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ARCHETYPES IN CONTEMPORARY ARCHITECTURE

ARCHETYPY W ARCHITEKTURZE WSPÓŁCZESNEJ

Abstract

Architectural archetypes, which can be defined as a timeless reference of the relevant typology of buildings, are labelled as such through purely intellectual appraisals. Their conceptual qualities do nonetheless translate into the design principles which have the potential to be used as guidelines of spatial definition. The contemporary American architect Louis I. Kahn, whose works are renowned for creating links with the built heritage, has adopted the notion of the archetype into his personal design philosophy. By means of studying a selection of his designs, this paper will try to explain what an archetype is and how it influences the architectural design. Moreover, it aims to show that deriving inspiration from the archetype is important in terms of creating unique places.

Keywords: archetype, architectural type, idea, design

Streszczenie

Archetyp architektoniczny, który można zdefiniować jako ponadczasowe odniesienie dla odpowiadającej mu typologii budowli, pozostaje w sferze intelektu. Jego wartości koncepcyjne mogą jednakże zostać przeniesione na określone zasady definiowania przestrzeni. Współczesny amerykański architekt Louis I. Kahn, którego prace słyną z nawiązań do dziedzictwa architektury, zaadoptował pojęcie archetypu do własnej filozofii projektowej. Poprzez analizę jego wybranych dzieł poniższy tekst ma na celu odpowiedzieć na pytania, czym jest archetyp i jak wpływa on na proces projektowania architektury. Ponadto poniższa praca dążyć będzie do pokazania, że czerpanie inspiracji z archetypu jest ważnym elementem w tworzeniu przestrzeni odbieranych jako unikalne.

Słowa kluczowe: archetyp, typ architektoniczny, idea, projekt

1. Philosophical background of the term

The term of archetype appears as early as in the works of Philo of Alexandria, according to whom, it can be referred to the image of the God in humans [5, p. 4]. Intended as a constantly recurring pattern or symbol that is historically grounded and shared among society, the notion of the archetype can be traced to the Platonic theory of forms, otherwise known as the theory of ideas. According to Plato, the philosophical concept of the form or idea refers to a purely intellectual model of an object, which represents its essential characteristics rather than specific details. The ideas are innate and, as a consequence, shared by all humankind. The notion of idea intended as a commonly recognised model or pattern was further developed by other philosophers. Among others, the notion of idea is also apparent in a priori forms as discussed by Immanuel Kant and in Arthur Schopenhauer's vision of the prototype. However, it was not until the 20th century that the terms "archetype" and "collective unconscious" were presented by Carl Gustav Jung [5]. In the framework of his psychological studies, Jung introduced the notion of archetypes intended as universal elements of the collective unconscious. Because they are intangible, their existence can be perceived through their representations in behavioural patterns, myths, religions, or art. Inherited and universal, archetypes can be materialised when given a particular expression by an individual. According to Jung, they can be defined as universal, archaic patterns, or primordial types of objects that may be used to interpret observations. Finally, the archetypes refer to immaterial concepts which relevant objects or patterns of behaviour strive to copy or emulate.

2. Archetypes in architecture

The notion of archetype cannot be separated from any discipline that refers to the principles of social life including architecture. In this context archetype can be defined as timeless reference of an architectural type which remains purely conceptual while having representation in various architectural projects as well as realisations in buildings. Throughout the history of humankind, several archetypes have marked the architectural activity of different societies; among these, archetypes of castle, ramparts, temple, monastery, house and settlement are particularly recurrent. Their various interpretations emerge from multiple architectural tendencies, from historic styles to modernity. Despite their differentiated design details, the typological analysis of these various interpretations should enable tracing them to their common prototype, which corresponds to the underlying concept, the idea of an object. In contemporary architecture, the significance of the archetype and its explanatory adaptations can be felt in the background of Louis I. Kahn's theory of form and design.

3. *Form and Design*¹

Backed by both Plato's theory of ideas and the Jungian vision of archetypes, Kahn's theory of form and design makes reference to the archetypes which belong to the collective unconscious and, therefore, are intangible and purely mental. For Kahn, any architectural design starts with the form, which "belongs to the order of thought and of the unmeasurable" [11, p. 57]. Characterised by the conceptual quality, the form springs from the nature of things and includes the question "What [is it that] a thing wants to be?" [6, p. 63] (Fig. 1) Because of this, the form differentiates one existence from another, being "a sort of matrix, generating the meaning that is attributed to the content of the work" [10, p. 10]. It can also be defined as "the thought of the form" [9, p. 47], which evokes the conceptual, or mental, character of archetypes. One form can have a range of individual expressions, which Kahn calls "designs". The architect explains his theory of form and design using the example of a spoon. The form which underlies the existence of a spoon consists of its two inseparable elements: the handle and the bowl. However, being a concept, it has neither shape nor dimension. By analysing it, different designers conceive different designs, each of which represents an individual expression of the underlying idea. The form is impersonal, while the design belongs to its creator. Kahn resumes his theory as follows: "Form is what. Design is how" [6, p. 64]. Analogically to the cited example of the spoon, the Form in architecture is an immaterial concept which specifies "a harmony of spaces good for a certain activity of man" [6, p. 64]. Various projects (designs) can express the same form differently, depending on the personal convictions of the creator as well as on a series of material conditions.

4. **Archetype of the castle and the castle concept**

The archetype of the castle, characterised by its inherent image of fortified walls enclosing the central meaning, was interpreted in several of Kahn's projects. One of its first applications can be found in the design of the First Unitarian Church in Rochester, in which it is essentially expressed by the order of spatial hierarchy as well as by the building's facade. For the first of these two elements, the archetype of the castle was associated by the architect with a functional plan of a typical medieval Scottish castle (Fig. 2) which he had analysed on the basis of literature. It served the architect to develop the design principle known as the "castle concept", which played an important role in his individual design method. Related to his theory of servant and served spaces, the castle concept entails a spatial order in which a central space is served by minor spaces situated within the thickness of its exterior walls. Consequently, the usage relations between the central space and the periphery result in a radial distribution, which forces the selection of a central architectural type, characterised by the opposition of the central void and its servant periphery (Fig. 3).

¹ The title refers to one of Kahn's basic writings: Kahn L.I., *Form and Design*, 1960 [in:] Twombly R., *Louis Kahn. Essential texts*, W.W. Norton & Company, New York 2003, p. 63.

The great interest Kahn brings to the archetype of the castle also resonates in his idea of the protective wall. For Kahn, the wall symbolises the functionality of a shelter that architecture originally offered to man. The return to the solid wall is, for him, the means to oppose the lightness of the modernity and to restore the perennial value of architecture. In the project of the First Unitarian Church in Rochester, the reference to the archetype of the castle becomes externalised from the moment when the architect decided to surround the building with a crenellated wall. Although the polygonal contour of the wall emerged from attempts to manipulate the natural light falling into the building's interior, Kahn perceived a resemblance to medieval castles which he decided to develop (Fig. 4). The following versions of the design, including the final proposal, are influenced by reference to the type of medieval castle, which prompts the architect to adopt the form of the buttress. In order to justify such a choice the architect provides it with a functionality of bay windows with benches to sit down.

Realised for the first time in the design of the First Unitarian Church, the combination of the archetype of the castle with the selection of the central architectural type is further explored in other projects, for example in the Erdman Hall located in Bryn Mawr. From the beginning, the project of the residence was marked by a conceptual duality which was due to the disintegrating cooperation between Louis Kahn and Anne Tyng. The gap between their individual visions of the building did not allow the reaching of a compromise and, therefore, its two alternative visions were elaborated simultaneously. The fundamental difference between the two proposals is related to the architectural type. While Anne Tyng focused on multiplication of the "molecular" octagonal module, Kahn studied the possibility to reuse the central type as an interpretation of the archetype of the castle. Taking into consideration the topography of the site, which was sloped, as well as the building's functional program, which resulted in the requirement for a considerable surface area, the architect opted for a juxtaposition of a few identical central units disposed along the upper edge of the slope. After having examined different ways to put the central units together, his decision was to align three such units along their diagonals, which in effect gave long and differentiated facades (Fig. 5). The typical unit – characterised by a symmetrical square plan with a central space of double height, flanked by four towers on the corners supplying it with natural light and surrounded by a periphery of rooms – has persisted through numerous modifications that occurred during the design process. This new interpretation of the archetype of the castle also refers to the castle concept, which determines the spatial organisation of the building. In the case of the residence in Bryn Mawr, its application facilitates the resolution of the problem of the aggregation of small bedrooms to large collective spaces. As in the case of the First Unitarian Church, the reference to the archetype of the castle does equally influence the facade. Recalling medieval fortified castles, the crenellated form of the residence's exterior wall, further complicated due to the shape of its footprint, is used to contain the periphery of bedrooms, with an emphasis placed on delivering natural light (Fig. 6).

The interest which Kahn showed in the archetype of the castle should not be considered as a purely formal inspiration. In reality, the architect focused most attention on the hierarchy of spaces and their definition. When the functional relationships between various spaces to be included within a building pointed to a central architectural type, the archetype of the

castle was chosen to serve as a model on which to base the building's organisational layout. Moreover, in situations where the contextual frame of the location was suitable to make a formal reference to the castle, the architect opted to express it by means of facade design. In Bryn Mawr, for example, the silhouette of the residence corresponds with the Neo-Gothic character of the college campus, which he tried to reinterpret in a contemporary style.

Associated with the archetype of the castle, the architectural type characterised by a bidirectional symmetry, square-shaped in plan and subdivided into a cross, reappears in many other designs by Kahn, including the Exeter library (Fig. 7), the National Capitol in Dhaka (Fig. 8), and the Synagogue in Jerusalem. The common feature of these projects is their spatial organisation, founded on the relevant archetype and characterised by a major central space containing the semantic sense of the building and a surrounding servant periphery that supplies all functional requirements. On the other hand, the designs based on the functional organisation principle of the castle concept do not necessarily refer to the stylistic features of historic castles, for example, to the crenellated wall. For Kahn, reinterpretations of such elements remain limited to these situations where the existing context justifies them.

5. Archetype of the monastery and the cloister

One of the essential features that characterise the archetype of the monastery is its inherent concept of the enclosure from the exterior, which results in the consolidation of an introverted architectural type. Usually divided from the chapel, which often remains open to the public, the residential part of a monastery is typically organised around a central cloister to which the cells and other spaces open. The typical cloister is rectangular and consists of a gallery that gives protected access to all spaces, a green outdoor courtyard in the centre and a fountain. Observed from the outside, however, the spatial compactness of a typical monastery conveys information about the control this architectural form is meant to exert over its inhabitants and their contact with the rest of the society.

Such an essential architectural type, which clearly reflected the principles of the relevant archetype and has been assigned to the design of monasteries over the centuries inspired Louis I. Kahn while he worked on the design of the Salk Institute in La Jolla. His first vision of the laboratories, which was practically a copy of previously designed medical laboratories in Philadelphia, was rejected after the architect gained a better understanding of both the territory and what working conditions were preferred by the scientists. Taking into consideration their needs for solitude, quiet contemplation and for spontaneous confrontation, Kahn analyses their everyday life in the institute and seeks an architectural expression of their usual activity. Mentioned by the client during one of his meetings with the architect, the Franciscan monastery in Assisi, which he considered an inspiring environment for work, has brought the idea of founding the spatial order of the laboratories on the concept of the cloister. Transformed into a form of a courtyard surrounded by a colonnade and rows of study rooms, this basic concept has become the main principle of the spatial organisation of the two pairs of laboratory blocks, as presented in the second version of the design. Enclosed from the outside

by a massive belt of exhaust towers and staircases, each pair of laboratory blocks opens into a central courtyard. In essence, the principles of distribution were maintained until the final version of the project, in which the number of laboratory buildings were reduced to one pair and, more importantly, the courtyard was opened in the east-west direction so as to extend the axis of the canyon that penetrates the site (Figs. 9 & 10). Moreover, the character of the central courtyard was transformed from the original vision of a garden into a paved plaza which invites contemplation of the view of the ocean. The symmetry of the whole layout is accentuated by a water course running towards the coast.

Reinterpreted by Louis I. Kahn in the project of the Salk Institute, among some more of his works, the archetype of the monastery also finds a functional aspect of its application in that precise case. Namely, the compactness of the architectural form as seen from the outside and its openness towards the central courtyard refers to the essential concept of the monastery, which is the deliberate and strictly controlled separation of the inside from the outside world. This division was equally intended by Kahn in his design of the laboratories in La Jolla, where it attains a functional significance, responding to the users' need for solitude as well as to the necessity of the limited access for visitors, who can potentially be intruders.

6. Archetype of the temple and the territory

The semantic meaning of the temple, which lies close to that of sanctuary, points to its significance for society. Although the archetype of the place of worship may be culturally diversified, the unifying feature is related to its dominant role in the public space. Both expression as well as perception of the role a temple plays for the local society is habitually underlined by the composition of its environmental setting or, in some cases, by the careful selection of its topographic situation. The importance of the territory in establishing the archetype of the temple can be justified by the fact that the first shrines of humankind were artefacts of nature.

The essential role of the territory in evoking the archetype of the temple can be observed in the example of the Salk Institute, specifically in the design of the meeting house. In La Jolla, the abundant site has initially posed a problem to the architect. The difficulty of the task to manage such an immense plot, further complicated by its unusual morphology, has shaped the design's first stage which was out of scale. The progressing comprehension of the site quickly allowed Kahn to produce a new version of the project based on a more appropriate site plan. By means of decreasing the project's scale, Kahn gained knowledge about the site's tectonics and identified its most outstanding features: the cliff, the canyon and the plateau. These three significant elements inspired the architect to crystallise a concept of three separate functional identities composing the Salk Institute. The laboratories, the only realised fragment of the design, were allocated to the plateau so as to make use of a relatively flat portion of land with a moderate height difference which facilitated the development and implementation of a large-area, horizontally extended structure. The second identity resulted from the combination of the site's privileged viewpoint overlooking the cliffs high above the Pacific coast with the representative function of the meeting house. Finally, the third unity

consisted of arranging the Institute's residential dwellings along the edge of the canyon (Fig. 11). Constituting a merger between the architecture and the terrain's topographic features, the three unique identities of the Salk Institute make reference to the spatial archetypes of the monastery (laboratories), of the temple (the meeting house) and the human settlement (housing). Despite the decreasing scale of the project's subsequent versions, Kahn seeks to maintain the essential concept based on the three identities, which can be summarised as the allocation of the terrain's particular features to the specific architectural objects.

With regard to the meeting house, its first formal references resulted from both the potential of its location and its functionality. Initially, the architect refers to the Greek stoa, which found expression in the form of a portico giving a view over the ocean. Afterwards, Kahn also cited the plan of Diocletian's Palace in Split, which could serve as a model of implementation, being located at the Adriatic coast. Its square and symmetrical plan, also with a portico overlooking the coast, was interpreted by the architect so as to fit the location and the functionality of the meeting house. As the work proceeded, the architectural form of the meeting house was transformed into its final version which is a composition of different types of spaces enclosed within basic solids and arranged around a rectangular central court. In any of these design versions, the monumentality of the proposed architecture, combined with the building's educational function as well as with the selection of a privileged topographic situation, makes a strong reference to the archetype of the temple in its essence. By means of the very elaborated use of its hilltop location, involving an outdoor amphitheater and other outdoor spaces that focused on contemplating the view, the meeting house, similar to the entire Institute, "promised to be a new Acropolis for biological science and also for architecture" [7, p. 41]. As a temple of knowledge, the meeting house points to this great classic reference by means of the perfect union of place and architecture.

7. Conclusions

As can be observed from the above examples, the contemporary interpretations of the architectural archetypes proposed by the architect Louis I. Kahn were based on a mindful and scrupulous analysis of the functional relations that are specific for each human activity. While translating his observations into a graphic diagram, the architect did not hesitate to draw on his knowledge of historic architecture in the quest for continuity. For Kahn, the great architectural types were a source to draw the design principles from. These principles were basically related to the building's spatial organisation and definition, rather than to details or construction methods.

Another important aspect of Kahn's approach to using the archetypes in his work is selectivity. The architect selects the archetype he refers to depending on its utility for the given purpose and its suitability with regard to the project's contextual frame. After this, the selected archetype is transformed along the design process so as to fit the circumstances and, ultimately, the result can surpass what was originally foreseen, following a thought of Gabriella Colucci [1, p. 251]. What can also be observed in the work of Louis I. Kahn is



that any first transformation of an archetype into a real design tends to create an enduring link between the archetype and a specific architectural type. Reaching again for the same archetypal reference in his subsequent works, the architect will start the design process with the same architectural type and the relevant distributive order. Being a natural result of using previously gained experience, this regularity leads to certain simplifications, which can have a narrowing effect on the significance which Kahn actually attributed to the study of the architectural archetypes.

It is likely that referring to the archetypes grounded in the collective unconscious is the basis upon which Kahn's works are considered as contemporary spaces that reflect timeless humanistic values. Reaching out for the archetypes is also not excluded nowadays. However, it ought to be remembered that an archetype is not interchangeable with an image of a historical architectural type. It has a conceptual quality and is represented by its various interpretations, while the essence remains strictly mental. Derived from the history of humankind, spatial archetypes underlie collective memory and respond to various subconscious concepts. Therein lies the source of their appeal to people, influencing them to perceive the visited places as being unique, memorable and being part of their lives.

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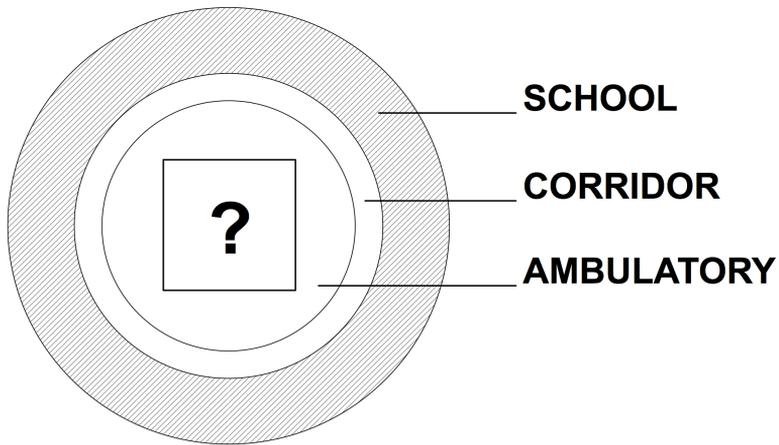


Fig. 1. Louis I. Kahn, Form drawing made for the First Unitarian Church in Rochester. Redrawn by the author from published materials [13]

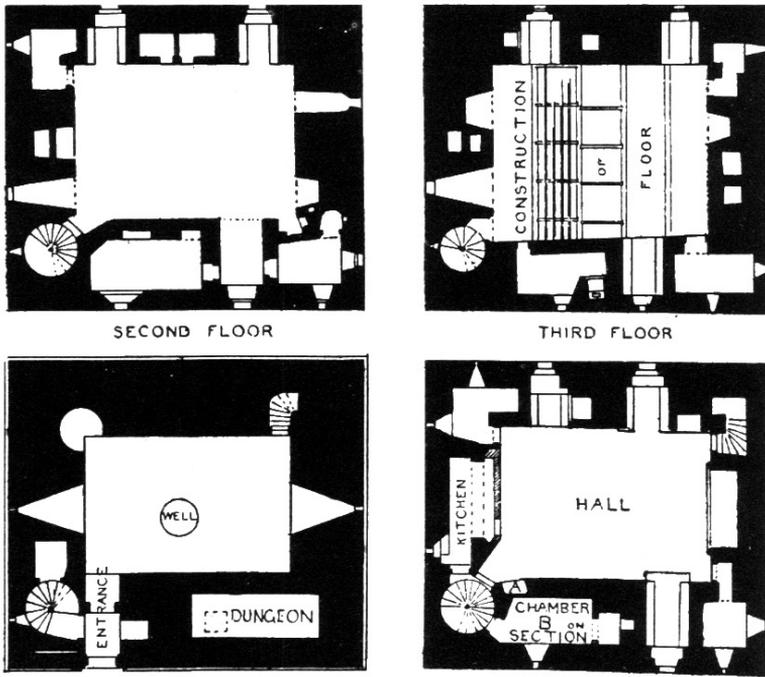


Fig. 2. Plan of Comlongon Castle in Dumfriesshire. Public Domain

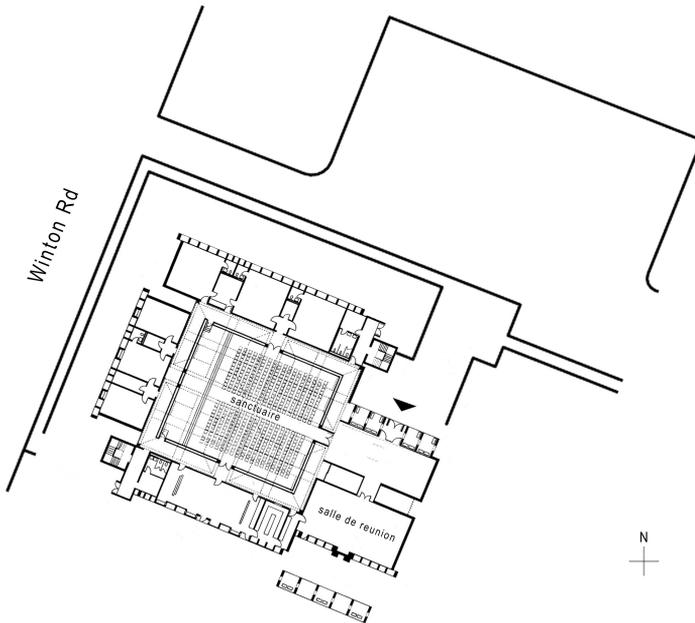


Fig. 3. Plan of the First Unitarian Church in Rochester, summer 1960. Redrawn by the author from published materials [13]



Fig. 4. The First Unitarian Church in Rochester, a view. Photo by the author

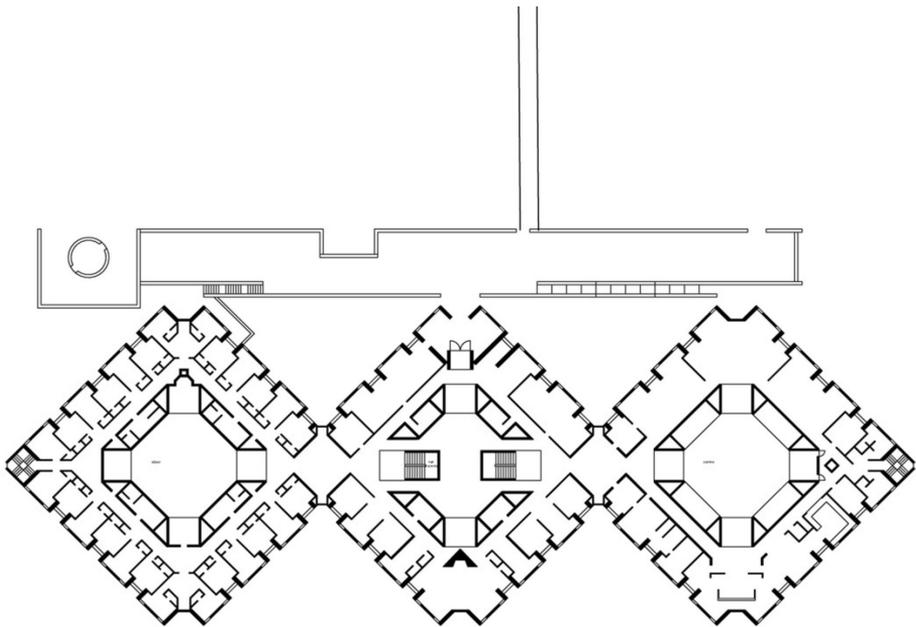


Fig. 5. Plan of the residence in Bryn Mawr. Redrawn by the author from published materials [13]





Fig. 6. A view of the residence in Bryn Mawr. Photo by the author

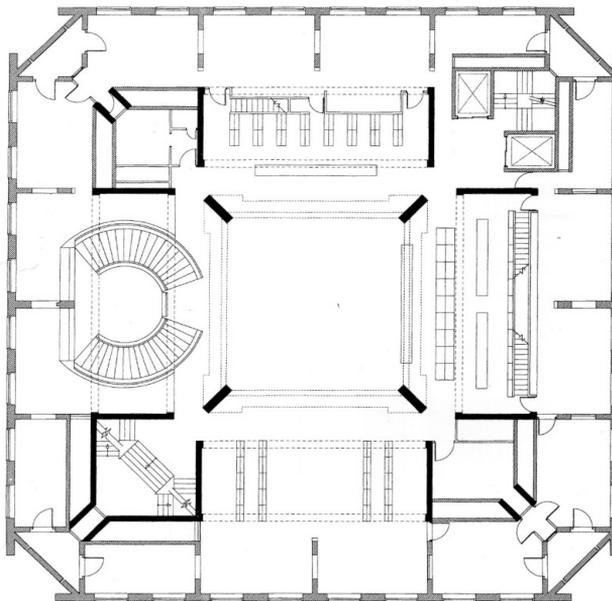


Fig. 7. Plan of the library in Exeter. Redrawn by the author from published materials [13]

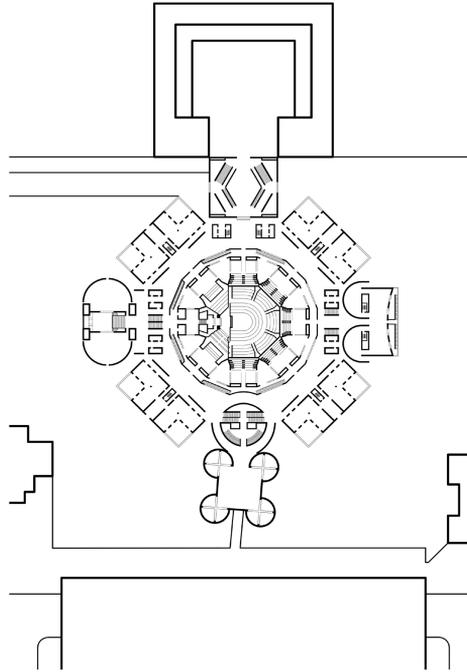


Fig. 8. Plan of the National Capitol in Dhaka, Bangladesh. Redrawn by the author from published materials [13]

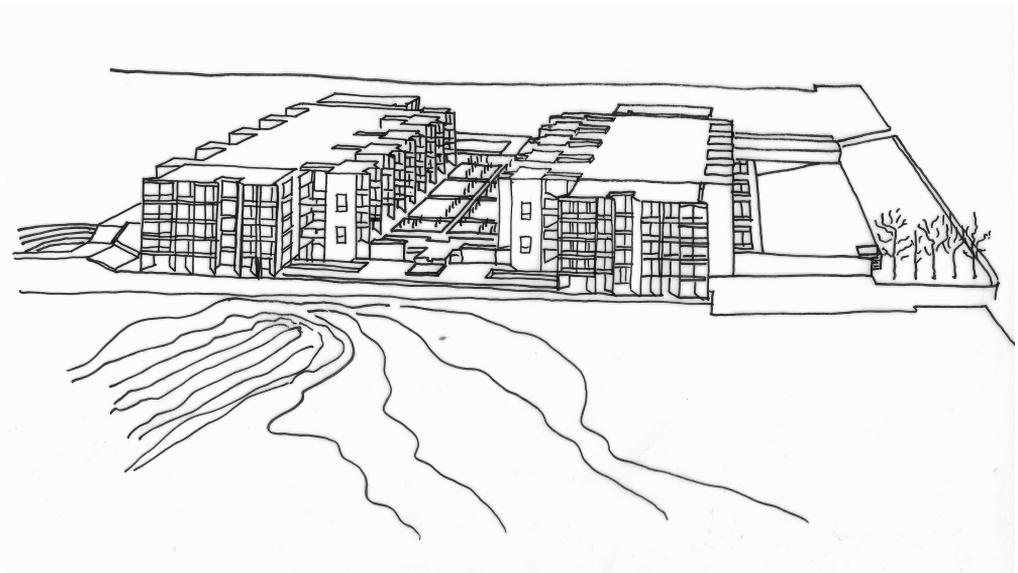


Fig. 9. A perspective view of the laboratories of the Salk Institute in La Jolla. A sketch based on the archival drawings from Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission



Fig. 10. Plan of the realised part of the Salk Institute in context of the site. Redrawn by the author from published materials [13]



Fig. 11. Three unities of the Salk Institute: the meeting house at the front, the laboratories on the left, the housing on the right. The Pacific coast is visible on the right. A sketch based on the archival drawings from Louis I. Kahn Collection, University of Pennsylvania and Pennsylvania Historical and Museum Commission