



The Stretto House

Steven Holl Architects
Dallas, TX, USA (1989-1991)



The Philips Pavilion

Le Corbusier; Iannis Xenakis; Edgard Varèse
Brussels, Belgium (1958)

Music and Architecture | Structuring Time - Structuring Space

The Stretto House and The Philips Pavilion

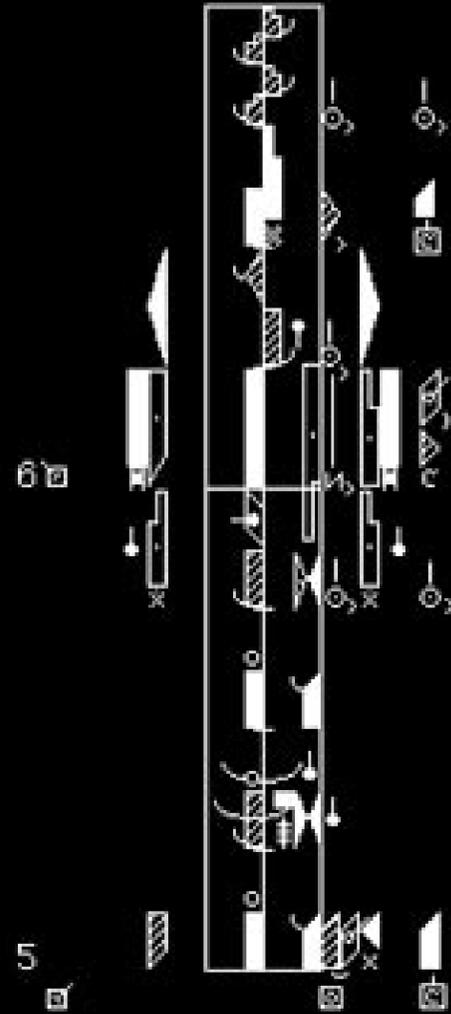
Material x Sound

Time

=

Material x Light

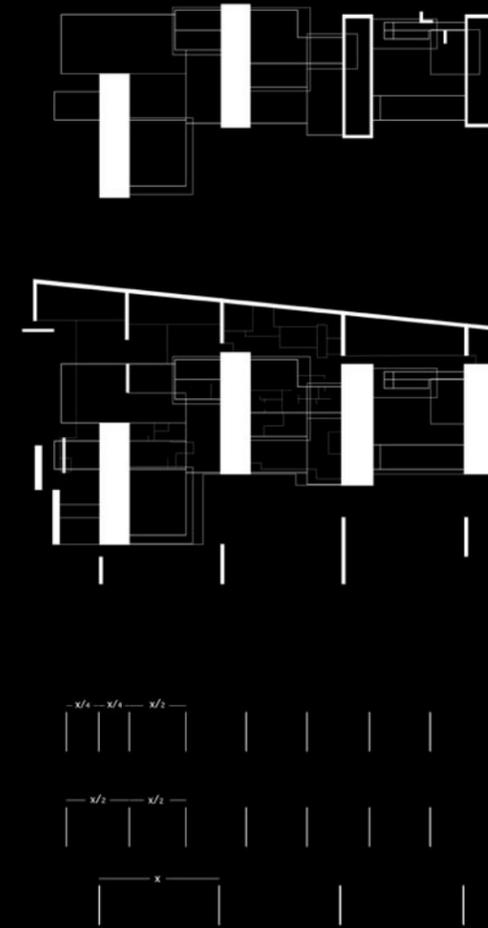
Space



Rudolf Laban - Laban Movement Analysis (LMA)



John Cage - *Fontana Mix*, *Chance Procedures*



Steven Holl - Stretto House

Notation

1. a system of graphic symbols for a specialized use, other than ordinary writing.
2. the process or method of noting or setting down by means of a special system of signs or symbols.
3. the act of noting, marking, or setting down in writing.

Béla Bartók

Music for Strings, Percussion, and Celesta

(Sketching Music Exercise)

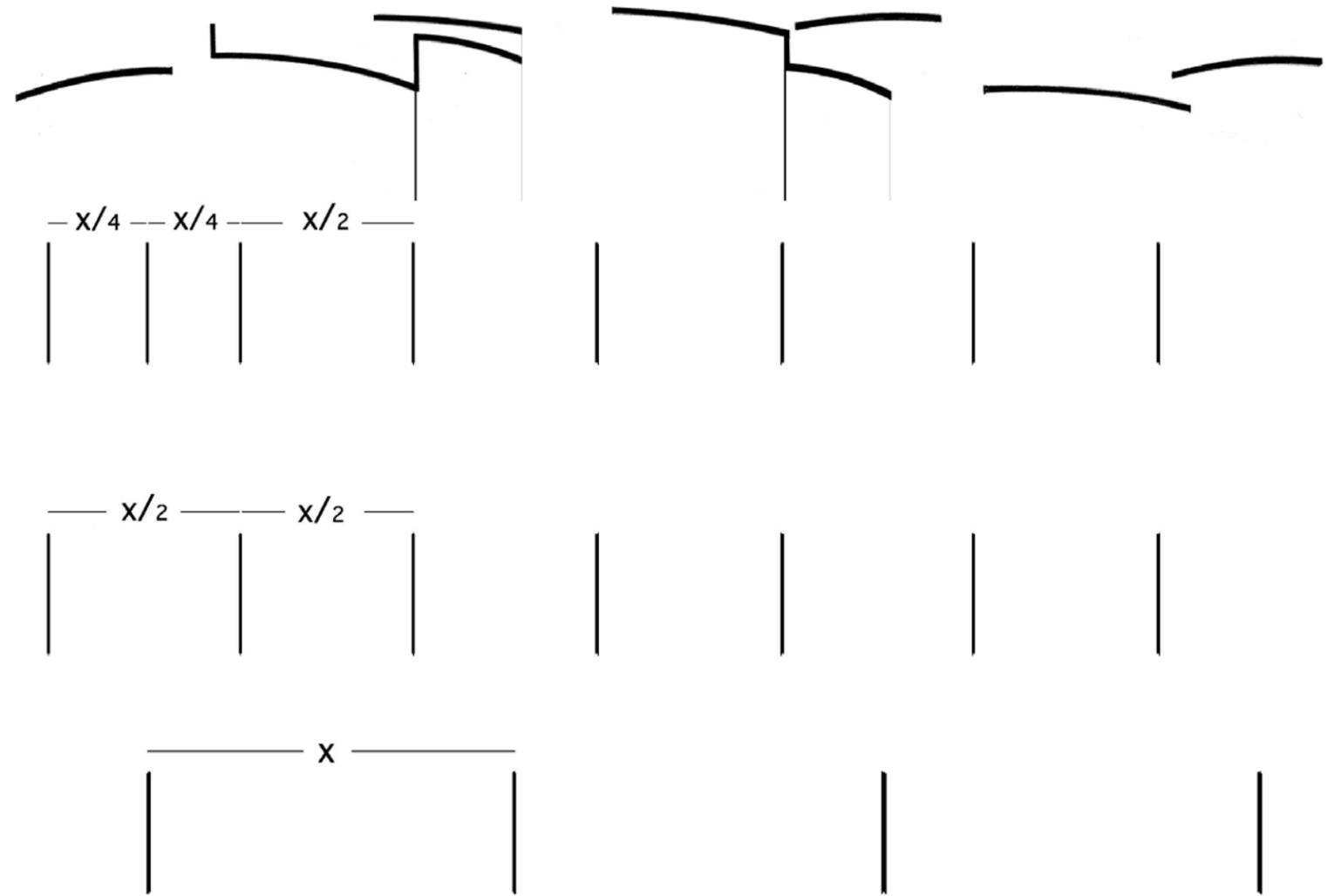


Stretto House

Steven Holl Architects, 1989-1991
Local Architect - Max Levy
Dallas, TX

In the initial sketches, we looked at the Texas vernacular materials of concrete and metal roofs. The need for shade from the hot Texas sun provoked explorations of shadow and overlap in the sketches. After discussions with one of my former students, John Szto, a pianist from the Julliard music school, I decided to explore the musical concept of the stretto, which is analogous to the sites overlapping ponds. In a fugue stretto, the imitation of the subject in close succession is answered before it is completed. This dovetailing musical concept could, I imagined, be an idea for a fluid connection of architectural spaces.

- Steven Holl



Stretto House

Diagram showing proportions / spatial rhythm and overlapping roofscape
 Steven Holl Architects, 1989-1991

Sited adjacent to three ponds with existing dams, the house projects the character of the site through a series of concrete “spatial dams” with metal framed “aqueous space” flowing through them. Pouring over the dams, like the overlapping stretto in music, water reflects the landscape outside and the spaces overlapping inside. Bartok’s Music for Strings, Percussion and Celeste has a materiality in instrumentation which the architecture approaches in light and space. Formed in four sections, the building consists of two modes: heavy orthogonal masonry and light, curvilinear metal. The main house is aqueous space: floor planes pull one space to the next, roof planes pull space over walls and an arched wall pulls light from a skylight. Materials continue the concept in poured concrete, cast glass in fluid shapes, slumped glass and liquid terrazzo.

- Steven Holl

Aqueous Space

Curvilinear Roofs

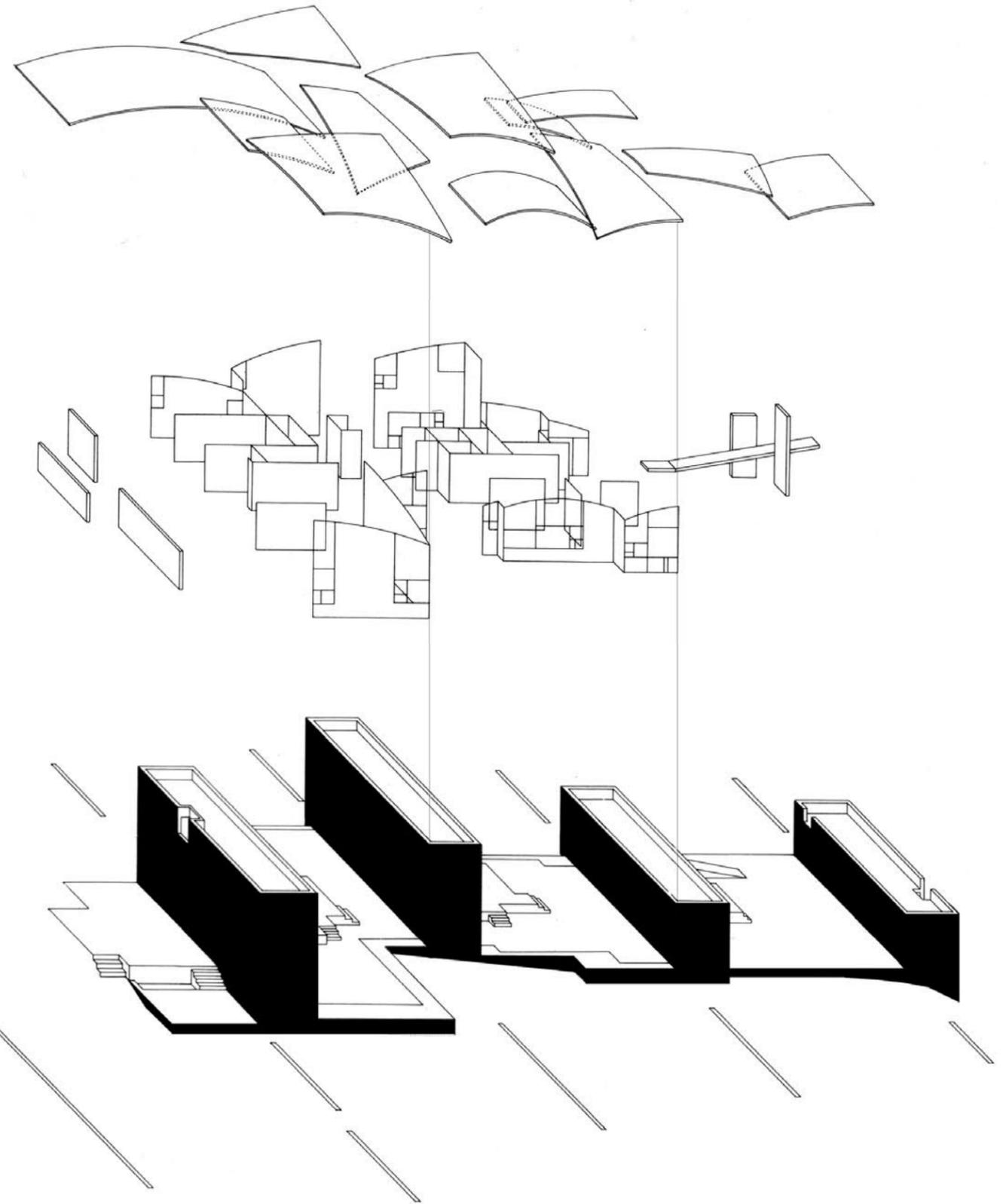
Light

Metal and Glass Structure
(proportions of Golden Section)

Spatial Dams

Heavy

Concrete Masonry



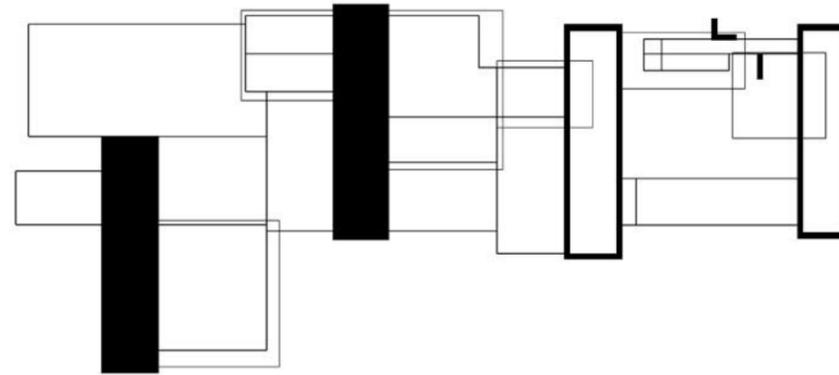


Site Diagram

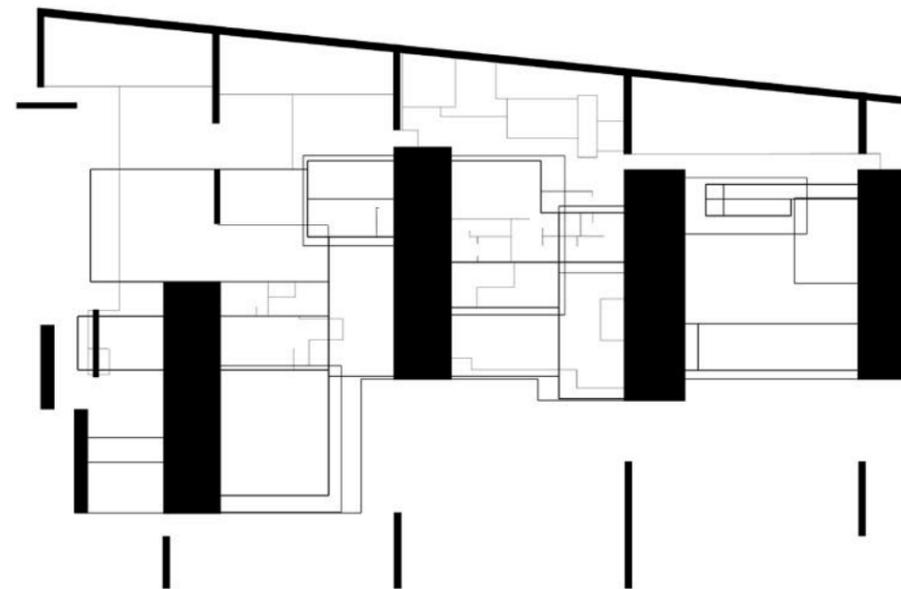
Showing Spatial Relationship of House to Existing Site Conditions

Steven Holl Architects, 1989-1991

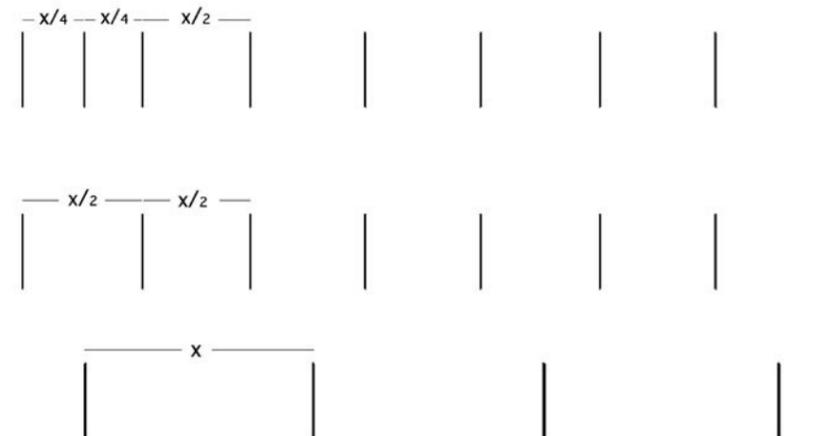
Upper Plan Diagram



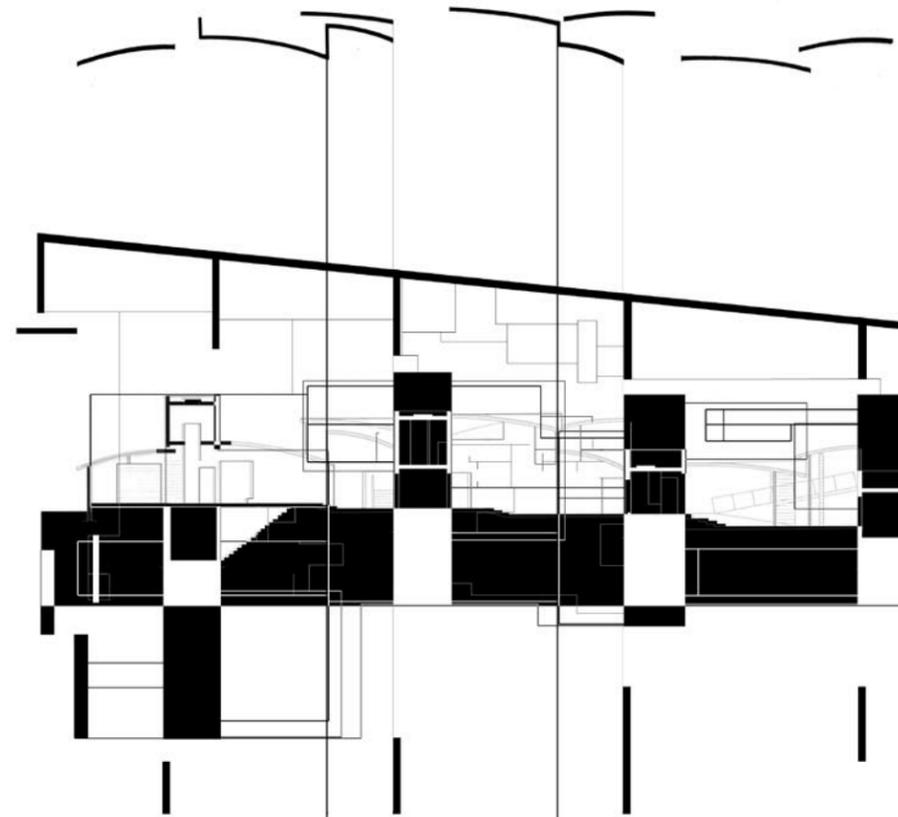
Ground Plan Diagram



Spatial Proportions



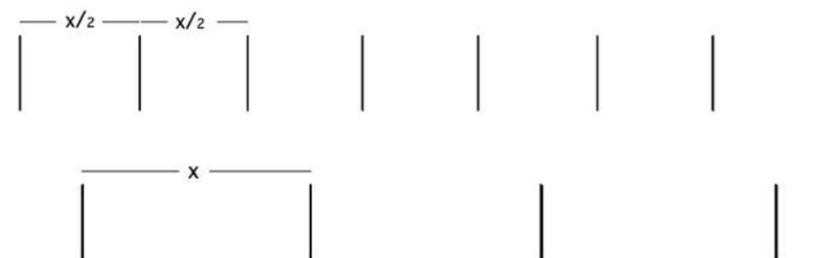
Curvilinear Roofs

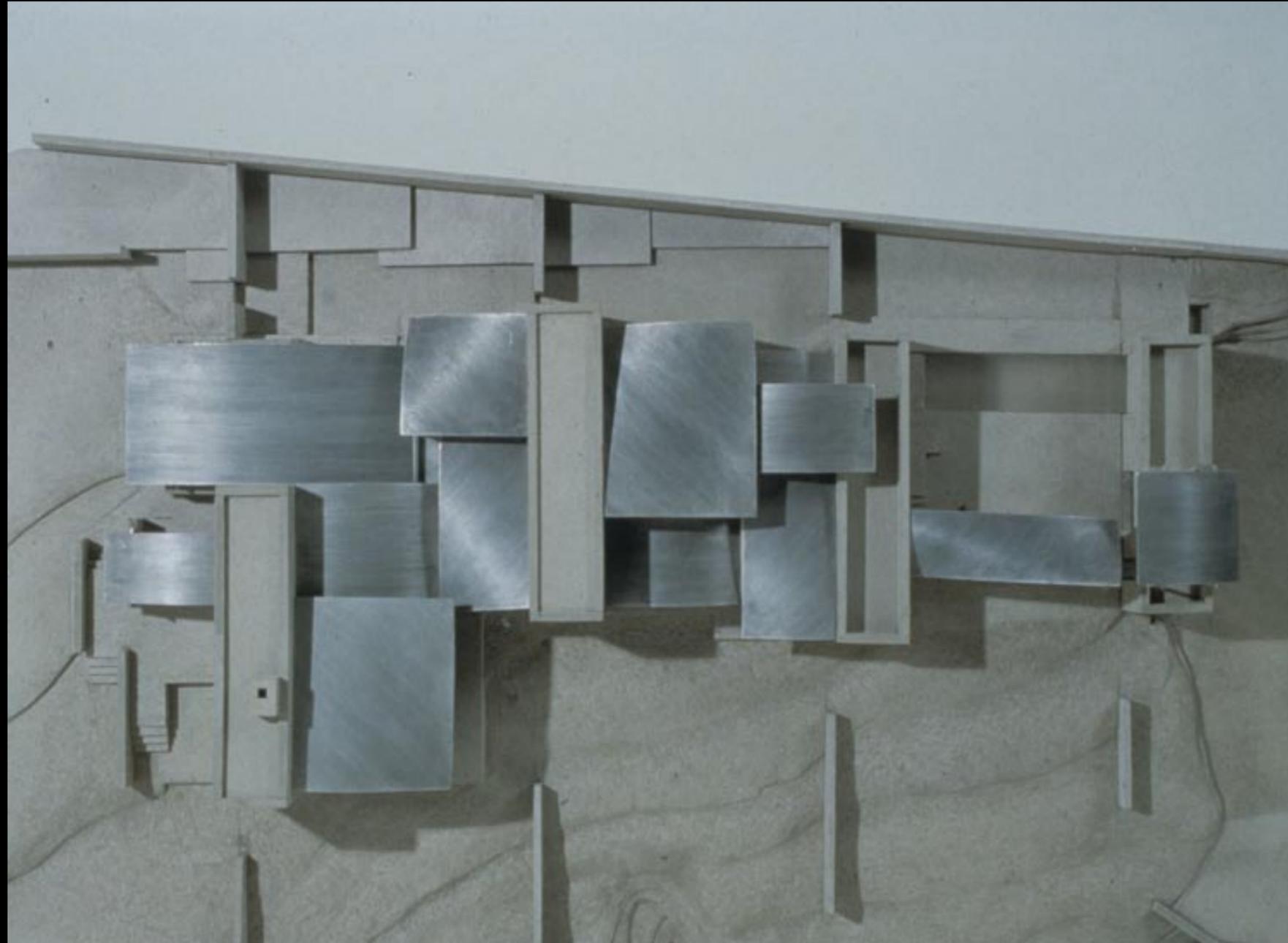


Plan / Section



Spatial Proportions





Stretto House - Site Model

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Interior View

Steven Holl Architects



Stretto House - Interior View

Steven Holl Architects



Stretto House - Exterior View

Steven Holl Architects



Stretto House - Interior View

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Stretto House - Interior View

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Stretto House - Interior View

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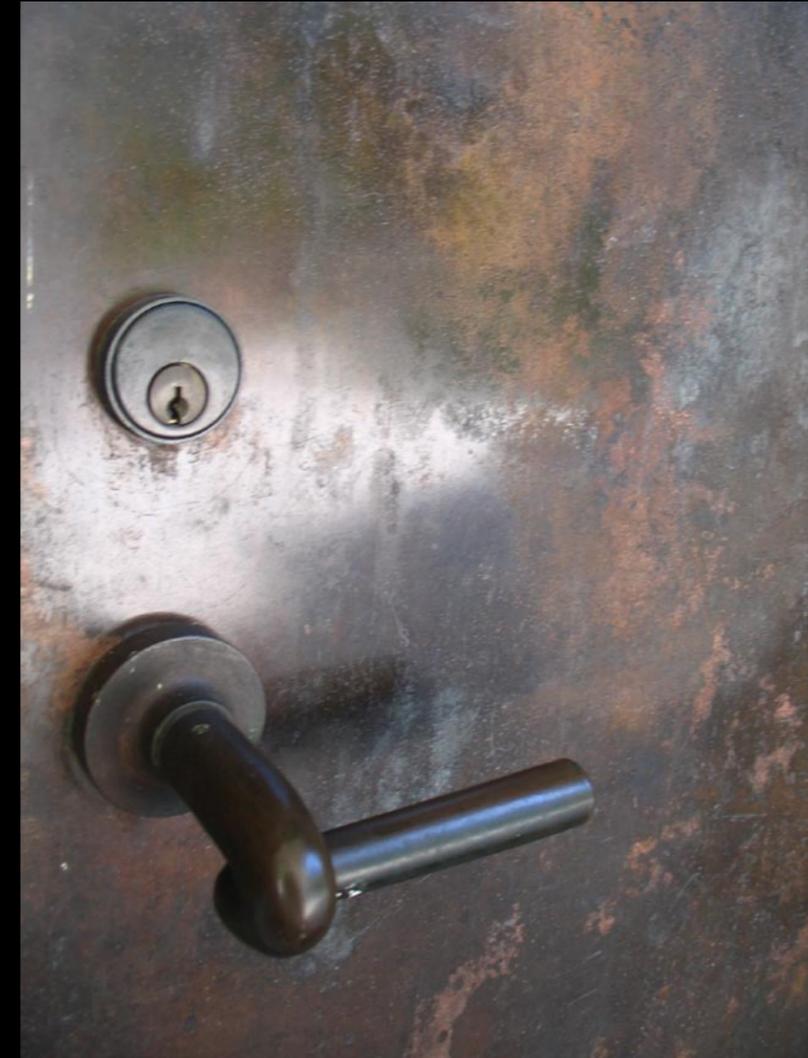
Stretto House - Interior View

Steven Holl Architects



Stretto House - Entrance

Steven Holl Architects



Stretto House - Door Handle Detail

Steven Holl Architects



The Philips Pavilion

Symbiosis between architecture, music and visual art

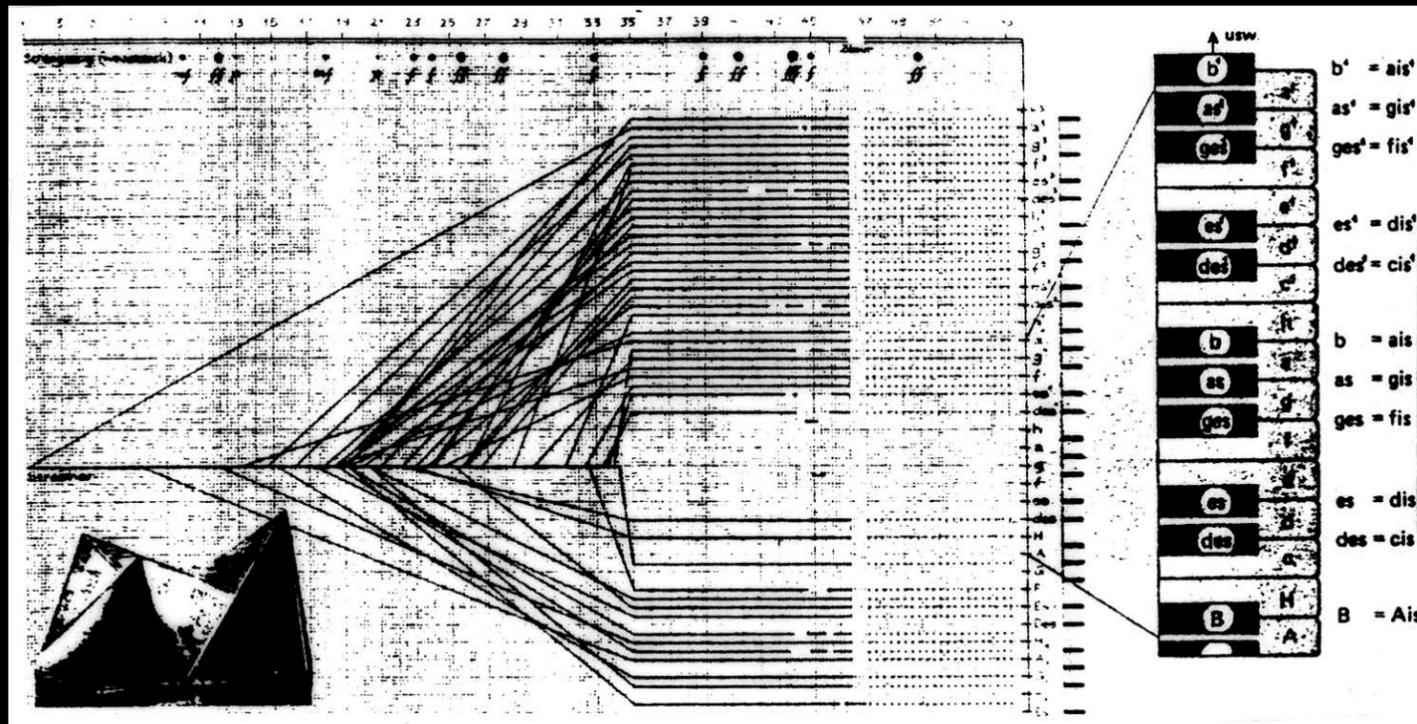
Le Corbusier; Iannis Xenakis; Edgard Varèse
Brussels, Belgium (1958)

Iannis Xenakis

Metastasis (glissandi)

1953-54

(Sketching Music Exercise)



Metastaseis: Graph of opening glissandi, with reference to Philips Pavilion (taken from Philips Technical Review).

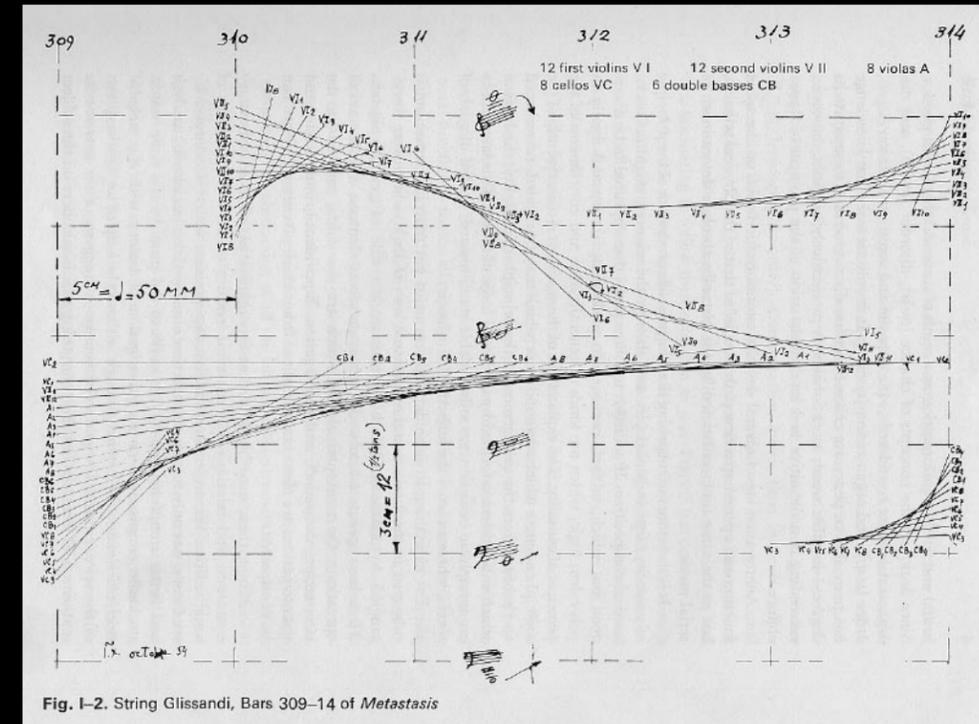
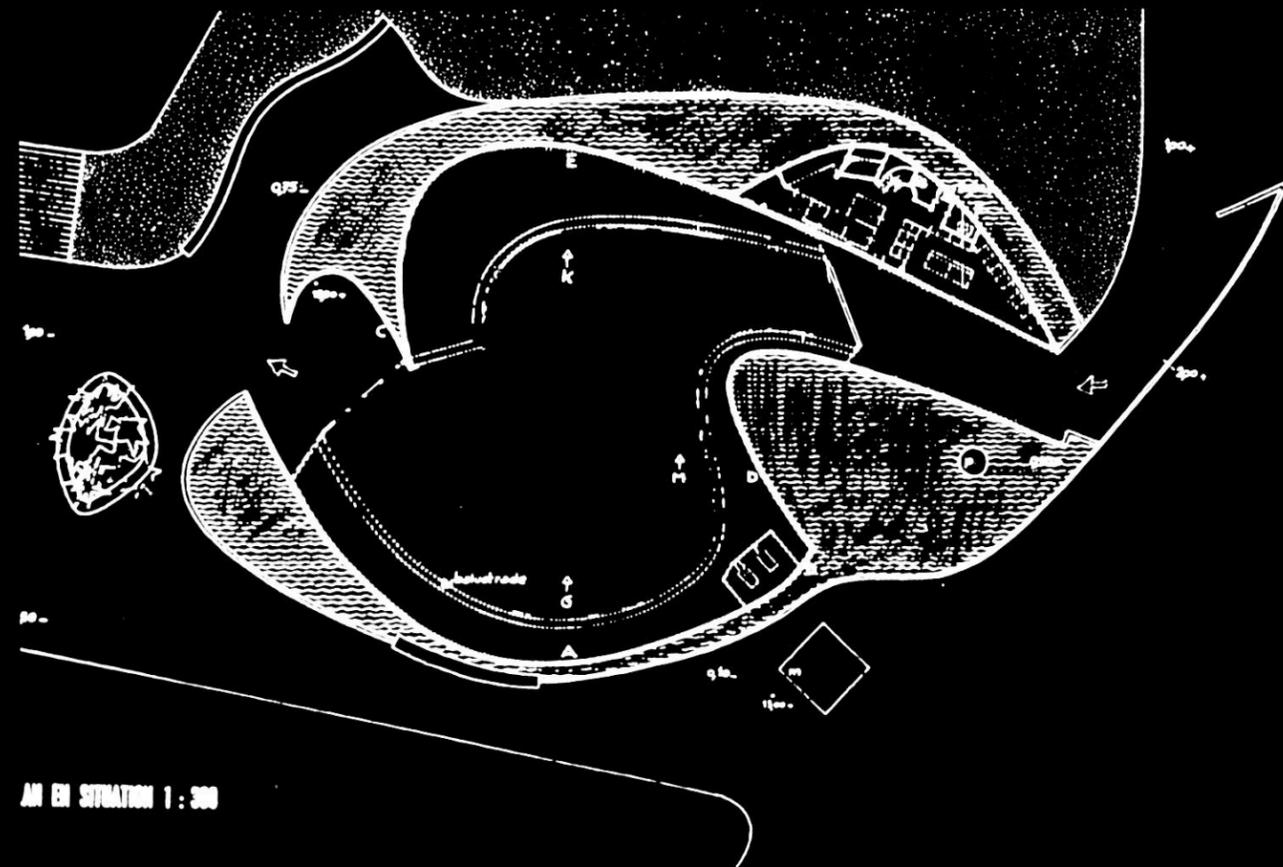


Fig. 1-2. String Glissandi, Bars 309-14 of Metastasis

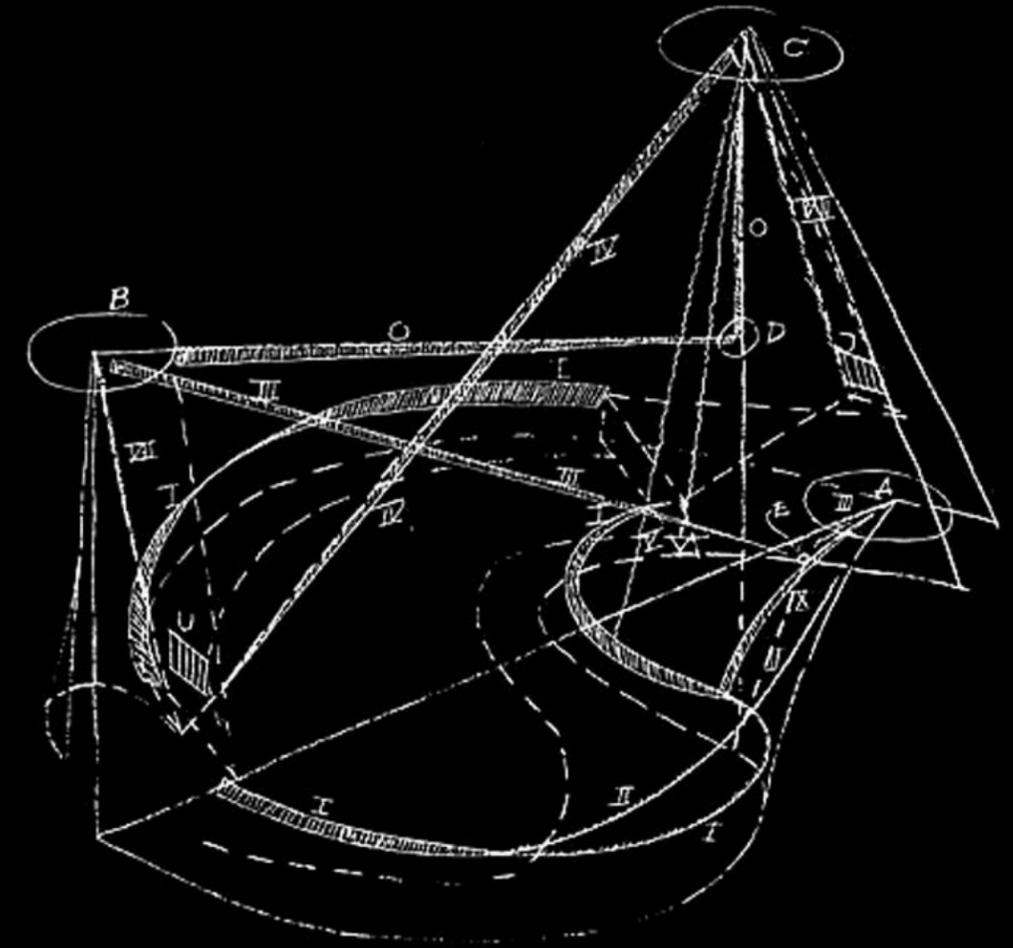
Glissando

a rapid series of ascending or descending notes on the musical scale



5-15
Diagram of the "Sound Routes." Iannis Xenakis.
[Philips Technical Review]

- Route I horizontal
- II I → A
- III B → E → A
- IV U → C
- V B → D → C
- VI along the warped surface
- VII B → U
- VIII C → J
- IX A ↓

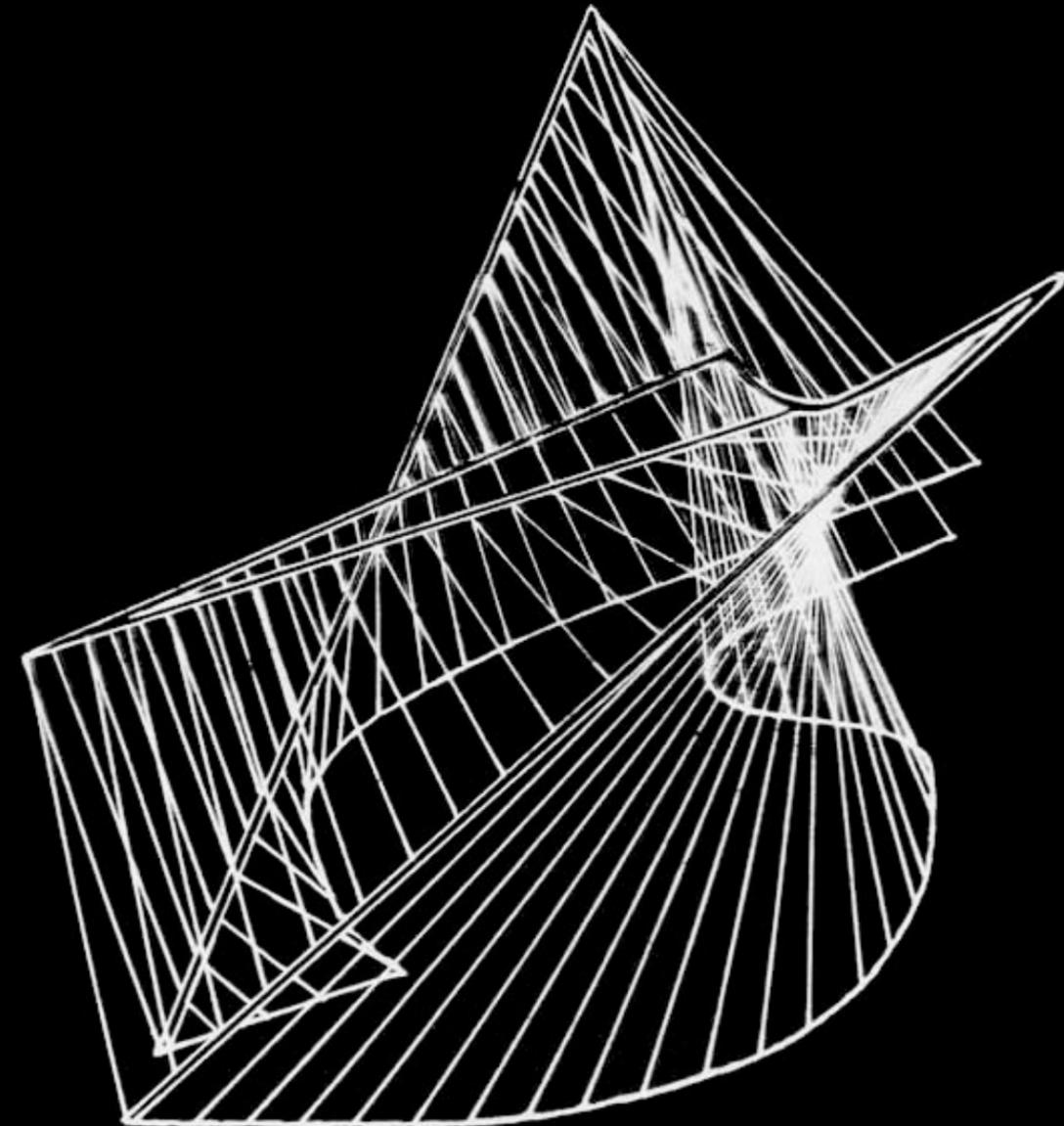
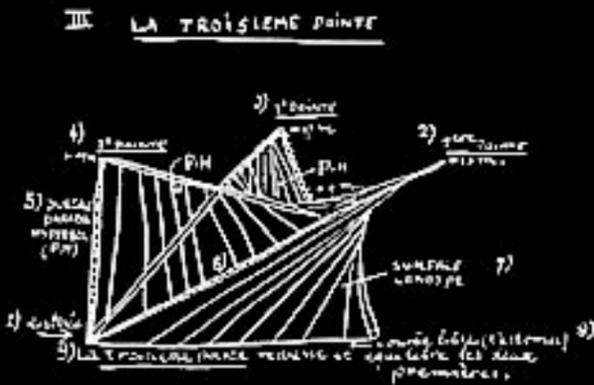
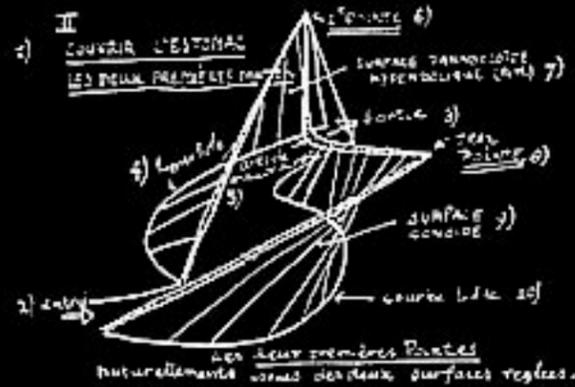
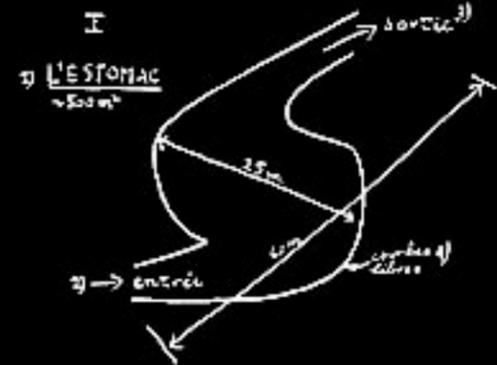


Philips Pavilion - Diagram of the 'Sound Routes' by Xenakis

Le Corbusier, Xenakis, Varese

Philips Pavilion - Le Corbusier's initial spatial concept sketch analogous to a biological organ. People would enter, see, hear, digest, and move out. The architecture was to facilitate this movement and provide the environment for the acoustic and visual events to occur.

Le Corbusier, Xenakis, Varese

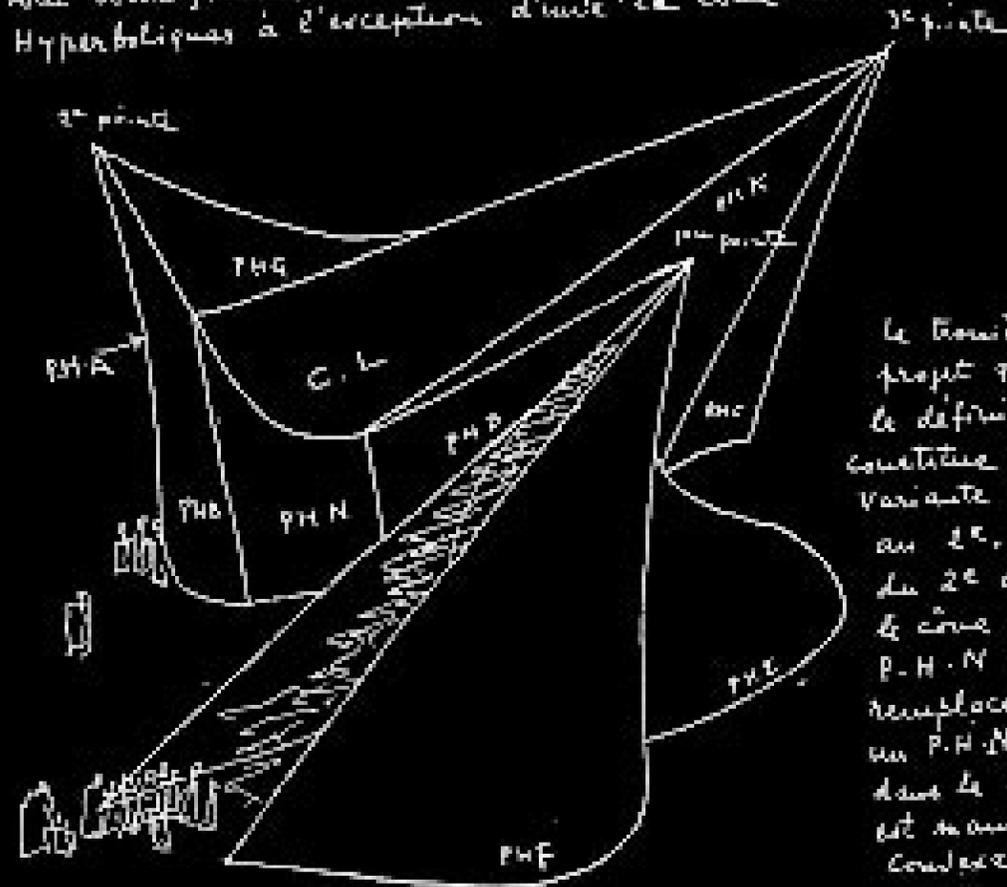


Philips Pavilion - Structural diagrams showing ruled surfaces (hyperbolic paraboloid)

Le Corbusier, Xenakis, Varese

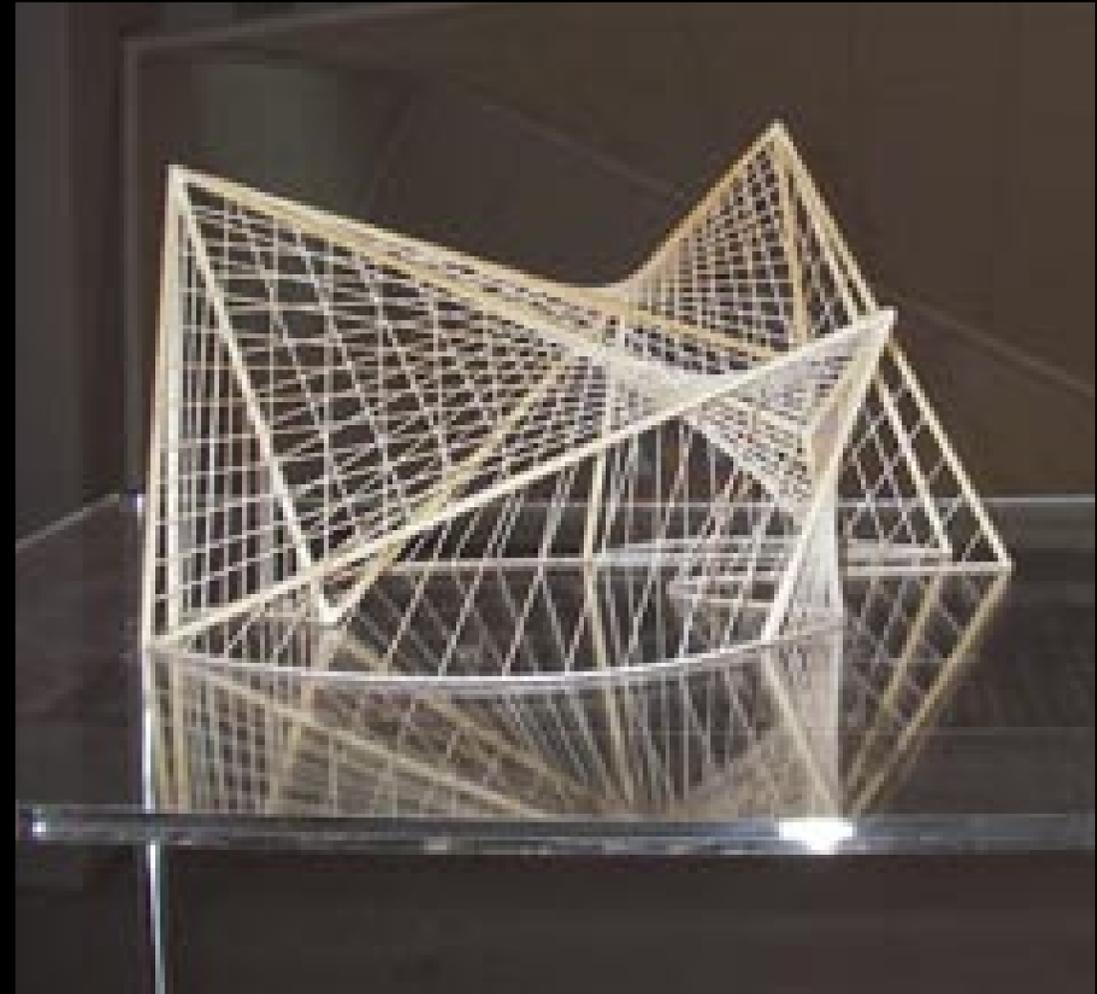
2^e PROJET

Toutes les surfaces du 1^{er} projet
sont transformées en Paraboloides -
Hyperboliques à l'exception d'une: le cône L.



Le troisième
projet qui est
le définitif est
constitué par une
variante par rapport
au 2^e. Il diffère
du 2^e que dans
le cône L et le
P.H.M qui sont
remplacés par
un P.H.N et
dans le P.H.C qui
est maintenant
cylindrique.

014031

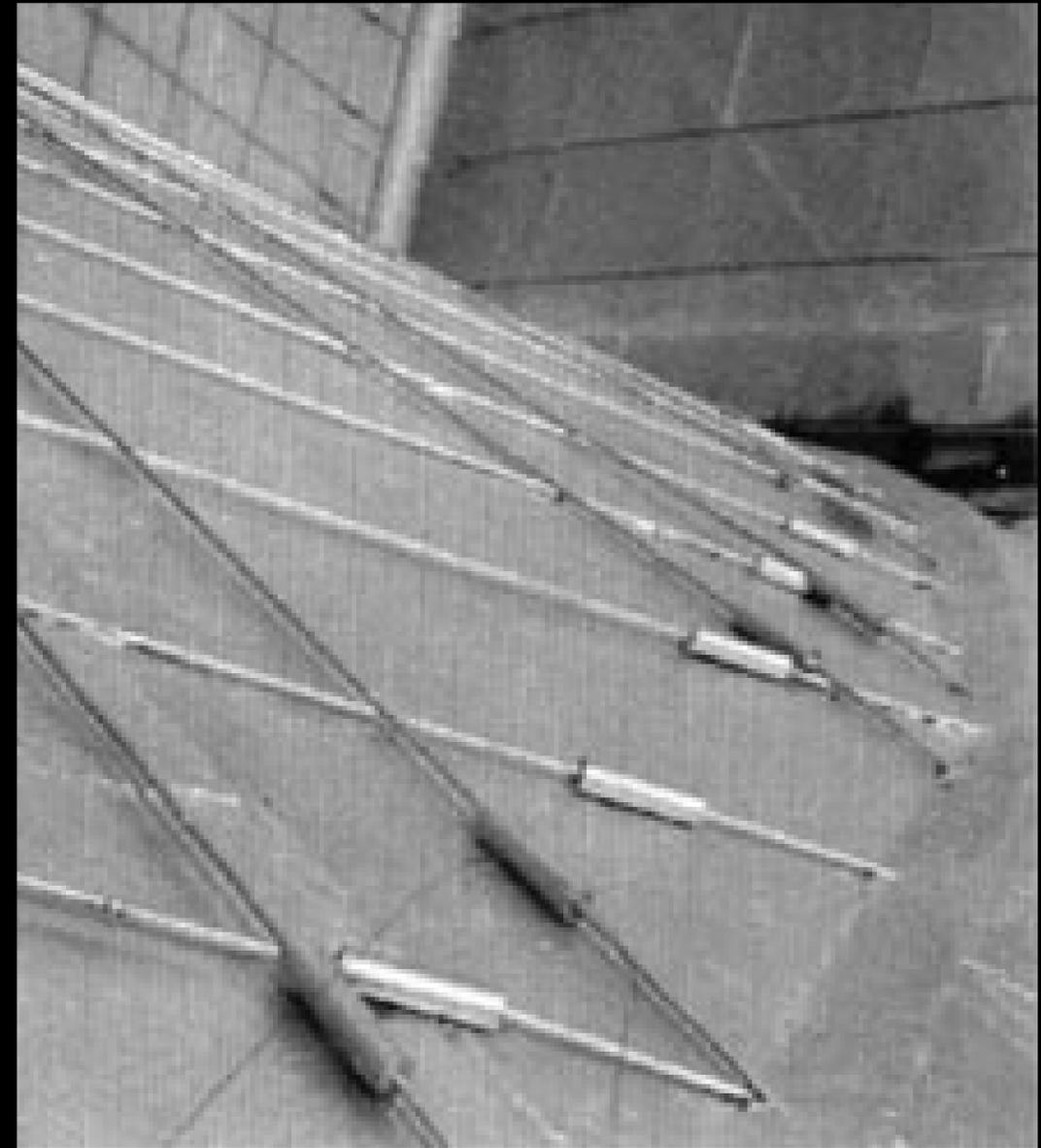


Philips Pavilion - Sketch of overall building geometry and entry
Le Corbusier, Xenakis, Varese

Philips Pavilion - Sketch model of ruled surface geometries
Le Corbusier, Xenakis, Varese



Philips Pavilion - Construction Process
Le Corbusier, Xenakis, Varese



Philips Pavilion - Double network of cables supporting shell
Le Corbusier, Xenakis, Varese



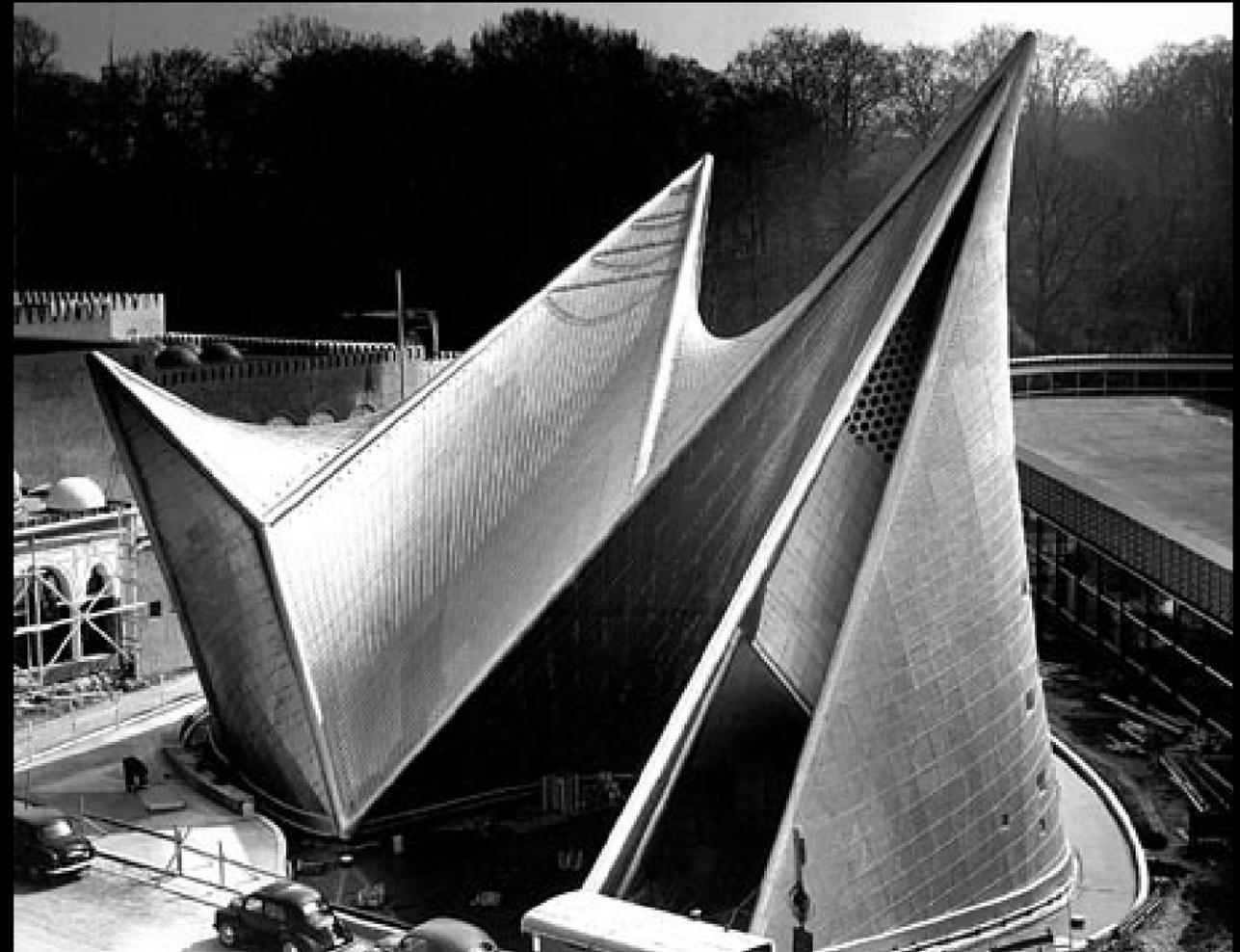
Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



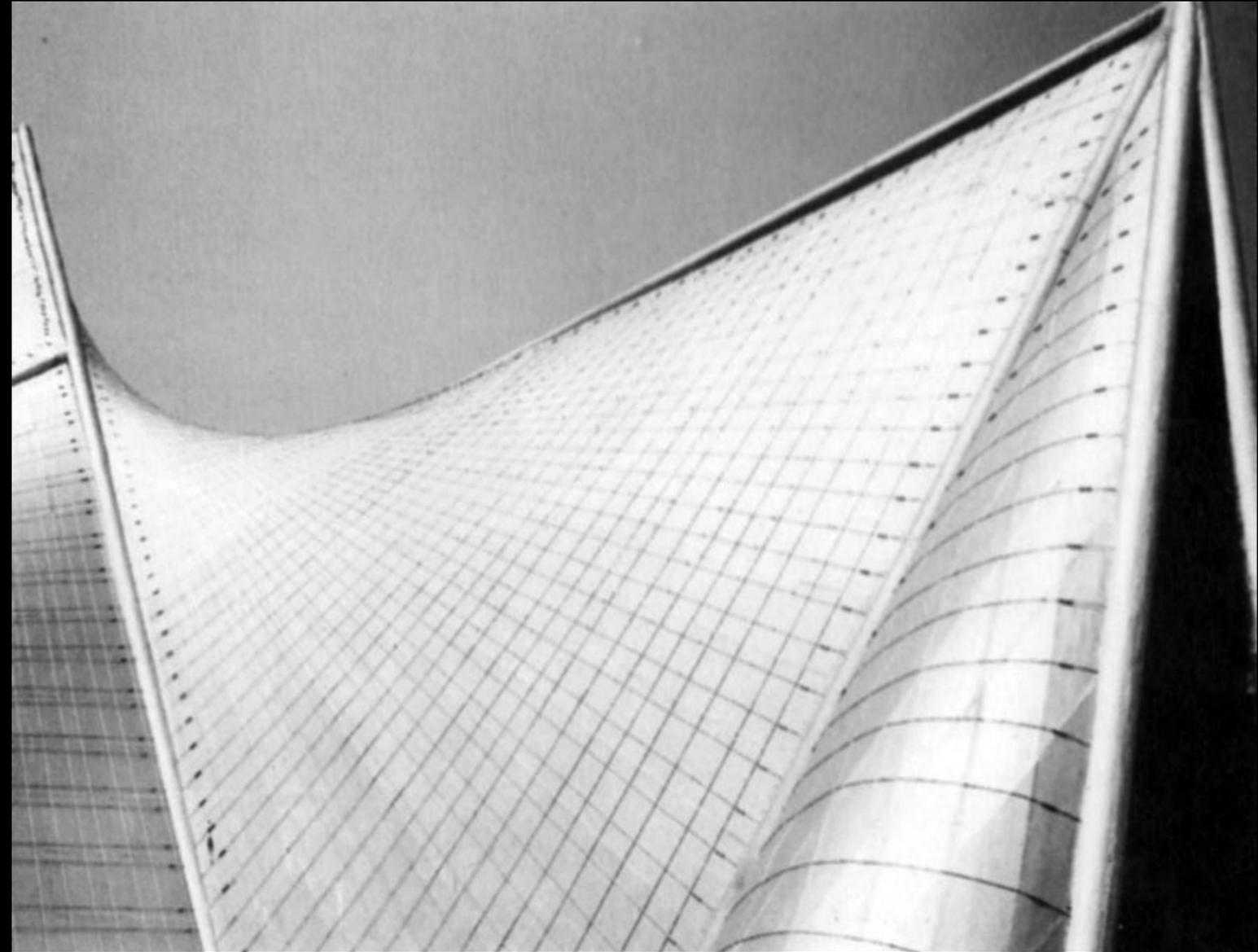
Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



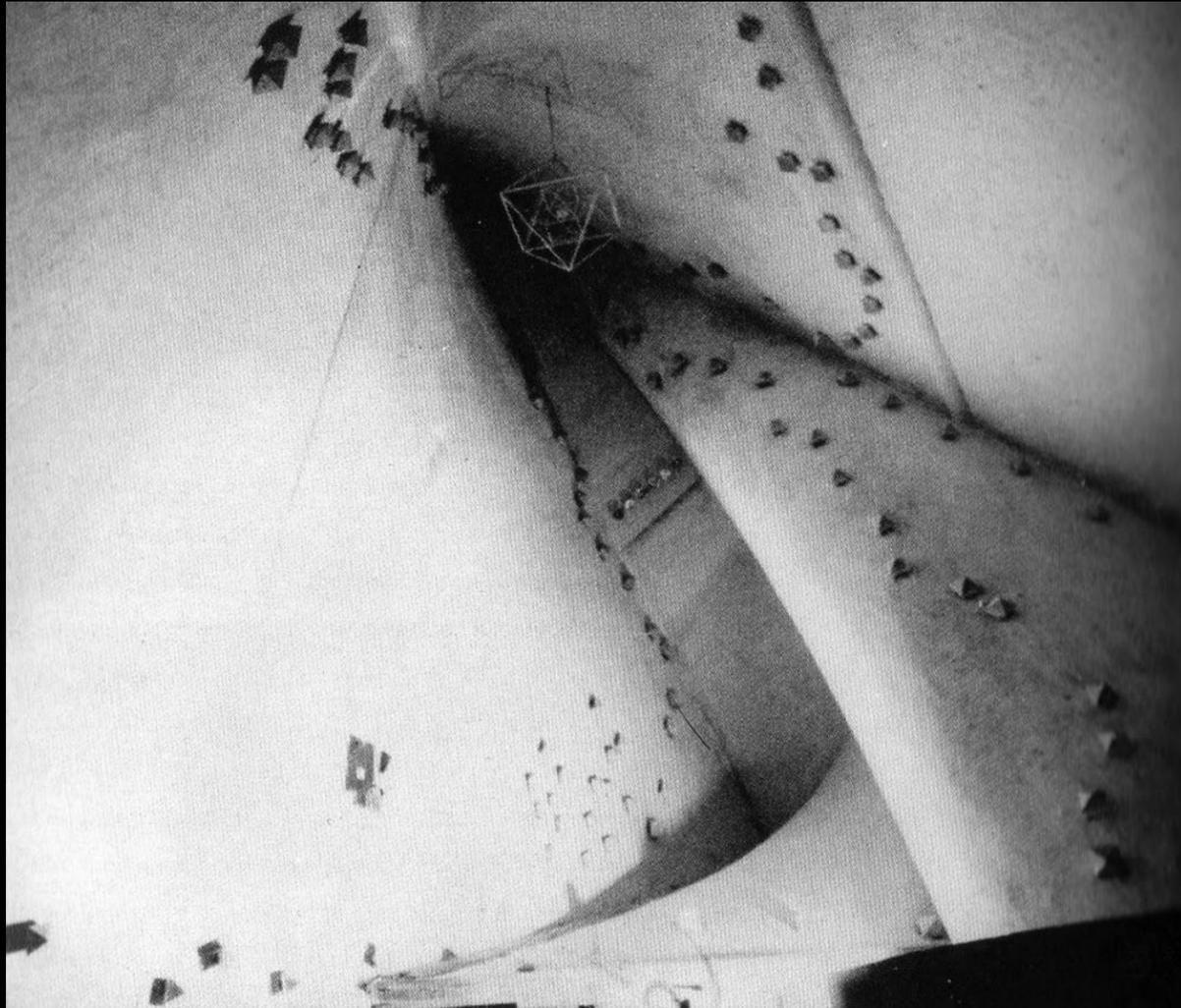
Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



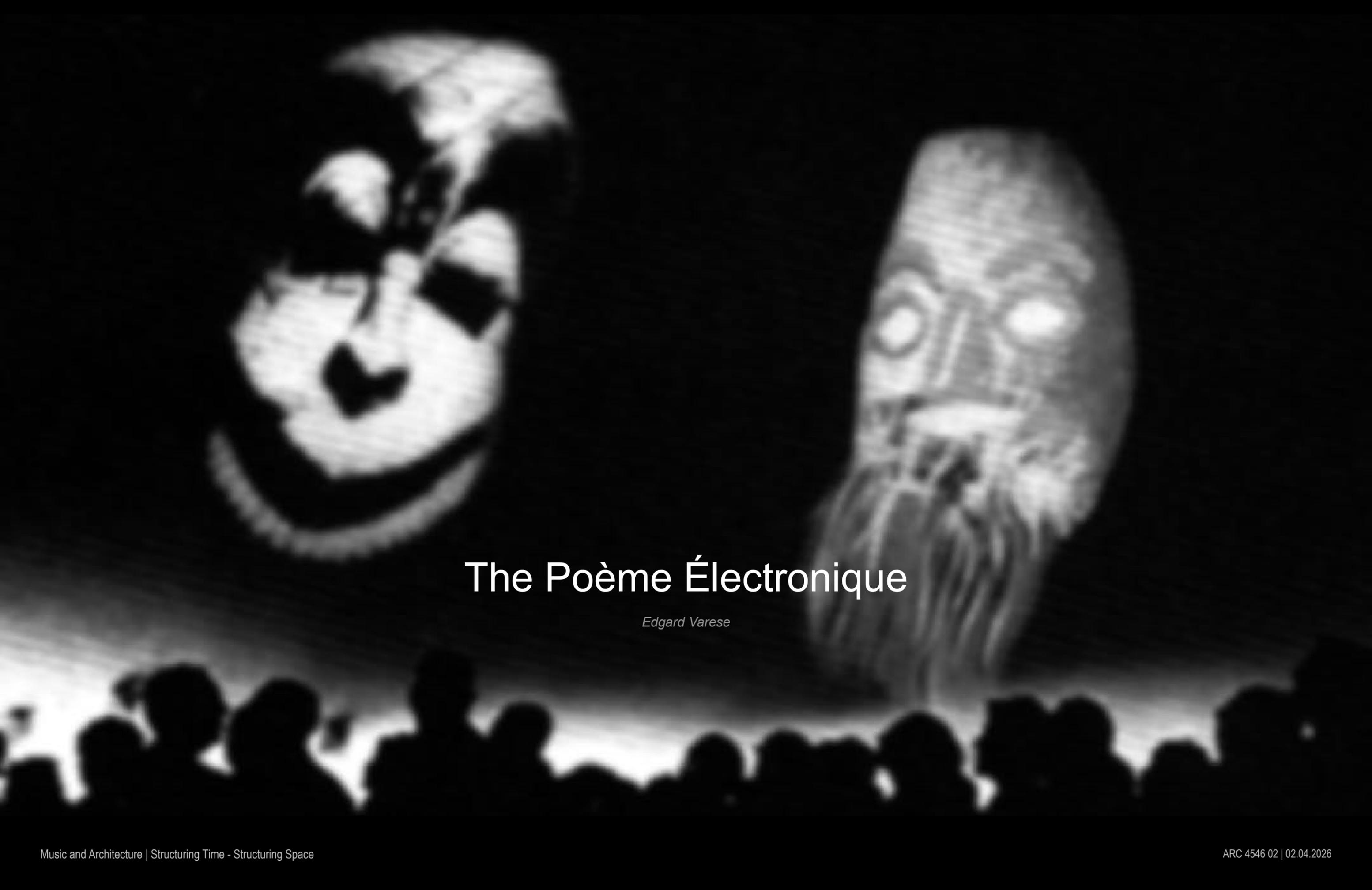
Philips Pavilion - Exterior View
Le Corbusier, Xenakis, Varese



Philips Pavilion - Interior view showing speaker placement
Le Corbusier, Xenakis, Varese



Philips Pavilion - Interior view showing projection during mutli-media show
Le Corbusier, Xenakis, Varese



The Poème Électronique

Edgard Varese







Incomplete Manifesto for Growth

Bruce Mau, 1998

Begin anywhere.

John Cage tells us that not knowing where to begin is a common form of paralysis. His advice:
begin anywhere.

Process is more important than outcome.

When the outcome drives the process we will only ever go to where we've already been.
If process drives outcome we may not know where we're going, but we will know we want to be there.

Love your experiments.

Joy is the engine of growth. Exploit the liberty in casting your work as beautiful experiments,
iterations, attempts, trials, and errors. Take the long view and allow yourself the fun of failure
every day.