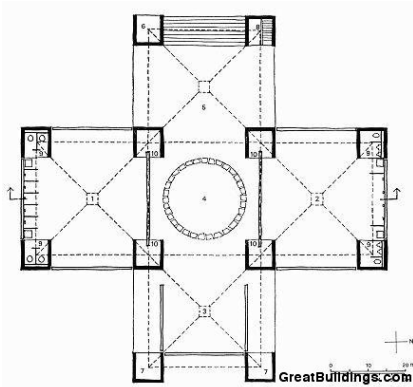


Rumination 1:

The Idea of Materials, the Material of Ideas*

Why make architecture? The classical Greek proposition (Aristotle) takes material as the first cause of action, among three other causes: efficient, formal and final. The perception of matter is instinctive: following the natural order by which every living organism is in continuous exchange with its surroundings. It has an effect on matter by integrating it into the body, or arranging it as a direct extension of it. The knowledge of form is intelligent: operating within the datum of nature, it deliberately rearranges matter to set up a different kind of order, the artificial order, which bears the sign of human intension and sensibility. In the ensuing rheology, the maker becomes a prime material of his, and her, own experiment: a sensing, imagining, reasoning, emerging material – which by dint of constructing, is constructing himself (Valéry). – Alvaro Malo, Univ. of Arizona



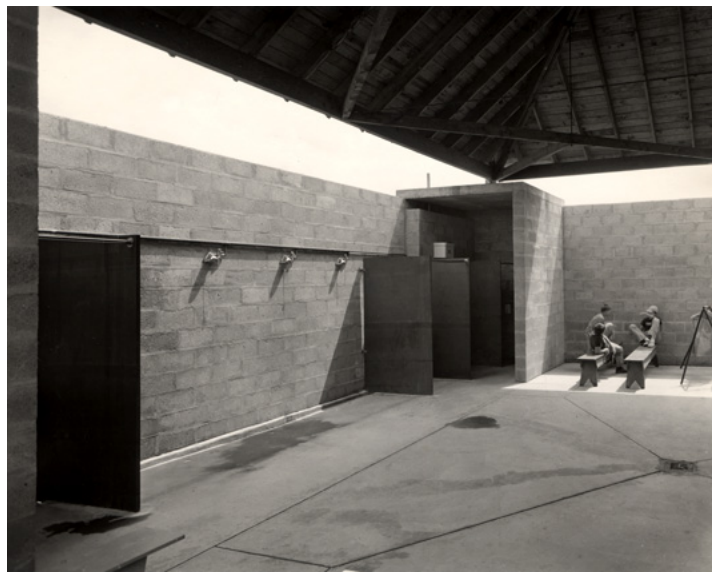
First Year, Graduate School

Went to visit Trenton Bath Houses by Lou Kahn. I knew the plan of course, we had studied it. It was based on a kind of platonic geometry, 5 overlapping squares, the overlaps creating smaller squares, each of the smaller squares with a center, the centers being the corners of squares drawn in dotted lines, those squares with diagonals, the intersection of the diagonals centering even smaller squares.

It was shorthand I found out: A way of describing structure, space, lighting, procession, human use and materials, all in one concise drawing. The diagonals were really a reference to structure, they always are. The squares could collapse into parallelograms, but the diagonals prevented this. In three dimensions the diagonals become pyramidal, the surface planes easily shed water. But the pyramids meant something else. They are a subtle reference to a history of common architectural forms. Something we could all understand intuitively, a part of our shared past. They immediately implied a *public space, to be shared*. Of course the pyramids were not weighty, not made of stone, they were levitated, made modern and light, held only at their extreme corners, impossible.

The smaller squares, formed by the overlap, were intentional and useful. With a wall bisecting their open end they made the perfect locker room entry; no door necessary, but maximum privacy. Two apart formed the perfect stops for a formal entry stair. With four walls they made the only purely private spaces with doors in the project: the toilets. They were useful but their intended game was structurally paradoxical. The point of needed maximum support is a void we can walk through, a heavy concrete pad does all the work, forming a small roof. The small square spaces are the key to the project, they allow the giant roofs to float free of each other. Kahn's powerful intuition told him this was possible because of the unique nature of the program, a public outdoor bath house is only used in fine weather.

Still smaller squares at the intersection of the diagonals. Openings in the roof peaks. No surface to mark the exact point of intersection. Open, void to the sky. Impossible.



The gaps between the exterior walls and the roof lines were open to the sky and let in beautiful strips of light. I noticed the showers. The showers were in the gaps. Of course. No roof is needed over a shower. The narrow space of sky revealed within the overlapping geometry really had a use, to let me take a shower in the rain. It was about me, and my body, and getting wet, and swimming.

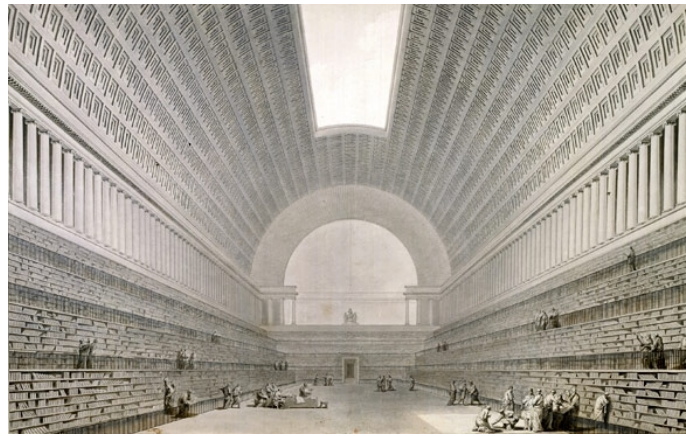
The Trenton Bath House, a beautiful first year field trip. Geometry, structure, use, material, procession, awareness of my body, water and light, all dancing together.

* Title and description from a new course proposed by *Professor Alvaro Malo, U of Arizona, Spring 2016*

Rumination 2

Library:

Space of Structure or Structure of Space



Étienne-Louis Boullée, French National Library, 1785

Libraries are traditionally built of the space of books. Solid, dense, compressive. Witness Avery Library. The organization of the main level is dependent on the location of books to organize everything: sequence and procession, exterior fenestration, to create sub-spaces in which to read, to house stairs to a mezzanine level. Forms of compression predominate. Weight becomes significant. Compression must carry through to the earth. The arch and the jack arch for Louis Kahn, the shell like vaults of Henri Labrouste, the massive encircling walls of Gunnar Asplund's majestic drum are all intuitive responses to the weight of accumulated knowledge, in the form of books. The sublime vault of the library of Boullée's imagination must be supported by heavy columnar construction. These are the intuitive, structural forms of libraries. There is an element of security and protection that is necessary. The library is the fortress of the culture.



Gunnar Asplund, Stockholm Library, 1928

The spaces within libraries are a communal void, a paradoxical emptiness of shared knowledge and beliefs. There is a commonality of intention, a faith that knowledge can be accumulated, that it can be continuously added to under the right circumstances. The spontaneous generation of new ideas requires this space. The space is the representation of this faith.



Henri Labrouste, Bibliothèque St. Geneviève, 1838-1850

We are living in a chaotic time of uncertainty: The implicit faith in the continuance of the culture may not be as strong as it once was. Books may not be as important as they once were. We are a disparate group, globalization has made the idea of a common culture an antiquated one.

Have libraries evolved out of the world of compression into the realm of tension? Tension allows openness, and a release from the necessity of compressive walls. The byproduct of tension in structure is the absence of walls and the admittance of light. And what of our accumulated knowledge? At this point knowledge is becoming available to all, everywhere. Transparency, tension, lightness, movability, changeability seem to be the keynotes of the contemporary library.



Louis Kahn, Exeter Library, 1971

Library Probe:
“Book Span”

The semester work will be conducted in a tactile manner. Progress will be made through the development of physical models. The first series will consist of physical “*Probes*”, as “instruments”, to facilitate exploration:

probe |prōb|

verb [with obj.]

physically explore or examine (something) with the hands or an instrument.

The probes will be the result of a paradoxical problem framed by the bounds of structure, modeling technique, and a singular modeling material.