

# The room as the place of the mind. Louis Kahn's concept of beginnings: a critique, with reference to the Erdman Hall Dormitories at Bryn Mawr College

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## Abstract

The purpose of the article is to decode the meaning and evaluate the architectural relationships of the Erdman Hall Dormitories at Bryn Mawr College, designed by Louis Kahn in collaboration with architects in his office during the early 1960s, as a totality of forms representing the disclosure of a "world". An attempt is made to assess the design of the dormitories as a process with reference to the functionality and aesthetics of the final product.

No work of architecture is made with only one material or consists of only one form. I concur with Gaston Bachelard's (1984: 147) statement about phenomena: "There are no simple phenomena; every phenomenon is a fabric of relations." Architecture is no exception: it is a unity of constitutive parts, structural functions, and environmental and social references. Even though meaning may be inherent in things as such, it is also inherent in relations - in the contrasts and similarities between parts. In general, Louis Kahn's buildings reveal a special sensitivity to these relations, but in this paper it will be argued that a failure occurred in the case of the relationships which comprise the Erdman Hall Dormitories at Bryn Mawr College, designed in collaboration with architects in his office during the early 1960s.

My endeavour is to decode the meaning and analyse the architectural relationships of the Erdman Hall Dormitories as a totality of forms representing the disclosure of a "world". The attempt to assess the design as a process, with reference to the functionality and aesthetics of the final product, will be based on two statements accepted as axiomatic:

- 1 The production of works of art, especially architecture, always

implies the use of technology; and

- 2 There is an ontological dimension to art and architecture. Ontology as the study or understanding of the being of beings implies that works of art and architecture disclose a "world". In an ontological sense architecture is the creation of a setting for human beings to enable them to be themselves, that is to achieve an optimal realization of their being-in-the-world, according to Martin Heidegger's (1889-1976) ontology.

It is likely that Kahn had knowledge of and was influenced by Heidegger's ontology,<sup>1</sup> which had, in turn, been derived from earlier sources. Kahn's approach to design is undoubtedly rooted in the phenomenological tradition. Herbert Spiegelberg's (1982: 693) assessment of phenomenology, which is echoed in Kahn's philosophy and practice of architectural design serves as proof:

Phenomenology begins in silence. Only he who has experienced genuine perplexity and frustration in the face of phenomena when trying to find the proper description for them knows what phenomenological seeing really means. Rushing into descriptions before having made sure of the thing to be described may even be called one of the main pitfalls of phenomenology.

We know that Kahn considered his designs in a meticulous way and reworked his plans relentlessly. His design process therefore echoes the procedure of phenomenological seeing as described above.

In order to formulate a method for the evaluation of the meaning of a building by Kahn evidence is quoted from historical

as well as contemporary philosophical texts and architectural theory which are rooted, to some extent, in classical Greek thought and the phenomenological tradition.

The first extract is a summary of the understanding of "Being" as expounded by Heraclitus (born c 535 BC). WT Stace (1956: 77) explains this Greek philosopher's insight as follows:

Not only is Being, for Heraclitus, identical with not-being, but everything in the universe has in it its own opposite. Every existent thing is a 'harmony of opposite tensions'. A harmony contains necessarily two opposite principles which, in spite of their opposition reveal an underlying unity.

... At the heart of things is conflict. If there were no conflict in a thing, it would cease to exist. This idea is expressed by Heraclitus in a variety of ways: 'Strife', he says, 'is the father of all things'. ... 'Join together whole and unwhole, congruous and incongruous, accordant and discordant, then comes from one all and from all one.'

In this sense, too, he censures Homer for having prayed that strife might cease from among gods and men. If such a prayer were granted, the universe itself would pass away. Heidegger (1971: 54-5) formulates a similar insight, revealing Heraclitus' influence on his thinking about the one and the many, or unity and parts, both as a life-world phenomenon and in the arts. His proposition is based on the thesis that opposition between parts do not result in duality; nor are they identical. In response to Heidegger's idea of strife between world and earth, the opposition between matter and form, and the disclosure of the breach (*Riss*) between concealment and unconcealment, J Sallis (1989: 185) explains that "strife is not a matter simply of opposition but rather is such that the opponents belong to one another in their very opposition ... . The opponents belong together by having a certain common ground and origin ... ." <sup>2</sup> This means that parts belonging to a whole are linked together by a solidarity relation; or stated differently: parts or separate forms in bigger wholes presuppose each other.

The previous insights relating to the parts and the whole can be linked up with a third - the theory of "dialogic architecture", as formulated by Tom Leddy (1994: 196). This architectural critic bases his thesis on an understanding of Socratic dialogue, which he explains, "moves from the word (signifier), to definition (signified), to instantiations (physical referent), to understanding, and finally to reality (essential referent). The relations between these concepts are dynamic: the path is both upwards or downwards". Likewise, relations are important in dialogic architecture. Leddy (1994: 198) refers to several levels on which dialogue must occur in order for dialogic architecture to happen, and concludes his theory by stating that "there must be a dialogue (metaphorically speaking) between different elements of the semantic situation, i.e. between signifier, signified and referent. This implies a commitment to a holistic organicist approach to architecture in which architecture is seen as referring to a physical, ecological, and cultural context. Architecture must not contribute to furthering our alienation from nature and cultural tradition, but rather should recognize the human need for wholeness."

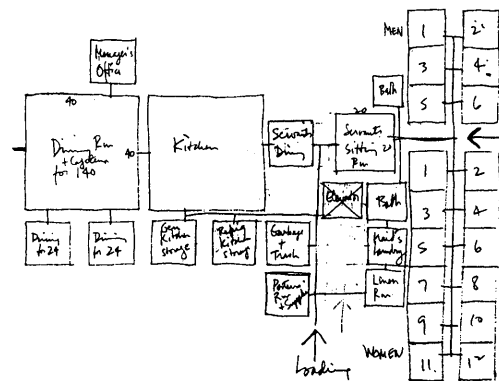


Figure 1

This recalls a structuralist position, with its emphasis on the creation of meaning through relationship, in which no term, form or part is to be understood in isolation, but instead as part of a contrasting system built up from binary oppositions.<sup>3</sup> Therefore, Edmund Leach (1976: 12), a semiotician, is quoted here because he elucidates the category of "signifier/signified" relationship. He labels as *signs* those *signa* in which signifier and signified are related, because all parts are

related to the whole. Since semiotics have influenced architectural theory to some extent, it comes as no surprise to find theories concerning paradox in modern and post-modern architectural criticism. For example, August Heckster, an architectural critic (quoted by Robert Venturi [1965: 20], a post-modernist architect) states: "A feeling for paradox allows seemingly dissimilar things to exist side by side, their very incongruity suggesting a kind of truth." Adding to this view one may say that strife implies the fructifying influence of paradox, which does not negate unity.

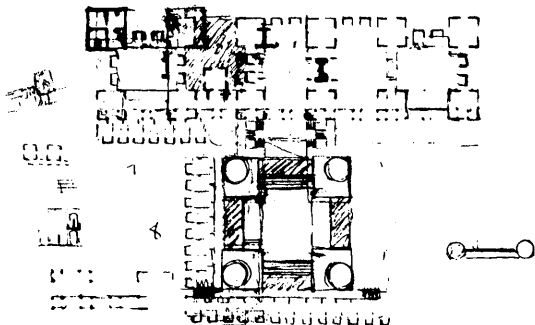


Figure 2

The relationships of "strife" (Heraclitus and Heidegger), the complementarity of the "signifier/signified" (Leach), contradiction (Heckster/Venturi), and the "dialogic" (Leddy) will constitute the basis of an understanding of the meaning of the reciprocal interdependence of the relations of forms composing the Erdman Hall Dormitories designed by Kahn and associates. In a remarkable way Kahn's design philosophy complements the views referred to above. Theory is merely the architectural critic's aid towards understanding the architect's creative practice better, preventing him or her from basing interpretations merely on intuition. An insight that is especially appropriate to this theoretical context is summarized by Domer (1993/94: 29): "Kahn made his buildings express a synthesis of polarities, polarities that he often used to explain to his students the meaning of human existence as well as architecture. The measurable and the unmeasurable, the tangible and the intangible, the affective and the intellective, the external and the internal, servant and served spaces, the spiritual and the physical, thought and feeling."

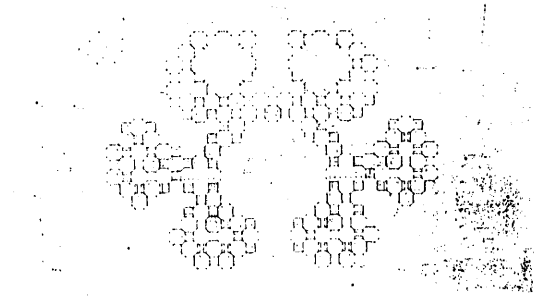


Figure 3

Kahn's architectural forms further exhibit a strong congruence of sensory pattern and abstract idea.<sup>4</sup> His cultivated architectural worlds came into being as a result of tension and complementarity by means of geometric patterning. Each individual building is a world of harmony in which reason presides over the harmonious formation of forms. However, geometric pattern is inherently limited and all patterns tend to reach culminations unless new material is gradually and constantly added, which Kahn no doubt realized. He believed that architecture begins as a room and in plan becomes a "society of rooms" in order to help each other so that "the plan begins to be something, the spirit of which you can convey to others" (Wurman 1986: 237). The plan in itself is "some-thing", a being asserting itself.

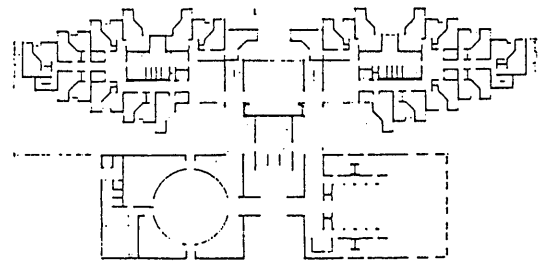


Figure 4

This process of a family of rooms asserting its identity can be followed in the design of the Erdman Hall Dormitories at Bryn Mawr College (figures 1-10). I will trace the process in reverse by drawing on Michael Lewis' assessment. In the final sketch approved by the Erdman building committee he states that: "Plan and elevation were united, each showing the twin motifs of the square and the diagonal" (1991: 356). However, while the motifs are striking geometric forms based on a plan consisting of three tilted squares (or diamonds) joined at the corners, the building

became what it needed to be, namely three large public spaces in the centres of the tilted squares with the alternation of interlocking rooms along the perimeter. Light was channelled through towers at all four corners of the courtyards. Lewis (1991: 245-55) quotes Kahn who confessed that Bryn Mawr was one of the most difficult problems he had faced, recalling Spielberg's reference to solutions that come after "perplexity and frustration". In his own words, he struggled to find "the qualities that made a school great". This, he told his students, was accomplished through a "thoughtful making of spaces". The result accomplished, Kahn as explained by himself, according to Lewis, was "to distinguish each space, each room as a single entity, not just a series of partitions". Quite literally, Kahn was implying that to a college student, his or her room is a place of the mind. There is not necessarily an attachment of the heart in the same way that there is attachment to one's home as a place of the hearth, but by means of the communal interior spaces in the dormitory complex, Kahn created a substitute home for an alternative or extended family.

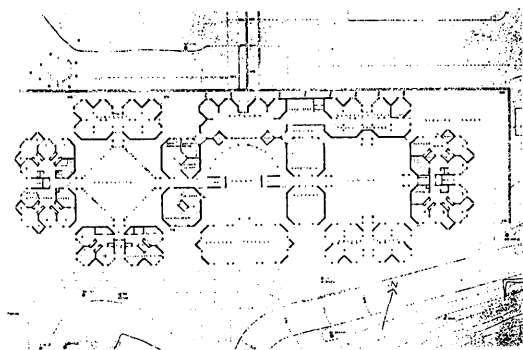


Figure 5

However, criticism has been expressed about Kahn's most celebrated achievements, for example the Kimbell Art Museum (Fort Worth, Texas), of which Dennis Domer (1993/94: 33) says:

Perhaps both Kahn and Brown [director of the Kimbell Museum] were so mesmerized by the creativity of the vault that they could not see how dysfunctional it was for the circumstances of work. It was a creative idea that did not work, but the feeling of form prevented the rational admission that a good idea can sometimes be taken too far.

Indeed, according to Vincent Scully (1962: 39) Kahn remained mesmerized by circles and triangles which are "evidences of specific use, fragments of Form", and applies this criticism to the Bryn Mawr dormitories which he evaluates as "close to pure Form: three cubes touching at the corners, advanced and recessed walls, creating side lights, a general rigid symmetry".

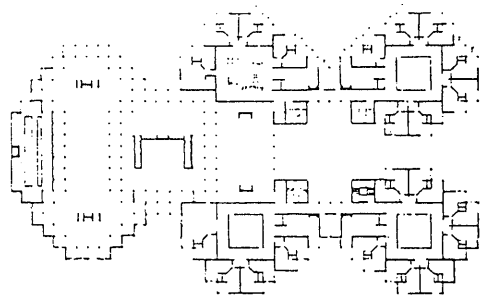


Figure 6

While the generic element of the geometric forms that Kahn consistently applied can be related to the intellectual clarity of his structures and planning, one may nevertheless argue that the use of formal systems in complex compositions often caused an aggravating inflexibility. In the final design of the dormitories this inflexibility and repetition is in evidence, caused, no doubt, by the concept of a room as the essential element of a house and all buildings. This insight could lead to a reassessment of Kahn's design of the Erdman Hall Dormitories as limited by inflexibility, since inflexibility eliminates strife. For that reason, the idea of desires counterpointed by needs was not realized in Kahn's scheme of complementarity.<sup>5</sup> Perhaps the open-plan home is more conducive to "strife" or vitalizing interaction, just as the central open hearth in historical homes may have been. The enclosed room, which is the module on which Kahn based his design of the Erdman Hall Dormitories, is a fixed entity emphasizing seclusion and isolation, which is not conducive to human wholeness. This calls to mind the insight expressed by physicist Werner Heisenberg (1974: xii) who observed that

"we seem to inhabit a world of dynamic process and structure. Therefore, we need a calculus of potentiality rather than one of probability, a dialectic of polarity, one

in which unity and diversity are redefined as simultaneous and necessary poles of the same essence.

Indeed, of all modern architects Kahn aspired most strongly to this ideal.



Figure 7

Kahn's manner of design may be called an attempt at "phenomenological seeing" (Spiegelberg 1982: 693), giving rise to a description of the building subject which reveals itself to the architect's creative consciousness, thereby coming into existence, and creating a "world". Looking at his serial design sketches we know that Kahn avoided what may be called one of the main pitfalls of phenomenology, according to Spiegelberg, by not rushing into descriptions before having made sure of the thing to be described. In this respect Kahn's design cannot be faulted. However, by turning the Erdman Hall Dormitories in on itself, shutting off the view of the exterior world, and lighting the interiors of the three blocks mainly through light shafts, the student's rooms are deprived of sufficient daylight, while Kahn (1960: 118) full well realized as early as 1960 that: "Each space must be defined by its structure and the character of its natural light."

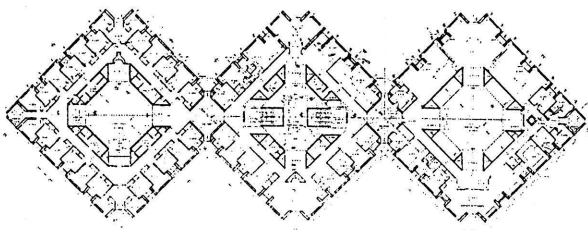


Figure 8

The exterior of the dormitories is not formed by wrapping concrete around geometricized voids, but is articulated by means of cast panels. Insufficient lighting causes a failure of one relation in the fabric of relations that characterizes the building, with the result that the students' need of a

life world conducive to study is impaired. This calls to mind Leddy's previously quoted plea that "architecture should recognize the human need for wholeness".



Figure 9

Peter Lemos (1992: 56) points out that in his later buildings Kahn turned concrete into a poetic medium, shaping it into graceful arches, coffers, circles and cylinders. Also his later geometric poetics may be said to be flexible and functional. When Kahn built in hot climates such as Bangladesh, he wrapped concrete around voids in a masterly way. Buildings such as the Parliament building at Dhaka, the capital of Bangladesh, completed in 1982, enhance the users' experience of the strife between the glare of direct sunlight and the restfulness of shade which belong together in a play of concealment and unconcealment. By means of arcades or bold geometric voids in the concrete walls which surround the interiors of buildings in the East Kahn succeeded in rendering them as artefacts in the brilliant tropical light. Also in the USA he achieved buildings which aspire to be a harmonious life world consisting of a fabric of relations suited to the locality. He achieved this through a personal insight, already formulated in 1960 (119): "I came to the realization that every window should have a free wall to face. This wall receiving the light of day would have bold [a] bold opening to the sky. The glare is modified by the lighted wall and the view is not shut off."

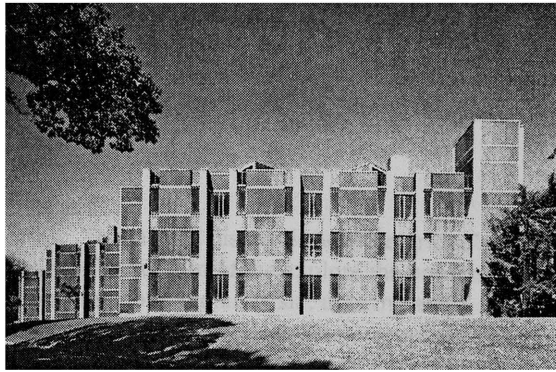


Figure 10

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### Notes

- 1 The influence of Martin Heidegger on Louis Kahn in discussed in some detail in Maré (1998: 279-97). See also Norberg-Schulz (1979).

- 2 Heidegger's concept of "disclosure", to which "strife" belongs, is elucidated in Maré (1995: 26-7).
- 3 See Seymour-Smith (1986).
- 4 I derive this idea from Thiel (1961: 46) who wrote: "It is a tragic fact that much of our manmade world no longer exhibits this congruence of sensory pattern and abstract idea."
- 5 I borrow this idea from Domer (1993/94: 33) that: "[Kahn] was not as interested in needs as he was of desires, and sometimes [in architectural design] questions of need should override questions of desire."

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