Louis kahn essay

At the start of a new commission, many architects begin their inquiry by studying the program for the proposed project. Facets of this studying might include a review of local building and zoning codes, an examination of the proposed site, including its soil and topographic conditions, and an investigation into the project's functions, including allotted square footage and adjacencies of different uses.

The client's requests regarding the project are also considered. In short, the design process begins with a serious and studies inquiry into the project's ' facts'. Louis Kahn did not begin his design process in this manner. To be sure, he eventually did all of these things which other architects do. He felt, however, that such inquiry into a proposed project's program-its ' facts'- was not the appropriate place to begin a design. He said, ' Architecture is the thoughtful making of spaces, not the filling of areas prescribed by a client.' Elsewhere Kahn said, ' It is the world of the architect to indicate those spaces which have never been and could not have been thought of by the client, but for which the client really wants you. The great client wants the architect to tell him that the fullness of the environment must be presented, from it true choices can be made.'

For Kahn, design was a two-step process. The first step was to consider the particular ' institution' to be designed (in this instance, a library), while the second step was to come to terms with the project's ' facts'. Kahn believed that all institutions had almost elemental meanings that were far more critical to a design's success than mere functional issues. He argues that these institutions possessed ' forms'. Rather than meaning physical forms, however, Kahn meant that the institution possessed a spiritual form which

would be based on men’s and women’s experiences of using it. This form gave the building an ‘ existence will’- the desire to be something. Thus, when Kahn began to design he asked himself, ‘ What does this building want to be?’ Regarding the onset of a library’s design, he said, ‘ If you were given the first commission before libraries were ever built to build a place where these books can be, what would you do? That is the thought you have about its nature when you are given the privilege to designing abuilding.’ Following this rational, when Kahn received the commission for Exeter Library, he began by asking himself what the library wanted to be. ‘ What is a library?’

What is a library? Kahn said, ‘ A man with a book goes to the light. A library begins that way. The carrel is the niche which could be the beginning of the space order and its structure.’ Elsewhere Kahn said, ‘ I see a library as a place where the librarian can lay out the books, open especially to selected pages to seduce the readers. There should be a place with great tables on which the librarian can put the books, and the readers should be able to take the book and go to the light.’ This seemingly simple idea is the driving force for Kahn’s design, and with this issue behind him he was able to produce a general diagram of the guiding form. After the completion of the first step, Kahn introduces the project’s ‘ facts’ to his design process.

The program for Exeter Library asked for the final design to include consideration for a variety of issues. First was the issue of context. The school wanted a building which would conform to the existing qualities of the campus. At the same time, because the school felt recent buildings had been too derivative of the campus’s style, they wanted a building that would be distinctive. The school also had specific guidelines for the library’s interior. “

The building would house 250, 000 books, current periodicals, fiction, and a rare book collection, as well as two seminar rooms, a suite of staff offices and work spaces, and outdoor reading areas in the form of ‘ a green garden, or shaded terrace’. Daylight was to be relied on as much as possible, and variety was very important:

‘ Some students like to sprawl in a deep armchair; others prefer to sit at a table. Some like a neutral setting others prefer to sit by an open window.’ In addition, there was a clearly stated preference for a system of individual study carrels, arranged in a alcoves close to the book stacks, over the traditional large open reading room. Inside, clarity was important: ‘ a reader should be able to sense at once the building’s plan.’”

Kahn’s final design meets the requirement of being respectful of the existing campus. The library easily fits into the campus’s overallaesthetic, yet appears distinctive. Kahn found inspiration in the surrounding buildings, and used jack arches similar to those on some of the older buildings. While certainly the tallest building on the campus, the library’s scale does not dominate the campus. In part this is due to the window design. While each opening actually provides light for the two floors, it appears as a single window.

These views reveal how the library’s facades relate to the Academy Building, located directly north of the library. Of special note are the Academy Building’s windows, including their overall proportions and the brick construction around them.

Directly west of the library is Dunbar Hall. As with the Academy Building, note the masonry construction.

As previously mentioned, each window in the library's façade provides light to two interior levels. As discussed in the Fenestration section of this Analysis, the exact design of each window relates to the interior functions adjacent to it. Also, as discussed in the section of the Analysis focusing on Materials, the masonry relates to the adjacent buildings not only as a material, but also in the terms of construction techniques.

Kahn's design for the interior was driven by his understanding of a library's form. Recall his statement that a reader should be able to come into the library, find a book, and take it to the light. This notion led Kahn to design the library with three distinct zones. Kahn said, ' Exeter began with the periphery, where light is, I felt the reading room would be a where a person is alone near a window, and I felt that would be a private carrel, a kind of discovered place in the folds of construction. I made the outer depth of the building like a brick doughnut, independent of the books. I made the inner depth of the building like a concrete doughnut, where the books are stored away from the light. The center area is a result of these two contiguous doughnuts; its jus the entrance where the books are visible all around you through the big circular openings. So you feel the building has the invitation to books.' This statement concerning the building design is almost identical to Kahn's form idea. The building has a large central zone which contains the invitation to books, an intermediate zone where books are kept, and a perimeter zone where the user can take the book to the light.

Consider the library’s central hall. This space was not a part of the original project program, and at one time was in danger of being eliminated as a way of reducing expenses. For Kahn, however, it was an absolutely critical space, for it was here that the invitation to books occurred. This invitation took place in several ways. Following Kahn’s notions, there are tables and cases in the hall where books are ‘ laid’ out to seduce readers. Perhaps more significantly, visible through the large concrete circles which form the halls structure are the bookstacks. Like the books on the table, glimpses of these stacks are also intended to seduce the reader.

Parenthetically, in the life of the library the hall has served a wide variety of other functions, including dances, films, banquets, concerts, and so forth. In many ways it is the heart of the campus. On each upper floor overlooking the central hall, is a large shelf. In addition to providing a useful place for library patrons to place books for quick review, the shelf continues Kahn’s idea of having an area for the librarian to place books to seduce readers.

The concrete doughnut, or ‘ bookcase building,’ as Kahn often referred to it also contains the library’s ‘ servant’ spaces (discusses elsewhere in the Analysis Section). Thus, the library’s first two zones are a concrete building.

Surrounding the concrete building on all sides is the seventeen-foot-wide brick doughnut where the study carrels are located adjacent to the light. This area, to which the reader takes the book, is load-bearing brick construction. Its warm tones and rich textures add to the inviting quality provided by the natural light. The brick also blends with the adjacent buildings, without

precisely imitating their forms. Kahn liked the surrounding buildings, and used brick jack arches in the library as a way ofpaying respect.

It is worth noting that the same type of thinking that drove Kahn's overall design, also drove his design of the library's smaller features. Consider his designs of the study carrels. Kahn said, ' The name carrel implies something which is in the construction itself, which you find as a good place to read. Its natural outcome of structure which says, Why don't' we set a bench there? It's a good place to be. Then you give them the name, rather than saying, We'll have carrels. If you see in a program a direction to the architect, We want so many carrels, what is lost is the discovery of the carrel.' For Kahn, the design of the carrel did not begin with the dictates of the project program, but with the question, What is the nature of a good reading carrel? Thus, he first considered those qualities of space and light that would make a good carrel. Only when he felt he understood these issues did he consider the programmatic requirements.

It is often noted that from the exterior the brick sections of the building almost read as screens for the concrete building behind them. As discussed elsewhere in the Analysis section, this is achieved in large measure by the way the comers are treated. Rather than bringing each side of the building to a traditional ninety-degree corner, Kahn omitted the corner and slightly extended the brick edge of the front façade. This small design move enhances the screen-like quality of the façade.

This view of a typical roof terrace corner also reveals the ways in which the brick doughnut achieves a screen-like quality. Close inspection of the picture

reveals that the two sections of the doughnut do not meet one another. Each has its own columns and roof. Only the forty-five-degrees brick inset joins them.

It is interesting to note the ways in which Kahn designed the separation of the concrete and brick doughnuts. On the interior this separation occurs in a variety of ways. As should be clear at this point, the structural system for each section is unique-brick for the carrels, concrete for the books. These two views also show the way in which exposed ductwork tends toannounce the separation of the two zones.

The separation of the concrete and brick doughnuts is quite evident on the exterior terrace. As the picture showing a typical division shows, the structure for the outer zone never touches that of the inner zone. The division is also reinforced by a slightly recessed slate paving strip between the two zones.

Several study lounges and seminar rooms are located on the library’s top floor. Because the area part of the concrete doughnut, their structure is concrete. Also, in keeping with the ‘ bookcase’ quality of the zone, rare books are housed in this area. As can be seen in the picture, the roof-slopes down in the direction of the glass which looks out onto the exterior terrace. Done as a way of decreasing the building’s apparent overall height, the slope also serves to reinforce the division of the zones. From the perspective of a person on the roof terrace, the terrace structure appears as double height brick, while the inner zone appears to be single height concrete.

Along the west façade of the first floor, the brick doughnut serves as the library’s Reference Area. The warm tones and soft textures of this area provide an attractive and comfortable place for study, and maintain Kahn’s design idea for the zone.

Following the program’s lead, Kahn also designed a variety of places for more informal, relaxed study. Again, in the keeping with his design idea, these zones typically, but not always, occur in the brick doughnut. These pictures show two such zones located along the library’s north façade.

In his design work, Kahn made a distinction between a building’s ‘ served’ and ‘ servant’ spaces. In general, served spaces are the building’s primary areas, while servant spaces include support areas such as mechanical equipment, toilet rooms, corridors, storage, and so forth. Kahn felt that

servant spaces should be grouped together and given their own structure from which they could serve the building’s primary areas. He said, ‘ The nature of space is further characterized by the minor spaces that serve it. Storage-rooms, service-rooms and cubicles must not be partitioned areas of a single space structure, they must be given their own structure.’

As discussed elsewhere in the Analysis Section, Exeter Library’s floor plan contains three zones: the outer zone where the reading carrels are located next to the light (Kahn referred to this as the ‘ Brick Doughnut’), the middle zone where the books are stored away from the light (Kahn referred to this as the ‘ Bookcase Building’ or ‘ Concrete Doughnut’), and the central zone which contains the main entry hall (the place where Kahn said the ‘ invitation to books’ occurred).

The library’s servant spaces are located in each of the Bookcase Building’s four corners. Each of these servant spaces is constructed of poured-in-place concrete and houses all the building services including mechanical shafts, stairs, elevators, toilet rooms, and service rooms.

There are numerous examples of how the distinction between servant and served space manifests itself in the library’s design. Notable among these is the use of materials in each type of space. For example, located in a primary served zone, the main entry stair is uniformly clad in white travertine marble. Although the marble is applied to a concrete structure, the stair gives the appearance of being completely monolithic. The effect, when combined with the thoughtful detailing, is quite rich.

In addition to its materials, the main entry stair is flooded with light from adjacent windows on the ground and first floors, adding to its grandeur.

In contrast, the stairs in the building’s servant zone are finished in thin pieces of slate and exposed concrete. In place of the entry stair’s massive travertine handrails are thin, almost spindly stainless steel rails. The only natural light in the servant zones is borrowed from adjacent served zones, and is relatively dim. While not unpleasant, the experience in theseservant stairs is radically different from that of the main entry stair.

It might be argued that the entire Bookcase Building is a servant zone. Once again, the difference between materials of the two adjacent zones is informative. In the Brick Doughnut, oak and brick combine with natural light and carpet to provide a rich, warm environment. In the central hall, oak,

travertine, and soft cool light from above (discussed elsewhere in the Analysis Section) create a similarly rich atmosphere.

When compared with the materials and light of the adjacent zones, the Bookcase Building’s metal shelving, exposed concrete, strip fluorescent lights, and exposed ductwork provide a distinctly utilitarian, if not industrial, feeling.

As discussed in the section on Kahn’s Design Idea, the library is divided into three sections: the brick doughnut which houses the private study carrels, the concrete doughnut which houses the books, and the main central hall. Kahn said, ‘ Exeter began with the periphery, where light is.’ Elsewhere he said, ‘ I see library as a place where the librarian can lay out the books, open especially to selected pages to seduce the readers. There should be a place with great tables on which the librarian can put the books, and the readers should be able to take the book and go to the light.’

These statements reveal the importance that light played in Kahn’s design for the library. They also reveal two different ways of considering light. The first is to begin, as Kahn did in his design, at the study carrel in the brick doughnut, and to move inward. The second is to begin with the patron entering the library, moving toward the perimeter. This processional movement from the large entry stair to the study carrel is a good way to consider the light.

As a patron ascends the entry stair, he or she enters the large central hall. At the top of the hall are clerestory windows. Little direct light enters the hall

from these clerestories. Instead it is blocked and filtered by an oversized concrete ‘ X-shaped structure.’

This filtering creates an indirect, soft ‘ blue’ light for the central hall. As Wickersham has argues, this cool light ‘ dramatizes the student’s encounter with knowledge and truth- not in the collective setting of a classroom, but as an individual who would set foot in the hall alone.’ In this hall is the ‘ invitation to books’- in the form of books which might be on display, and books visible through the large circular openings in the walls.

It is noteworthy that the large ‘ X’ structure is far more massive than required to carry its modest load. A primary function for the sixteen-foot-deep structure is to filter light from the clerestory windows. Kahn said, ‘ In the central room I chose the kind of structure which shields the light so it is not pouring down. …a clerestory light gives you light from the sides of a beam.’

From the central hall a patron moves to a reading carrel. The reading carrels are characterized by their ‘ white’ light, as well as warm colors and rich textures. This is where the reader goes for personal encounter with his or her book. The white light has an almost spiritual connotation.

Between the central hall and the reading carrels is the concrete doughnut- Kahn’s book stack building. While there is a great deal of natural light in the central hall and at the reading carrels, there is none in the bookstacks. Keeping the shelved books away from light in this way not only helps to preserve their life, but it also dramatizes the difference between the warm and cool light of the adjacent zones.