

## DURATION

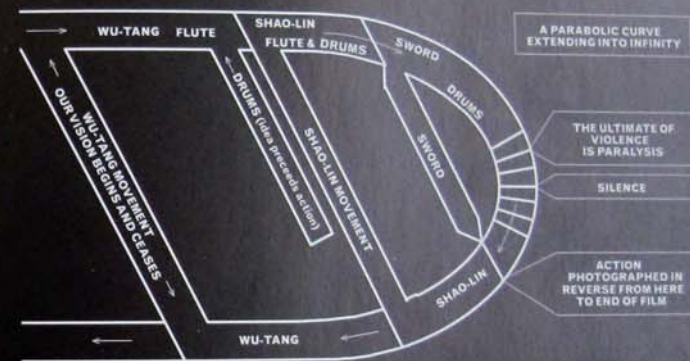
(THE NOT YET MEETS THE ALREADY GONE)

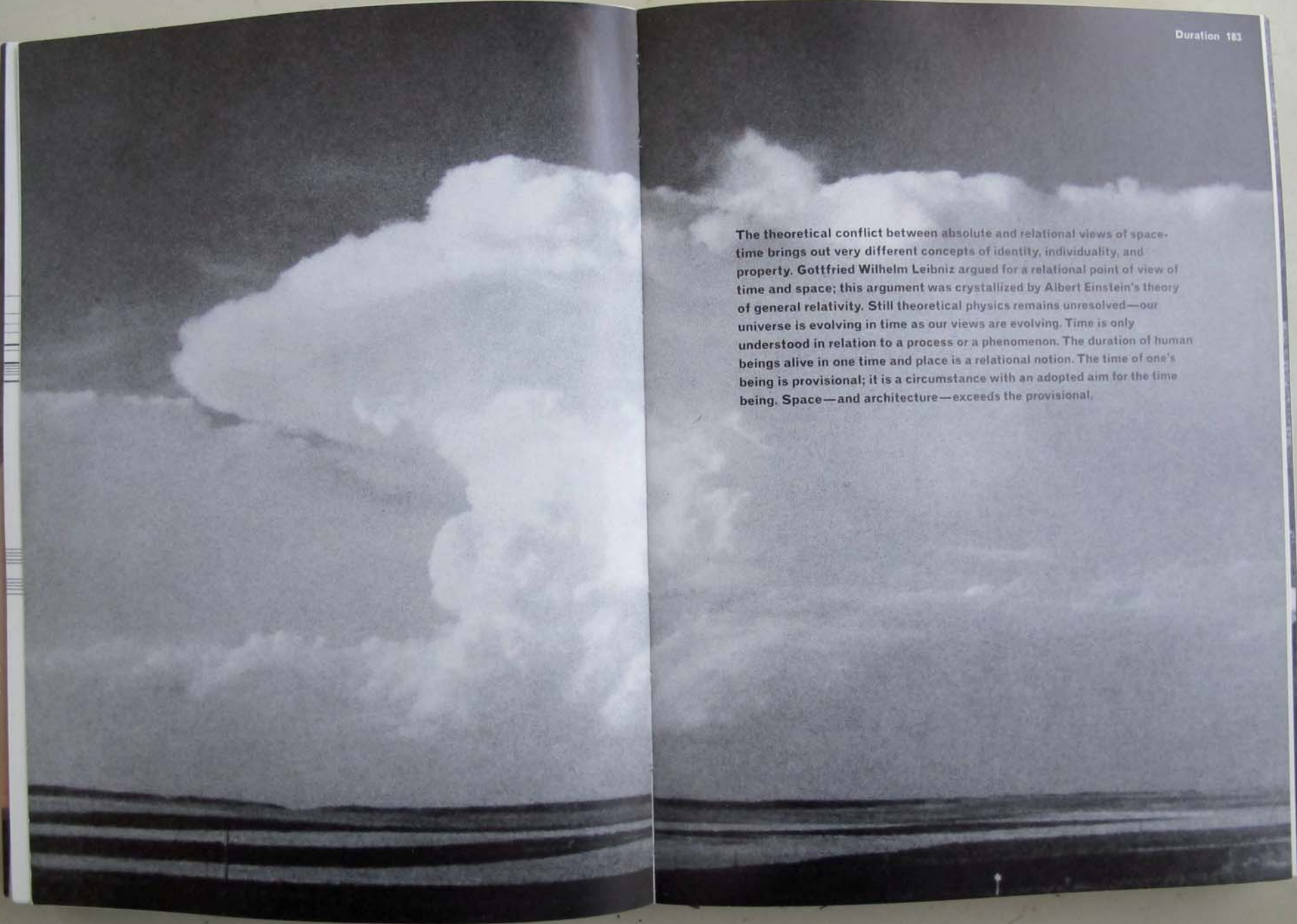
"I simply think that water is the image of time, and every New Year's Eve, in some pagan fashion, I try to find myself near water... preferably an ocean... to watch the emergence of a new helping, a new cupful of time from it."

—Joseph Brodsky, *Watermark*

Henri Bergson argued in his book *Matter and Memory* (1911) that we cannot speak of time, we can only speak of duration. Duration, a fluid, flowing time, is intertwined with an experience of being where past, present, and future merge. If one extreme of time is the experiential time of individual being, the other extreme is the abstract, anonymous, measured time of science. As we strike a balance between these dynamic extremes, we are enmeshed in changing paradigms. Bergson's critique of chronometric theories of time argued for psychological time as duration—an argument in which time equals space.

Time/action diagram for Maya Deren's 1948 film *Meditation on Violence*. Two parabolic arcs describe three types of Chinese boxing in a single continuous movement. The last portion of the film is printed in reverse motion.



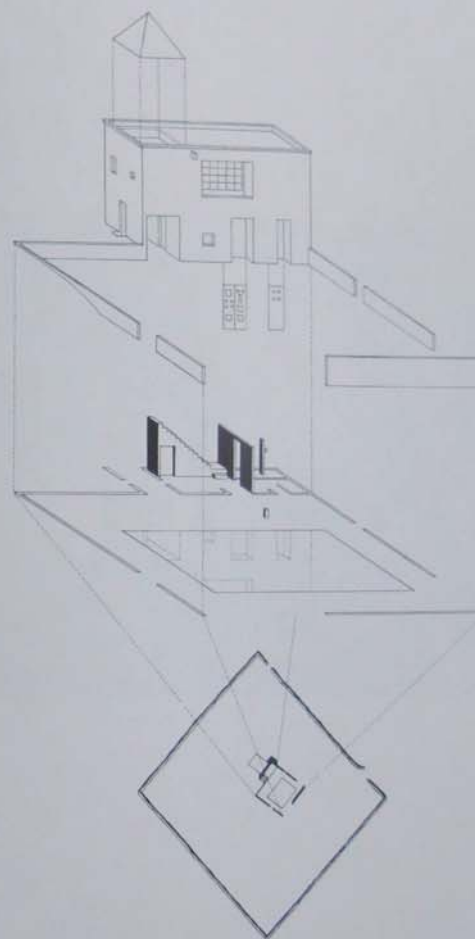


The theoretical conflict between absolute and relational views of space-time brings out very different concepts of identity, individuality, and property. Gottfried Wilhelm Leibniz argued for a relational point of view of time and space; this argument was crystallized by Albert Einstein's theory of general relativity. Still theoretical physics remains unresolved—our universe is evolving in time as our views are evolving. Time is only understood in relation to a process or a phenomenon. The duration of human beings alive in one time and place is a relational notion. The time of one's being is provisional; it is a circumstance with an adopted aim for the time being. Space—and architecture—exceeds the provisional.

Inspired by a first analysis of Bergson's *Matter and Memory*, in 1979 we designed and constructed a pool house and sculpture studio in Scarsdale, New York, based on a concept of "walls within walls." We attempted to engage time on several levels. First, the eighteenth-century stone wall of the site's perimeter became a point of departure in the cyclical and mythical time of the site. Second, the time of the day and the seasons were engaged in the angles of sunlight captured in the tiny project. Two large apertures in the longitudinal facades measured daily and monthly sun angle change, and two round windows punctured a corner to align with the summer solstice.

The construction of the pool house/sculpture garden presented us with an inspiring series of changing spatial perspectives upon approaching and circling the "walls within walls." Space was perceived by the body moving through time. This experiment was, for us, our first, crude space-time manifold.

"Walls within walls" concept diagram, 1979







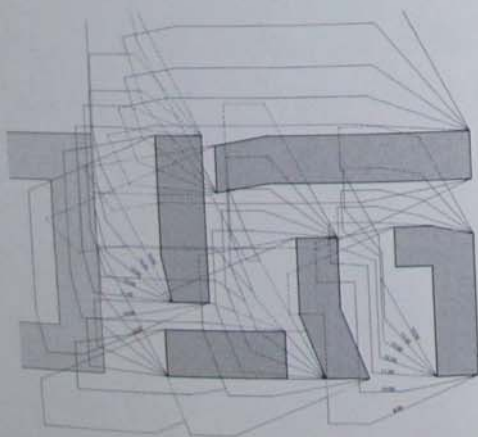
Walls within walls, Pool House and Sculpture Studio, Scarsdale, New York, 1979

Time—as experienced duration—is relative to an individual and to a space. Constantin Brancusi imagined and fabricated his own time capsule. His studio was an unchanging Carpatian village in the middle of Paris with the *Endless Column* as its timepiece. Here, the finite time of place and culture was counterposed to infinity.

During our extensive work in Japan, with over sixty trips between 1989 and 1999, I became aware of another understanding of time. The concept of the fusion of space and time in “MA” are ancient and yet astonishing. Studying this concept opened my eyes to strange parallels in ancient Eastern and modern Western thinking. The Western argument that time persists merely as a consequence of the events taking place in it (time is nothing) is similar to the fourteenth-century monk Dogen’s concept of “uji” or “being time.” For the Buddhist, time is a continuous flux, a fluidity that makes every manifest form perishable and ontologically unreal. Existence and nonexistence are not different aspects of a thing—they are the thing.

Below: Diagram of sun angles, Maku-hari Housing, Chiba, Japan, 1996. Each apartment must have four hours of sunlight every day.

Right: Constantin Brancusi’s time capsule



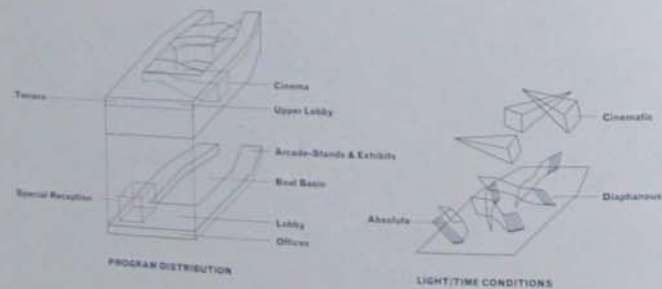
Time in its various abstractions links architecture and cinema. Our design for the Palazzo Del Cinema competition for Venice (1990) involves three interpretations of time and light in space:

1. Collapsed and extended time within cinema is expressed in the warp and extended weave of the building. It is analogous to cinema's ability to compress time (twenty years into one minute) or extend it (four seconds into twenty minutes).
2. Diaphanous time is reflected in sunlight dropping through fissure space between the cinemas into the lagoon basin below. Ripples of water and reflected sunlight animate the grand public grotto.
3. Absolute time is measured in a projected beam of sunlight that moves across the "cubic pantheon" in the lobby.

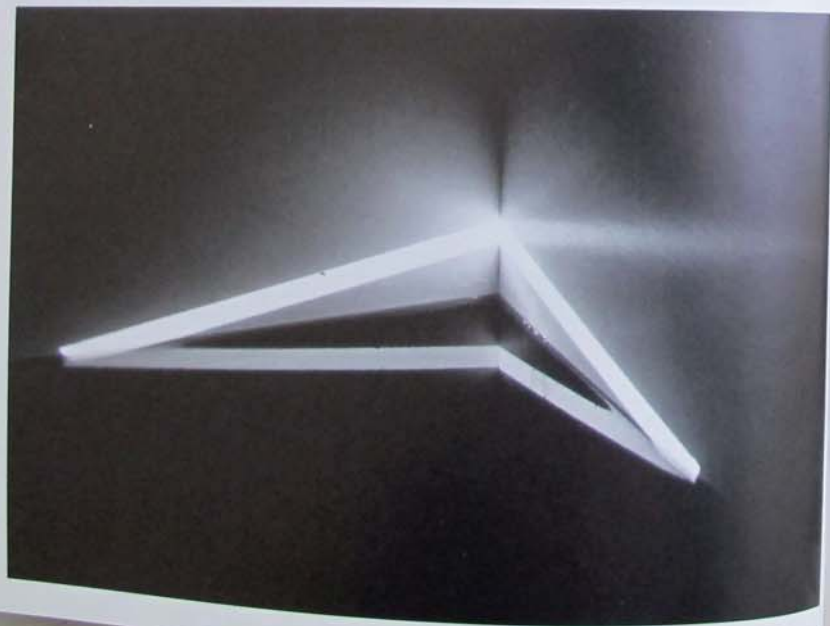
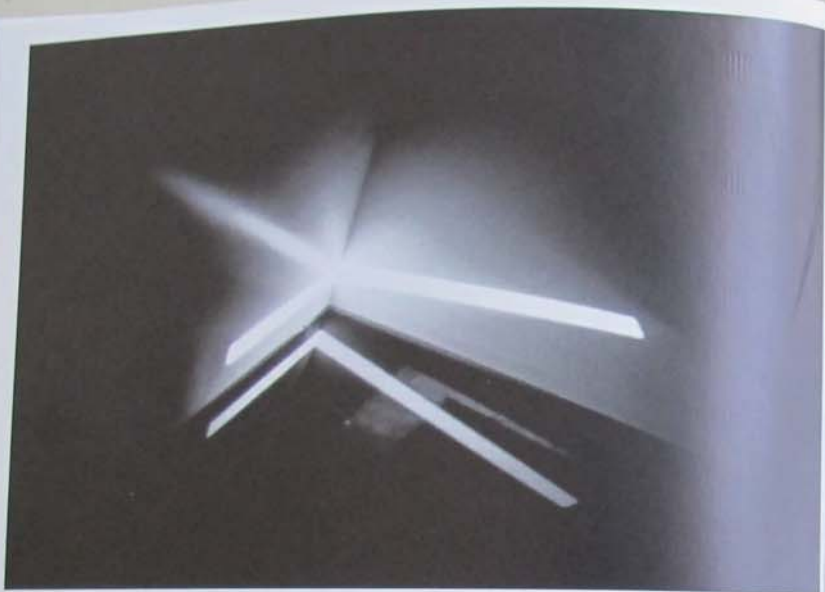
A vessel for filmic time and filmic space, the building is bottle-shaped, with its mouth open to the lagoon towards Venice. The cinemas interlock within this frame, creating dynamic crevices and fissures that allow sunlight to reach the water below. In section, the cinemas turn slightly, like interlocking hands, changing their interior and exterior aspects of space.

Below: Concept diagram, Palazzo del Cinema, Venice, Italy, 1990

Right: Plan view of model



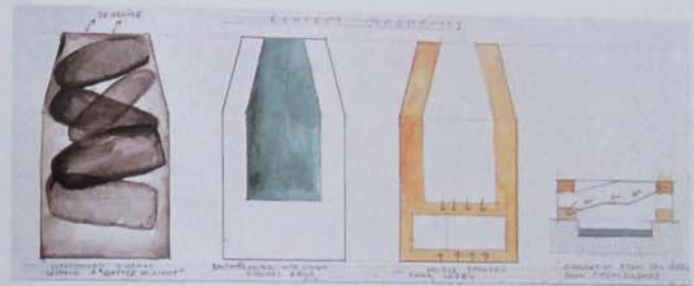




"Cubic pantheon," a space measuring seasons and hours



Figure space reflection on underside of suspended cinemas

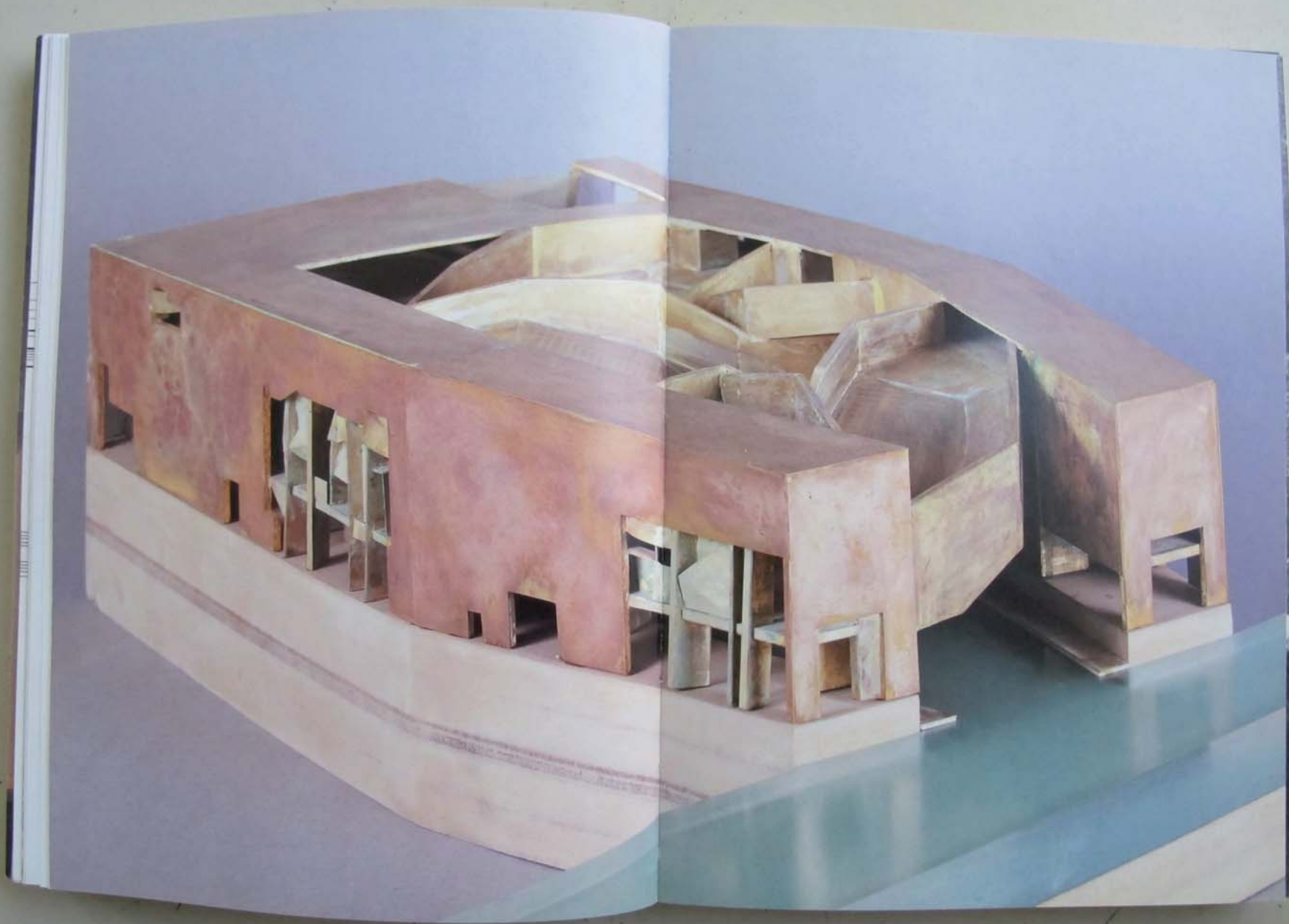


Concept studies





Entrance from the lagoon





Study of filmic space provides a dynamic tool for the conception of architecture. In the beginning of Michelangelo Antonioni's *La Notte* for example, the camera pans down the surface of the Perelli Building in Milan, making a vertical parallax in urban space. Filmic space is often created in linking a series of interiors in sequence without an overall objectified exterior. Likewise an architecture can be created from the inside out.

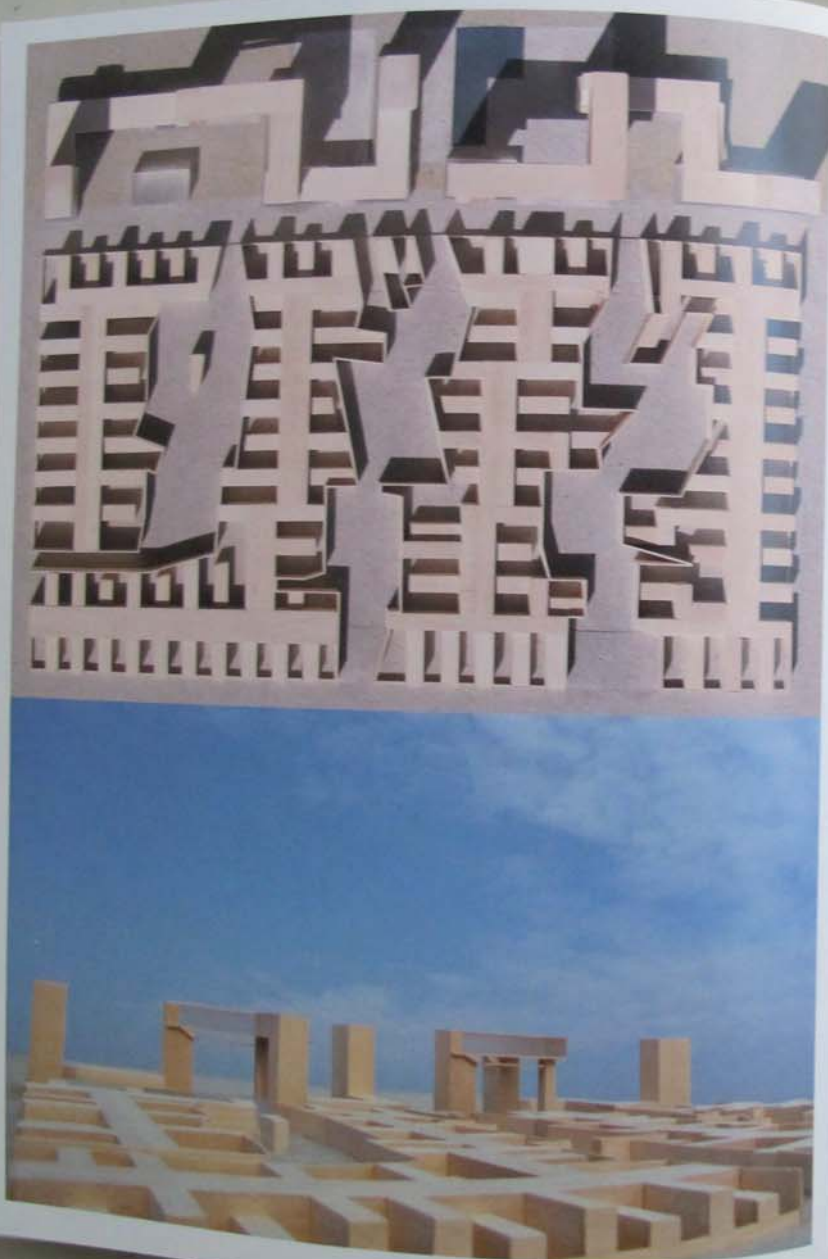
Today, discussions of altering time's paradigms continue. Simultaneity and a new multiplicity of times are brought on by digital communication. Only with time's distance can a clear picture of these transformations emerge. In the end, all comparisons of time remain pertinent in a macrocosm in which space and time are only relations between our lived bodies and things that happen. Their experiential measure is duration.

below: Calendar of Epochs from ancient Mexico

Opposite: 256K dram microchip enlarged 4250x







For Guadalajara, Mexico, as part of the initial phase of the new Cultural Center project, we designed a sector of 200 housing units and 150 hotel rooms divided into an Aerial (upper) Range and a Terrene (lower) Range. The interlocking sections offer each apartment and hotel room north and south views. The Aerial Range hovers twenty meters above the ground of a former cornfield. It is extroverted toward distant views, while the Terrene Range is introspective, focusing toward garden courts. The ranges contain a hybrid of hotel and housing with garden hotel rooms along the north of the Terrene Range and permanent apartments in the Aerial Range. Silent Interval Plazas are cut through the mat of the Terrene Range using the geometry of the shadows from the Aerial Range.

Two spatial horizons suggest two time horizons. The ancient Mexican calendar has eighteen months of twenty days each. There are eighteen arms in the Aerial Range. The five "interval spaces" carved from the Terrene Range correspond to the ancient Mexican epochs. Each of these spaces provides the entrance for twenty houses.

Due to the "glyphic section" the sun's shadows mark present and future via a numeric connection to ancient time. Architecture aspires to the infinite and yet a project can become "pure dissipation." Without respect to before or after, beginning or end, cause or effect, the not yet meets the already gone.

Left above: Guadalajara Housing & Hotel, Guadalajara, Mexico, 1998. Hanging walkways give access to upper stratum.

Left below: Upper stratum slides public spaces into lower stratum

Below: Glyphic diagram: shadows cut public squares in housing mat

