

Trenton Bathhouse

by Louis Kahn



合作人： 何学焜 安来乾



◆ 建筑师简介

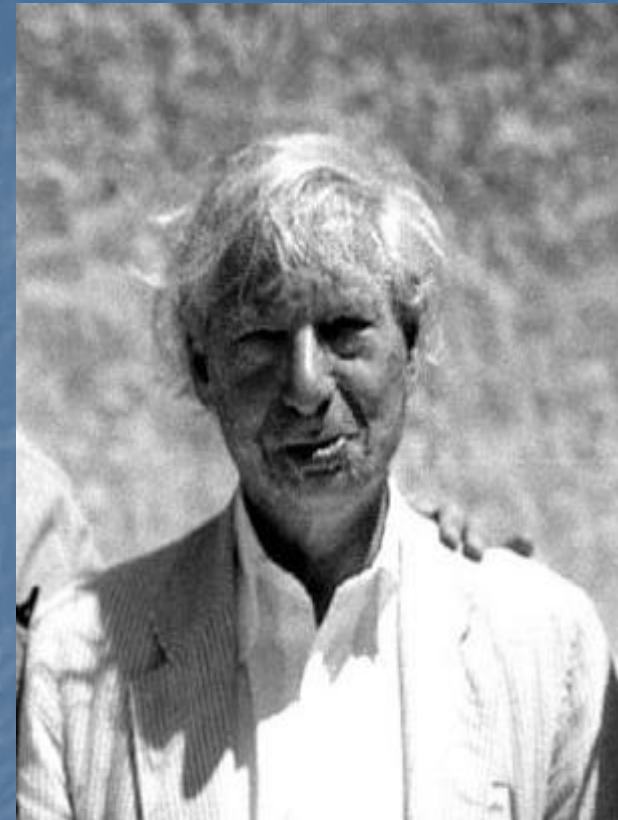
- Louis Kahn was born in Saarama, Estonia in 1901. His family emigrated to the U.S. in 1905. He graduated from the University of Pennsylvania with a thorough grounding in the Beaux Art school of architecture. During the 1920s and 1930s he worked as a draftsman and, later, as a head designer for several Philadelphia-based firms.

- In 1925-26 Kahn acted as the Chief of Design for the Sesquicentennial Exhibition. During the Depression, he was active in the design of public assisted housing. Beginning in 1935 Kahn worked with a series of partners, but from 1948 until his death in 1974, Kahn worked alone. From 1947 to 1957 he was Design Critic and Professor of Architecture at Yale University, after which he was Dean at the University of Pennsylvania.

- Among his many notable buildings are the Salk Institute (La Jolla, CA), the Phillips Exeter Academy Library, the Yale Center for British Art, the Kimbell Art Museum, Indian Institute of Management in Ahmedabad, India, and the National Capital of Bangladesh. Two of his unbuilt designs have also garnered considerable praise: the Franklin Delano Roosevelt Memorial and the Hurva Synagogue in Jerusalem, Israel.

- Kahn's architecture is notable for its simple, platonic forms and compositions. Through the use of brick and poured-in place concrete masonry, he developed a contemporary and monumental architecture that maintained a sympathy for the site. While rooted in the International Style, Kahn's architecture was an amalgam of his Beaux Arts education and a personal aesthetic impulse to develop his own architectural forms.

- Considered one of the foremost architects of the late twentieth century, Kahn received the AIA Gold Medal in 1971 and the RIBA Gold Medal in 1972. He was elected a member of the American Academy of Arts and Letters in 1971.



Louis Kahn(1901—1974)



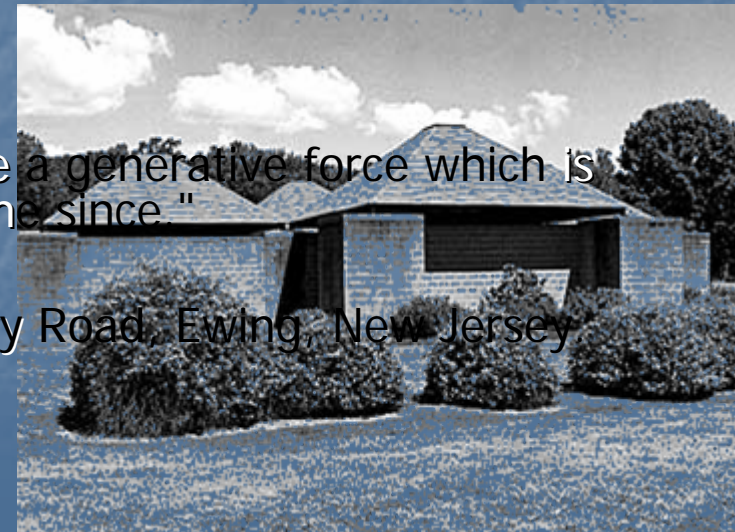
Trenton Bathhouse概况

Designed as part of a larger plan (never executed) for the Jewish Community Center of the Delaware Valley, the "bath house" opened in 1955 and served as the entrance and changing area for patrons of an outdoor swimming pool.

From a design perspective, the bath house actually appears as a quite simple cruciform shape-- four square concrete block rooms or areas, surrounding an open atrium. Each of the rooms is topped by a simple, wooden rectangular pyramid. At the corner of each room there is a large, open rectangular column that supports the roof. However, closer inspection reveals that in addition to the pure design elegance, Kahn also clarified his thinking about the utilitarian purposes of the various spaces, and it was in this building that he first articulated his notion of spaces serving and spaces served.

Kahn often spoke of this project as a turning point in his design philosophy, "From this came a generative force which is recognizable in every building which I have done since."

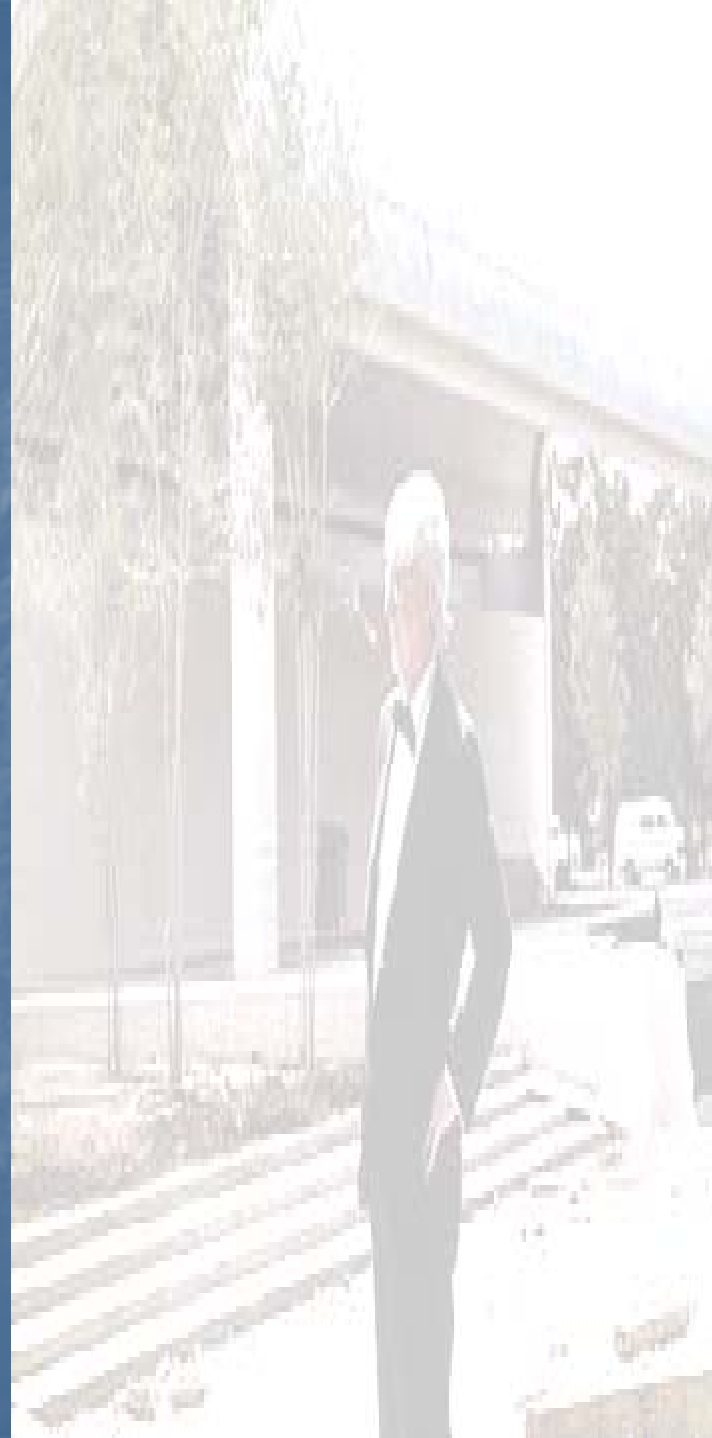
The Bath House is located at 999 Lower Ferry Road, Ewing, New Jersey





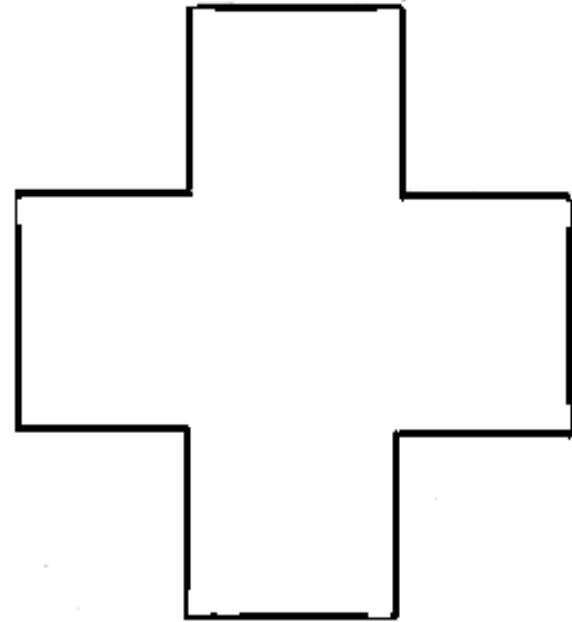
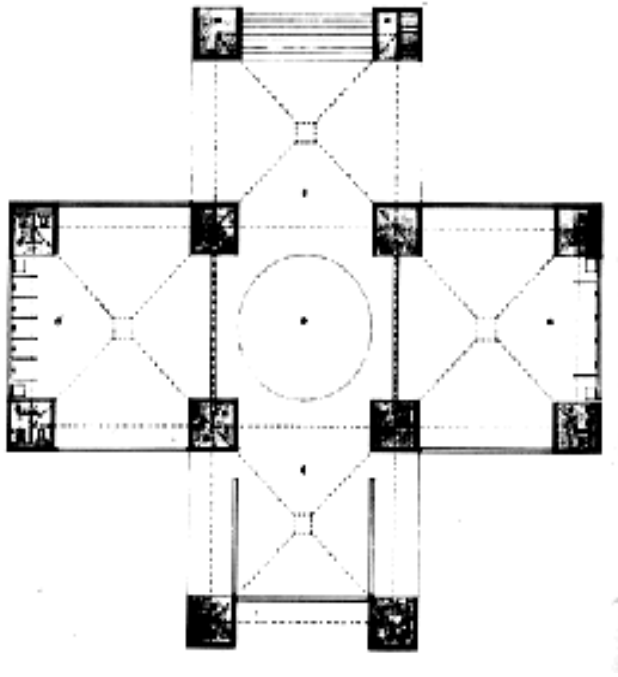
对TrentonBathhouse的分析

- ◆ 形体分析
- ◆ 材料和结构
- ◆ 功能分区
- ◆ 采光
- ◆ 建筑中的设计理念





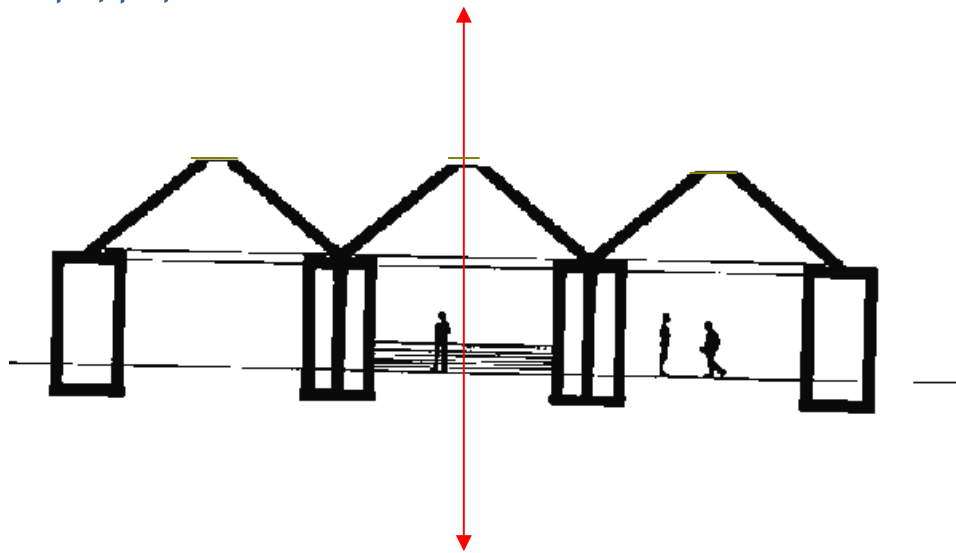
平面图



Trenton bathhouse更衣室在平面布局上成拜占庭十字形，上下左右四个正方形围绕一个中庭展开，亦与前方紧接的方形游泳池十分契合，简洁而明确。

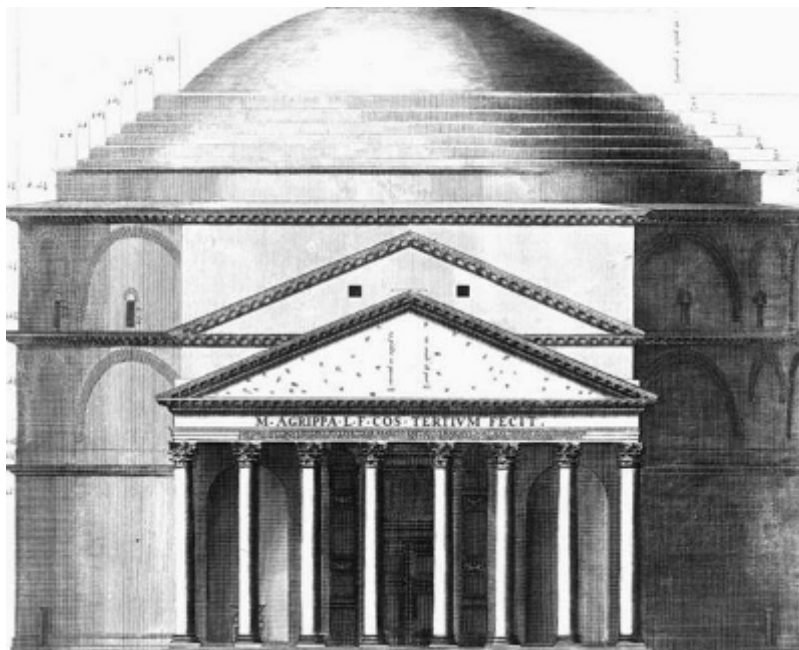


立面图



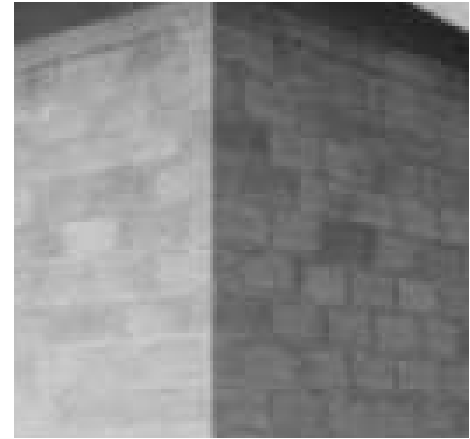
建筑具有明显的中轴线，由屋顶中央采光，内部空间向上收拢，有古典神殿建筑的影子。

Pantheon, Rome

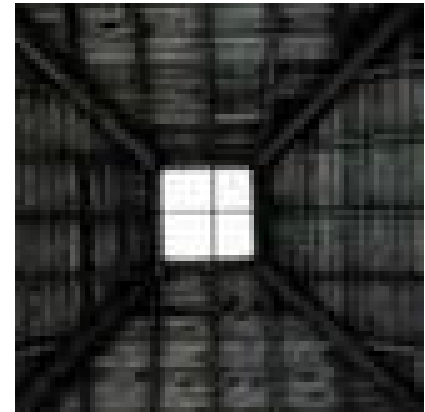




◆ 四个方盒子由砖块筑成，个种色调的砖块砌筑使最简洁的墙面变得富有层次感而又不在整体环境中显得突兀。建筑师的这种处理方法明显带有Le Corbusier的影子。

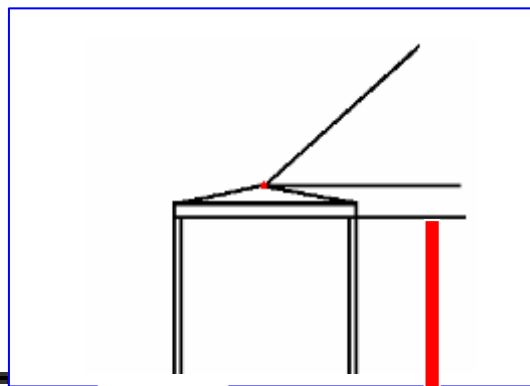
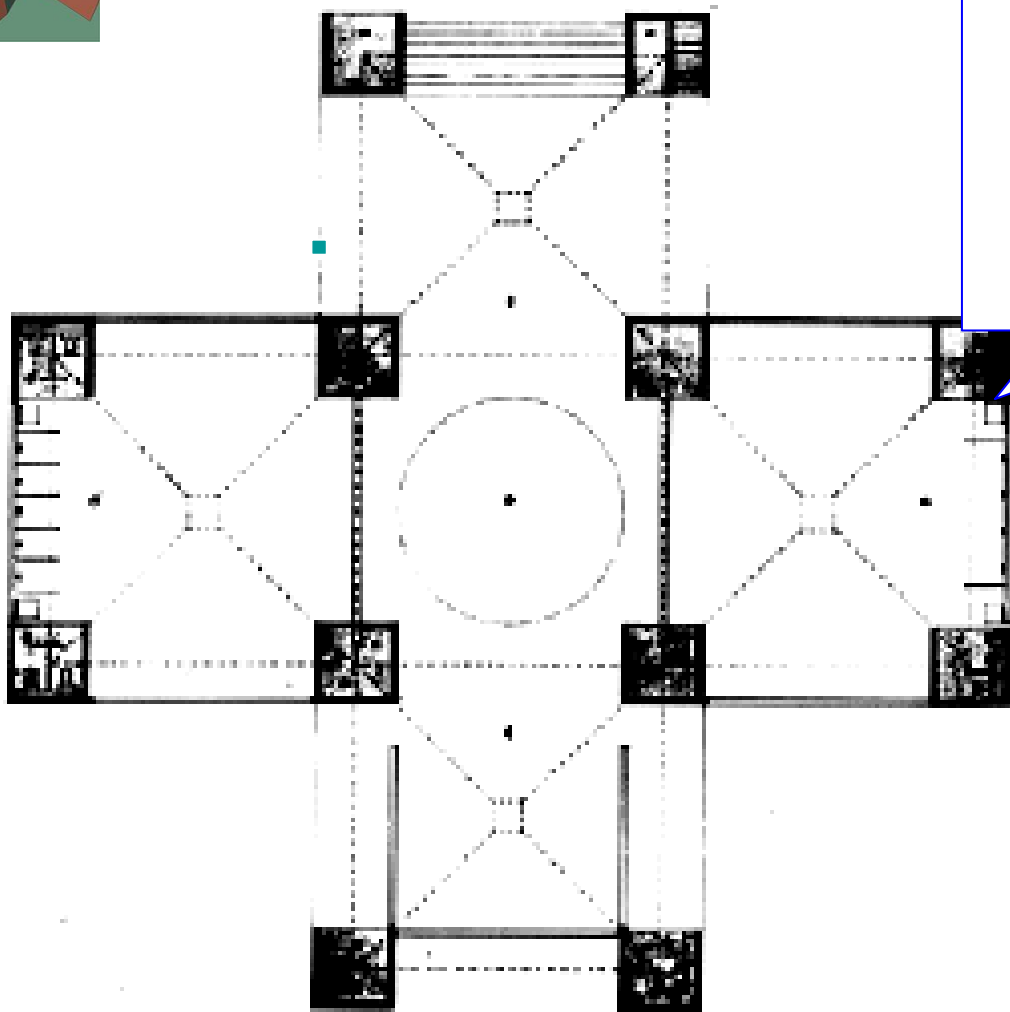


◆ 屋顶采用细密排列的木材料且为小倾角金字塔状设计，使其整体并不显得笨重。





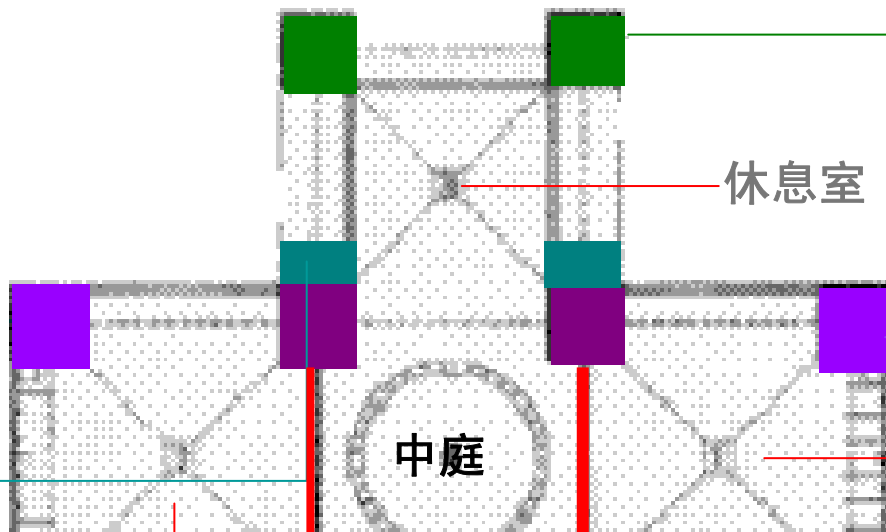
◆屋顶内部采用暴露结构构件的方法，与四面简单的墙壁形成对比



◆每个屋顶的四角与柱子的微凸处相连，它们之间留有的间隙让人觉得屋顶仿佛漂浮与墙体上空。

◆同时这几条接缝也巧妙地解决了建筑的通风和照明问题，舍去了在游泳池更衣室这种私密场所的墙体上开洞的尴尬





休息室

储藏室

卫生间

女更衣室

中庭

弱化处理更衣室入口，入口由影墙遮挡，产生迷路式效果



总入



服伺与被服伺空间

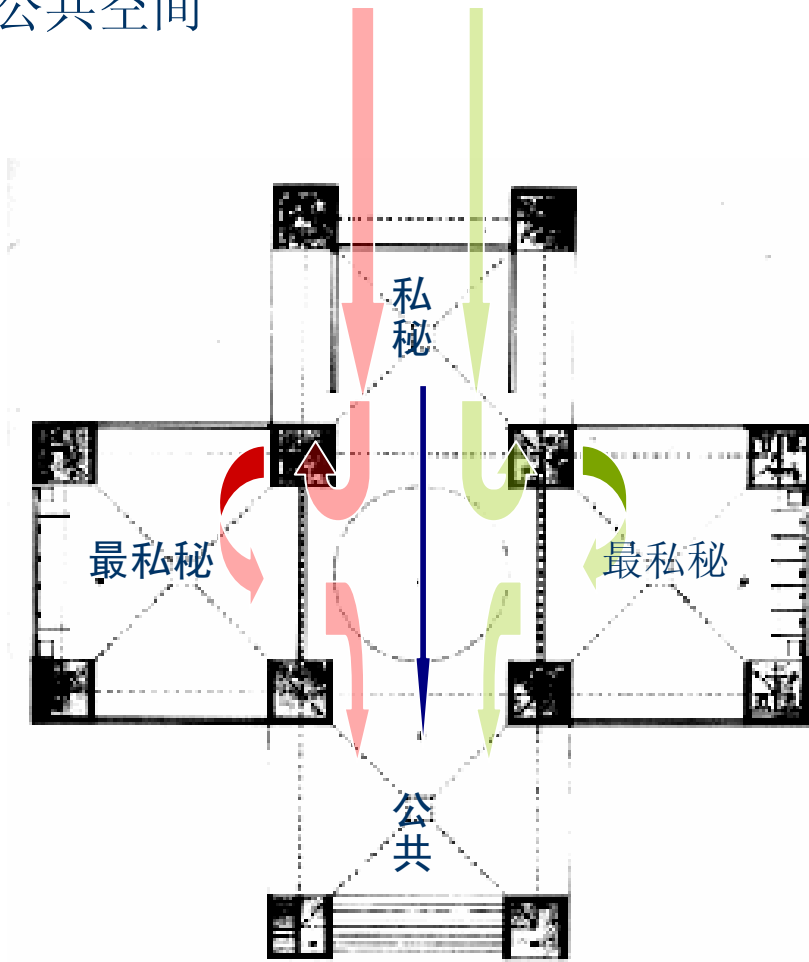
- ◆ The Trenton Bath House gave me the first opportunity to work out the separation between the serving and the served spaces. It was a very clean and simple problem. It was solved with absolute purity. Every space is accounted for; there is no redundancy.

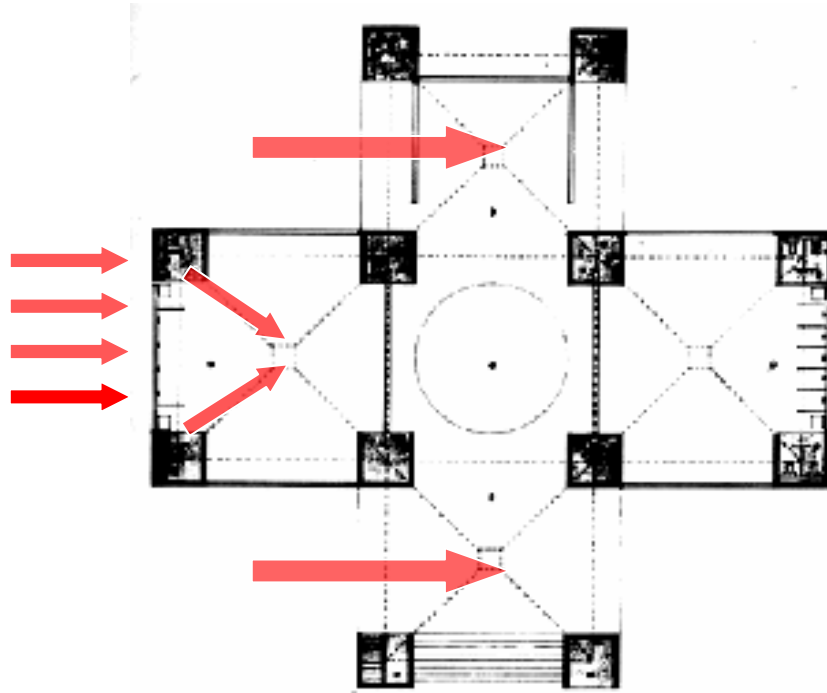
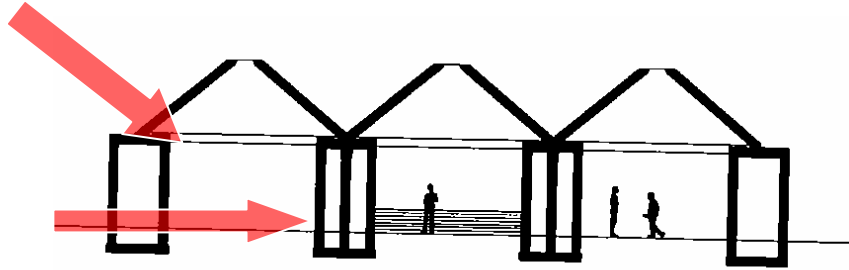
从构造上说，服伺空间的墙体承重直接支撑屋顶的重量。Louis Kahn一直在追求建筑各功能区间的完美划分。





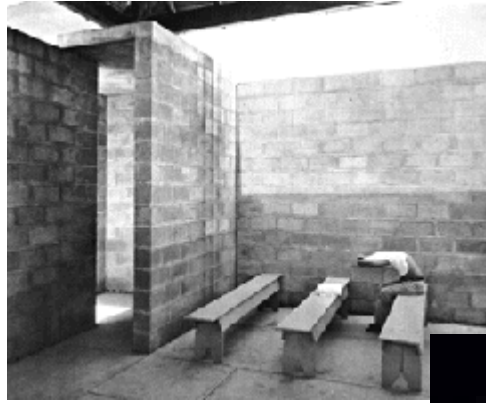
私密空间与公共空间







不同的建筑立面也产生建筑内外的光影变化

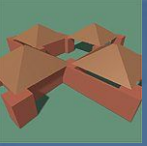




Louis Kahn的设计理念



- ◆ What was has always been.
- ◆ What is has always been.
- ◆ What will be has always been.



- ◆ Louis Kahn 60年代的设计方案几乎都有明确的**轴线构图**，有的是中轴线构图，甚至有主次轴线，有的虽然不完全遵循中轴对称法，但在其主要部位采用某种**古典的构图手法**。
- ◆ 运用“**服伺空间**”与“**被服伺**”观念，加上简单的建筑形式，采用钢筋混凝土和砖作为建筑材料，形成明确的个人建筑风格。
- ◆ 其建筑作品体量雄浑，但凭借对材料**天然质感**和**人工肌理**的表现，使建筑有一种从总体到细部统一的雄浑感。

谢谢

THANK YOU