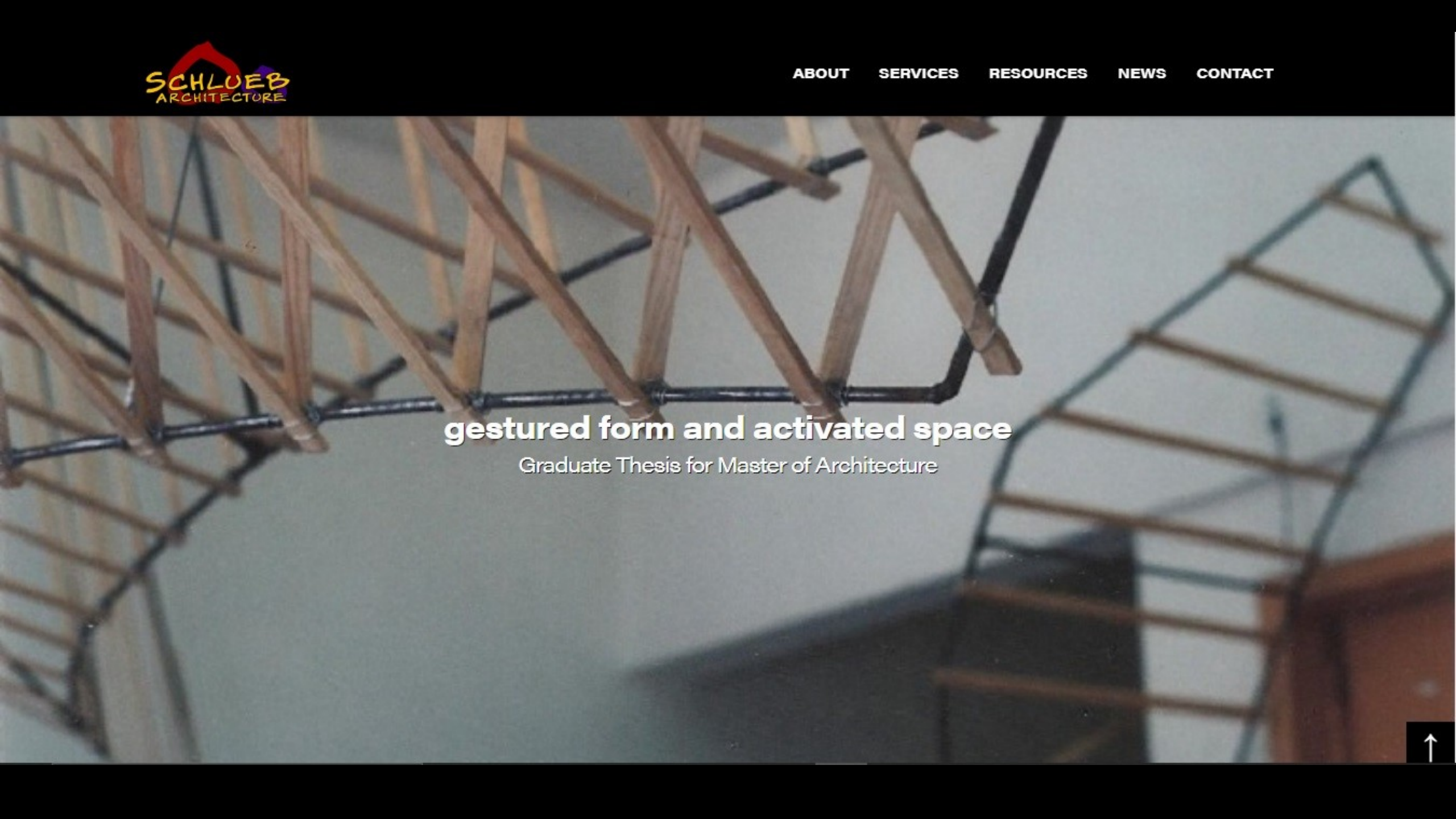




## Villa Vuoto

Gestured Form and Activated Space

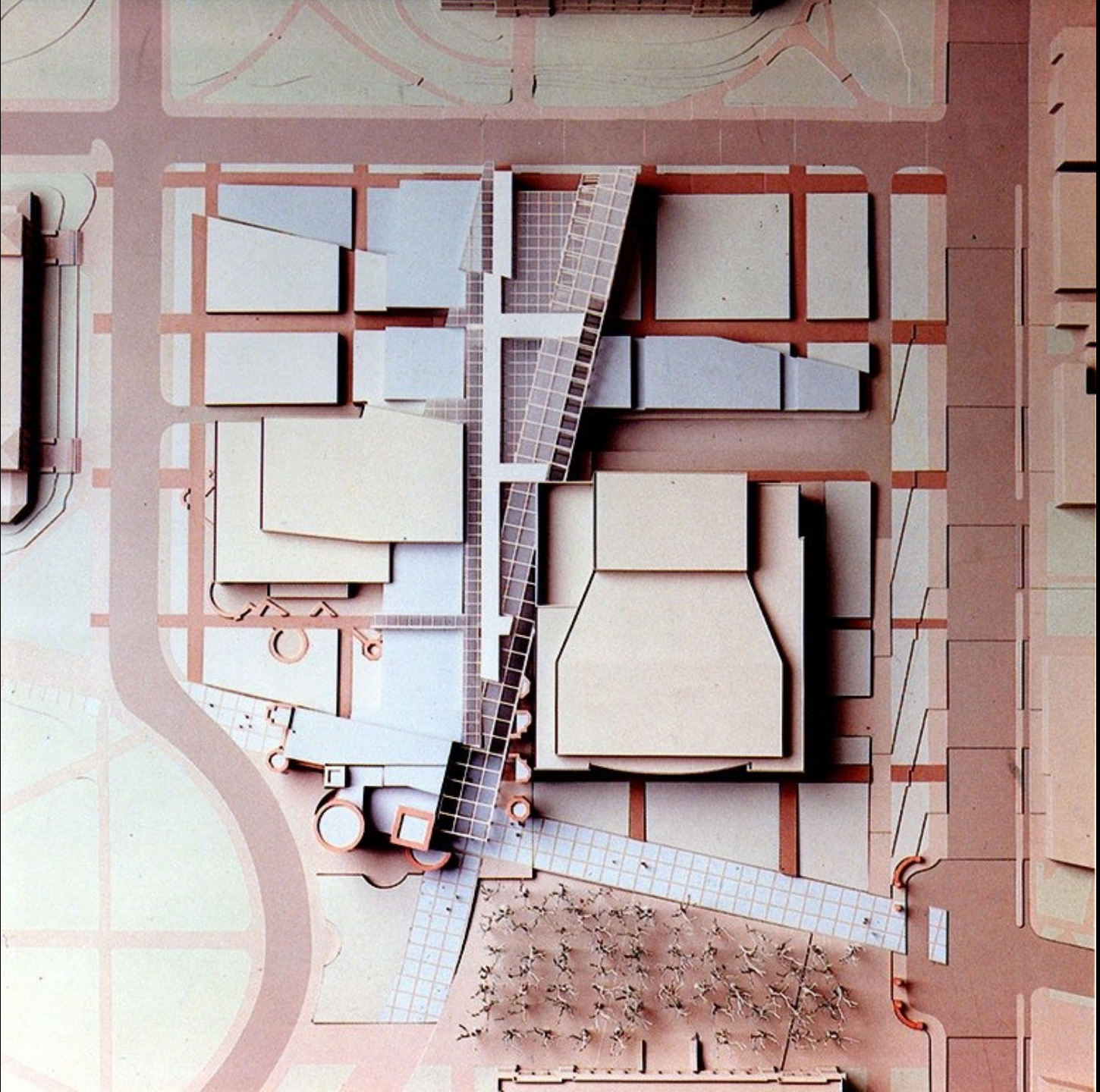
Osher at CMU 2024.03.13

A close-up photograph of a wooden architectural model. The model consists of a complex network of thin, light-colored wooden beams connected by dark metal rods. The beams are arranged in a series of overlapping, slightly curved planes, creating a sense of depth and movement. The background is a plain, light-colored wall.

# gestured form and activated space

Graduate Thesis for Master of Architecture






**I NOTICE HOW  
YOU LISTEN  
WHEN THE  
MOUNDS  
SPEAK.**

**IT'S GREAT  
THAT YOU  
RECOGNIZE  
PEOPLE  
WERE HERE  
BEFORE  
YOU.**



The image shows the exterior of the Wexner Center for the Arts. On the left, there are two prominent, tall, cylindrical brick towers. A paved walkway leads from the foreground towards a white metal grid structure that serves as a covered entrance. Two banners are attached to this structure: a white one on the left and a blue one on the right. The building behind the walkway is a mix of red brick and light-colored stone or concrete. The sky is blue with scattered white clouds. In the foreground, there is a patch of grass with some fallen leaves and a large, bushy green plant.

IT'S TRUE!  
THERE  
WAS  
A VOICE  
BEFORE  
COLUMBUS.

wexner  
center  
for the  
arts



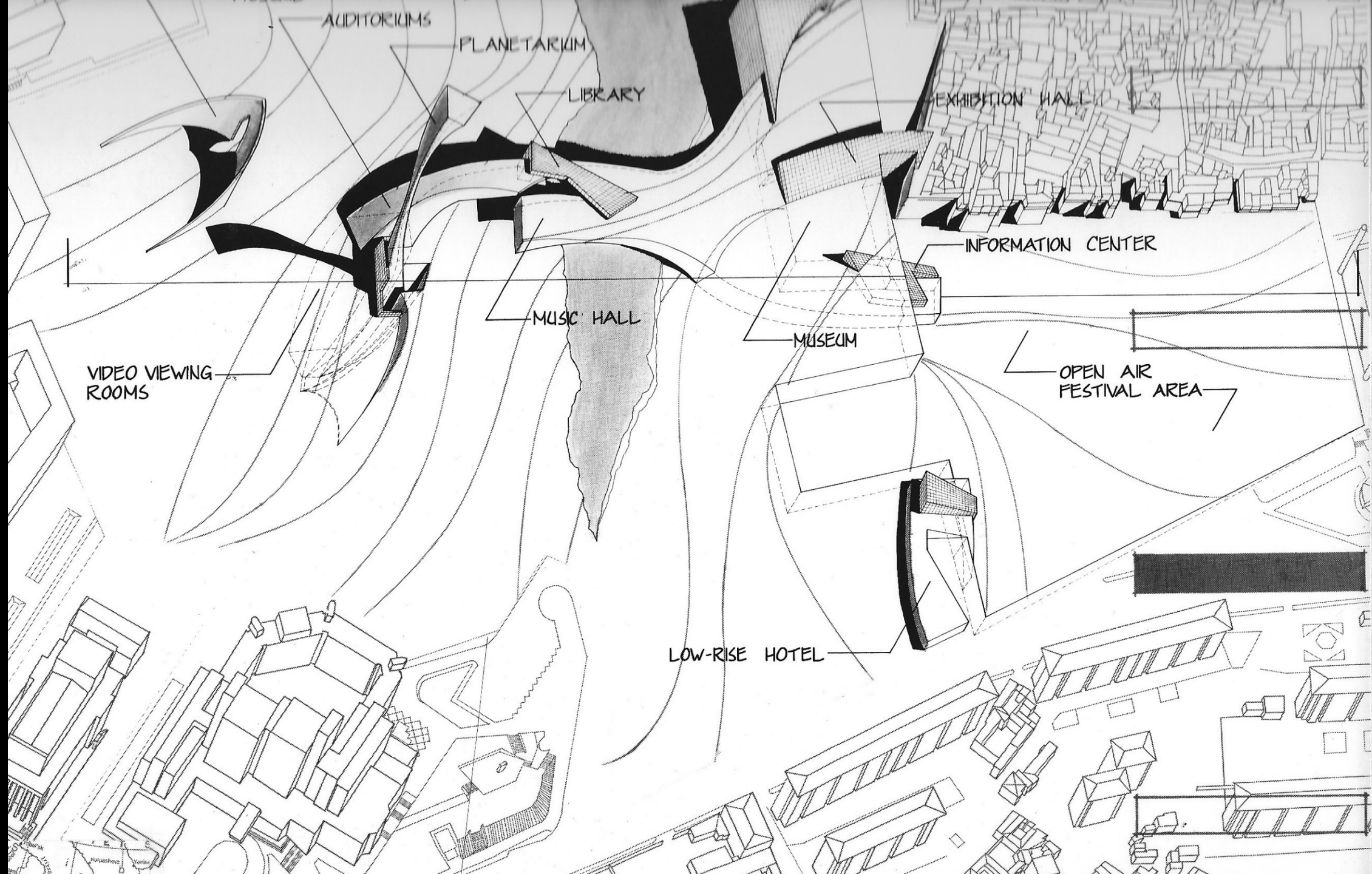


STRIKE  
HERE  
AS  
VOICE  
EXPLORE  
COUNCIL

STRIKE  
HERE  
AS  
VOICE  
EXPLORE  
COUNCIL







AUDITORIUMS

PLANETARIUM

LIBRARY

EXHIBITION HALL

INFORMATION CENTER

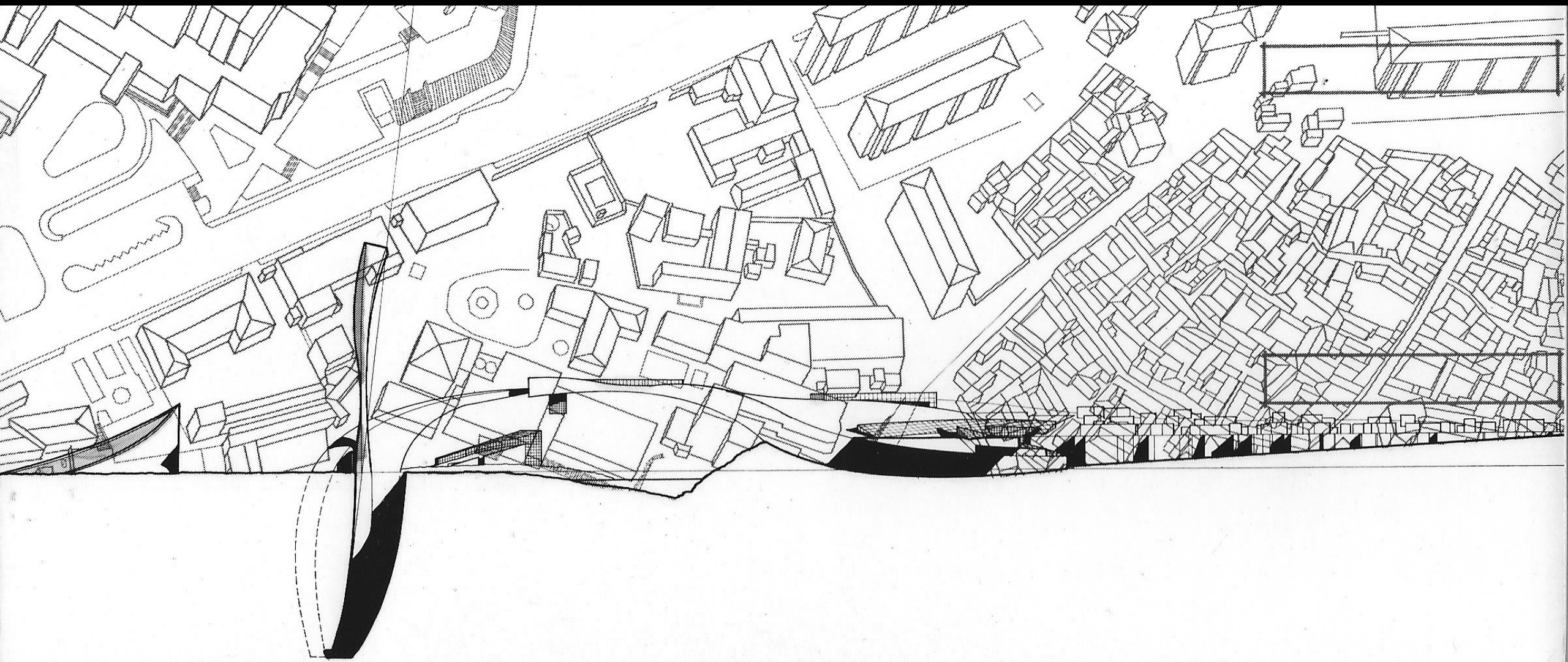
MUSIC HALL

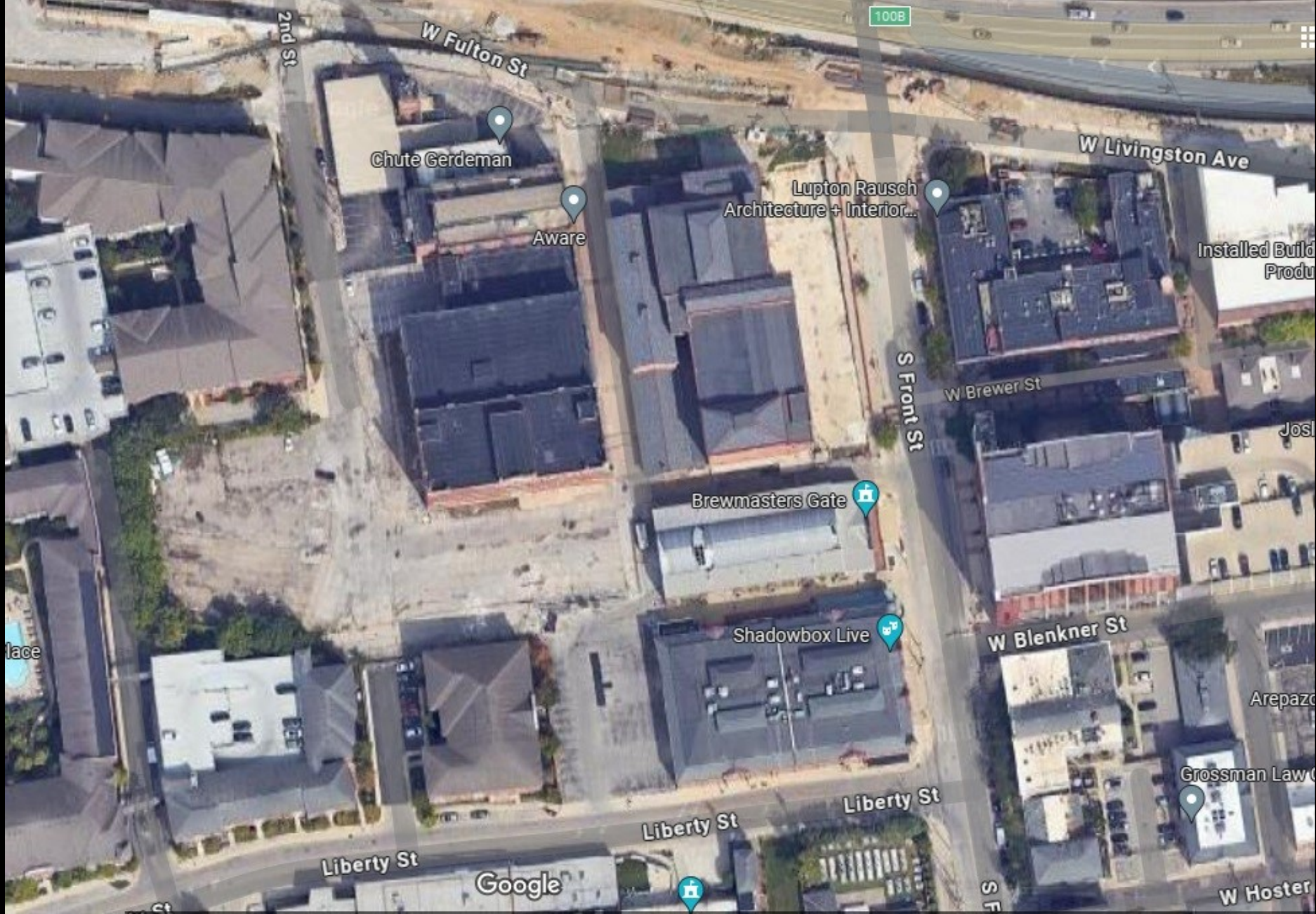
MUSEUM

OPEN AIR  
FESTIVAL AREA

VIDEO VIEWING  
ROOMS

LOW-RISE HOTEL





2nd St

W Fulton St

100B

W Livingston Ave

Chute Gerdeman

Lupton Rausch  
Architecture + Interior...

Aware

Installed Build  
Produ

S Front St

W Brewer St

Brewmasters Gate

Jos

Shadowbox Live

W Blenkner St

lace

Arepaz

Grossman Law

Liberty St

Liberty St

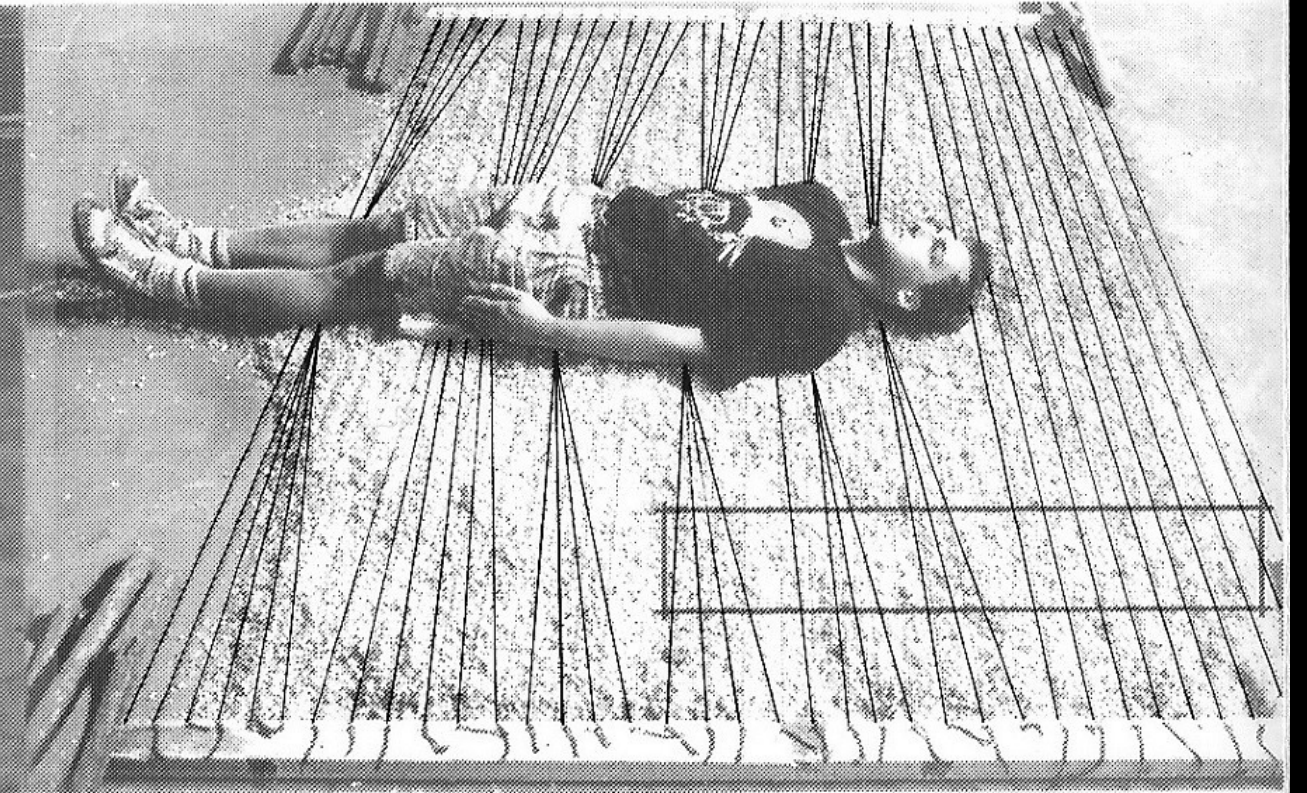
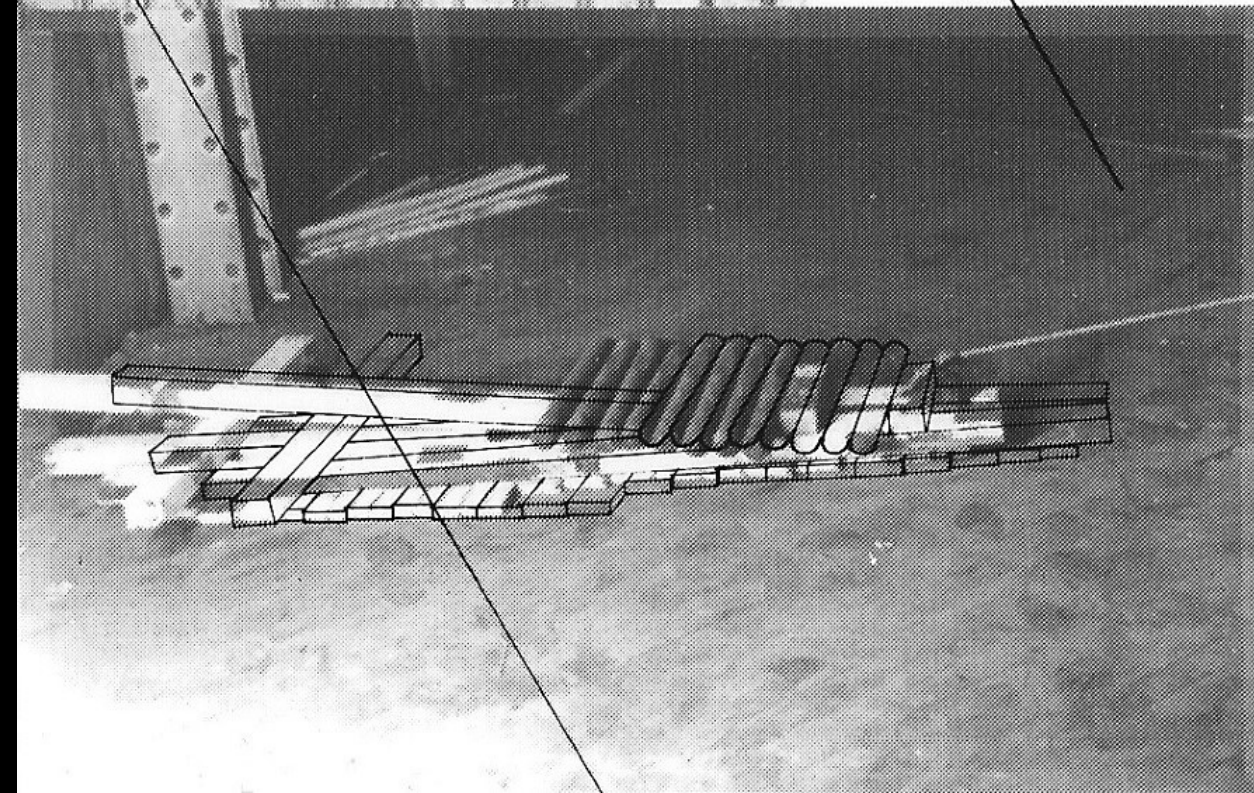
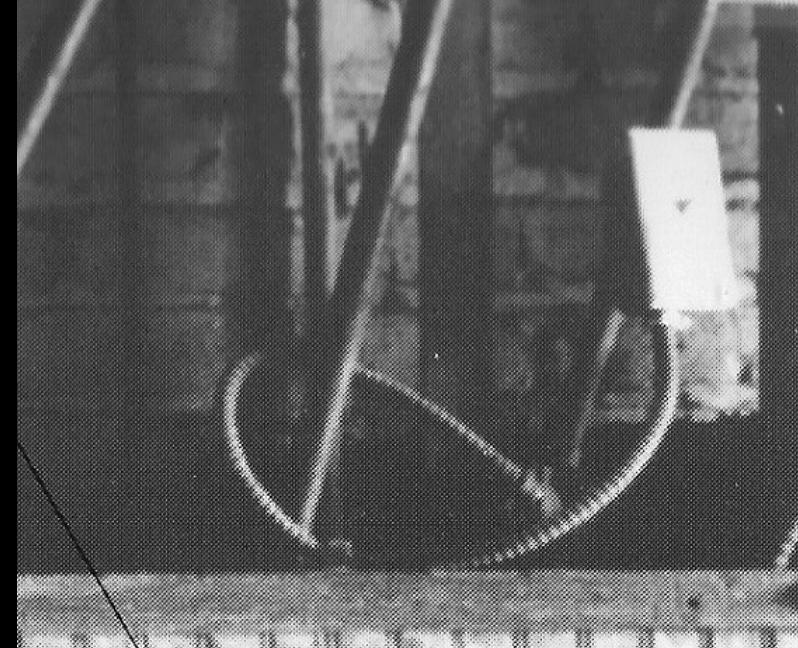
Google

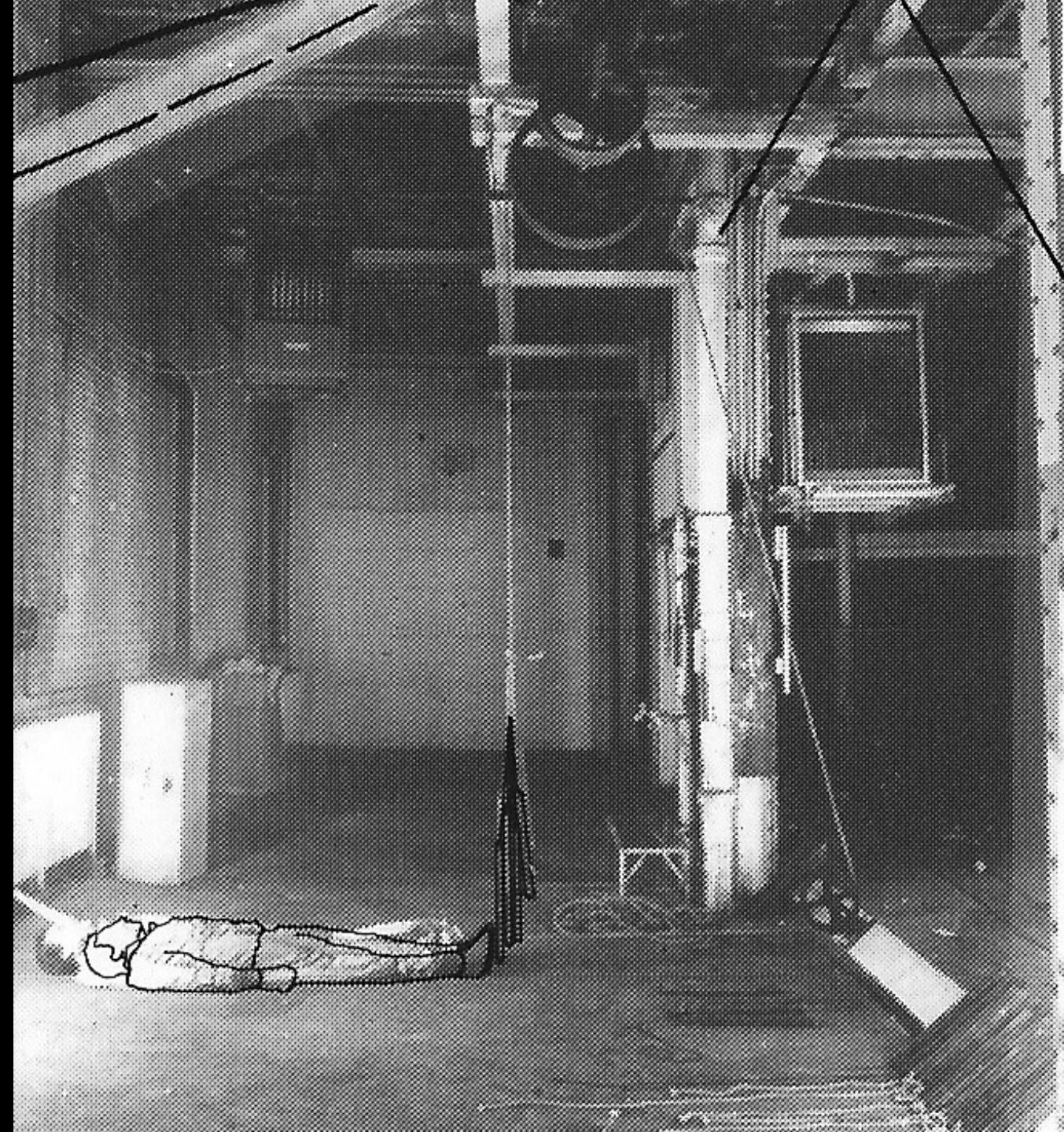
Liberty St

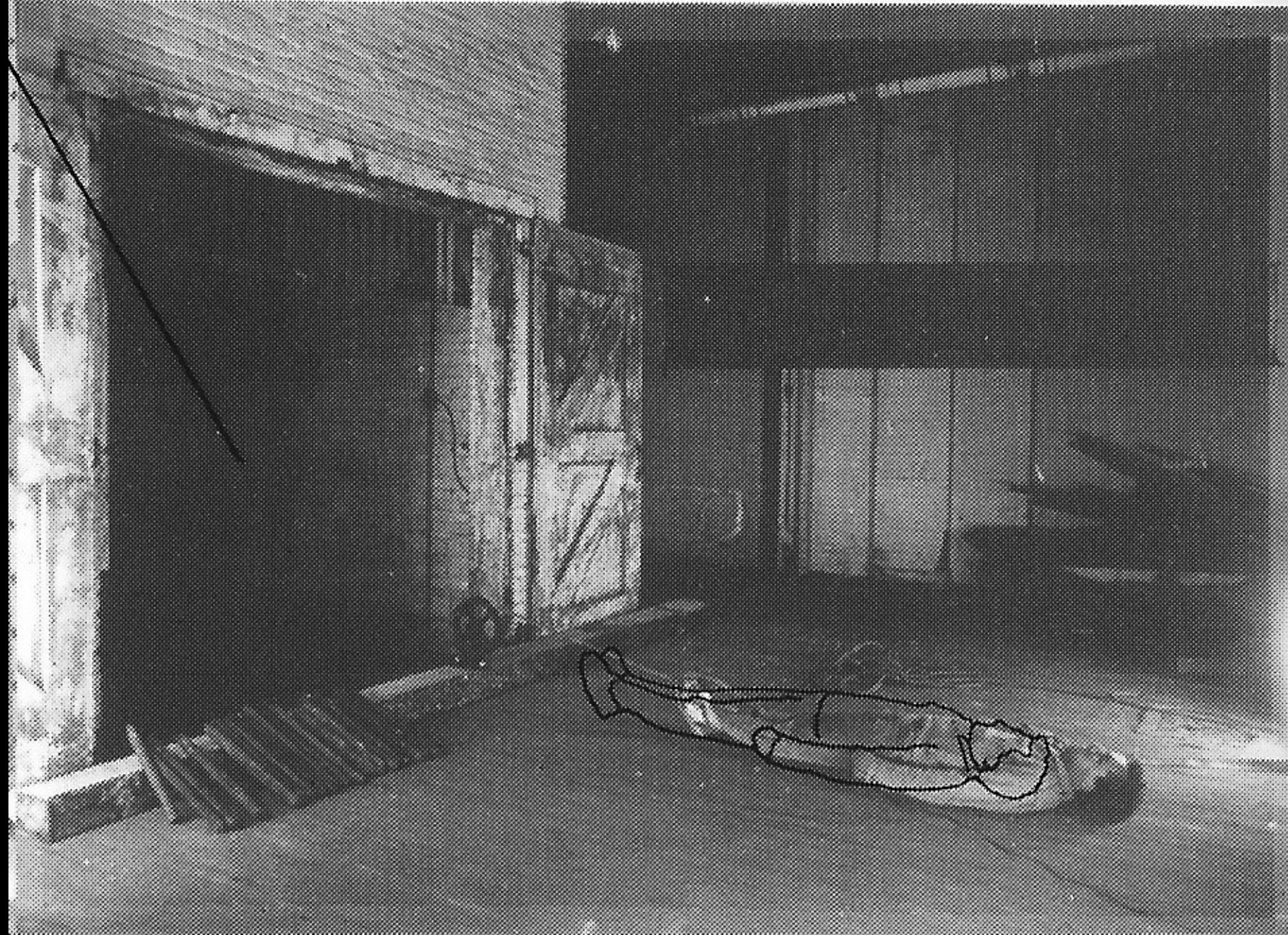
W Hoster

IN STUDIES OF MAN VERSUS BUILDING, I MEASURED RESISTANCE BY OBSERVING A BALANCING OF THE ABRASIVE VARIABLES: BODY WEIGHT, TEXTURE, MATERIAL, AND SURFACE AREA.

MAN AGAINST MODEL / MODEL AGAINST MAN



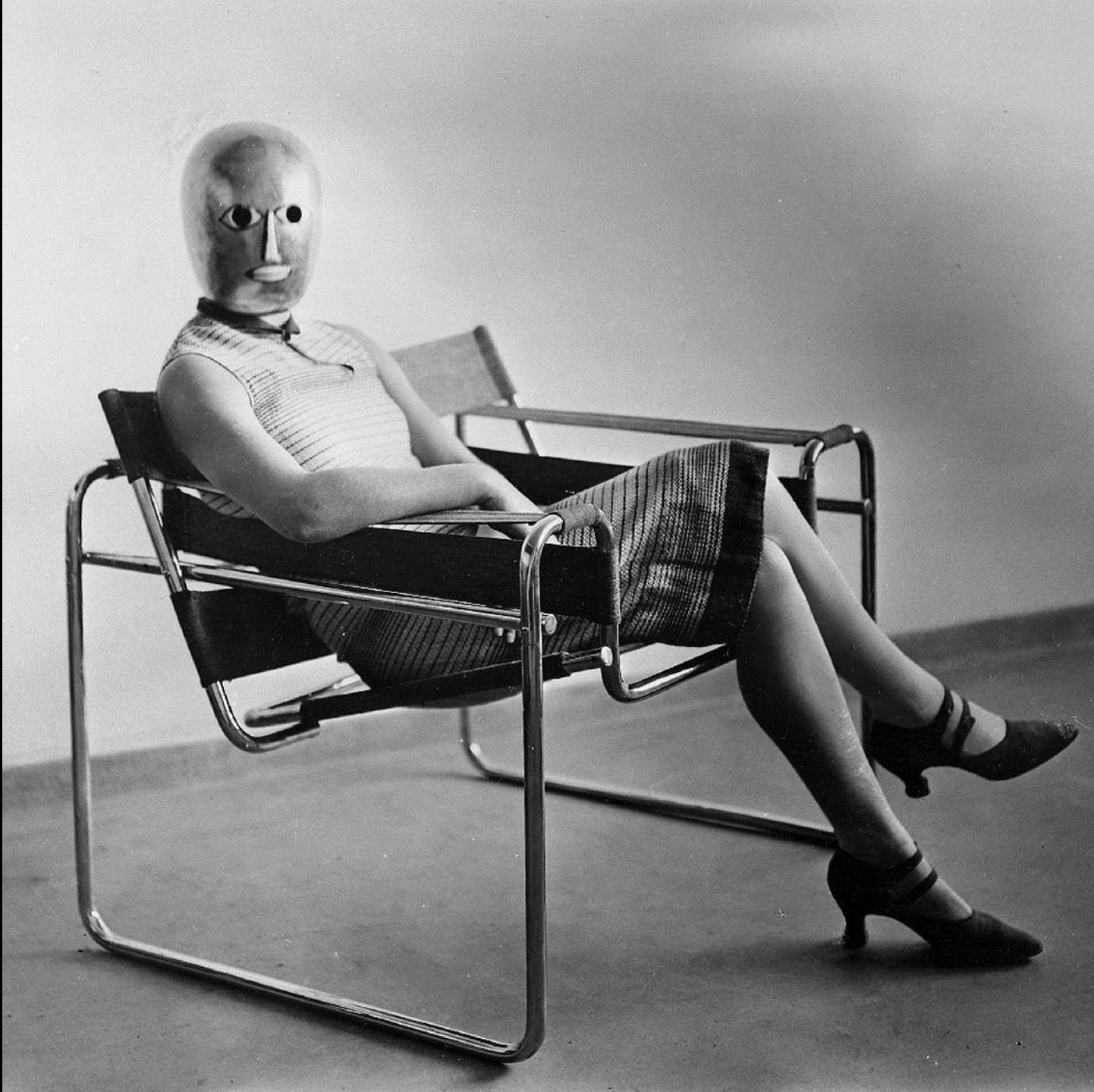




















Carnegie Tech College of Fine Arts building, designed by Henry Hornbostel, erected 1916. Muller-Munk's office was on the top floor.

COURTESY OF CARNEGIE MELLON UNIVERSITY LIBRARIES



Director of the Art-Engineering Department, Westinghouse Electric & Manufacturing

## PITTSBURGH

Pittsburgh is one of the great industrial cities of the world. Major plants of many of America's leading industries are located in its district, including those dealing with metals, electrical goods, glass, ceramics and paints. A metropolitan center of some two million people within a thirty mile radius, Pittsburgh affords the student of industrial design the stimulation of a colorful and varied environment reflecting the tempo of modern life.

*For additional information address:*

**ALAN BRIGHT, REGISTRAR**  
CARNEGIE INSTITUTE OF TECHNOLOGY  
PITTSBURGH . . . PENNSYLVANIA

# A NEW COURSE IN INDUSTRIAL DESIGN

CARNEGIE  
INSTITUTE OF  
TECHNOLOGY

DEPARTMENT OF PAINTING AND DESIGN

1934

utility or product is not the sure test of their acceptability to the buying public. Today

## OBJECTIVE

To prepare such artists is the aim of the new course. It is planned to give the student not only a grasp of design principles and the resources for their expression, but also to give him a basis for adapting this knowledge to the conditions which the designer must cope with in industry. Emphasis will be laid on the study of design in terms of typical materials and the processes by which they can be fashioned. The student is assisted in evolving a technique of study applicable to any problem which he may later encounter.

## APPROACH

The technical studies of the first two years lay a foundation of basic principles in drawing and creative design, developed through a diversified series of related and typical experiences. From this general ground work the student proceeds in the last two years to the study of the specific application of his artistic knowledge to the requirements of the manufacturer. Along with his study of materials, tools, tool processes, and manufacturing methods as they condition his design, he must learn the part played by consumer needs, market conditions, design trends, and costs. A regular program of visits to industrial plants in both the junior and senior years contributes to this end. Throughout the four years the technical art studies are supplemented by subjects of general cultural intent. Upon completion of the four year program the student is given the degree of Bachelor of Arts in Industrial Design.







# FOUNDATION COURSE

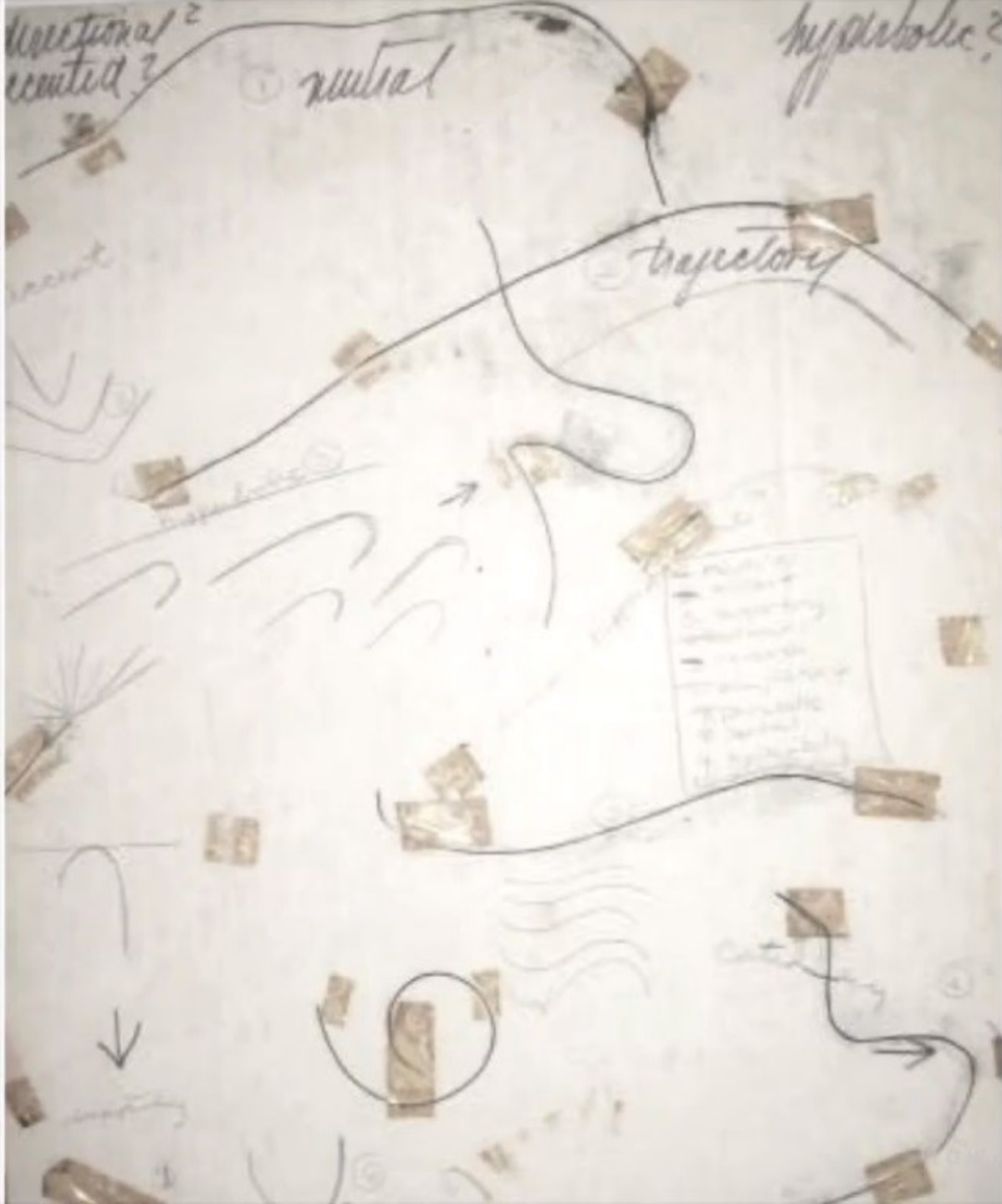
A prerequisite for advanced work in the Departments of  
Advertising Design, Illustration,  
Industrial Design, and Interior Design

GEORGIA EVEREST, *Administrative Supervisor*

ALEXANDER J. KOSTELLOW, *Supervisor of Design and Structure*

## INSTRUCTORS

THE DIRECTOR . . . . .	<i>History and Appreciation of Art</i>
LAURENCE BRULIN . . . . .	<i>Structural Representation</i>
DOROTHY McVEY COTHER . . . . .	<i>Nature Structure</i>
DONALD R. DOHNER . . . . .	<i>Design</i>
GEORGIA EVEREST . . . . .	<i>Design</i>
PAUL FJELDE . . . . .	<i>Design</i>



Movements always travel in pairs.

Qualities of line.

static =  $\perp$

projection =  $>$

A curve doesn't project, it expands.  
Eye travels on line.

expansion =

If a surface is closed, its directional quality ceases--



projection

expansion

indirectional surface

Curves---

= neutral curves

= resting curve

= supporting curve

= directional curve

Nature opposes a curve with a straight line

right



wrong



as in the knee



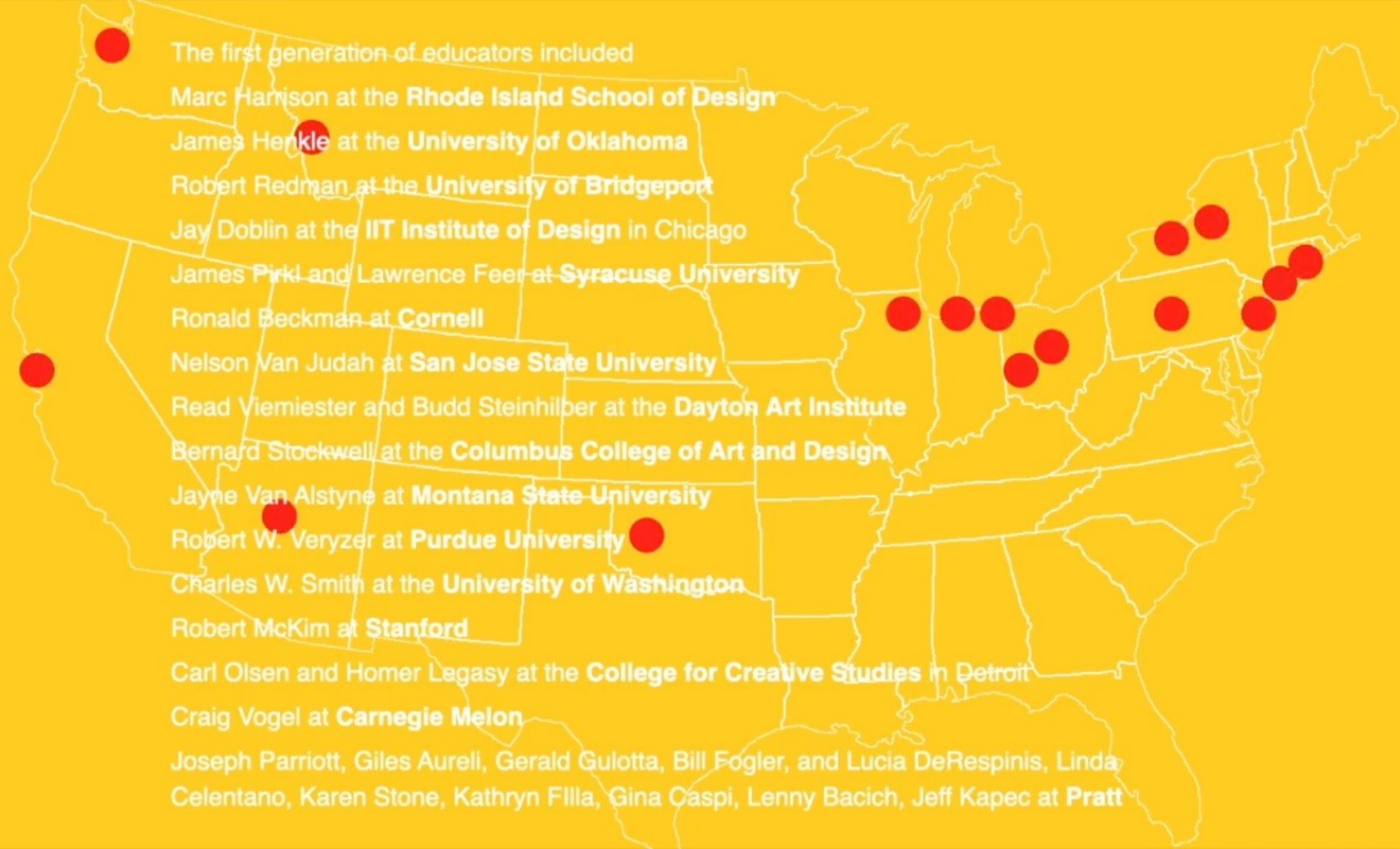
Use unlike curves and different lengths of line.

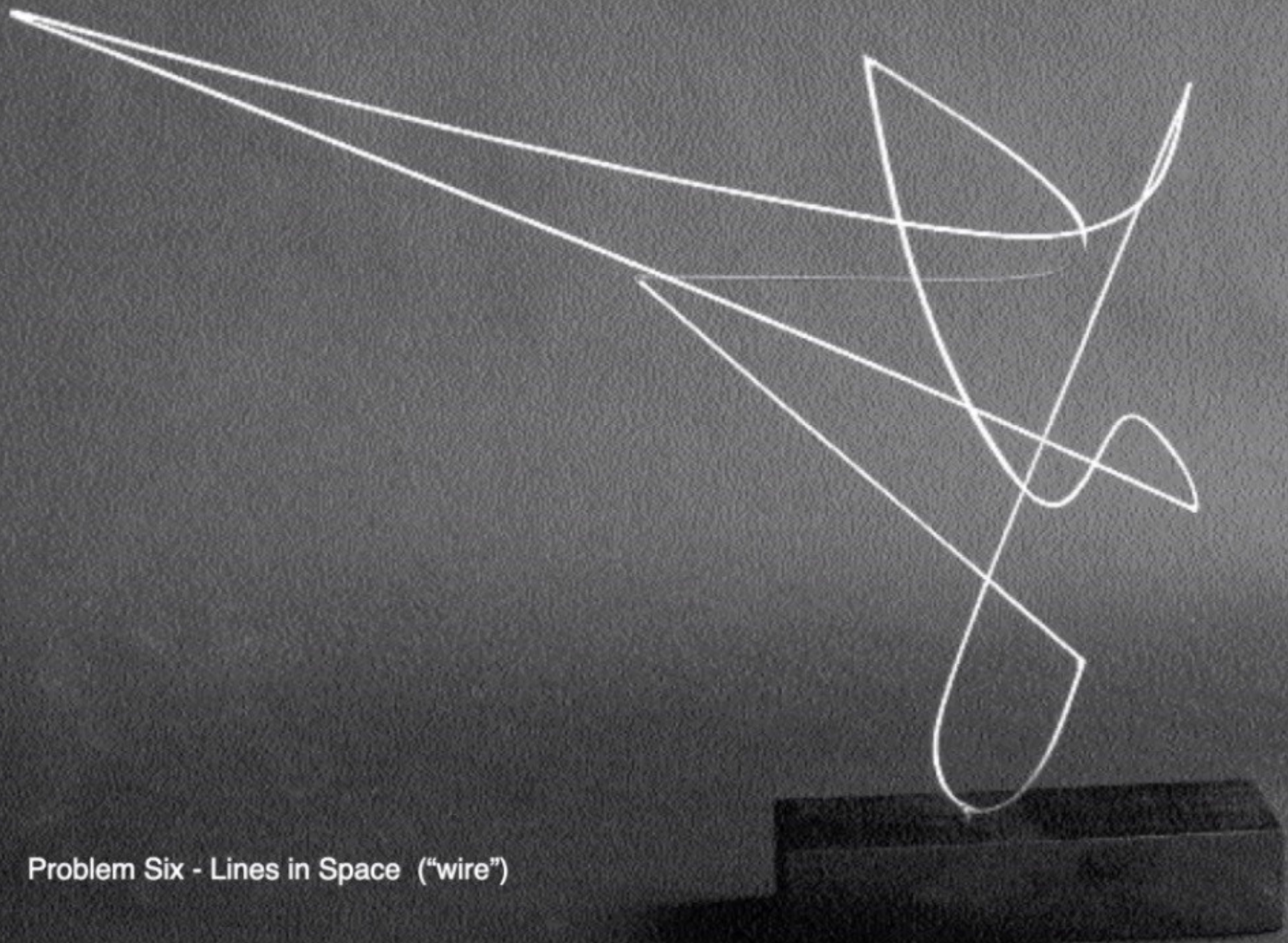
Design as intent  
Design as expression

Design

Structural elements  
of design

Individual structure of shapes, Composition of various, Pattern (effect of light and color), Unity (singleness of purpose and dominance of shape), Variety (domination and subordination, and by directional indication of lines and masses), Coherence, and Fitness.





Problem Six - Lines in Space ("wire")



Problem Five - Planar Construction

# the new bauhaus

AMERICAN SCHOOL of DESIGN

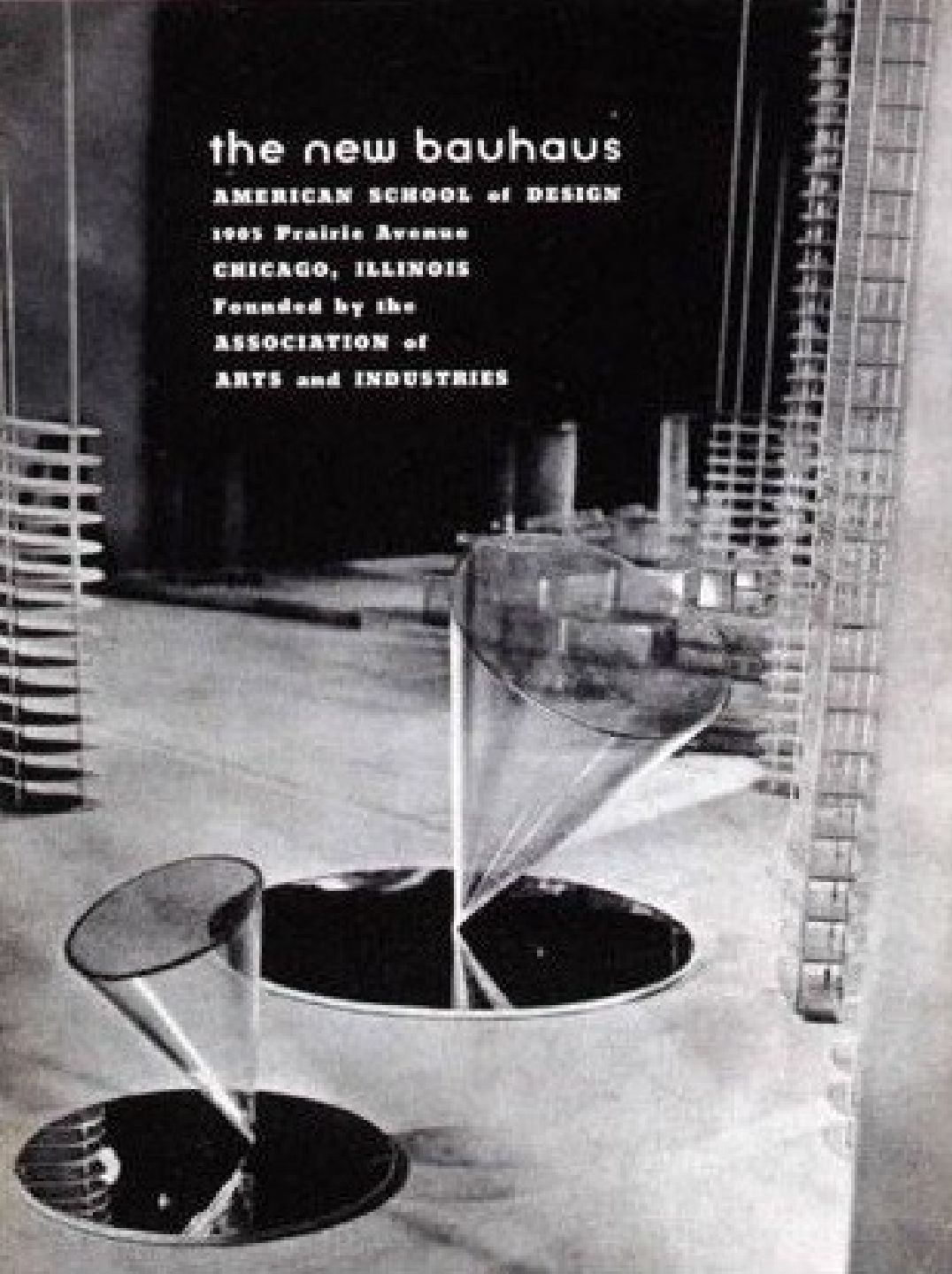
1001 Prairie Avenue

CHICAGO, ILLINOIS

Founded by the

ASSOCIATION of

ARTS and INDUSTRIES





Harley Earl

Sandra Longyear

GM's "Damsels of Design"

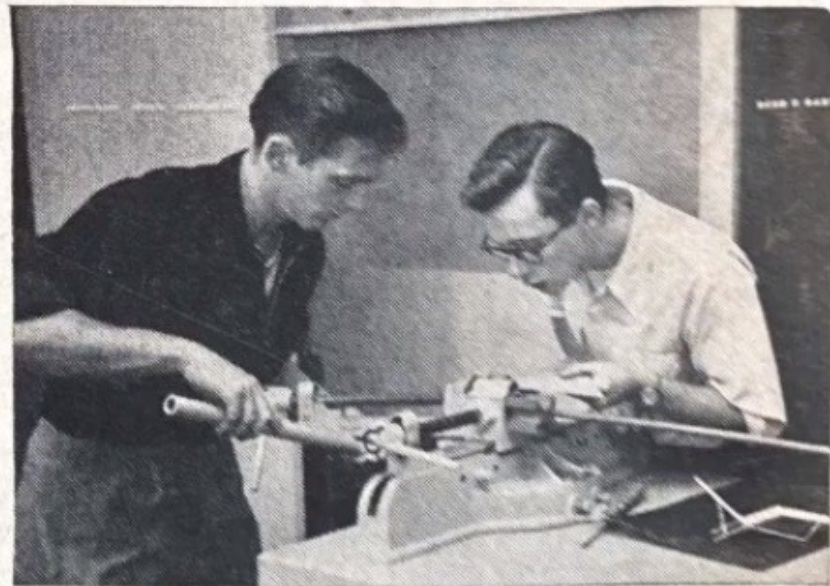




**BOATS**



**AUTOS**



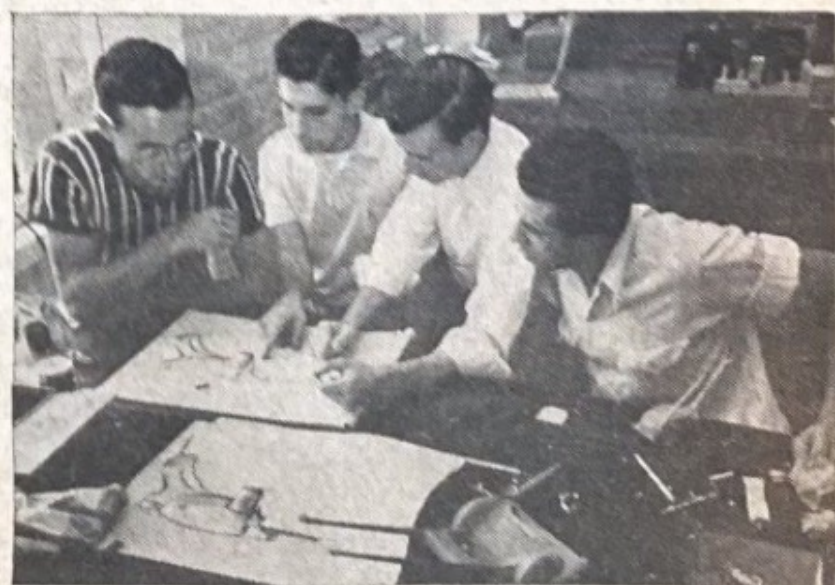
**FURNITURE**



**SALES DISPLAYS**



**KITCHEN UTENSILS**



**TOOLS**



APPLIANCES



BUSINESS MACHINES



VENDING MACHINES



ABSTRACTIONS



PACKAGING



SUPPORTING FRAMES

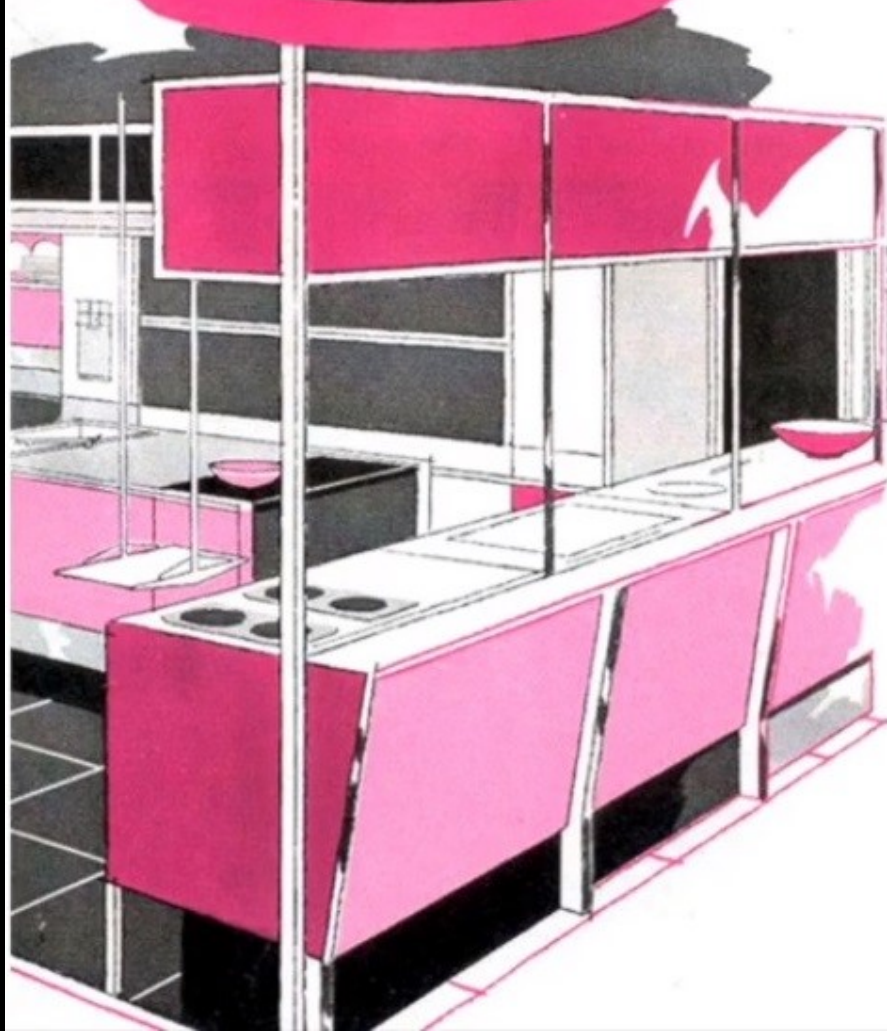
Presenting . . .  
**THE 1955  
FRIGIDAIRE**

## **KITCHEN OF TOMORROW**

**Another step forward . . . by  
Frigidaire and General Motors  
. . . toward new convenience  
for tomorrow's kitchens**

General Motors Stylists working with Frigidaire and General Motors Engineers are continually looking into the future. These are the men who created the Kitchen of Tomorrow—to show you in one working wonderland the many new conveniences that Frigidaire is constantly experimenting with to fulfill its promise of "more and better things for more people".

Many of the Kitchen features could be a part of your kitchen very shortly. Others may be a long time in coming, while still others may be only a dream. But don't be quick to label any of the features fantastic . . . for often what appears to be fantasy is foresight in disguise.





YANG



DIVISION OF GENERAL MOTORS

*presents*







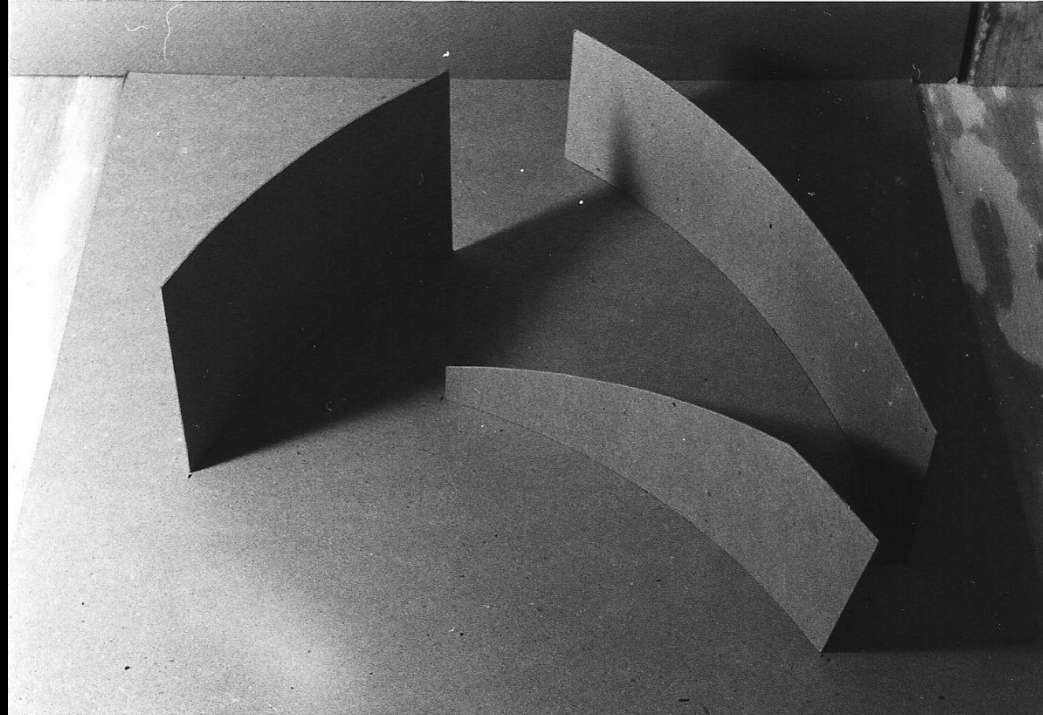






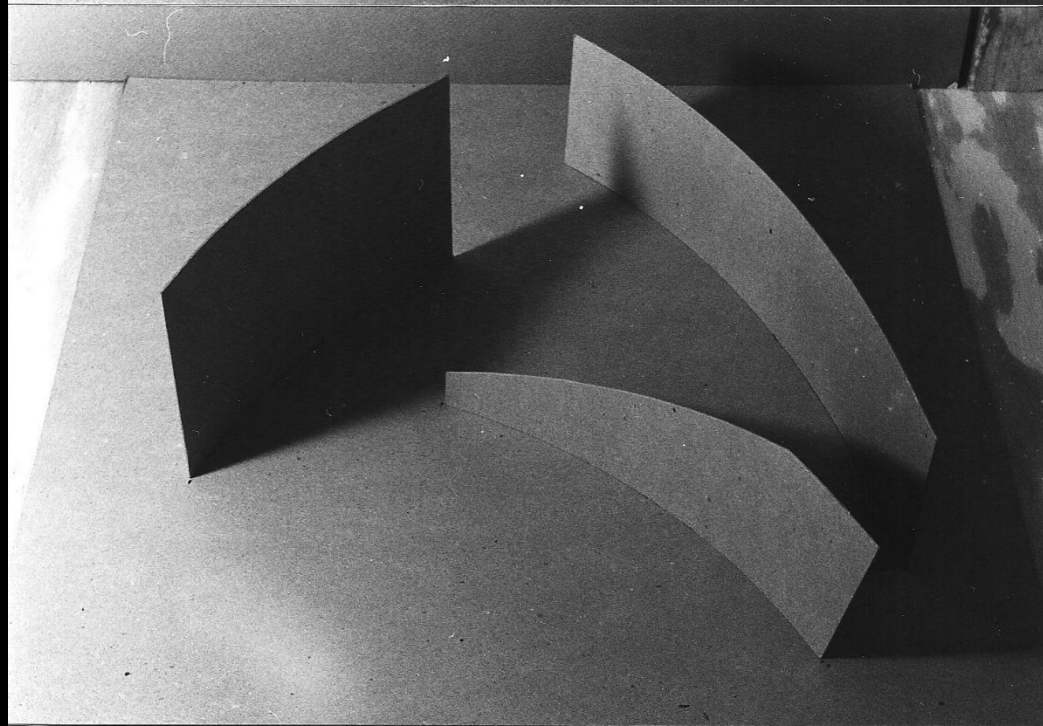


CONTROL  
MODEL

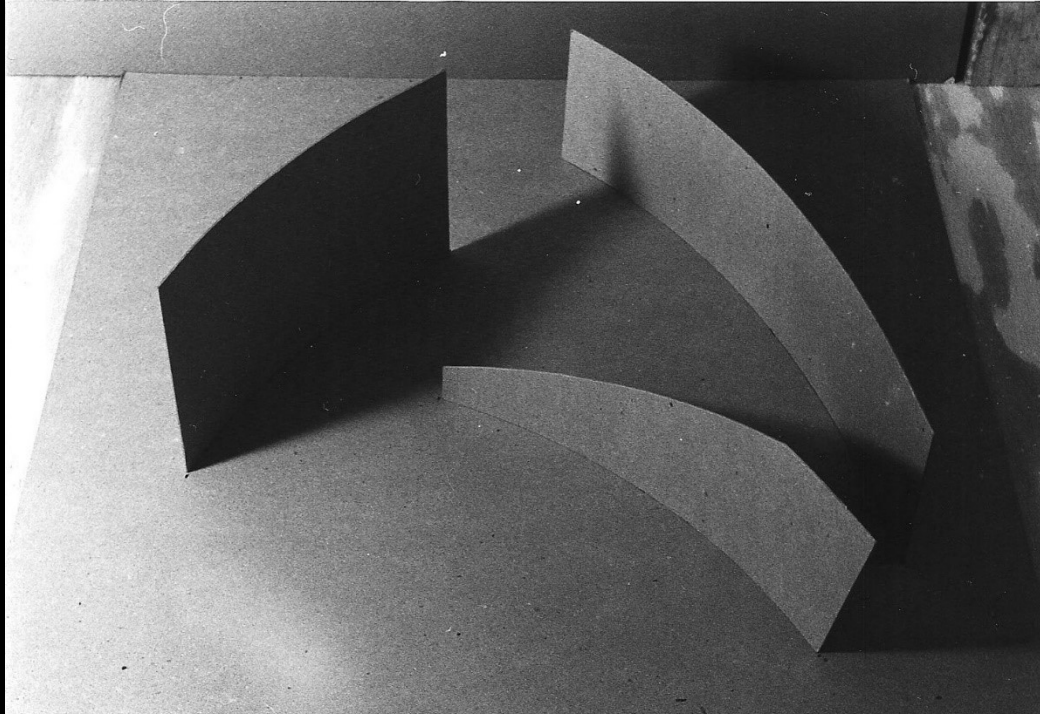


ORIGINAL  
CONDITION

DESIGN  
MODEL

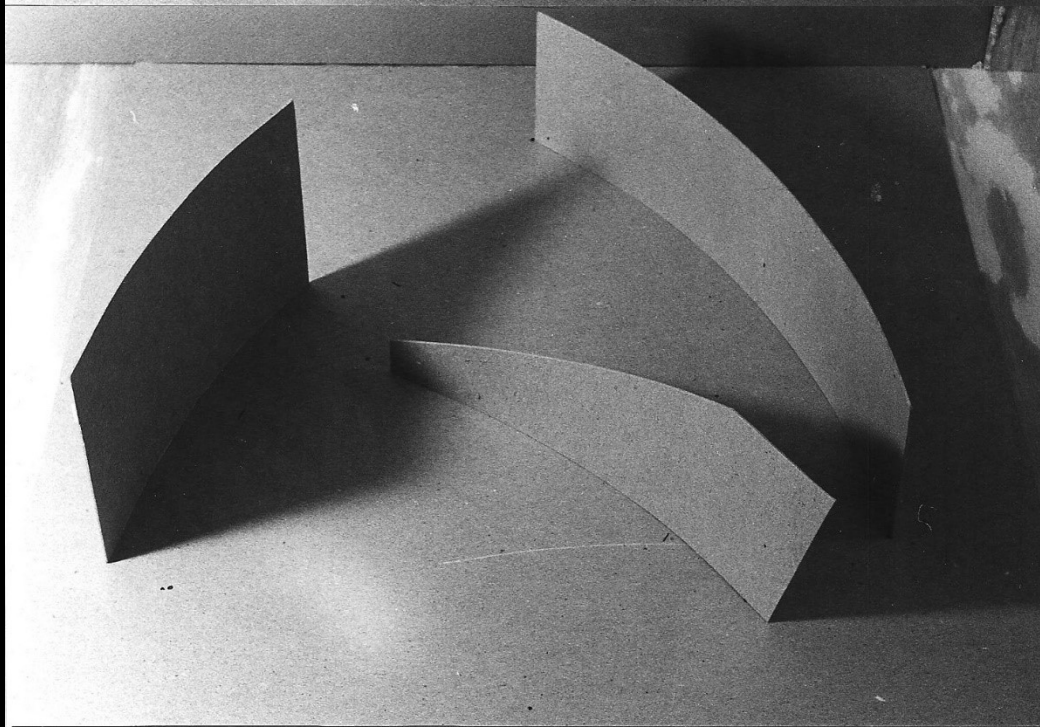


CONTROL  
MODEL



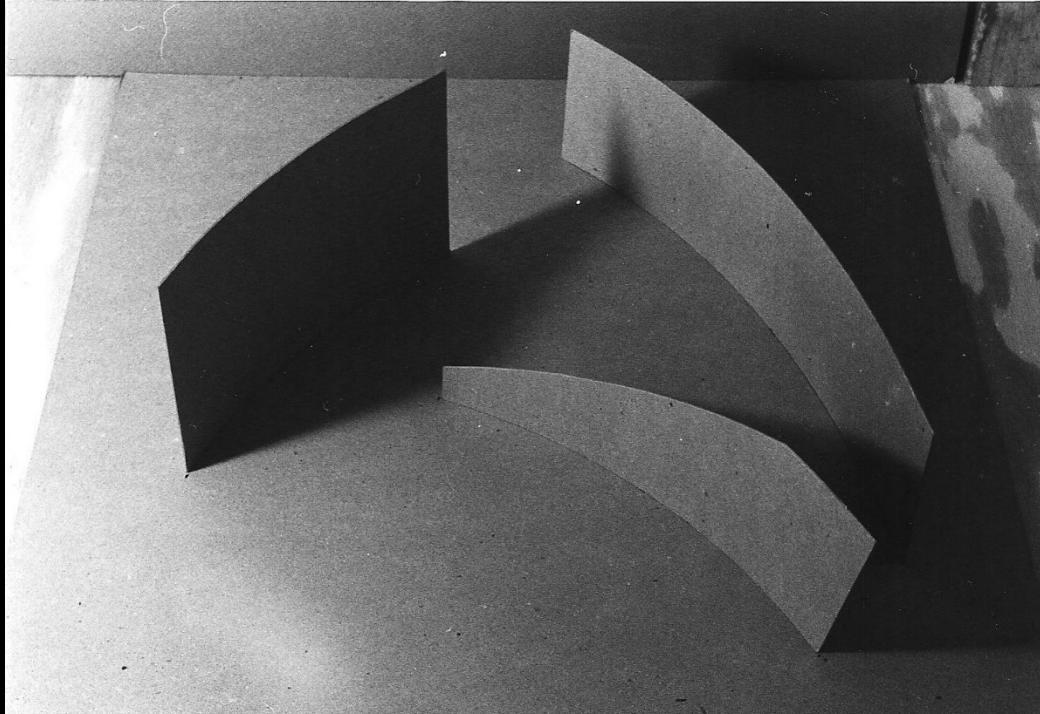
ORIGINAL  
CONDITION

DESIGN  
MODEL



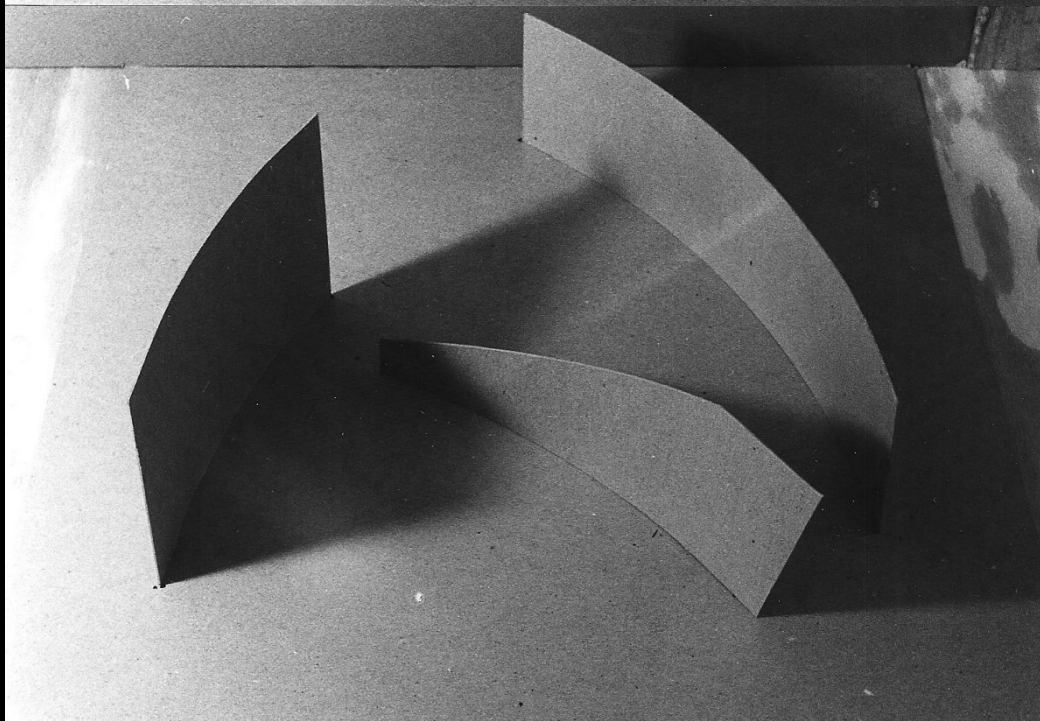
SUBDOMINANT  
VARIATION

CONTROL  
MODEL



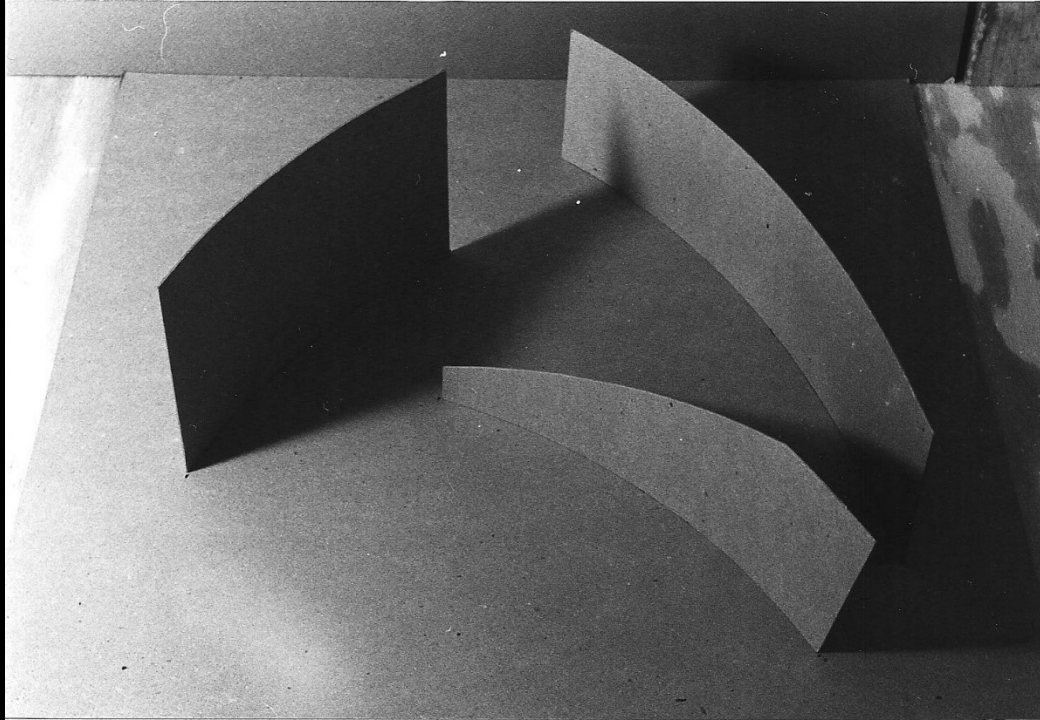
ORIGINAL  
CONDITION

DESIGN  
MODEL



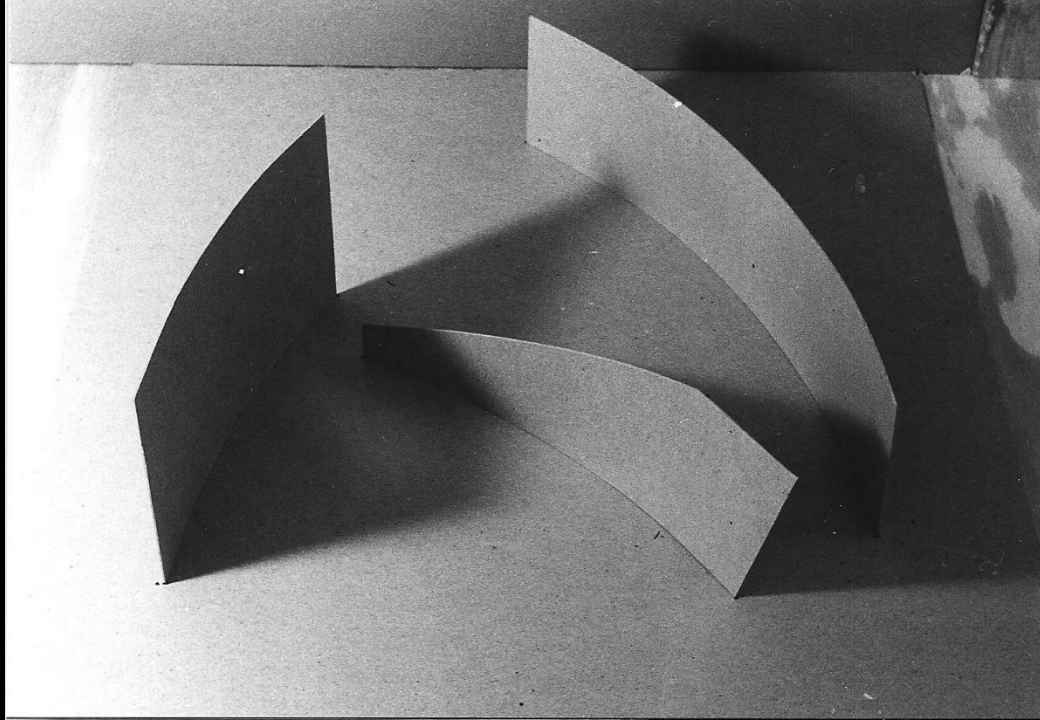
SUBDOMINANT  
IMPROVED

CONTROL  
MODEL



ORIGINAL  
CONDITION

DESIGN  
MODEL

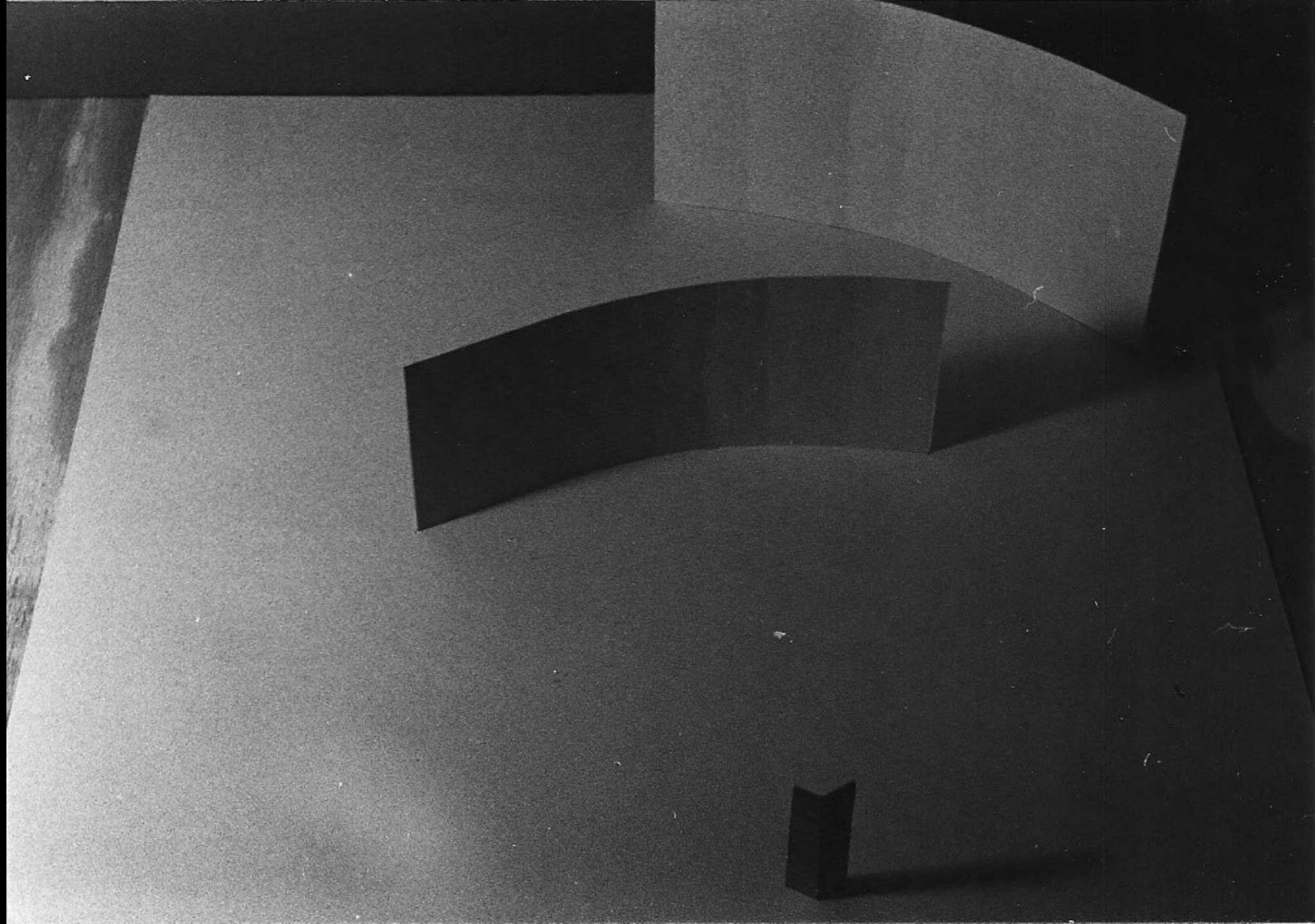


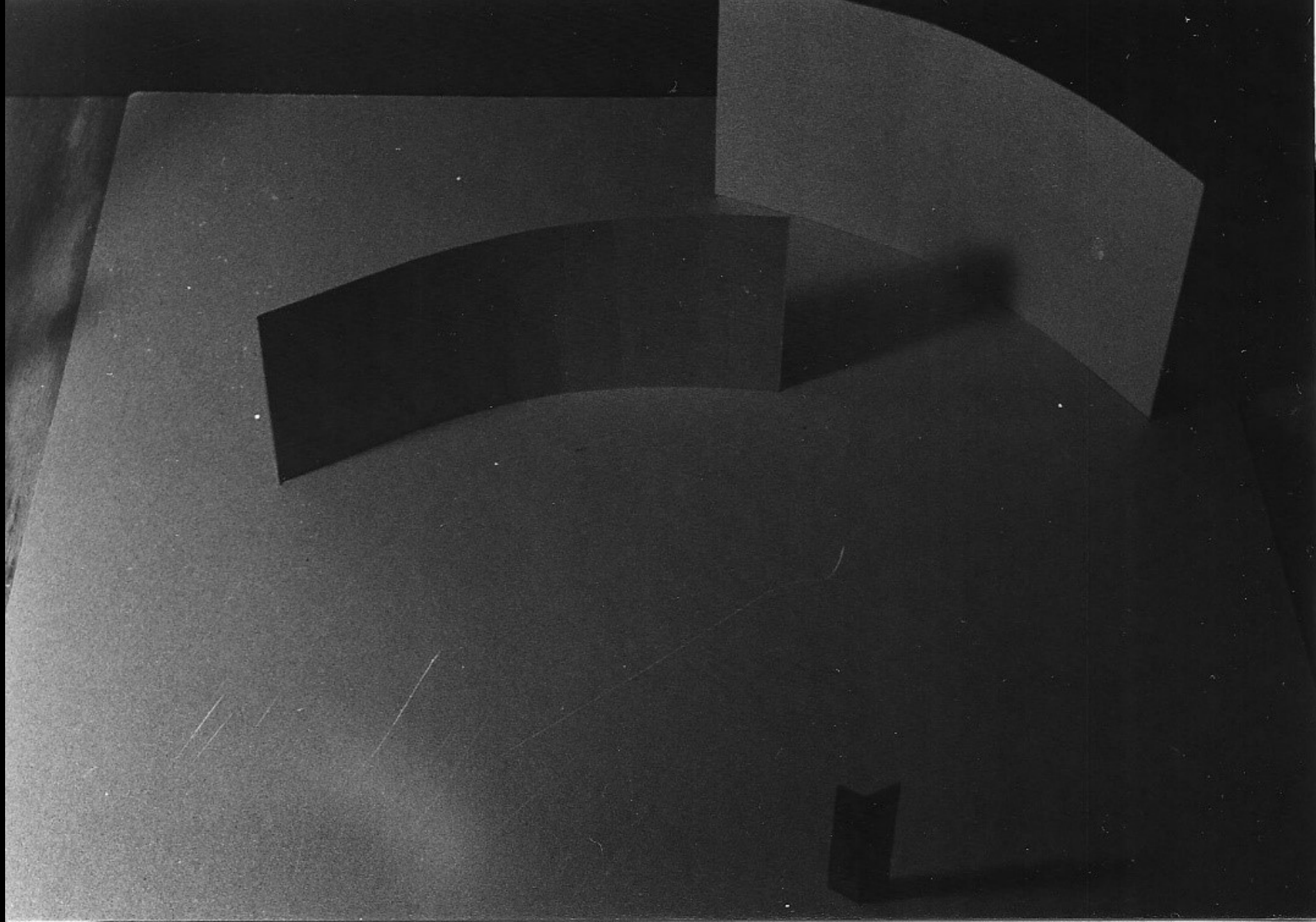
SUBORDINATE  
IMPROVED

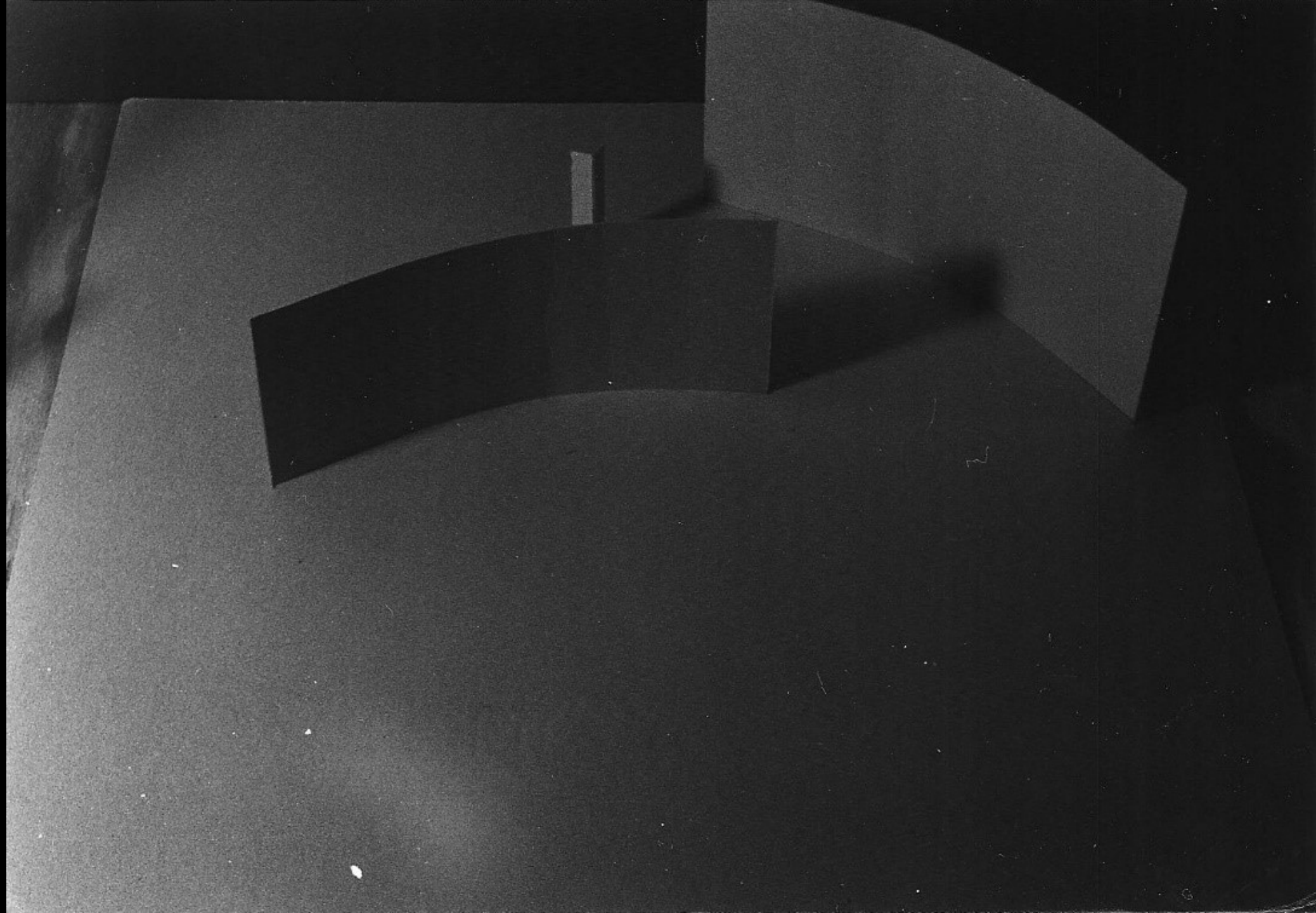




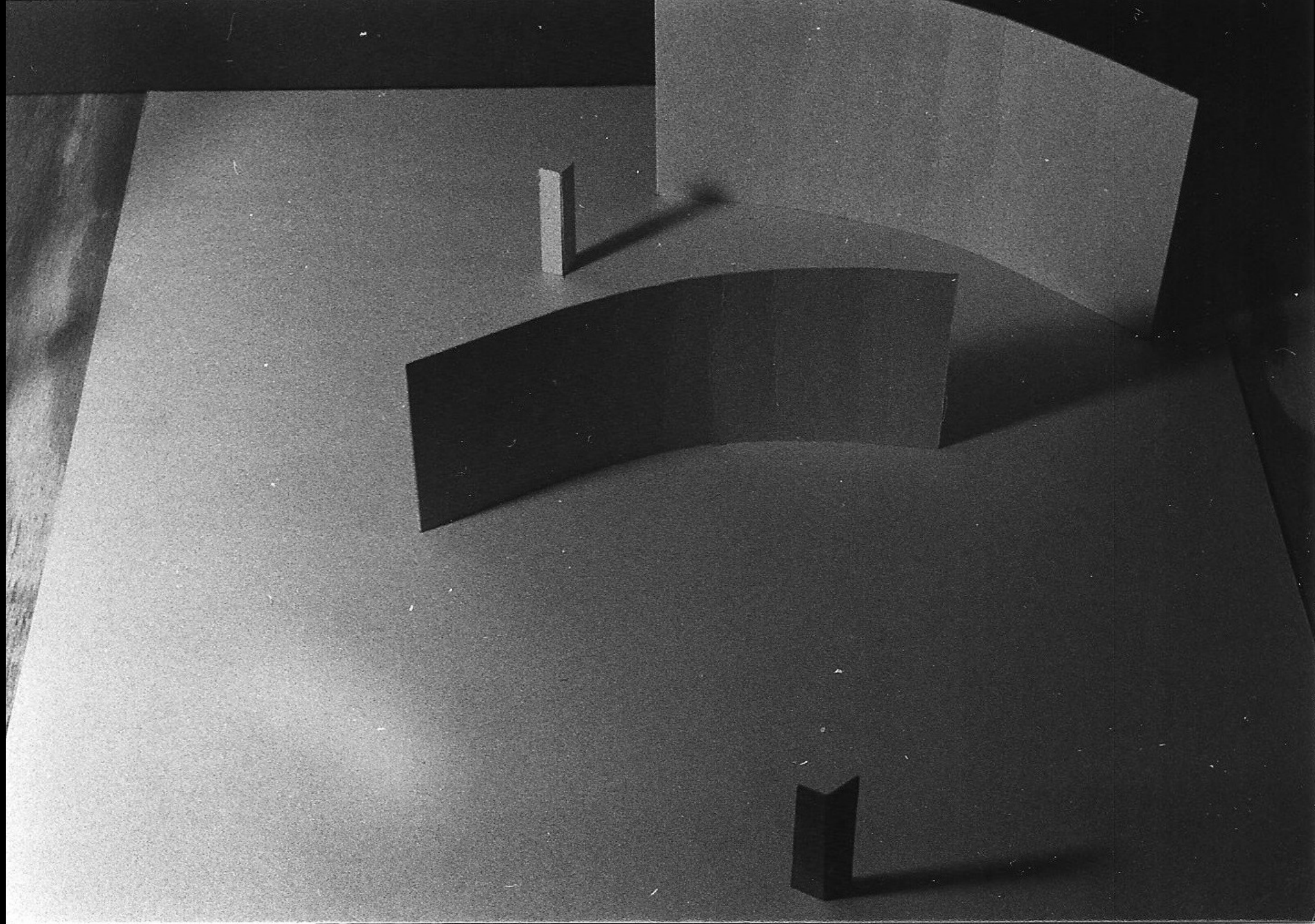


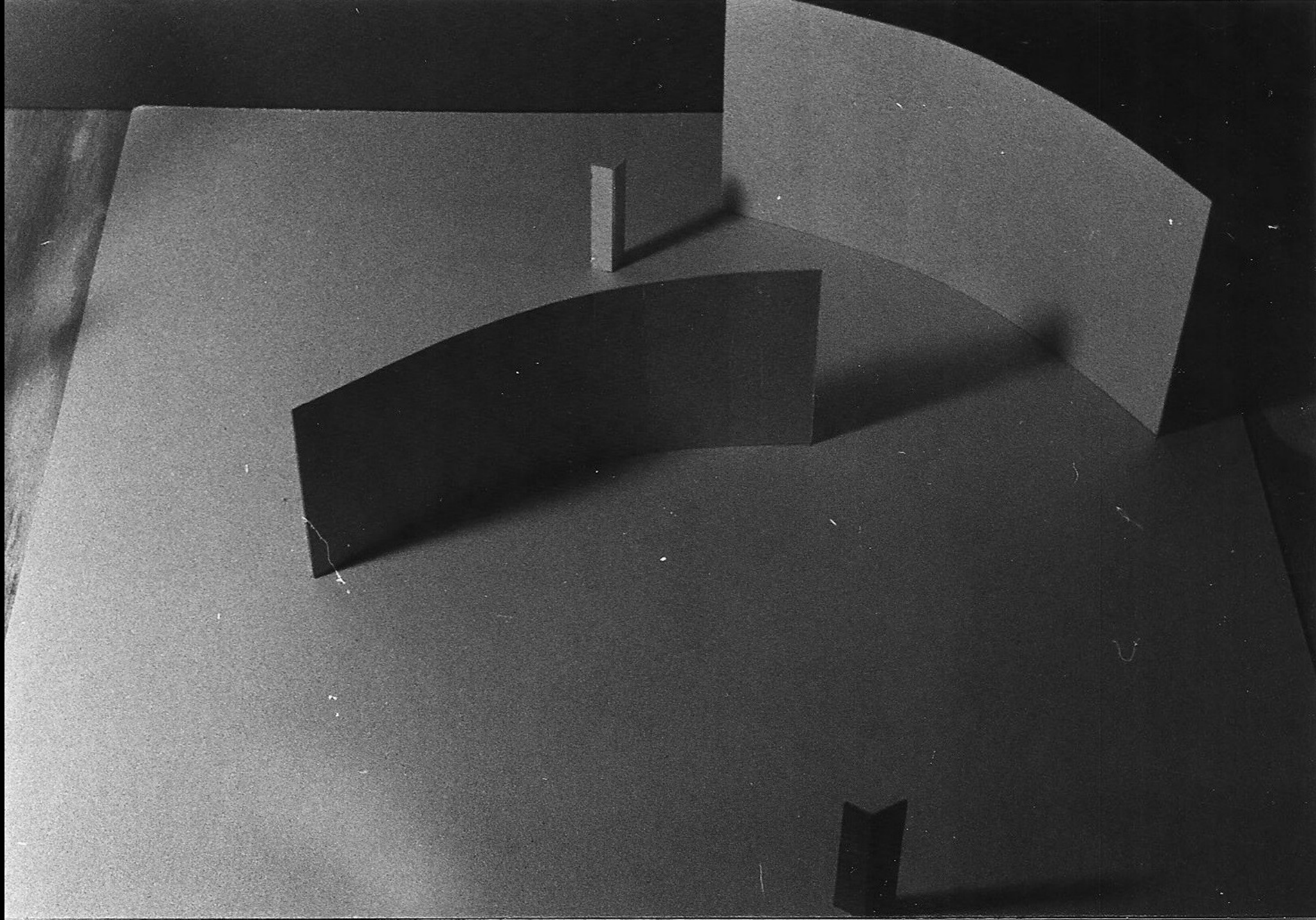






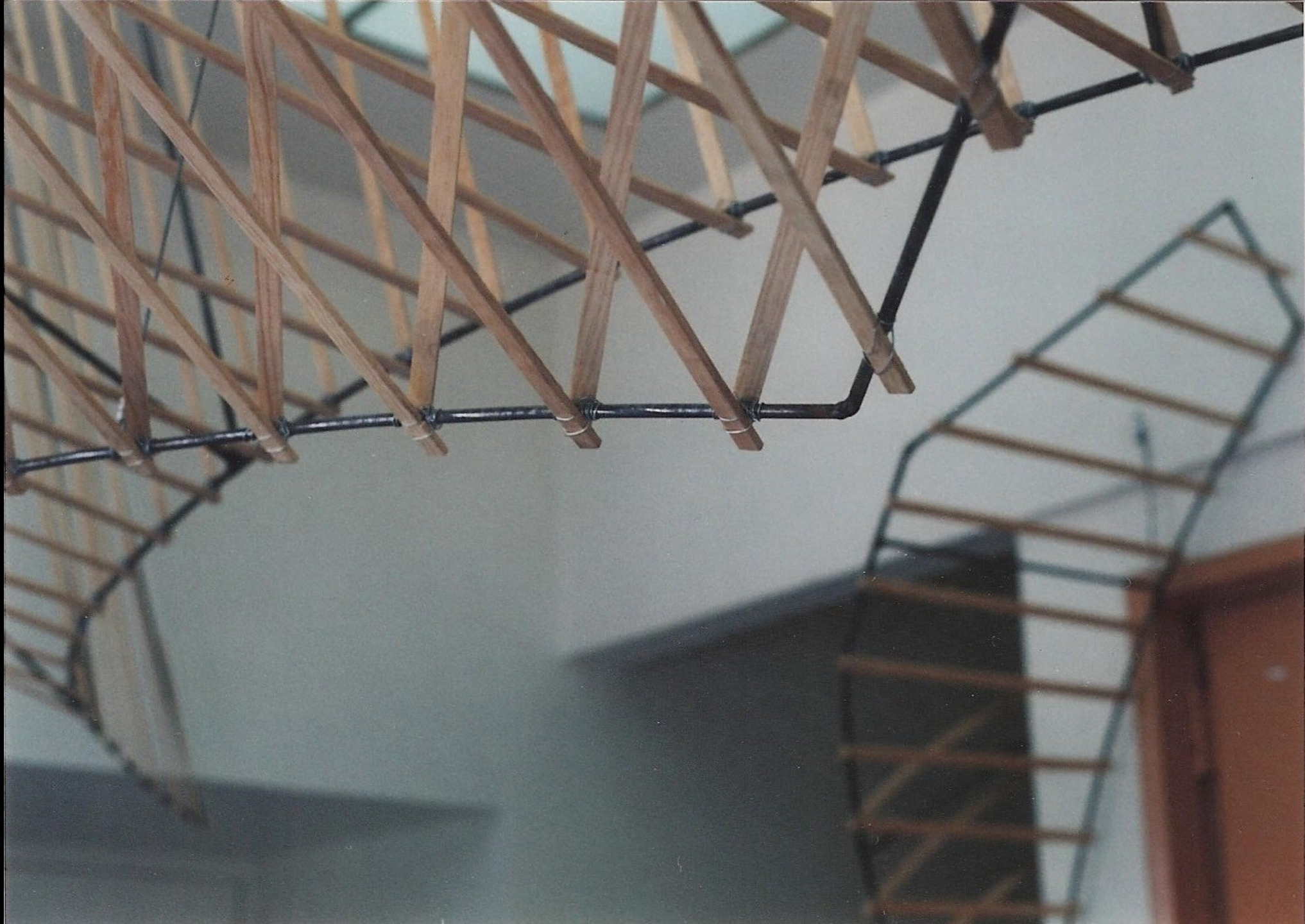












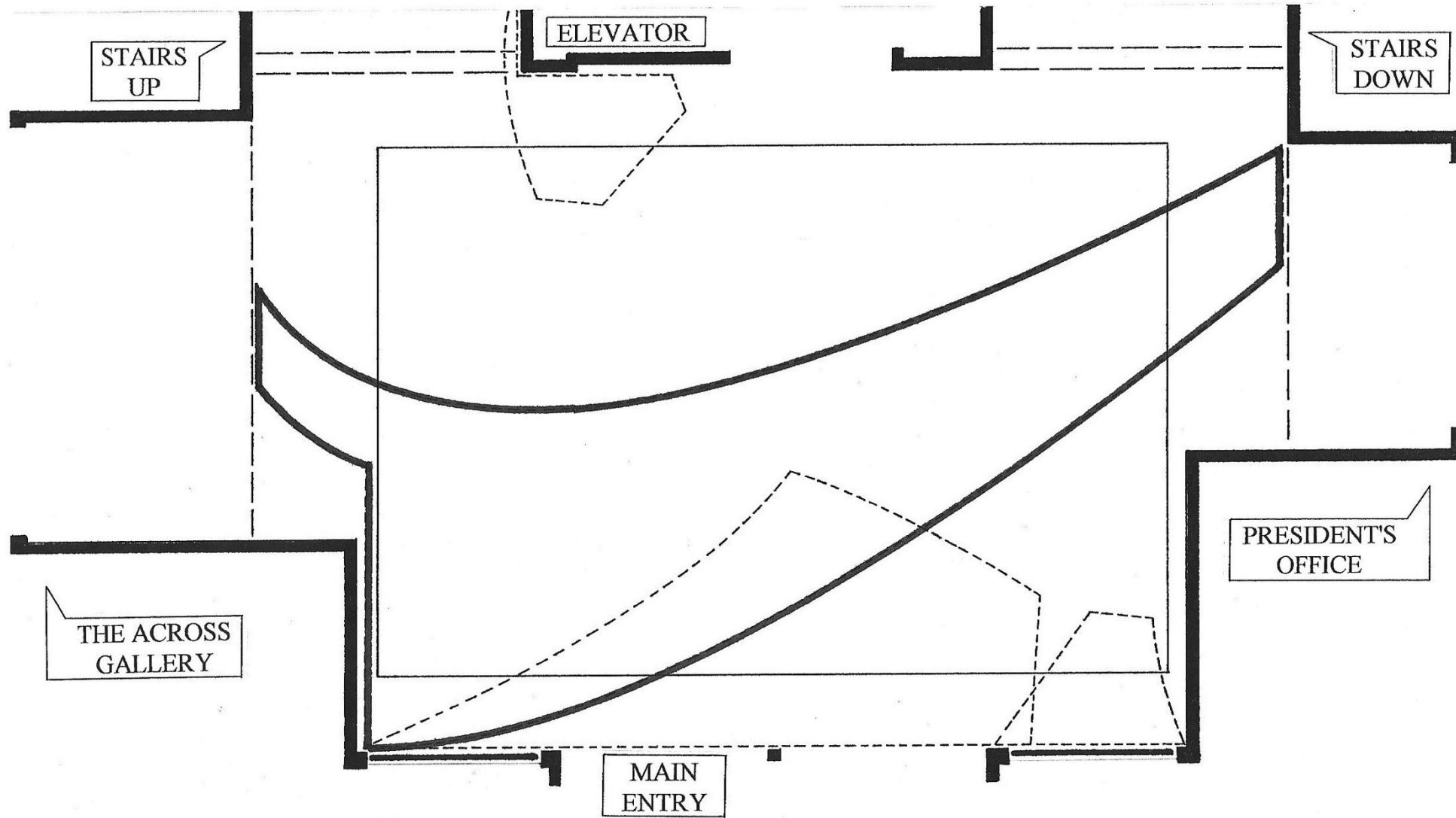


Figure 5: Form-A

Form-A consists of two surfaces, a concave vertical surface and a convex horizontal surface. The concave vertical surface defines an open space in front of the elevator, dividing the entry hall in half: a constricted front half and an open rear half. The convex horizontal surface follows the other surface's curved edge, constricting the front half of the entry hall by defining a new ceiling plane at seven feet off the floor. (For photographs, refer to Fig. 1 and 2)

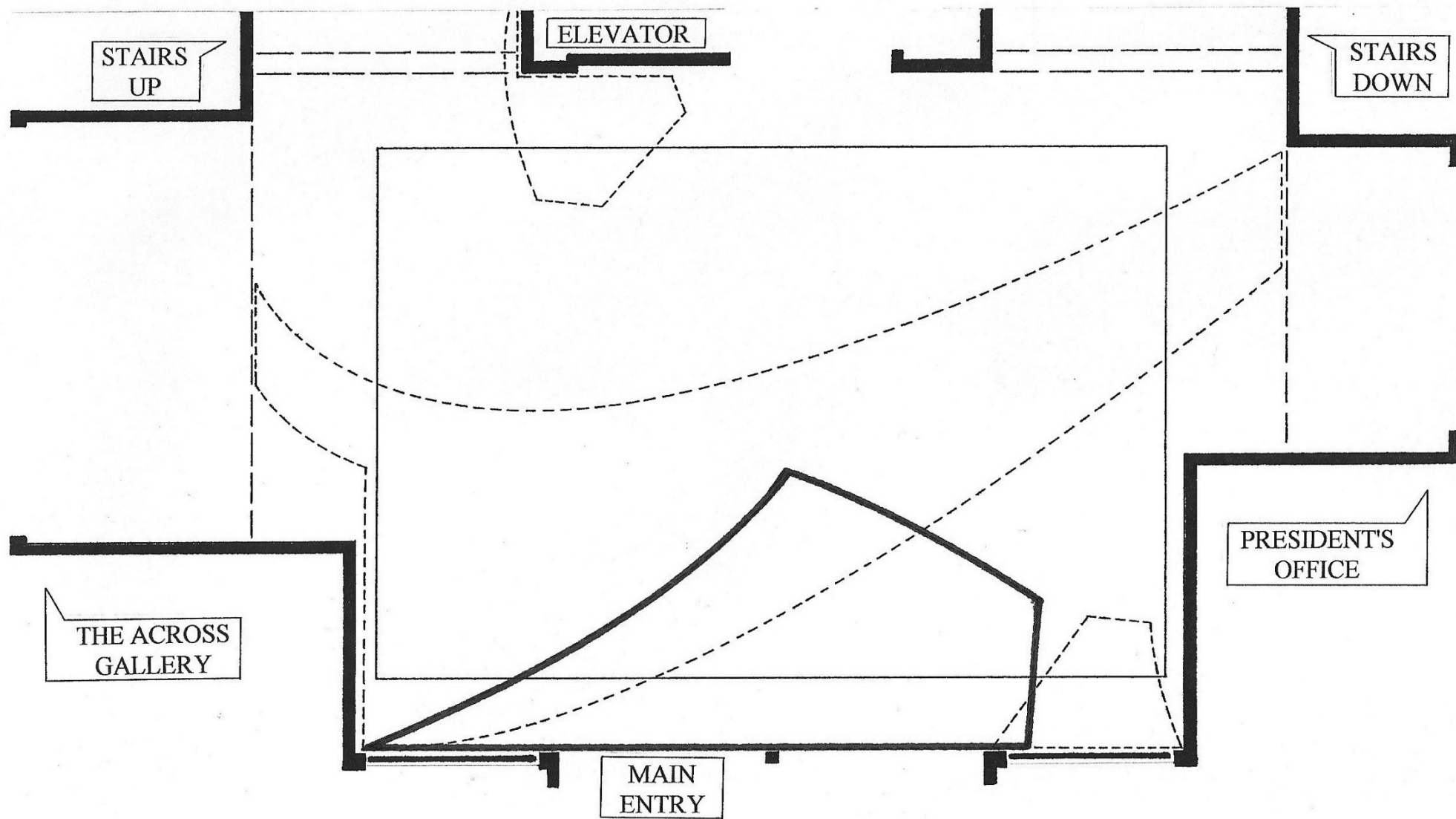


Figure 7: Form-C

Form-C consists of two convex horizontal surfaces. The first of the two surfaces, is oriented toward the floor plane, at seven feet off the floor plane. This surface has an inverted concave bend, defining a spatial envelope at the threshold of the main entry. The second surface follows the inverted bend mirroring the first surface, engaging the horizontal surface of Form-A. (For photographs, refer to Fig. 1, 2 and 4)

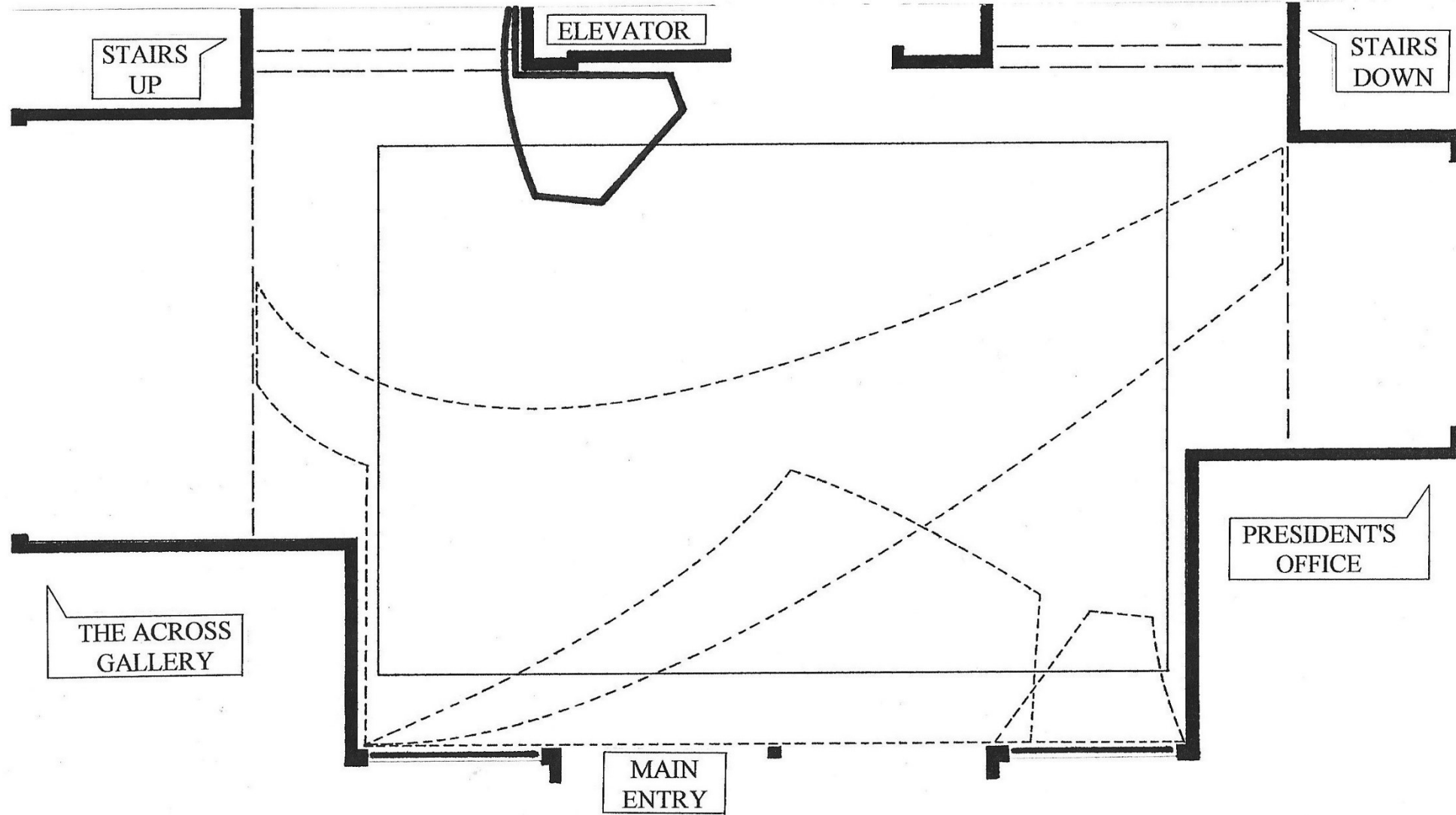


Figure 6: Form-B

Form-B consists of two surfaces, a concave vertical surface and a convex vertical surface. The convex vertical surface wraps the corner as it expands up the staircase, hinting of the gestured forms in the entry hall. The concave vertical surface defines a smaller envelope of space immediately in front of the elevator door. (For photographs, refer to Fig. 1 and 4)

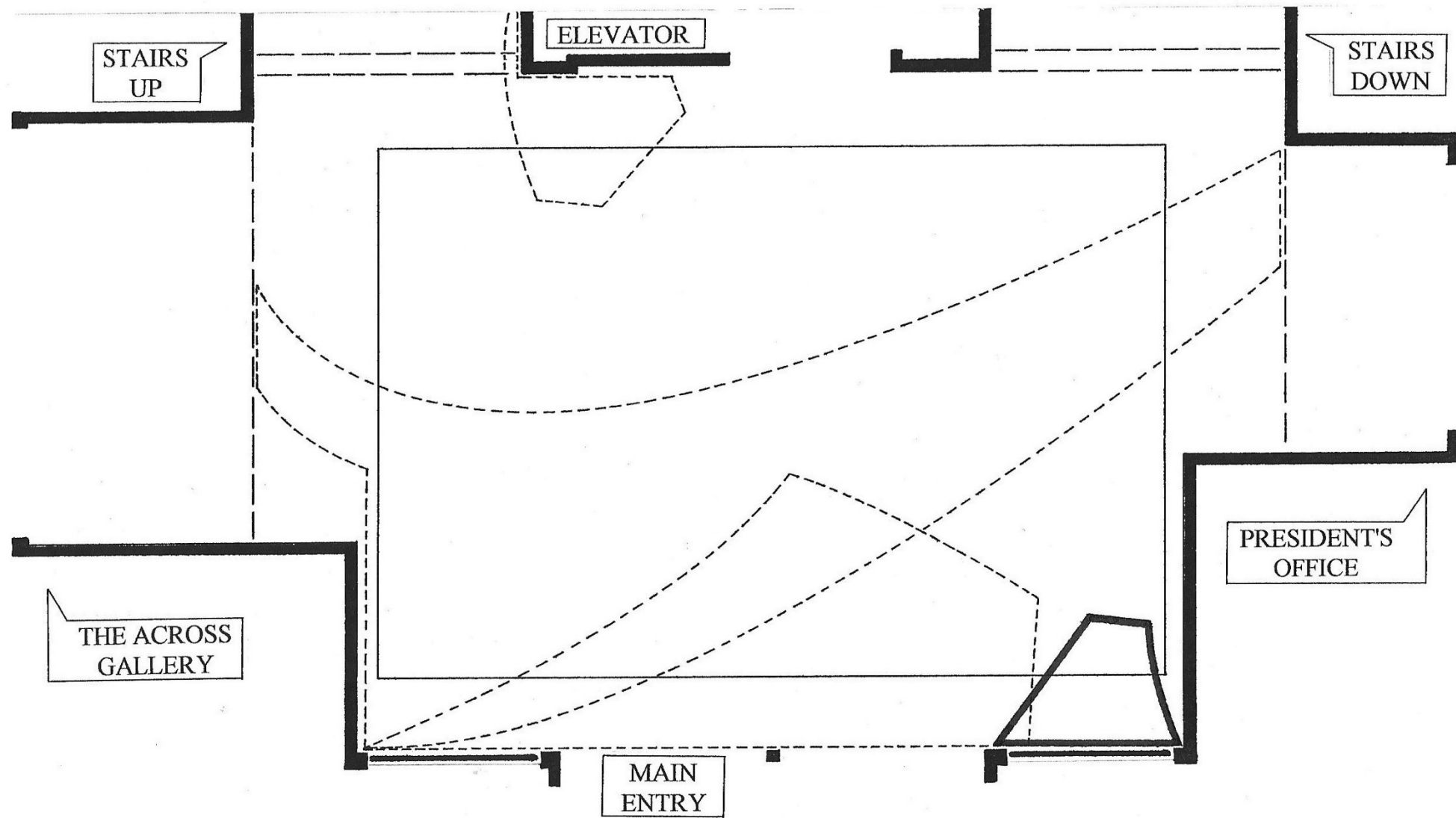


Figure 8: Form-D

Form-D consists of a single folded surface, extending vertically from the floor plane up to a point at six feet off the floor. This dimension gives the form a human scale, engaging the occupants of the entry hall. The fold in the surface creates two concave halves, one defining a lower perimeter to the spatial envelope activated by the lower surface of Form-C. The other half engages the floor plane.

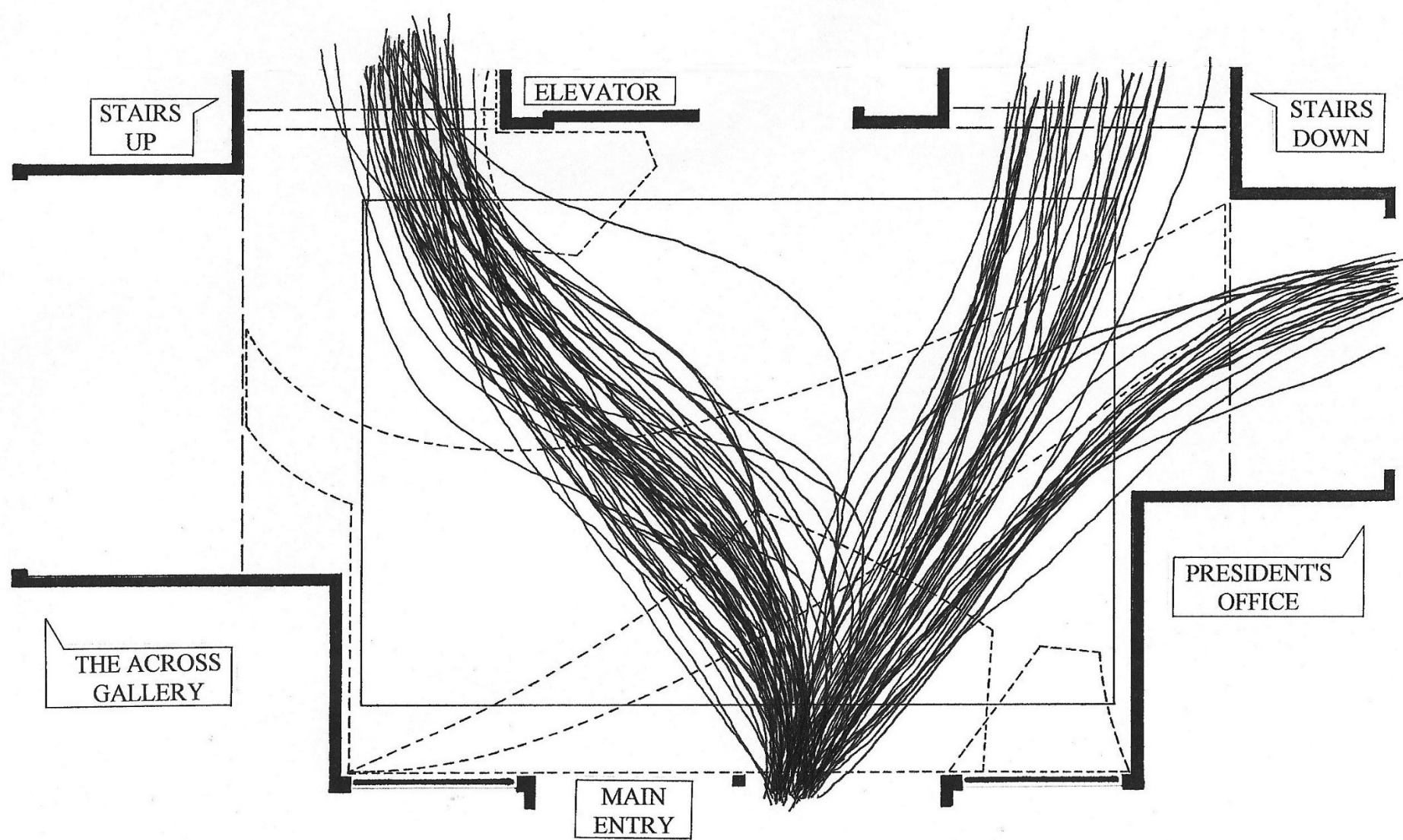


Figure 10: Entry Patterns through Main Door (Installed Condition)

This is a composite of all of the individual paths (related to three of the twenty-seven different movement patterns) made by the occupants entering the entry hall, during the time period following the installation of the four gestured forms. The three different movement patterns are 'Entry in and up the staircase', 'Entry in and down the staircase', and 'Entry in and into the President's Office'; all used to study the entry hall's spatial conditions.







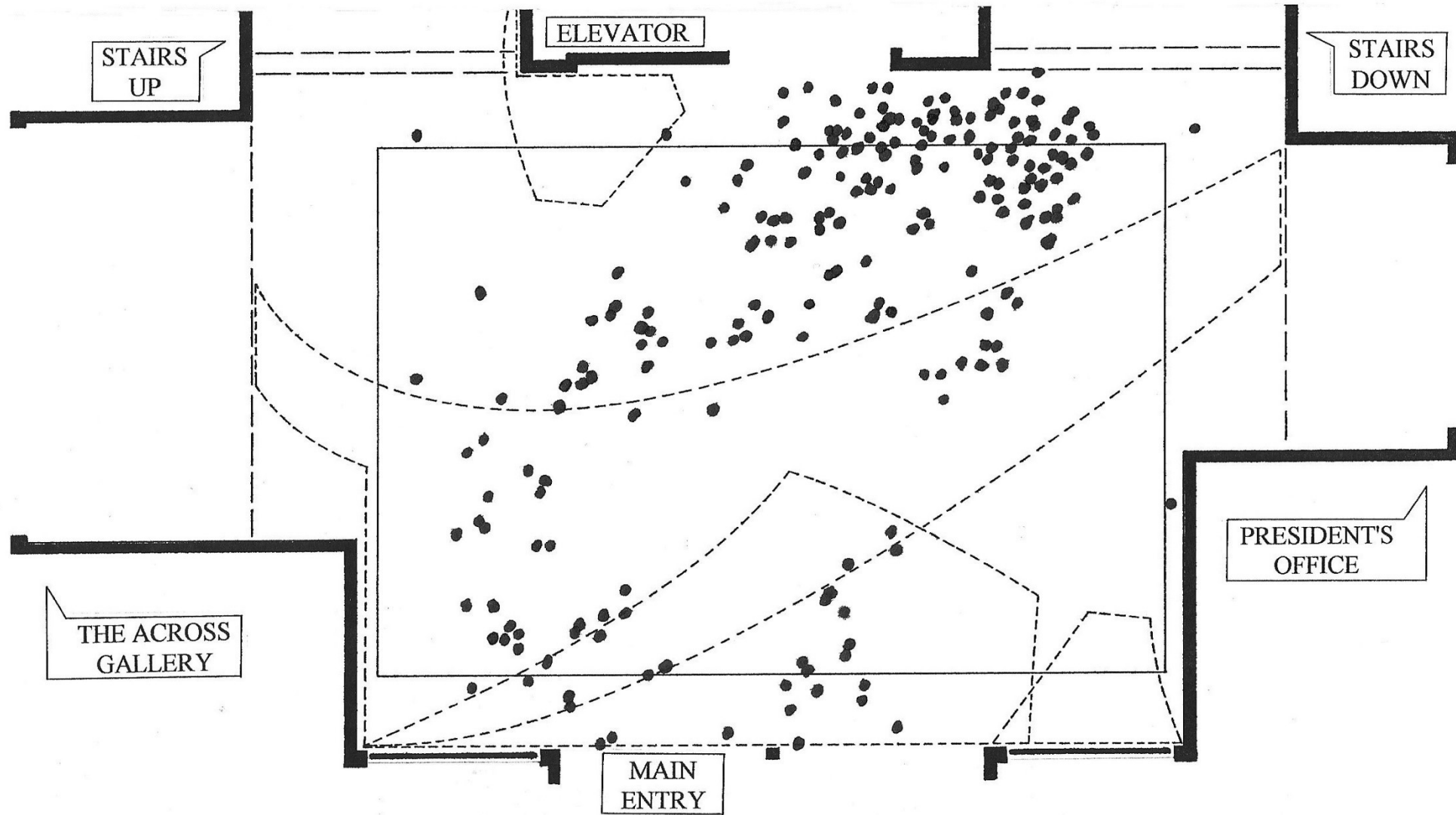
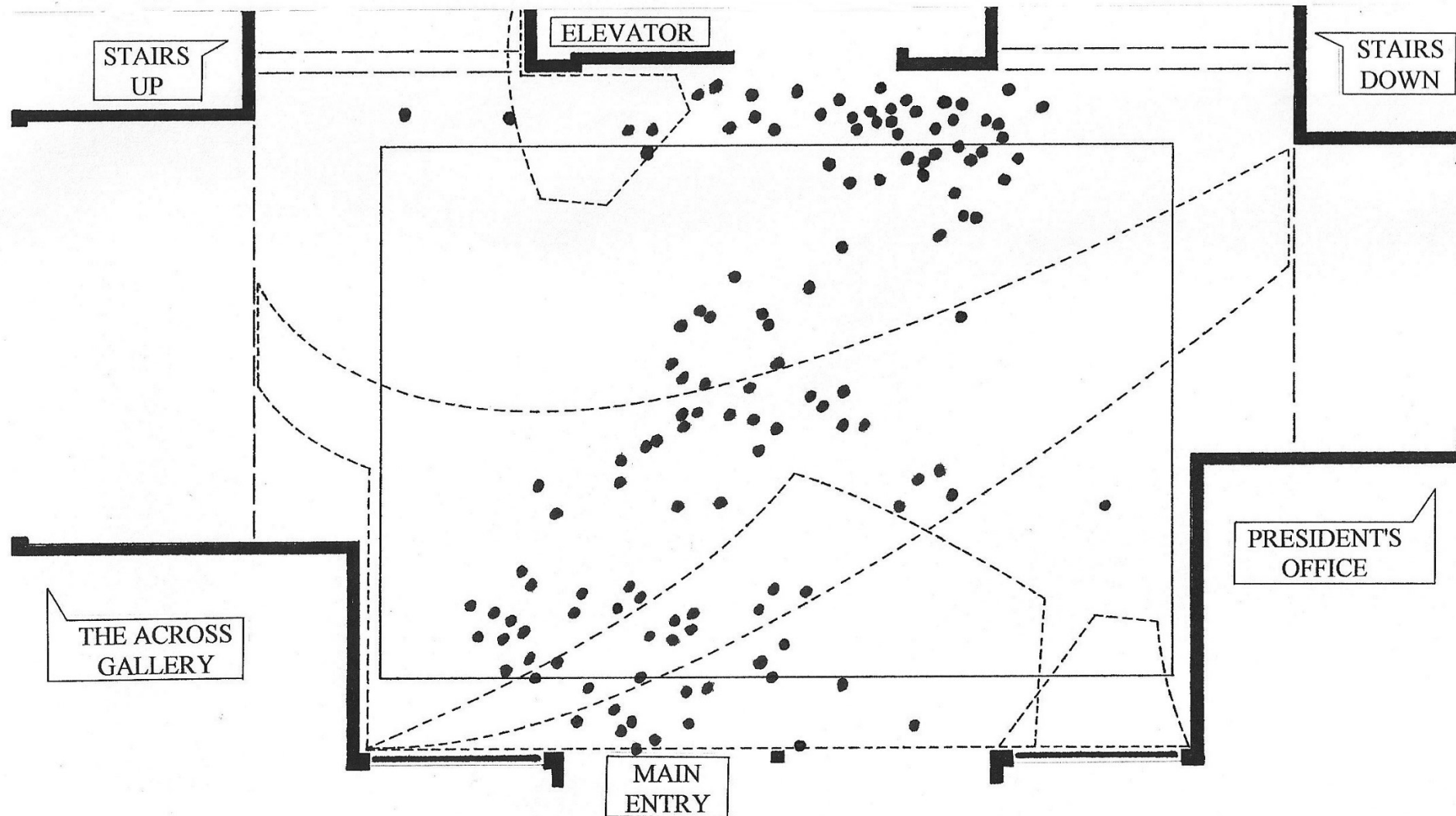


Figure 19: Stationary Points Waiting for Elevator (Existing Condition)

This is a composite of all of the individual points (related to the stationary pattern: Waiting for Elevator) made by the occupants standing in the entry hall, during the time period before the installation of the four gestured forms. The movement pattern 'Waiting for Elevator' is used to study the entry hall's spatial conditions of envelopes, perimeters, and relationships.



**Figure 21: Stationary Points Waiting for Elevator (Installed Condition)**

**This is a composite of all of the individual points (related to the stationary pattern: Waiting for Elevator) made by the occupants standing in the entry hall, during the time period following the installation of the four gestured forms. The movement pattern 'Waiting for Elevator' is used to study the entry hall's spatial conditions of envelopes, perimeters, and relationships.**

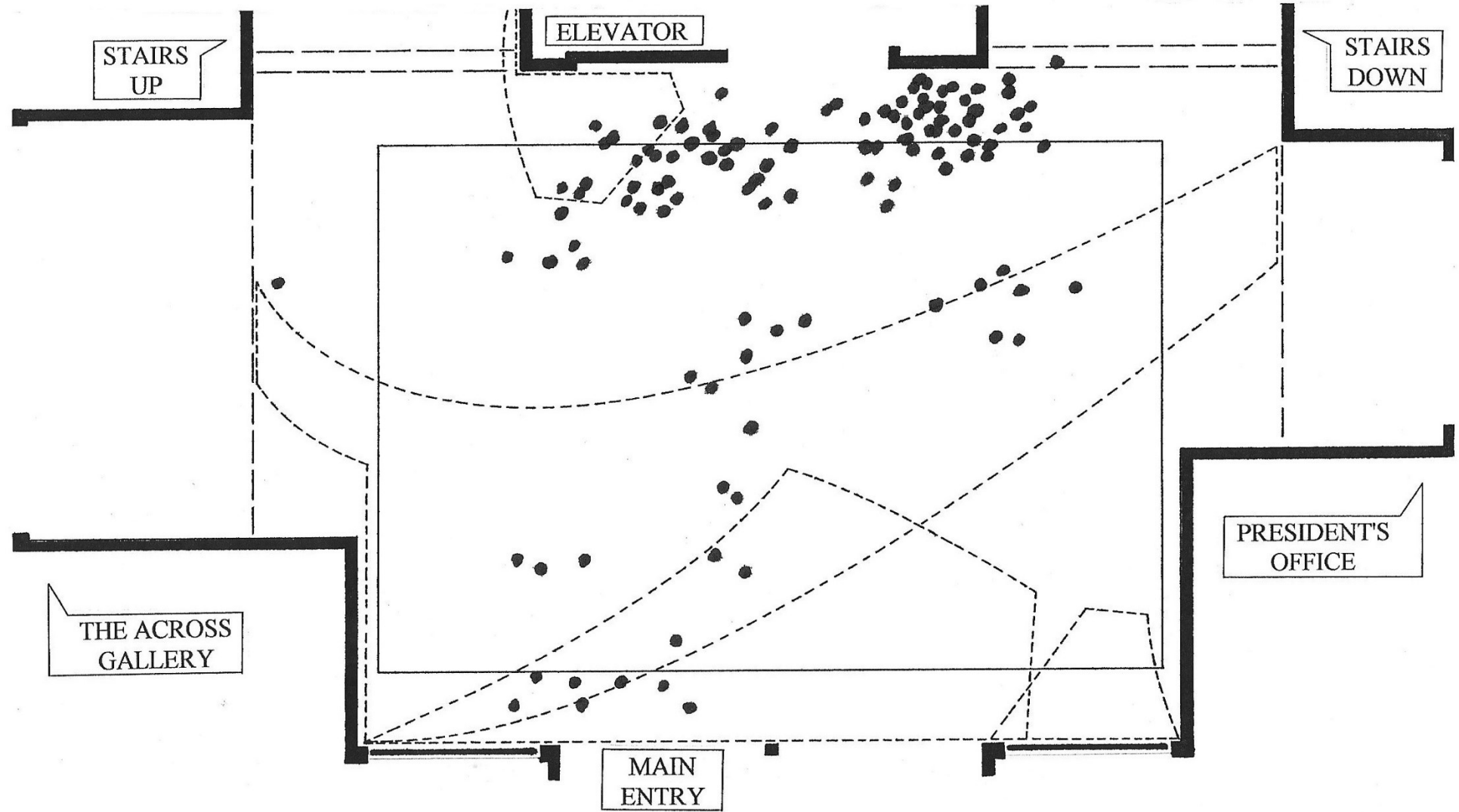


Figure 23: Stationary Points Waiting for Elevator (Adjusted Condition)

This is a composite of all of the individual points (related to the stationary pattern: Waiting for Elevator) made by the occupants standing in the entry hall, during the time period following the adjustment of two of the four gestured forms. The movement pattern 'Waiting for Elevator' is used to study the entry hall's spatial conditions of envelopes, perimeters, and relationships.

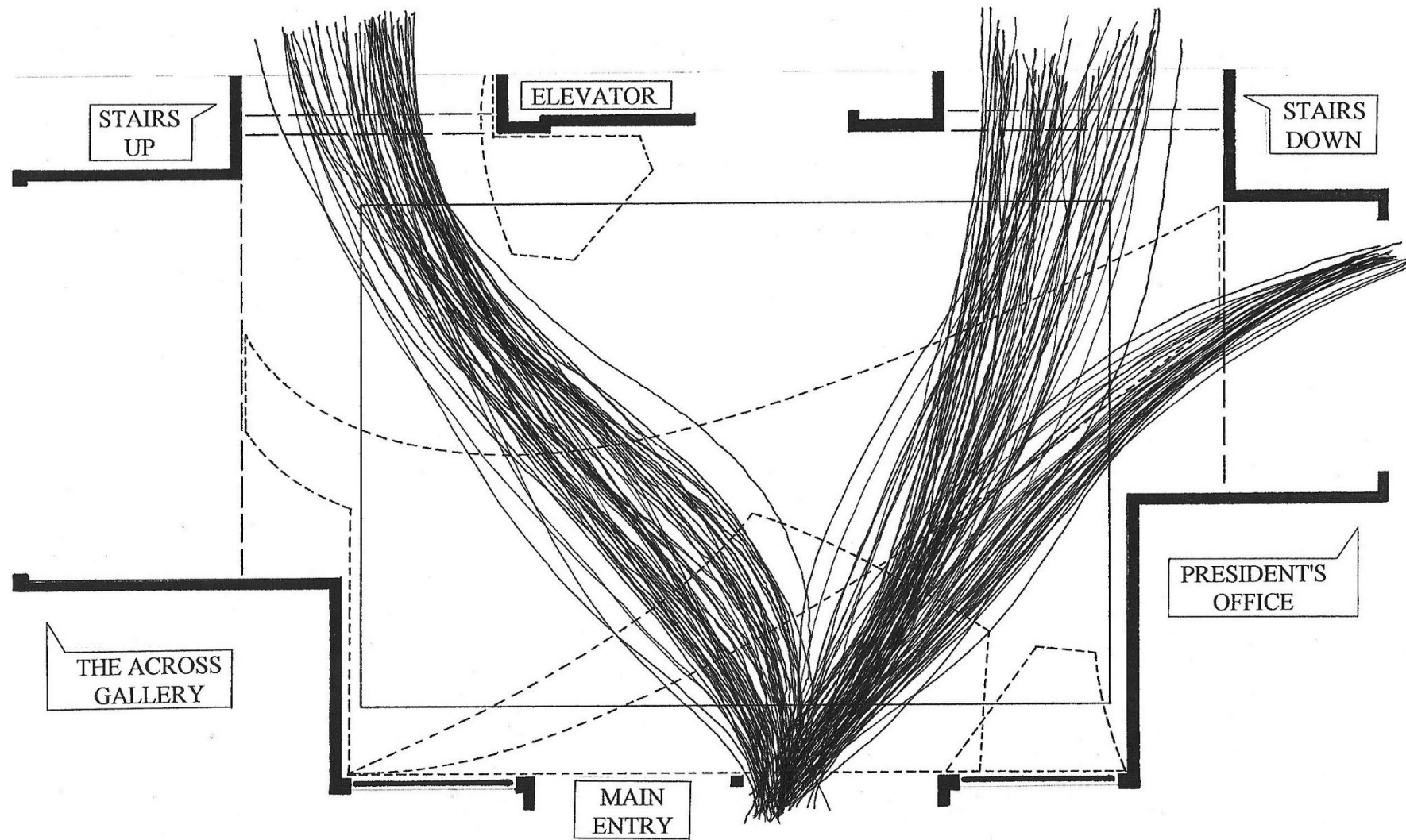


Figure 11: Entry Patterns through Main Door (Adjusted Condition)

This is a composite of all of the individual paths (related to three of the twenty-seven different movement patterns) made by the occupants entering the entry hall, during the time period following the adjustment of two of the four gestured forms. The three different movement patterns are 'Entry in and up the staircase', 'Entry in and down the staircase', and 'Entry in and into the President's Office'; all used to study the entry hall's spatial conditions.

















THE MORE YOU CONNECT, THE LESS YOU CONNECT  
A reminder to 'Put People First' from

