, the light of the Messiah will become visible by gradation and stages, until it will shine forth brightly, and then strike forth in all its Glory, creating a brightness that cannot be looked at."<sup>114</sup> Kocahn explains that God's obscure description

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<sup>113</sup> Kochan explains that while the exact definition of "idol" is not clearly discussed in the Bible, the word *Idol Elil* (אֱלִיל) contains within it the word *el* – meaning not (אֵל) and could, therefore, also be understood as not a thing to worship or believe in. Kochan, *Beyond the Graven Image- A Jewish View*: 1-23.

<sup>114</sup> Gershom Scholem, *The Messianic Idea in Judaism and other essays on Jewish spirituality* (New York: Schocken Books, 1971), 10-11.



and the multiplicity of God's appearances prevent his conceptualization into one material or form. Humans would thus never acquire a complete knowledge of God.<sup>115</sup>

Furthermore, Kochan explains that God's anonymity determines the human perception of God and shapes the role of symbolism and the structures of religious institutions engaged in worship of the divine. Mintz and Schiffman explain that the relationship between the Israelites and God has always been based on the sharing of the "spiritual," (*Ruhaniut* רוחניות), opposed to the sharing of "matter" (*Gashmiut* גשמייות). In other words, it is believed that through the soul and the spirits, which make up the essence of the human being, humans could intersect with the divine.<sup>116</sup> Therefore, explains Kochan, the Jewish God and the Hebrew Torah try to prevent the Israelites from surrendering to the enchanted world of matter. To do so, the Torah introduces sight and touch, the sources for physical representation, the primary media for the construction of perception (used by pagan beliefs of the time), as media of deception, illusion, abuse, and seduction to the world of matter. Already in Nu. 15:39 God warns the Israelites that they not "follow your heart and eyes in your lustful urge". The Jewish God manifested his presence via intellectual forms of perception and spiritual modes of cognition, and did not materialize through pragmatic and phenomenological means. The Jews hear him and

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<sup>115</sup> Kochan, *Beyond the Graven Image- A Jewish View*: 5-23.

<sup>116</sup> Therefore, the Bible puts an emphasis on describing the non-physical and spiritual, namely the *ruah* רוח, aspects of God and of the human being. Already in the story of creation (Gen 2:4-3), it is only when God breathes the *nishman adam* – the soul of man - into man that they become living beings (when a person died it was believed that the soul left the body while maintaining a degree of consciousness and ascended to God, while the body went to *sheol*. The spirit, given by God to humans is perceived by Judaism as the essence of life and only when joined to the body could result in the "spirit of life," *nishmat hayyim* נשמת חיים. The soul, *nefesh* נפש, was the seat of emotions, affections (love, fear, desire), and all other animated aspects of the human being (Gen. 9:4-5; Deut 12:23, Lev. 17:11). Schiffman, *Jewish Spirituality and Divine Law*: 39-43.

apprehend his will.<sup>117</sup> However, while the Torah emphasized the spiritual connection with the divine, Jewish tradition has always been aware that communication between man and the divine takes place in the world of appearances, created by God. Thus, the Bible has recognized the role of the phenomenological world to express meaning and allow human action, and has enabled the establishment of suitable settings for the practice of rituals to express solidarity with spiritual concepts and beliefs. In these structures, the role of speech-transcending modes of communication and perception to convey meaning is being seriously addressed. The other senses taking part in the communication of meaning are not completely ignored but suppressed, so that the risk of succumbing to the physical realm, in the belief that its manifestations might represent the divine, was minimized.<sup>118</sup>

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<sup>117</sup> Kochan, *Beyond the Graven Image- A Jewish View*: 5-23. Thus, as has already been discussed from the ancient biblical times into the Second Temple period human's encountered God through his speech. God's divine cognition, which was first manifested and transferred through speech, developed into modes of prey in prophetic epochs. Later, speech and prey converted into the mode of teaching. In Rabbinic era's prayers and studies of were regarded as experiences through which the soul was trained to ascend to God. Finkelstein, "The Origin of the Synagogue." Moreover, the unpunctuated Hebrew language and its open structure, lets itself to a multiplicity of readings and renderings and this multiplicity of meaning was something that the author of the Bible and Rabbinic scripts have always taken as an advantage. Thus, the Hebrew word allows communication and apprehension of a multiplicity of meaning, and raises humans' attention above the world of matter into the world of wisdom. Kochan, *Beyond the Graven Image- A Jewish View*: 5-10.

Cradozo stresses out that even the Jewish prayers emphasize the paradox of communication through final worlds with the infinite God. The main body of the Jewish prayers is opened by the Chazan (communal reader), saying "Baruch et Ha-Shem Ha-Mevorach" (praise the LORD who is ultimately praised). However, at the same time the audience is instructed to say "His name is elevated above all praises and blessings." The two statements express the tension existing between communicating and praising the one who his beyond all praises. In a way finite man communicates with the divine who is beyond human capabilities to approach. The same paradox could be found in the important prayer of the Kaddish: The prayer starts with "May (God's) great Name be exalted and hallowed in the world of his creation...He is...honored, exalted, glorified, adored (etc)," and after the prayer is asked to change the tome and say "(God) is beyond the power of all blessings, hymns, praise, and consolation that are said in this world and now say: Amen." In both cases it is hinted that man may praise God, but he will never do it sufficiently. The attempt is limited. In other words, ideally man stands speechless in front of God; Silence is the highest expression of prayer; However, humans are not strong enough to stand in silence. Thus, words are used to pray, and once again, to succumb to the human finite weakness and their need to address the divine in tangible manners, appropriate the human condition. Full silence - the ideal contemplation with God - cannot be achieved in reality. Nathan T. Lopes Cardozo, *Between Silence and Speech, Essays on Jewish Thought* (Northvale, New Jersey, London: Jason Aronson Inc., 1995), 8-9.

<sup>118</sup> The consideration of the senses and the practicing of the body as major means to communicate meaning is dangerous, according to Judaism, since it could easily lead to the succumbing to the physical modes of representation, resulting from three interrelated risks: The first, that the physical representation used while worshipping could accidentally be recognized as God and thus will diminish God's mighty, infinite, and irreducible existence; The second, that the physical similarities between humans and physical representations, might lead to the wrong illusion that man and God share the same world of matter, which can result in self-seduction of the worshipper. The third, that the use of

Kochan explains that the Bible tried to avoid depicting incidents where images provoke messages by signifiers of the deity, or of humans' relationship to it, and hence the Pentateuch rejected all surrounding scarabs, groves, sanctuaries, altars, and sacred vessels. All previous objects that allowed communication with "the other divinities" (idols), which were used by the Israelites prior to their acceptance of the belief in an abstract deity were destroyed (Ex. 34:12-16).<sup>119</sup> However, in Jewish tradition remnants of the destroyed signifiers served to convey meanings that transcended their original figurative symbolism, and found places in the evolving Jewish religion as objects that deny any specific representation.<sup>120</sup>

Lopes stresses that from the divine revelation at Mount Sinai (proposed by scholars to take place between the 16th and 13th century BC) it was clear that the Jewish God was willing to commune with the Israelites in a manner that would cause them to hear what could usually be seen and see what could usually be heard. In other words, God used refined modes of communication that could not be perceived by the regular senses in the way that one perceived physical objects. However, right after the revelation, God understood that this sort of communication with humans was impossible, and gave Moses the Two Tablets of stone (matter) on which the covenant was inscribed (Exodus 20).

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physical materials to describe the almighty might result in the mistaken belief that the almighty is an entity that can be represented by "*that which their own fingers have made*" (Is. 2:8), meaning the work of artisans, joiners, carpenters, blacksmiths, goldsmiths and silversmiths (Hosea 8:6; Is. 44:9 ff. Jer 10:9 ff). Kochan, *Beyond the Graven Image- A Jewish View*: 4-8, 12-21.

<sup>119</sup> Ibid. Most of the sins of the Israelites and their leaders are related to the overuse of matter in a figurative sense. Thus when Jeroboam conspired to rule were followed, upon the death of Solomon, and his becoming king of the 10 tribes, by the fortification of Shechem as the capital of his kingdom and the erection of, two "golden calves" as symbols of God, at Dan and Bethel (1 Kings 12). Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 27. Later, Jeremiah, the prophet preaching the Israelites after the destruction of the First Temple, claims that the "*mutinous Israel ...committed adultery with stone and with wood*" (Jer 3:8-9, Jer. 10:1-16). Cardozo, *Between Silence and Speech, Essays on Jewish Thought*: 12.

<sup>120</sup> Kochan, *Beyond the Graven Image- A Jewish View*: 12-15.

Later he permitted the building of the Tent of Meeting (*Mishkan* מִישְׁכַּן - *Ohel Moed* אוֹהֶל מוֹעֵד), which, according to Soforno, was built out of the remnants of the Golden Calf. The Altar, the Menorah, and the Ark were used in the Tent to bring the divine experience down to earth, a testimony without which the divine experience would have perished. In the Tent of Meeting God instructed that the altar be built either from earth or from unhewn stones (so that the attractiveness of the stone would be reduced) (Ex. 20.21-22). The first Temple was built from poor materials (fully described in 1 Kings 6-8); while in the Second Temple it was prohibited to make any patterns or incisions into the stone (as described in 2 Kings 25-26), which would draw the physical entity closer to the hearts of the people and attract attention to the phenomenological world of appearances, and thus disturb true communication with the divine.<sup>121</sup>

Furthermore, as Lopes explains, the Jews have used fragments of the figurative symbols and abstracted pieces of matter, as forms through which the belief in that which is beyond the physical universe was translated and transcended into the world of human beings. The Covenant, the Tent of Meeting, and even the First and Second Temples in Jerusalem served as symbols difficult to translate via the human imagination, and through which the ultimate *symbolessness* of monotheism was acknowledged. Lopes stresses that although in its ultimate aspiration Judaism needs no symbol or physical means of representation, Judaism yet succumbs to a physical means of representation after all. Acknowledging that the intangible cannot be grasped in the real world of appearances,

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<sup>121</sup> As mentioned: the people of Israel “*Saw the sounds and the flames and the stones of the shofar*” and “*trembled and stood afar*” (Exodus 2:15) Quoted in Cardozo, *Between Silence and Speech, Essays on Jewish Thought*: 4. Moreover, in the Temple, the Israelites were able to “*see the face of God*” (Det. 16:16, Psalm 11:4-7). However, seeing the face, *Panim* פָּנִים, meant being encountered with interior of God, by providing a religious experience of him which transcended the any physical attributes, and indeed the chair on which the God was supposed to sit was empty. Schiffman, *Jewish Spirituality and Divine Law*: 45.

Judaism compromises, and transmits the idea of the infinite through fragmentary, broken means of representation, encouraging contemplation, amazement, and awe in the encounter with the divine.<sup>122</sup>

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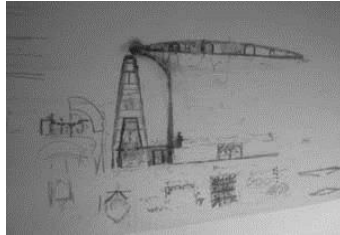


Fig 20a

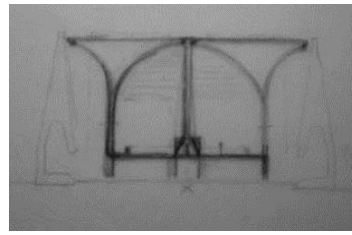


Fig 20b

Fig 20a, Fig 20b: The Hurva Synagogue sketched by Kahn using loose pencil lines as a fragmented, flexible structure. (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

Kahn's projects fully acknowledge the complexity of the historical Jewish problem of representation. Using loose pencil lines, Kahn's sketches definitely depict the Synagogue as a fragmented structure and reveal that he contemplated on the means to bring forth the preference of the oral and the suppression of the tactile and the visual in his designs for the Hurva Synagogue (Fig 20a, Fig 20b).



Fig 20c



Fig 20d

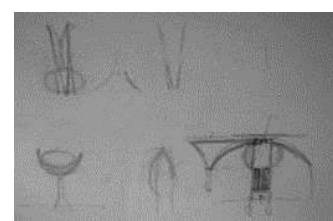


Fig 20e

Fig 20c: Picture of a wood model showing the abstracted broken structure of the Hurva in its monumental surrounding.

Fig 20d: Picture of a working model of the exterior of the Hurva Synagogue - An abstract cube, whose corners were subtracted, surrounding walls were broken, and roof was detached from its supporting walls. (From pictures of working models of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 20e: Kahn's personal sketches showing the use of concrete in the Synagogues' interior as a poor and flexible material giving the impression of a space in constant flux. (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

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<sup>122</sup> Cardozo, *Between Silence and Speech, Essays on Jewish Thought*: 4-12.

There were different ways to present the preference of the oral and the suppression of the visual and the tactile, emphasizing the idea that the Jewish God resided beyond the physical world of existence, as they were expressed and articulated throughout history and were brought together in Kahn's design. The Hurva Synagogue was to be contained in an abstract cube (fig 20c), whose corners were subtracted, whose surrounding walls were broken, and whose roof was detached from its supporting walls (Fig 20d). The interior of the Synagogue was modeled in concrete "done as though it is to be covered and neglected in every detail of technology" to make it seem "very poor." (Fig 20e)<sup>123</sup> The fragmented nature of the structure allowed intense Mediterranean light to enter the Synagogue from several directions and created striking patterns on the walls and floors: reflections on the polished concrete interior made it difficult to discern the physical appearance of the Synagogue, and the structure was distorted. Thus, the immense structure looked fragmented, and the materiality of the architectural space was blurred.<sup>124</sup>



Fig 20f

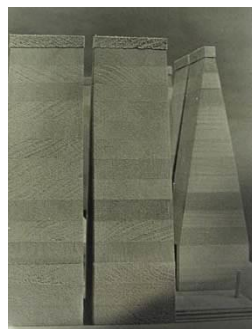


Fig 20g

Fig 20f: Fragment of Kahn's personal sketch showing the carved pylons and their remaining thin walls. (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Archives, University of Pennsylvania).

Fig 20g: Picture of a working wood model showing the walls of the Synagogue composed from large unhewn stones. (From pictures of working models of the Hurva Synagogue, The Louis I. Kahn Collection).

<sup>123</sup> Kahn, July 1968, quoted in Ronner Heinz, *Louis I. Kahn Complete Work 1935-1974*: 363.

<sup>124</sup> On the use of light in Kahn's Jewish projects also see Dan Mirkin, "Louis Kahn Against the Architects of Solele Boneh," *Ma'ariv*, 29/07/1968; Kent, *Louis I. Kahn, Unbuilt Masterworks*: 167; Solomon, *Louis I. Kahn's Jewish Architecture*: 109-11.

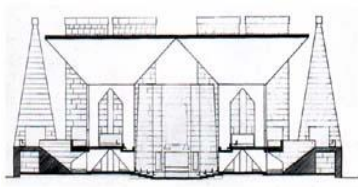


Fig 20h

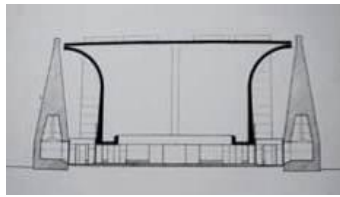


Fig 20i

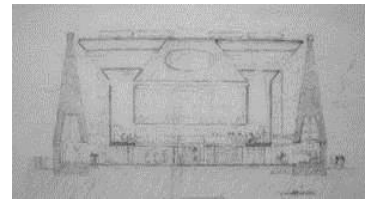


Fig 20j

Fig 20h: Section drawing showing the interior space of the first design for the Hurva defined by hollowed mushroom like columns.

Fig 20i: Section drawing showing the interior space of the second design for the Hurva defined by a hollowed thin concrete shell that floated above the Synagogue's floor and curved from the Synagogue's gallery upwards.

Fig 20j: Section drawing showing the interior space of the third design for the Hurva defined by mushroom like columns within which large openings were located allowing the penetration of bright light ad evoking their sense of materiality.

(From working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

The physical units alluding to the structure of the Temples in Jerusalem, which Kahn used to articulate the envisioned Synagogue's structure, were constantly weakened and negated; voids were preferred to solids, light to materiality, and abstraction and plainness to texture.

The walls defining the Synagogue, having the height and width of the walls that supported the Temple Mount, had wide bases that anchored the structure into the ground and yet were hollow, creating a place within them. They were tapered as they ascended, and Kahn claimed they gave the impression of being tilted by the wind (Fig 20f).<sup>125</sup> The walls of the Synagogue were constructed out of huge stones, similar in size to those used in the Western Wall; however, the stones' texture was diminished, almost as their materiality was negated, to seem as if they shined and glowed (Fig 20g).<sup>126</sup> Kahn explained: "I intend to use the same stone as the stones of the Western Wall, large, not

<sup>125</sup> Dan Mirkin, "Louis Kahn Against the Architects of Solele Boneh," *Ma'ariv*, 29/07/1968.

<sup>126</sup> Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site."

small stones, rather as large as you can get, as monolithic looking as possible."..."These stones are 16 foot square."..."Like the Stones of the Western Wall [they] will be golden in color."<sup>127</sup> The interior space of the Synagogue, similar in size to the area of the Foundation Stone (currently encased by the Dome of the Rock), was loosely enclosed in the first proposal for the Hurva by mushroom like hollowed columns, which hardly touched the ground (Fig 20h). In the second proposal the enclosure was created by hollowed thin concrete shells that floated above the Synagogue's floor and curved from the Synagogue's gallery upwards (Fig 20i), while in the third proposal, the interior space of the Synagogue was defined by mushroom like columns within which large openings were located allowing the penetration of bright light and evoking their sense of materiality (Fig 20j).

In addition, the details within the Synagogue were modestly defined, as were the objects to be used during the service, except from the *Ark* and the *Bima* which received attention and focusing. Thus, in all of Kahn's three design proposals, visual and tactile experiences were minimized so that the Divine would not be depicted to the worshipper. The high interior space of the Synagogue and its long walls made sound and voice an important factor. God, who is perceived according to Jewish belief as a consoler and a messenger, could be "found", or mainly "heard," in the Synagogue.

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<sup>127</sup> Kahn, July 1968, quoted in Ronner Heinz, *Louis I. Kahn Complete Work 1935-1974*: 363.



## Borders and the concept of Purity

Kahn's studies revealed the importance of degrees of purity in the Jewish ritual of divine communication, and the different ways these had been expressed in religious structures and experienced in Jewish rituals during the course of history.

Finkelstein explained that the *Mikrae* and the *Mikrae Kodesh* surrounded the man who was in charge of divine communication, and the area where the assemblies took place was defined by the contours created by God's canopy of shadow and light.<sup>128</sup> Fergusson described the importance of the central area in each of the "Temples of the Jews" and the differences in the areas surrounding them. All "Jewish Temples" were built on plans having concentric rings defining degrees of purity so that the outer circles were less pure and the interior circles signified degrees of greater purity as they approached the center. The holy scrolls were kept in the center of the Jewish Temples, and were out of reach for everyone, except the holy priests (II Chronicles 3, 14).<sup>129</sup>

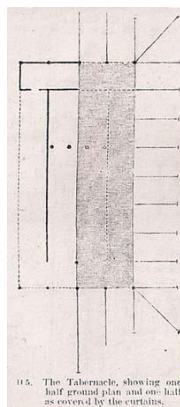


Fig 21a

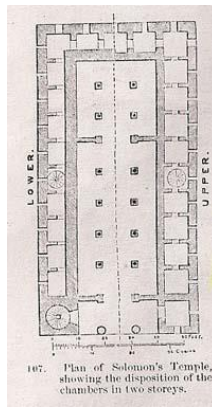


Fig 21b

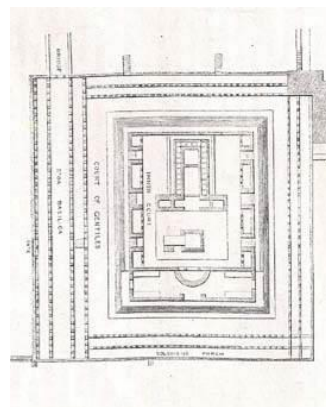


Fig 21c

Fig 21a: A plate from Fergusson chapter depicting rings defining degrees of purity in the Tabernacle.  
Fig 21b: A plate from Fergusson's chapter depicting rings defining degrees of purity in the First Temple.  
Fig 21c: A plate from Fergusson's chapter depicting rings defining degrees of purity in the Second Temple.  
(All from James Fergusson, *History of Architecture from the Earliest Times to the Present Day*, 212-215).

<sup>128</sup> Finkelstein, "The Origin of the Synagogue ", 51.

<sup>129</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 215.

Fergusson's woodcuts depicted the central location of the covenant and the surrounding courtyards in the Temples in Jerusalem.<sup>130</sup> The Tabernacle was located in the midst of the Israeli camp and the twelve tribes organized themselves around it according to degrees of purity. In the center of the Tabernacle was the Holy of Holies, containing the Ark with the Tablets protected by a curtain (*Parochet*, פרוכת), and only the High Priests entered this area.<sup>131</sup> The Holy of Holies was encompassed by ~4.6M-by-9.15M space and surrounded by ~2.3 M of slanted cloth in every direction to create a courtyard, where priests guided communal prayers (Fig 21a).<sup>132</sup> The First Temple was located in the midst of the Kingdom of Israel, in the center of the Temple was the Cella, surrounding the elevated Burdensome Stone, which contained the Holy Ark with the Ten Commandments and was entered, by the high priest, only once a year, on the Day of Atonement (I Kings 8, 28). The Cella was surrounded by a court ~91.4M in length and ~45.7M in width (all its other dimensions doubled those of the Tabernacle, including its height) (Fig 21b), where prayers were conducted.<sup>133</sup> The Temple, according to Ezekiel's

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<sup>130</sup> Ibid.

<sup>131</sup> As is clearly describes in Numbers 3:38 degrees of purity also defined the organization of the Israeli camp, the social inner circle was composed from the priests, this circle was surrounded with the ring of the Levites who were then circled by all the other Israeli tribes. Kunin explains that Judah, the tribe of the Destiny of David faced the entry to the court, and was set in opposition to Ephraim, one of the tribes in the Kingdom of Israel, who presented the Northern Kingdom. This Opposition reflected the historical division of the Kingdom, when it was separated to Israel and Judah. The East was composed of tribes of Leah's youngest sons, in the order of their birth; Issachar, Judah and Zebulun and the West was composed from the tribes of the children and grandchildren of Rachel, Mannasseh, Ephraim, and Benjamin. Again, those located on the East, and facing the West were valorized (Rachel, the youngest daughter was valorized upon the older daughter Lea, as usually were the young children in Hebraic bible) and considered more significant for the history of the Israeli tribe. On the north were the tribes of Asher, Dan and Naphtali and on the South Gad, Reuben and Simeon. The southern side had a negative association which derived from their rejection of Torah (Numbers 16). For further discussion of the organization of the twelve tribes around the Tabernacle see Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 15-19.

<sup>132</sup> Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 212-14.

Kunin adds that the curtained off section of the "Holy of Holies" was surrounded by a court, which might itself also had been divided into different zones in relation to degrees of holiness and purity. Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 7-9.

<sup>133</sup> Fergusson refers the reader to the Jewish Bible, *Kings* 5,6,7 and 8 as well as description 2 *Chronicles* 3,4,9 and 15. Mintz adds that the Temple of Solomon was composed from increasingly sanctified areas. In the macro level the Temple put Jerusalem and the Israeli King in the center of the united nation (1 Kings 12:26-28). In the micro level, the worshipper entered the gates of the Temple and was slowly climbing in a spiritual ladder. The women stopped in the

vision, housed the Holy of Holies in its center, and was ringed by several courts, though it lacked some of the courts which made up the First Temple. In the Second Temple, the Holy of Holies, without the Ark (which was buried under the First Temple's ruins) was located in the center of the Temple and was entered only once a year by the High Priest. The Second Temple had several courts like the First Temple and an additional impressive large court, which served pilgrimages to Jerusalem and used as the Court of the Gentiles in Herod's time (fig 21c). Kahn learned From Finkelstein that the area of the Ark in Rabbinic Synagogues could be accessed only by the leaders of the community, whose position was akin to that of the priest, and the community member who was given the honor to read from the Holy Book. The rest of the community surrounded them during worship ritual.<sup>134</sup>

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The archeological excavations in Jerusalem also revealed evidence of the courts that had surrounded the Second Temple. Three out of the five gates described in the Mishna, through which believers entered the Temple's courtyards, were unearthed. Also were revealed the two Hulda Gates (also named the “The Double Gate” or “The Triangle Gate”), located on the supporting southern wall of Temple Mount, and the Coponius Gate, located on the Western Wall, added by the Romans when they took over Temple Mount in 70 AD, and identified with the gate existing below the Moors' Gate, named Barclay's Gate today.<sup>135</sup>

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women's court and the men could arrive until the *azarah*, the "Court of the Israelite's." Only priests could continue further towards the "Holy of Holies." Schiffman, *Jewish Spirituality and Devine Law*: 43-44.

<sup>134</sup> Finkelstein, "The Origin of the Synagogue", 58.

<sup>135</sup> "חמישה שערים היו להר הבית: שני שערי מזר, "חפירות ארכיטקטוניות בירושלים העתיקה, סקירה ראשונה על חפירות תשכ"ח", 163. משמש כלום; שער מזרחי, עליו שושן כניסה ויציאה; קיפונס מן המערב, משמש כניסה ויציאה; טדה מן הצפון, לא היה חולדה מן הדרום, משמשין Mishna Masehet הפרה, ופרה, וכל מסעדיה יוצאין להר המשחה." (משנה, מסכת מידות פרק א, פסוק) הבירה צורה--שבו כוהן גדול השרוף את Midot A: c, Mazar, Ibid.

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Smith explains that the sacred space in Judaism suggested a progression of small domains which were opposed to one another on the basis of holiness and purity. Inner rings were more exclusive and holy with respect to the surrounding rings, and less exclusive and less pure with respect to the rings located inside. The "Holy of Holies," the most sacred zone, was located at the center of sacred religious structures. Thus, these categorized spaces defined the level of access to different zones within religious structures, as well as the degree of participation, with direct relationship between the level of purity to the extent of participation in the religious ritual, namely in the degree of access to divine communication – to the divine word.<sup>136</sup>

The concentric idea of purity, explains Kunin, has defined Jewish culture as a whole and was expressed in sacred Jewish spaces, which have always been divided into degrees of purity surrounding the divine biblical law, the more holy the zone, the more exclusive the access. Thus, sacred spaces have also functioned as genealogical and social metaphors. On the macrocosmic level, the Israelites are differentiated from the other nations, and on the microcosmic level, the internal units comprising the Israelites – the different tribes, families, and individuals, differentiated from each other, so that the purest have access to the holiest in the holy zone, while the impure are excluded from the sacred area. Whereas the Tabernacle defined zones of purity in the Israelite camp, the Temple served as defined zones of purity for the unified Israelite nation, and in parallel

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"Five gates were the Temple Mount: two from the Southern Daily rat, used for entry and exit; Kifonos the West, serves as the entry and exit; Tda from the North, was not used to anything; Eastern Gate, Shushan the capital to form - where the high priest Hsorf breach, violation, Iotzain Electric Mountain" (Mishna Masehet Midot A: c). Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 10.

<sup>136</sup> For further discussion see Smith, "Traces of Second Temple Found," 62-63.

the Synagogue defined social hierarchies within whole or even just part of specific communities.<sup>137</sup>

Kahn was familiar with the arrangement of Rabbinic Synagogues according to degrees of purity, in which the Holy Ark and the *Bima* would occupy the holiest zones. The Rabbi, and the person chosen from the congregation to read the Holy text, were the only individuals allowed to open the Ark's encasing ornamental curtain, *The Parochet* (פרוכת), and to hold the Holy Scripts. The congregation's most important members were seated next to the Ark and the *Bima*, the rest of congregation were seated in concentric rings, from the Ark and Bima to the Synagogues' exterior walls according to their degrees of purity, so that the least pure people sat along the borders of the Synagogues.<sup>138</sup> Women often sat in galleries behind a dividing screen, the *Mechitza* (מחיצה), within the Synagogue's main space.<sup>139</sup>

Kahn was also exposed to the democratization of religion and to the emergence of feminism which encouraged freer relations with members of Jewish congregations, permitted a more flexible participation in religious rituals, which affected the design of Synagogues so that they became more widely accessible and less formal. In many

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<sup>137</sup> Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 7-9, 49.

<sup>138</sup> Ibid., 51. This might explain some stone chairs found in the Synagogues in the Northern part of Israel (in the Synagogue of Chorazin and Hamat-Tiberias) attributed as the "Seats of Moses". Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman*: XVIII. In the Rabbinic era, the prophecy, chosen by God, and the priests, born to a certain tribe, were replaced by Rabbis, who were chosen by the community and functioned as their representatives. Kunin, *God's Place in the World, Sacred Space and Scared Place in Judaism*: 26.

<sup>139</sup> Breffny explains that in early Synagogues there is no indication that partitions for women were used. Breffny, *The Synagogue*: 31. Levine adds that Synagogues in the Galilee, dating from Byzantine times (the 3<sup>rd</sup> and the 4<sup>th</sup> centuries AD) had galleries which were reached by staircases. However, it is not clear whether galleries served the women in the communities or just enabled various activities of the enlarged community to take place in the Synagogue. Levine, *Ancient Synagogues Revealed*, 12.

Synagogues in the United States, galleries and interior separations were abolished; in more traditional Synagogues men and women were only subtly divided on the same floor; and in Conservative, Reconstructionist, and Reform Synagogues women were even counted as part of the Minyan and nominated as Rabbis and cantors.<sup>140</sup>

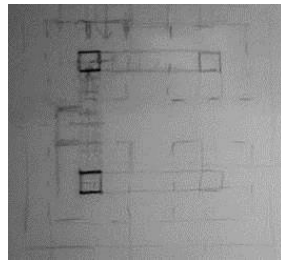


Fig 21d

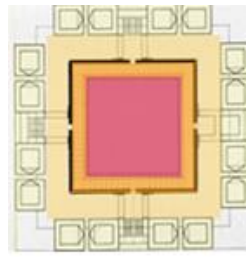


Fig 21e

Fig 21d: Kahn's personal sketch contemplating borders defining varying degrees of purity in the Hurva Synagogue. (From Kahn's personal drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 21e: Plan of the Hurva with author's scheme of the circular rings (in orange- yellow gradients) surrounding the interior area (in red) in Kahn's design.

(Plan from working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

Kahn's sketch of the Synagogue as a concentric plan divided into sequential rings that surrounded a small central area reveals his aspirations to use borders to define varying degrees of purity, to allude to the structures and rituals which took place in the dispersed assembly convocations of antiquity, as well as those in the Tabernacle, the Temples in Jerusalem, and Rabbinic Synagogues (Fig 21d).<sup>141</sup>

All of Kahn's designs for the Synagogue proposed an interior sanctuary, aimed to duplicate the area that surrounded the Foundation stone in the Temple (Fig 13d), that was circled by an ambulatory. In some proposals Kahn also included upper galleries, and additional surrounding rooms that he located within the stone pylons. Kahn explained:

<sup>140</sup> Solomon, *Louis I. Kahn's Jewish Architecture*: 6-8. For further reading on the topic see Wigoder, *The Story of the Synagogue*: 190-92.

<sup>141</sup> See note 28.

"The new building should itself consist of two buildings –an outer one which would absorb the light and heat of the sun and an inner one, giving the effect of a separate but related building. The inside building would be a single chamber resting on four points.... The exterior will be visible through the niches which are in the stones.... The space between them will be such as to allow sufficient amount of light to enter from the outer chamber, and completely surrounding the interior chamber there will be an ambulatory from which people will also be able to witness a service taking place in the interior chamber. The construction of the building is like the large leaves of a tree, allowing light to filter into the interior."<sup>142</sup> Kahn added: "The Synagogue's interior chamber is a room 60 feet by 60 feet [~18.3M by 18.3M] a very modest sized room I think. It is designed so that four people or 200 people may feel comfortable while praying there."<sup>143</sup> The design encouraged different degrees of participation in Jewish rituals. The more affiliated people could take part in the services to be conducted in the interior chamber, while those who were not part of the worshipping group could assemble on the outskirts of the Synagogue, or just pass through it as part of their journey in the city.<sup>144</sup>

### **The Concept of *Aliah* (עליה) - Ascension**

Kahn's studies familiarized him with the positive associations related to the act of ascending, *Aliah* (עליה), and the negative associations related to the act of descending, *Yerida* (ירידה), in Jewish belief.

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<sup>142</sup> Kahn, July 1968, quoted in Ronner Heinz *Louis I. Kahn Complete Work, 1935-1974*: 363.

<sup>143</sup> Kahn, July 1968, quoted in *Ibid.*, 364.

<sup>144</sup> Mirkin, "Louis Kahn Against the Architects of Solele Boneh."

Finkelstein did not explain the importance of ascension in ancient biblical acts of divine communication, but if Kahn had consulted the Jewish Bible he would have noticed that the biblical figures searching for the divine were doing so in raised liminal spaces. To mention only a few examples: Aharon ascended to Mountain of Moriah, believed to be the site of Temple Mount, and the site of man's first covenant with God, Abraham was asked by God to "raise up" (*la haalot*, להעלות) his son Isaac, while the two men who accompanied him were left at the bottom of the Mountain and did not take part in the act (Genesis, 22), God revealed himself to Moses and gave him the Ten Commandments on Mount Sinai (Genesis 23), and later, when Jacob stopped in the site now identified as Mount Moriah, the future home of the Temple in Jerusalem, he ascended up the ladder - signifying the "bridge" between Heaven and earth (Genesis 28).<sup>145</sup>

Kunin explains that in opposition to the positive connotations of the act of ascending, the act of descending (*Yarad*) had negative associations, and was associated with death. Pits and other low places represent the netherworld (*Sheol*, שאול), the world of the dead, and belong to earth. Thus, after the original sin, Adam and Eve descend from the Garden of Eden (עֵדֶן) (Genesis 2-3); the Israelites go down to Egypt and ascend to Israel: a more specific example is of Joseph being thrown into a pit while a sacrifice is raised to God (Genesis 22 and 37).<sup>146</sup>

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<sup>145</sup> Kunin adds that other sacred spaces were located between different cultural domains or bridged different domains. For example the action of Genesis took place in the fork of the river, where land water meet (Genesis 32:23-33) Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 35.

<sup>146</sup> Other places where descending was associated with bad meaning can be found in Genesis 44:31, 37:35, 33-34.





Fig 22a

Fig 22a: Fergusson's plate showing Temples were composed of physical rings of differing heights, with the area of the Cella and the stage of the priests being the highest and most sacred zones.

(From James Fergusson, *History of Architecture from the Earliest Times to the Present Day*, 216).

As Finkelstein explained, Jews used to ascend to the Temples in Jerusalem during three pilgrimages a year. Fergusson showed that the Temples in Jerusalem were located on the ridge of a mountain, elevated over their surroundings. The act of visiting the Temple was called the act of Ascension (*Aliah* עליה), to the Temple. The Temples were composed of physical rings of differing heights, with the area of the Cella and the stage of the priests being the highest and most sacred zones (Fig 22a). Finkelstein pointed out that only when the First Temple was contaminated (during the reigns of Manasseh and Amon, and in the first year of Josiah's reign, 7<sup>th</sup> century BC) and when the Jews were persecuted in exile (in Spain during the Inquisition), services were conducted in the form of secretive prayers in silence and hiding.<sup>147</sup>



Fig 22b



Fig 22c

Fig 22b: Beir's photograph showing location of the Sephardic Ramban Synagogue below street level.

Fig 22c: Beir's photograph showing the entrance to the Eliyaho Hanavi Synagogue below street level.

(From Aaron Bier, *For the Sake of Jerusalem*, 52-53).

<sup>147</sup> Finkelstein, "The Origin of the Synagogue," 53-54; Fergusson, *History of Architecture from the Earliest Times to the Present Day*, VI: 214-16.

Kahn must have been aware of the importance of the act of ascending and the negative connotations of the act of descending as had been depicted in Rabbinic Synagogues. Although there were no specific instructions pertaining to the building of the Synagogue, most Rabbinic texts, such as those in the *Tosefta* (Meg VI, 22-23) (the Jewish oral law from the period of the Mishnah, c. 200 CE) argue that the Synagogue should be built on high ground, so that it would be higher than regular houses and if possible, be the highest structures in the city.<sup>148</sup> During foreign rule over Jerusalem, it was prohibited for Jews to build their Synagogues higher than other religious structures. Thus, the Hurva Synagogue built by Rabbi Moshe ben Nahman in 1267 was situated below street level to comply with the restriction that houses of prayer of other religions could not be higher than mosques (Fig 22b). All Sephardic Synagogues adjacent to the Hurva's site, as well as the Ashkenazi Hurva Synagogue, built in 1857, were built in accordance with the Muslim restrictions requiring Synagogues not to exceed the height of mosques.<sup>149</sup> Regardless of time and place, there has always been an emphasis on maintaining the raised condition of the Ark and the *Bima* in the interior space of Synagogues, to allow the rituals of ascendance during divine communication. The person chosen by the congregation to read the Torah was invited to perform the action of *Aliyah*, to ascend to the Ark and take from the elevated *Bima* the scrolls that were to be read.<sup>150</sup> The *Bima*, from where the Torah was read, and from which the Rabbi communicated with God in the name of the congregation, was equivalent to the priests' place in the

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<sup>148</sup> Breffny, *The Synagogue*: 25-31.

<sup>149</sup> Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls*: 50-52, 72-75.

<sup>150</sup> Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 42-52.

Temple.<sup>151</sup> Thus, the Ark and the *Bima* were elevated from the ground level in all Synagogues built on the Hurva's site and adjacent to it. To allow for such an elevation of the Ark and the *Bima*, but nonetheless comply with the restrictions on the Synagogue's total height, the ground floor of some of the Synagogues was sunken a few steps below street level (Fig 22c).<sup>152</sup>

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Fig 22d

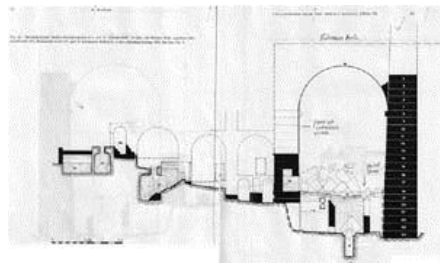


Fig 22e

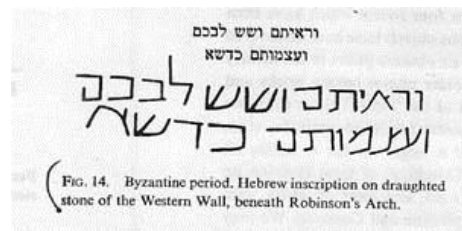


Fig 22f

Fig 22d: Mazar's plate depicting Robinson's Arch which connected the Temple to the Upper City.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, cover).

Fig 22e: Mazar's drawing depicting Robinson's Arch which connected the Temple to the Upper City.

(From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, 14-15).

Fig 0022f: Mazar's plate depicting the Hebrew inscription on the ashlar stone, found next to the Robinson Arch. (From Binyamin Mazar, *Preliminary Report on the Second and Third Seasons 1969-1970*, 23).



Fig 22g

Fig 22g: A postcard sent by Kahn from Jerusalem showing the elevated Temple within its surrounding context. (A Postcard Sent by Louis Kahn to his Office from Jerusalem on the 25<sup>th</sup> of June 1973, The Louis I. Kahn Collection, Box 39.7)

<sup>151</sup> For discussion of these issues see: Wischnitzer, *The Architecture of the European Synagogue*: 278-79; Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 51-52; Levine, *Ancient Synagogues Revealed* 7-10.

<sup>152</sup> Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls*: 50-52, 72-75. It is interesting to mention the religious positive connotations associated with *Aliyah* also derived at the fact that the arrival of Jews to Israel has been called *Aliyah*, while their leave from it is called *Yerida* (Descend ירידה). In 1949 Kahn volunteered to assist in defining ways to house the new immigrants who "Ascended" to Israel. Thus, it is reasonable to argue that he has been acquainted with the symbolic terms of *Aliyah* and *Yerida* also in the Zionist context.

Archeological findings in Jerusalem have revealed the height and position of the Second Temple, through the remaining fragments of Robinson's Arch (an arch 15.2 meters in length, most likely located 12 meters north of the southwest corner of Temple Mount), which connected the Temple to the Upper City on the west (Fig 22d, Fig 22e). Evidence of the ascendance to Temple Mount in the Byzantine era, performed on the memorial day of the Temple's destruction (*Tisha Beav*, תשעה באב), were found leaning on the Walling Wall. These included a handle of a candle carrying an inscription of the Menorah (a nine branch candelabrum), other objects used in Jewish ritual, and an ashlar stone with the Hebrew inscription "ואריתם ושש" "לבכם ועצמותם כדשא", quoting the words from Isaiah (66.14): "And when ye see this, your heart shall rejoice, and your bones (shall flourish) like an herb."..."As one whom a mother comforted, so will I comfort you; and ye shall be comforted in Jerusalem." These verses were meant to express the emotions of Jews visiting the sanctified area (Fig 22f).<sup>153</sup> Kahn visited Jerusalem a few times, and was aware of how Temple Mount was elevated with respect to its immediate surroundings in the old city. In 1973 he sent a postcard from Jerusalem to his office showing the concentric plan of the Temple in Jerusalem and a section showing its elevation above its nearby surroundings (Fig 22g).<sup>154</sup>

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Kunin emphasized that the importance given in Judaism to the elevation of sacred places derived from the belief that the human and the divine were located in two opposing domains but could be bridged through divine communication. Therefore, sacred

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<sup>153</sup> מזר, "חפירות ארכיאולוגיות בירושלים העתיקה, סקירה ראשונה על חפירות תשכ"ח", 163-64.

Mazar, "Preliminary Report on the Second and Third Seasons 1969-1970," 7-10, 13-17, 22-25.

<sup>154</sup> A Postcard Sent by Louis Kahn to his Office from Jerusalem on the 25<sup>th</sup> of June 1973, The Louis I. Kahn Collection, Box 39.7.

spaces in Judaism symbolize spaces of transition and transformation, where divine communication may result with the feeling of ascension – an experience that lead to spiritual rebirth. The act of ascension also suggested that communication with the divine lay outside the everyday condition of humanity, and embodied the idea that divine revelation has brought together the positive space of Heaven with the neutral space of Earth.<sup>155</sup>

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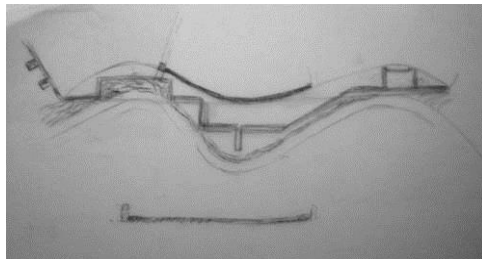


Fig 22h

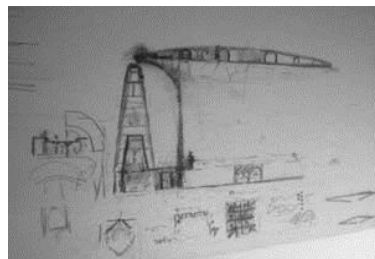


Fig 22i

Fig 22h: Kahn's sketch showing the ground level of the Hurva Synagogue higher than the ground level of the ruined Historical Hurva Synagogue, and lower from the ground level Temple Mount.  
 Fig 22i: Kahn's personal sketch showing an underground dark area of the Synagogue.  
 (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

Kahn's sketches show a clear aspiration to emphasize ascension in his design. Kahn wanted the *Hurva Synagogue* to be higher than the previous *Hurva* buildings but lower than Temple Mount (Fig 22h).<sup>156</sup> However, Kahn also included within the Synagogue an underground area, a resonant allusion to the times when a restrictive form of worship was practiced in hidden Synagogues (Fig 22i).

<sup>155</sup> Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 30-32, 40-42.

<sup>156</sup> "דמות כתר לבית- כנסת "החורבה", תכניתו של אדריכל פרוץ' לואי קאהן הוצגה במוזיאון ישראל". Box 39.5, The Louis I. Kahn Collection.



Fig 22j



Fig 22k

Fig 22j: Pictures of wood working model showing the elevation of the Synagogue's ground floor from street level, and the stone slab on the building's exterior marking the place of the elevated gallery.

(From pictures of models of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 22k: Fragment of section drawing showing gallery and steps leading into the rooms surrounding the central space. (From working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

The importance of verticality, emphasizing the idea that God resided in the heavenly realm, was expressed in all three design proposals. Maintaining contextual references and respect, the Hurva was designed with its ground level at 760 meters above sea level, higher than the ground level of the ruined Hurva Synagogue, and lower than the ground level of Temple Mount, located at 772 meters above sea level.<sup>157</sup> The Synagogue's 20-meter-high interior was divided into two levels: the ground floor, built three steps higher than the street level, and a gallery about four meters higher than the ground floor, which was marked on the building's exterior by a stone slab (Fig 22j, Fig 22k). All elements reiterated the elevated condition of historical precursors and the importance of ascension.

### **The Jewish Idea of Time and the concept of the Messianic Future**

Kahn's study of historical precedents pointed towards the unique Jewish concept of time. Finkelstein explained that in ancient biblical times, individuals' inquiries were

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<sup>157</sup> Box 39.5, The Louis I. Kahn Collection.

related to their most pressing concerns, and guidance provided by the Oracle related to humans' immediate future. Thus, in Genesis, when Rebecca felt ill, she called out to the LORD, who informed her that she would give birth to Jacob and Esau (Gen. 25, 72).<sup>158</sup> Divine guidance which took place in the Tabernacle and in assembly convocations (in the *Mikraek* and *Mikraei Kodesh*) was tied to the Israelites' nomadic lifestyle and dealt with their future entry into Cna'an.<sup>159</sup> In the time of the First Temple (833 BCE - 586 BC) prayers concentrated on the future provisioning of the newly founded Kingdom of Israel. After the destruction of the First Temple believers did not inquire about their present lives or their near future (as they inquired in Hezekiah, 750 BC, Isaiah, 700 BC, Jeremiah 600 BC, and Zedekiah, 597-586 BC, before and during the era of the First Temple) but about the far future of redemption. The psalmist, the hymn writers, and the later prophets (such as Malachi, 450 BC, and the Second Zechariah, 500 BC) lost touch with reality and became apocalyptic. Their warnings and promises concentrated on the envisioning of a far prospect and the prediction of the reconstruction of the Temple in a messianic era in Jerusalem. In religious assemblies, which took place in Exile, believers mourned the destruction of the First Temple and prayed for its reconstruction in Jerusalem (Zech 7.5). In the time of the Second Temple (516BC-70AD), prayers in the Temple and in Synagogues once again dealt with the immediate future of the Jewish community, and after the destruction of the Second Temple in 70AD, prayers in the Synagogues conducted on Sabbaths and festivals (on the *moed*, מועד) expressed the aspiration and yearning to rebuild the Temple in the Holy Land in the far future.<sup>160</sup>

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<sup>158</sup> Finkelstein, "The Origin of the Synagogue", 54.

<sup>159</sup> "These are the appointed sea-sons of the Lord, even holy convocations (*mikrae kodesh*), which ye shall proclaim in their appointed seasons" (Lev. 23, 4). Ibid., 50-51.

<sup>160</sup> Ibid., 55, 58-59.

Traditions related to the historical Hurva Synagogue and to the Synagogues adjacent to it were related to the belief in an optimistic future in view of the Jewish hope for redemption in messianic times. Arab Sephardic Jews believed that the Messiah would be welcomed in the Eliyahu HaNavi Synagogue (built in the 16<sup>th</sup> century). The Spanish and Italian Jews believed that the Yochanan ben Zakkai Synagogue (built in the 17<sup>th</sup> century) was founded on the same site on which Ben Zakkai established a Beit Midrash after Jerusalem was conquered by the Romans, in 70 AD and where he prayed for the reconstruction of the Temple.<sup>161</sup> The Ashkenazi Hurva Synagogue designed by Assad Effendi had a surrounding balcony opening towards the Old City, from where believers prayed towards Temple Mount in the hope that it would be rebuilt in the future.<sup>162</sup>

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Scholem explains that the Jews always believed in a future of penance, and thus were encouraged to live in constant anticipation and hope for an upcoming recovery. Redemption was perceived as an event which will take place in real history and within the existing world, and anticipation for the upcoming future was always connected with a particular context in which it took place. Thus, in ancient biblical times, prophets anticipated the near future of individuals; after the establishment of the Kingdom of David, the prophets anticipated the improvement of humanity in the Davidic kingdom (1000-930BC); and after the destruction of the Temple in Jerusalem (586BC), prophets

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<sup>161</sup> Bier, *For the Sake of Jerusalem: 3000 Years of Jewish Sites and History Within the Walls*: 52-55.

<sup>162</sup> The new Synagogue was called "Beit Yaakov," meaning "The House of Jacob" although it was still called "The Hurva." Blumberg Arnold & Finn, *A View from Jerusalem, 1849-1858*: 62-63 .

Openings towards Jerusalem, could be found in Ancient Synagogues in the Galilee from the 2<sup>nd</sup> and 3<sup>rd</sup> centuries AD (for example in the Synagogue in Kefar Birim) Leter, R. Hiyya ba Abba (an important figure from the 2<sup>nd</sup> century AD) declared that it was not allowed to pray in houses lacking opening facing Jerusalem. Praying towards Jerusalem was an indication for the hope for salvation, to take place in messianic times. Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon by Joseph Gutman*: XIX.



introduced the Messianic idea of time and anticipated an unknown, mysterious, secretive future that would take place at the end of history. Messianic prophecy combined fragments of existing conditions with apocalyptic visions, and embedded mythical images into utopian content. The more remote the history of the ancients and the destruction of the Temple, the more mysterious the prophecy became. In Rabbinic Judaism (from the 2<sup>nd</sup> – 6<sup>th</sup> century AD) the Messianic future came about via catastrophe, and the arrival of a new future depended on the destruction of the existing status quo. Thus, Redemption was associated with dynamism of historical events, dependent on destructive and constructive forces, and brought together ruin and utopia. The Messianic future was composed from parts of the lost ideal past that were given a completely new beginning. In Messianic times, history did not perish. Jewish belief acknowledged the lack of a complete transition between history and redemption. At the foundation of the concept of redemption lay the tension between the utopian and the restorative.<sup>163</sup>

According to Jewish tradition redemption could not be prepared for, and depended on God alone.<sup>164</sup> Scholem argues that it is anticipation and the living of humans in incomplete desire that gives Messianic times its continuous power.<sup>165</sup> The Messiah would come when least expected, and when hope had almost completely been

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<sup>163</sup> Scholem, *The Messianic Idea in Judaism and other essays on Jewish spirituality*, 1-12, 28-29.

Isaiah for example described the day of the LORD as a day of catastrophe (Isaiah, chapter 2 and 4). Scholem adds that the change in the content of the knowledge transmitted by prophets to their believers, from concrete knowledge in ancient biblical times to mysterious hidden and secretive knowledge in late Second Temple times also affected the manner in which the knowledge was transmitted by the prophets to the audience. While ancient prophets directly communicated with the individual and the community, later apocalyptic prophets concealed themselves and communicated by whispering. However, Rabbinic instruction returned to be direct and becomes an open exchange of ideas, spoken out loud in the study rooms). Ibid., 25.

<sup>164</sup> As Ezra says: "you will certainly not want to hasten more than the Creator" (4:34).

<sup>165</sup> The return to Zion has positioned the Jews in front of a new reality – a reality in which the Jews find their hopes fulfilled, and for the first time, the Jews were challenged to act, to take part in history and to define Israel's future. Scholem, *The Messianic Idea in Judaism and other essays on Jewish spirituality*, 34-36.

abandoned.<sup>166</sup> Thus, enigma and anticipation, fear and hope were always involved in this orientation of belief.<sup>167</sup> The Latter Prophets (*Nevi'im* נְבִיאִים) (~630-516BC) predicted that in Messianic times the dark, impure life would be corrected by light; purity would reign in political and social relations; the Temple in Jerusalem would be re-established; and everlasting peace would be achieved. The appearance of the Messiah was described as a breaking-in upon history, when historical ruins would be struck by beams of light shining into them from an outside source.<sup>168</sup> Rabbinic texts described the Messianic future as a time when the world will be repaired, corrected, improved, and harmonized into a world of *Tikkun*, תִּיקּוּן (in Hebrew, literally meaning a repaired world). In this repaired world the Israelites will acquire wisdom and attain wider understanding; people will enjoy freedom of knowledge; and humanity will reach profound and higher levels of existence. The power of evil will be broken, existence will reach purity, and there will be no need for differentiations, restrictions, and prohibitions. As Isa. 11.6 promises, peace will be found: "The wolf shall dwell with the lamb and the panther shall lie down with the kid."<sup>169</sup>

Kunin explains that the concept of Jewish time, according to which the past and the future affect but do not repeat each other, has affected the structures of Jewish sacred places, to which space as a mirror of cyclical understanding of time did not apply. In Jewish religious structures, time has always determined access to religious domains and

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<sup>166</sup> Ibid., 1-15.

<sup>167</sup> Ibid., 32. Only from the 19<sup>th</sup> century onwards, utopian times started to be perceived as predictable and controlled by humans' reason, and the Messianic idea became closer to the idea of modern progress. Then, the restorative factor was entirely dismissed, and a positivistic dogmatic tendency was adopted. Ibid., 25-27.

<sup>168</sup> Ibid., 4-11.

<sup>169</sup> Ibid., 13-24.

location and physical attributes had less importance (for example, the Holy of Holies was entered only on Yom Kippur).<sup>170</sup>

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Fig 23a



Fig 23b



Fig 23c

Fig 23a: Fragment from Kahn's personal sketch depicting the enclosed rooms in the walls of the Synagogue with no views of the outside.

(From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 23b: Fragment of a working drawing depicting the controlled views from the Synagogue's ambulatory towards the old city.

(From working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 23c: Fragment from Kahn's personal sketch depicting infinite views towards the open sky from the Synagogue's inner chamber.

(From working Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

In his design for the Hurva Kahn aspired to bring forth the importance of time and its unique perception in Jewish tradition, emphasizing the fact that divine communication was always connected with the activities of the Israelites, and their content related to the time when they took place. Kahn's drawings for the Hurva Synagogue were composed of three types of spaces. The first, enclosed rooms that were located on the borders of the Synagogue, that were bound in time and having no view of the outside, symbolizing the immediate present (Fig 23a); the second, an ambulatory surrounding the inner space of the Synagogue allowing views towards the surrounding city and its horizons, symbolizing

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<sup>170</sup> While Christian sacred spaces symbolize the center of the universe and resemble a cosmic order, in the Jewish tradition these characteristics of sacred spaces are usually exceptions. Kunin, *God's Place in the World, Sacred Space and Sacred Place in Judaism*: 1-2.

the close future (Fig 23b); and the third an interior chamber allowing seemingly infinite views directed towards the open sky, a perspective related to the anticipation of messianic times (Fig 23c). In addition, all of Kahn's design proposals were composed of pieces which seemed like ruins that he brought together, communicating the forces of destruction and re-construction. The believer experienced spaces in sequence, in progressive anticipation, all along feeling a sense of incomplete hope and a desire for redemption. The darkest spaces were located along the Synagogue's perimeter, the spaces with more light were located close to the surrounding ambulatory, and the most brightly-lit interior space was located at the center. In the central part of the Synagogue, the worshipper became aware of the Jewish idea that the present is in under constant evolution and changed, and was awaiting a new, improved and enlightened, messianic future to be born.

### **The Narration of Historical Ideas in the Hurva**

The continuous concepts in Jewish belief allowed Kahn to regard the different places of worship, the rituals carried in them, and their structures to represent synonymous manifestations of the same governing ideals. Kahn acknowledged memories of historical places as images, and memories of tradition as embodied rituals. He decomposed past traditions and re-composed them into contemporary spaces as recollections of fragments of images and traces of rituals, and provided poetic architectural experiences in which banal linear time was left behind. The image of the Synagogues that Kahn suggested alluded to images of various Jewish places of worship

all at once; and the spaces for ritual Kahn offered were composed so as to encompass different traces of the rituals of communication with the divine that had been practiced across history, from biblical times through the present.

Kahn's design proposals emphasized the possibility of architecture to document historical narratives and to offer them as spatial programs, composed with architectural images to present mnemonic collages. Each of Kahn's design proposals was composed of layers, in which images of Jewish places of worship and rituals of communication with the divine, from the structures of ancient biblical times to the historical Hurva Synagogues, were manifested as traces and fragments of memories. The site chosen for the Hurva, four times bigger than that of the previous Hurva Synagogue, offered an opportunity to embrace space, relate and echo the various rituals practiced along history. Each layer of Kahn's Hurva Synagogue partially resonated with a previous historical ritual. Rituals were composed together and arranged according to a modern perception of time, promoting a linear narration of historical ideas. Traces of the oldest rituals were located in the Synagogue's exterior perimeter, and fragments of the most recent rituals were located in the Synagogue's center. Thus, history could be experienced in Kahn's design for the Hurva, from the building's outer shell to its central most sacred space, as a multiplicity of events that emerged in the flux of time.

Dispersed, bounded, intimate, and liminal chambers, elevated off the ground floor and carved into the pylons composing the Synagogues' exterior shell, served individuals

looking for personal divine guidance, and echoed the ancient biblical practice of seeking the Oracle in the wilderness (see series of Fig 07, Fig 08, Fig 09).

From these chambers, one was led to the second layer, located between the concrete interior shell and the exterior wall. This mediating area served as a space for sporadic rituals and was roofed by a concrete canopy, a structure recalling the ancient canopies over the Tabernacle, detached from the surrounding walls – flooded by mysterious diffused light that recalled God's ephemeral canopy of shadow during the day and his cloud of fire during the night, meant to resonate with the history of communal services which took place in the random religious assemblies of the nomadic Israelite society of the distant past, such as those conducted in the *Mikraei Kodesh* and the *Mikraeih* (see series of Fig 07, Fig 08, Fig 09).

The believer's entry into the Synagogue through its subtracted corners, his wandering through its interior via the ambulatory, and exiting from its northeast corner towards the "Promenade of the Prophets" leading to Temple Mount, resonated with the past's dynamic rituals in which the Israelites walked with the Tabernacle and carried it from the Sinai Desert northeast into Cna'an (Fig 14m-14p).

The inner space of the Synagogue was intended to recall services that had taken place in the Temples in Jerusalem. The axial arrangement of the interior space resonated with the axial processions in the traditional rituals in the Temple. The narrow area, with stairs leading to the Synagogue's ambulatory commemorated the ritual of ascension to the Temples in Jerusalem. The boundary between the exterior stone shell and the inner

concrete wall recalled pilgrimages to the space facing the Wailing Wall, prior to its reconstruction after 1967 (see series of Fig 07, Fig 08, Fig 09).<sup>171</sup>

The interior arrangement of the Synagogue also resonated with rituals practiced in Rabbinic Synagogues. The orientation of prayer towards Jerusalem was manifested in the location of the Ark on the eastern interior wall (Figs 07a, Fig 08a, Fig 09a).

The openings in the ceiling towards the infinite sky resonated with the content of prayers in Rabbinic times when the Messianic future predicting the return of the Jews to Jerusalem was envisioned (Fig 21c, Fig 22b, Fig 23a). The underground level of the Synagogue echoed rituals practiced under foreign regimes' restraints in the time of Manasseh and Amon, in the 13<sup>th</sup>-century Ramban Synagogue, and in other Synagogues built later on the site and adjacent to it that abided by Christian and Muslim restrictions, and with secretive Jewish services conducted in Portugal and Spain during the Inquisition (see series of Fig 07, Fig 08, Fig 09).

When walking from one concentric ring to another, one felt oneself processing in degrees of purity towards the Holy Ark and the *Bima*, which resonated with all communal rituals of divine guidance in the *Mikraei Kodesh* and the *Mikraeh*, in the Tabernacle, in the Temples in Jerusalem, and in Rabbinic Synagogues (Figs 07a, Fig 08a, Fig 09a).

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<sup>171</sup> A picture in the brochure given to the members of the 1970 International Committee members dealing with the sacred Jerusalem, depicted the narrow and dramatic alley beside the Wall prior to its reconstruction after the 1967 War. As far as I know, Kahn did not read French. However, the images in the brochure must have drawn his attention. La Terre Sainte, Jérusalem Juin-Juillet 1970, Dix-Neuvième Centenaire De La Ruine Jérusalem (70-1970), Box 39.13, The Louis I. Kahn Collection.

**Part 4: The Mnemonic Historical Image and Program**  
**in Kahn's three Design Proposals**

In all of the three design proposals Kahn tried to determine to what extent the Synagogue should preserve traditions and in what degree should it aim to frame a new more relevant program. Differences between the three designs, which at a first glance might seem to be exclusively formal, express different propositions about the manner and extent in which historical memory was embedded in the proposed new structure. The degree of erasure and the degree of remembrance offered in each design proposal reflect a process that spanned over five years in which Kahn modified his ideas on the nature of the building program with reference to the complicated cultural, religious and political context and in view of past historical traditions, present events, and future aspirations related to religious and national identities of the Jewish people.

Thus, the first proposal is fresh, delicately encompassing all of Kahn's reflections on what the Synagogue should be. It skillfully weaves together religious practices and ideas on places of worship in a unique, almost natural way, precisely presented in a detailed building. The second proposal, offered by Kahn after the first one had been discussed and criticized, reflects Kahn's considerations and learning, but more so his attempts to simplify and focus his design so it would bring forth the essential parameters of the program, space, and form reflecting eternal and timeless ideas characterizing Jewish worship, but at the same time would remain open to the development of a future, yet undefined, modern Jewish ritual. The third proposal was produced after further



discussion, when the task to build the Hurva Synagogue seemed complicated and maybe unnecessary, and followed recommendations for Kahn to drastically change the program and not to build the Synagogue on the site, but rather design a memorial garden. Unhappy with this decision, which simplified and hollowed his ideas, the third proposal reflects Kahn's endeavors to reinstate his ideas and proposal for the Synagogue in a more moderate structure, resonating and abstracting his first proposal.

In the following sections I will discuss in more detail the manner in which the three designs frame rituals and practices through forms related to a prevailing concept of sacred place, the orientation of the divine, the preference of the verbal, degrees of purity, the rituals of ascension and the concept of time in Jewish belief.

### **First Design Proposal (1967-1968)**

*The idea which motivated the design I submitted for your approval some months ago, came from an inspirations never before felt. This design came spontaneously though it took many days and hands to develop.<sup>172</sup> ... From the enthusiasm in my office I sensed, before its presentation, that the design had the essence of Hurva's spirit and the desire to be.<sup>173</sup>* (Louis I. Kahn on his first design proposal)

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<sup>172</sup> Letter from Louis Kahn to Mr. Yehuda Tamir from the Ministerial Committee for Jerusalem (Mayor Teddy Kollek, Ya'acov Salomon and Ram Carmi CC'd), March 28<sup>th</sup> 1969, Box 39.2, The Louis I. Kahn Collection.

<sup>173</sup> Letter from Louis Kahn to Ya'acov Salomon, August 19<sup>th</sup> 1968, Box 39.1, The Louis I. Kahn Collection.



Fig 24a



Fig 24b



Fig 24c

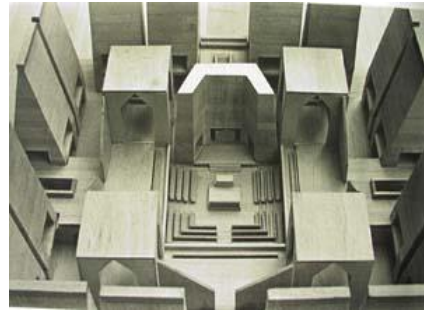


Fig 24d

Fig 24a: Kahn's personal sketch showing the bright rooms equipped with vessels to be used in the Jewish rituals. (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).

Fig 24b: Detail of picture of wood model showing the massive three stories Ark, located on the Eastern end of the Synagogue and the *Bima*, and the ambulatory and the Galleries providing views towards them.

Fig 24c: Detail of picture of wood model showing the opening in the ceiling and in the Eastern facade emphasizing the axially of the service, directing light towards the holy Ark and permitting view towards the city and towards the infinite sky.

Fig 25d: Picture of model showing openings in the chambers allowing light to enter into them, depicting the bright central space of the Synagogue defined by different degrees of participation, the ambulatory and the Galleries, and the U shaped pews to permit the Ashkenazi and the Sephardic ritual.

(From pictures of working models of the Hurva Synagogue, The Louis I. Kahn Collection).

Kahn's first proposal affirmed and commemorated historic architectural images and rituals practiced over the course of history, recreated them and incorporated them in a contemporary architectural design.

The rooms serving individuals seeking divine guidance in an atmosphere of intimacy echoing ancient biblical rituals were connected to each other both on the ground and at the gallery levels. They were accessible, bright and clear, washed by diffused daylight, which entered via large openings located at the tops and bottoms of the thick exterior walls, and equipped with vessels to be used in Jewish ritual. The intimate dimensions of the rooms, the dramatic quality of light, and the elevated orientation of their spaces promoted by their slanted ceilings, gave them the quality of unique semi

isolated spaces independent from their surroundings, with the presence of a torch echoing the ancient biblical practice of searching for the oracle in the wilderness (Fig 24a, Fig 24d).

The inner space of the Synagogue, the sanctuary used for services, was bright, clearly defined by four hollow concrete columns, and arranged to accommodate the traditional Jewish rituals followed in the *Mikraei Kodesh*, the *Mikraeih*, the Tabernacle, the Temples in Jerusalem, and in Rabbinic Synagogues. Areas demarking different degrees of participation, manifesting the importance of purity in the Jewish rituals practiced in the same places of worship were well preserved. The Synagogue was divided into three different areas: The central space, clearly marked by four hollow columns, contained the Ark and a few pews for important people of the congregation; a mediating space, an upper level ambulatory passing through openings in the columns to serve as long galleries in which women could assemble;<sup>174</sup> and the Synagogue's exterior volumetric shell rooms or chambers where the least affiliated with tradition could enjoy the services (Fig 24d).

The significance of Temple Mount and the orientation of prayer towards it were preserved by locating the Ark on the eastern end of the Synagogue's interior (Fig 024d). The centrality of the holy scrolls and the importance of the person leading the services were well emphasized in the building. An elevated and massive *Bima*, commemorated the place of the Prophet, the Priest, and the Rabbi. A three-story, ten-meter-high trapezoidal concrete structure to accommodate the Ark and the holy scrolls, echoing the Holy Ark in

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<sup>174</sup> Kent, *Louis I. Kahn, Unbuilt Masterworks*: 135-41.

the Temple, the Tabernacle and the symbolic Ark in Rabbinic Synagogues, was the most dominant structure in the building (Fig 24d).

Thin slit-like openings on the top of the roof, running both from East to West and from North to South, as well as openings in the concrete shell surrounding the interior space, directed rays of light to illuminate the sanctuary's eastern end, *Mizrach*, and the Holy Ark containing the holy books of the Bible, to celebrate their important role in the Jewish ritual (Fig 24d).

The importance of ascension in Jewish rituals was preserved. The Ark and the Bima were located a few steps above ground level. The soaring Ark could be seen from the raised ambulatory and high galleries which passed through the columns defining the inner sanctuary (Fig 24d).

The extensive views of the surrounding city available from the ambulatory resonated with the content of divine guidance given in the time of the First and Second Temples when the distant future of the Kingdom of Israel was envisioned. The inner sanctuary's seemingly infinite views up into the open sky through the long slits in the ceiling resonated with the content of divine guidance provided in Rabbinic times, when Messianic enlightenment was predicted (Fig 24c).

Finally, U-shaped pews, permitting congregants to sit facing the Ark and surrounding it suiting both Ashkenazi and Sephardic communities' services assured

continued ritual practices in line with the previous Hurva Synagogue and the Synagogues adjacent to it (Fig 25k).

### **The Critique of Kahn's First Design Proposal**

Kahn's first design proposal was presented on 28 July 1968 to the committee of the municipality of Jerusalem, the minister for religious affairs Dr. Zerah Warhaftig, the Ministerial Committee responsible for the Old City of Jerusalem and of the reconstruction of the Jewish Quarter and the places of historical and religious interests, and several reputed Israeli architects at the office of the Prime Minister of Israel.<sup>175</sup> The model, plans, and photographs of Kahn's first design proposal were presented in a public exhibition at Israel Museum in Jerusalem, and attracted wide attention.<sup>176</sup> A radio program in Israel discussed Kahn's design for the Hurva, and articles were published daily in the Israeli newspapers about the new project.<sup>177</sup> Mayor Teddy Kollek wrote to Kahn: "It has been a long time since a single Project, such as your plans for the Hurva, has aroused as wide as a response, and this, of course not only in Jerusalem but

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<sup>175</sup> "דמות כתר לבית- כנסת "החורבה", תכניתו של אדריכל פרופ' לואי קאהן הוצגה במחיאון ישראל "; "דמות כתר לבית- כנסת "החורבה", *Maariv*, 3rd July 1968.

Ram Carmi, Yehuda Tamir and Teddy Kollek participated in the meeting. Letter from Ya'acov Salomon to Louis Kahn from, 3<sup>rd</sup> of January 1969, Box 39.1, The Louis I. Kahn Collection.

<sup>176</sup> Letter from Ya'acov Salomon to Louis Kahn, 2<sup>nd</sup> August 1968, received in Kahn's office on the 8<sup>th</sup> of August 1968, Box 39.1, The Louis I. Kahn Collection. In this letter Ya'acov Solomon wrote to Kahn "It was wonderful to have you here with us. Your visit has created quite an excitement with the public at large and there is a great demand, so I am advised by the Israel museum... that the model, pans and photographs, be shown to the public at the Museum, duly exhibited. I have since received the wonderful additional photographs of the wood model, with the letter of Marvin Verman of 25<sup>th</sup> July. I am sending these to the Museum and as from the middle of next week, we will have the earlier exhibits and these photographs shown to the public. I am sure thousands will want to see the beginning of planning of the Hurva Synagogue."

<sup>177</sup> A translated transcription of the Radio program was sent to Kahn. Letter from the Mayor of Jerusalem, Teddy Kollek to Louis Kahn, the 29<sup>th</sup> of August 1968, Received by Kahn on the 4<sup>th</sup> of September 1968, Box 39.1, The Louis Kahn Collection.

throughout the country. Certainly no architectural plans have created such debate before.”<sup>178</sup>

Important Israeli architects such as Arielev Sharon, David Brutzcu, Seadiya Mendel and Rafi Davara were satisfied with Kahn's design, and Mayor Kollek was happy with the new project's expression of Jewish tradition in the Old City.<sup>179</sup> Other committee members who reviewed the project, found that the Synagogue designed by Kahn was overly ambitious and too large, and competed with other historical monuments in the Old City, such as the Western Wall, the Mosque of al-Aqsa and the Holy Sepulcher. They felt that such a tremendous undertaking in the Old City should be prevented and argued that a more modest building should be built on the site.<sup>180</sup> The journalist architect Mordechai Ben Churin, on the other hand, suggested that the modern Synagogue designed by Kahn looked small and broken in comparison to the strong and coherent older monuments; it seemed to be assembled from different left-overs without creating a clear relationship among them. Ben Churin was disappointed that the building sparked neither enthusiasm nor pride but seemed to surrender to the other monuments in the Old City, and could not be situated in the global architecture of the time, or even its own context.<sup>181</sup> Ya'akov Azrieli supported Ben Churin's critique of Kahn's design and claimed

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<sup>178</sup> Letter from the Mayor of Jerusalem, Teddy Kollek to Louis Kahn, the 29<sup>th</sup> of August 1968, Received by Kahn on the 4<sup>th</sup> of September 1968, Box 39.1, The Louis Kahn Collection.

<sup>179</sup> פרופ' לואי קאהן מציג את תוכניתו להקמת בית כנסת במקום "החורבה", בניין דמוי כתר מאורך. – בקורקע מקביל לכיפת הסלע – " ? , " *Ha'aretz* 29th July 1968.

Ya'acov Salom wrote Kahn as per the compliments he had received from leading architects: "I was not present at the Museum on Sunday the 28<sup>th</sup> July, but from press reports, and they are plenty, and my talks with architects and others, I know it was quite a success." Letter from Ya'acov Salomon to Louis Kahn, 2<sup>nd</sup> August 1968, received in Kahn's office on the 8<sup>th</sup> of August 1968, Box 39.1, The Louis I. Kahn Collection.

<sup>180</sup> Letter from Ya'acov Salomon to Louis Kahn from the 30<sup>th</sup> of October 1968 Received by Kahn on the 5th of November 1968, Box 39.1, The Louis I. Kahn Collection.

<sup>181</sup> Mordechai Ben Churin, "Louis Kahn's Plans for the 'Hurav' in Jerusalem," *Haaretz* (9th August 1968).

that the proposed Hurva was "frightening and ugly in shape, instead of being beautiful, appealing and welcoming."<sup>182</sup>

Teddy Kollek wrote Kahn that the main question in the presentation of his design proposal came down to a question of "competition": "Should we in the Jewish Quarter have a building of major importance which 'competes' with the Mosque of al-Aqsa and the Holy Sepulcher, and should we in general have any building which would compete in importance with the Western Wall of the Temple?"<sup>183</sup> Ya'acov Salomon was one of the more enthusiastic proponents of the design, writing Kahn in August 1968: "It is quite clear that your conception of the new Hurva is tremendous. It is no longer a reconstruction, which was never intended in the physical sense, nor perhaps in the spiritual, but it envisages a spiritual shrine for the whole of Jewry. It is far greater than anything I had in mind."<sup>184</sup>

The project, it was decided, would require state responsibility. Salomon informed Kahn: "Indeed it ceases to be a project which individuals, even with the support of the Ministry of Religious Affairs, can decide up – and try to realize. If accepted, it is a project of state responsibility and therefore requires consideration by the highest authority, namely by the Government headed by the Prime Minister." Tamir and Salomon decided to meet with the Prime Minister and receive his approval of the project, "namely

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<sup>182</sup> Ya'acov Azrieli, "The 'Hurva' has to be proposed for an International Competition," *Ha'aretz* 23rd August 1968.

<sup>183</sup> Letter from the Mayor of Jerusalem, Teddy Kollek to Louis Kahn, the 29<sup>th</sup> of August 1968, Received by Kahn on the 4<sup>th</sup> of September 1968, Box 39.1, The Louis Kahn Collection.

<sup>184</sup> Letter from Ya'acov Salomon to Louis Kahn from the 25<sup>th</sup> of August 1968, received by Kahn on the 27<sup>th</sup> of August 1968, Box 39.1, The Louis I. Kahn Collection.

as a structure symbolizing the spiritual unity of Jewry, a shrine of a conception befitting the reunification of Jerusalem and ingathering of the exiles.”<sup>185</sup>

After the presentation of Kahn's design before the different ministers and the Cabinet, Salomon informed Kahn: "The principal question was whether the Hurva should be rebuilt as a replica of the Old Hurva, or whether your conception, which as you know I wholeheartedly endorse and consider as the only way of restoring the Hurva with its religious and national significance, should be adopted. I referred to the history of the Hurva, its significance, what it stands for and what it is intended to stand for when reconstructed. I indicated that the alternative is not whether the Hurva should be restored as it was or that your plans should be adopted, but whether the place should be left as it is in its state of ruin as a memento of the past or whether, whilst the ruins are left as you want them as part of the overall planning, a new edifice symbolizing the past, present and future of the Jewish spiritual unity should be built in place of the Hurva.”<sup>186</sup>

Interestingly, the various critiques of Kahn's design captured his intentions and vision inherent and assumed in his design proposal. The building was definitely not a reconstruction of the historical Hurva Synagogue. Kahn himself argued during a congress in Jerusalem, that a building should not be regarded as a problem and its design should not be viewed as a means to give a solution but as an opportunity to inquire and question: "A building was not a solution, but a way to present a problem, and the presentation and confrontation with a problem was art.... Confronting a problem an artist

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<sup>185</sup> Letter from Ya'acov Salomon to Louis Kahn from the 25<sup>th</sup> of August 1968, received by Kahn on the 27<sup>th</sup> of August 1968, Box 39.1, The Louis I. Kahn Collection.

<sup>186</sup> Letter from Ya'acov Salomon to Louis Kahn from the 3<sup>rd</sup> of January 1969, Box 39.1, The Louis I. Kahn Collection.



is asked what to do, while searching for an answer is to search for how things should be done.”<sup>187</sup> In its aspirations to relate to many references encompassing different epochs, on a site four times bigger than that of the ruined Hurva Synagogue, Kahn's design proposal was indeed ambitious and grand. And yet, in its un-monumentality, and its composition out of layered fragments, it seemed diminished when compared to other monuments and buildings in the Old City: it appeared broken and modest.

On the whole, it was agreed that Kahn's approach should be adopted, and that his new approach should be embraced.<sup>188</sup> In February 1969, Kahn was officially informed by Salomon of the continuation of the Hurva project: "On behalf of the Ministerial Committee for Jerusalem, headed by the Prime Minister, I have pleasure in informing you of the Committee's decision reading as follows: 'Resolved: to invite Prof, L. I. Kahn, architect of the United States, to continue the planning of the new building for the Synagogue of 'Churbat Rabbi Yehuda Hachasid.' I was requested by the Committee to congratulate you on your excellence and most interesting project and to invite you to come to Israel for further discussions of the project and its constitution.”<sup>189</sup>

Ya'acov Salomon mentioned that by accepting Kahn's approach to the design of the Hurva Synagogue, the Synagogue was looked at as "a structure symbolizing the spiritual unity of Jewry, a shrine of a conception, befitting the reunification of Jerusalem

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<sup>187</sup> Kahn quoted in Mirkin, "Louis Kahn Against the Architects of Solele Boneh."

<sup>188</sup> Letter from Ya'acov Salomon to Louis Kahn from the 3<sup>rd</sup> of January 1969, Box 39.1, The Louis I. Kahn Collection.

<sup>189</sup> Letter from Yehuda Tamir from the Prime Minister's Office to Louis Kahn from the 25<sup>th</sup> February 1969, Received by Kahn on the 1<sup>st</sup> March 1969, Box 39.1, The Louis I. Kahn Collection.

and the in gathering of the exiles.”<sup>190</sup> Indeed, Kahn's design integrated Diasporic memory, Hebraic origins, and modern desires for new beginnings.

When Kahn was working on the first design proposal Teddy Kollek was Jerusalem's Mayor. Kollek led Jerusalem through its reunification in 1967 and its development as a modern, secular city. Kollek recalled: "When the city was united, I saw this as an historic occasion. To take care of it and show better care than anyone else ever has is a full life purpose. I think Jerusalem is the one essential element in Jewish history. A body can live without an arm or a leg, not without the heart. This is the heart and soul of it."<sup>191</sup> Kollek was a secular, left-wing, open-minded delegate. First elected in 1965, Kollek was re-elected in 1969 and enjoyed wide support in the government and throughout the Israeli population. Although he saw Jerusalem as an essential part of Jewish history, he always advocated religious tolerance, and aspired towards a secular city which would nonetheless show respect for its traditional past and the religious people who currently lived there. Kahn had a good personal relationship with Kollek, it was no surprise that during his tenure as mayor Kahn's daring initiative was pursued.

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<sup>190</sup> Letter from Ya'acov Salomon to Kahn, August 25 1968, The Louis I, Kahn Collection, Box 32.1.

<sup>191</sup> Marilyn Berger Erlanger Steven, "Teddy Kollek, Ex-Mayor of Jerusalem, Dies at 95," *The New York Times* (2 January 2007).

## Second Design Proposal (1969-1972)

*This chamber should be more anonymous, I feel more deeply not knowing in what direction it should go. And therefore, you might say it sums up, you see a new beginning of a chamber which, by practice, will become a ritual as the State of Israel Today – where the various attitudes that are about religion can take place.*<sup>192</sup>

The critique of Kahn's first proposal and the comments regarding the relationship of his design to the historical Hurva Synagogues and the Temples in Jerusalem were an opportunity for Kahn to rethink and re-conceptualize his design. Kollek's open-minded approach to Jewish history might have encouraged Kahn to propose a more secular, open, and daring design proposal, in which many traditional practices were put aside. In this second version, the Synagogue's structure was bolder and historical references were only vaguely integrated into it. Historical precedents were used as components whose validity had passed. Spaces that resonated with historical precedents were emptied of their contents and remained dark and mysterious. Rather than commemorating the past, Kahn's second design proposal emphasized the unknown potential developments of the future.



Fig 25a

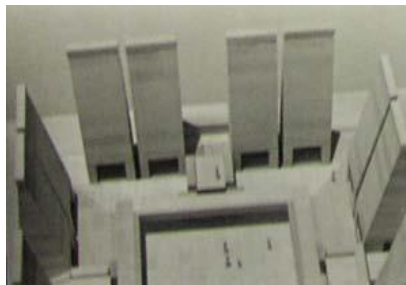


Fig 25b

Fig 25a: Kahn's personal sketch showing thin walls defining dark rooms emptied from vessels and lit by candles. (From Kahn's personal sketches, The Louis I. Kahn Collection)

Fig 25b: Picture of wood model showing omitting of the ambulatory connecting between the dispersed rooms, and abolishment of the chambers' upper openings. (From pictures of models of the Hurva Synagogue, The Louis I. Kahn Collection).

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<sup>192</sup> Kahn quoted in Kent, *Louis I. Kahn, Unbuilt Masterworks*: 161.

The ancient practice of searching for divine guidance was only vaguely articulated. The chambers placed within the pylons composing the Synagogue were carved deeper into the exterior shell, reaching a height of 6M (changing the chamber's proportions from cubical, 3M X 3M X 3M, in the first proposal, to rectangular, 3M X 3M X 6M, in the second proposal), so that only thin walls binding the intimate rooms remained. The ambulatories passing through the chambers were omitted. Contained in pylons, the chambers functioned as elements that were only loosely connected, and entry to the chambers was directed through small openings in the main floor. Vessels to be used during the services, which were located in the chambers in the first proposal, were taken out; the openings in the chambers' tops were closed, and their interior space remained lit only by a few candles, which Kahn regarded as "an extension of the Jewish Ritual." The spaces recalling the individual's search for divine guidance remained dark and deserted (Fig 25a, Fig 25b).



Fig 25c

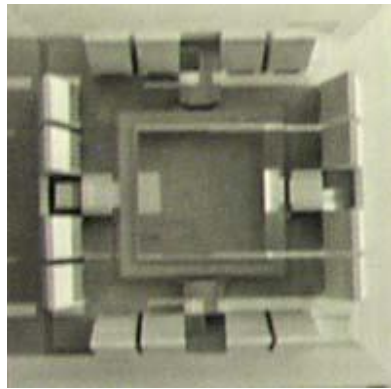


Fig 25d

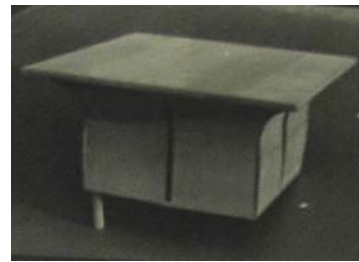


Fig 25e

Fig 25c: Detail of picture of wood model showing narrowing of Eastern opening in the Synagogue's façade.

Fig 25d: Picture of wood model showing the emptying of the Bima and the Ark from the central space of the Synagogue, the few marks light on the Synagogue's floor entering the dark interior, the narrow gallery surrounding the interior space, and the platforms remaining from the ambulatory surrounding the Synagogue' inner sanctuary.

Fig 25e: Picture of wood model showing the mushroom like roof of the Synagogue – flat and closed on its top, with narrow openings on its perimeter.

(From pictures of models of the Hurva Synagogue, The Louis I. Kahn Collection).

The interior space, which had resonated with dispersed biblical communal religious structures such as the *Mikrae* and the *Mikraei Kodesh*, the Tabernacle, the Temples in Jerusalem, and the historical Hurva Synagogue, was emptied. The disappearance of the Ark and the other physical objects used in the Jewish ritual and their burial beneath Jerusalem after the destruction of the Temple were acknowledged. The Bima was abolished. The Ark was taken out of the central chamber and tucked underground, behind one of the pylons (Fig 08a, Fig 08b, Fig 25d). The sense of orientation towards Temple Mount was blurred. The large openings in the synagogue's façade and the opening in its roof, which had lit the interior in the first proposal to emphasize the focus of the service in the sanctity, were narrowed and masked by the interior concrete wall (Fig 08e, Fig 25c, Fig 25e), so that only few rays of light penetrated the sanctuary. Light was physically and metaphorically shut down. The sanctuary remained empty and mysterious (Fig 25d).



Fig 25f

Fig 25f: Picture of models showing shadow on the floor as trace marking degrees of participation in the Synagogue. (From pictures of models of the Hurva Synagogue, The Louis I. Kahn Collection).

Galleries surrounding the interior chamber were omitted and replaced by a new space to mediate between the chambers and the Synagogue central space, a new parallel concrete wall ascended from the new gallery level (which now faced inward to the central

space of the Synagogue) and curved outwards to meet the pylons' tops, where a gap allowed indirect light to filter into the space. The borders defining degrees of participation in the sacred rituals were less clear. The interior chamber of the Synagogue clearly defined in the first design proposal by the hollowed columns and the galleries passing through them, was now only minimally articulated by the shadows of the surrounding ambulatory and the curving concrete interior shell on the Synagogue's floor that remained to commemorate the demarcations of degrees of purity that had been part of communal places of worship (Fig 25e, Fig 25f).

Only small platforms remained of the ambulatory surrounding the Synagogue's inner sanctuary, and its views towards the city were narrowed, one who ascended to them was immediately required to descend back down to the Synagogue's empty space. The ritual of *Aliyah* was disturbed (Fig 25b, Fig 25c), seating in the Synagogue was omitted, and the Ark was tucked behind one of the pylons under the gallery, so that the inner sanctuary remained dark and empty.

On the whole, in Kahn's second design proposal the traditional rituals of the past were erased. Voids supplanted forms, emptiness replaced structures, mysteriousness and enigma took over for commemoration and tradition. What remained were solely fragments, traces, and memories from the past. Empty spaces and plain facades containing vague traces, called for intervention and the accumulation of additional parts. The emphasis was obviously on the future and a "different" spirituality (Fig 26n). Kahn acknowledged the ruin of the old Hurva and emphasized its desire to be recreated,

rethought, reused, and changed into something new. The space Kahn created gave the impression of a space with a "*desire to be*" (Kahn's words). However, fragments of the past remained, carrying some of the essential values of Jewish belief upon which further developments could take place. In its emptiness and plainness, the structure of the Synagogue conveyed the existence of absence. Traces functioned to evoke governing concepts in Jewish belief – emblematic placement, abstraction, ascendance, purity, and potential redemption, showing the existence of ideals, tied to an inherited past that could provide a basis for a potential new future. Hence, as Kahn himself argued, although many of the rituals inside the Synagogue were erased, the idea governing the structure gave an impression that it would last forever.<sup>193</sup>

Kahn's proposal was daring. His proposal suggested an institution that was based on traditional values but also open to new beginnings in the modern, secular, Israeli state. Kahn explained: "This chamber should be more anonymous, I feel more deeply not knowing in what direction it should go. And therefore, you might say it sums up, you see a new beginning of a chamber which, by practice, will become a ritual as the State of Israel Today – with the various attitudes that are about religion can take place. So therefore, even the Torah, the Ark, is not present in these chambers as I see it now, but is in one of these niches...where it can be taken out, as it used to be done when there was a procession.... So the Ark is there...or you might say the Synagogue is there...or you might say, the Synagogue is the Ark....A very precious building."<sup>194</sup>

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פרופ' לואי קאהן מציג את תוכניתו להקמת בית כנסת במקום "החורבה", בניין דמוי כתר מאורך. – בקורקיע מקביל לכיפת הסלע – " ? ,<sup>193</sup> " ארכיטקטים מביעים הערכתם

<sup>194</sup> Kent, Louis I. Kahn, *Unbuilt Masterworks*: 161.

## The Critique of Kahn's Second Design Proposal

In July 1973 Kahn was told that the construction of the Hurva Synagogue was to be postponed.<sup>195</sup> Instead, he was asked to start working on a memorial garden on the site of the historical Hurva, while taking into consideration remnants of the historical Hurva which were found at the site.<sup>196</sup> Teddy wrote Kahn: "We cannot proceed as yet on the Hurva project...but we know that one day, if anyone can do it, you can."<sup>197</sup> However, he added: "We are most anxious to work on the Memorial Garden near the Hurva Synagogue. I am deeply convinced that once work has begun on the Memorial Garden, a decision on building the Hurva will be much easier to reach;"<sup>198</sup> "I am eager to start the Hurva during my term office which will surely be the last. Time is really very pressing and thus I think it is particularly important that we begin the memorial garden now, I warn you that you will be pestered by me at least once a week on this."<sup>199</sup>

The decision to postpone Kahn's work on the Hurva Synagogue and Kollek's desire to promote the design of the memorial garden before the construction of the new building was influenced by the strengthening of more traditional and nationalist parties in Jerusalem. Nationalist parties were always more religious than other parties. Traditional parties were very much tied to Diasporic rituals practiced when Jews were a minority and were required to strictly differentiate themselves from those surrounding them. Kollek was due to stand for another election and was worried about his future position. Hoping

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<sup>195</sup> Letter from the mayor of Jerusalem, Teddy Kollek, to Louis Kahn from the 9<sup>th</sup> of July 1973, received by Kahn on the 17<sup>th</sup> of July 1973, Box 39.4, The Louis I. Kahn Collection.

<sup>196</sup> Letter from the mayor of Jerusalem, Teddy Kollek, to Louis Kahn from the 9<sup>th</sup> of July 1973, received by Kahn on the 17<sup>th</sup> of July 1973, Box 39.4, The Louis I. Kahn Collection; Letter from Teddy Kollek to Louis Kahn, from the 6<sup>th</sup> of September 1973, received by Kahn on the 13<sup>th</sup> of September 1973, Box 39.4, The Louis I. Kahn Collection.

<sup>197</sup> Letter from Teddy Kollek to Kahn, July 9, 1973, the Louis I. Kahn Collection, Box 39.1.

<sup>198</sup> Letter from Teddy Kollek to Louis Kahn from the 28<sup>th</sup> of December 1973, Received by Kahn on the 7<sup>th</sup> of January 1974, Box 39.4, The Louis I. Kahn Collection.

<sup>199</sup> Letter from Teddy Kollek to Louis Kahn from the 1<sup>st</sup> of March 1974, Box 39.4, The Louis I. Kahn Collection.



to satisfy the more traditional sects, Kollek suggested to work first on the memorial garden and thus to assure commemoration of the past, after which he hoped he would be able to pursue a more flexible design reflecting an open attitude to tradition, an approach he believed in.<sup>200</sup>

### **Kahn's Third Design Proposal (1973-1974)**

Kahn was not very motivated to deal with the reconstruction of past events as he was asked to do, and although Kollek pestered him several times about the Memorial Garden, Kahn did not work on it much.<sup>201</sup> Instead, he rethought his design so that it would more strongly manifest connections to past rituals that took place in ancient biblical times, in the Temples in Jerusalem, and in the historical Hurva Synagogue, and hoped that this would satisfy his clients' desires to have the past commemorated.

In the third design proposal the empty spaces of the second proposal were again as in the first proposal used to store and display objects defining traditional Jewish rituals. Familiarity, once again, asserted itself over the uncanny, fulfilled expectation over unaccomplished desire. The spaces composing the Synagogue were re-lit. Clarity replaced darkness. The overall structure alluded in a vaguer manner to historical precedents and was more open to change than the first design proposal, but was more traditional than the second.

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<sup>200</sup> Sakr, "The Subvertive Utopia – Louis Kahn and the Question of the National Jewish Style in Jerusalem," 77, 81-82.

<sup>201</sup> Teddy wrote Kahn: "Some time ago the Company for the Restoration and Development of the Jewish Quarter in the Old City sent you all the material that you require, but so far we have not received any reply from you. Please, please let us know when we can expect detailed plans for submission to the various building committees." Letter from Teddy Kollek to Louis Kahn from the 28<sup>th</sup> of December 1973, Received by Kahn on the 7<sup>th</sup> of January 1974, The Louis Kahn Archives, Box 39.4.

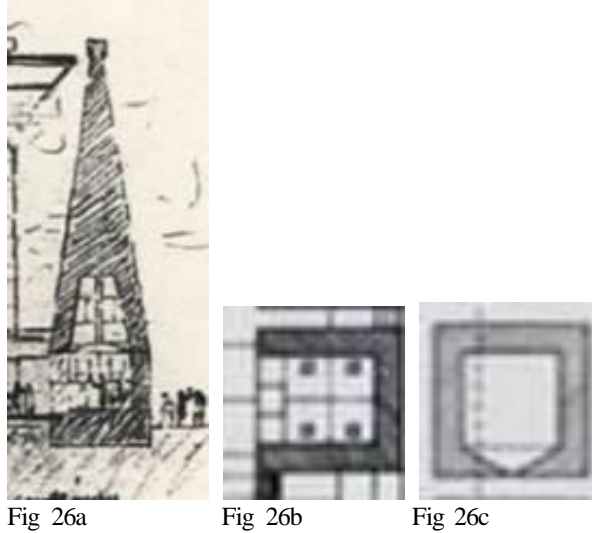


Fig 26a: Kahn's personal sketch showing the intimate rooms with a person sitting on one of the benches in it and the narrow opening on the side of the pylons allowing the penetration of light.  
 (From Kahn's personal sketches of the Hurva Synagogue, The Louis I. Kahn Collection).  
 Fig 26b: Detail from the first floor plan showing cubical structures located in the rooms.  
 Fig 26c: Detail from second floor plan showing narrow opening carved into the side of the pylons allowing penetration of light into the rooms.  
 (From working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

The ritual of seeking divine consultation in an atmosphere of intimacy echoing ancient biblical rituals in the wilderness could be re-experienced in the small chambers composing the Synagogue's exterior shell, whose spaces stood for isolation. The chambers (which housed religious vessels in the first design proposal and were emptied in the second design proposal) once again became available for use. Small openings carved in the sides of the pylons allowed the penetration of light to the upper area so the rooms, so that the intimate dimensions of the rooms, the elevated orientation of their spaces promoted by their slanted ceilings, re-appeared and they were once again given the quality of unique semi isolated spaces. Four 30CM x 30CM cubical structures, of undetermined height, facade, material, and other specifics, perhaps as benches for individuals or posts for religious vessels, were placed into all four sides of the chambers carved into the pylons on the Synagogue's outer shell (Fig 26a, Fig 26b, Fig 26c).

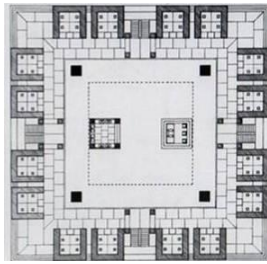


Fig 26d

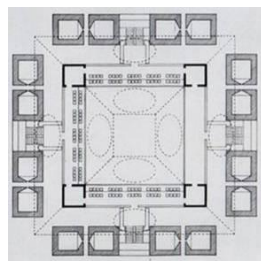


Fig 26e

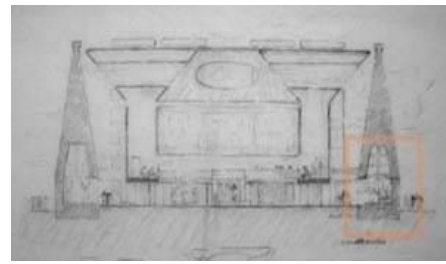


Fig 26f

Fig 26d: First floor plan of the Synagogue showing the location of the Ark and the *Bima* in its central space, the four columns defining the inner sanctuary

Fig 26e: Second floor plan showing galleries surrounding the inner space of the sanctuary, rows of setting provided in them and the oculus in the roof allowing the penetration of light into the Synagogue and permitting views towards the infinite sky.

Fig 26f: Section through the Synagogue showing the dispersed rooms carved into the pylons, the interior space with the Ark and *Bima* in it, the galleries and people sitting in the pews located in them, and the oculus in the ceiling permitting light into the Synagogue.

(From working drawings of the Hurva Synagogue, The Louis I. Kahn Collection).

The inner space of the Synagogue was revitalized, and as in the first proposal once again resonated with past communal places of communication with the divine. The traditional Ark and the *Bima* found their way back into the sanctuary in two niches.

The importance of the Ark was once again brought forth. In this proposal, however, the Ark was placed in a modest, slender structure, only one story high (similar in size to the *Bima*), that could hardly be viewed from the upper level of the Synagogue. The *Bima* itself, serving as a stage for the congregation's representative (resonating with the historical place of the prophet/ the priest/ the Rabbi, and the scholarly savant), was placed closer to the western end of the Synagogue's interior. The Ark, the place provided for the Holy Scrolls, was located closer to the eastern end, functioning as a competing yet complementary node (Fig 26d, Fig 26e).

Light entered the interior space through an oculus to the sky at the center of the ceiling and through four additional cylindrical openings pierced into the ceiling's planes. "Traveling" in space, lighting the Ark, the *Bima*, and other points in the Synagogue's interior, the center of attention was not fixed. The tension between the Ark, the *Bima*, and alternative places of attraction in the future Synagogue was brought forth. The inner sanctuary seemed very much like a stage, with a spotlight projected on it, awaiting the next performer to accommodate the upcoming scene (Fig 26d, Fig 26e, Fig 26f).

The space of the Synagogue, which was secularized in the second design proposal, was re-purified. The inner sanctuary was re-emphasized. Four columns much thinner than those used in the first proposal were located on the sanctuary's corners to define it. Galleries with only few benches for seating, shorter and less wide than those provided in the first design proposal (they were omitted in the second design proposal), were re-inserted into the building. Areas demarking degrees of purity and defining degrees of participation were gently made present (Fig 26d, Fig 26e, Fig 26f).

The importance of *Aliyah*, almost completely negated in the second design proposal and very much emphasized in the first design proposal, was once again brought forth. The Ark, which soared three stories high in the first proposal but was tucked under one of the pylons in the second proposal, was now located on the ground floor of the Synagogue, a few steps higher than its surroundings; galleries allowed views towards it (Fig 26f).

The inner space of the Synagogue was once again set to accommodate rituals that had been carried out in Rabbinic Synagogues. A few pews of seating suitable for the Ashkenazi and Sephardic modes of services were allocated along and parallel to the exterior walls of the Synagogue. Two pews facing the *Bima* and the Ark, resonated with the Ashkenazi service, whereas two pews surrounding the *Bima* and the Holy Ark resonated with the Sephardic service: the orientation of the space depended on their use (Fig 26e, Fig 26f). Openings in the ceiling allowed light once again to enter into the Synagogue, and the Jewish hope for redemption in the Messianic future was also expressed (Fig 26f).

#### **Part 5: Kahn's Poetic De-structuring of History in the Hurva Synagogue**

As has been shown, Kahn's study of relevant historical sources acquainted him with the governing concepts in Jewish belief that were at the core of changing programs and structure, forms and spaces in places of Jewish worship over the course of history. Thus, Kahn was able to de-compose different precedents and recompose them into a new program for a Synagogue which expressed the practices that had evolved over history and were bound to a continuous context. Kahn managed to arrive at an innovative project that would not be, as Salomon indicated, another "little house of prayer" for a few dozen Ashkenazi Jews, but "a national asset to the entire Jewish people,"<sup>202</sup> but as Salomon described the Synagogue was "a place for prayer and thanksgiving for the entire people ... a spiritual center for Judaism, to contain the largest Torah Library in the World, a meeting place for Jewish thinkers, for the study of tradition, a new Sanhedrin."<sup>203</sup>

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<sup>202</sup> Salomon, *In My Own Way*: 249.

<sup>203</sup> Ibid., 284-85.

Kahn expressed an existential, modern attitude in his use of historical precedents. Precedents were used as elements which "desired to be," opening potential prospects. His design proposals not only commemorated the lost past but invited a new future, and were open towards new spiritual attitudes.<sup>204</sup> In all of Kahn's design proposals history was addressed as a recollection of memories. His first design proposal was to a great extent a composition of rituals carried out in the historical precedents studied by Kahn; in the second history was acknowledged as what has belonged to the past, and engagement with it required much imagination from the beholder, who, at times, felt disoriented and was left in complete darkness. In the third design proposal the clarity of historical rituals was blurred. In all proposals enforced participation in past rituals decreased; architectural elements used to control engagement were reduced; and only fragments of rituals and memories essential to generate contemplation were included.

Each layer of the Synagogue partially resonated with a previous historical ritual. Rituals were composed together and arranged according to a modern perception of time, promoting a linear narration of historical ideas, so that traces of the oldest rituals were located in the Synagogue's exterior perimeter, and fragments of the most recent rituals were located in the Synagogue's center. Thus, history could be experienced in Kahn's design for the Hurva as a multiplicity of events that emerged in the flux of time. However, some layers of the Synagogue described above overlapped; others embedded associations from several Jewish rituals. Light fell onto the un-hewn golden stones and on the smooth grey concrete of the interior and created green, brown, and grey reflections.

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<sup>204</sup> Orozco, "Hurvat haMidrash—the Ruin of the Oracle, The Hurvah Synagogue of Louis Kahn and the Semantics of Nationalism," 15; Yehuda Kastan, "Louis Kahn's Design for the 'Hurva', A Modern Building in an Historical Site," *Ha'aretz*, 02/08/1968.

The space of the Synagogue was fragmented. Voids, gaps, and a multiplicity of paths accreted within the building, turning the Synagogue into a maze. The Synagogues' layers could hardly be experienced in logical sequence. The chronological ordering of the Synagogue's layers was but an illusion.

Kahn not only recreated historical Jewish rituals, but offered experiencing them to the worshipper who was required to choose the spaces through which he passed, defining his personal route within the Synagogue. The choice of one particular path did not require the giving up of other possibilities, and wandering through the Synagogue the believer constantly felt desire and repose. The rational narration of historical rituals was disturbed, and the perception of an obsolete architectural image was avoided. No references to past traditions could be fully experienced. One had to define a subjective route within tradition. Thus, through experiencing the Synagogue one took part in the narration of history which was transformed into an ever-changing subjective story.

Gaps in sequence of architectural spaces also created voids and shadows which symbolized the elapsing of time, promoting active participation and a constant searching. Fragmented experiences were encouraged. The linear structure of modern history was recomposed and history was restructured. History was recollected, re-narrated, and re-interpreted into subjective stories which both resonated with past Jewish rituals and were open towards the potential future.

Thus, opportunities offered by Kahn's Synagogue were not romantic or naïf. When experiencing the Synagogue, one was required to situate oneself physically and spiritually within history and modernity at once. Opportunities of free engagement, essential to determine the future ways of conduct, were celebrated, only certain elements of ritual elements were fully embodied in space, form and material; others cast mere shadows on the beholder. Kahn's suggestion of active participation in fragmented rituals did not promote solely positive feelings of belonging and orientation, but involved questioning, demanded debate, and was inevitably followed by confusion, fear, and loss. However, it was precisely the capturing of this bittersweet human condition, which encompassed unaccomplished desires within comforting structures, which gave the traces of ritual their applicability, and allowed history to be experienced as a poetic construction in a manner particularly appropriate to a modern sense of spirituality, particularly in the second design, beyond dogmatism.

Kahn understood that changes that took place in Jewish religious institutions reflected changes in liturgy as well as social and economic forces from within and outside, and cultural evolution that could not be flattened to matters of mere style. His design proposals commemorated the conditions which shaped the formation of the Synagogue over the course of history.<sup>205</sup> The Hurva Synagogue mirrored the story of the Jewish people and their social, religious and political history;<sup>206</sup> it echoed with the Synagogue's role as a *Bet ha-Tefilla* (house of prayer), *Bet ha-Midrash* (house of learning,

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<sup>205</sup> Zeitlin, "The Origins of the Synagogue, A study in the Development of Jewish Institutions," 13-16.

<sup>206</sup> Wischnitzer, *The Architecture of the European Synagogue*: XXVII.



seeking, and study) and *Bet ha-Knesset* (house of assembly).<sup>207</sup> While relating the architecture of the Synagogue to the time and place in which it was built, Kahn also recognized the continuous ideas which shaped its overall structure and allowed changes and transformations to be manifested in it. Thus, Kahn showed that the modern Synagogue could be based on forms of society which had existed in previous epochs, and that the modern Synagogue was inseparable from the history which preceded it, in which it was established and nourished from.

### **Part 6: The Conversation Regarding History in Jerusalem**

Between 1969 and 1973, Jerusalem mayor Teddy Kollek organized three international meetings, known as the Jerusalem International Committees, to discuss different approaches to Jerusalem's layered past and its historical assets and tasks to be taken in the modern development of the city.

Kahn, who actively participated in all three committees, joined other architects, planners, sculptors, historians, sociologists, biblical and religious scholars, writers and poets, archeologists, and educators, who suggested means to address historical heritage in the growing city.<sup>208</sup> While some members regarded the past as a burden for the future

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<sup>207</sup> Gutmann Joseph, *The Synagogue: Studies in Origins, Archeology and Architecture, Selected with a Prolegomenon* by Joseph Gutman: X-XI.

<sup>208</sup> Teddy Kollek thanked Kahn for his contribution in the advising committee. The First Statement of the Jerusalem Committee from July 4<sup>th</sup> 1969, written by the drafting committee composed of Mr. Btienne Boegner, Sir Phillip Hendy, Dr. Willem Sandberg, Sir Gerge Weidenfeld and Prof. Yigael Yadin, and the article published on the New York Times on the 6<sup>th</sup> of July, were, received in Kahn's office on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection. Kahn participated in the Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970 where he chaired the panel which dealt with "The Theme of Jerusalem" (The Panel on the Old City was chaired by Sir Nicholas Pevsner). The Jerusalem Committee Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970, sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis Kahn Collection.

development of Jerusalem, most argued that the preservation of Jerusalem's past was essential to maintain its special identity.

Among the participants who encouraged beginning from a *tabula rasa* were Manuel Aguilar, who asserted that historical buildings should be replaced with new structures, so that step by step the Old City would become modern, S.N. Tagore, who suggested that the city preserve only small parts, which were "old enough," hence worthy for preservation – other parts, such as the Turkish Walls surrounding the Old City, could be demolished, since they had a bad "psychological effect" on the people of Jerusalem. Those encouraging preservation included Prof. E. Rodrigues Fabregat, who was determined that new buildings must not be built in the Old City, since it had to maintain the attributes for which it was remembered, in order to offer a stable foundation for people's faiths and traditions.<sup>209</sup>

Between these two extreme approaches stood another group of thinkers that did not observe history and modernity as a dichotomy, but saw them as complementary pairs. These men and women regarded the heritage of the past as a potential source for the spiritual and physical growth of Jerusalem. Within this group were Bruno Zevi, R. Buckminster Fuller, and Louis I. Kahn.

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General Schedule for Jerusalem Committee Meeting June 18<sup>th</sup> – 21<sup>st</sup>, 1973, Received by Kahn on the 29<sup>th</sup> of May 1973, Box 39.7, Louis Kahn Collection; Kahn was thanked for his contribution to the Third International committee. Letter from the mayor of Jerusalem, Teddy Kollek, to Louis Kahn from the 9<sup>th</sup> of July 1973, Received by Kahn on the 17<sup>th</sup> of July 1973, Box 39.4, The Louis I. Kahn Collection. List of Members as of May 25<sup>th</sup> 1969 of the Jerusalem Committee, Received by Kahn on 12<sup>th</sup> of June 1968, Box 39.1, The Louis I. Kahn Collection, List of Members as of 1<sup>st</sup> of June 1969 of the Jerusalem Committee, Received by Kahn on 12<sup>th</sup> of June 1968.

<sup>209</sup> Out of Jerusalem, News and Views, The Jerusalem Committee, September 1970, Received by Kahn on the 24<sup>th</sup> of September 1970, Box 39.13, The Louis I. Kahn Collection.

Bruno Zevi opposed a romantic approach towards the preservation of the past and rejected the idea of leaving Jerusalem's Old City as a kind of sacred, untouched Acropolis.<sup>210</sup> He argued that any kind of copying of historical monuments was foolish: this resulted in "ghostly panoramas" that promoted a false architecture (like that of the Parthenon, which "has been copied hundreds of times all over the world") having no meaning "from an artistic point of view, nor from an historical point of view."<sup>211</sup> He also mentioned that such architecture did not express the decay and change which took place in time.<sup>212</sup> He believed that signs of damage that should be regarded as beautiful and truthful were met with a superficial willingness to cleanly preserve history.<sup>213</sup> Zevi was an advocate for the importance of significant human intervention, which required a historical-critical observation that did not regard "Modern architecture" and "ancient architecture" as a dichotomy.<sup>214</sup> He determined that while authentic parts should be preserved and kept, the preserved parts should create a framework to allow a dialogue between the new and the old and encourage a modern approach.<sup>215</sup> Zevi asserted that those who favored restoration per se were "people who do not know history and do not know architecture" and therefore "they cannot make a new design." Thus, he believed that new buildings to be constructed in the Old City should be designed by creative people, who would not imitate existing styles but address the challenge and demonstrate

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<sup>210</sup> Bruno Zevi, "Lecture in the International Jerusalem Committee," (Jerusalem 1970), 109-12., Box 39.5, The Louis Kahn Collection.

<sup>211</sup> Ibid., 113.

<sup>212</sup> Ibid., 17.

<sup>213</sup> Ibid., 109-12.

<sup>214</sup> Ibid., 17.

<sup>215</sup> Ibid., 114.

that it was "possible to rebuild an historic city without betraying either the past or the present."<sup>216</sup>

R. Buckminster Fuller insisted that the past and the present should be bridged in Jerusalem. He claimed that "the world citizens of our time need a sense of continuity." He believed that the restoration of biblical myths had an important role in building a sense of history within modernity. He explained that "more and more the young want to combine opening up tomorrow with a feeling for the past"; "they are traveling around the world, and they no longer want to see the past in museums but where it belongs – as part of the living environment"; "they want technology but they also are aware that there was a good way of living 2000 years ago in Jerusalem, or a half millennium ago in the Elizabethan age. They want to experience the sense of mystery that comes with the restoration of history."<sup>217</sup>

Louis Kahn was the only member who emphasized the role of architecture in shaping communities and behavioral patterns. He claimed that architects had to strive to "develop a sense of community in modern cities."<sup>218</sup> Kahn explained that a sense of community, in opposition to mere aesthetics, could not derive from reconstructing, refurbishing, or preserving irrelevant orders. Jerusalem was regarded by Kahn as "a living place with new inspirational beginnings." However, Kahn believed that traditional understandings had an important role in shaping new beginnings. Kahn asserted that "the

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<sup>216</sup> Out of Jerusalem, News and Views, The Jerusalem Committee, September 1970, Received by Kahn on the 24<sup>th</sup> of September 1970, Box 39.13, The Louis I. Kahn Collection.

<sup>217</sup> Henry Raymond, "Jerusalem Plan Backed by Fuller," *New York Times* 3rd June 1970, Received by Kahn on the 7th of July 1970, Box 39.1, The Louis I. Kahn Collection.

<sup>218</sup> Ibid.

basis for any artistic creation is respect.” respect and generosity towards the other and respect to the situation that the creation itself responds to and is situated in. "Art," he said, "was allegory to a seed of Gold that the artist absorbs as an inspiration from a certain situation.”<sup>219</sup> Therefore, he claimed that Jerusalem's architecture should consist of a "composite order,” in which the new and the old were composed so that they were not simply "patched together” as aesthetic, abstract elements but merged into a poetic construction. He stated: "I indeed convey ideas about Architecture which would give complete latitude to every architect's personal way of expressing and still assure a harmony – poetic and symphonic.”<sup>220</sup>

What exactly Kahn meant was difficult to discern. However, in his design for the Hurva Kahn made it clear that what he called the "seed of Gold that the artist absorbs as an inspiration from a certain situation" was not of a formal character. On the contrary, Kahn saw no problem in composing "concrete and stone right in the Jewish Quarter,” and believed that the old scale found in the archeological remnants in Jerusalem and the larger scale of new developments could be "equally as beautifully handled.”<sup>221</sup>

Jerusalem mayor Teddy Kollek held that while it was essential to preserve the feeling of unity and coherence in the city, and thus prevent rapid deterioration of the city's meaningful history, Jerusalem should not become a museum city. Kollek saw the importance in preserving monuments, and called for the consideration of preserving some

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<sup>219</sup> Silence and Light in Louis Kahn, *Writings, Lectures, Interviews* (New York: Rizzoli, 1991), 234-35.

<sup>220</sup> Letter from Louis Kahn to Teddy Kollek, on the 4<sup>th</sup> of July 1969, Box 39.7, The Louis I. Kahn Collection.

<sup>221</sup> Letter from Louis Kahn to Teddy Kollek, on the 4<sup>th</sup> of July 1969, Box 39.7, The Louis I. Kahn Collection.

antiquities in an exposed fashion- as antiques, but he also encouraged architects to pursue innovations by "giving them freedom to introduce new building elements."<sup>222</sup>

In general, while the committees suggested the preservation of Jerusalem's spiritual, natural, scenic, and cultural values, they regarded the city as a creative intellectual center, and emphasized the need to take into consideration its contemporary daily life.<sup>223</sup> The committees warned against the temptation to use the tangible remnants of the past so as "to make the city a museum or a stage set."<sup>224</sup> It was suggested that within the Old City, remnants of the past of artistic or historical value should be preserved, and efforts to restore unity and continuity within the city were to be encouraged.<sup>225</sup> In 1970, 500 historical sites were declared, including the Temple Mount and the Western Wall, and no development was to be permitted by the Wailing Wall or by the City of David, both declared to be sites devoted to archeological excavations. It was also decided that any construction, demolition, or future planning in the city would

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<sup>222</sup> Zevi, "Lecture in the International Jerusalem Committee," 117-18; Letter from Teddy Kollek to Louis Kahn from the 23<sup>rd</sup> of June 1970, received by Kahn on the 7<sup>th</sup> of July 1970, Box 39.6, The Louis I. Kahn Collection; Quote from Letter from Teddy Kollek to Louis Kahn, 8<sup>th</sup> of January 1971, Box 39.1, The Louis I. Kahn Collection.

<sup>223</sup> The committees also included some other key figures such as: Jacque Lipchitz the sculpture, Mrs Reinhold Niebuhr, the wife of the Protestant theologian, Rabbi Emmanuel Rackman of the Fifth Avenue Synagogue and Prof. Leon Feldman of Rutgers University, Mr. Etienne Boegner, Prof. R.B. Fuller, Prof. Leon Feldman, Miss Mary Davis (representing Dr. Franklin Murphy), Dr. Ursula Neibuhr, Mr. Isamu Nouchi Reverend Dr. R. Ortayer, Rabbi Emanuel Rackman. The Hon. Ogden R. Reid and Mr. Eduward M.M. Warburg. Observers: Mr. Nachum Bernstein, Mrs. Ruth Cheshin, Mr. Karl Katz, Mr. Ephraim Levy and Mr. Henry Raymont. Letter from Teddy Kollek to Louis Kahn from the 23<sup>rd</sup> of June 1970, received by Kahn on the 7<sup>th</sup> of July 1970, Box 39.6, The Louis I. Kahn Collection. Alona Nitzan-Shifan, "Capital city or spiritual center? The politics of architecture in post-1967 Jerusalem " *Cities* 22, no. 3 (2005). The Jerusalem Committee Townplanning Subcommittee of the 19<sup>th</sup> -21<sup>st</sup> of December 1970, Sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis I. Kahn Collection.

<sup>224</sup> James Feron, "World Panel on Jerusalem," *The new York Times*, 6th of July 1969.

<sup>225</sup> The first statement of the Jerusalem Committee from July 4<sup>th</sup> 1969, Received by Kahn on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection. The Jerusalem Committee Town Planning Subcommittee from the 19<sup>th</sup>-21<sup>st</sup> December 1970, sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis Kahn Collection.

have to be approved by the Department of Antiquities and would have to submit to supervision by expert architects.<sup>226</sup>

However, freedom of expression was encouraged. The committees stated: "We appeal to all creative minds of today to contribute to this task."<sup>227</sup> The committees emphasized a revised modernism which would focus on memory to reestablish Jerusalem as a spiritual living center.<sup>228</sup> It was claimed that new buildings were essential for the city's development. But these, it was emphasized, were to be grounded in social, emotional, and symbolic issues involving consensus, so that the past, present, and the future would be brought together.<sup>229</sup>

### **Part 7: The Hurva Synagogue after Kahn**

In 1974 Kahn's plans were finally accepted. But unfortunately, just two weeks after the submission of the last proposal, and after Teddy Kollek's expression of willingness to start work based on the design drawings, Kahn died and his plans were shelved. An exhibition to be mounted in memory of Kahn and his design for the Hurva was planned for the Israeli Museum, as was a competition among Israeli architects for a memorial garden near the Hurva, which Kahn himself did not bring to a state of completion.<sup>230</sup>

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<sup>226</sup> Out of Jerusalem, News and Views, The Jerusalem Committee, September 1970, Received by Kahn on the 24<sup>th</sup> of September 1970, Box 39.13, The Louis I. Kahn Collection.

<sup>227</sup> The first statement of the Jerusalem Committee from July 4<sup>th</sup> 1969, Received by Kahn on the 14<sup>th</sup> of August 1969, Box 39.1, The Louis I. Kahn Collection.

<sup>228</sup> Nitzan-Shiftan, "Capital city or spiritual center? The politics of architecture in post-1967 Jerusalem".

<sup>229</sup> The Jerusalem Committee Town planning Subcommittee of the 19<sup>th</sup> -21<sup>st</sup> December, 1970, Sent to Kahn on the 8<sup>th</sup> of January 1971, Box 39.1, The Louis I. Kahn Collection.

<sup>230</sup> A letter from Teddy Kollek to David Wisdom from the 26<sup>th</sup> of March 1974, Received in Kahn's office on the 4<sup>th</sup> of April 1974, Box 39.4, The Louis I. Kahn Collection.



Fig 27a

Fig 27a: The reconstruction of the stone arch that supported the 19<sup>th</sup>-century Synagogues' dome, 1978. (From <http://www.netplaces.com/jewish-history-heritage/keeping-the-sabbath/observing-shabbat.htm>, 18.04.2011)

Kahn's interesting way of addressing history influenced some important discussions regarding the relationship between historical heritage and new developments in Jerusalem. But unfortunately, on the whole, a formal reading of history that freezes the past, was adopted in Jerusalem instead. In 1978, one of the 16-meter-high stone arches that supported the 19<sup>th</sup>-century Hurva Synagogue's monumental dome was recreated. Together with the ruins it recalled what had stood there before (Fig 27a).



Fig 28a

Fig 28a: The Exterior of the Hurva Synagogue today, a reconstruction of the 19<sup>th</sup>-century Hurva Synagogue by architect Nachum Meltzer. (From [http://he.wikipedia.org/wiki/%D7%A7%D7%95%D7%91%D7%A5:Old\\_Jerusalem\\_Hurva\\_Synagogue](http://he.wikipedia.org/wiki/%D7%A7%D7%95%D7%91%D7%A5:Old_Jerusalem_Hurva_Synagogue), 20.04.2010)

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In this letter Teddy Kollek wrote about Kahn's surprising death: "The deep shock has not subsided. I know how difficult a time this must be for all." Teddy also asked for a full set of plans, photographs and models of the Hurva Synagogue, as well as some of the appraisals of Kahn which were published in the Press, as well as Kahn's writing relating to Jerusalem, for the planned exhibition in memory of Louis Kahn in the Israeli Museum., A letter from Teddy Kollek to Architect Marvin Verman from the 8<sup>th</sup> of April 1974, Box 39.4, The Louis I. Kahn Collection.





Fig 28b



Fig 28c

Fig 28b: The Dome of the Rock, Jerusalem.

(From [http://en.wikipedia.org/wiki/Dome\\_of\\_the\\_Rock](http://en.wikipedia.org/wiki/Dome_of_the_Rock), 20.04.2010).

Fig 28c: The Holy Sepulcher, Jerusalem.

(From <http://www.biblewalks.com/Sites/Sepulcher.html>, 20.04.2010).

In 2005, re-construction began at the Hurva's original site on a version of Assad Effendi's 19<sup>th</sup>-century design. Architect Nahum Meltzer, who designed the new structure, feels that "both out of respect for the historical memory of the Jewish people and out of respect for the built up area of the Old City, it is fitting for us to restore the lost glory and rebuild the Hurva Synagogue the way it was."<sup>231</sup> Rabbi Menachem Porush, who remembered the original building, mentioned he was satisfied to see his dream come true – the rebuilding of the Hurva.<sup>232</sup> The work on the building – a replica of the nineteenth-century Hurva Synagogue – is now complete (Fig 28a).

Kahn's design for the Hurva Synagogue suggested to create a building, a place that used Hebraic and Diasporadic memories to bring forth a layered significant past, which could serve as a common ground of belonging for Israelis of different affiliations, and could provide a valuable basis upon which a shared culture could develop. When experiencing Kahn's building and space, people would have at once acknowledged the importance of the Jewish culture while rethinking and questioning traditional social hierarchies, the role of the Jewish Law (the bible) and the identity and positions of the

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<sup>231</sup> Nadav Shragai, "Out of the Ruins," *Haaretz*, 20th December 2005.

<sup>232</sup>"The Hurva Returns to Life ", *Chadrei Charedim*, 20th February 2007 .

leaders in the newly created state. Kahn's designs and mainly his second daring proposal expressed the unique character of a truly modern Synagogue built in Israel; particularly suggesting the blurring of irrelevant social hierarchies between the more pure and the less pure (which in ancient times was applied to people with blood on their hands, later mistakenly associated with women), thus promoting the possibility to enrich the biblical law by additional modern texts; and encouraged to rethink the position of religious leaders in the new secular state. Most importantly, Kahn's propositions for the Hurva Synagogue offered the Jewish people, whose dream to create a state in the Holy Land had come true, a unique opportunity: a design that embodied the desire to take an active part in the shaping of a progressive future for a modern, secular, democratic Jewish nation in which behavioral conducts, ideas, and values forming lifestyle, could finally freely be defined.



Fig 28e

Fig 28e: The Interior of the Hurva Synagogue Today whose structure does not acknowledge its location in the holy land, in which traditional degrees of purity are preserved, in which the community leaders are very much elevated and separated from the community, and whose arrangement suits only the Ashkenazi services. (From <http://erinamsili.blogspot.co.il/2012/01/Hurva-Synagogue.html>, 15.05.2011).

These extraordinary hopes and aspirations have been unfortunately set aside by a more conservative politics. While superficially historical, Meltzer's design for the Hurva, an architectural structure whose exterior is more similar in character to non-Jewish monuments such as to the Dome of the Rock and the Holy Sepulcher (Fig 28a, Fig 28b,

Fig 28c) and whose interior echoed traditional Ashkenazi Rabbinic Synagogues in Diaspora (Fig 28e) represent a lamentable disregard of a deeper and more open history. The importance of the Synagogue's location in Israel, the meaning entailed due to the establishment of an Israeli state and the possibility to freely re-visit Jewish ideas, together with Israel's commitment, as expressed in her statement of independence to be non-discriminative on a gender basis, and the aspirations that Israel as a whole, and Jerusalem as its symbolic heart, will serve as a melting pot for all exiles, are overlooked. Furthermore, desires and hopes to promote new beginnings are suppressed. Judaism appears rather as a stagnant religion, where architecture is used as a repressive force promoting dogmatic attitudes.

As an 8<sup>th</sup> generation Israeli, an architect raised in Jerusalem, I hope that the lesson learned from Kahn's thoughtful proposals (and their unfortunate rejection) will not be forgotten, helping us to eventually embrace progressive architectural expressions with potential to be the stage for truly open and free human interaction.

## Conclusion:

### Kahn's Poetic Mnemonic Historical Architectural Images, Programs and Narratives

*The more deeply a thing is engaged in the unmeasurable, the more deeply lasting is its valid.*<sup>1</sup>

Kahn believed that in order to allow desires and future aspirations to appear, modern spaces “should be flexible,”<sup>2</sup> remain “available to all people,” and allow diverse “realms of expressions.”<sup>3</sup> However, Kahn was convinced that there was “a commonness in all of man.”<sup>4</sup> He held that “human agreement has always been and will always be.”<sup>5</sup> Thus, he believed that the architect’s professional social responsibility to provide common cultural grounds for belonging should surpass his individual motivation for freedom of expression and thus suggested the need to address historical precedents as dominions of our shared culture which, if neglected, would impede human agreement.<sup>6</sup>

In his designs Kahn combined recollections of historical fragments and traces from different epochs that related to archaic “proto forms”<sup>7</sup> which were “evidence” of what has been, and thus represented thoughts which must live to allow “a new sense of human agreement” in “places of worship or of home, or of other institutions of man.”<sup>8</sup>

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<sup>1</sup> Louis I. Kahn, "1973: Brooklyn, New York," in *Louis I. Kahn: Writings, Lectures, Interviews* ed. Alessandra Latour (New York: Rizzoli, 1991), 320.

<sup>2</sup> Louis I. Kahn, *Conversations with Students* (Houston, Tex; New York, N.Y: Architecture at Rice Publications; Princeton Architectural Press, 1998), 26-28.

<sup>3</sup> Louis I. Kahn, "The Room, The Street, and Human Agreement, 1971," in *Louis I. Kahn: Writings, Lectures, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 267.

<sup>4</sup> Louis I. Kahn, "A Statement, 1962," in *Louis I. Kahn: Writings, Lectures, Interviews*, ed. Alessandra Latour (New York: Rizzoli, 1991), 146. Kahn used the same terminology in Louis I. Kahn, "Space and Inspiration, 1967," in *Louis I. Kahn: Writings, Lectures, Interviews* ed. Alessandra Latour (New York: Rizzoli, 1991), 224.

<sup>5</sup> Kahn, "The Room, The Street, and Human Agreement, 1971," 276.

<sup>6</sup> Kahn, "Harmony Between Man and Architecture, 1974," 338.

<sup>7</sup> Louis I. Kahn, "Form and Design, 1961" in *Louis I. Kahn: Writings, Lectures, Interviews* ed. Rizzoli (New York: 1991), 114.

<sup>8</sup> Kahn, "The Room, The Street, and Human Agreement, 1971," 276.

Fragments and traces of the institutions of the Monastery/Convent in the Motherhouse for the Dominican Sisters in Media, Pennsylvania and of the Synagogue/Temple in the Hurva Synagogue in Jerusalem served such a function, allowing reflections that permitted the situating of oneself within shared meanings, and as Kahn had explained in their openness posing questions rather than defined culturally agreed-upon conducts.<sup>9</sup> Thus, Kahn brought together the decaying past with the not yet determined future into the temporal lived present.

The architectural images for the Motherhouse and the Hurva Synagogue were composed from fragments and traces of historical images from different periods that together formed *fabriques* that could be perceived as surreal collages as well as recognized images. As surreal collages they embraced diversity, were put together so they never seemed complete, and allowed their elements to constantly disappear and disclose themselves to the beholder. Thus, they embraced disorder and fragmentation, avoided direct statement, detached the mind from pre-conceptualized architectural configurations, questioned the authority of a permanent aesthetic truth, and required using the imagination to construct the architectural image.<sup>10</sup> However, aware of “beauty as potent” and realizing that “when harmony is not there it disappears,”<sup>11</sup> the

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<sup>9</sup> Kahn, "Form and Design, 1961."

<sup>10</sup> I owe the understanding of the notion of the poetic image as a not self-referential object and as one whose elements always reveal and conceal each other to Alberto Pérez-Gómez and Louise Pelletier see their discussion of the topic in Alberto Pérez-Gómez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, Mass: MIT Press, 1997), 331-67.

On the depth of the visual perception as an important component of poetic experience see Eye and Mind in Maurice Merleau-Ponty, *Phenomenology, language and sociology: selected essays of Maurice Merleau-Ponty* (London: Heinemann Educational, 1974), 280-311; Juhani Pallasmaa, *The Embodied Image: Imagination and Imagery in Architecture* (Wiley, 2011), especially: The Poetic Image, The Architectural Image, David Leatherbarrow, *Topographical Stories: Studies in Landscape and Architecture* (Philadelphia, PA: University of Pennsylvania Press, 2004), especially chapters: Character, Character, Geometry & Perspective or How Topography Conceals Itself, The Image & its Setting or How Topography Traces Praxis.

<sup>11</sup> Kahn, "Harmony Between Man and Architecture, 1974," 335.

Motherhouse of the Dominican Convent and the Hurva Synagogues' architectural images were also created so that "though the image of the quality" differed between "each individual," the diversity of figurative associations they triggered resonated with a chain of similar buildings from past epochs, remained in accord with the images of known Convent / Temple typologies, and thus maintained the force of agreement.<sup>12</sup>

The Motherhouse's and Hurva's architectural image took place in what Nietzsche defined as the "twilight" - between light and darkness - neither completely alluding to a pre-known aesthetics nor totally negating them.<sup>13</sup> They were images that "involve the eyes, involve vision and the mind;" images one "sees through the feeling of association which is remote, rather than direct;" images that "in other ways you can close your eyes and see philosophical realization;" and that "you can see it in a way that you can listen to it." As such they served as transitory images that possessed the power of metaphors - at once pointed towards a shared lost allegorical past and towards endless new, expressive, subjective representations, therefore had "longer life and love," and reclaimed the lost poetic dimension of the traditional architectural image.<sup>14</sup>

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Kahn's architectural programs for the Motherhouse for the Dominican Sisters and for the Hurva Synagogue were composed of traces and fragments of kinesthetic memories of rituals practiced in relevant institutions that could be experienced as

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<sup>12</sup> Kahn, "Architecture, 1972," 271.

<sup>13</sup> Nietzsche defines the poetic of site as the very possibility of seeing in the twilight as he tells us: "People must learn to see; they must learn to think, and they must learn to speak and to write: the object of all three of these pursuits is a noble ... To learn to see — to accustom the eye to calmness, to patience, and to allow things to come up." Friedrich Wilhelm Nietzsche, *Twilight of the Idols* (UK: Wordsworth Editions, 2007), 45.

<sup>14</sup> Kahn. *Conversations with Students*: 57-58. I owe the concept of the space of desire as a space open to participation to Alberto Pérez-Gómez. Pérez-Gómez discusses the idea in relation to Marcel Duchamp's work in Alberto Pérez-Gómez, *Built Upon Love: Architectural Longing After Ethics And Aesthetics* (Cambridge, MA: MIT Press, 2006), 102-04.

*labyrinths*, but in which the governing object-type program still resonated. As *labyrinths* Kahn's programs functioned as spaces of "inspired rituals without favoritism."<sup>15</sup> Loosely modulated they suggested a "variety of spaces with a variety of ways of natural light."<sup>16</sup> Kahn's programs encouraged beholders to maneuver in space while their "vectors could become tremendously confused."<sup>17</sup> As such they required inhabitants to create their own routes within spaces, to decide where they stood in relation to religious and ethical issues, and to determine their leap upon unknown imaginative orders of the future; they inspired contemplation, were open for action and participation and questioned traditional **rituals'** validity, truthfulness and applicability.<sup>18</sup> Moreover, offering the possibility to conduct contradictory paths within them when used by several people, they had the potential to turn into "a performance" where each one performed his "own lines."<sup>19</sup> As such Kahn's programs provided a constant critical interaction with traditional rituals, promoted the possibility to develop multiplicity of unknown new orders, brought forth the fragmentary condition of temporal human existence and shed light on the impossibility to fully predict the future in the effacement of communal consensus deriving from the blurring of shared beliefs, rituals and patterns of behavior.

However, Kahn did not give up the consensus-based past in favor of a progressive, fragmentary present or a skeptical future. As he stated he was "not in favor of existentialism of any kind". Rather, he was interested in anticipation. Although they embraced progressive culture, his programs did not foster authentic choices that

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<sup>15</sup> Kahn, "The Room, The Street, and Human Agreement, 1971," 264.

<sup>16</sup> Kahn, *Conversations with Students*: 32.

<sup>17</sup> Kahn, "Form and Design, 1961," 214.

<sup>18</sup> Kahn, *Conversations with Students*: 32.

<sup>19</sup> Kahn, "Architecture, 1972," 277.

completely broke away from tradition; they supported traditional actions that were engrained in the human body, encouraging existing patterns while allowing the beholder to make genuinely new reflections upon shared ideas. Both in the Motherhouse for the Dominican Sisters and in the Hurva Synagogue, habitual conduct that allowed to live a life echoing the life of Christ and characterized the Jewish service of communicating with the divine could be still followed. As David Polk explained, Kahn avoided a complete erasure of traditional programs in favor of flexible futuristic space and rapid fluid spaces. He engaged with past “ruins” (things that are no longer buildings) - fragments and traces of geometries, materials, and light - to provide a “sense of enclosure,” to determine different “gradients of relevance” and define different “degrees of participation.” Thin brick and masonry walls used for the exteriors were experienced in the background as belonging to the past; concrete was used as mediator to define the buildings' interior spaces experienced as flexible, mysterious and undefined, while wood was used to define the few elements people engaged with in the buildings, and thus referred to an unstable present suggesting itself towards embodiment.<sup>20</sup>

Thus, Kahn suggested replacing the object-type Beaux Arts space and the voyeuristic subjective modern “transparent space” by spaces “without partitions which will form themselves into partitions some-day.”<sup>21</sup> They suited times when there existed a

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<sup>20</sup> David Polk on Kahn's buildings, interviewed by D. Brownly, Nov. 2, 1983, Tape, The Louis I. Kahn Archives.

<sup>21</sup> Kahn, “Silence and Light, 1969,” 240.



“demand for saying nothing specific.”<sup>22</sup> Nevertheless they did not give up the hope for future agreement, and by doing so reclaimed the traditional poetic program.<sup>23</sup>

Using empty spaces stripped of ritualistic attributes Kahn created places of what he named “no –religion.”<sup>24</sup> With the absence of theology the empty spaces “were left undescribed.”<sup>25</sup> They expressed “progressive uneasiness” resulting from the fact that in modern times “one does not know much about the belief as to make it always fully aware and beautiful.”<sup>26</sup> In their silence they promoted engagement, remained open to an unknown future, triggered the possibility to reconnect with faith by giving it a new authentic definition, and encouraged beholders to come up with “words which have not yet been spoken and actions which have not yet taken place.”<sup>27</sup> Yet again, fragments and traces that surrounded the empty spaces and relics located in them brought forth belief as “something which did not quite express itself in all its beauty but had such power of existence.”<sup>28</sup> They pointed towards a lost past, gave the beholder the possibility of reflecting upon familiar ideas and served as “the force out of which grows the will and the desire to express oneself,”<sup>29</sup> allowing to use them as potentials yielding towards the new future. Kahn questioned faith rather than dismissed it. His designs promoted spaces of no-dogmatic religion allowing the possibility to “either revitalize a prevailing belief or

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<sup>22</sup> Kahn, “A Statement, 1962,” 151.

<sup>23</sup> I owe the idea of the poetic as an alternative to the modern space as object-type Beaux Arts space and the voyeuristic subjective modern “transparent space” allowing the experience of a labyrinth to Pérez-Gómez and Louise Pelletier Pelletier, *Architectural Representation and the Perspective Hinge*: 362.

<sup>24</sup> Kahn, “The Room, The Street, and Human Agreement, 1971,” 264.

<sup>25</sup> “I made a square center in which I placed a question mark... This I encircled with an ambulatory for those who did not want to go into the sanctuary. Around the ambulatory I drew a corridor which belonged to an outer circle enclosing the space... It became a wall which surrounds Question.” Kahn on the space of a sanctuary in the Chapel of the Unitarian Church. Kahn, “Form and Design, 1961,” 115.

<sup>26</sup> Kahn, “Remarks, 1965,” 195.

<sup>27</sup> Kahn, “Harmony Between Man and Architecture, 1974,” 338. Kahn also spoke in such terms about his design of a chapel see Kahn, “Form and Design, 1961,” 115.

<sup>28</sup> Kahn, “Remarks, 1965,” 195.

<sup>29</sup> Kahn, “Harmony Between Man and Architecture, 1974,” 338.

finding a new belief' which was "in the air somehow,"<sup>30</sup> reconciling the realm of God and the realm of man.

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Kahn's designs for the Motherhouse of the Dominican Sisters and for the Hurva Synagogue were an opportunity to offer spaces in which historical narratives could be experienced both as shared and as personal constructions. Combining fragments and traces of memories with multiplicity of gaps between them gave the impression that it was not as if "one thing started at one time, another thing at another time. Everything has started in one way at the same time."<sup>31</sup> Such spaces suggested a variety of non-linear simultaneous paths within the building, gave the beholder the authority to follow a multiplicity of passionate, subjective routes lacking of outside guidance, and allowed him/her to organize personal historical narratives.<sup>32</sup> However, Kahn did not give up the plot that was essential to allow people to have something in common to follow. By organizing traces and fragments from different epochs in layers forming a concentric organization, he brought forth the understanding that his space was not of "no time either."<sup>33</sup> Both the Motherhouse for the Dominican Sisters and the Hurva Synagogue allowed one to move through the buildings' incidents, which carried the oldest memories, to the open interiors, which hinted about the unknown future, and thus to turnover pages of the book of history, to pass through its different periods, and thus to re-experience the historical narrative as a quasi-continuous, a plot-like structure.

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<sup>30</sup> Kahn, "Remarks, 1965," 194.

<sup>31</sup> Kahn, "1973: Brooklyn, New York," 320.

<sup>32</sup> Doshi has pointed out that Kahn combined writings that differentiate line, weight, and color in his architectural drawings – details, plans, sections, and diagrams. The writings indicated what it was about the narratives which the architectural elements could generate in his beholders while experiencing space. Doshi interview on Kahn's work in Balkrishna V. Doshi, *Le Corbusier and Louis I. Kahn, The Acrobat and the Yogi of Architecture* (Ahmedabad Vastu Shilpa Foundation for Studies and Research in Environmental Design, 1992). 29-31.

<sup>33</sup> Kahn, "1973: Brooklyn, New York," 320-30.

In Kahn's designs the dogmatic scientific linear historical narrative promoted by the Beaux Arts, as well as the modernist eschewing of historical narratives were overcome. The historical narrative was offered instead as a poetic field - as an open story that could never be fully chronologically known or systematically used to predict the future, but still bore a certain objectivity - a plot emerging from fragments which was important for culture and its future development.

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By using historical memories (in their phenomenological understanding) Kahn's places acted as "sanctuaries of all expressions."<sup>34</sup> As such they brought forth architecture "closer to the psyche."<sup>35</sup> Memory was used by Kahn to allow an incomplete situation of the modern self within environments whose vagueness and incompleteness destabilized traditional, social, religious and cultural norms, blurred behavioral conducts, promoted free participation and welcomed dissension which "stems from desire – desire for what is not yet made, not yet expressed."<sup>36</sup> They emphasized that "man, unlike nature has choice,"<sup>37</sup> but also brought forth the feelings of disorientation, anxiety, and threat, constantly renewed and affirmed by action, deriving from the power of the self and his possibility to choose and therefore promoted the bitter-sweet spaces of desire.

In Kahn's design time and history were juxtaposed in space. Any objectified meaning of the past was destabilized, temporality was embraced, nihilism was avoided

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<sup>34</sup> Kahn, "Space and Inspiration, 1967," 225.

<sup>35</sup> Kahn, "Form and Design, 1961 " 112.

<sup>36</sup> Kahn, "Architecture: Silence and Light, 1970," 249.

<sup>37</sup> Kahn, *Conversations with Students*: 32. I owe the concept of the bitter sweet space as a place of desire to Alberto Pérez-Gómez see his discussion on the space of desire in Pérez-Gómez, *Built Upon Love: Architectural Longing After Ethics And Aesthetics*: Entire book and especially Chapter 3: Eros and the Poetic Image, 69-110.

and the possibility for continuity was accepted. History was experienced as a multiplicity of singularities, experiences, and metaphors that emerged in the flux of time, governed by permanent ideas but allowing temporal participation, interpretation, and imagination. Thus, Kahn's design enabled the beholder to be acquainted with the poetic dimension of history, experienced as an ever-changing story. Kahn's work demonstrated that "known" historical structures were inexhaustible in depth and could serve architects as grounds to come up with innovative and appealing designs which were not anarchic, allowing beholders to experience collective memories upon which modern affirmation, negation, or silence were possible, and upon which a development of an authentic modern culture which did not rebel against tradition was possible. From both design and experiential aspects, the use of architectural history allowed re-discoveries of the new which stemmed from meanings rooted in tradition, encouraged critical thought and responsible re-interpretation of the past.

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In both projects examined in this dissertation Kahn faced one of the most difficult tasks of architecture - the manner in which religion, belief, practice of rituals and way of life should be manifested in a modern context. In both he assumed responsibilities beyond the common practical tasks of the discipline. Through extensive dialogue with external resources, colleagues, employees, students and clients he constantly searched for the proper way to bring architectural programs and expressions which would reflect subject matter, place and time, all in the context of a wide humanistic approach to architecture which centered on the user.

I selected these two projects among Kahn's vast practice for their potential to demonstrate his concern with history and the particularities of his approach. In many of his more famous buildings this concern is implicit but obviously more difficult to demonstrate: Kahn's modernity has always been stressed. These two projects offered an opportunity to characterize how indeed Kahn's modern intentionality differed from others, particularly in view of tasks that were understood as embodiments of the main cultural and spiritual meanings that have been a fundamental concern of historical architecture. In both projects three schemes were designed and extensively discussed with the clients until finally they were halted. Easier solutions, conforming with present day events and moods were adopted instead: a conventional Synagogue in accordance with nationalist politics was built in Jerusalem, and a Conventional life-style was pursued by the Dominican Monastic Sisters, following the expectations of a secularized Catholicism. This may say something about the very limitations of architecture in a contemporary world. Probably Kahn's deep personal involvement in the program and the complex and multi-layered messages of his architecture, ranging from the emotional to the discursive, always beyond mere formalism and pragmatic considerations, were too difficult to accept. In the best tradition of critical projects in the last two centuries, these two un-built projects by Kahn answer architectures' inveterate quest to provide places for poetic dwelling, where humans may find themselves whole (and holy), potentially complete and in union with their natural and cultural worlds.

## Architectural History as “Golden Dust”

*We talked about tradition as though they were mounds of golden dust of man's nature, from which circumstances were distilled out. As man takes his path through experience, he learns about man. Learning falls as golden dust, which if touched gives the power of anticipation. The artist has this power.*<sup>38</sup>

*Testimonials to the past are important, they are tradition; but tradition is like the product of distillation, the essence that remains. Tradition is only valid when it can be everywhere, here and now as well as in the past.*<sup>39</sup>

I find it important to add some concluding remarks on the manner in which Kahn's approach to architectural history was unique and differed from both the Beaux-Arts and the so-called International Style schools of thought. I hope to demonstrate how it was attuned with hermeneutical-phenomenological approaches.

Beaux-Arts theories held architectural history as a construction that took place in the past whose orders had to be preserved to allow future progress to rise directly from it. The International Style asserted that what occurred in the past belonged to the past, and in order to begin anew and anticipate the future the past had to be put aside. Kahn departed from the understanding of past and future as opposing dichotomies fastened in different segments of time – both which stagnated the ideal past and the utopian future and detached them from the present - and in line with hermeneutic thought that suggests to regard lived time as an “historical present,” or what Paul Ricoeur defined “the time of

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<sup>38</sup> We - Kahn refers to himself and Louis Barragan. Kahn, "Architecture: Silence and Light, 1970," 257.

<sup>39</sup> Kahn, "Harmony Between Man and Architecture, 1974," 339.

initiative” in which the consideration of the past and the anticipation of the future intersected.<sup>40</sup>

Kahn opposed the Beaux Arts ideas regarding the existence of architectural “universal” stable truths along history disregarding changing contextual and personal parameters, and the belief that they had to be preserved without speculation.<sup>41</sup> He criticized historicist aspirations to give history timeless veracity since, as he explained, “truth is everything that happens... it’s a living thing” and warned against the cultural stagnation that could derive from favoring past architectural expressions regardless to the context in which they came into being.<sup>42</sup> But Kahn also believed in an “eternal” truth which he regarded as continuous, measured upon which cultures were constructed that were “revealed by circumstances,” and hence felt uncomfortable with artificial aspirations to begin anew while neglecting concerns which were part of our inherited culture and by so doing disregarded the “nature of man.”<sup>43</sup>

Kahn was in line with Nietzsche’s ideas that “the unhistorical and the historical are necessary in equal measures for the health of an individual, of people and of culture.”<sup>44</sup> He believed it was impossible to embrace the past in a positivistic way but

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<sup>40</sup> On the historical present see Paul Ricoeur, *Time and Narrative*, vol. Vol.3 Chapter 10: Towards a Hermeneutics of Historical Consciousness (Chicago University of Chicago Press, 1988); *ibid*.

<sup>41</sup> Kahn, "Harmony Between Man and Architecture, 1974," 333-43.

<sup>42</sup> Kahn, "How'm I Doing, Corbusier?", 1972," 299. Kahn understood, like Gadamer explains, that the reconstruction of the old simply because it was old, undertaken with no understanding of its meaning or relevance to life, caused an erosion of historical depth, resulting from the accordance between architecture and the broad context in which it came into being. Hans George Gadamer, *Truth and Method* (New York: Continuum International Publishing Group, 2004). 275- 305. Kahn’s understating that the past, the future and the present should not be read as dichotomies was in line with other hermeneutic writers. On Hermeneutics as a discourse channeling towards architectural creation, see Alberto Pérez-Gómez, "Hermeneutics as Discourse," *Design Issues* 15 No. 2 (1999): 71-79.

<sup>43</sup> Kahn, "Harmony Between Man and Architecture, 1974," 338.

<sup>44</sup> Friedrich Wilhelm Nietzsche, *Unlimited Meditations*, vol. On the Use and Abuse of History for Life (Cambridge, USA: Cambridge University Press, 1997), 63.

also asserted that it could not simply be disregarded as if it had never happened, and therefore called to adopt a critical approach to architectural history: On one hand, he held that one should take into consideration the past and its architectural manifestation seriously, as “strong seed” from which modern culture and its architecture should develop.<sup>45</sup> On the other hand he advocated the need to recognize that the past belonged to the past, and therefore should be addressed as an “incomplete book,” to be redefined by present values, beliefs, and morals.<sup>46</sup> Furthermore, Kahn felt that the assumption that we could understand the past in its original meaning, as if it were an inherited language, was false since with the passing of time we see things differently. As he explained, “knowledge is your own knowledge, and the way you reveal it”<sup>47</sup> and added that therefore the knowledge of the past “cannot be written down as being the truth.”<sup>48</sup> Kahn, thus, called to address the past and its architectural manifestations as “weak truths” for endless mediation out of which we should aim and come up with new meanings.<sup>49</sup>

Kahn referred to history while preserving a critical distance from it, avoided its abstract homogenized understanding and revealed it as a rich and ambiguous field of inquiry. His attitude resonated with philosophical hermeneutics in that he thought the past could reveal authentic knowledge while being affected by one’s “singularity” and the “well full with the things you will ever learn,” and shared knowledge deriving from the

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<sup>45</sup> Kahn, "On the Responsibility of the Architect, 1953," 53-54.

<sup>46</sup> Kahn, "The Room, The Street, and Human Agreement, 1971," 268-69.

<sup>47</sup> Kahn, "Harmony Between Man and Architecture, 1974," 333-43.

<sup>48</sup> Kahn, "How'm I Doing, Corbusier?, 1972," 299.

<sup>49</sup> On the importance of the knowing the past to redefine morals and to secure the lost state of modern humanity, deriving from the increasing powers of humanistic inquiry leading to abstract thought, see Hannah Ardent, *The Human Condition*, vol. The Vita Activa and the Modern Age, World Alienation (University of Chicago Press, 1998), 34- 35. Kahn was also in line with Nietzsche’s call to “confront our inherited and hereditary nature with our own knowledge of it and through a new, stern discipline combat our inborn heritage and implant in ourselves a new habit, a new instinct, a second nature.” Nietzsche, *Unlimited Meditations*, On the Use and Abuse of History for Life: 74-76.



“things around us.”<sup>50</sup> These modes of study allowed a sort of understanding that resulted from the integration of “knowledge to knowledge” that together as Kahn held activated “a sense of wonder,” which he believed could encourage “means of self-expression” and gave birth to creative thought.<sup>51</sup>

While obviously acquainted with standard writings on Western progressive architectural history, Kahn preferred texts that speculated with historical data. He also devoted considerable time listening to clients’ memories, multiple narrations of facts, the intentional understanding of the past and the selective, fragmentary and mortal condition of human experiences.

He went on extensive travels to Europe where he had intimate and emotional encounters with historical ruined monuments, producing drawings in which he depicted phenomenological embodied experiences. His drawings expressed the impossibility to encounter architectural history in some “original” or objective condition, brought forth the mystery of the sites, and celebrated Nietzsche’s understanding that the “world is deep, / And deeper than the day could read. Deep is its woe.”<sup>52</sup>

Taking into consideration the depth of human perception - the engagement of the body and its haptic senses, the possibility of the eye to deceive the mind, the active role of the beholder receiving the past, the influence of other environmental factors - Kahn

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<sup>50</sup> As Kahn stated: “knowing is private.” Kahn, “On the Responsibility of the Architect, 1953,” 53.

<sup>51</sup> Kahn, “A Statement, 1962,” 147.

<sup>52</sup> Nietzsche, *Thus Spoke Zarathustra*, quoted in Magdalena Holzhey, “Giorgio de Chirico, 1888-1978: the modern myth,” (Köln, Los Angeles: Taschen, 2005), 14. De Chirico acknowledged the direct impact of de Frederic Nietzsche's writing on him, especially *Ecce Homo* and *Thus Spoke Zarathustra*. Ibid., 8-10, 14-15.

brought forth the dialogue created between him and the environment and **documented** the “flesh” of the historical world as it was disclosed to him. In addition, Kahn drew the sites as ready-mades by challenging traditional axial routes, distorting measurements and displacing components, thus bringing forth the manner in which historical spaces were seen in the eye of a modern beholder. Kahn questioned a blind respect for traditional meanings, contemplated new inspirations, and offered the possibility to read new meanings into the ruins. Furthermore, Kahn’s collages point towards his understanding that memories were not stored chronologically or typologically in the mind. When drawing Kahn depicted the monuments of the past as spaces which gave rise to multiple inter-subjective experiences, formed a variety of rich and non-chronological memories, gave rise to the imagination and allowed to bring about new discoveries.

Kahn was critical of positivistic approaches to architectural history that “foreclosed the possibility for living”, discouraged speculation and critical reactions to tradition, and prohibited “progress” which by definition required a critical reading of the past. He was also worried about creating future oriented “naked buildings” that were disconnected from past meanings and left men “floating around” like estranged objects suggesting a future in a realm out of reach.<sup>53</sup> Kahn understood that the unknown future must define itself through existence so we could grasp a sense of it. This points towards Kahn’s understanding of the architectural experience as a phenomenological encounter as it is defined by Maurice Merleau-Ponty – an event during which the embodied consciousness (including one’s memories, innate and habitual abilities, previous events and encounters), its inherent spatiality and temporality, and reflective space (including its

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<sup>53</sup> Kahn, "Form and Design, 1961," 114.

new offered articles and networks of references) are projected on one another in a manner that promotes transactions between space and the beholder and allows dwelling.<sup>54</sup> Or in other words, that we experience and understand the world always in relation to what we already are, through pre-reflective emotions and intellectual concepts, in a thick present which is never merely a non-existing point between past and future. True architectural experience has the capacity to reveal such a dimension, opening towards a past and a future: true dwelling, since dwelling always direct an intention towards something. As Heidegger writes "phenomenology means ... to let that which *shows* itself be seen from itself in the very way it shows itself from itself."<sup>55</sup>

Aspiring to arrive at spaces which allowed dwelling Kahn held that new spaces should contain some "lessons" the "buildings of the past teach us" – even environments which try to express new meanings have to relate to past ideas that were represented in historical environments in one way or another. He therefore encouraged architects to study architectural history as "areas of realization" and "senses of orders" whose validity has past but bared within them the possibility to mediate "the sense of dream" of the architect and come up with future environments that might be grasped by conscious embodiment.<sup>56</sup> Kahn believed that such an approach to architectural history would give birth to "a creative force and power of self-criticism," and "give form to the unfamiliar."

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<sup>54</sup> On memories as forming an integral part of one's interior world see Sigmund Freud, *Civilization and its discontents* trans. David McLintock (London: Penguin, 2001). 69-72. On the spatial experience as a phenomenological encounter, see Morice Merleau Ponty, *Phenomenology of Perception*, trans. Colin Smith (London: Routledge & Kegan Paul, 1962), 98-102, 20-23, 37-47, 203-05.

<sup>55</sup> Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962), 58; John Bagnell Bury, *The Idea of Progress* (Fairfort: Kessinger Publishing, 2010), 8-11.

<sup>56</sup> Kahn, "A Statement, 1962," 146-47.

<sup>57</sup> He held that the use of architectural precedents in this manner would stimulate “an entirely new point of view” and pave the way to “new realizations.”<sup>58</sup>

When working on his architectural commissions Kahn studied historically relevant architectural manifestations.<sup>59</sup> He regarded them as “offerings,” entities grounded in tradition that allowed for possession as memories and questions, but called for their re-creation.<sup>60</sup> His sketches, working, drawings and models demonstrate that Kahn did not use architectural precedents as truthful “end products” and then “read into them certain appropriateness.”<sup>61</sup> Instead, Kahn acquired familiarity with their “worlds,” studied what means the architects of the past went through in order to arrive at their conclusions, and contemplated his own personal acts upon them. <sup>62</sup>

Admitting the difficulty of arriving at certain conclusions after reconsidering historical expressions, i.e., the impossibility to re-define traditional rituals, beliefs and narratives for our modern “institutions on trial,” Kahn suggested addressing the modern era as an era of transition, offering architectural spaces in which tradition could be mediated. Or as Nietzsche put it - at times when “culture is essentially subjective” the only path to avoid it from perishing was through the “knowledge of its antithesis...the ages, customs, arts, philosophies, religions, discoveries of others” and to come with something which would not be “real culture but a kind of a knowledge of culture” which

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<sup>57</sup> Kahn, "Order Is, 1955," 59.

<sup>58</sup> Kahn, "Architecture: Silence and Light, 1970," 248-49.

<sup>59</sup> Design for Kahn was a process which never ended. The exiting surrounding was re-considered during the design and also became part of it. Kahn, "Architecture and the University, 1953," 55.

<sup>60</sup> Kahn always spoke of architectural manifestations as offerings waiting to be re-interpreted and recreated. Therefore, likely to assume that this approach also applied to the manner in which he regarded historical architectural precedents. Kahn, "Address, 1966," 210.

<sup>61</sup> Kahn, "The Nature of Nature, 1961," 142.

<sup>62</sup> Kahn, "Architecture and the University, 1953," 55.

would in the future allow us to “become anything worthy of notice.”<sup>63</sup> Kahn’s designs offered spaces in which a microcosmic representation of ideas, rituals, narratives, beliefs, and traditional Orders practiced throughout history could be contemplated, future culture could be mediated and new realizations might come forth.

Thus Kahn included in his projects traces and fragments of history that could be experienced in a similar way to those which he learned from his clients those he documented when visiting historical sites – as weak truths, suggesting enigmatic experiences of the past that promoted wonder and encouraged participation.

The Beaux Arts had regarded historical memory as an objective recording of past events, advocating the creation of buildings that preserved the images and programs of architectural precedents allowing intuitive and direct recalling of imagery and habitual memories in their wholeness at any time. Modernism supposed the possibility to empty the body and the mind from its past memories and supported the design of buildings in which one could not recall the past and thus allow the new to appear. In opposition to both alternatives, Kahn addressed the memory of images and habitual memory as records of one's life's odyssey whose role in shaping present and future culture could not be dismissed.<sup>64</sup> As he explained: “within us lies the record of the decisions that make us particularly human. There is the psychic record, and there is the physical record together

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<sup>63</sup> Nietzsche, *Unlimited Meditations*, On the Use and Abuse of History for Life: 79.

<sup>64</sup> Kahn, "How'm I Doing, Corbusier?", 1972," 308.

with the choices we made to satisfy this desire to be, which in turn directed itself to what we now are.’<sup>65</sup>

However Kahn addressed memory as an ever-becoming dynamic construction which included commemoration and erasure – he believed that while memories did not end right after they occurred, and were carried away and lasted much longer than the experiences themselves, they were, nevertheless, carried as blurred, ruined, fragmented, and distorted arguments that were affected by the lapses of time and place, as he pointed out “nothing is completely destroyed” but “things do not endure forever.” In addition, acknowledging the temporality of architectural history and its richness, as well as the inter-subjective manner in which we experienced architectural history affected by personal intentionality and desires, as well as the depth of human perception, Kahn regarded historical memories as manifestations of “immeasurable” veracities (rather than one abstract truthful past). Kahn did not attribute mechanical measures to the mind. He held that the “the mind” contained “the brain and psyche” and acted as “a sensor” which “wonders and questions.”<sup>66</sup> Thus, he believed that memories were conceived, stored, organized and recalled in non-scientific quasi-continuous modes as he explained “even the same event is recorded differently, responds differently, *records itself* differently in every singularity.”<sup>67</sup>

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<sup>65</sup> Kahn, "I Love Beginnings, 1972," 287.

<sup>66</sup> Kahn, "Remarks, 1965," 197.

<sup>67</sup> Kahn, "How'm I Doing, Corbusier?, 1972," 299.



Fig 01

Fig 01: Cartier-Bresson, Behind the Gare St. Lazare.

*"We photographers deal with things which are continually vanishing, and when they have vanished there is no contrivance on earth can make them come back again. We cannot develop and print a memory."*

(From Henri Cartier-Bresson, <http://www.photoquotes.com/printables/howquotes.aspx?ID=98>, 20/10/2012)

Like the events recorded in Cartier-Bresson photographs (which Kahn appreciated, Fig 01), Kahn conceptualized memories in the form of traces and fragments of images, tactile imprints, and orienting objects to bring forth the past in the form of instants and fleeting moments (rather than static configurations that endured forever) that were carried into the present but could also perish and transform.<sup>68</sup>

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<sup>68</sup> Kahn expressed his appreciation of the work of the French photographer Henri Cartier-Bresson (who also visited Kahn's office) that depicted the physical environment as a stage for human action. Kahn stated: "The very secret of Cartier-Bresson's art is that he looks for the *critical moment*, as he puts it. This is like saying that in circumstance, which is both continuous and unpredictable, he sets the stage for it. He knows what will happen but he waits and waits for it.... In fact, I learned very much about the meaning of one art and another through him, just by coming to understand that his art was different only because he was giving the circumstance." Louis I. Kahn, *Writings, Lecture, Interviews* (New York: Rizzoli, 1991). 39; Kahn, *Conversations with Students* (Houston, Tex; New York, N.Y: Architecture at Rice Publications; Princeton Architectural Press, 1998). 39.

Cartier-Bresson developed a street photography which aimed at depicting captured the world in moments of movement, spontaneity, and transformation, through documenting the fleeting, unpredictable moments of urban life rather than documenting its static configurations. Cartier-Bresson explained: "There is a creative fraction of a second when you are taking a picture. Your eye must see a composition or an expression that life itself offers you, and you must know with intuition when to click the camera. That is the moment the photographer is creative," he said. "Oop! The Moment! Once you miss it, it is gone forever." Adam Bernstein, "The Acknowledged Master of the Moment," *The Washington Post* (August 5 2004); *ibid*.



Fig 02



Fig 03

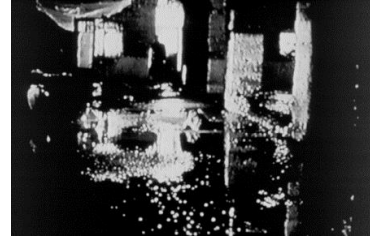


Fig 04

Fig 02, Fig 03: Images in Andrei Arsenyevich Tarkovsky's movie – *Nostalgia*.

(From <http://most-underrated-movies.blogspot.co.il/2011/05/nostalgia-andrei-tarkovsky-1983.html>, 15.10.2012).

Fig 04: Living spaces in Andrei Arsenyevich Tarkovsky's movie – *Nostalgia*. (From Juhani Pallasmaa, *Lived Space in Architecture and Cinema*, in *The Architecture of Image: Existential Space in Cinema*, Rakennustieto, Helsinki, 2000).

Similarly to the journeys offered in W. G. Sebald novels and Andrei Arsenyevich Tarkovsky movies, in some of Kahn's projects one walked through the haunted, blurry, foggy past - a journey in which memories appeared as flashing, reflective, scattered, distorted- selective entities that imbued the space with feelings of obscurity, prevented obsolete interpretation, and were loosely composed together in spaces with multiple winding paths that disrupted total experiences, generating labyrinth-like zones of wonder and anticipation.<sup>69</sup>

By composing fragments and traces of memories Kahn offered spaces that suggested "thresholds" of meanings and bared the character of a poetic metaphor.<sup>70</sup>

<sup>69</sup> Winfried Georg Sebald, *The Rings of Saturn*, trans. Michael Hulse (New York: New Directions, 1998). Winfried Georg Sebald (1944-2001) was a German writer whose work concerned with personal and collective memory. His novels including *Austerlitz*, *The Rings of Saturn*, *The Emigrants*, and *Vertigo* are unique for their mixture of apparent facts, recollection, and fiction. In his novels he often combined hazy black-and-white photographs which did not reconcile directly with the narrative, but accompanied it). I explicitly refer to Andrei Arsenyevich Tarkovsky, *"Nostalgia,"* (1983).

<sup>70</sup> Kahn explained: "In my own search for beginnings a thought has recurred – generated by many influences – out of the realization that material is pent light...The movement of silence to light, light to silence, has many thresholds...and each threshold is actually a singularity. Each one of us has a threshold at which the meeting of light and silence loges." Kahn, "I Love Beginnings, 1972," 285-86. In this sense Kahn referred to the architectural spaces in the same manner that Octavio Paz addressed poems - as ambiguous entities bringing forth the realm of endless possibility - encasing truth which at once reveals and conceals because it always implies an absence, something transcending itself. Octavio Paz, *The Bow and the Lyre: The Poem, The Poetic Revelation, Poetry and History*, trans. Ruth L. C. Simms (Austin: University of Texas Press, 1973), 10-12, 84. As Paz explains poems "Without losing their primary values, their



Beholders in Kahn's projects were offered multi-layered architectural experiences suggesting "a variety of spaces" to construct paths depending on "the singularity of every person."<sup>71</sup> They could create diverse new cultural orders, while using memories as "offerings."<sup>72</sup> Their choices, in-turn constructed new unfinished behavioral conducts **that** were put "under scrutiny"<sup>73</sup> yet confirmed the possible of the unknown, continuous yet unpredictable future culture. In so doing Kahn spaces brought forth ideas and meanings that resonated with the lived past and its prevailing "sense of harmony" yet offering something new.<sup>74</sup>

Kahn used architectural memory not to bring forth self-referential architectural experiences and reclaim past meanings, neither to create experiences bearing no relation to the past with the aim to arrive at new meanings from a tabula rasa, but to present experiences that allowed inhabitants to waver between the typological and the circumstantial - between "Light to Silence, Silence to Light"- <sup>75</sup> promoted movement of thought and meaning, generated wonder like that characterizing poetry, and brought forth embodiment as a repeated hesitation of situating body and reason.<sup>76</sup> As such Kahn's

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original weight are also like bridges that take us to another shore, doors that open to on another world of meaning inexpressible by means of mere language. An ambivalent being, the poetic word is completely that which it is – rhythm, color, meaning – and it is also something else- image." Ibid., 12.

<sup>71</sup> Kahn, "Form and Design, 1961," 115.

<sup>72</sup> Louis I. Kahn, *Transcript of a lecture by Louis I. Kahn, given at the American Library in Brussels, Belgium*, (The Architectural Archives, University of Pennsylvania: Transcribed by William Whitaker, Curator and Collection Manager 1973).Track 12

<sup>73</sup> Kahn stated: "there is nothing finished", "everything that you use is under scrutiny." Kahn, "A Statement, 1962," 224.

<sup>74</sup> Kahn, "The Room, The Street, and Human Agreement, 1971," 269.

<sup>75</sup> Kahn explained: Between "house", "a house", and "home"; "school" and "a school". Kahn, "Form and Design, 1961," 113.

<sup>76</sup> Kahn regarded the role of the architect as that of a poet "who goes from the seat of the unmeasurable and travels towards the measurable but keeps the force of the unmeasurable with him all the time, distaining almost to write a word" but since "words propel his poetry" he "succumb to the word after all. ... Just a smidgeon." He believed that in this sense the architect stood in opposition to the scientist who "does not go away or travel with the unmeasurable because he's interested in knowing ... the laws of nature" and then "must grab it" when it comes to him because "he cannot stand the difficulty of holding back" and thus "he received knowledge in full", objective knowledge, "and he

spaces served as “auras of desires” and “ambience of inspirations.”<sup>77</sup> They offered environments that steered wonder and mediation, opened themselves to new interpretation, that in turn lead to insights, activated participation and brought forth deeds of expression channeling the way towards reclaiming the unknown future in the temporal present.<sup>78</sup>

Kahn himself acknowledged that it was precisely the “incompleteness” of memory that endowed it with “powers of anticipation,” with the potential to open up to new possibilities.<sup>79</sup> Thus he used memories to create environments in which the multilayered-rich meanings of the ambiguous past were gathered into the temporal indefinite contemplative poetic lived present and unfolded towards many new opportunities and expectations lying within the anticipated unknown future.<sup>80</sup> architectural memories as the source to shape bittersweet experiences and to recover the erotic space of desire.<sup>81</sup>

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works with it.” Kahn, “1973: Brooklyn, New York,” 327. Kahn spoke in the same terms about the architect in Kahn, “How’m I Doing, Corbusier?, 1972,” 306. Kahn’s emphasis on the importance of movement of thought to allow human dwelling calls into the mind Heidegger’s ideas on meditative thinking in Martin Heidegger, *Discourse on Thinking*, trans. John M. Anderson and E. Hans Freund (New York: Harper & Row, 1966), 12-14, 23-24, 44-47. Kahn’s emphasis on hesitation echoes Deleuze’s discussion on poetic embodiment as hesitation of body and reason see Gille Deleuze, *The Logic of Sense* (New York: Columbia University Press, 1990), 280, 63.

<sup>77</sup> Kahn, “Form and Design, 1961,” 113. Kahn used similar terminology in Kahn, “Architecture: Silence and Light, 1970,” 249. Kahn’s spaces could fall within what Pérez-Gómez defines as spaces that bring forth “that which cannot be reduced to words and yet begs to be named.” Perez-Gomez and Pelletier, *Architectural Representation and the Perspective Hinge*: 368.

<sup>78</sup> Louis I. Kahn, “Foreword, 1969,” in *Louis I. Kahn: Writings, Lectures, Interviews*: ed. Alessandra Latour (New York: Rizzoli, 1991), 247. Kahn spoke in similar terms in Kahn, “Architecture: Silence and Light, 1970,” 249.

<sup>79</sup> Kahn, “Space and Inspiration, 1967,” 230.

<sup>80</sup> On space as intersection between the past and the future - as gathering and unfolding see Ricouer, *Time and Narrative*, Vol.3 Chapter 10: Towards a Hermeneutics of Historical Consciousness.

<sup>81</sup> On the bitter sweet condition as the real space of participation see Pérez-Gómez, *Built Upon Love: Architectural Longing After Ethics And Aesthetics*: 31-32.

*And what I am trying to say only is  
that everything that you use is under scrutiny,  
there is nothing finished.  
And the door is open, very open,  
to the realization of wonderful new institutions.*<sup>82</sup>

Kahn sanctified the world of historical architecture, adopted a perspective which sought for phenomena as yet unnamed in it, and found mysteriousness and transcendence in the very same artifacts which were reduced by the Beaux Arts to the stuff of objective science and architectural history's clichés, artifacts which for this reason had been dismissed by modern architectural trends and regarded as irrelevant and false.<sup>83</sup> As Doshi mentioned, Kahn was armed with the passion to search for virtues within architectural history and to reveal its specifics rather than deduce from it generalities. By addressing the world of architectural history as profound- as levels of "creative consciousness... forever becoming higher in level" and not as expressions which "imply beauty,"<sup>84</sup> Kahn demonstrated that the encounter with architectural history intrigued the mind and the body, arose interest, and promoted imagination. Its study could stimulate critical thinking, lead to the discovery of what could not be seen, said, thought, or defined, serve as a means for self-discovery, encourage the "singularity of every individual in attitude and talent"<sup>85</sup> while transferring the "I into thou."<sup>86</sup> History supplied architects with instruments to work with, albeit, in a creative non-methodological manner,<sup>87</sup> generating a

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<sup>82</sup> Louis I. Kahn quoted by Heinz Ronner & Sharad Jhaveri, *Louis I. Kahn- Complete Work 1935-1974*, Second revised and Enlarged ed. (Basel, London: Birkhauser, 1978), 307.

<sup>83</sup> On de Chirico see Holzhey, "Giorgio de Chirico, 1888-1978 : the modern myth," 19.

<sup>84</sup> Kahn, "Order Is, 1955," 59.

<sup>85</sup> Kahn, "Architecture: Silence and Light, 1970," 248-49.

<sup>86</sup> Kahn, "A Statement, 1962," 146-47.

<sup>87</sup> Kahn explained: "If a man is really an artist, he looks not with too studious an eye at what the others have done; the will is to produce something coming from the inside of you. He must have an instrument of work; therefore he uses whatever he understands as a means but does not copy". He added: "The man looks at work fleeting with a certain

“complexity of making,” and promoting designs of “a yet unthought-of nature.”<sup>88</sup> Thus it served as “entering to creation.”<sup>89</sup>

Kahn’s work demonstrates that the potential for poetics within the world of the past should not be dismissed. He also showed that poetic *mimesis* could lead to the creation of designs in the “Form” of the past.<sup>90</sup> Designs whose “images” are “of the same spirit”, and whose programs evolve “from universal Orders,” yet are “unfamiliar,” rich with “diversity of forms.”<sup>91</sup> They offered exciting spaces that would serve as true “offerings to the art,” even during modern times when *mimesis* had to be attuned to the earthy world (rather than mirroring the cosmic transcendental order as it once was).<sup>92</sup>

*Questions in class today about where is Architecture going were very easy to answer because it is not going anywhere else but than it ever was ...  
Because it is remarkable that a field of expression comes about because it could not have come about unless it was in the nature of man ...Architecture is not going to change...  
But architecture itself is constantly waiting for a new aspect of it ...  
Our desire is insatiable, and presents itself in many many aspects, always new because it is completely unmeasurable and unpredictable.  
Only circumstances bring it out and it always surprises as another aspect of the nature of man.*<sup>93</sup>

On one hand Kahn stated: “I honor beginnings, of all things, I honor beginnings. I believe that what was has always been, and what is has always been, and what will be has

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amount of humility, with a feeling wishing that he had done it, but does not copy.” Kahn, “On the Responsibility of the Architect, 1953,” 53-54.

<sup>88</sup> Kahn, “Form and Design, 1961” 113.

<sup>89</sup> Ibid.

<sup>90</sup> Kahn, “Order Is, 1955,” 59.

<sup>91</sup> Kahn, “Architecture: Silence and Light, 1970,” 248-49.

<sup>92</sup> Kahn, “1973: Brooklyn, New York,” 328. On the modern state of transition of architectural mimesis see Gabriela Switek, *Writing on Fragments. Philosophy, Architecture, and the Horizons of Modernity* (Warszawa: Warsaw University Press, 2009), 49-53.

<sup>93</sup> Kahn, “Architecture, 1972,” 271-72.

always been. I do not think the circumstantial play from year to year and era to era means anything ...The man of old had the same brilliance of mind as we assume we have now. And that which made a thing become manifest for the first time is our great, great moment of creative happening.” On the other hand he asserted “desires ... the qualities of the not-yet-said and the not-yet-made, must not be stymied ... desire is the very reason for living. It is the core of the expressive instinct that has to be given play,” “And that is the beauty of our work, that it deals with the recess of the mind from which what is not yet said and what is not yet made comes.” Kahn believed that architects should “find those spaces...where the availabilities, not yet here, and those that are already here, can have environments for their maturing.”<sup>94</sup>

After dwelling on Kahn’s work it is, indeed, possible to understand that his aspirations to relate to the architecture of the past and to create spaces that would suit the future, which at first glance might seem contradictory, were complimentary. His work is evidence that “architecture has no [quantifiable] presence but exists as a realization of spirit.”<sup>95</sup> As such it brings forth the understanding of a mature, responsibly innovative yet restrained architect, who acknowledged that meaning could not be copied but also could not be simply invented ex-nihilo. Instead, the richness of true meaning appears in the realm in - between. Thus, Kahn’s work proves that modern architecture “has no favorites; it has no preferences in design; it has no preference for materials; it has no preference for technology. It just sits there waiting for a work to indicate again, to revive the spirit of

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<sup>94</sup> Kahn, "1973: Brooklyn, New York," 329-30.

<sup>95</sup> Kahn, "Architecture: Silence and Light, 1970," 248.

architecture by its nature, from which people could live for many years.’<sup>96</sup> Therefore while architectural history should be consulted its depth is inexhaustible, ensuring that its consideration would prove that “the door is open, very open, to the realization of wonderful new institutions.”<sup>97</sup>

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Kahn was a poet, and poetic language battles with discursive language. Kahn has often been accused of saying nothing clearly. I would like to think the following humble words spoken toward the end of his life justify my endeavor: “I speak very little about it [my work], because I don’t know how to extend things, because I do not have any historical knowledge, nor any research tendencies. I can’t look up and find other literature, I just can’t do it. And so it’s left, in a way, in a very undeveloped state, as though it was just an offering to someone else...to extend.”<sup>98</sup>

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<sup>96</sup> Kahn, "Silence and Light, 1969," 238-39.

<sup>97</sup> Kahn, "A Statement, 1962," 224.

<sup>98</sup> Kahn, "How'm I Doing, Corbusier?, 1972," 310.

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**Mediating Architectural History in Design**  
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#### **Chapter Four:**

#### **Mediating Architectural History in Design**

#### **The Hurva Synagogue, the Old City of Jerusalem**

#### **1967-1974**

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## **Conclusion:**

<b>Kahn's Poetic Mnemonic Historical Architectural Images, Programs and Narratives.....</b>	<b>no images</b>
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