

Z

hdk

Zürcher Hochschule der Künste
Bachelor of Arts in Design

Designing Object Experience

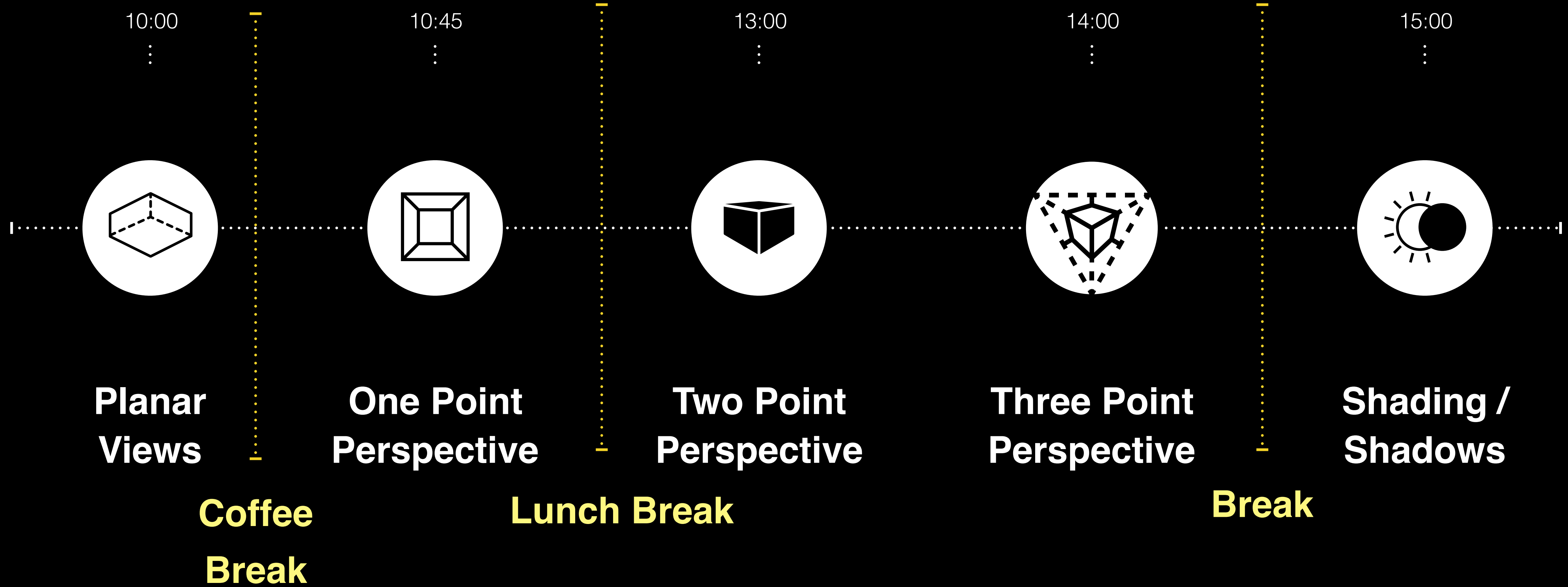
Sketching I

Object Experience | 27th of September 2022

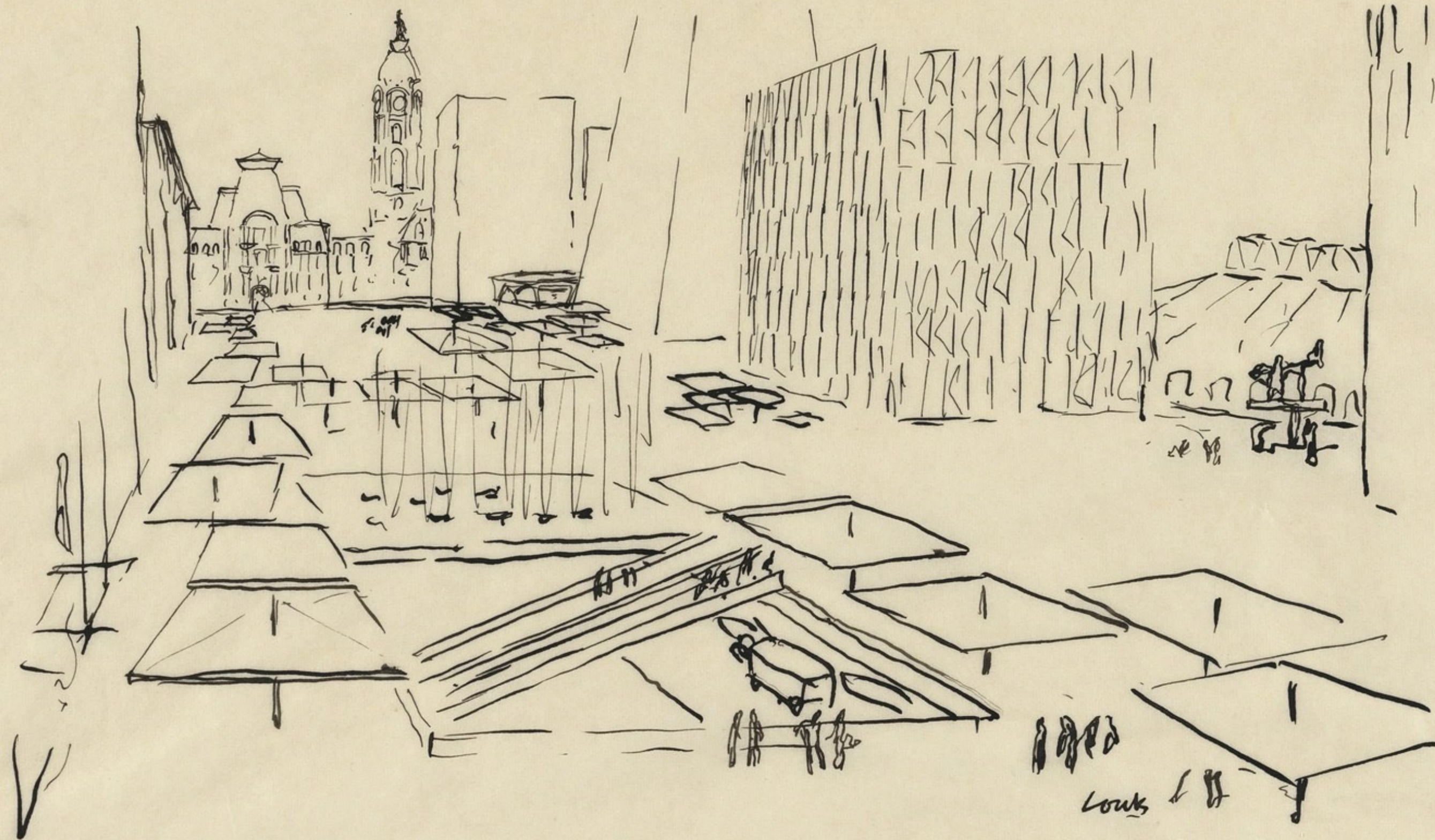
lecturer
Rasa Weber

Overview

Today's Schedule



**WHAT IS A GOOD
SKETCH FOR YOU?**



Louis Kahn, 1901–1974, Sketch MOMA

There is no value in trying to imitate exactly. Photographs will serve you the best of all, if that's your aim. We should not imitate when your intention is to create – to improvise.... I try in all my sketching not to be entirely subservient to my subject, but I have respect for it, and regard it as something tangible – alive – from which to extract my feelings.

Louis I. Kahn, “The Value and Aim in Sketching”

SKETCHING

THE BEGINNING

Sketching Practice

The first stroke - the fear of starting



Film by: Scene from 'Visit to Picasso', by Paul Haesaert, 1949.

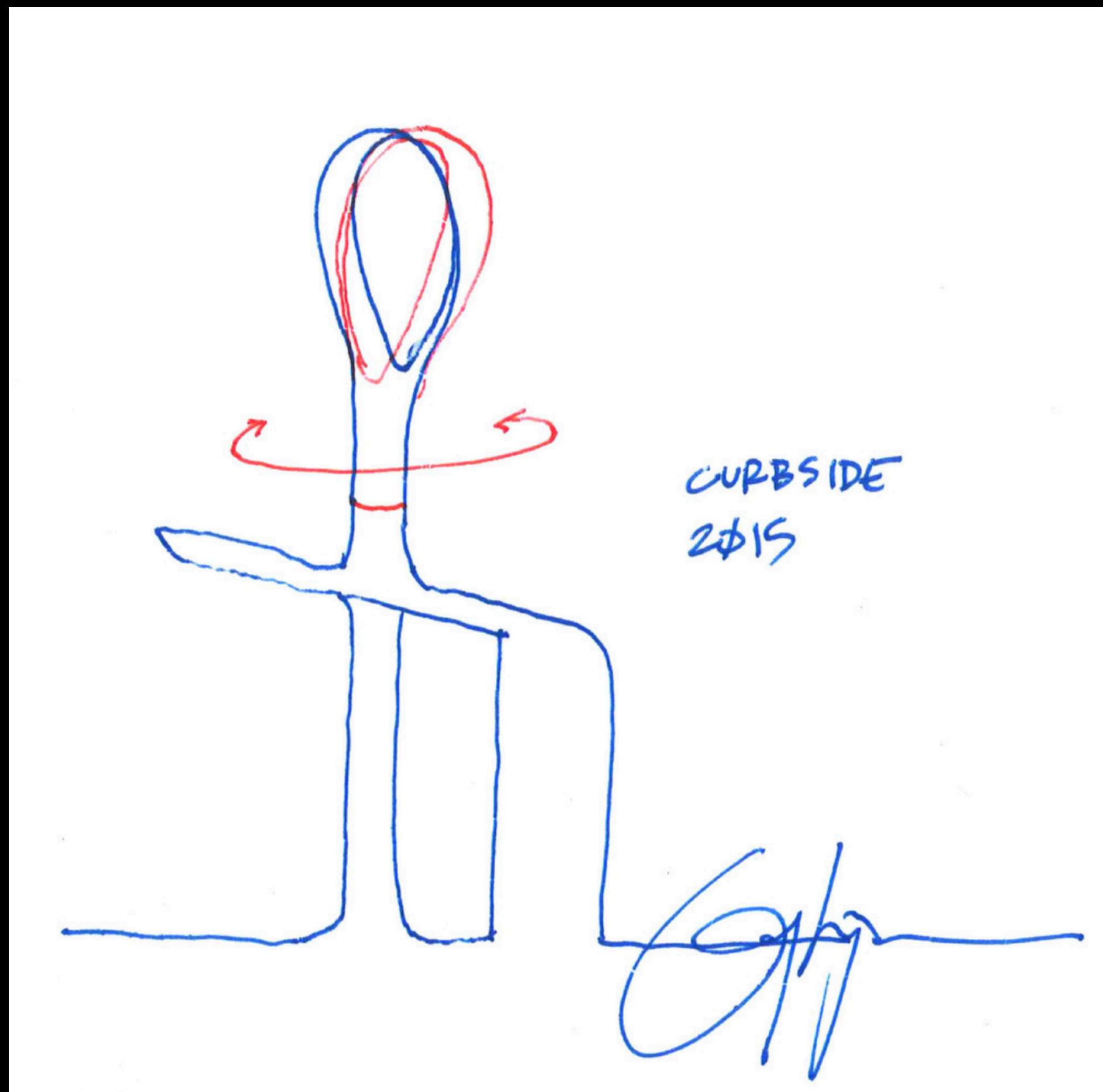
Sketching Practice

The first stroke - the fear of starting



2.
DON'T
BE
SCARED!

Sketching Practice
Dreaming - First ideas

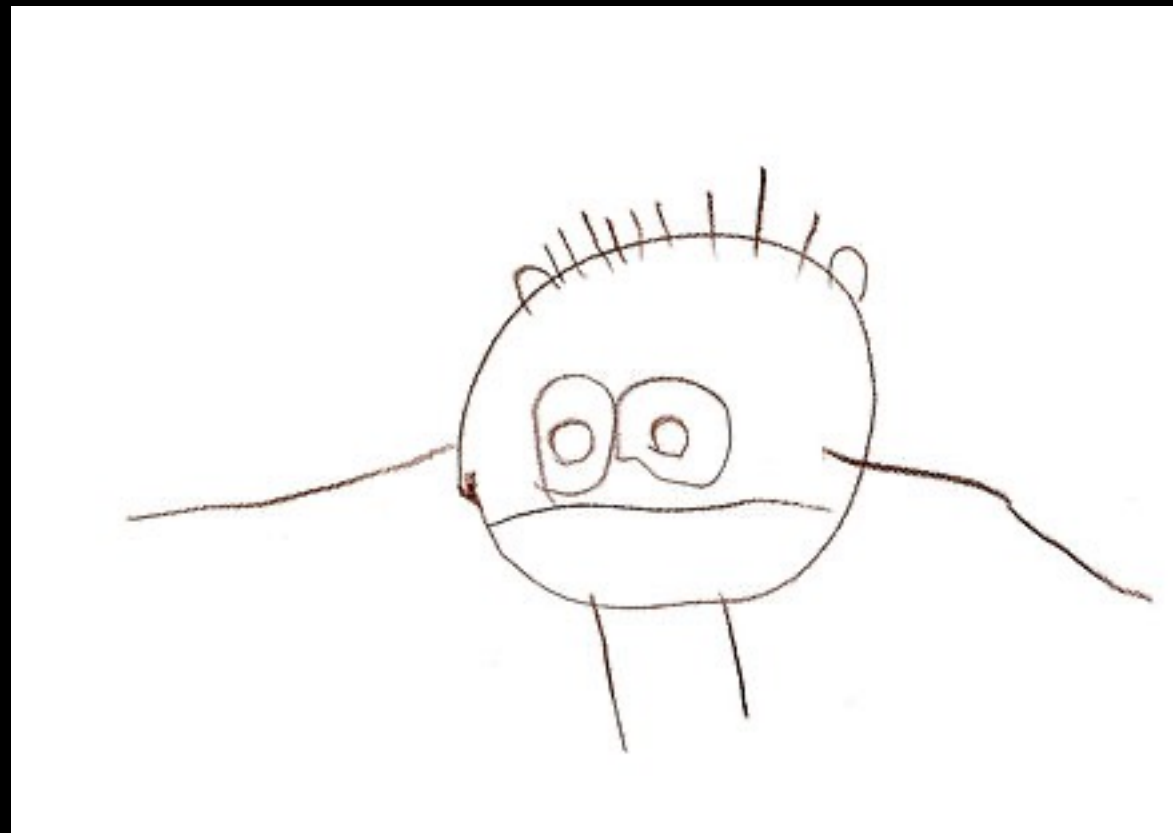


Sketch by: Greg Lynn on Napkin

Sketch by: Frank Gehry, Guggenheim Bilbao, 1993

Sketching Practice

Sketching and Perception



Child Sketch "Kopffüßler"



Child Sketch "Vorschemaphase"



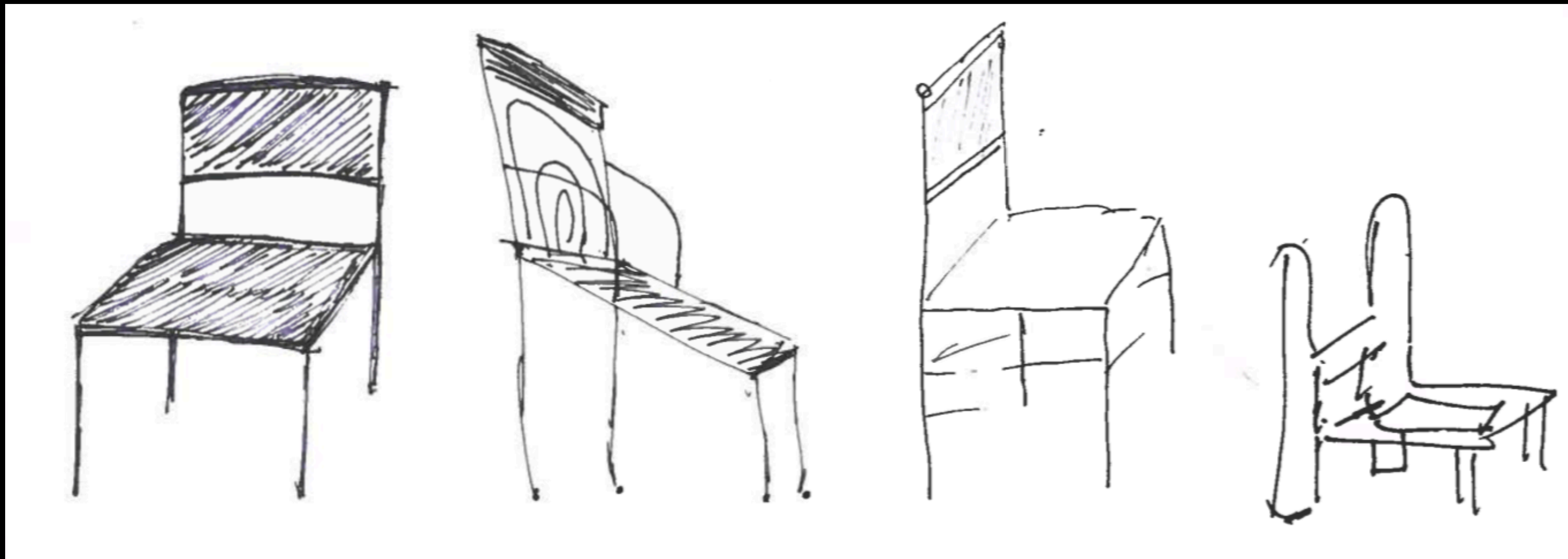
Child Sketch "Werkreife"

Sketching Practice

Sketching and Perception

3.

SKETCH WHAT YOU SEE!

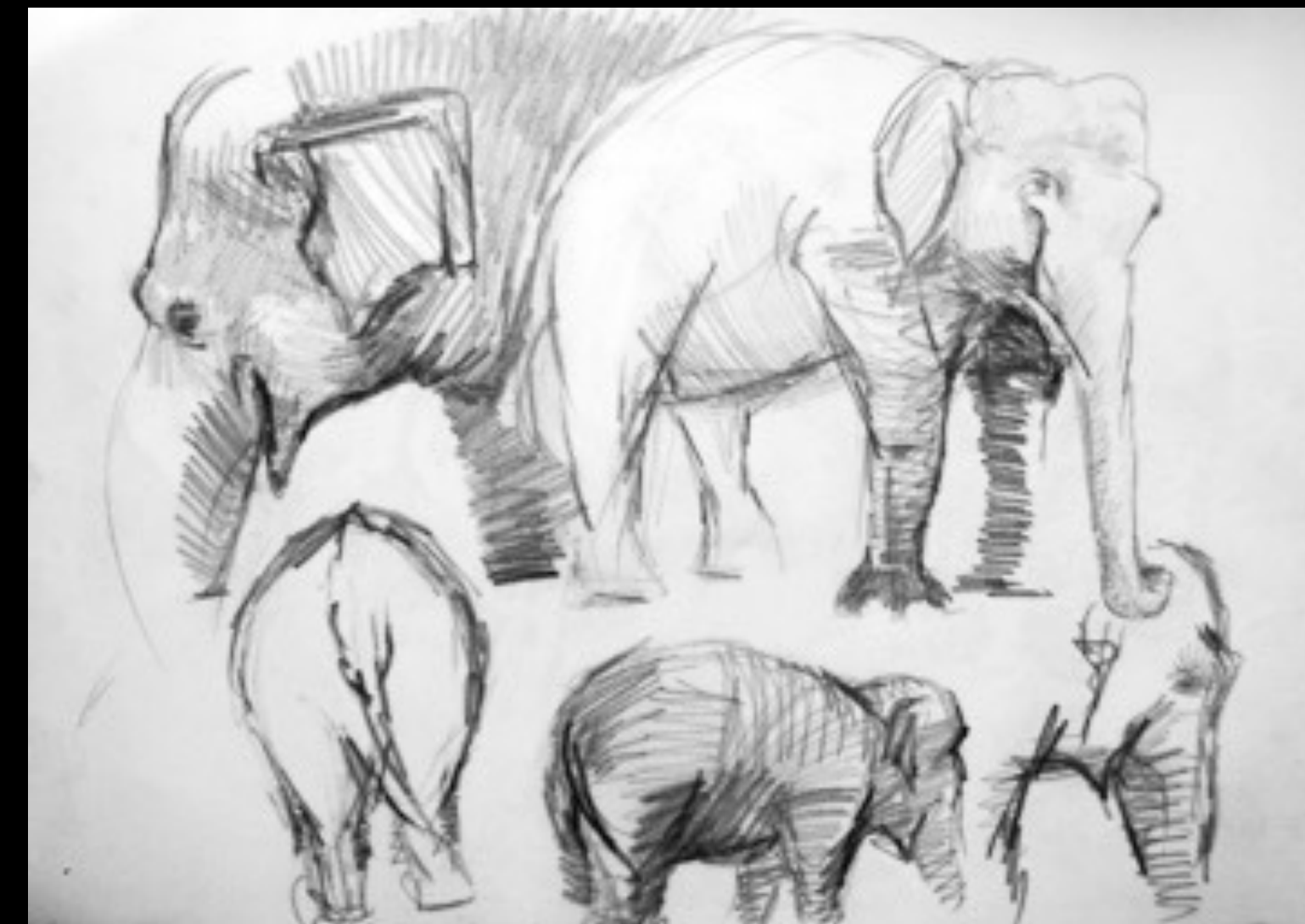


Drawing of chairs by non-designers of different age and gender

Sketching Practice
Generate variations



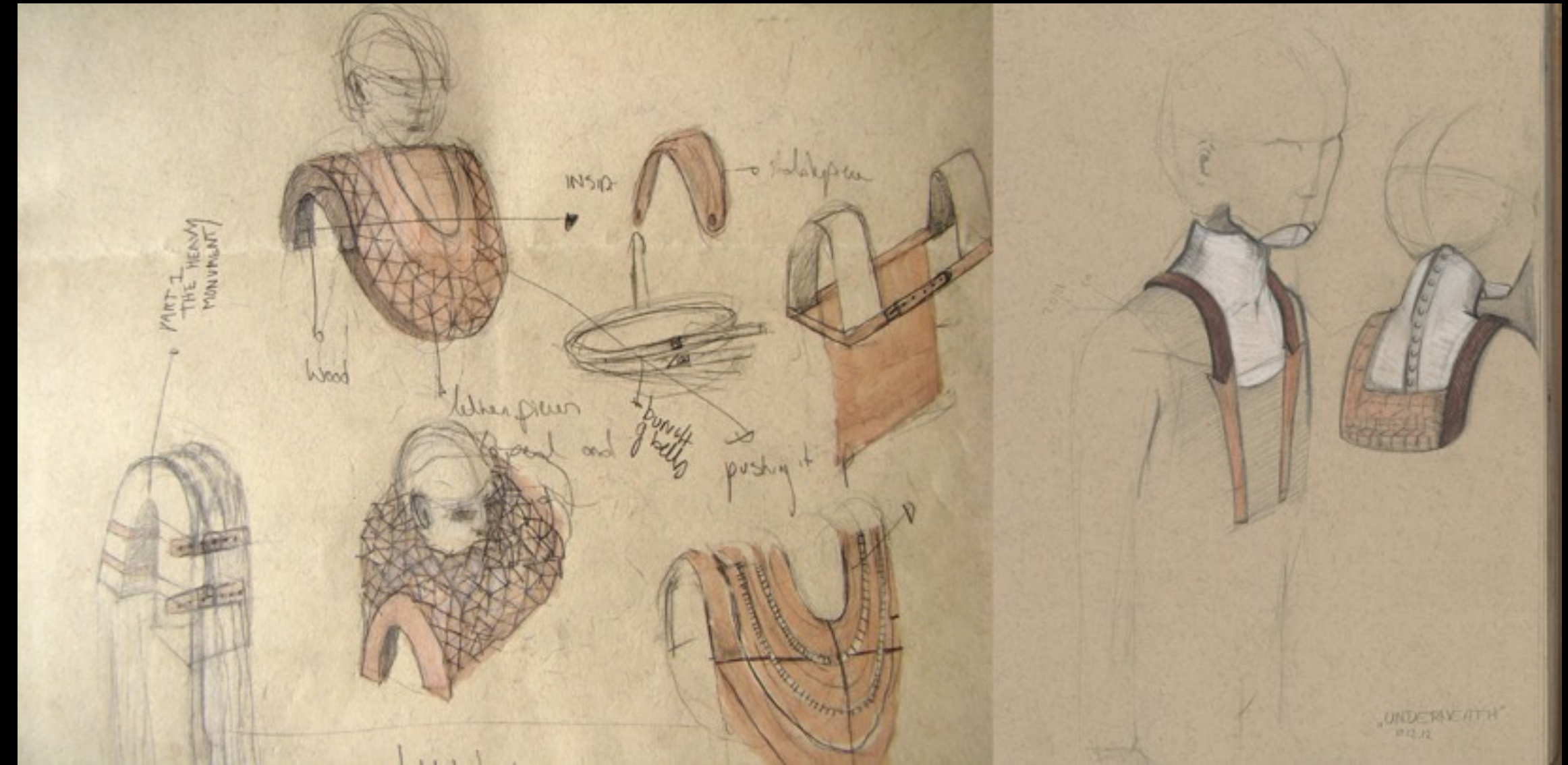
Sketches by Robert Bronwasser, SMOOL



4.
NEVER
EVER
STOP!

Sketching Practice

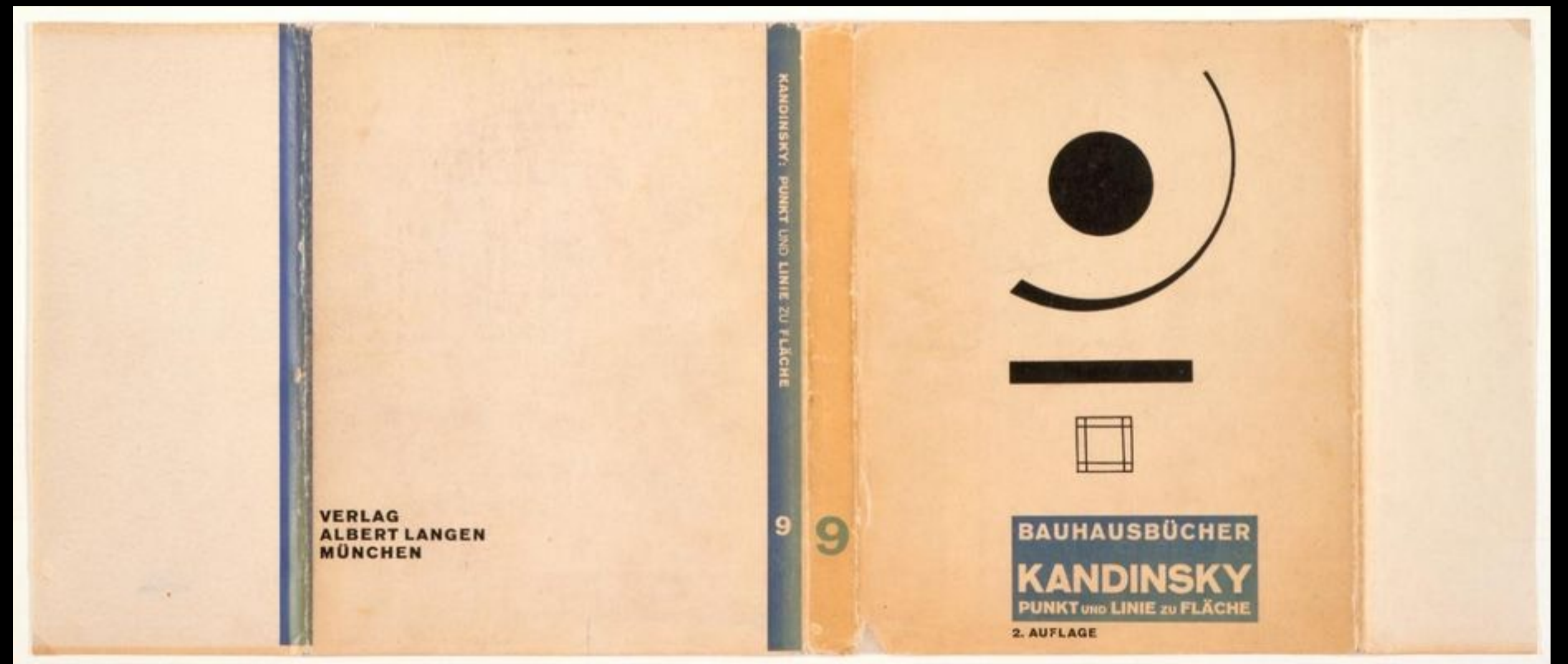
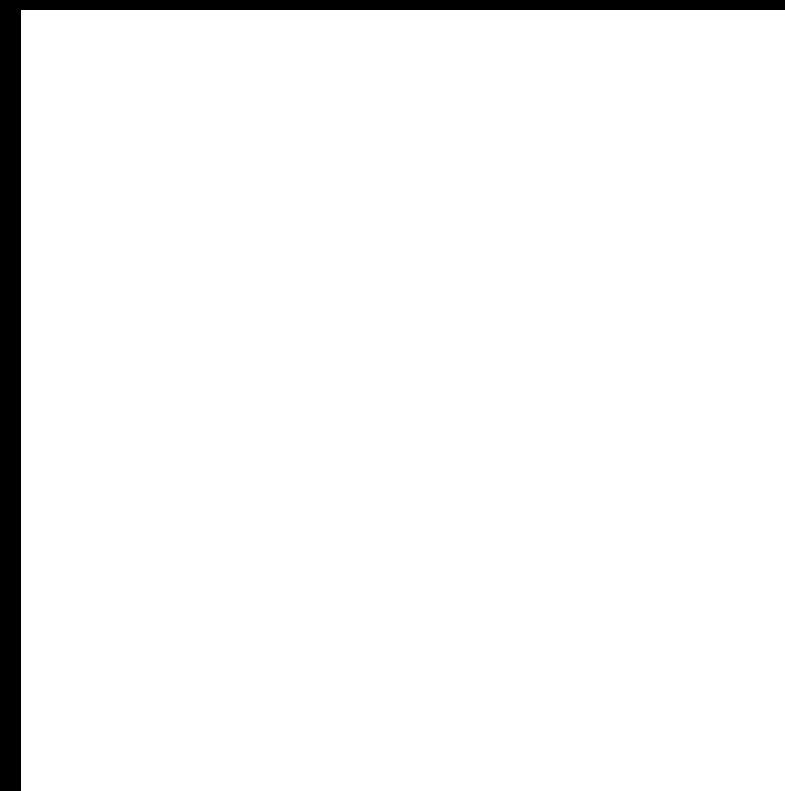
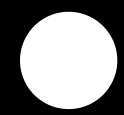
The development



SKETCHING

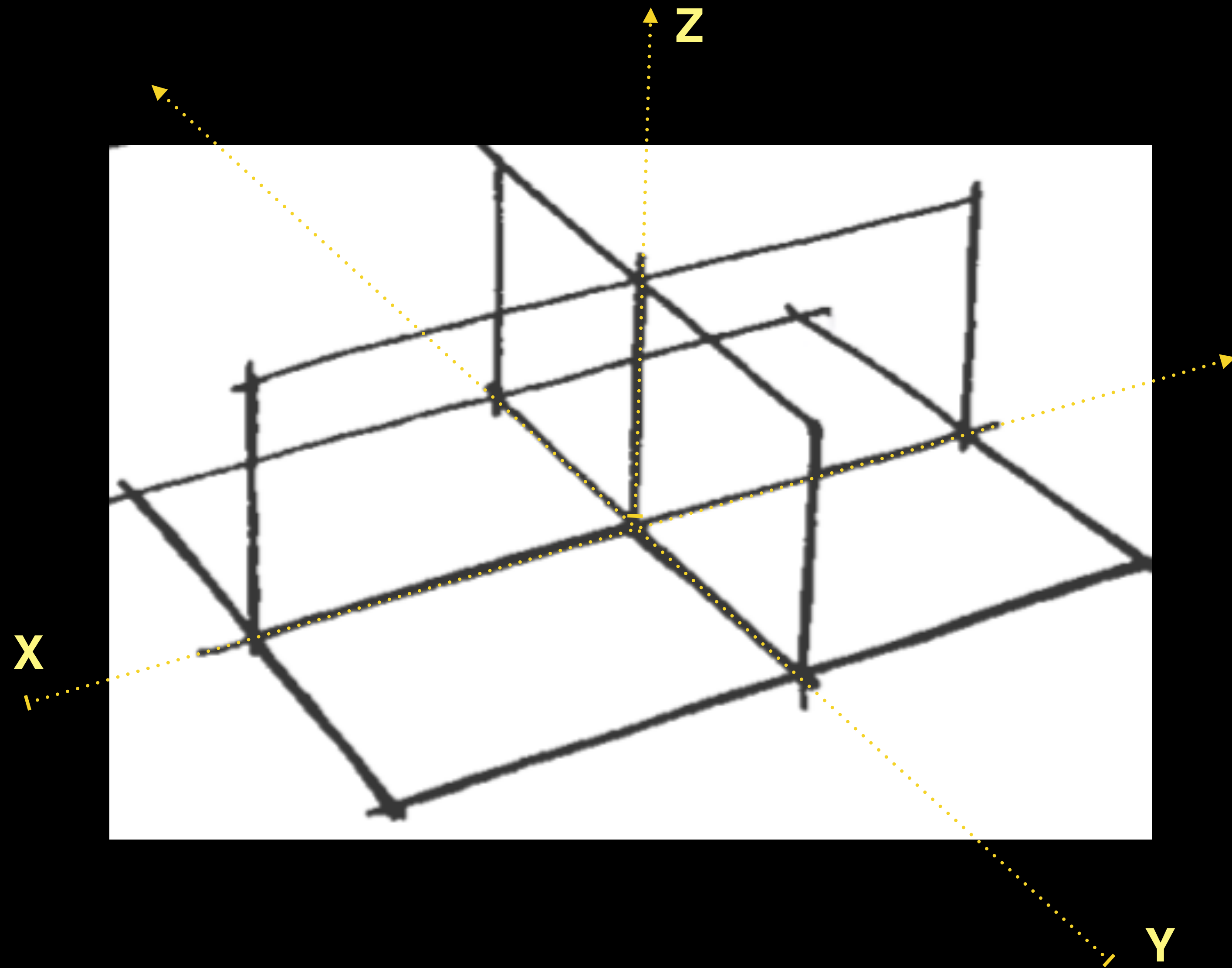
THE BASICS

THE BASICS



Bauhausbücher – Band 9. Punkt und Linie zu Fläche, Umschlaggestaltung: László Moholy-Nagy, 1926/28.

Sketching Form Space



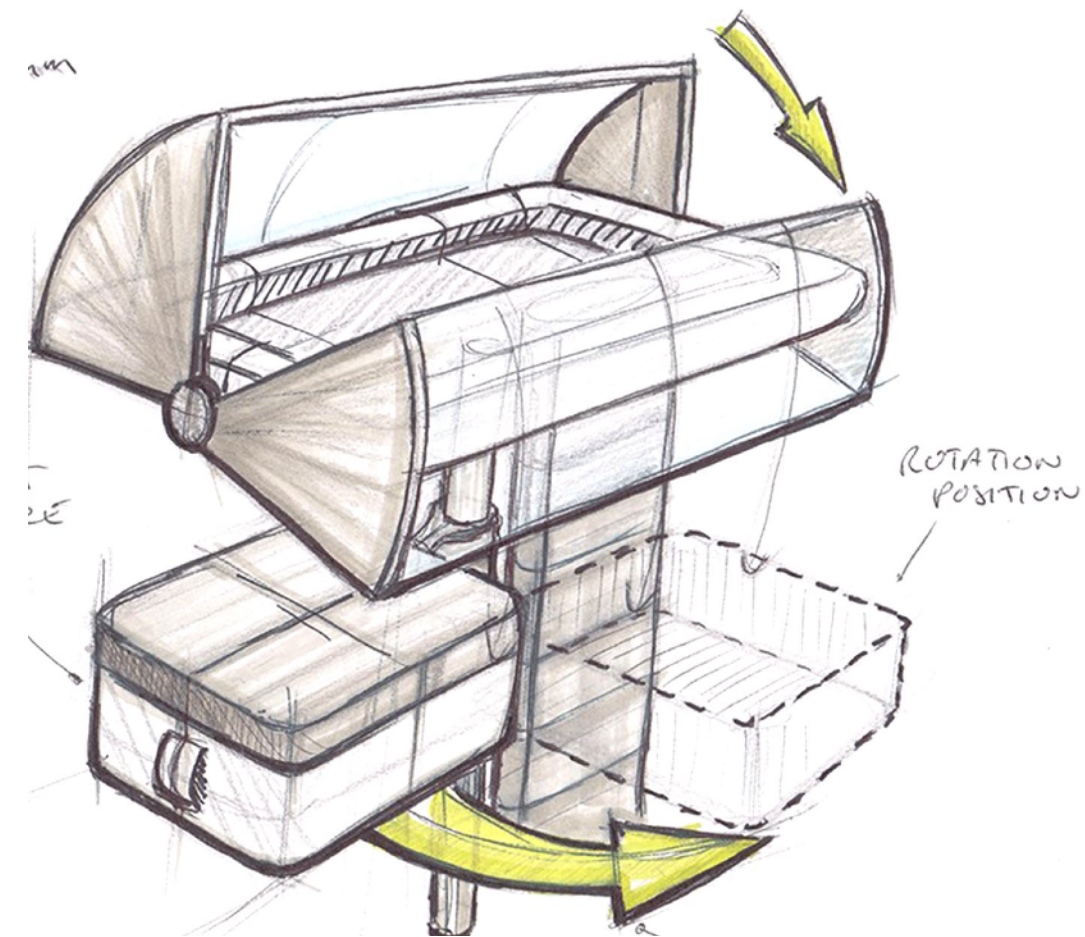
Sketching Form

HOW TO DO A STROKE?



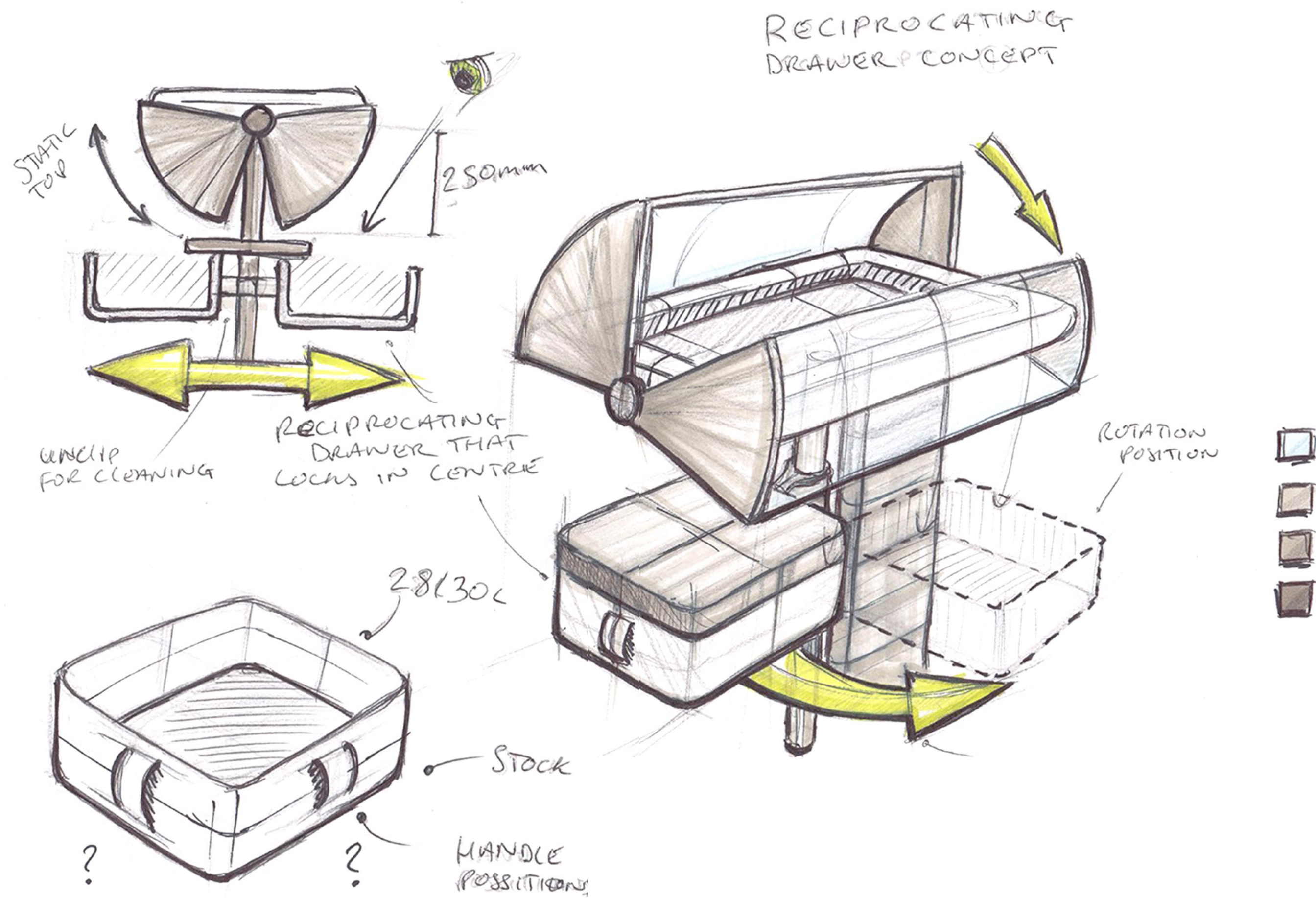
Sketching Form

HOW TO ORGANIZE A PAPER ?



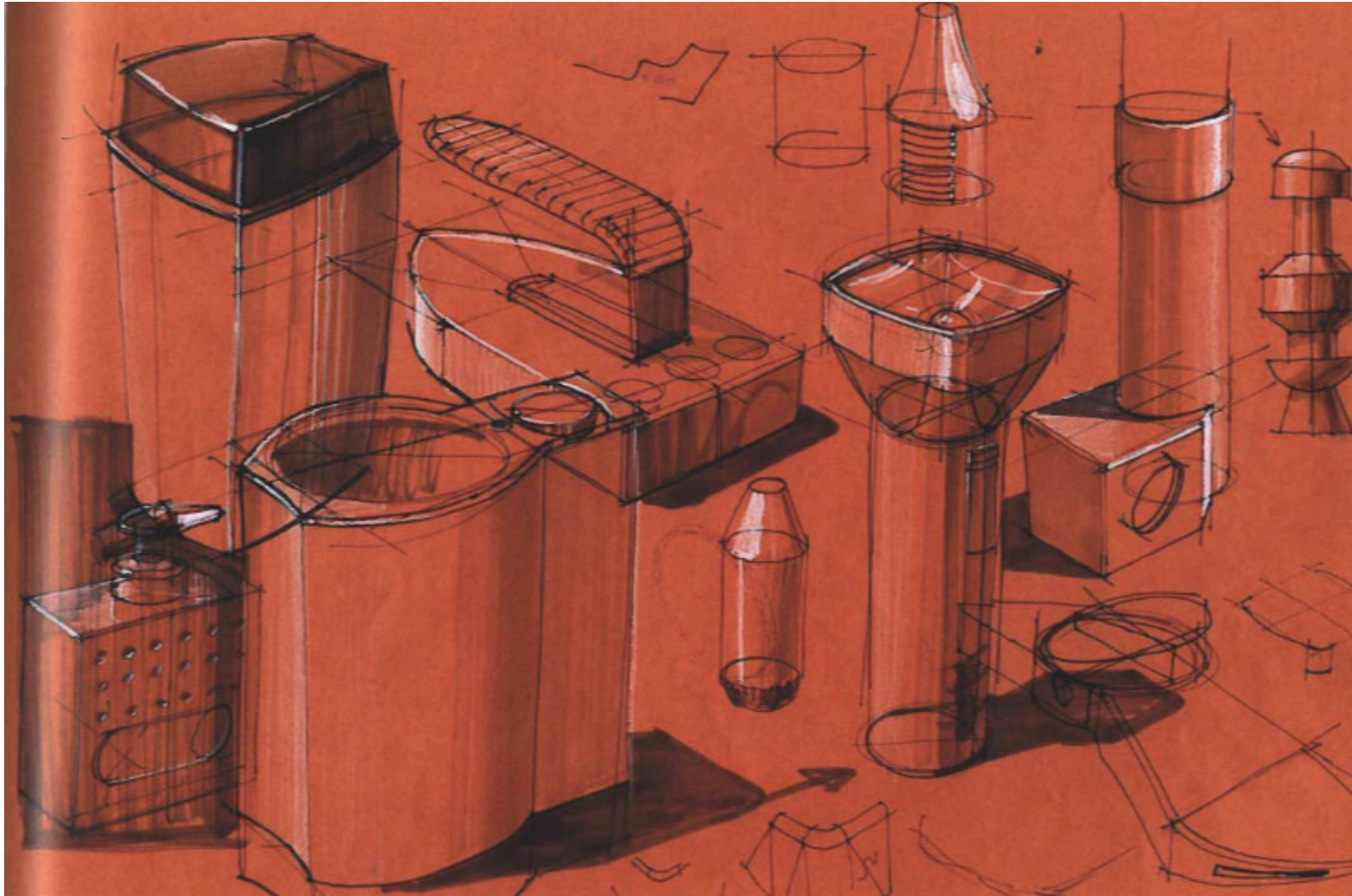
Sketching Form

HOW TO ORGANIZE A PAPER ?



Sketching Form

HOW TO ORGANIZE A PAPER ?



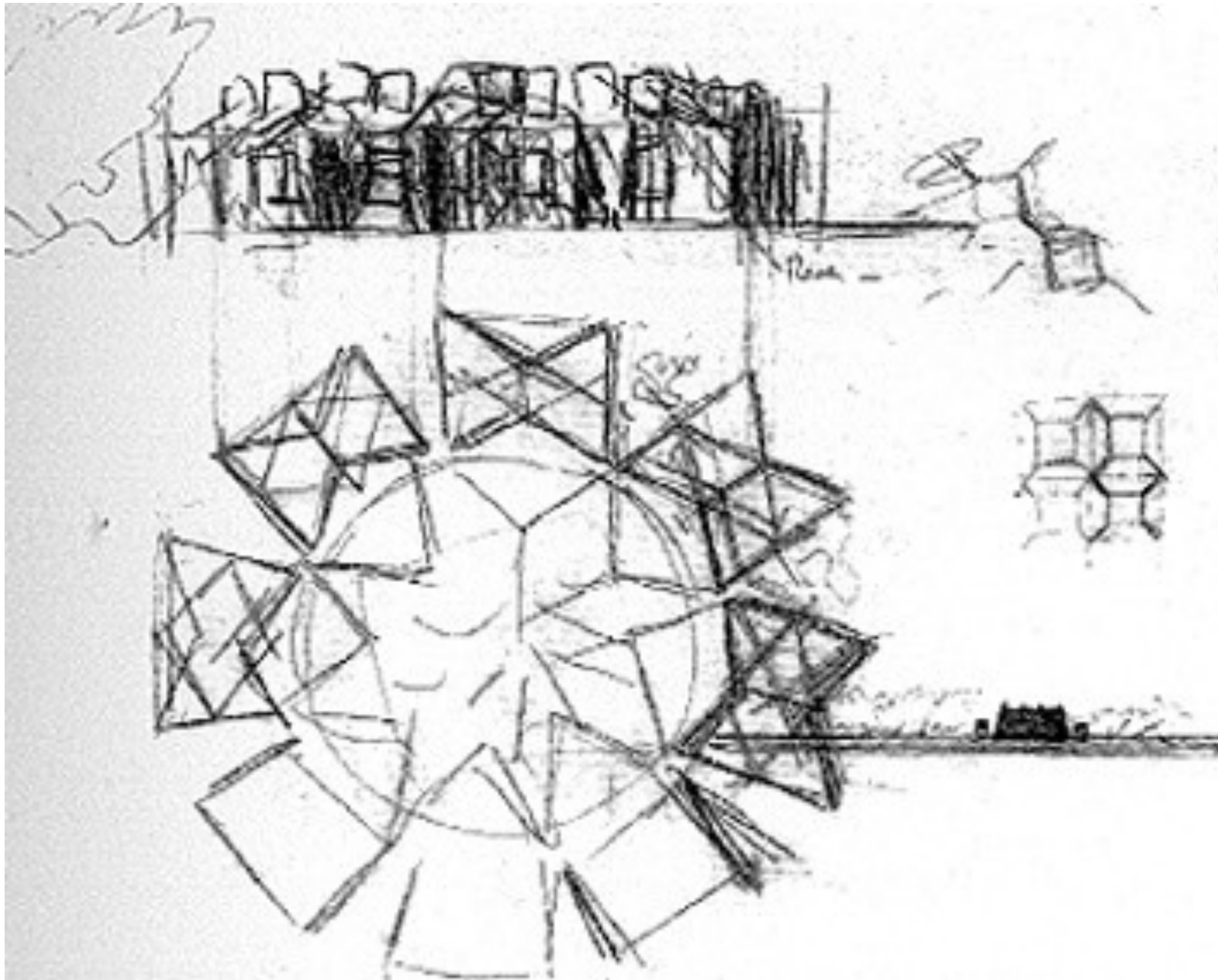
Sketching Form

WHAT IS IMPORTANT?



Sketching Form

WHAT IS IMPORTANT?

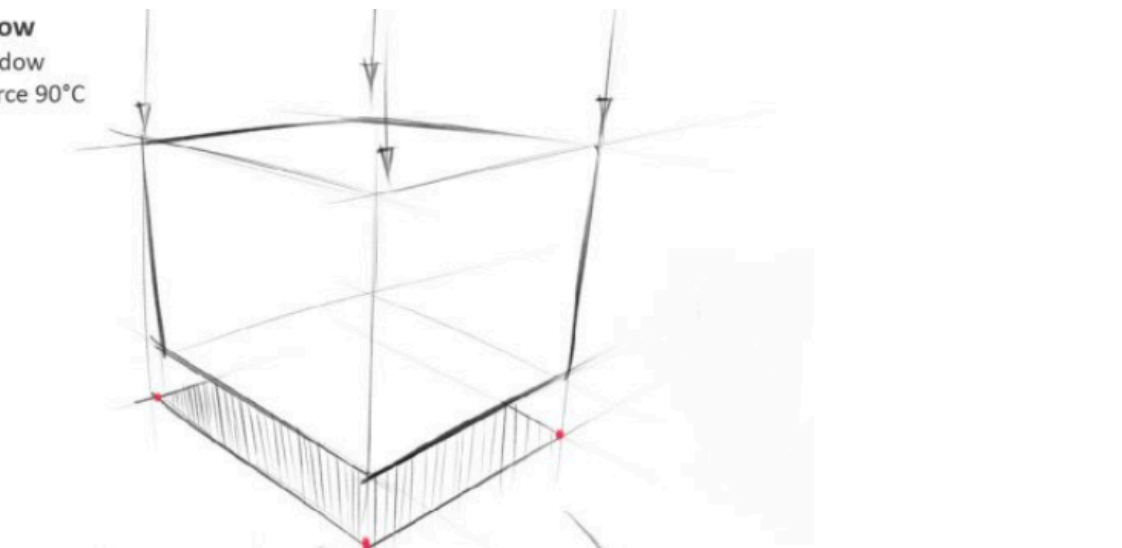


Sketching Form

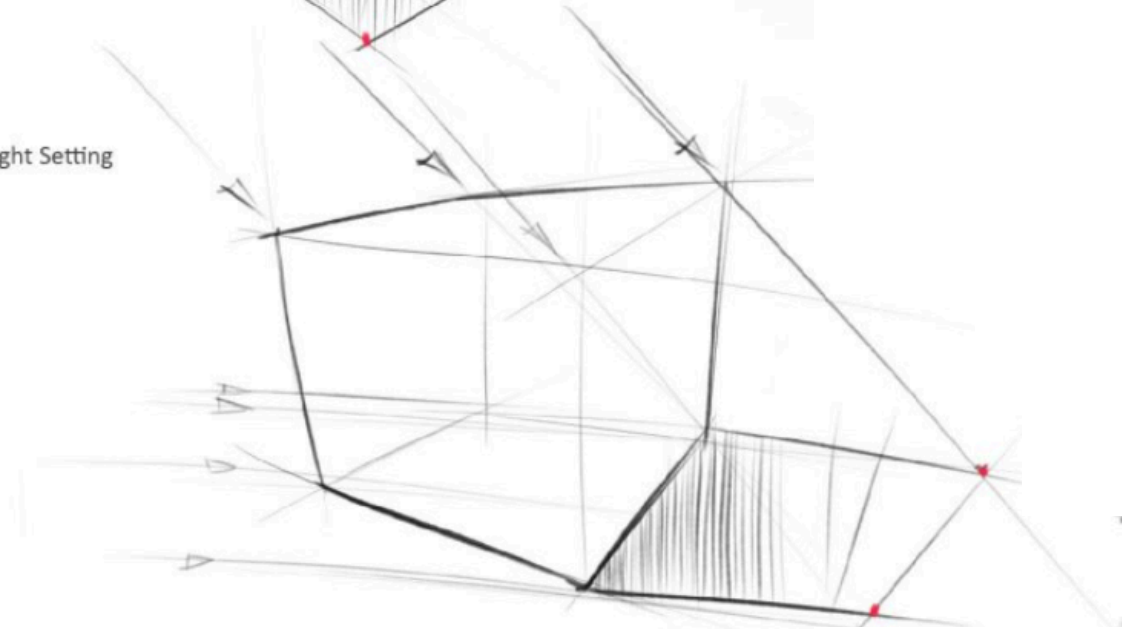
WHERE DOES THE LIGHT COME FROM?

Cast Shadow

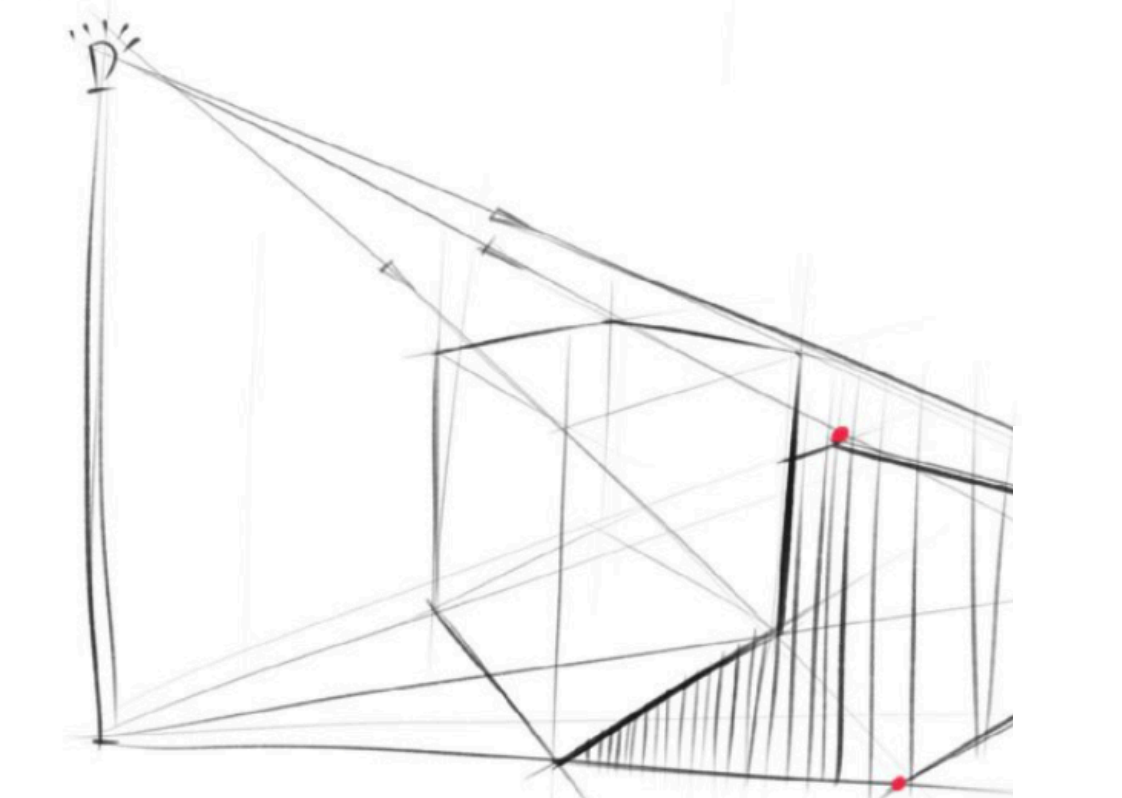
1. Drop Shadow
light source 90°C



2. Nature Light Setting
angled

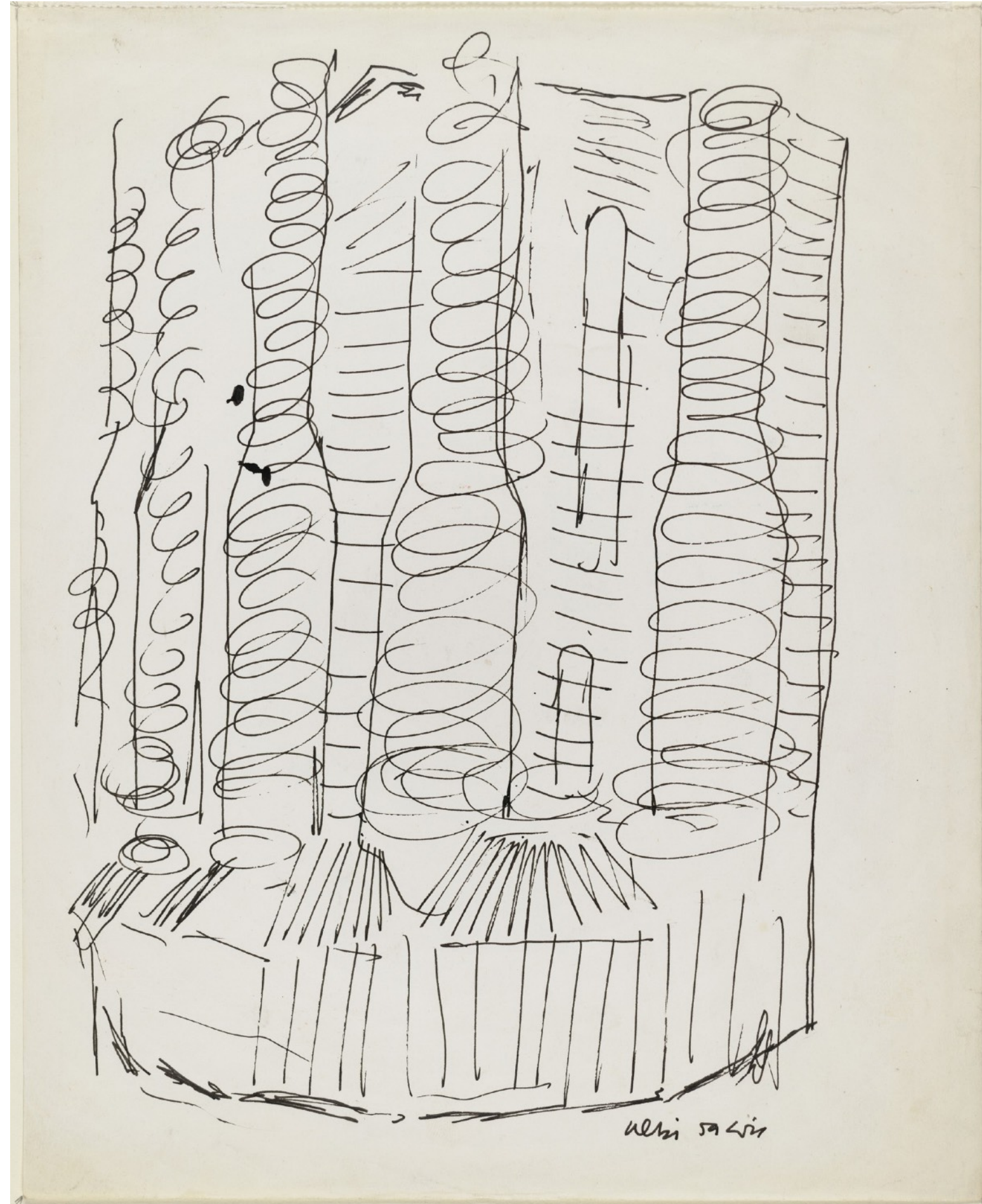


3. Artificial Light



Sketching Form

WHEN IS THE BEST POINT TO STOP?



Louis I. Kahn, Travel **Sketch** for Sainte Cécile Cathedral, 1959.

Sketching Form

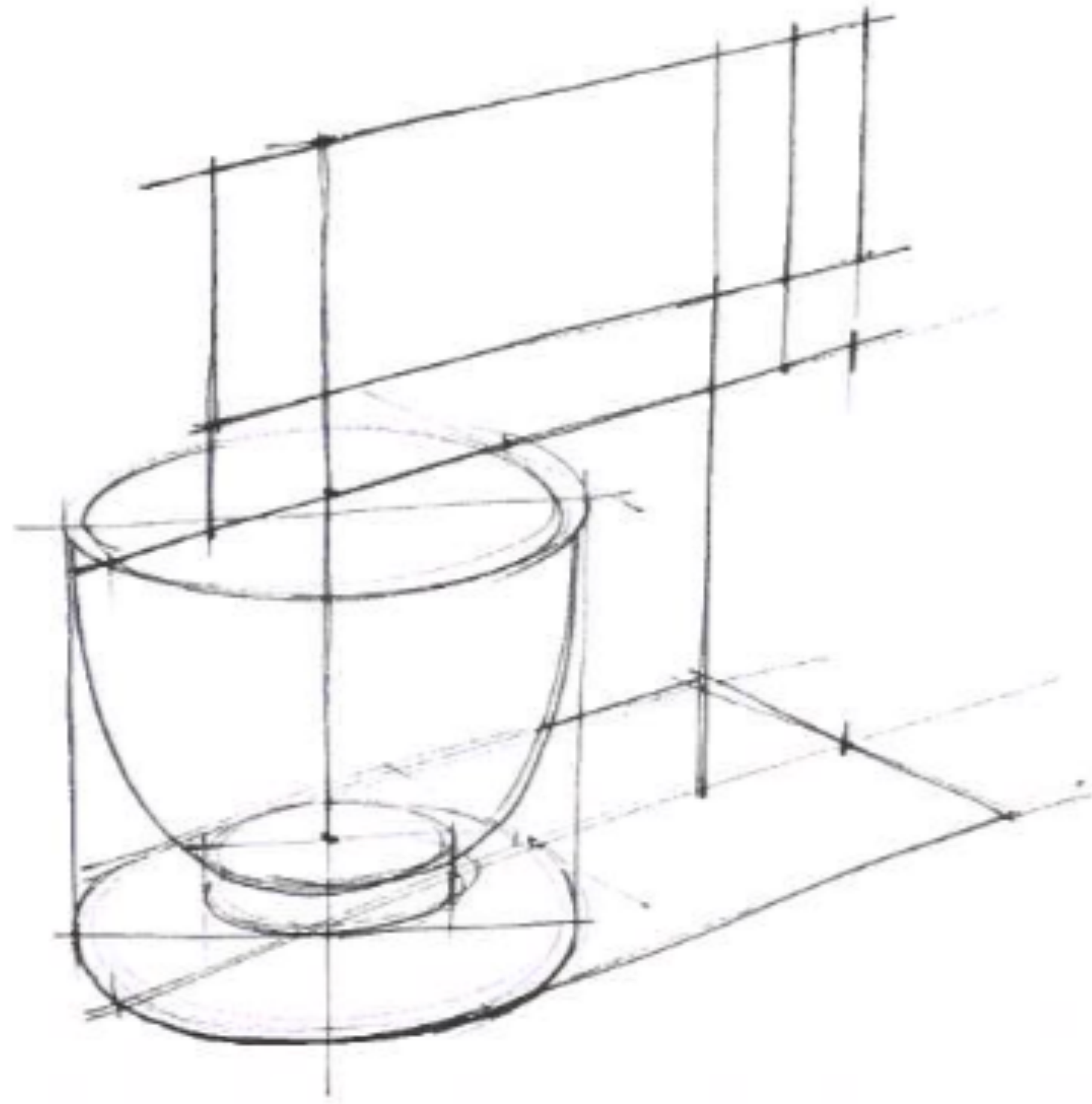
WHEN IS THE BEST POINT TO STOP?



Hugo Barros Costa.

Sketching Form

HOW TO ORGANIZE THE OBJECT?



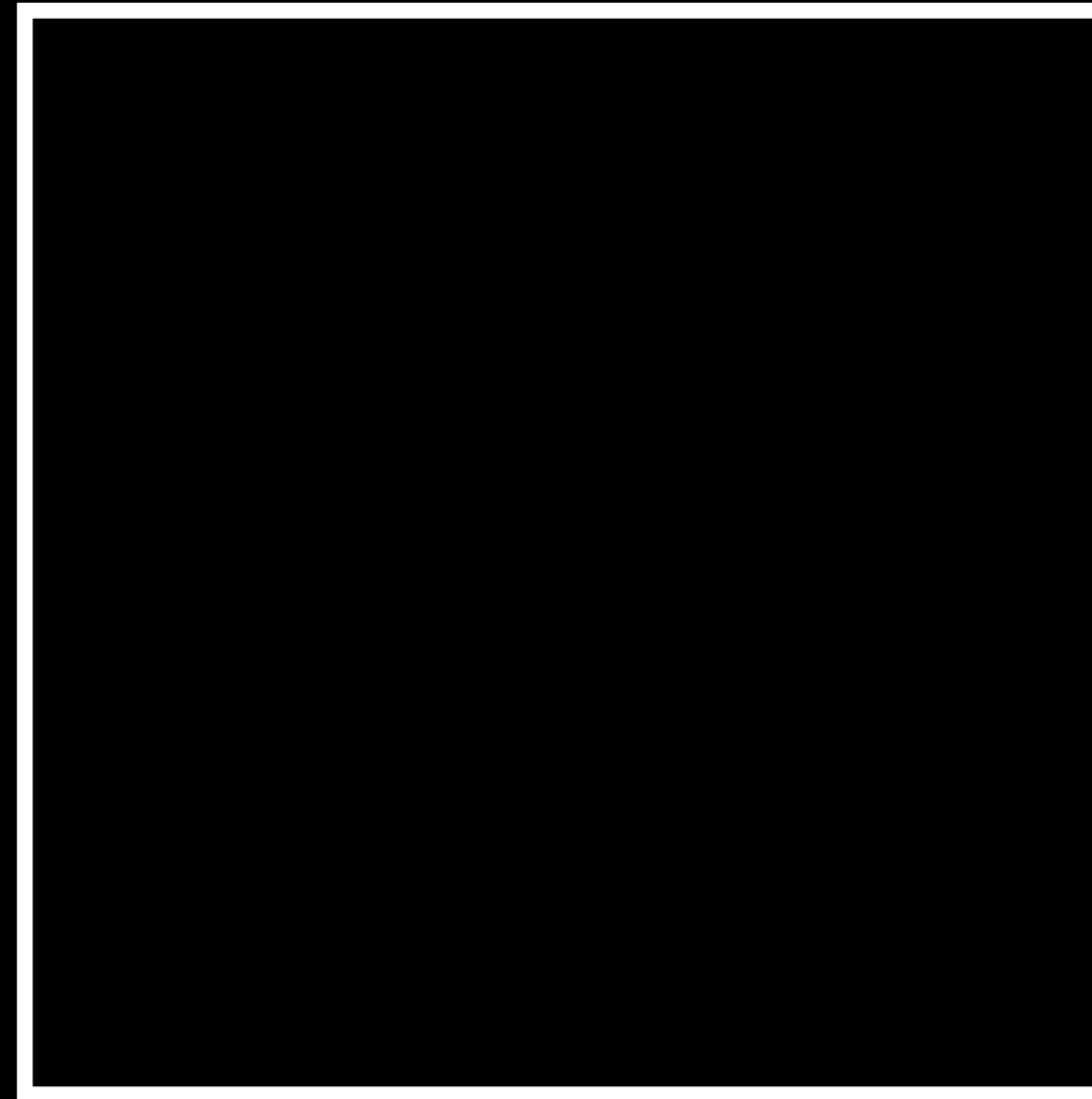
Exercise 1

1 MINUTE SKETCHES

15 min

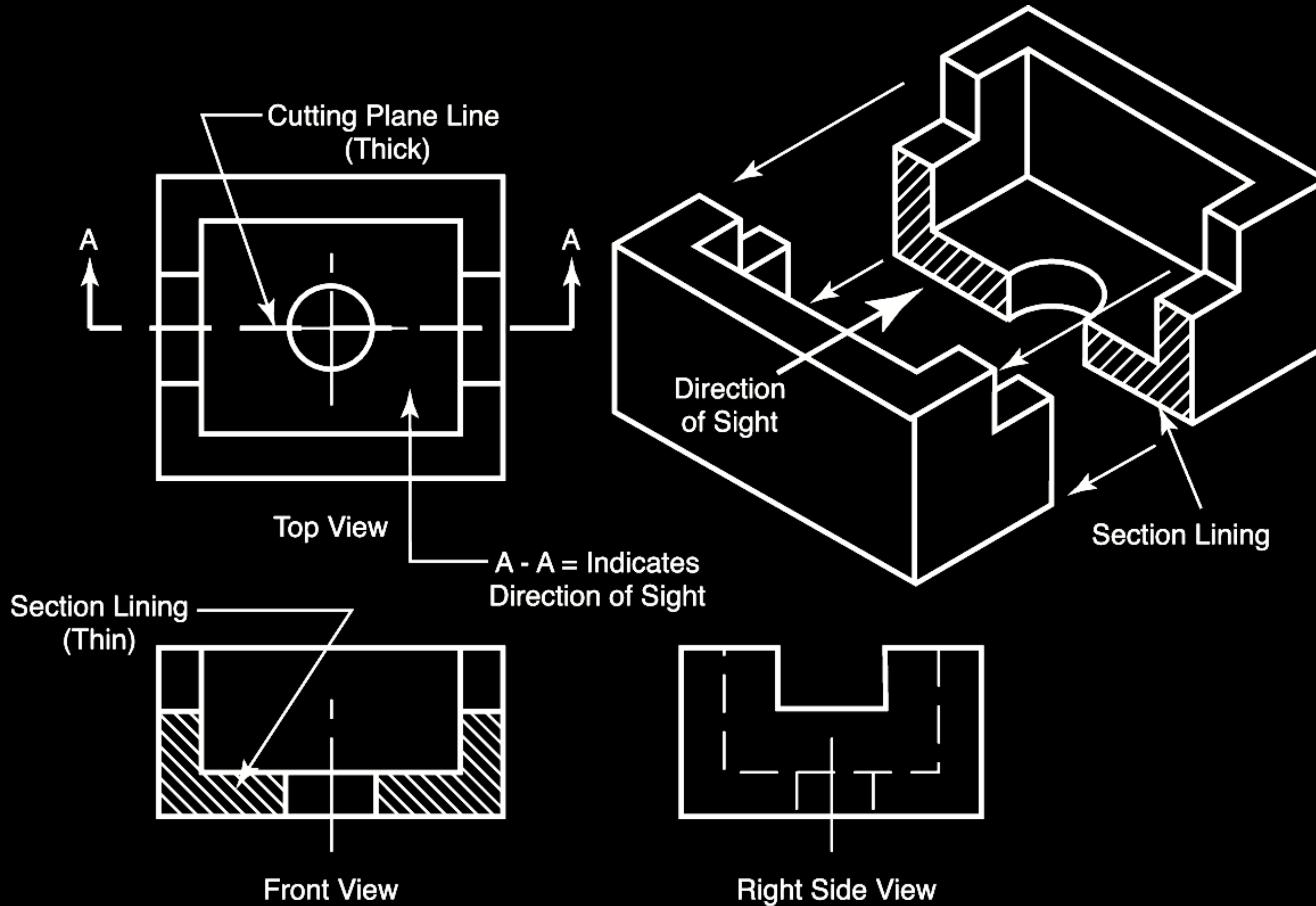
Sketching Form

SIDE VIEW AND TOP



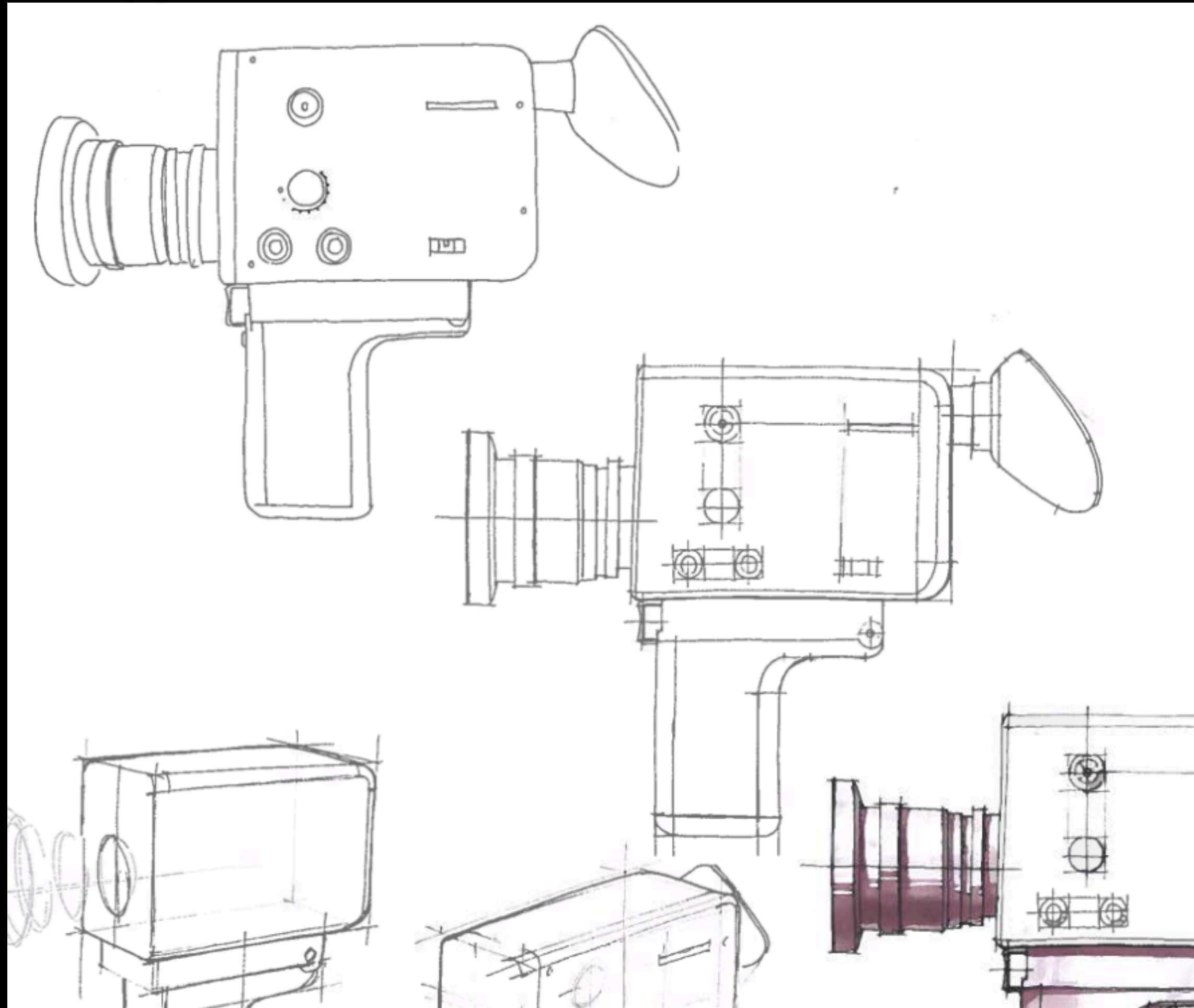
Sketching Form

Planar Views



Sketching Form

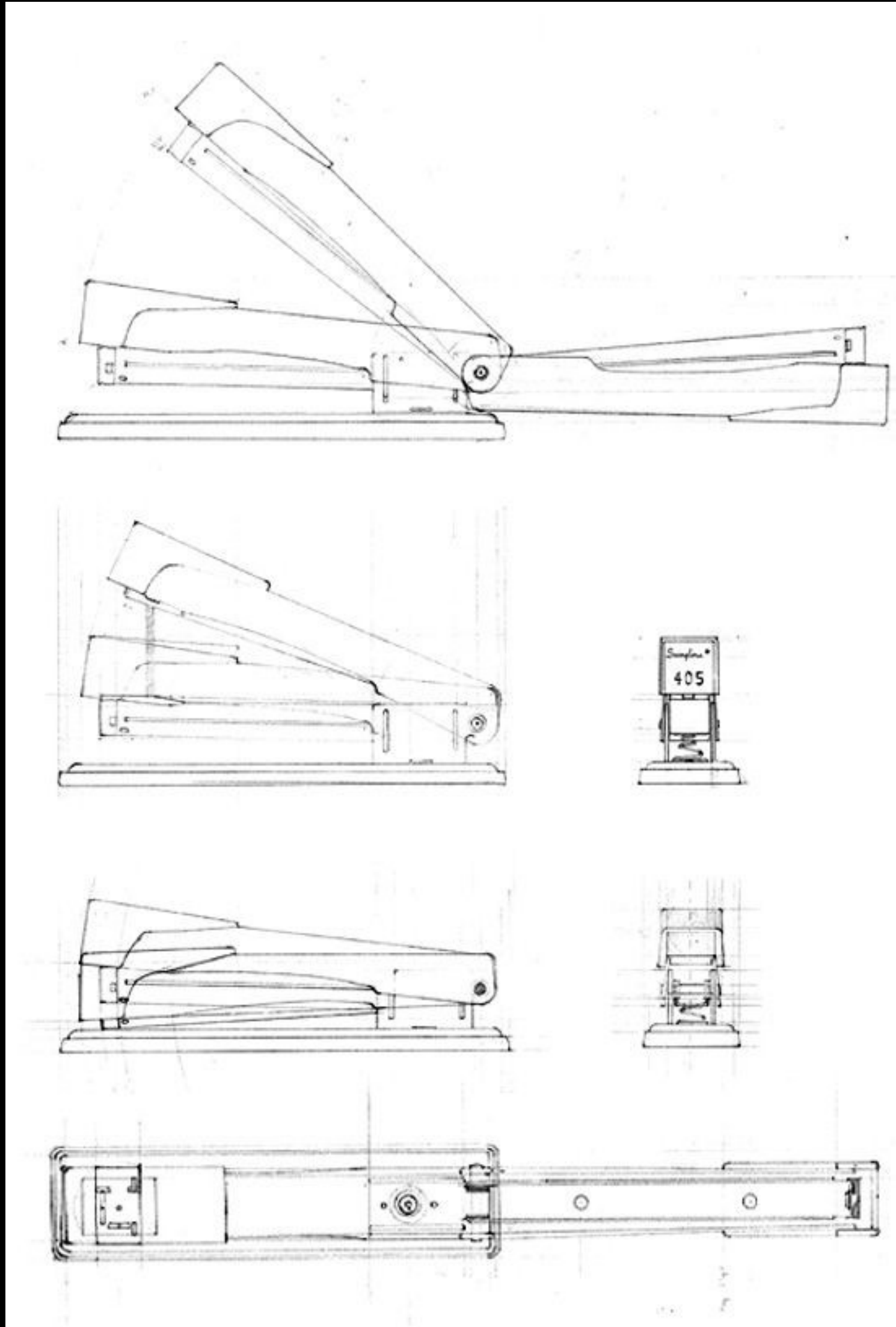
Planar Views



Sketching the Basics
Steur, Eissen
2011

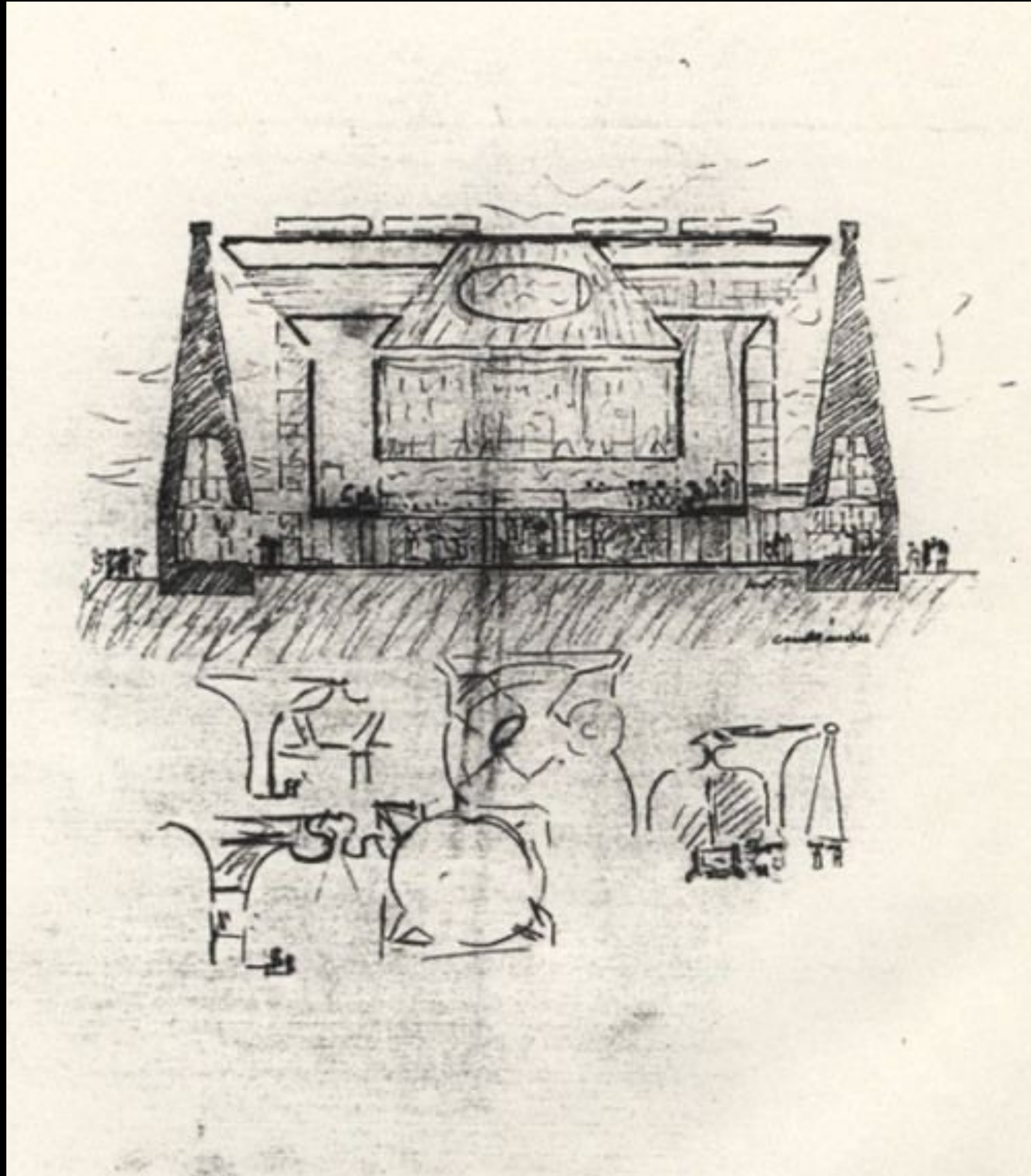
Sketching Form

SIDE VIEW & TOP VIEW



Sketching Form

SIDE VIEW & TOP VIEW



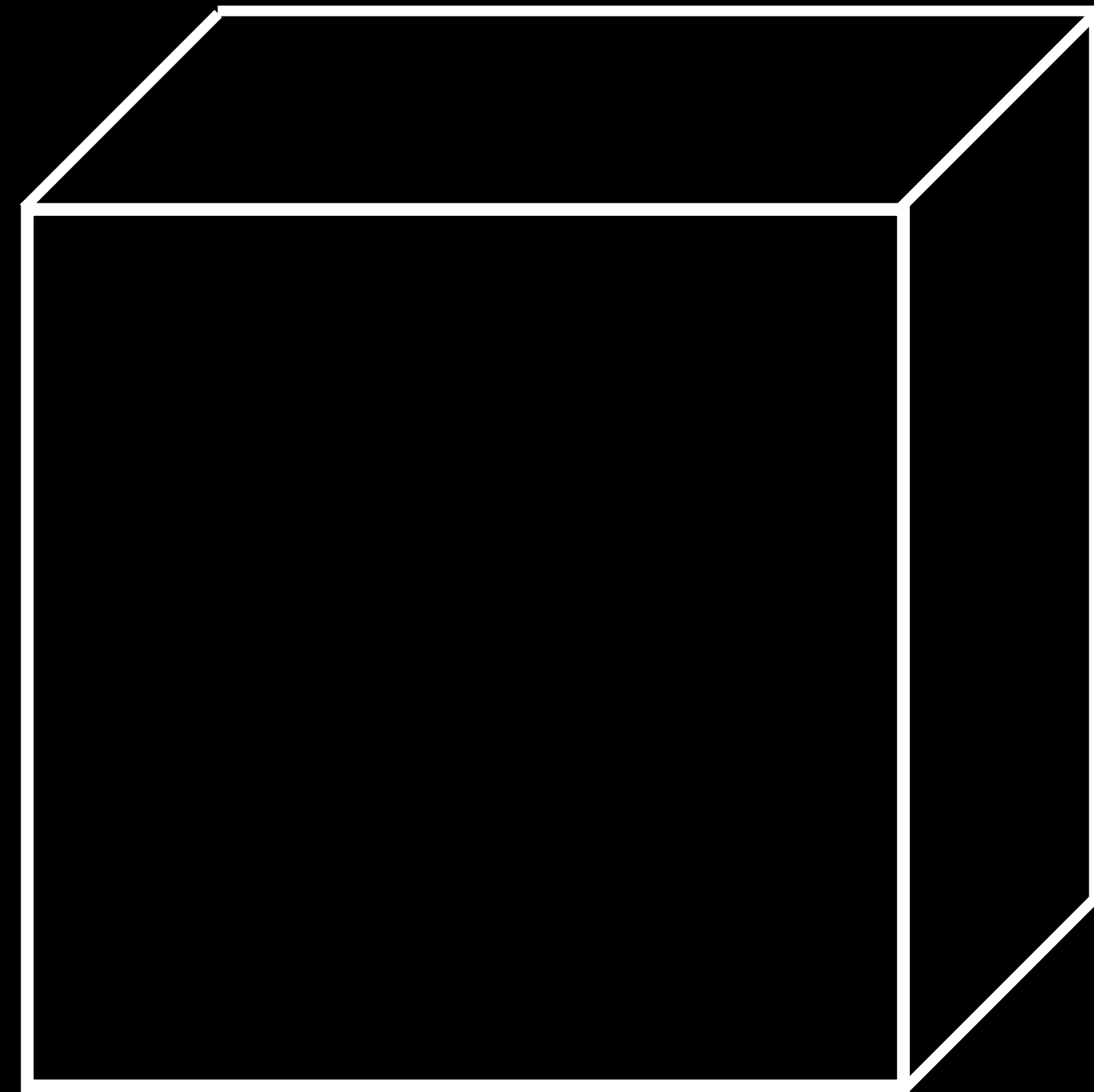
Exercise 2

SIDE VIEW OF YOUR OBJECT

10 min

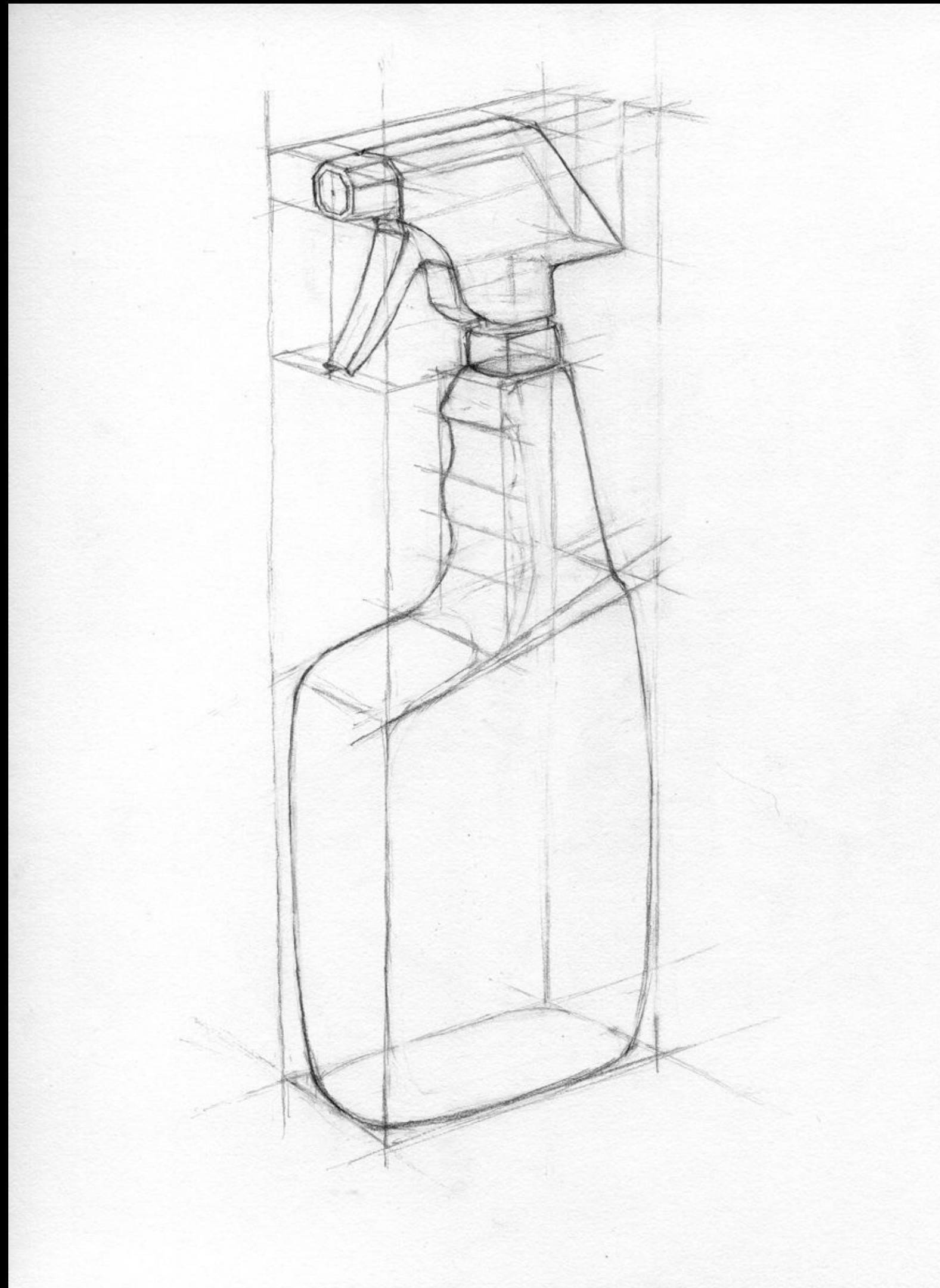
Sketching Form

AXONOMETRIC DRAWING



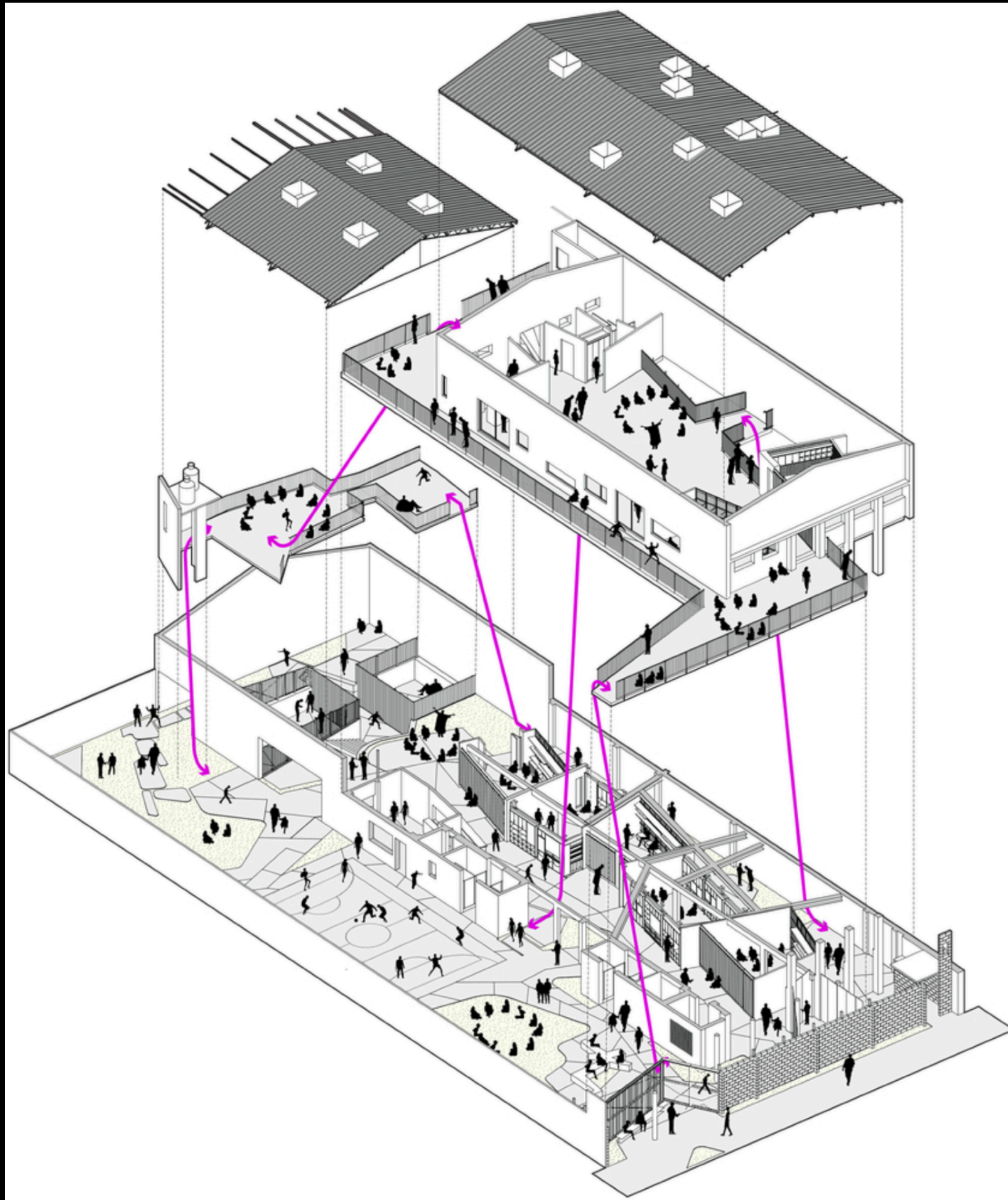
Sketching Form

WHAT IS AN AXONOMETRIC DRAWING?



Sketching Form

WHAT IS AN AXONOMETRIC DRAWING?



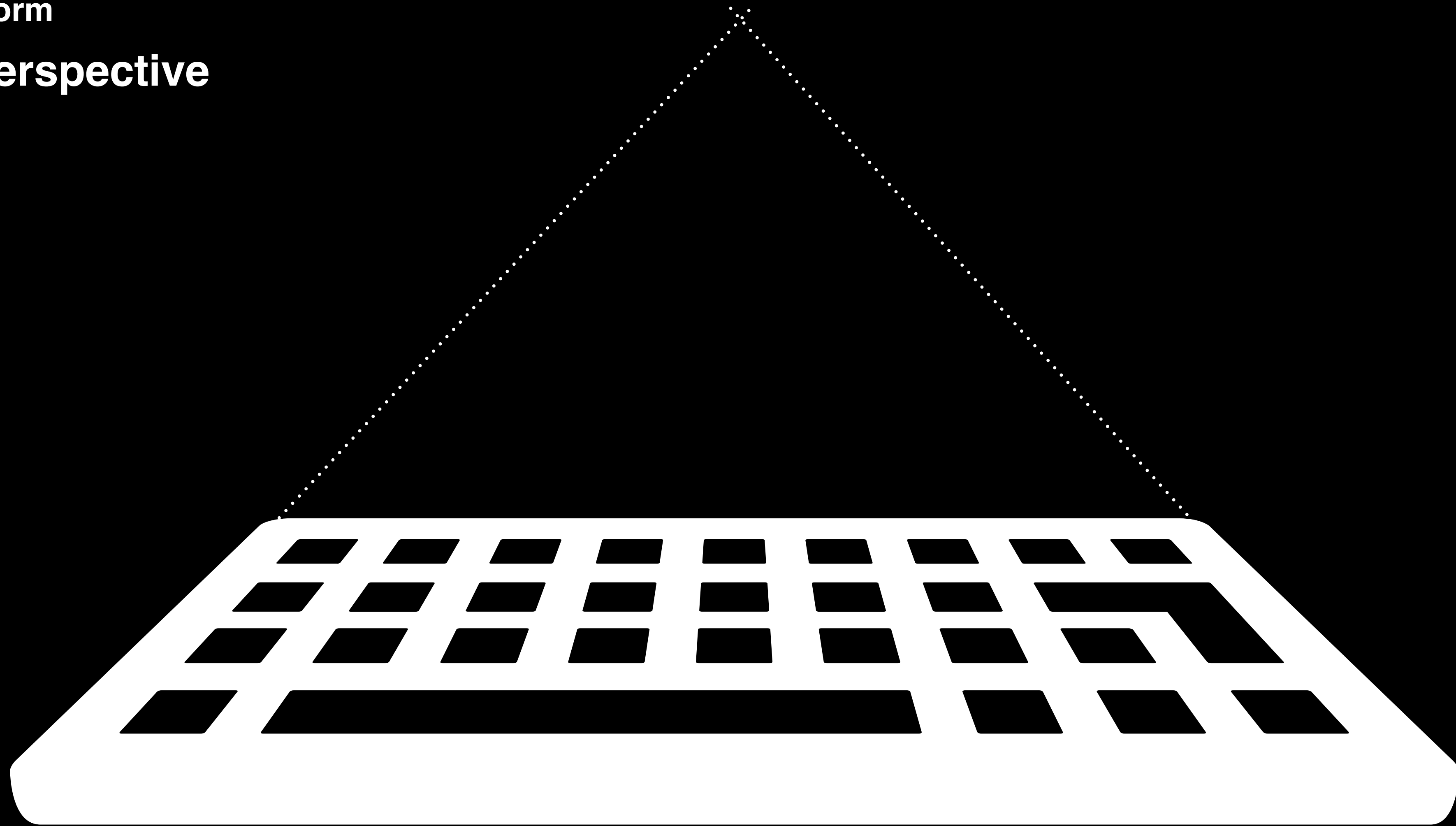
Exercise 3

AXONOMETRIC DRAWING

5 min

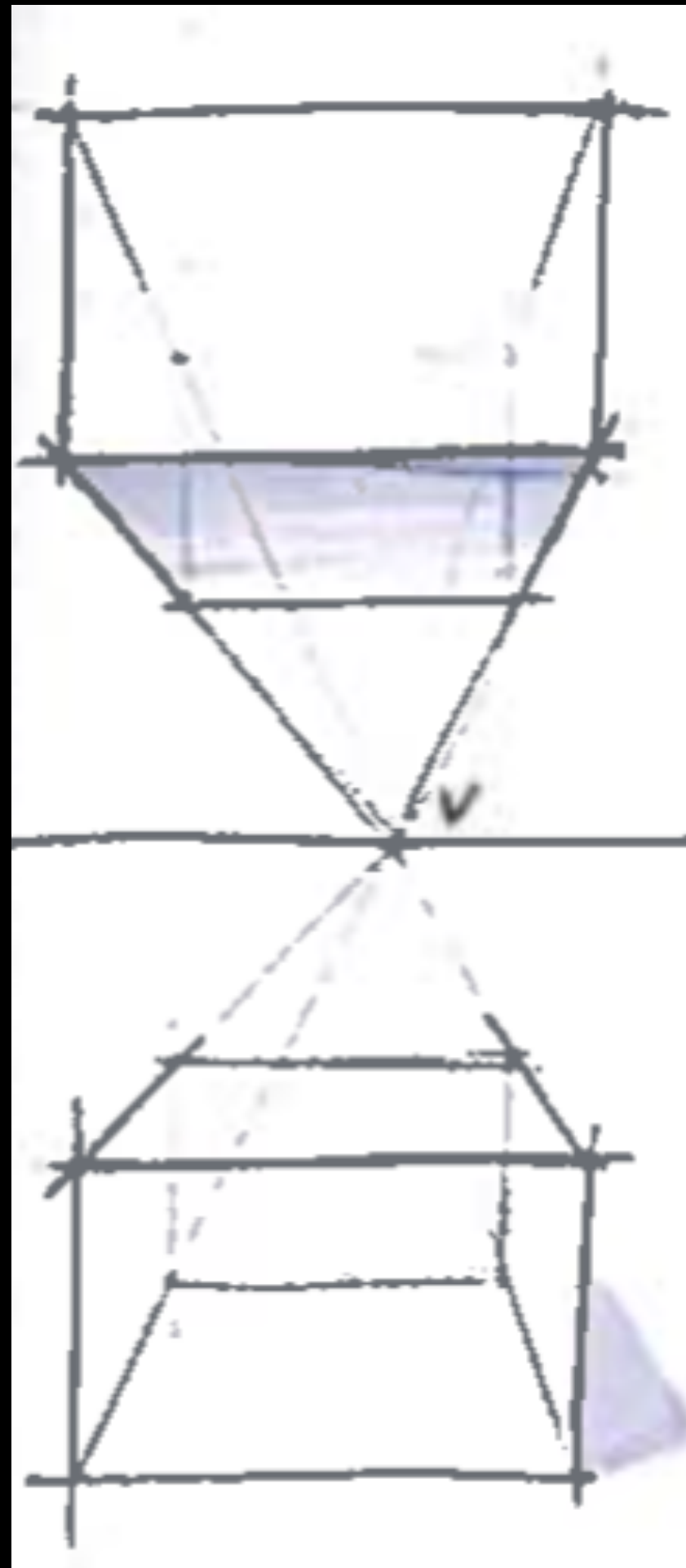
Sketching Form

1 Point Perspective



Sketching Form

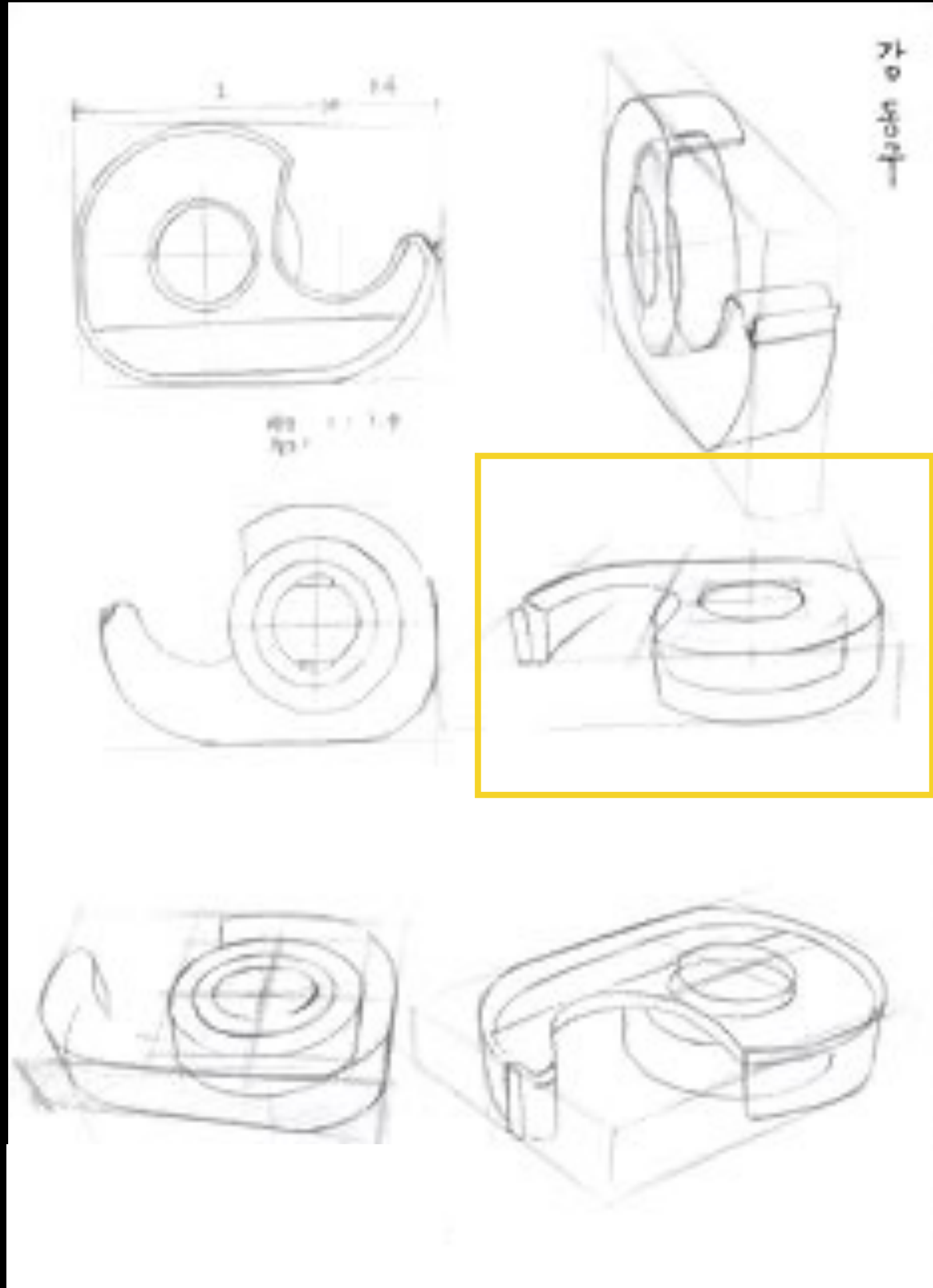
1 Point Perspective



Sketching the Basics
Steur, Eissen
2011

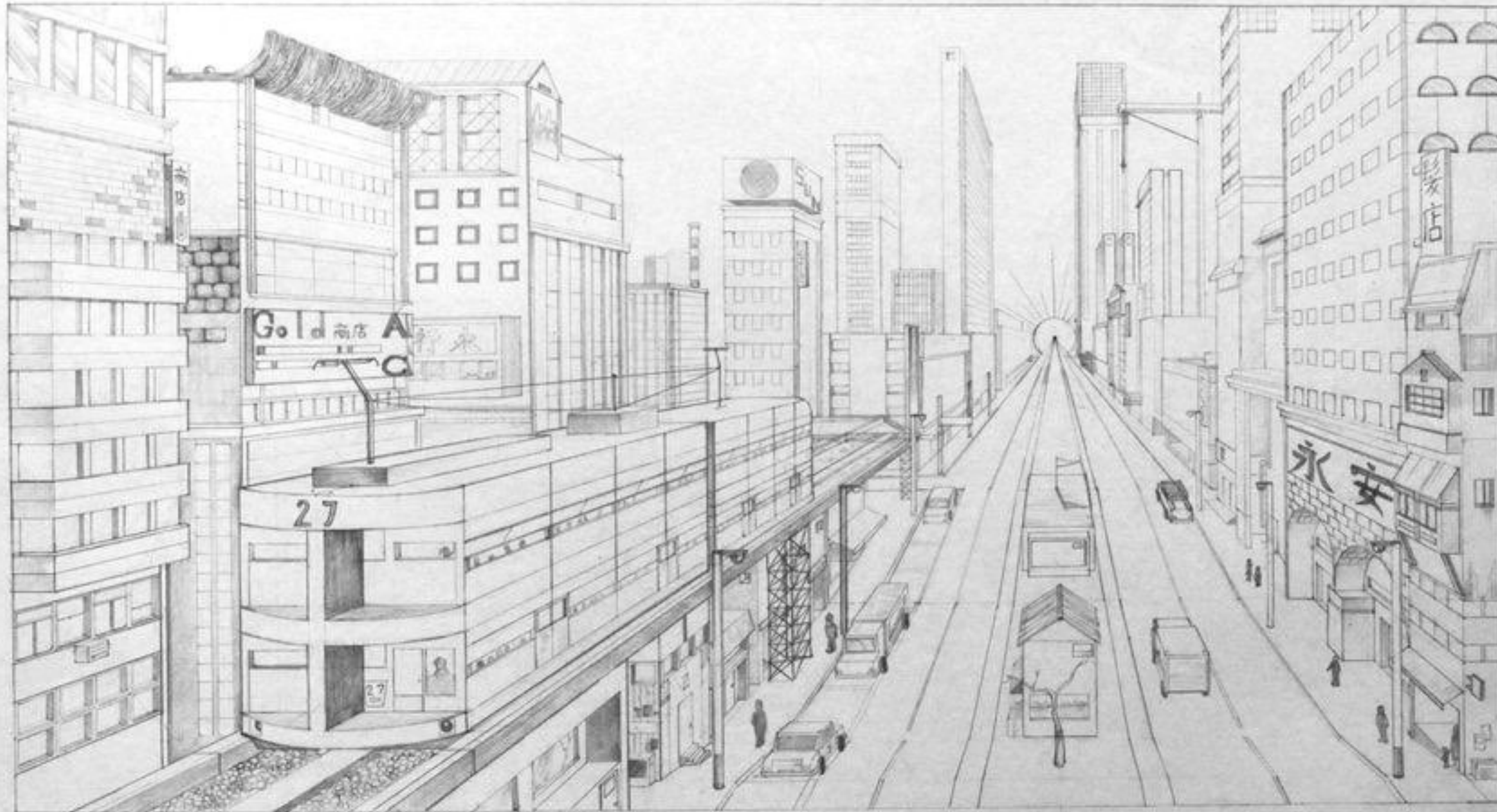
Sketching Form

1 Point Perspective



Sketching Form

1 Point Perspective



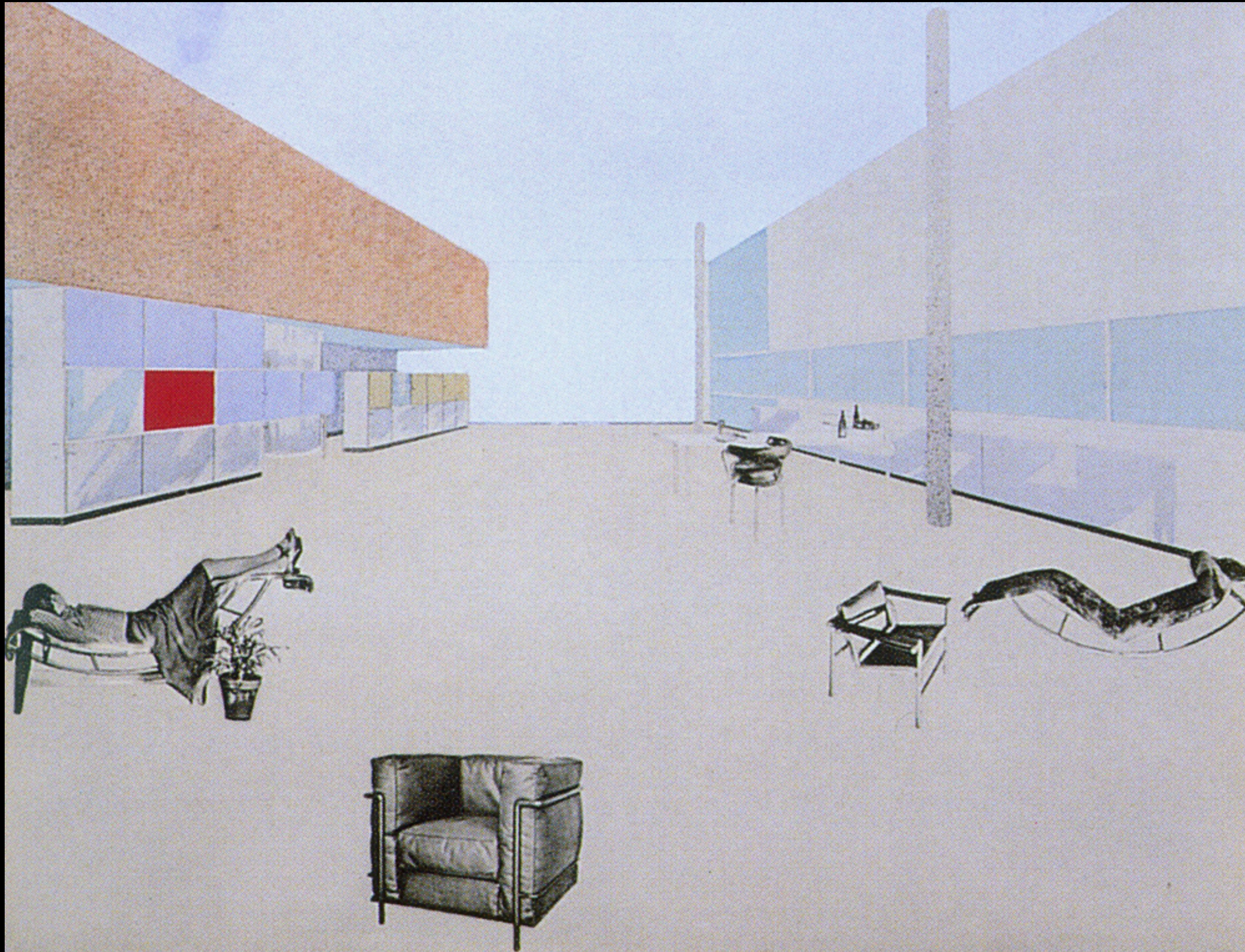
Sketching Form

1 Point Perspective



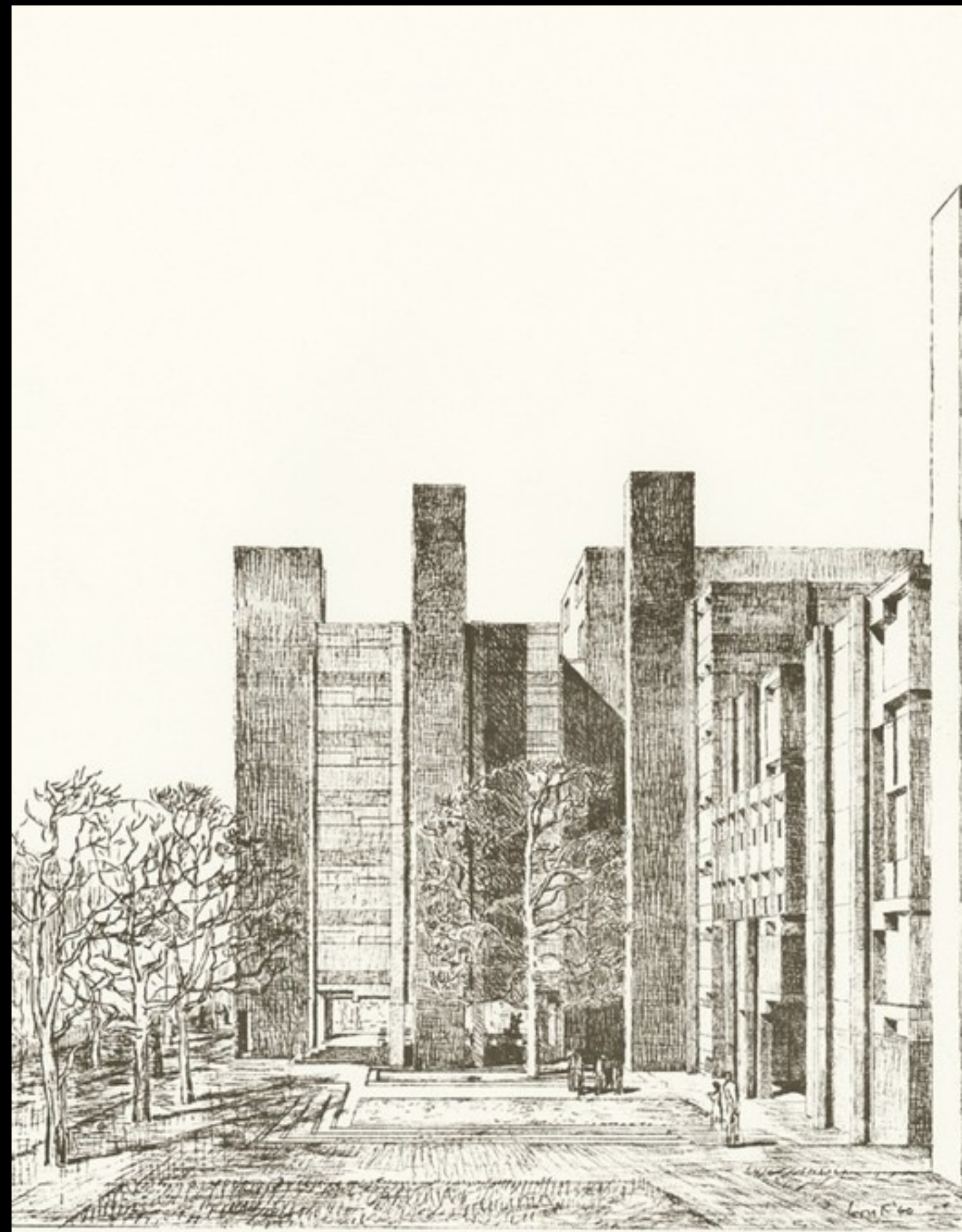
Sketching Form

1 Point Perspective



Sketching Form

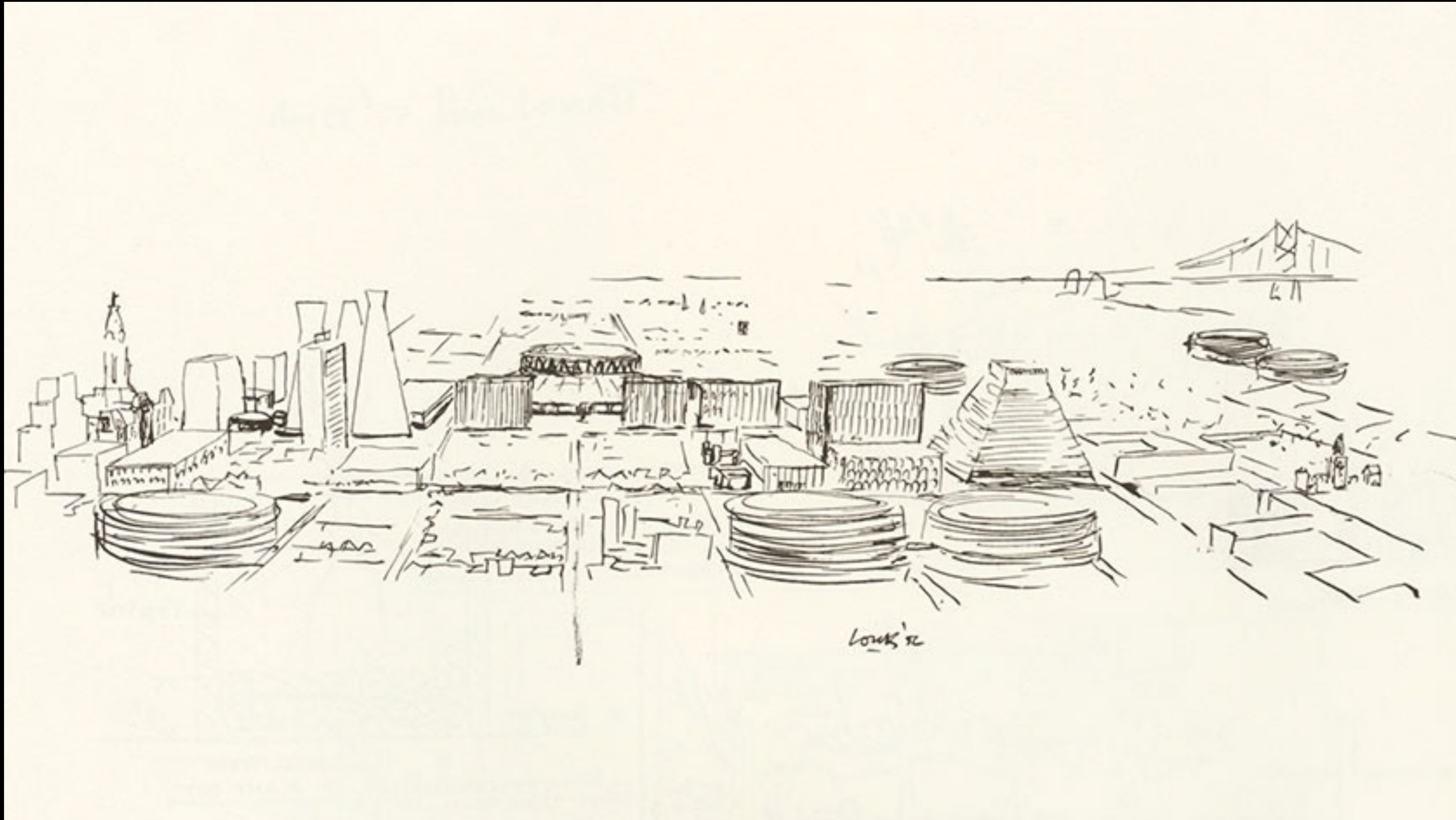
1 Point Perspective



W. 1907 A. N. Richards Medical Research Building, University of Pennsylvania, Philadelphia, definitive study/77% pencil on tracing paper/see note

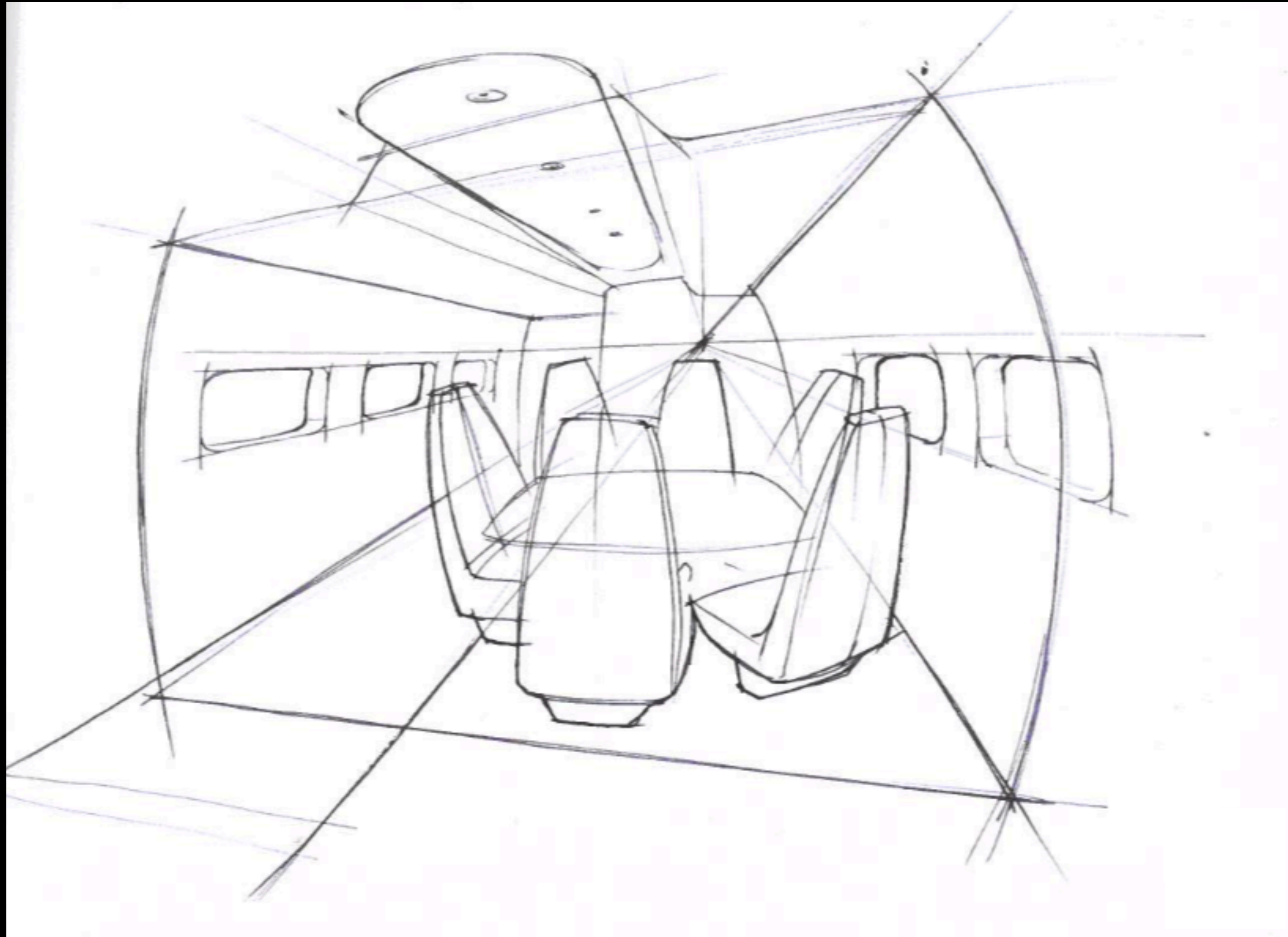
Sketching Form

1 Point Perspective



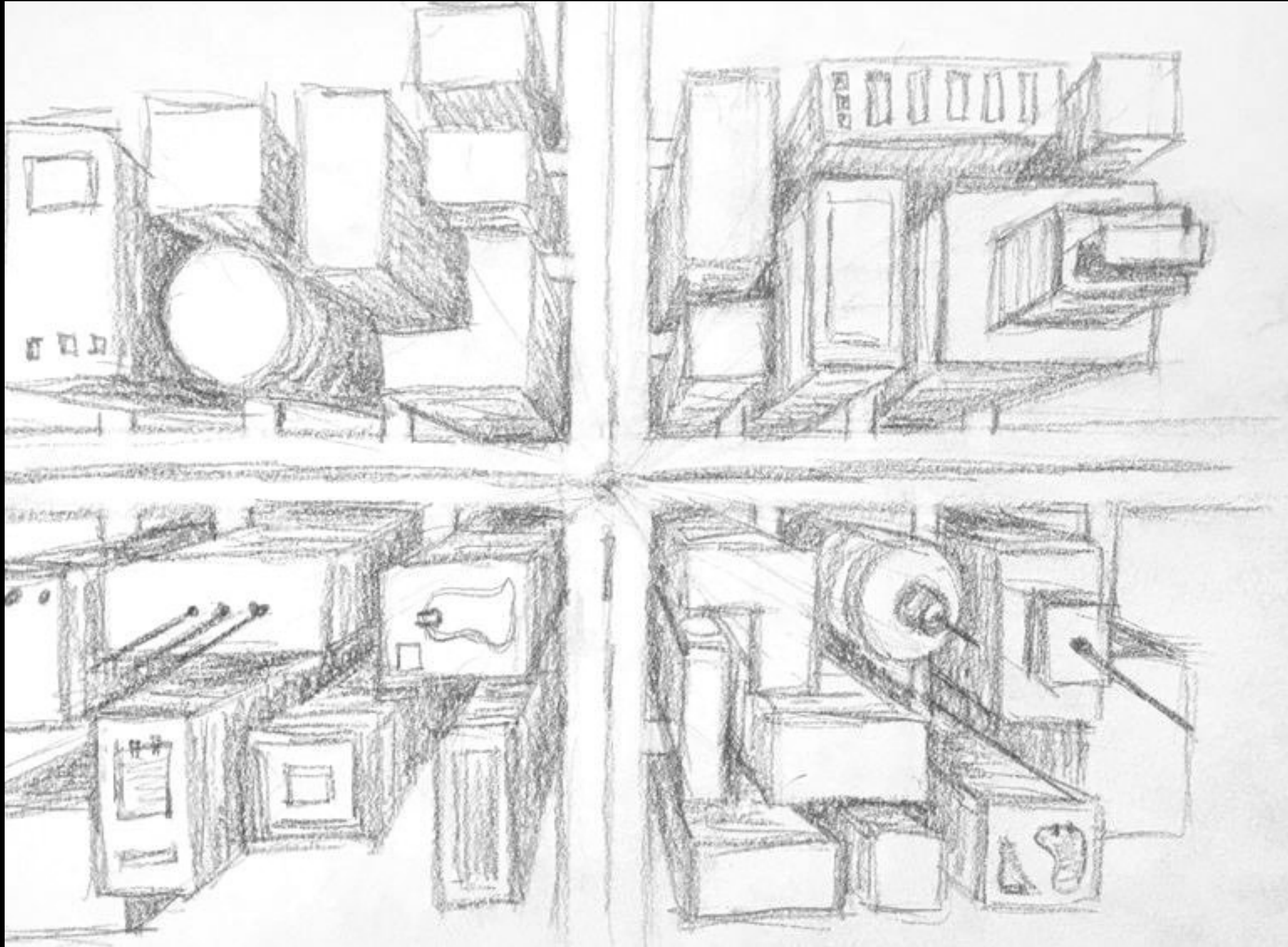
Sketching Form

1 Point Perspective



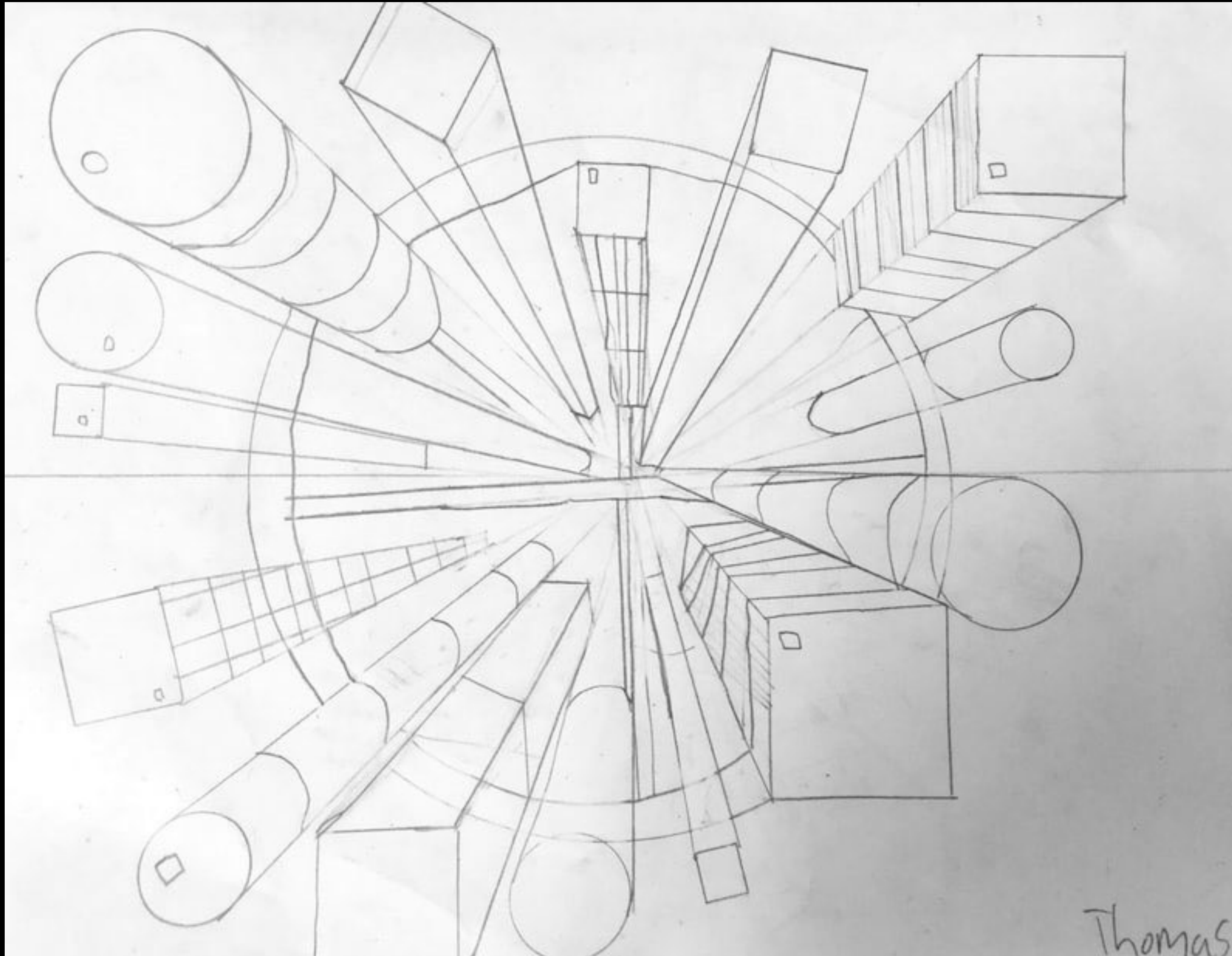
Sketching Form

1 Point Perspective



Sketching Form

1 Point Perspective



Exercise 4

1-POINT ARCHITECTURE

20 min

Exercise 5

1-POINT PERSPECTIVE

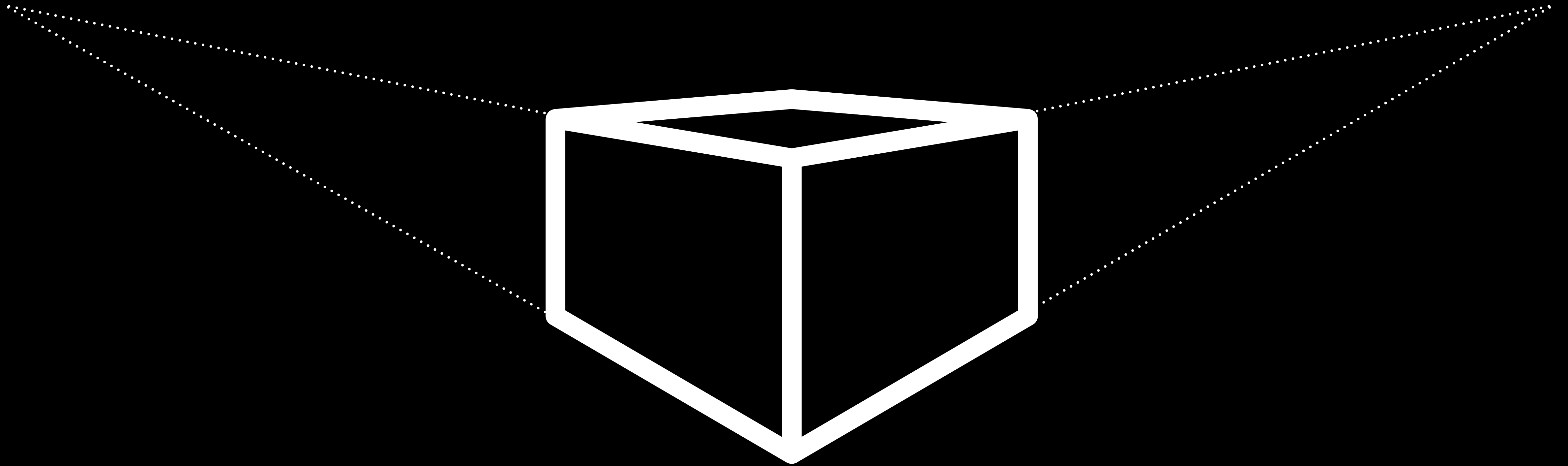
20 min

LUNCH BREAK

1 Hour

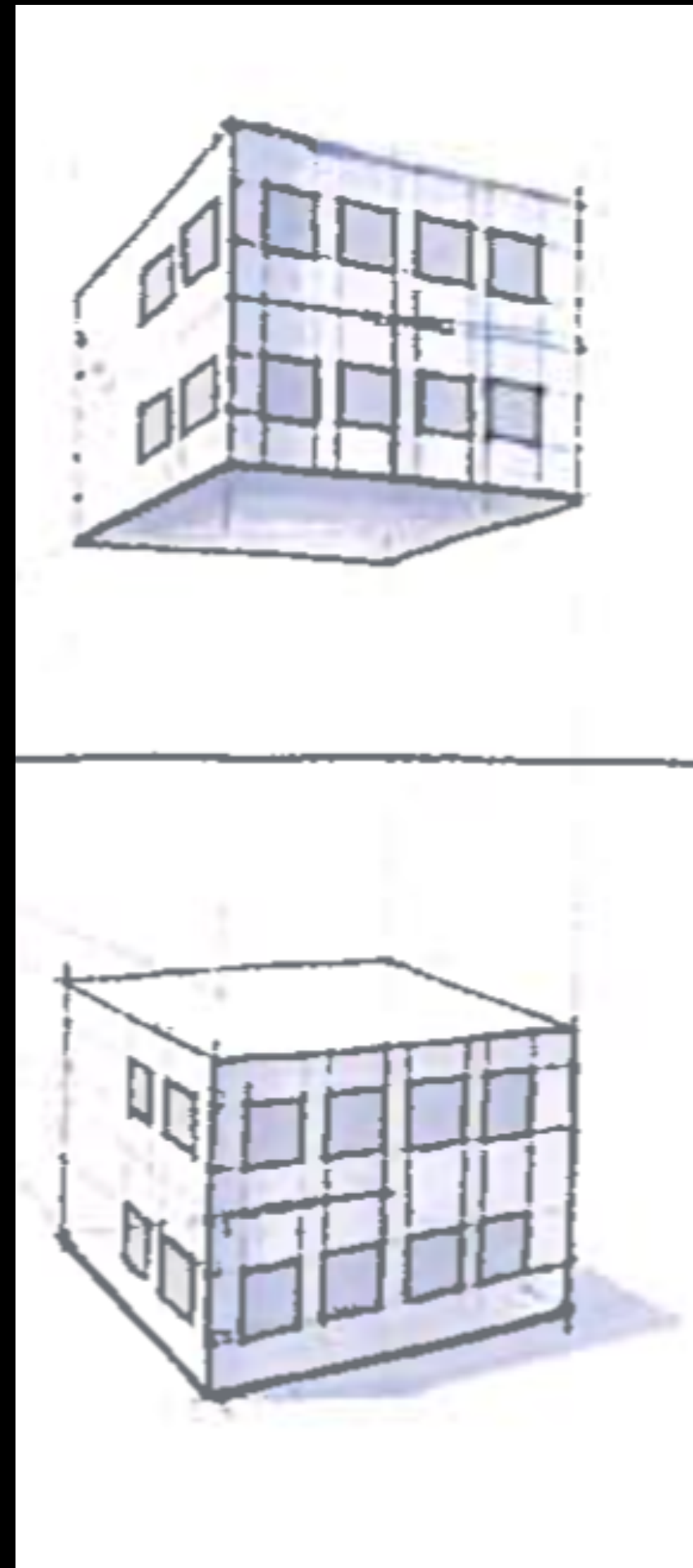
Sketching Form

2 Point Perspective



Sketching Form

2 Point Perspective



Sketching the Basics

Steur, Eissen

2011

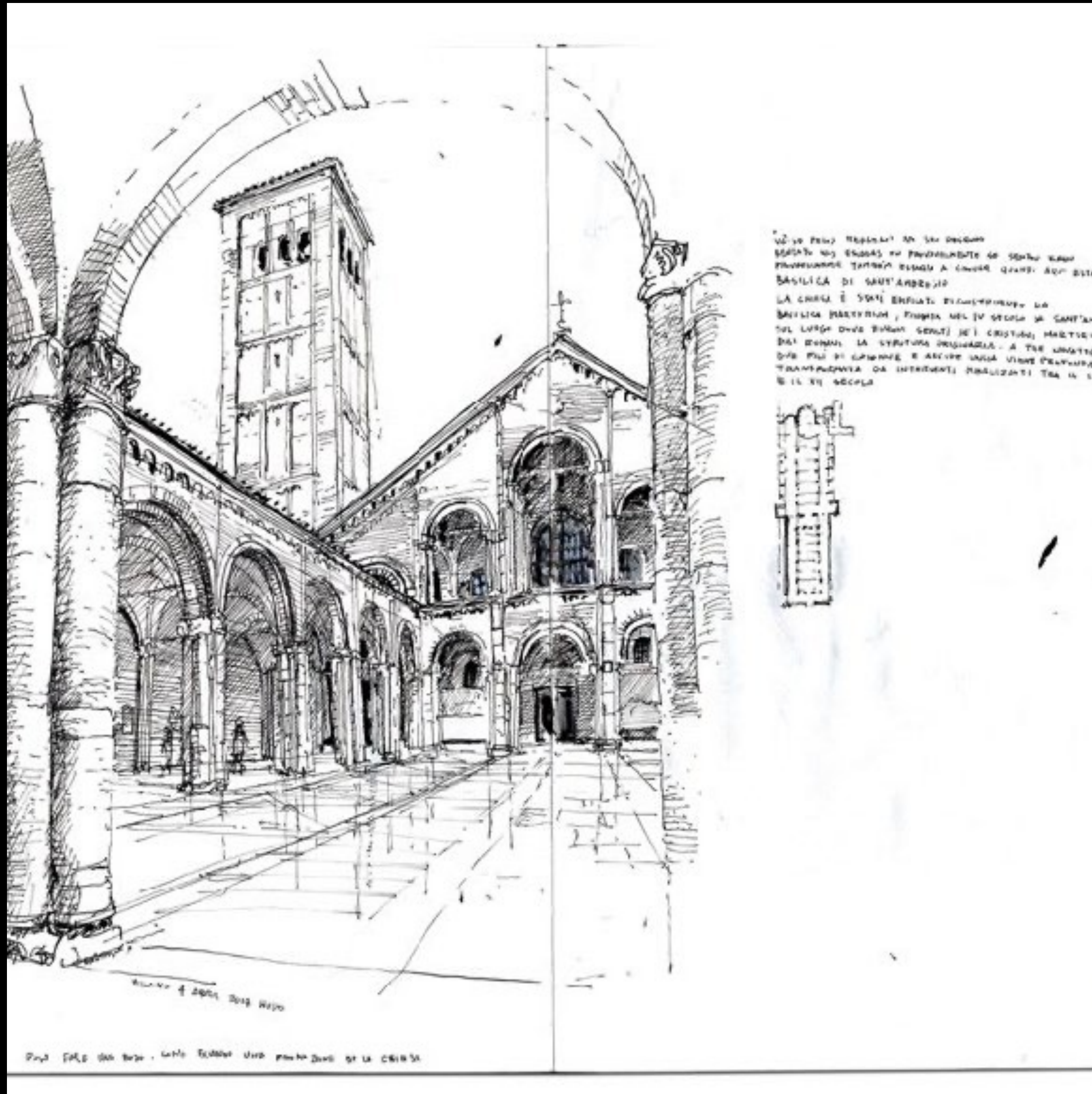
Sketching Form

2 Point Perspective



Sketching Form

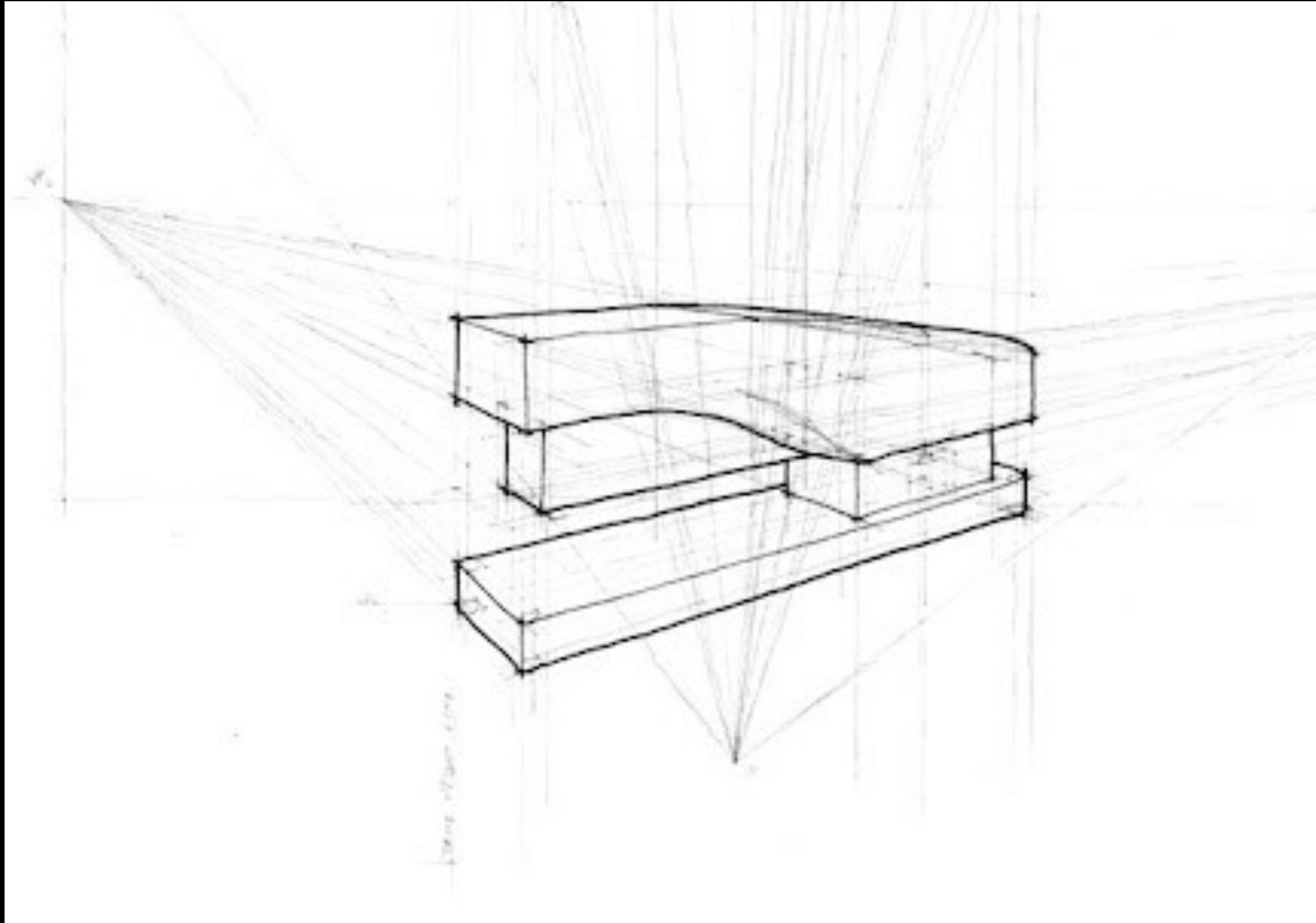
2 Point Perspective



Hugo Barros Costa, Basilica of Sant'Ambrogio, 2016.

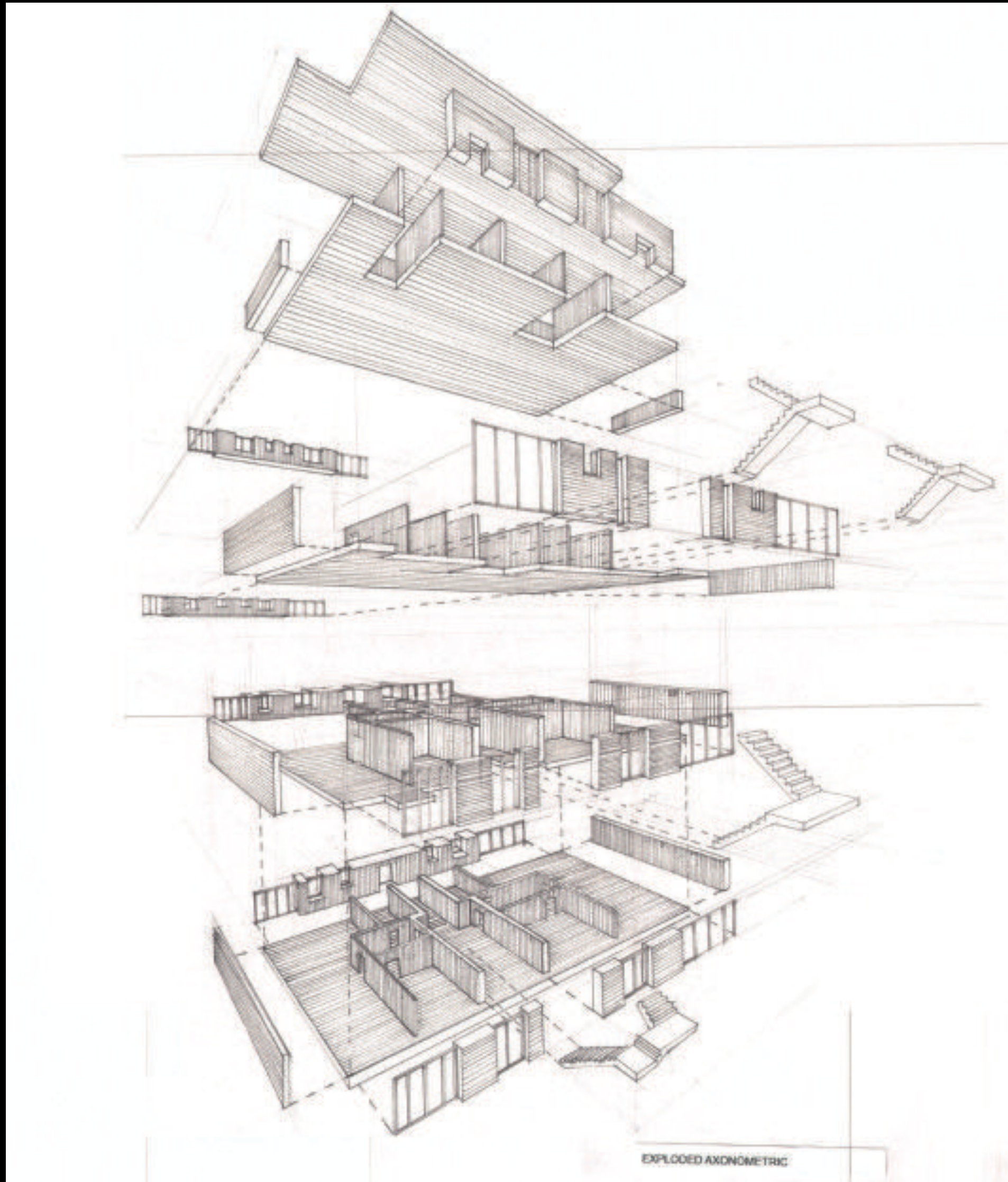
Sketching Form

2 Point Perspective



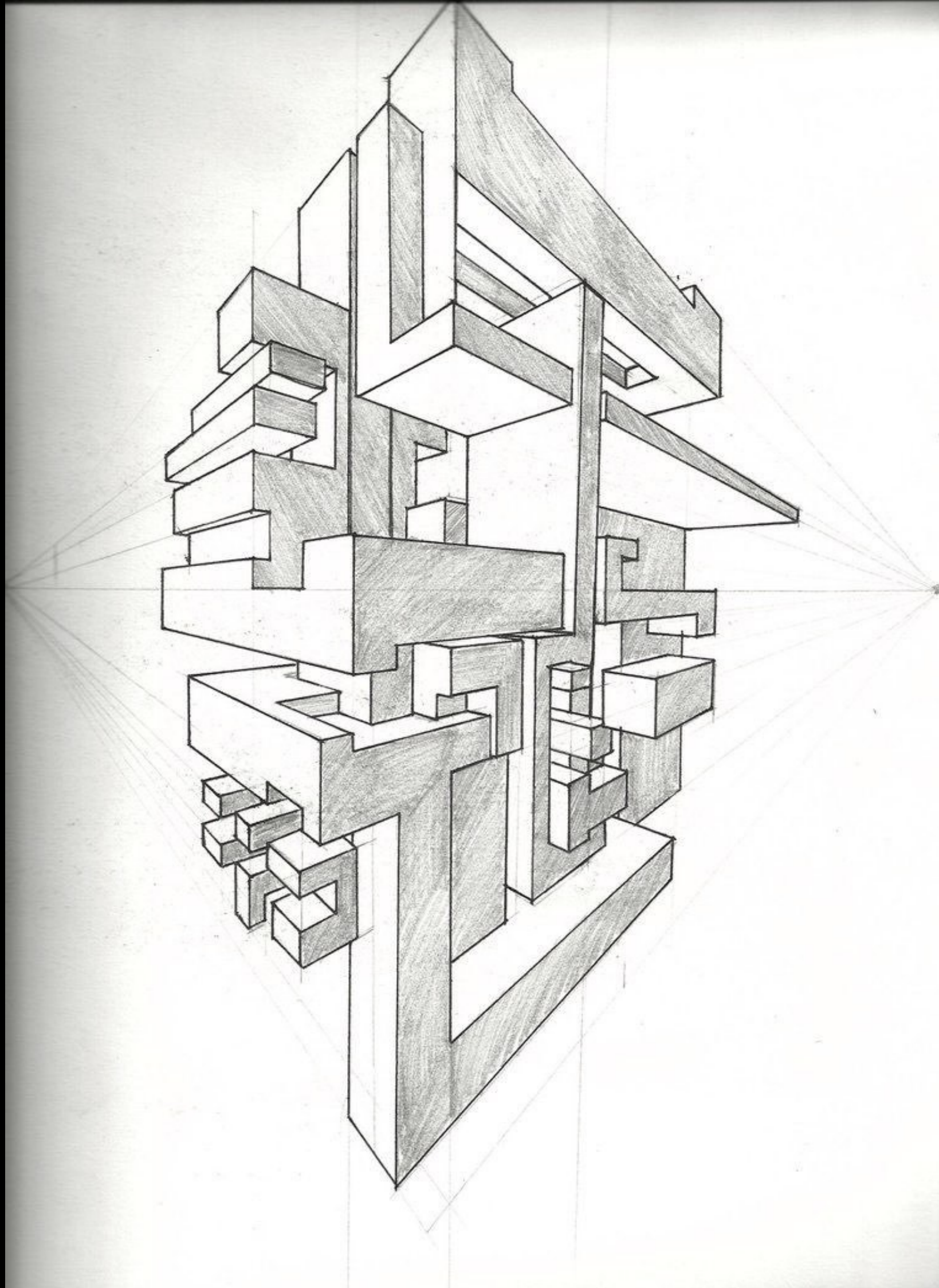
Sketching Form

2 Point Perspective



Sketching Form

2 Point Perspective



Exercise 6

2-POINT ARCHITECTURE

20 min

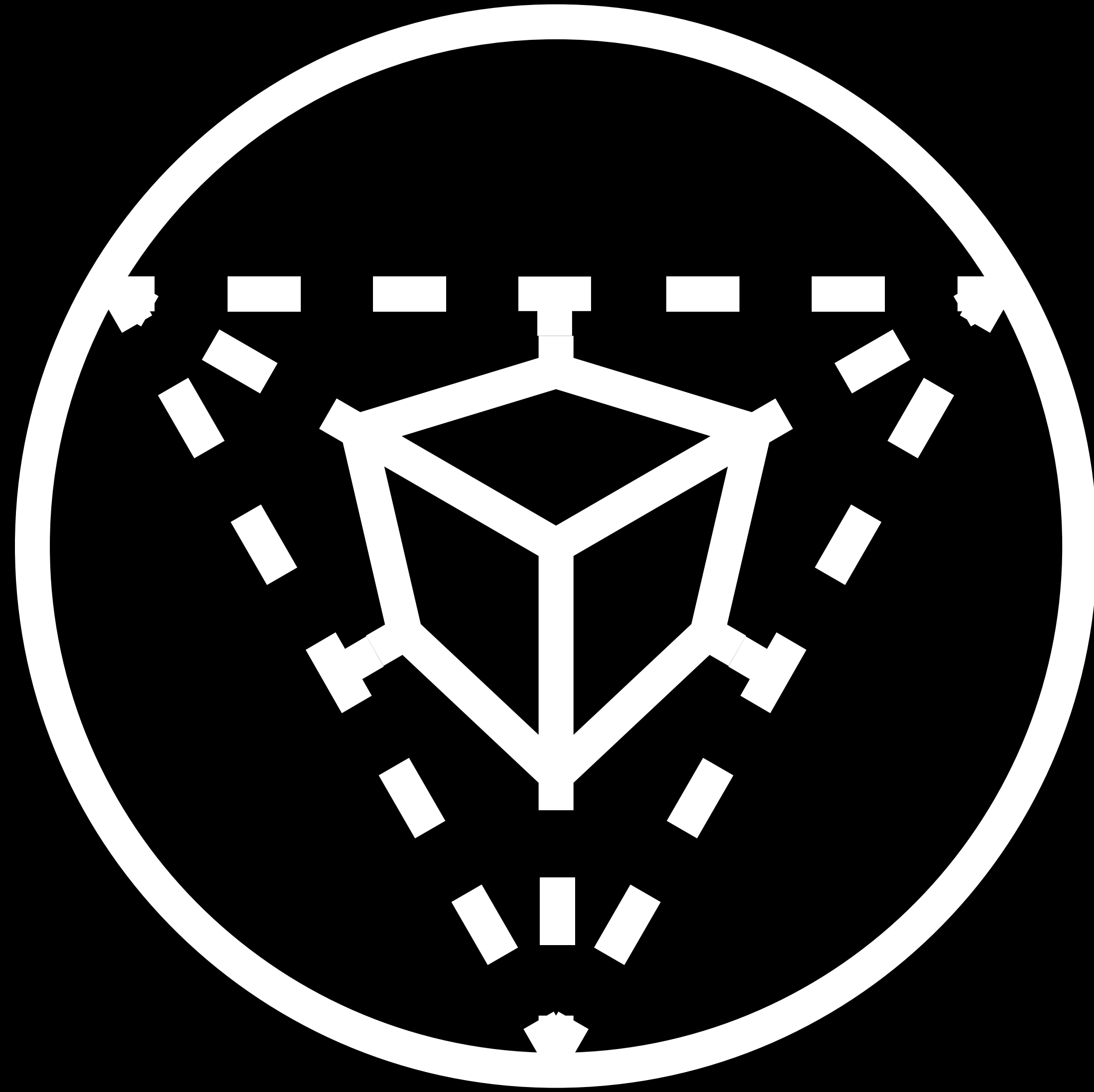
Exercise 7

2-POINT PERSPECTIVE

20 min

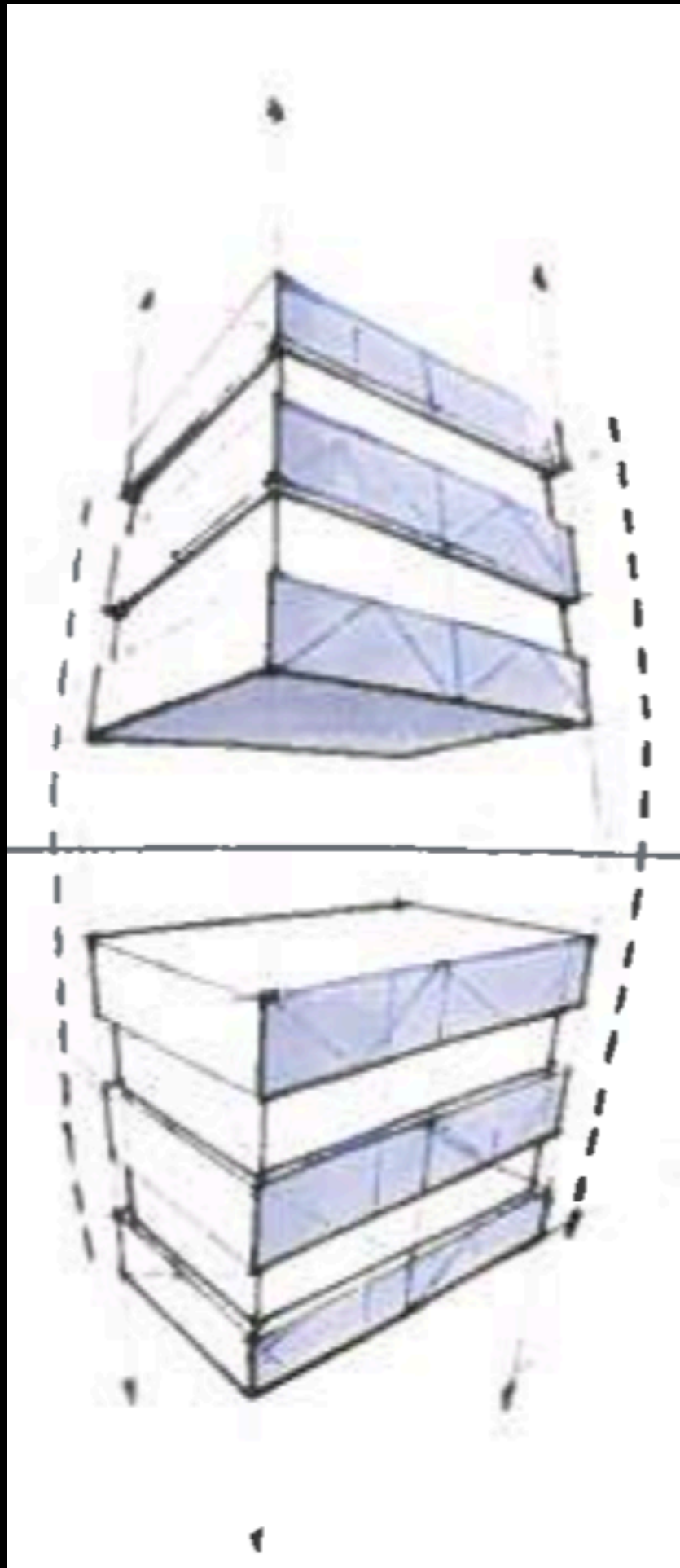
Sketching Form

3 Point Perspective



Sketching Form

3 Point Perspective



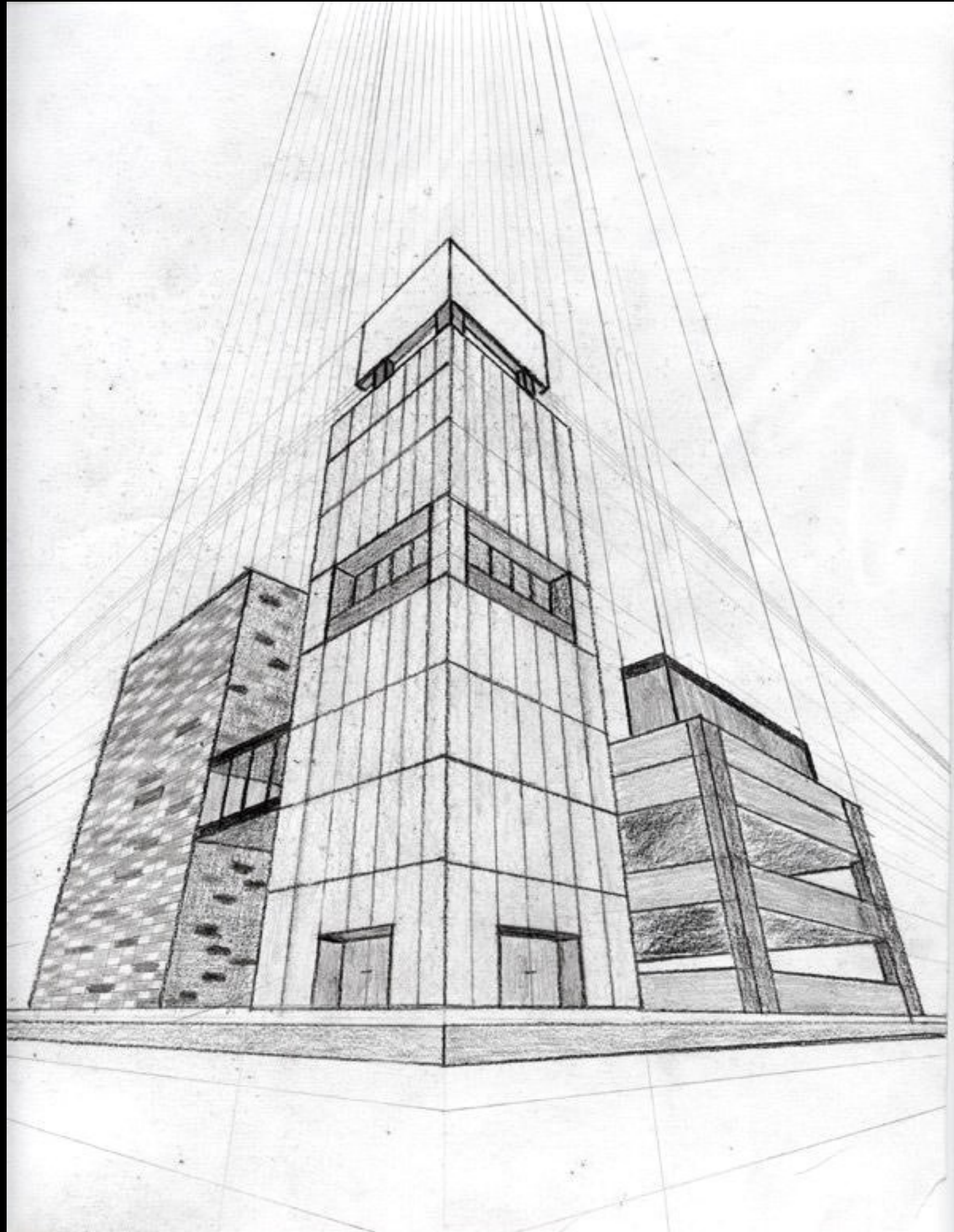
Sketching the Basics

Steur, Eissen

2011

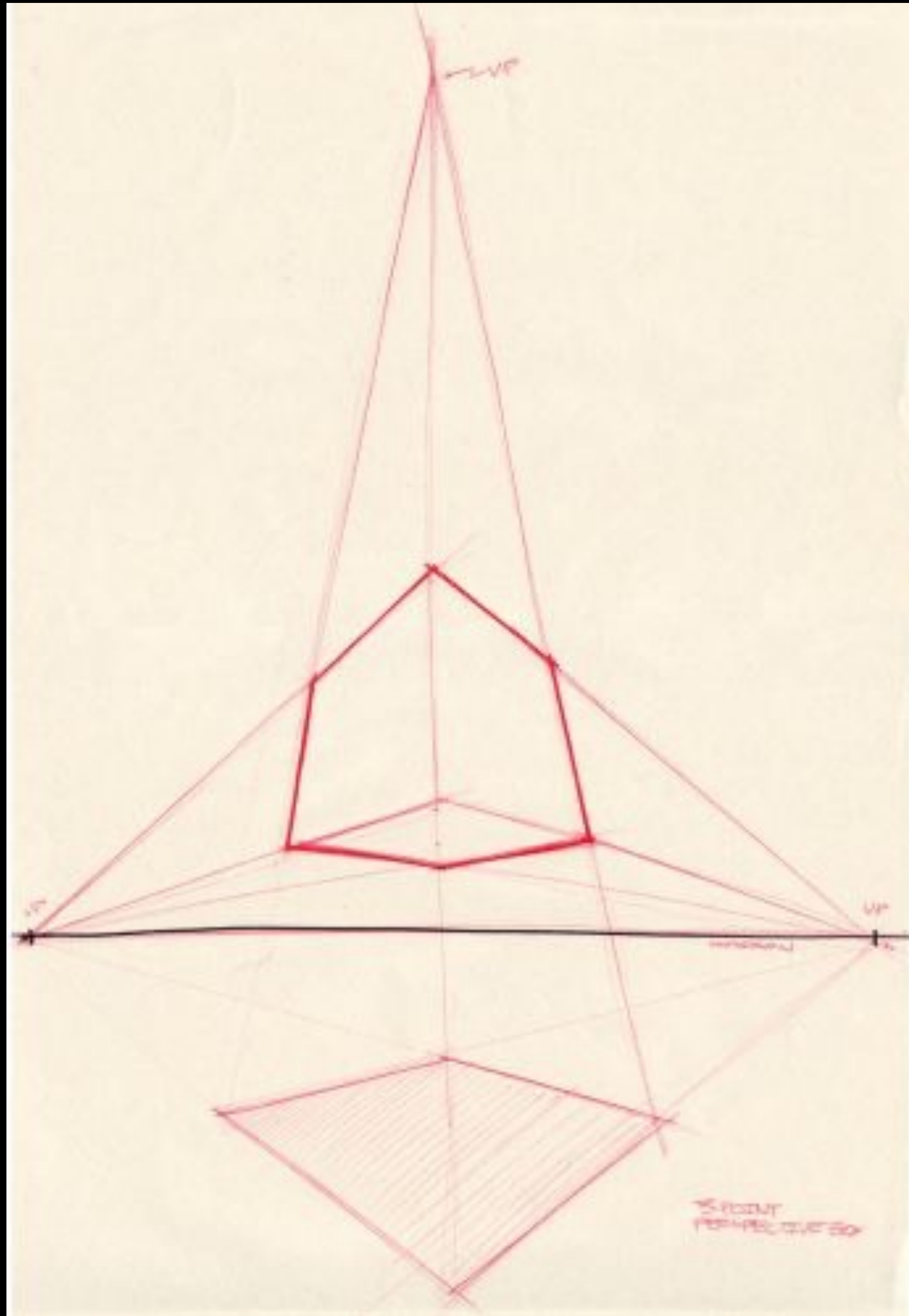
Sketching Form

3 Point Perspective



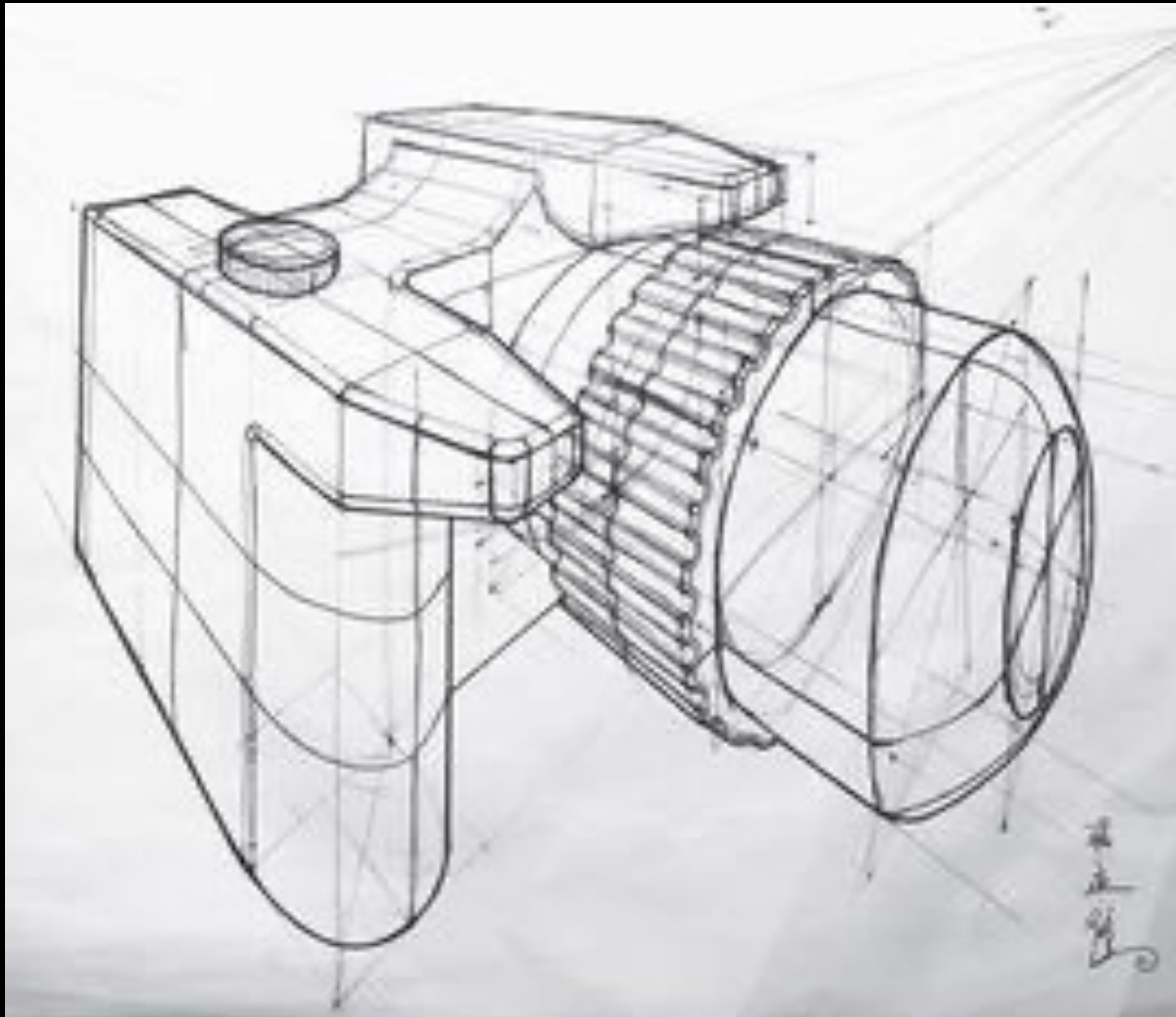
Sketching Form

3 Point Perspective



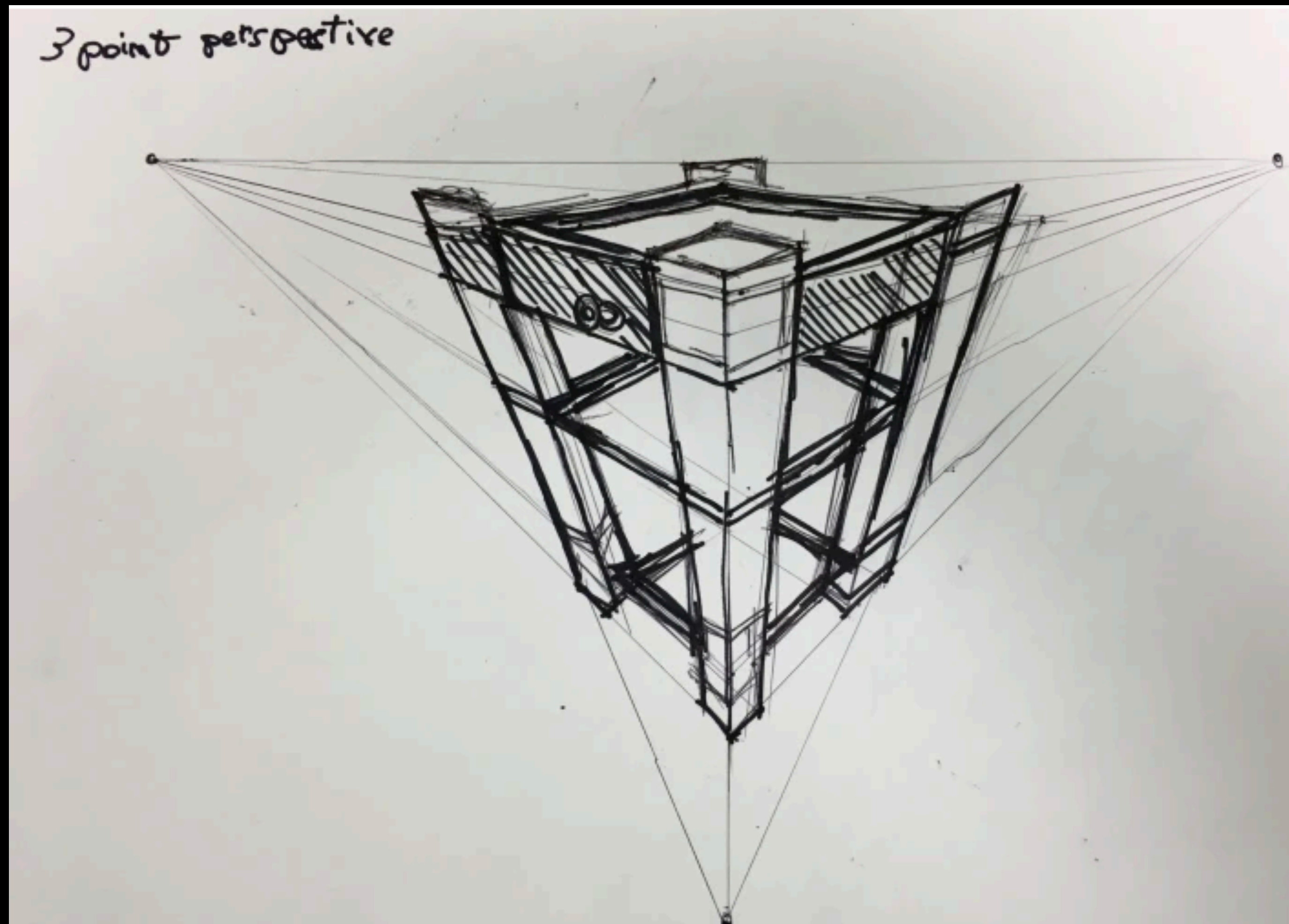
Sketching Form

3 Point Perspective



Sketching Form

3 Point Perspective



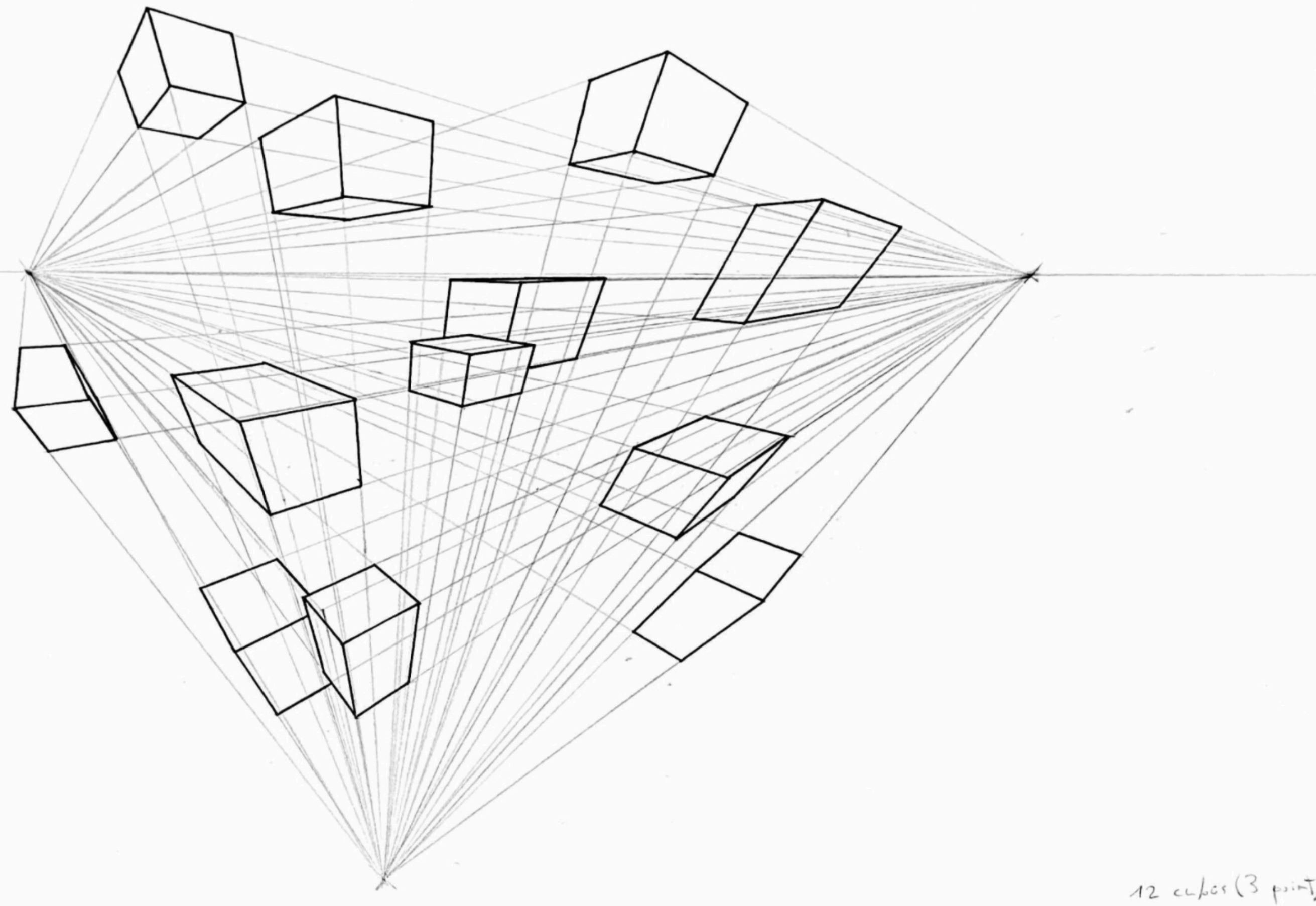
Sketching Form

3 Point Perspective



Sketching Form

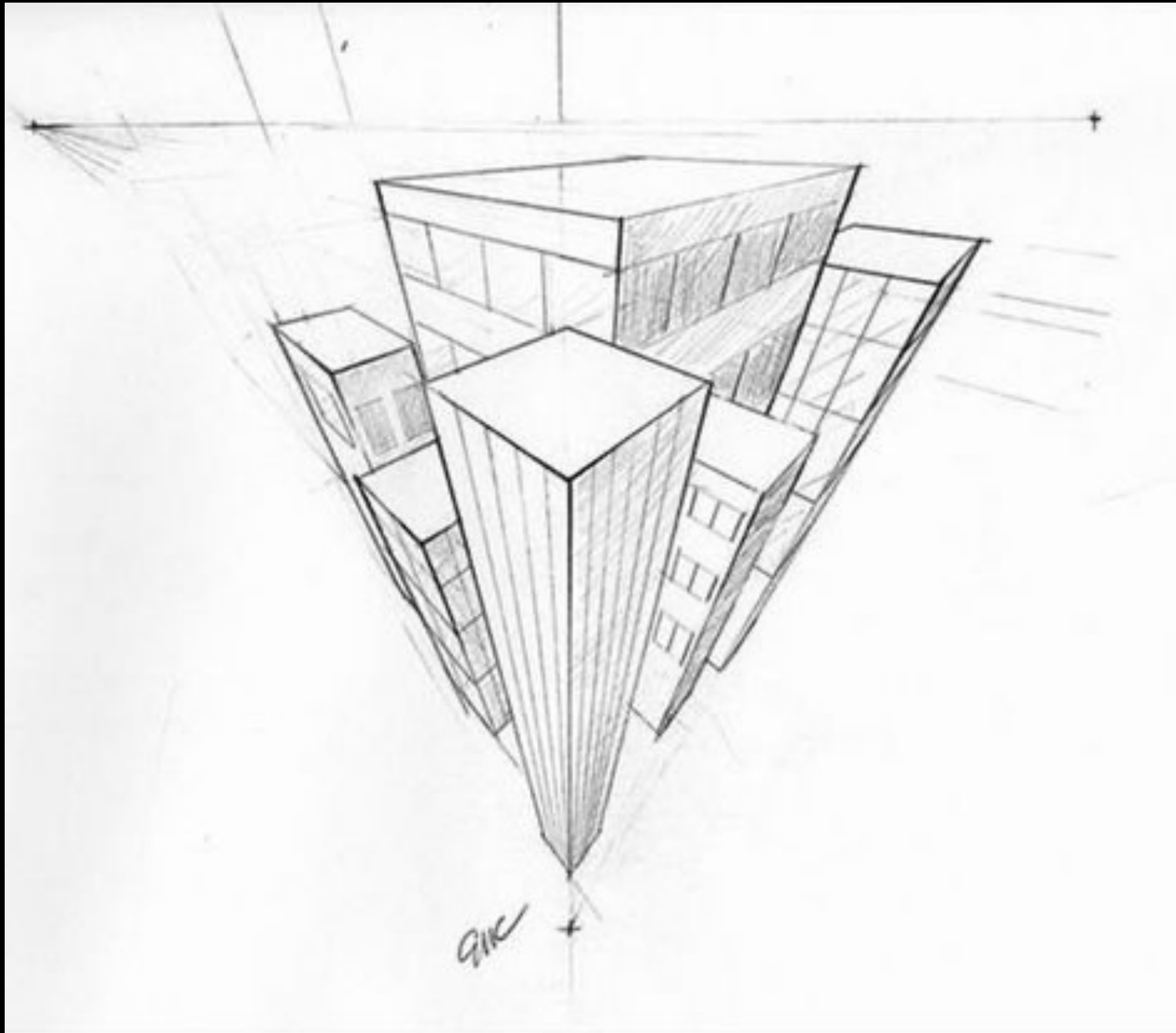
3 Point Perspective



12 cubes (3 point)

Sketching Form

3 Point Perspective



Exercise 8

3-POINT PERSPECTIVE

20 min

Exercise 9

3-POINT ARCHITECTURE

20 min

Buckminster Fuller

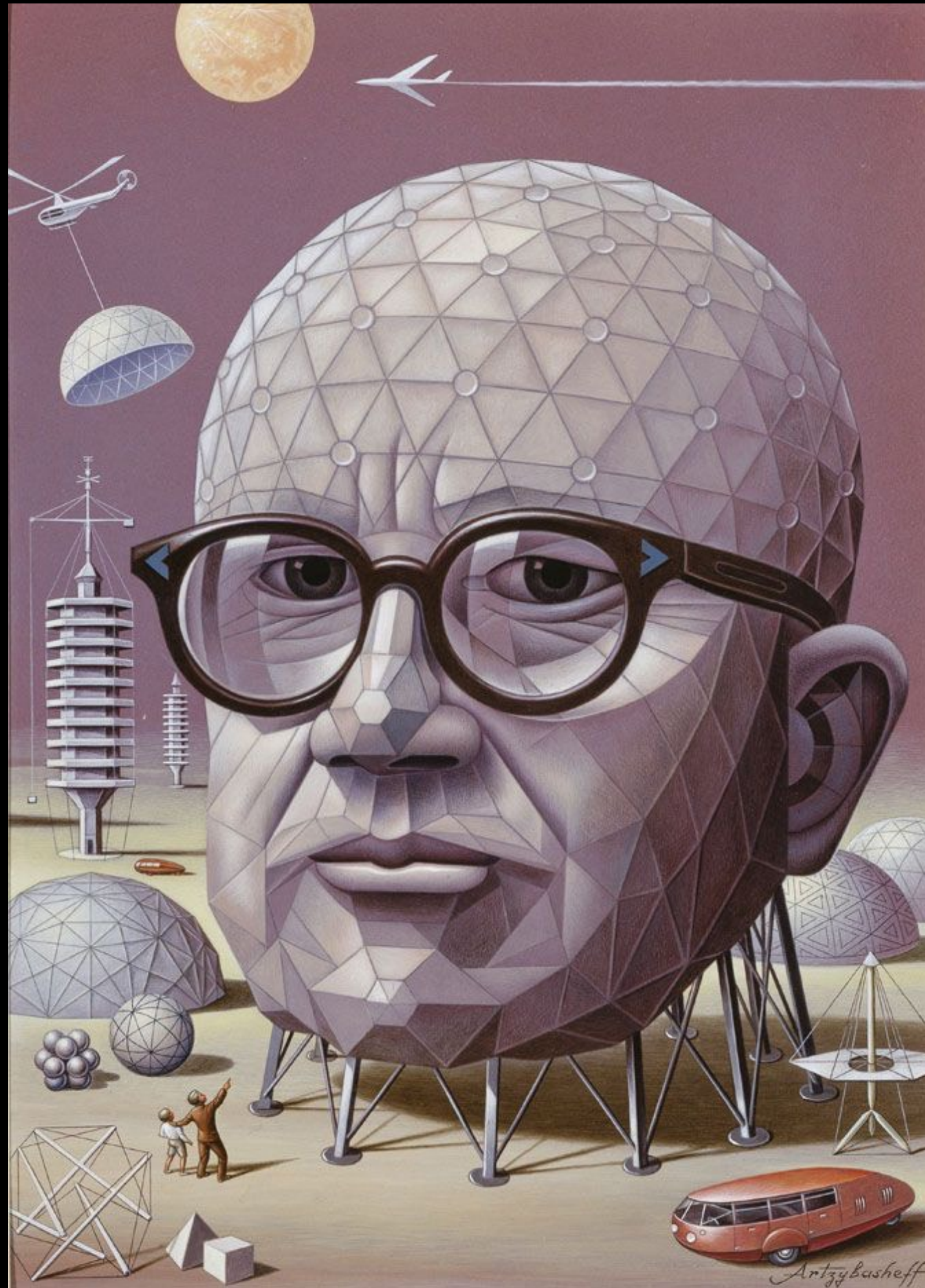
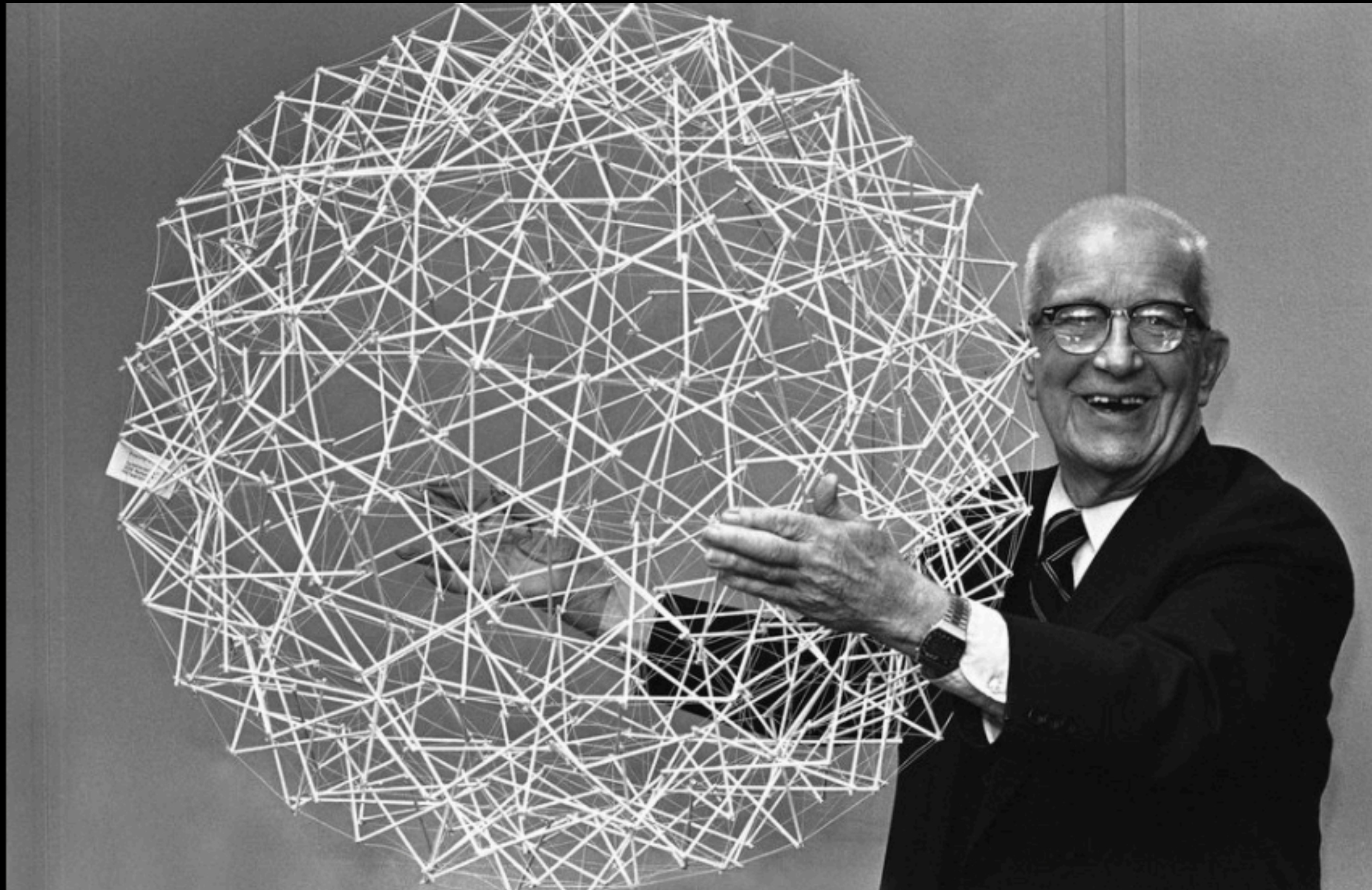


Image by: Boris Atzybasheff for Time Magazine 1964

Also see:

- [99% invisible on Buckminster Fuller](#)
- [Wikipedia on Buckminster Fuller](#)
- [Wikipedia on geodesic domes](#)

Buckminster Fuller - The Person



1895-1983

Image: Buckminster Fuller with Model of Tensegrity Sphere, 1979.

Buckminster Fuller - Sketches

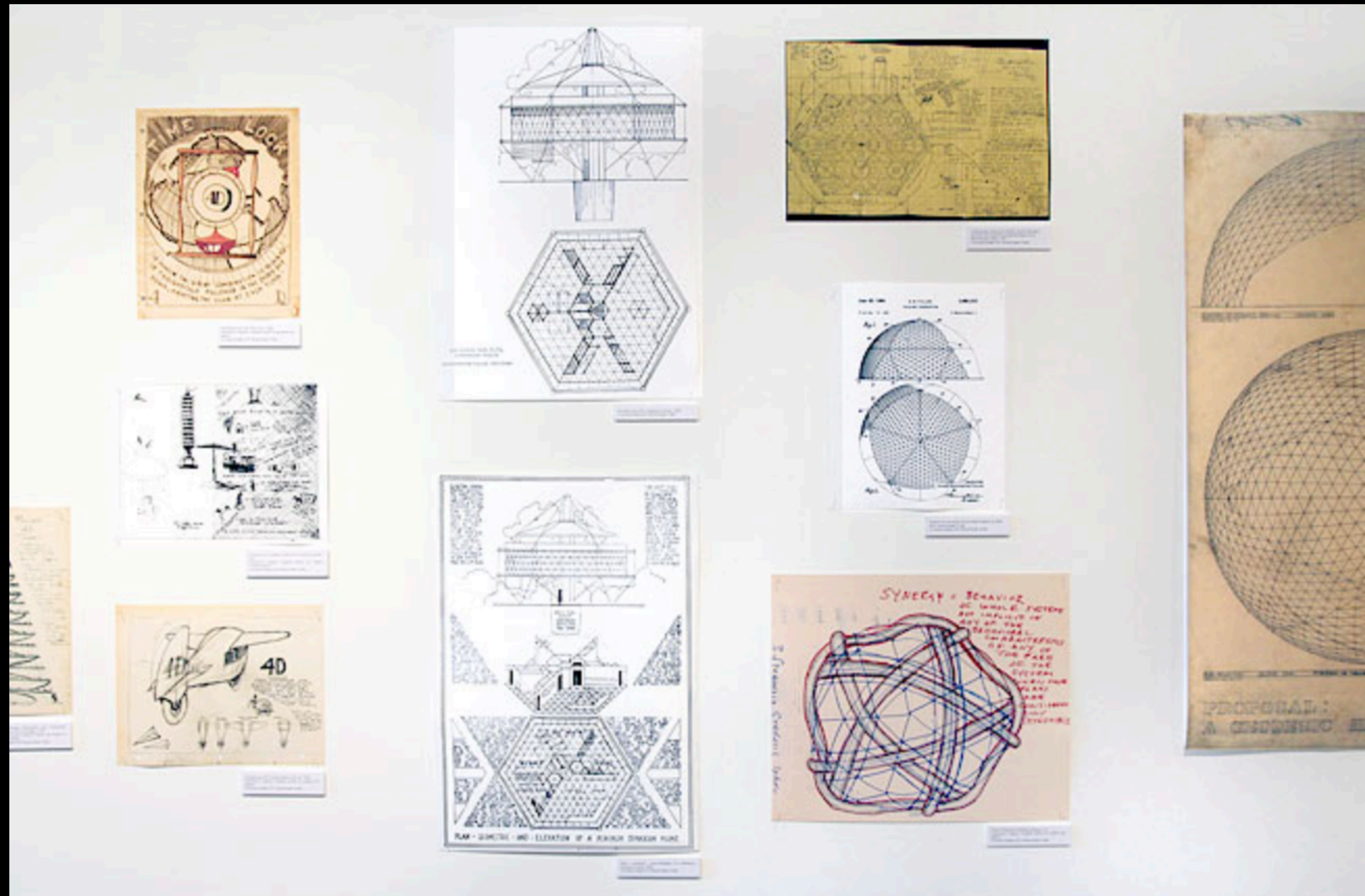
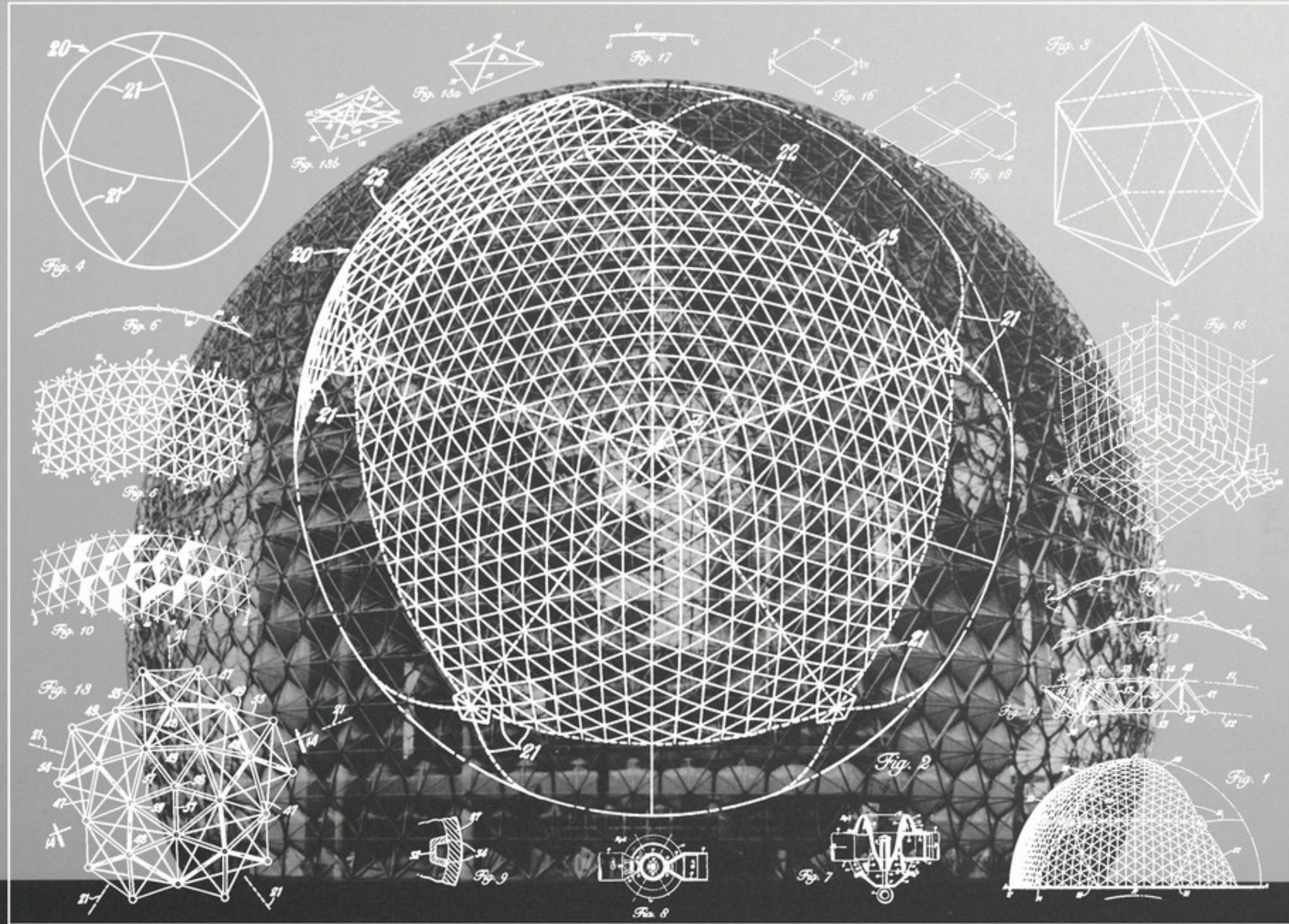


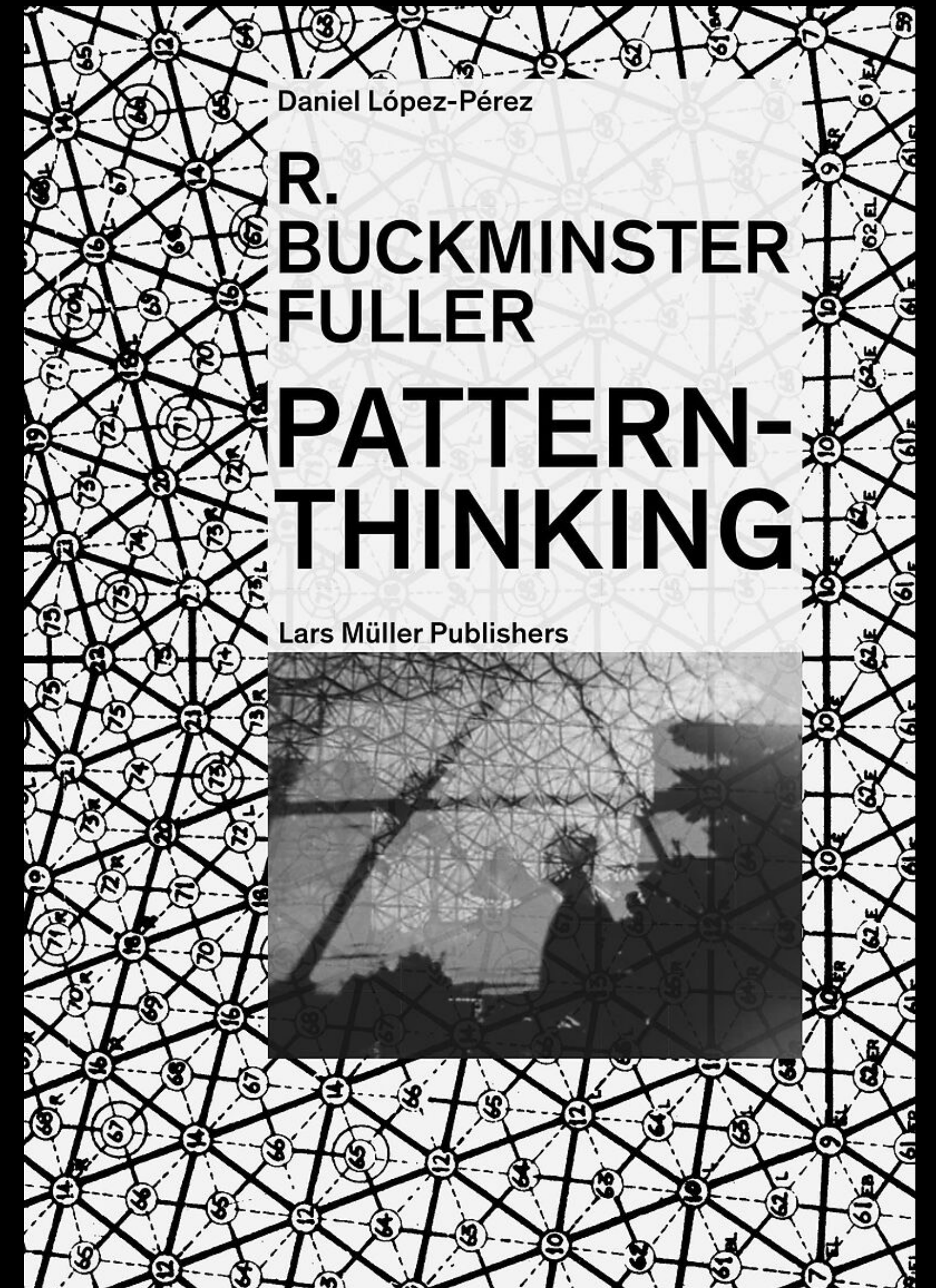
Image: Buckminster Fuller sketches

Buckminster Fuller - Geodesic Dome



BUILDING CONSTRUCTION/GEODESIC DOME, United States Patent Office no. 2,682,235, filed December 12, 1951, serial no. 261,168, granted June 29, 1954, inventor: Buckminster Fuller

© 1994 Buckminster Fuller

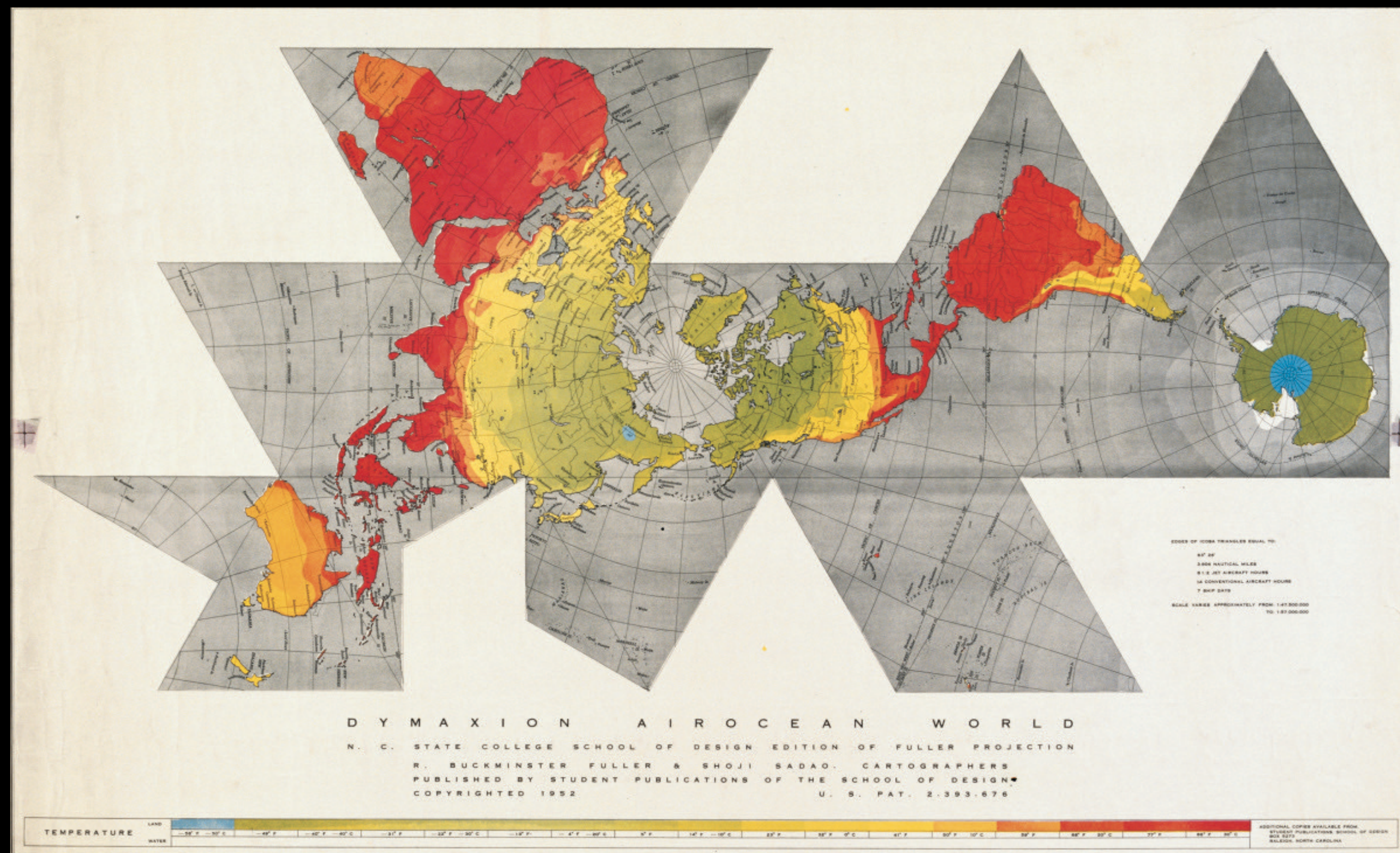


Daniel López-Pérez

R.
BUCKMINSTER
FULLER
**PATTERN-
THINKING**

Lars Müller Publishers

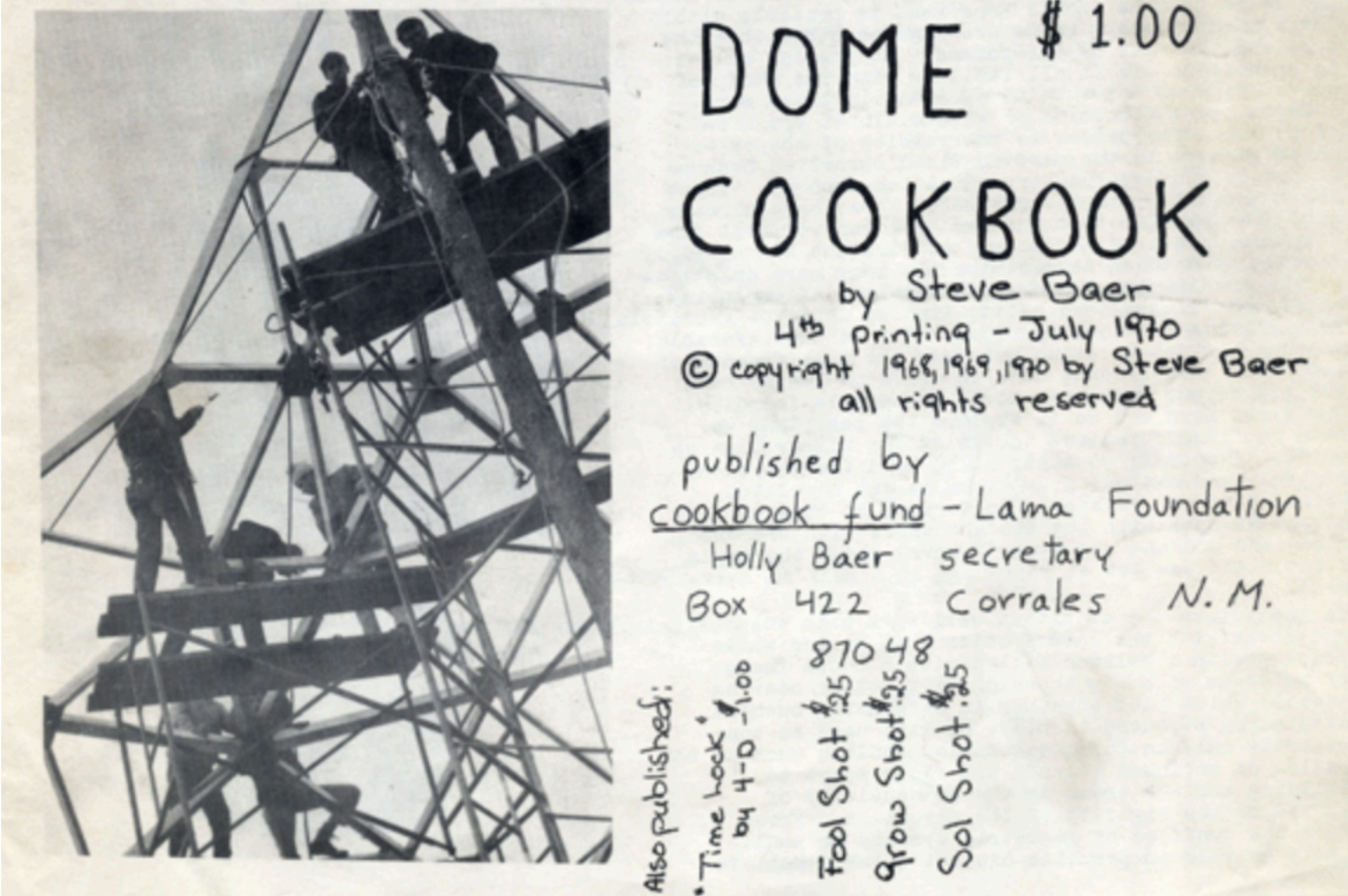
Buckminster Fuller - Dymaxion Map



Courtesy Buckminster Fuller Institute

Performer folds Dymaxion Map, Getty Images

Buckminster Fuller Inspired Design



Steve Baer. *Dome Cookbook* (Lama Foundation, 1967).



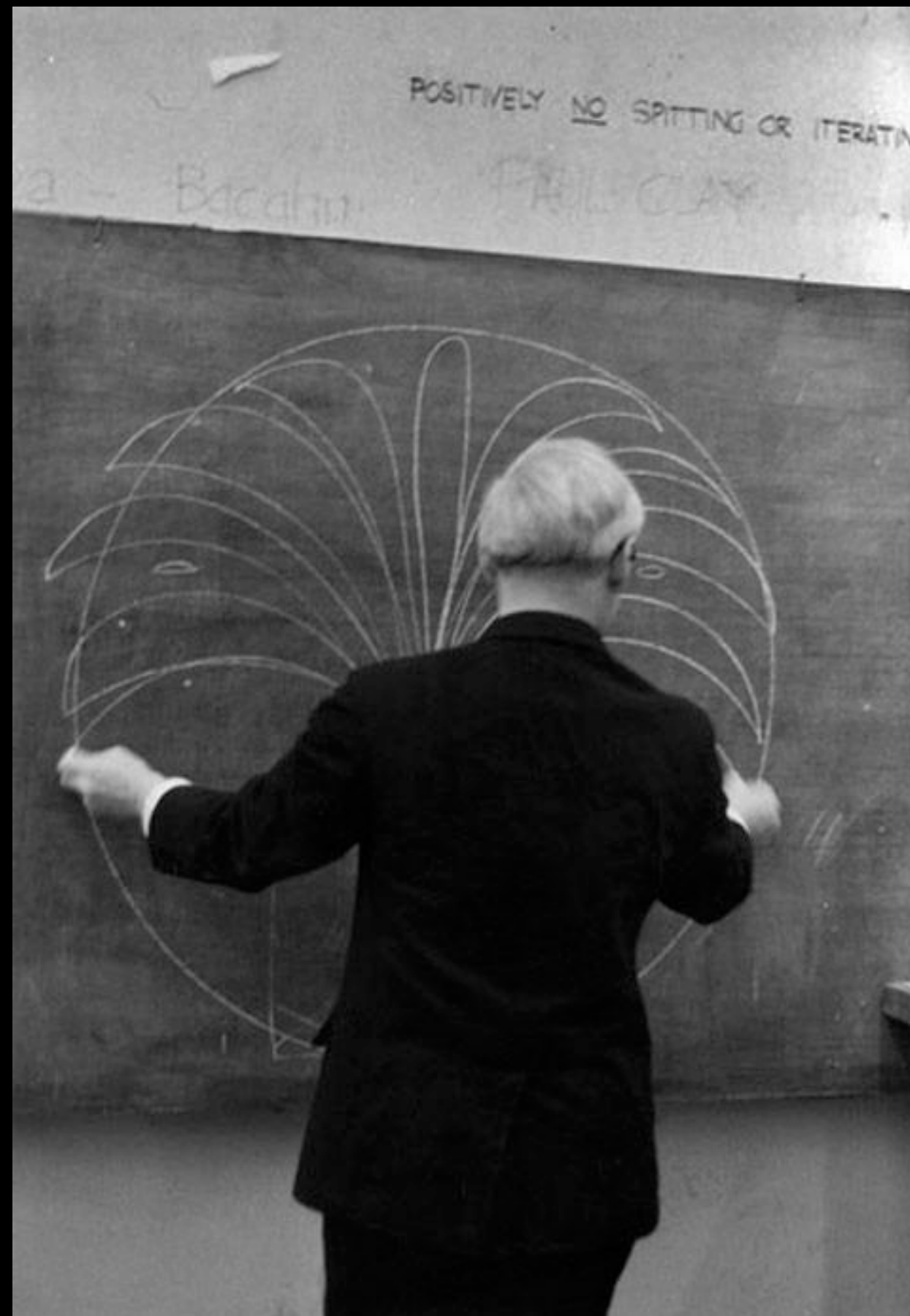
Biosphere II, Arizona, 1999.



Dome of Visions, Copenhagen, Danish architects Kristoffer Tejlgaard and Benny Jepsen , 2013.

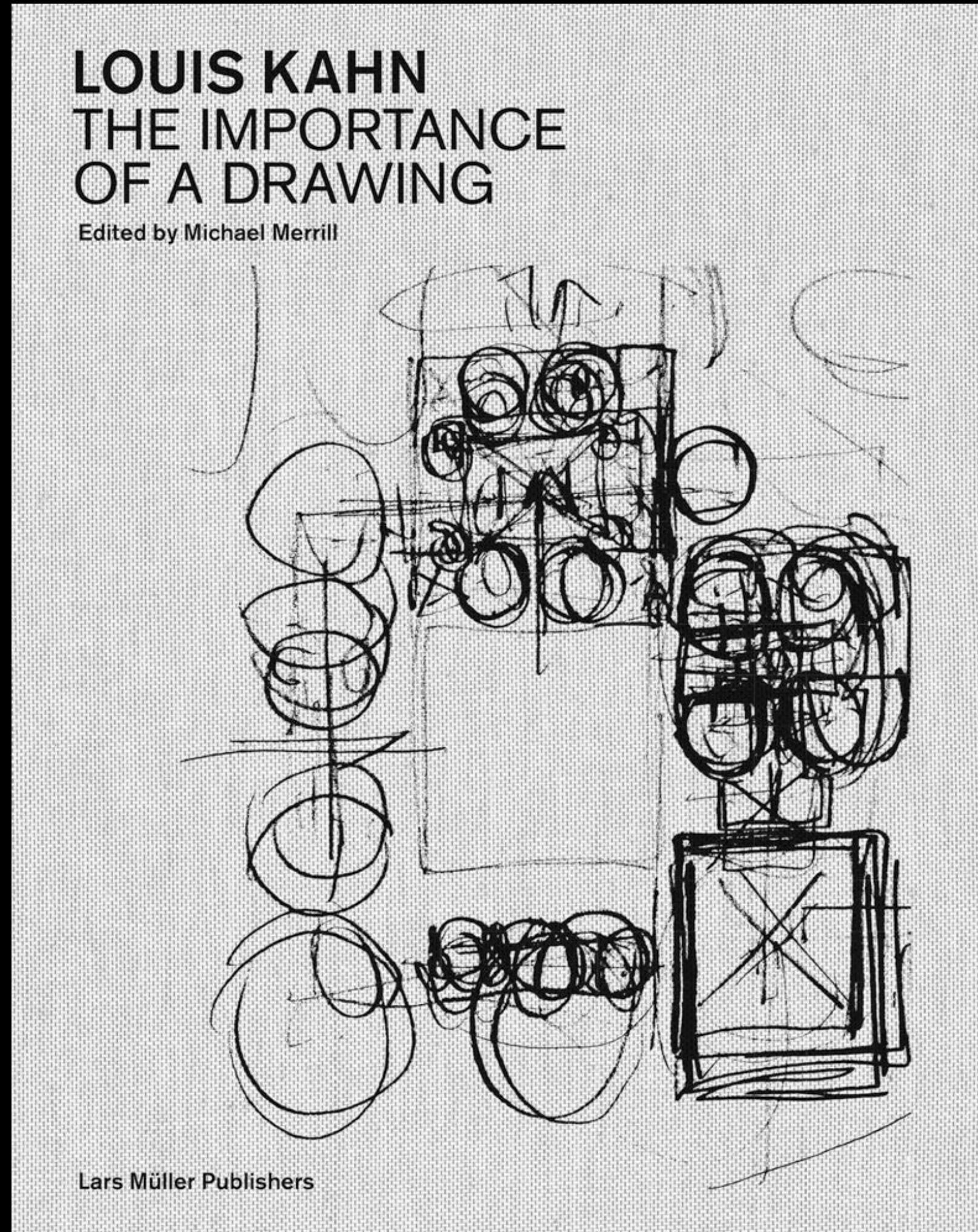
The Dome Cookbook, Steve Baer, 1968.

Louis Kahn

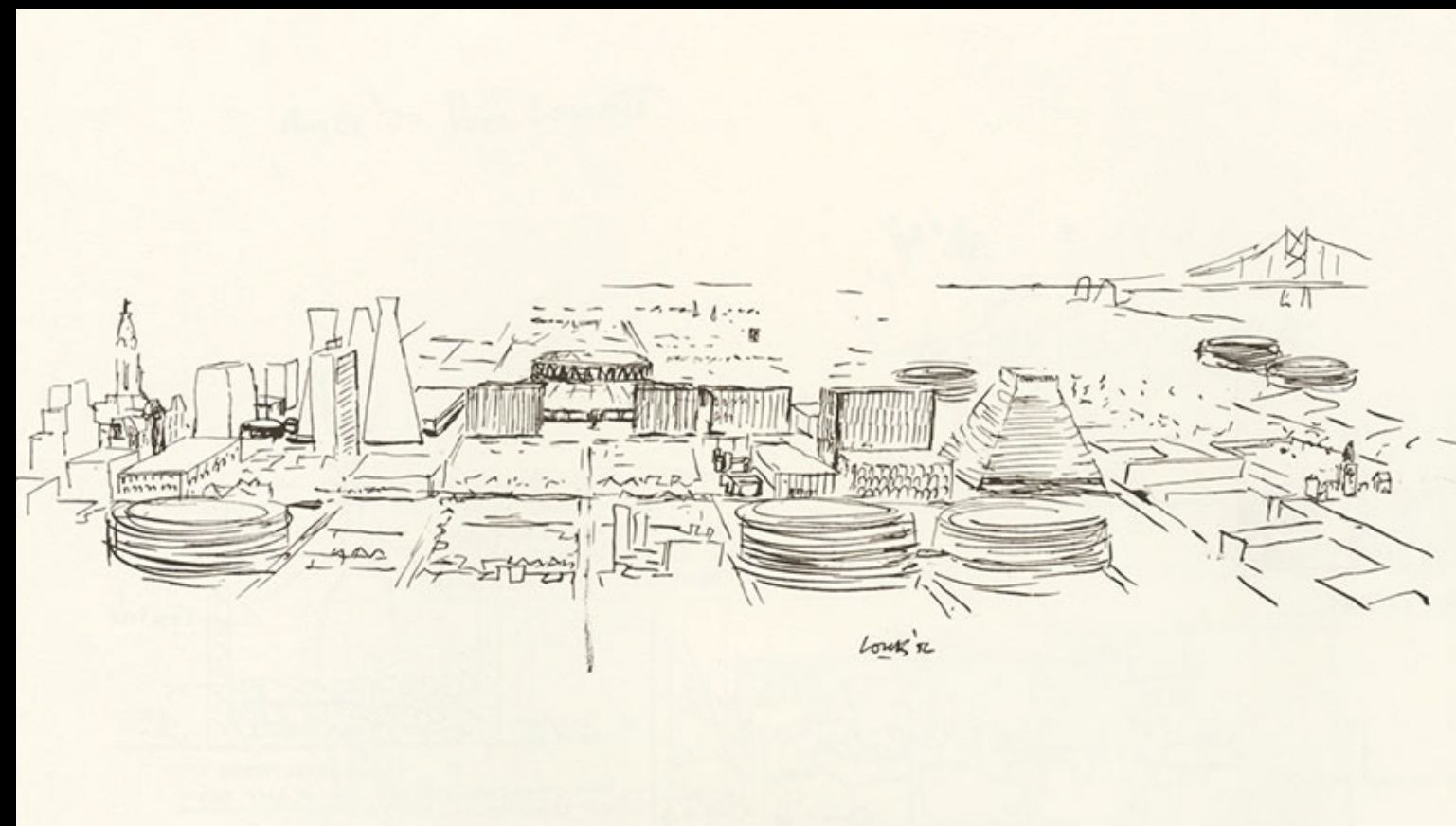
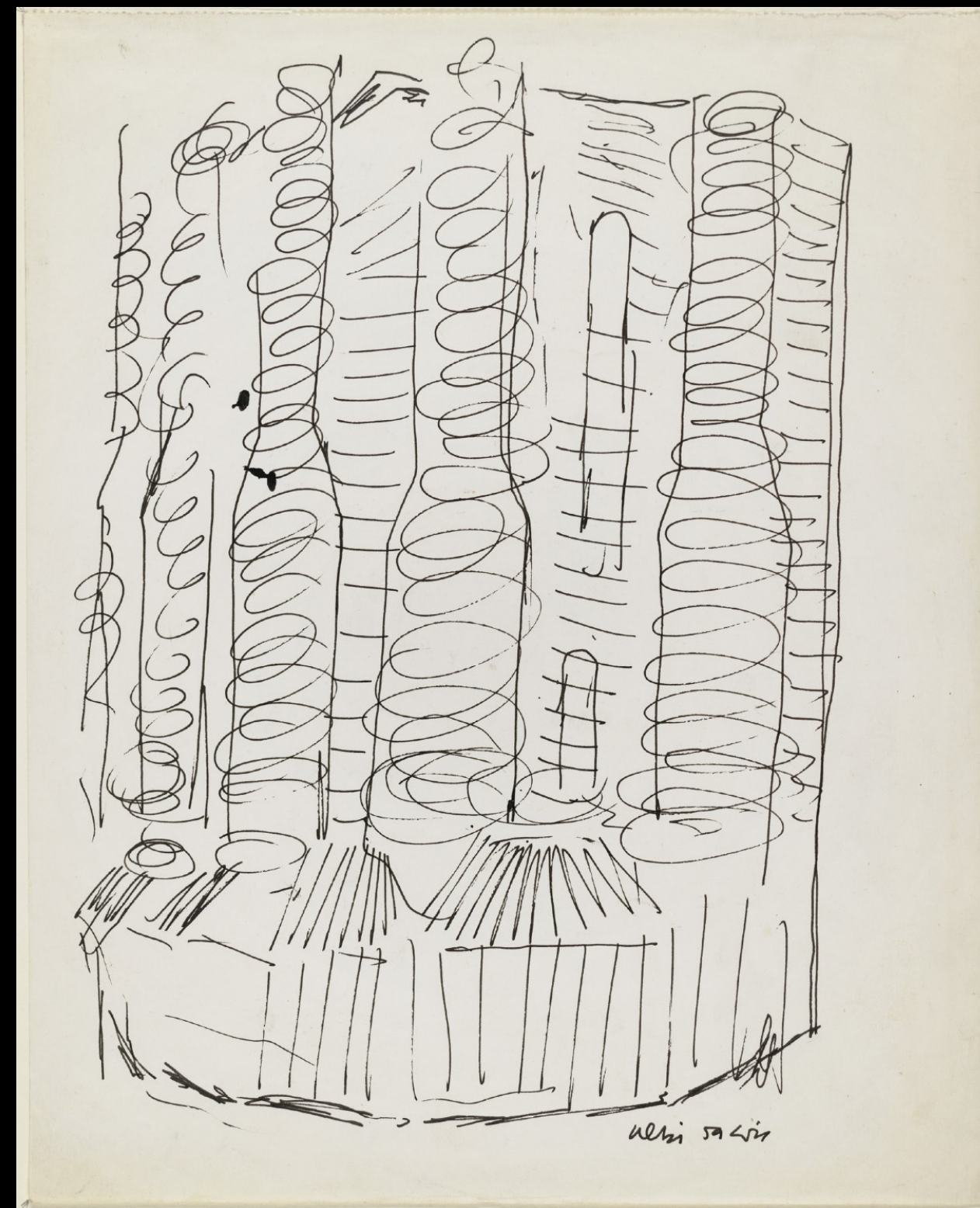


1901-1974

Louis Kahn



Louis Kahn



Louis Kahn



Buckminster Fuller as an inspiration for Loop Design



Sketch furniture by Front

Biennal 2021 - Maison Fibre



Biennal 2021 - Maison Fibre



Maison Fibre

Towards a Novel Material Culture

17th International Architecture Exhibition
La Biennale di Venezia 2021

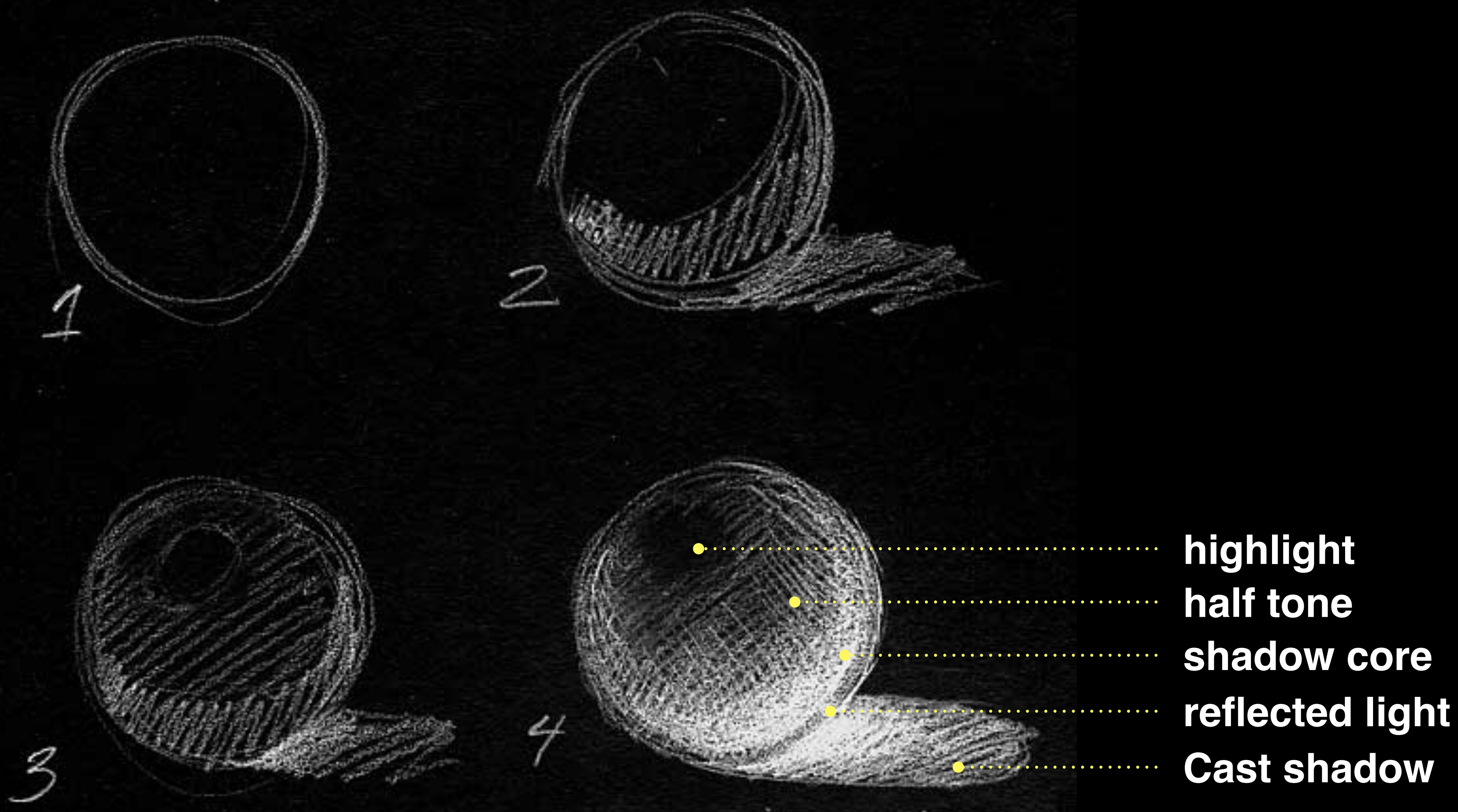
Exercise 10

SHADOWS

30 min

Sketching Form

Shading



Exercise 11

ORGANIZE A FULL PAPER WITH ALL SKETCHING TECHNIQUES

1 hour

Thank you!

Contact

Rasa Weber | rasa.weber@zhdk.ch

Z

hdk

Zürcher Hochschule der Künste
Bachelor of Arts in Design