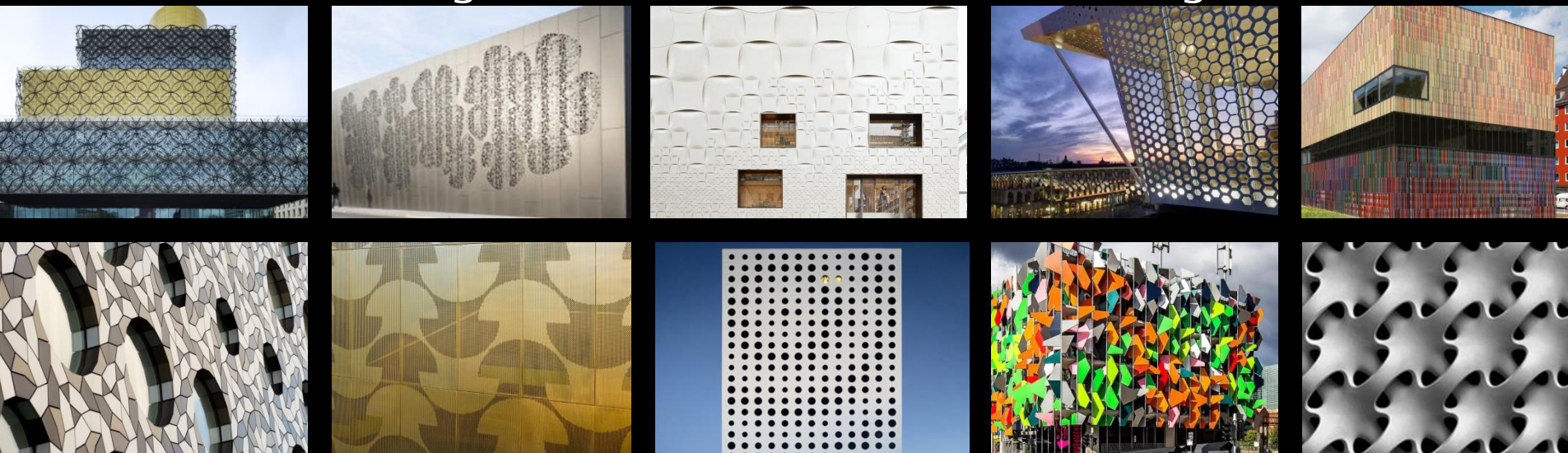
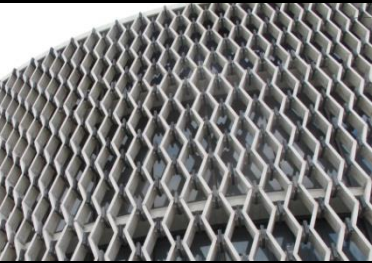


DrAFT

An Algorithmic Framework for Facade Design

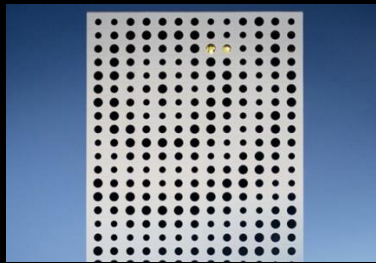




Background

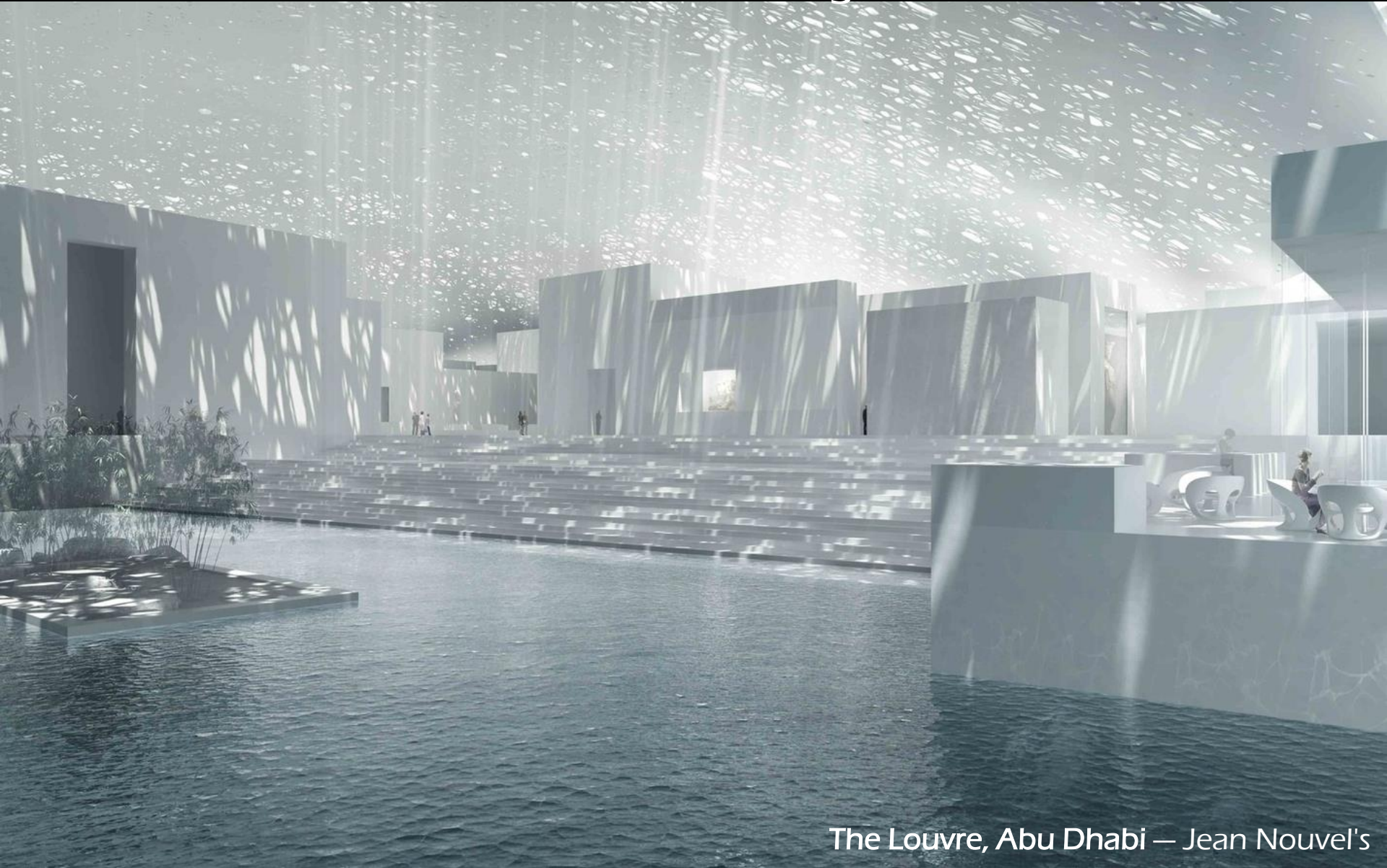


Work Developed



Examples

Generative Design



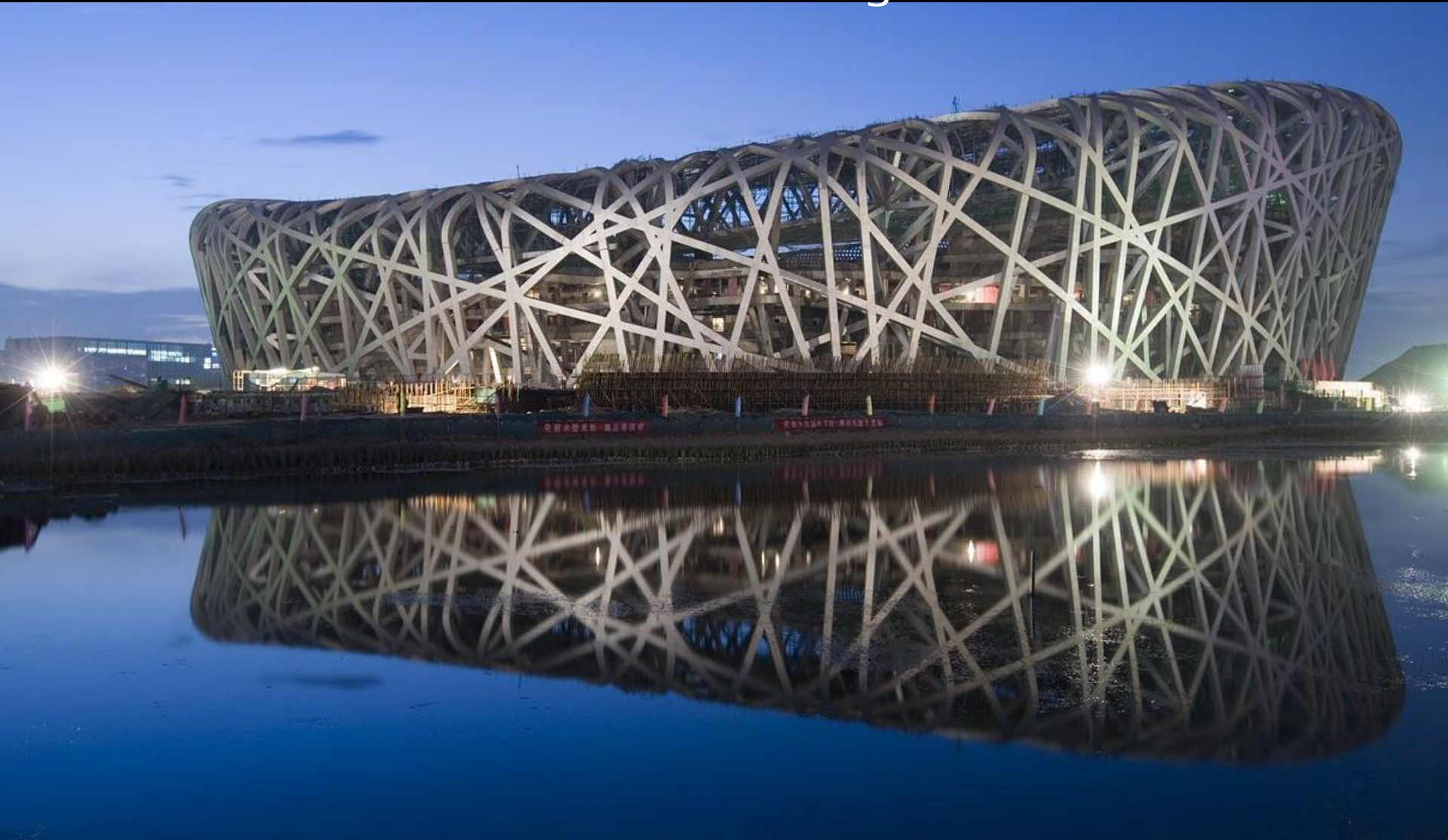
The Louvre, Abu Dhabi — Jean Nouvel's

Background

Work Developed

Examples

Generative Design

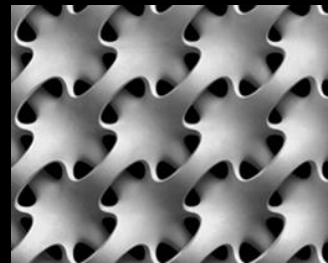
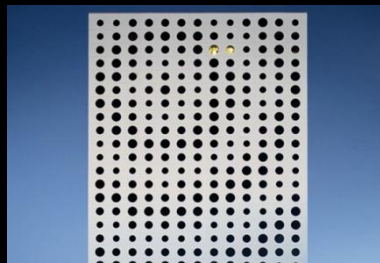
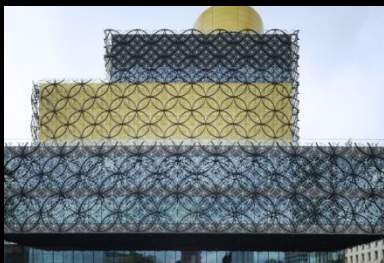
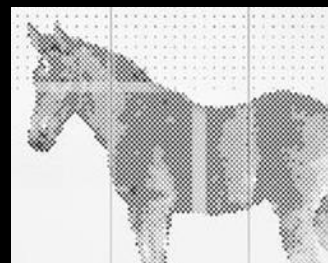
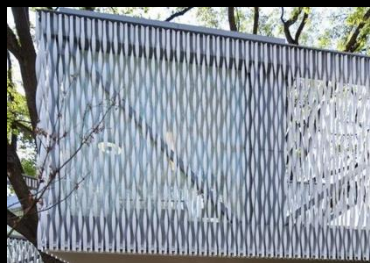


Beijing National stadium, China — Herzog & de Meuron, ArupSport, China Architectural Design

Background

Work Developed

Examples



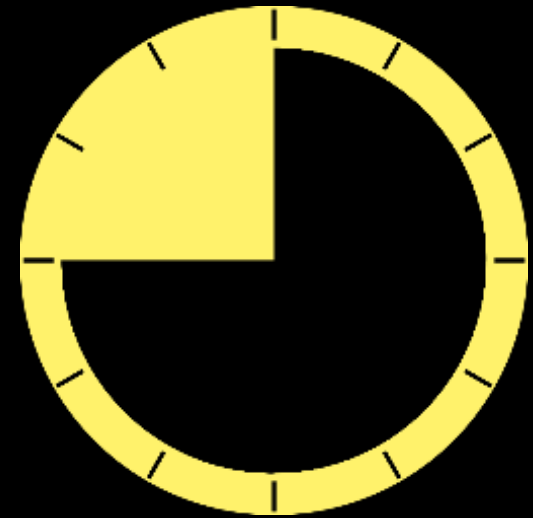
Background

Work Developed

Examples



Background



Work Developed

Examples



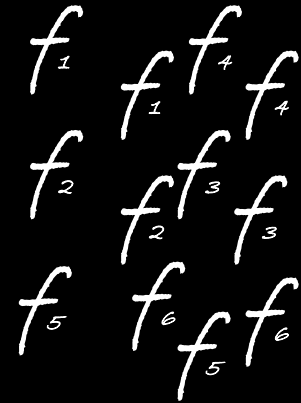
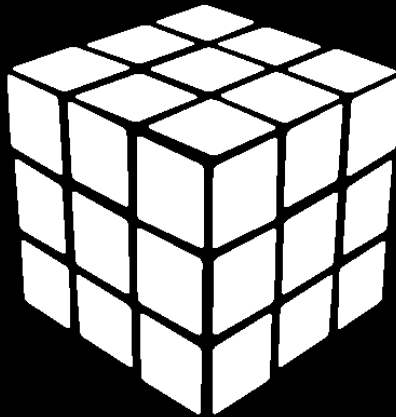
Background



Work Developed

Examples

Framework

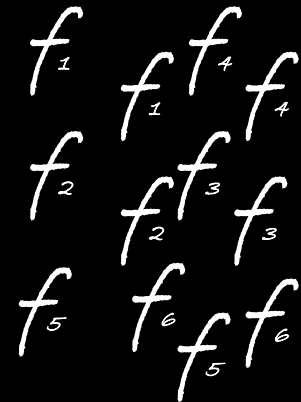
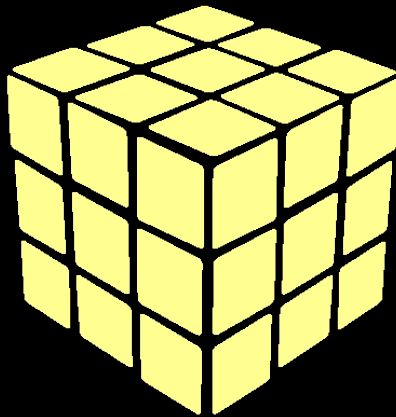


Background

Work Developed

Examples

Framework



Background

Work Developed

Examples

Classification

FACADE GEOMETRY

ELEMENTS/UNITS

GRID/DISTRIBUTION

ARTICULATION

Background

Work Developed

Examples

FACADE GEOMETRY

ELEMENTS/UNITS

GRID/DISTRIBUTION

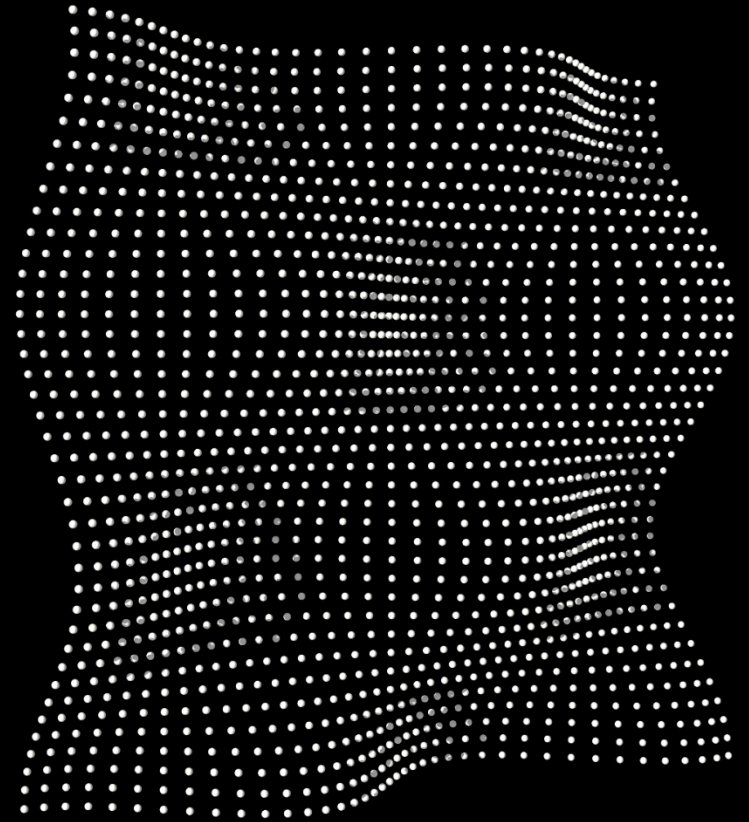
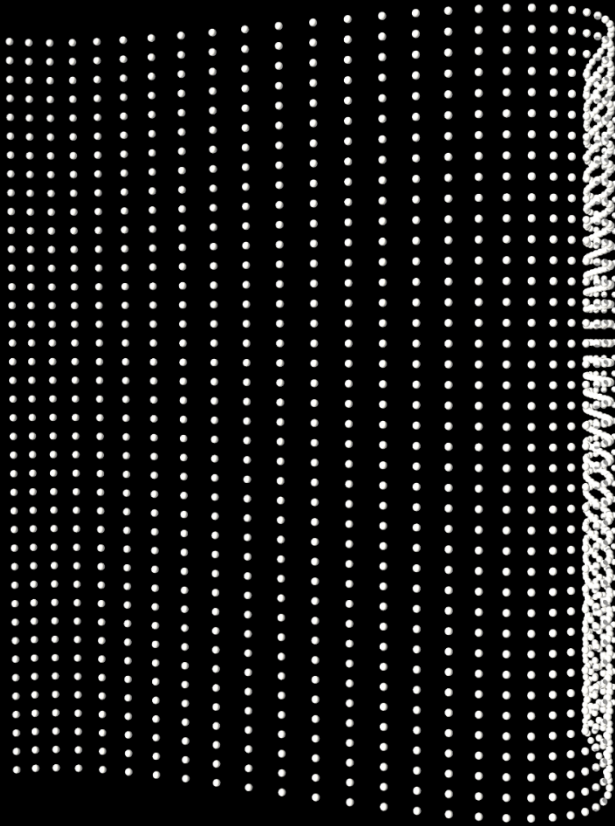
ARTICULATION

Background

Work Developed

Examples

Facade Geometry



Background

Work Developed

Examples

FACADE GEOMETRY

ELEMENTS/UNITS

GRID/DISTRIBUTION

ARTICULATION

Background

Work Developed

Examples

FACADE GEOMETRY

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION

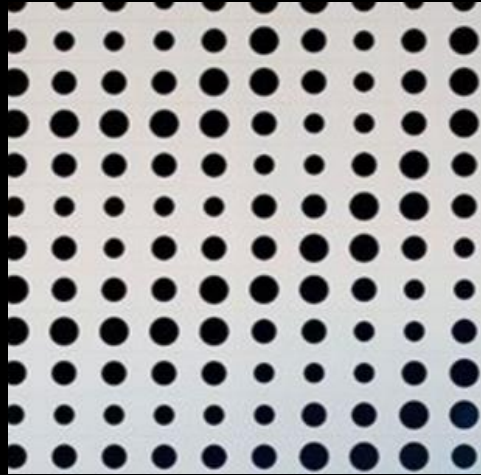
Background

Work Developed

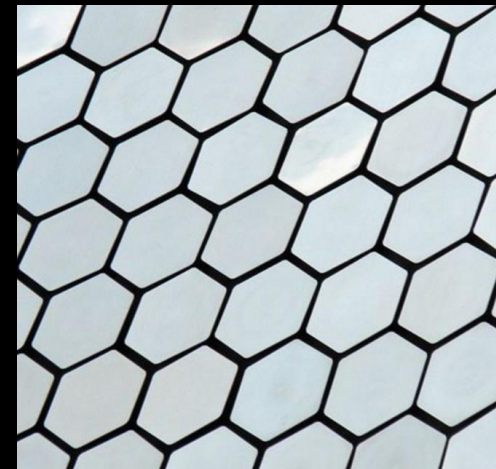
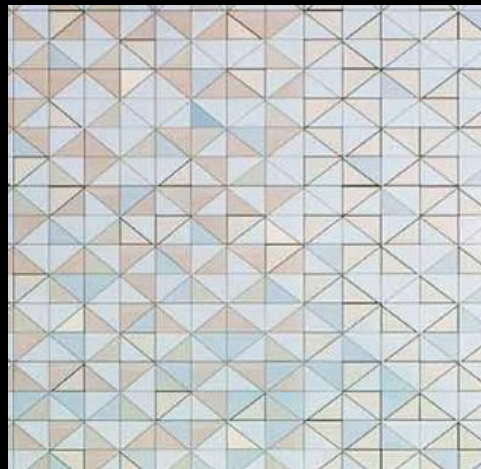
Examples

Units/Elements

SHAPE



TRANSFORMATION



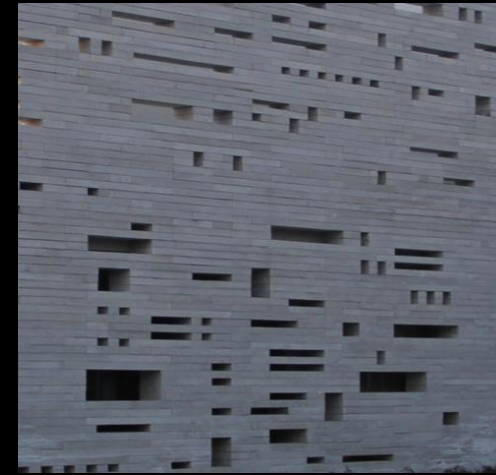
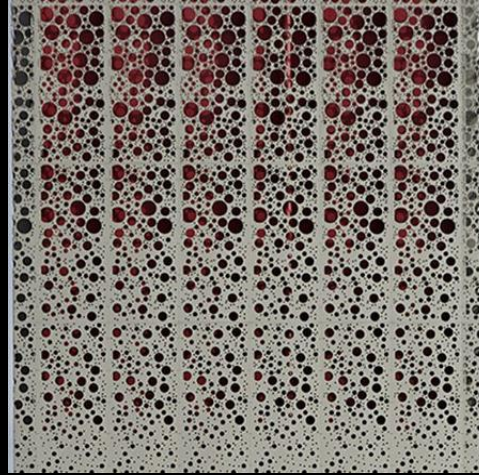
Background

Work Developed

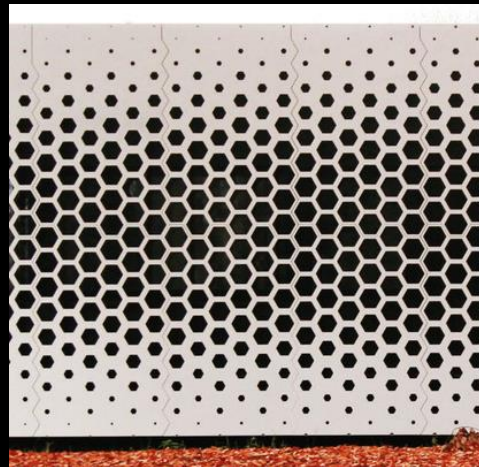
Examples

Units/Elements

SHAPE



TRANSFORMATION



Background

Work Developed

Examples

Units/Elements

SHAPE



TRANSFORMATION



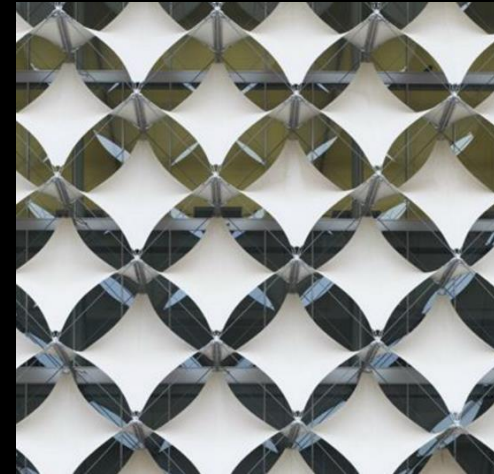
Background

Work Developed

Examples

Units/Elements

SHAPE



TRANSFORMATION



Background

Work Developed

Examples

FACADE GEOMETRY

ELEMENTS/UNITS

GRID/DISTRIBUTION

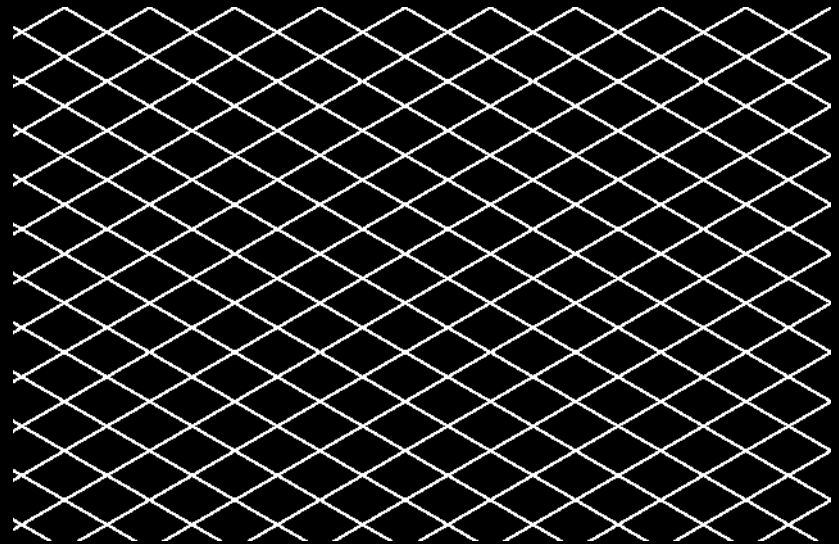
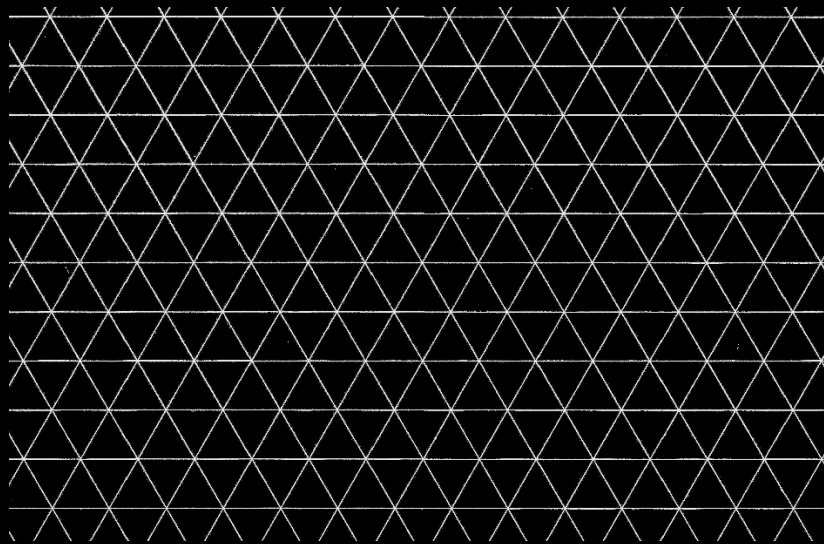
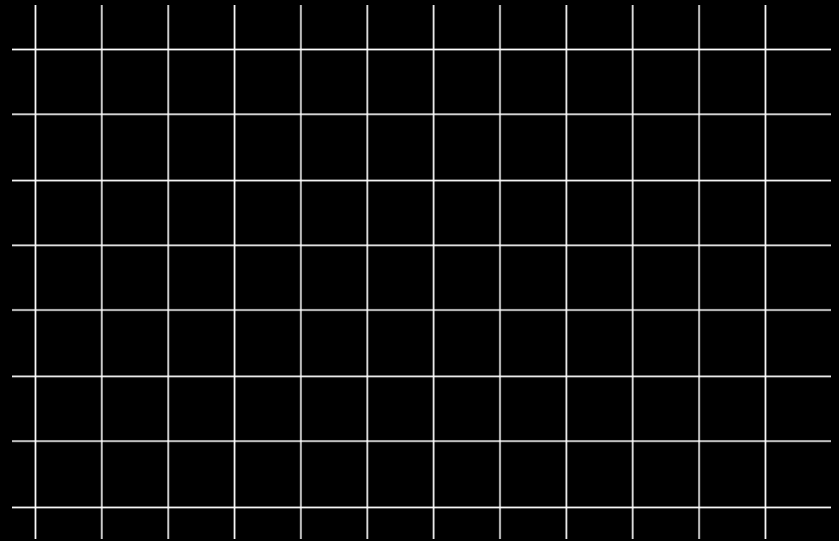
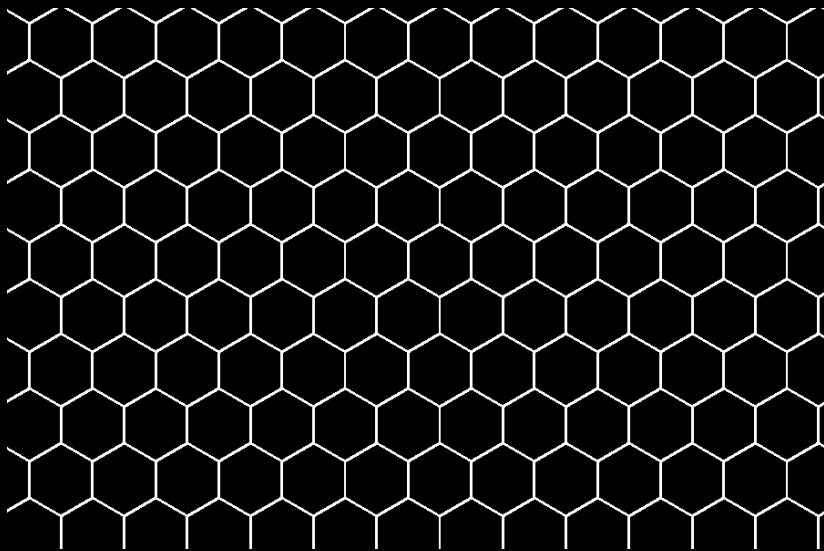
ARTICULATION

Background

Work Developed

Examples

Grid/Distribution



Background

Work Developed

Examples

FACADE GEOMETRY

ELEMENTS/UNITS

GRID/DISTRIBUTION

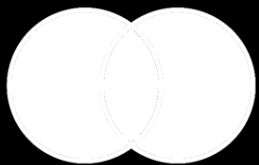
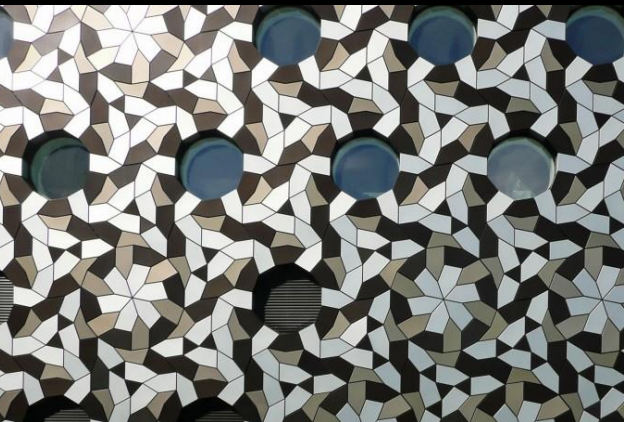
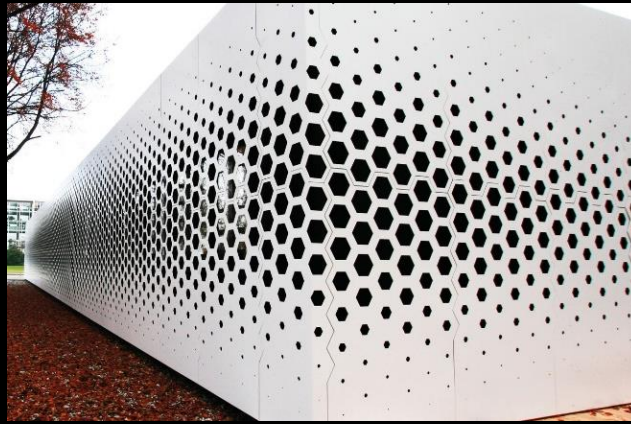
ARTICULATION

Background

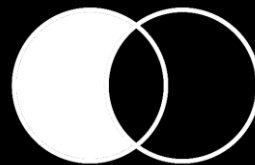
Work Developed

Examples

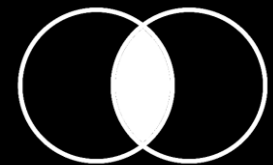
Articulation



Background



Work Developed



Examples

Practical Applications



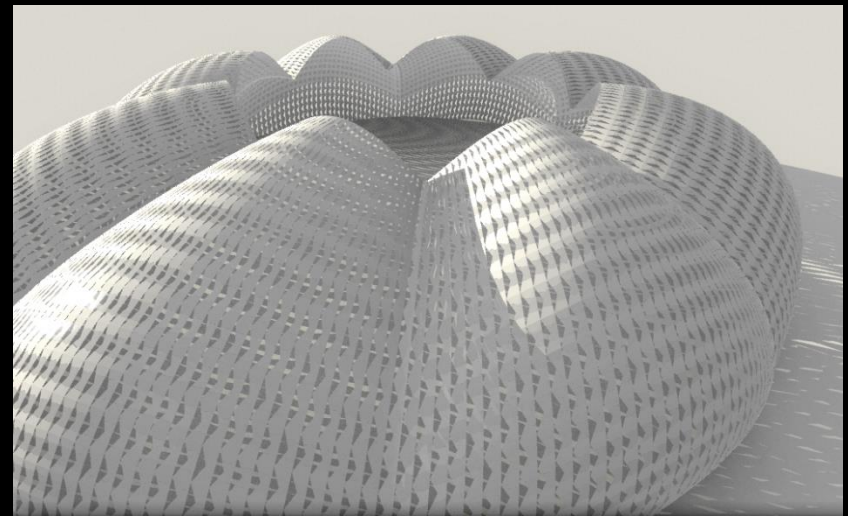
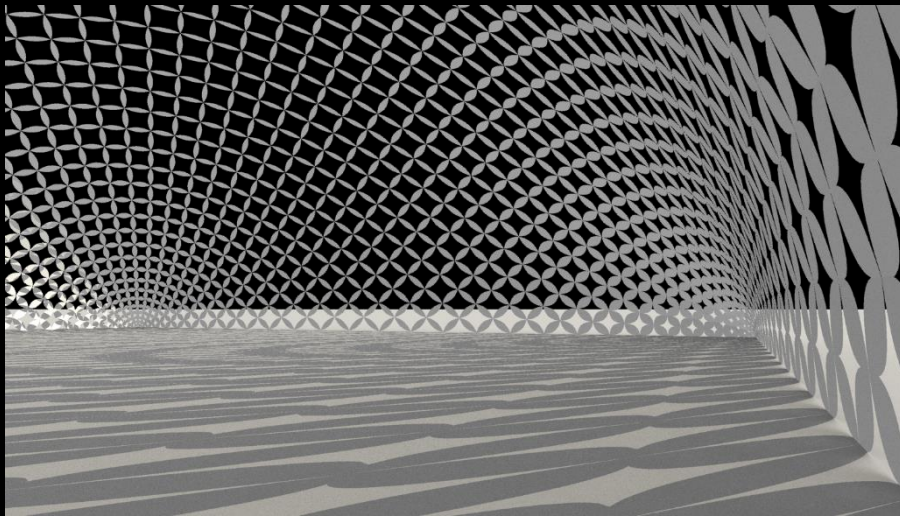
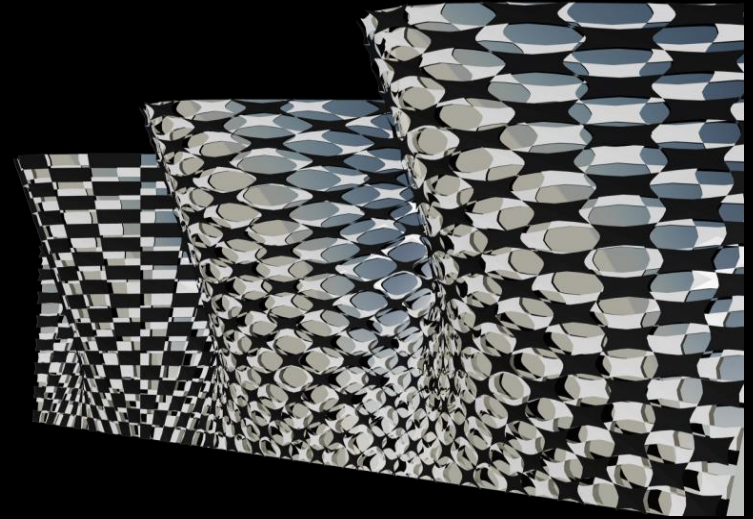
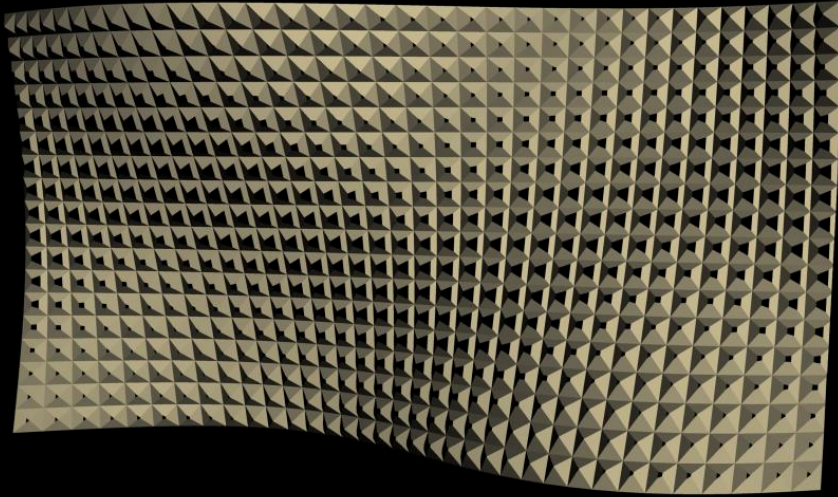
Background

Work Developed

Examples

Shape Algorithms

ORIGINAL or Analytical



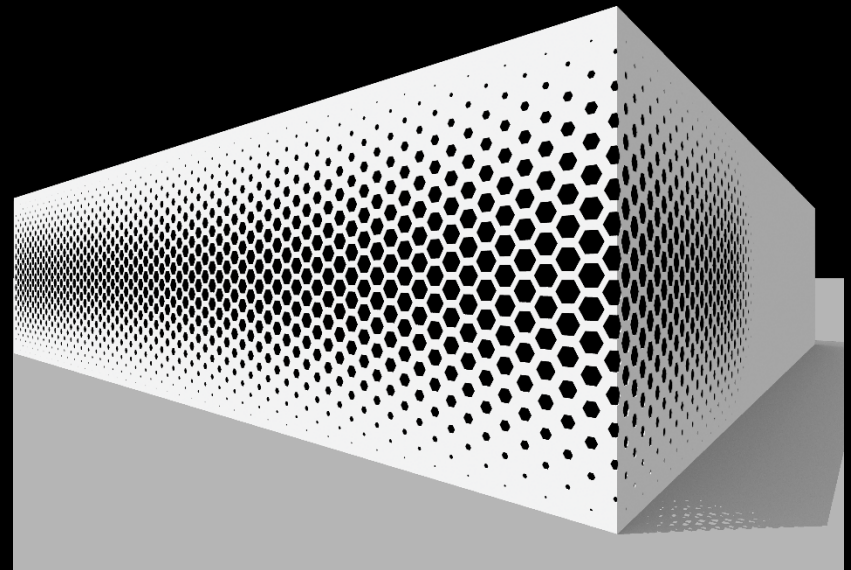
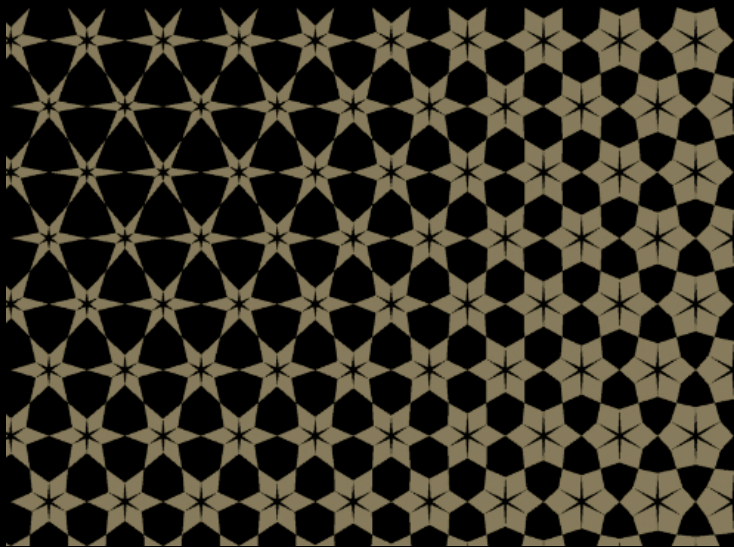
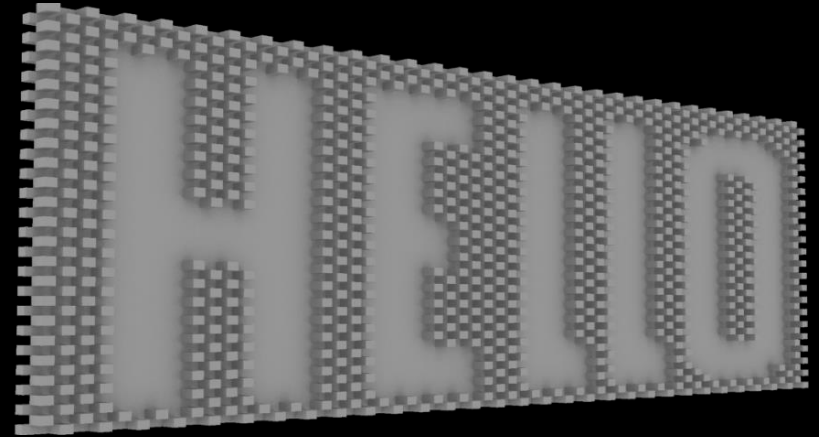
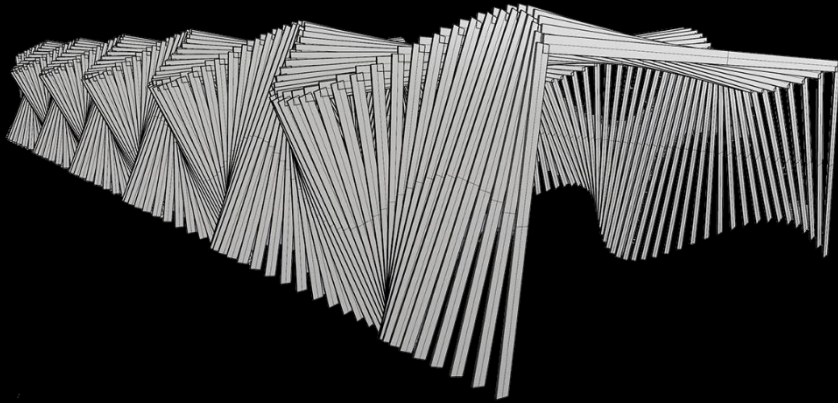
Background

Work Developed

Examples

Shape Algorithms

Original or **ANALYTICAL**



Background

Work Developed

Examples

FACADE GEOMETRY

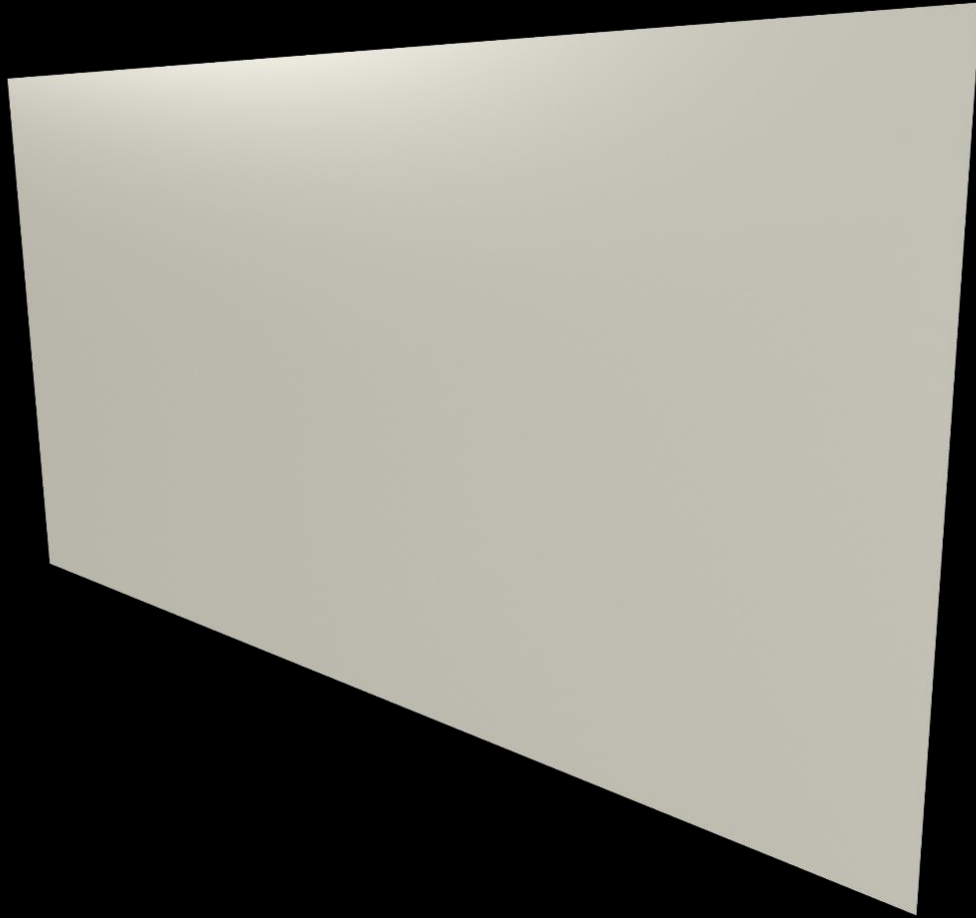
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

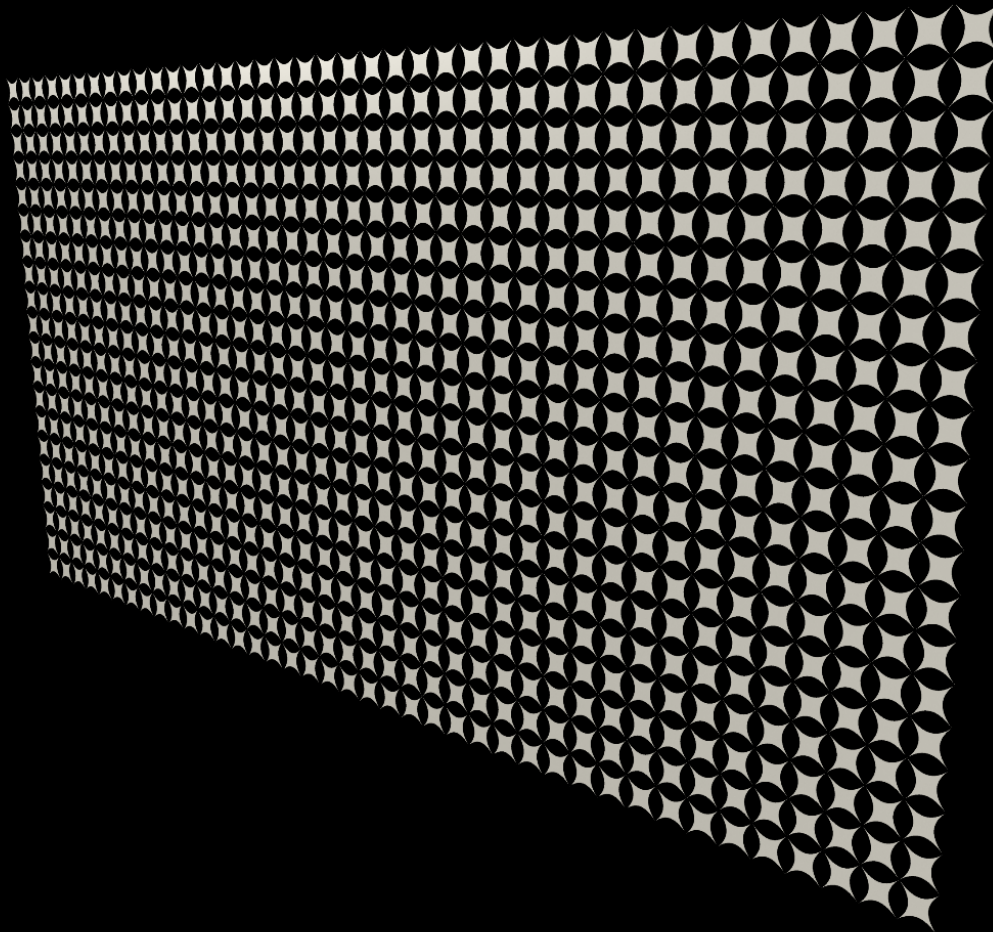
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

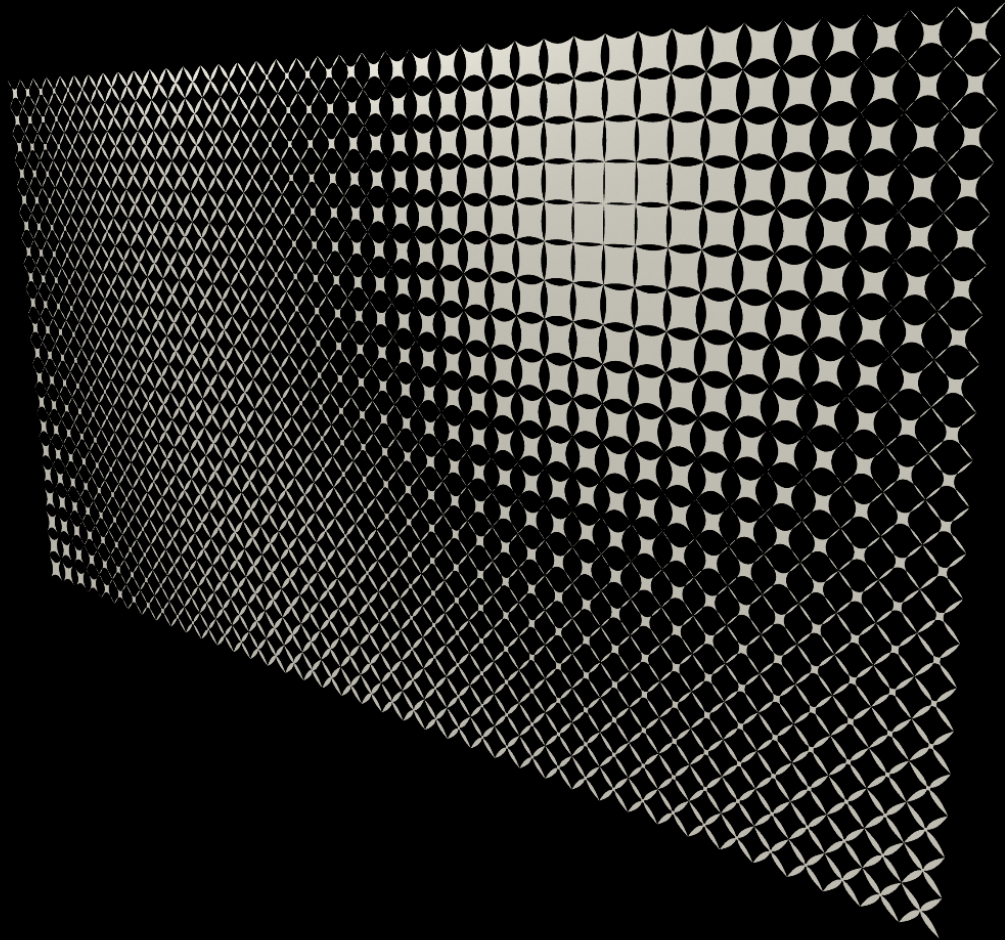
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

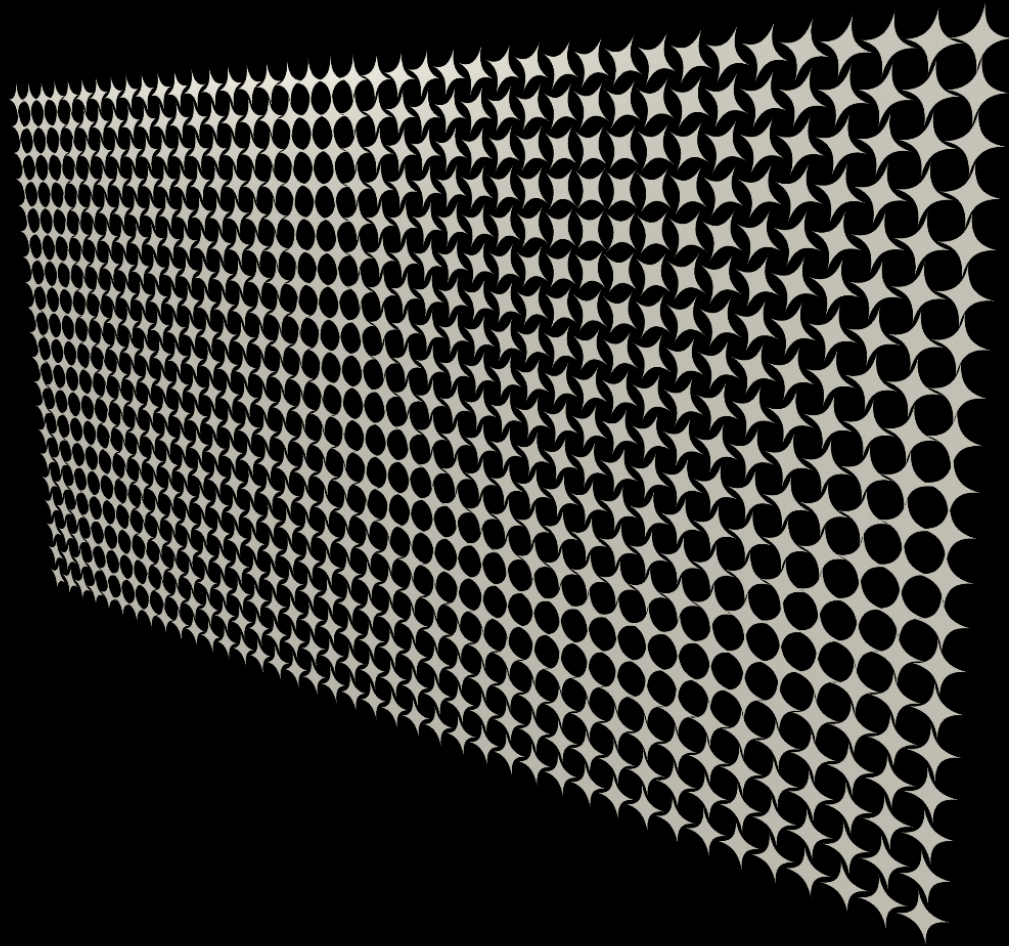
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

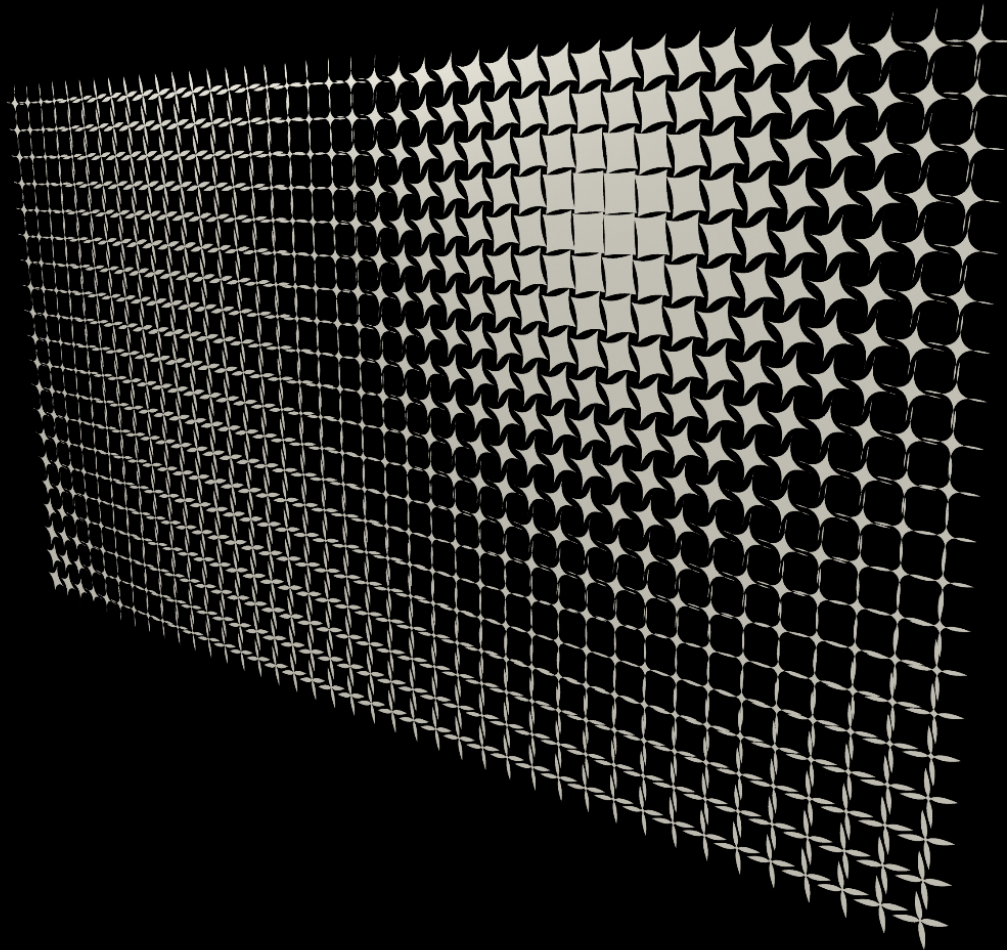
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

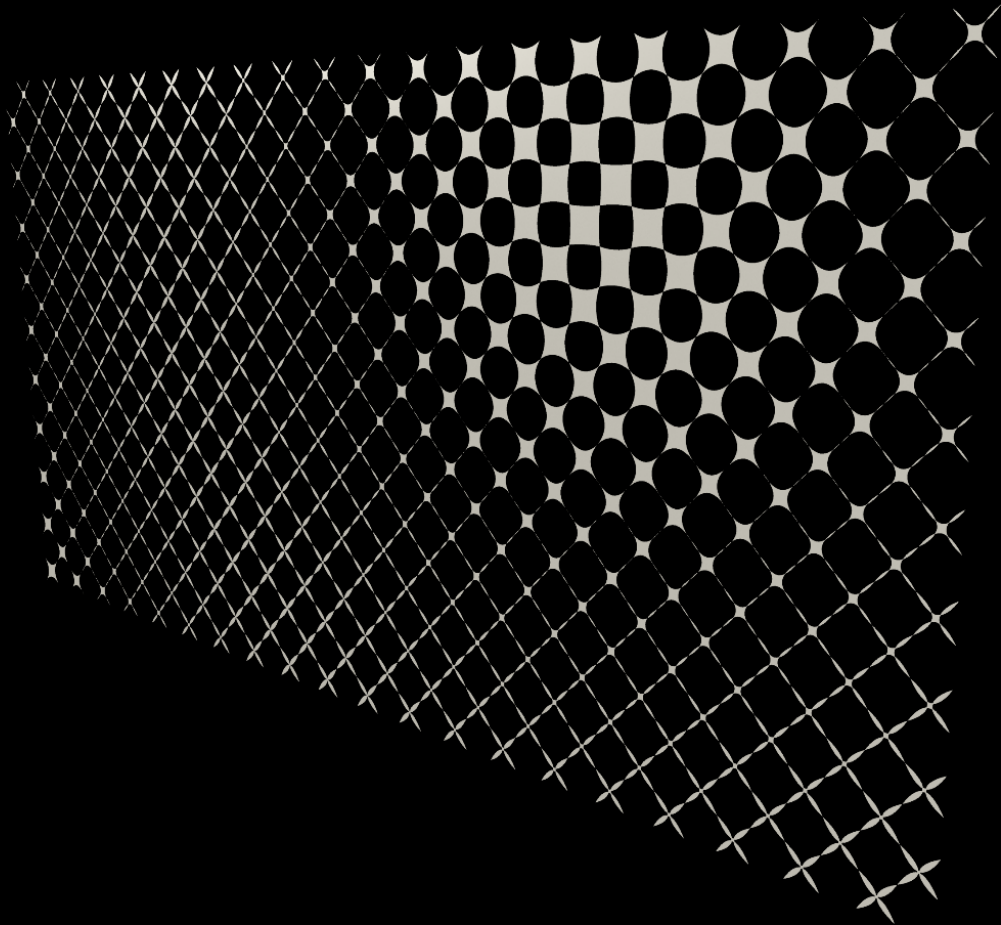
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

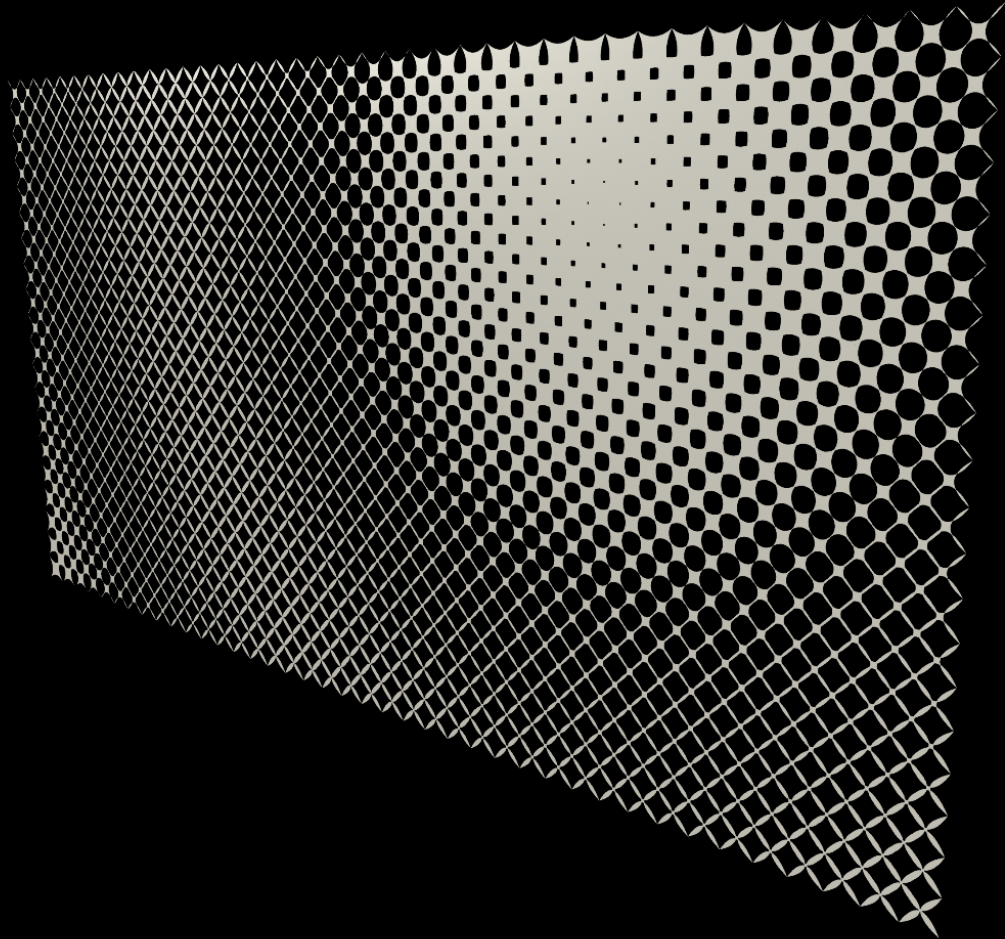
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

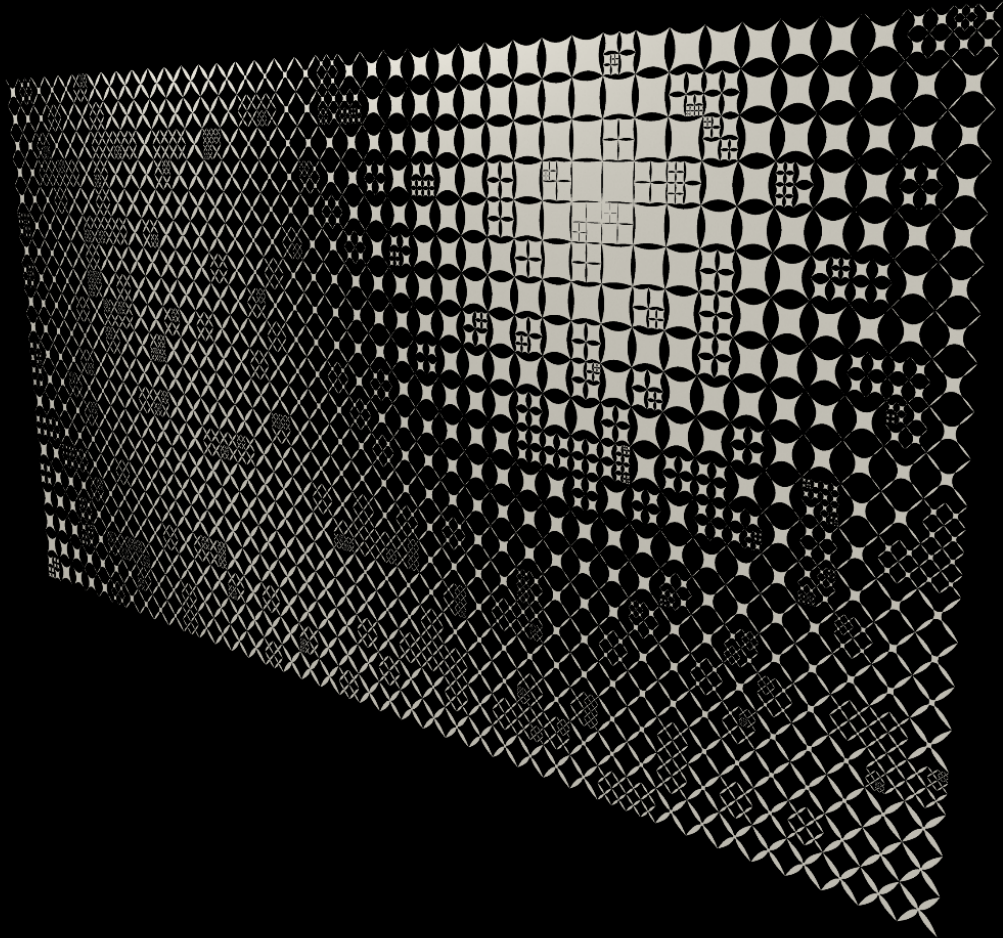
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

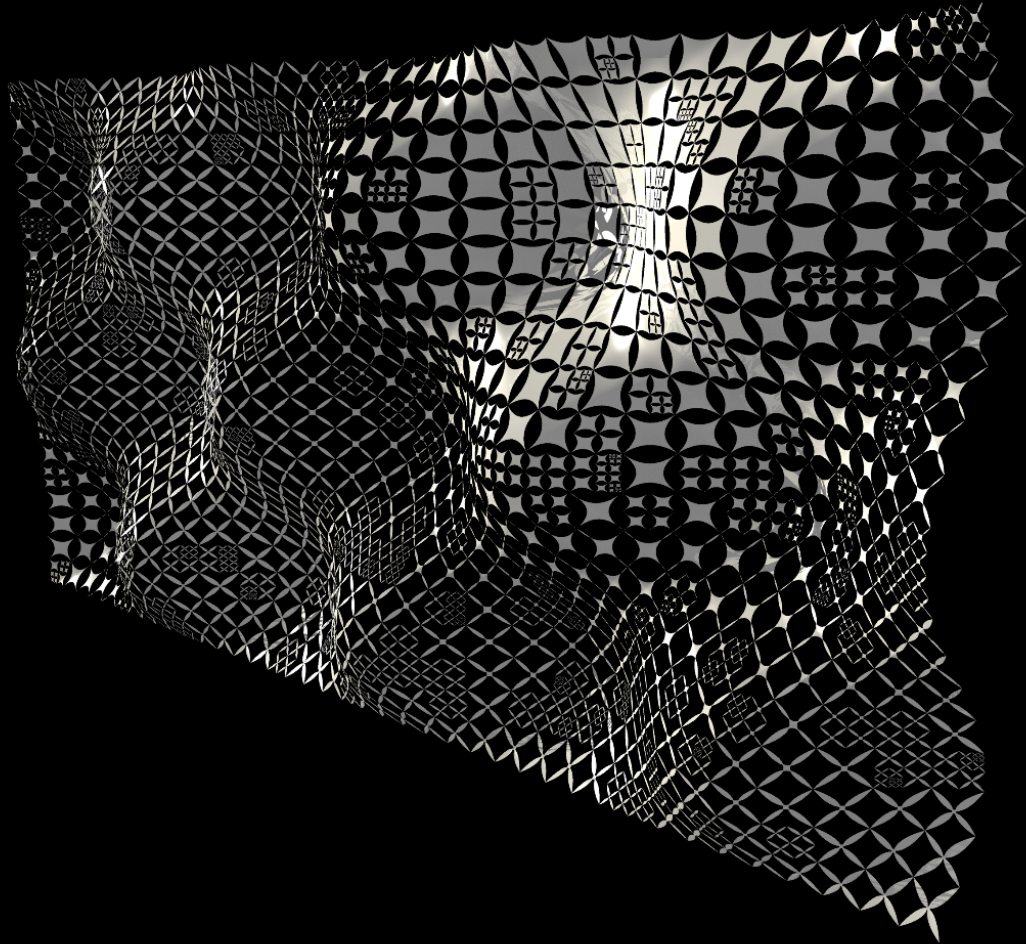
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

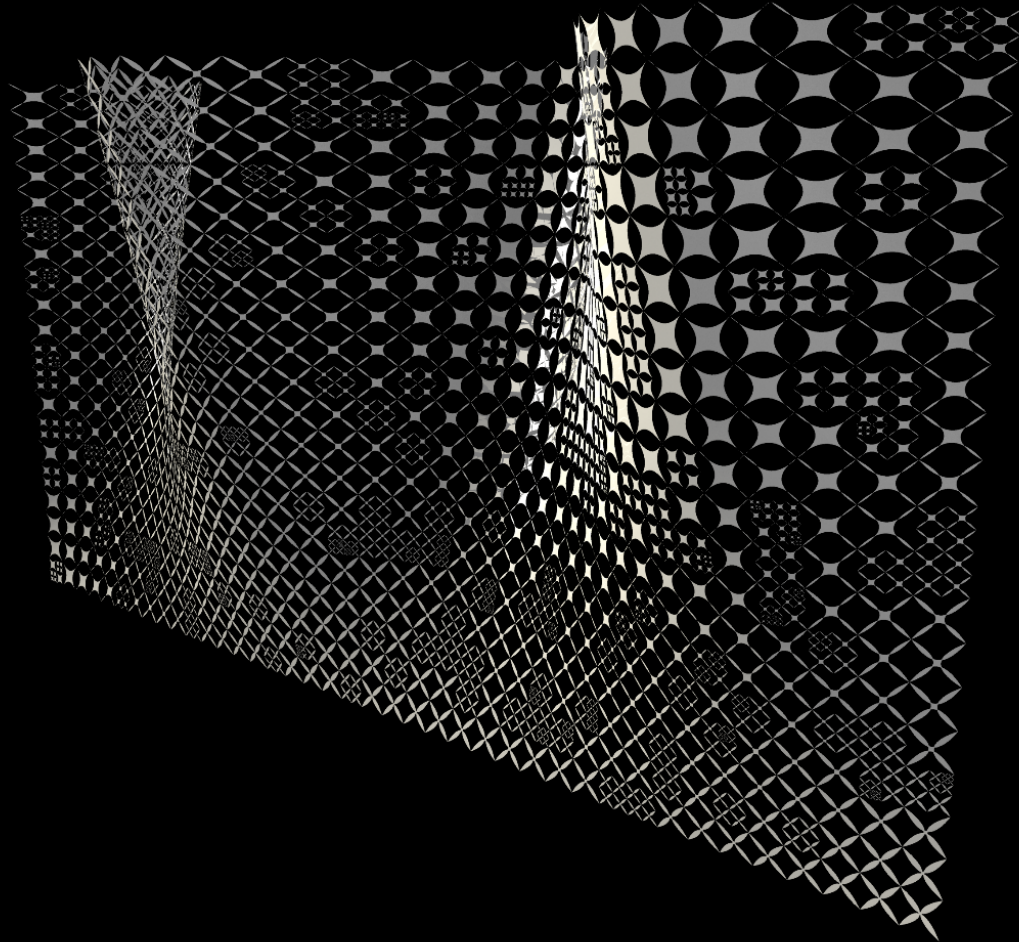
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

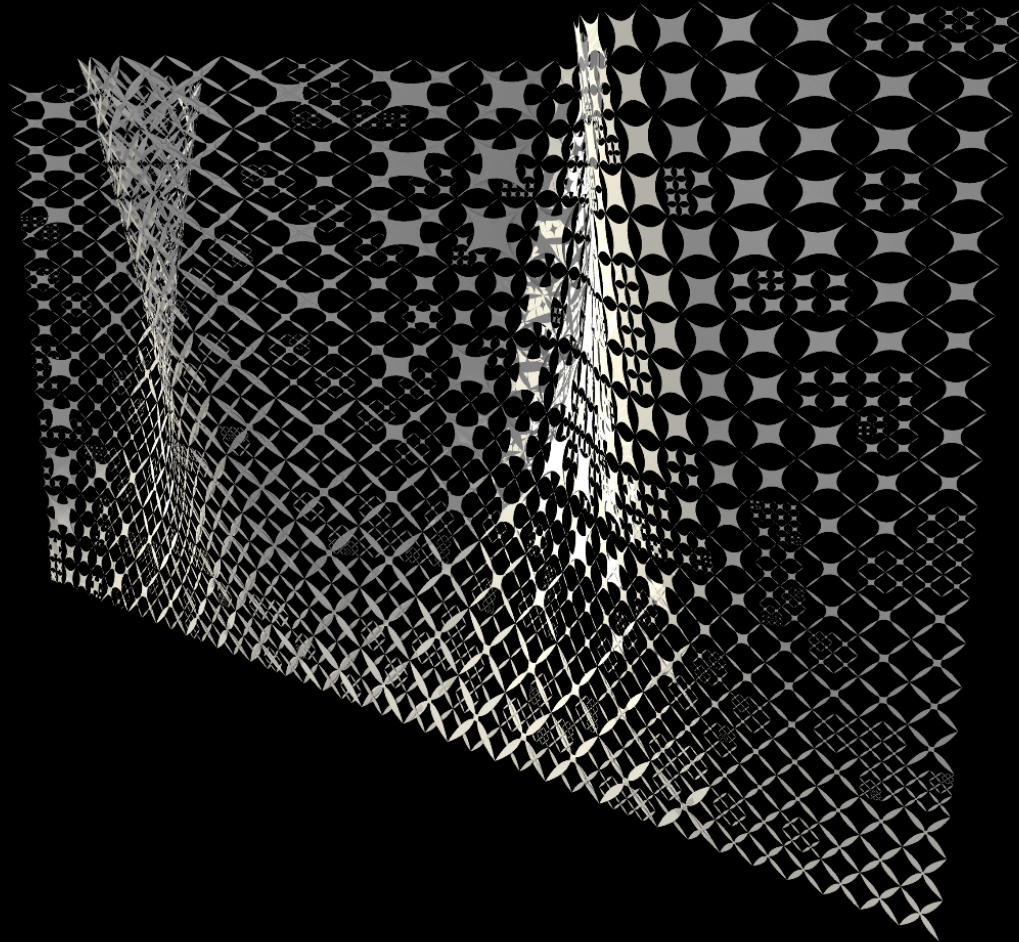
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

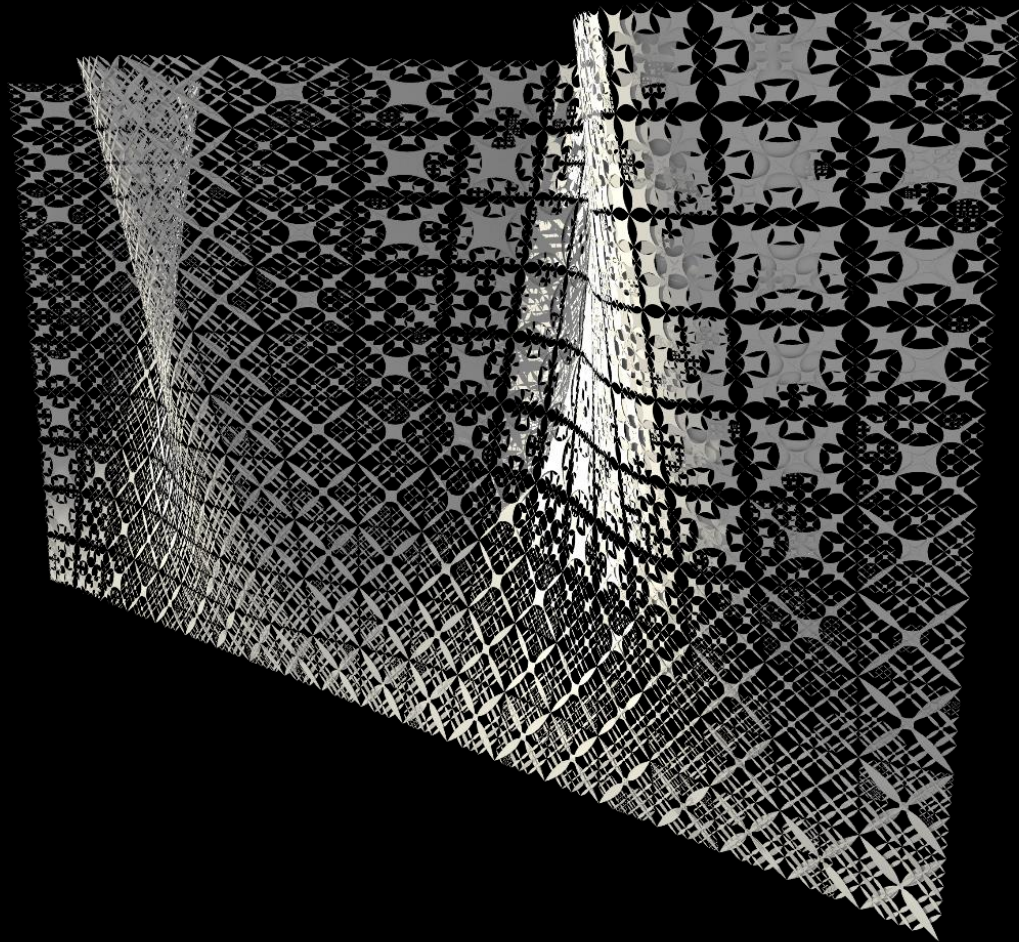
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

ARTICULATION



Background

Work Developed

Examples

FACADE GEOMETRY

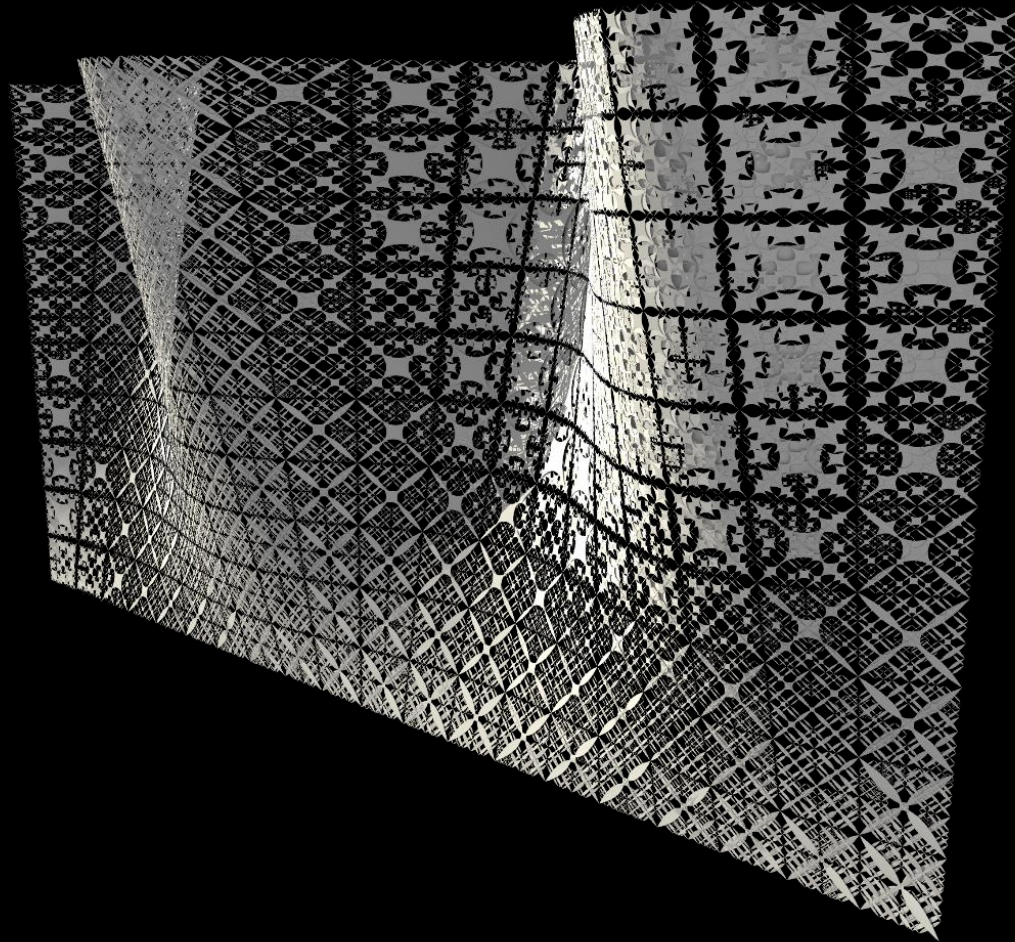
UNIT

SHAPE

TRANSFORMATION

GRID/DISTRIBUTION

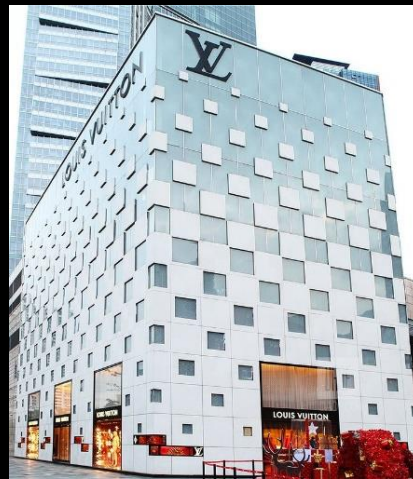
ARTICULATION

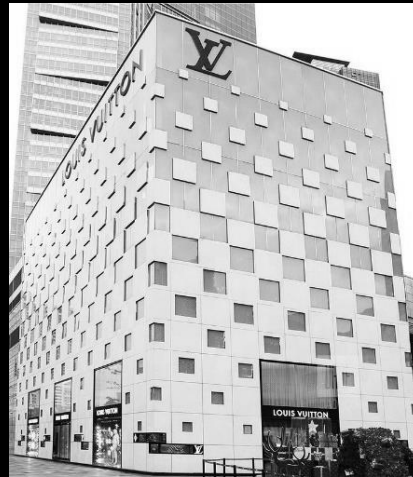


Background

Work Developed

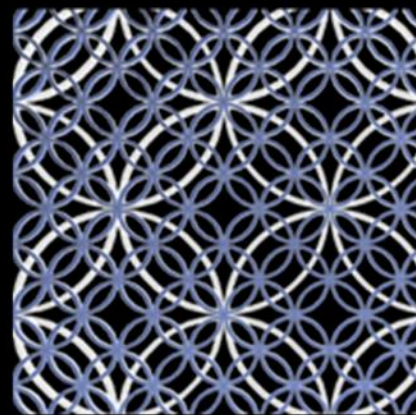
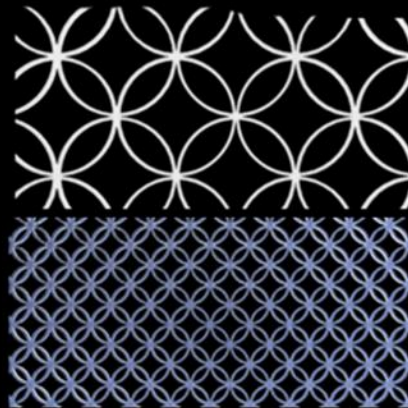
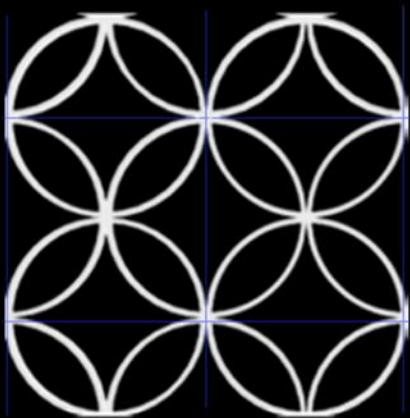
Examples







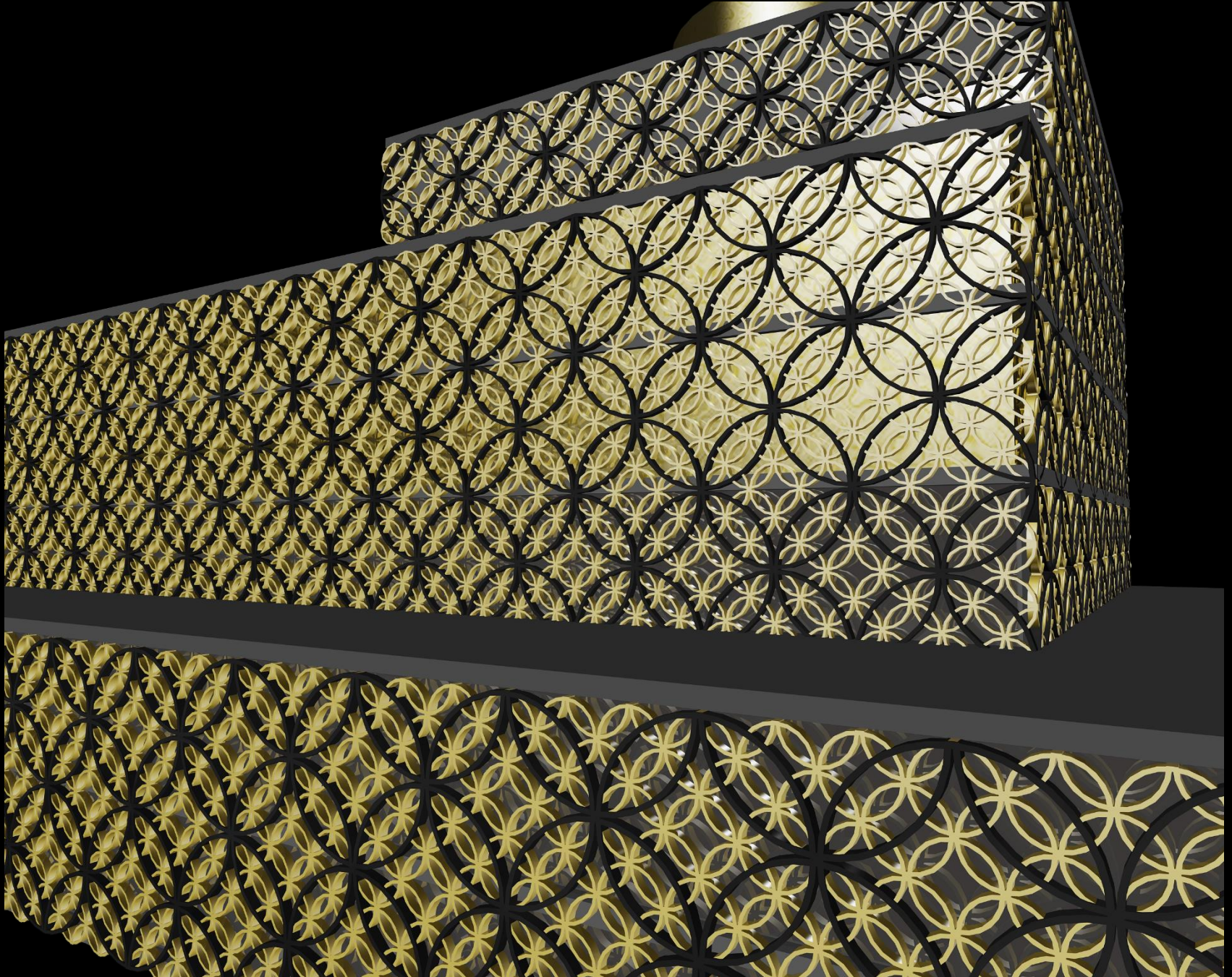
Library of Birmingham
Mecanoo



Background

Work Developed

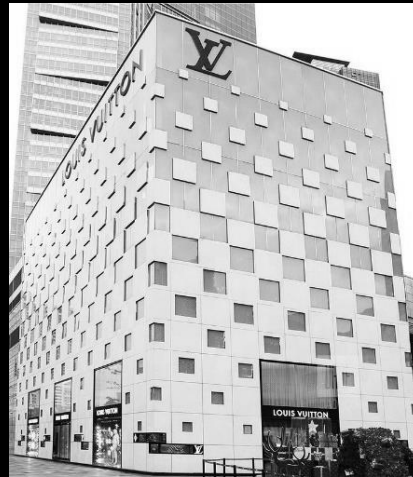
Examples



Background

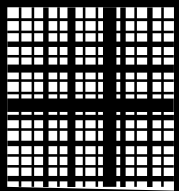
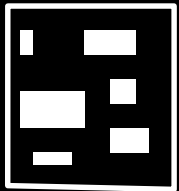
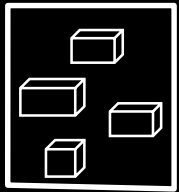
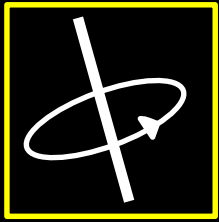
Work Developed

Examples





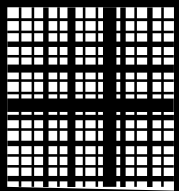
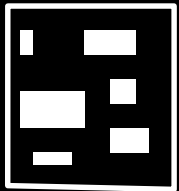
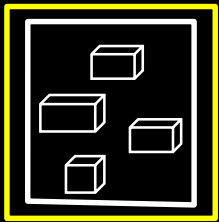
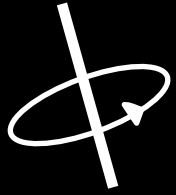
Gantenbein Vineyard
Gramazio and Kohler



Background

Work Developed

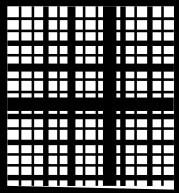
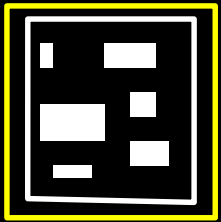
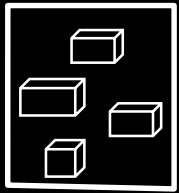
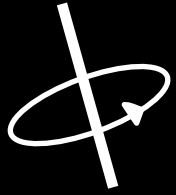
Examples



Background

Work Developed

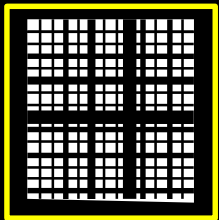
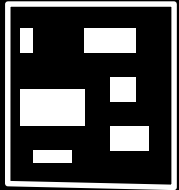
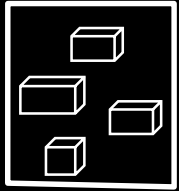
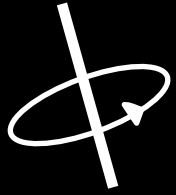
Examples



Background

Work Developed

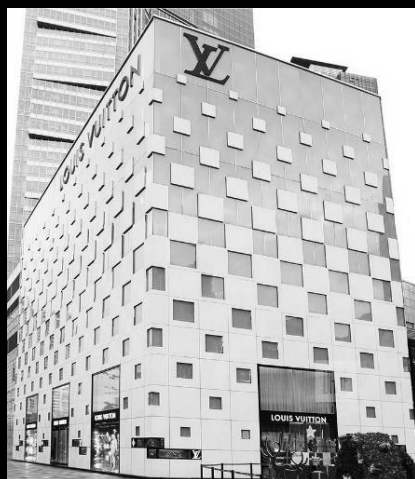
Examples



Background

Work Developed

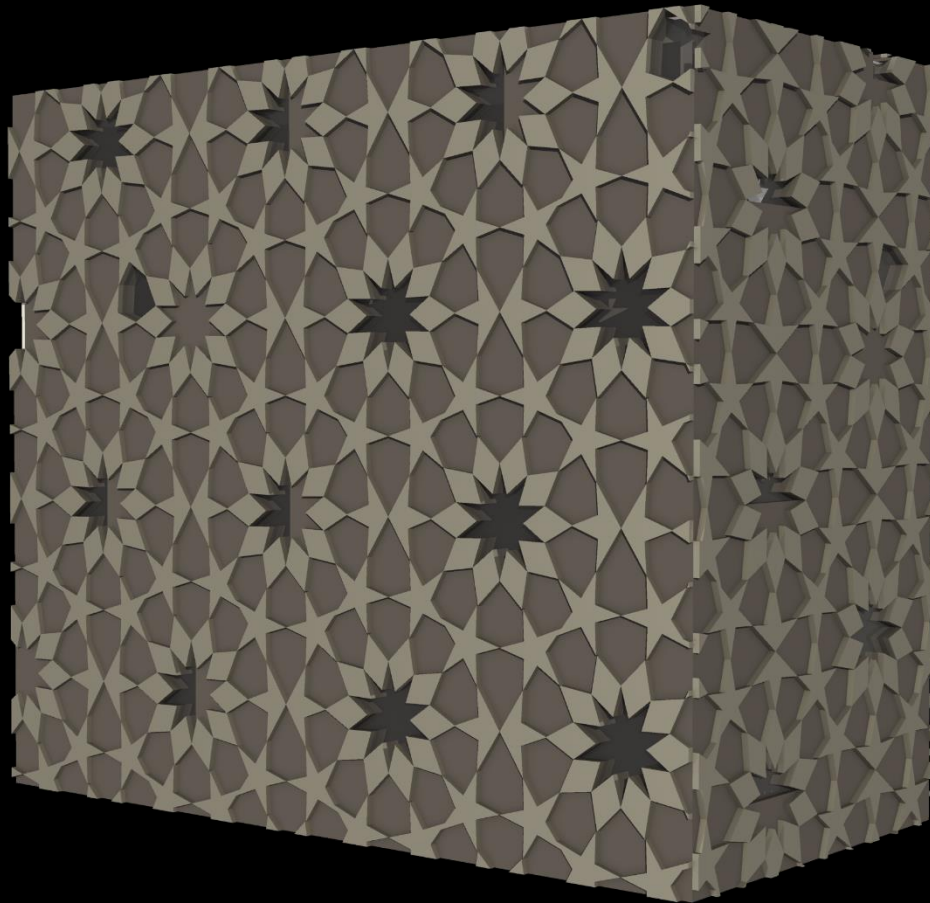
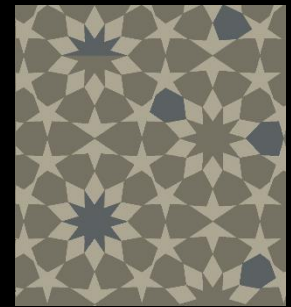
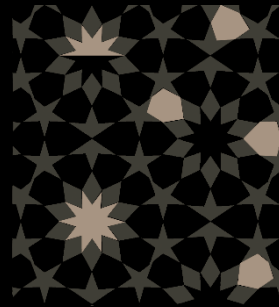
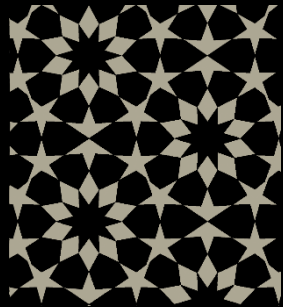
Examples





Yardmasters Building

McBride Charles Ryan



Background

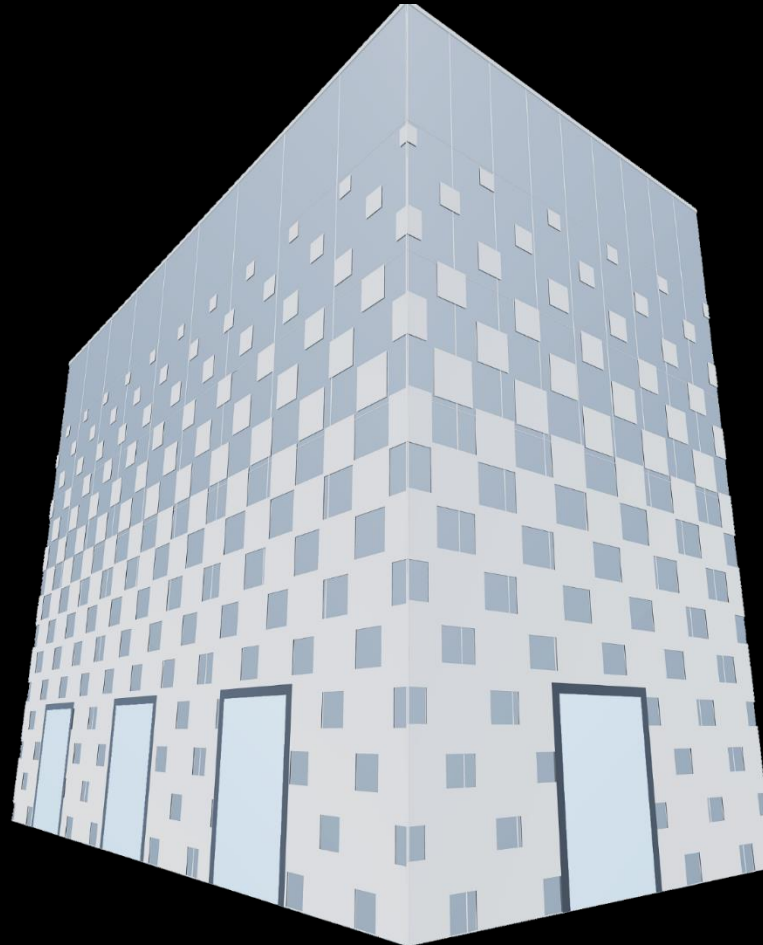
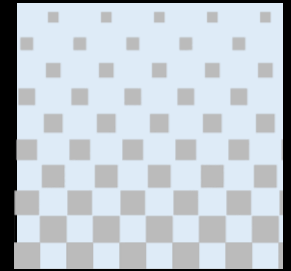
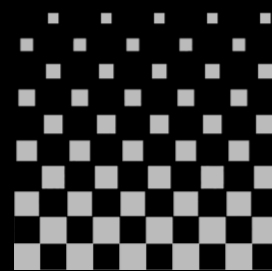
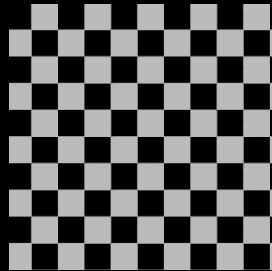
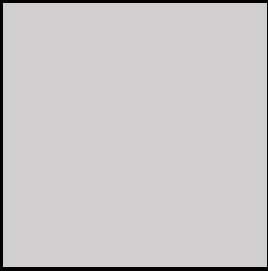
Work Developed

Examples





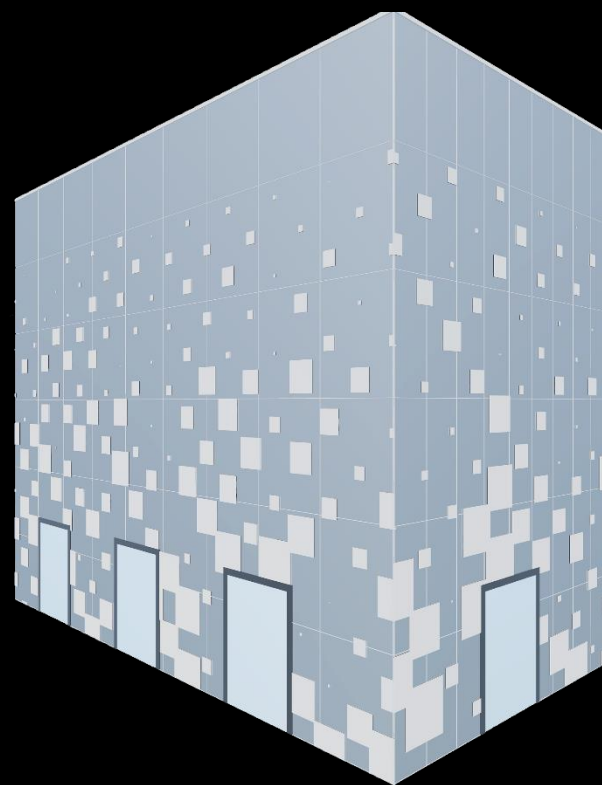
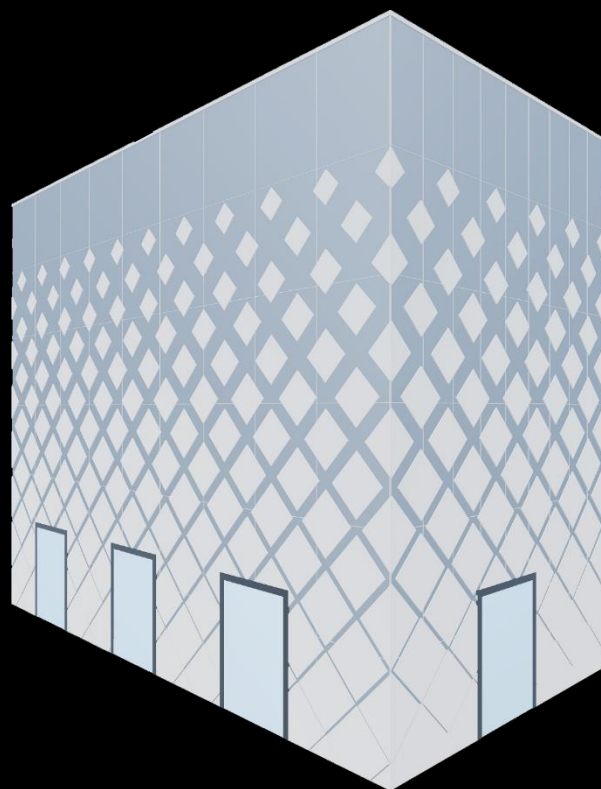
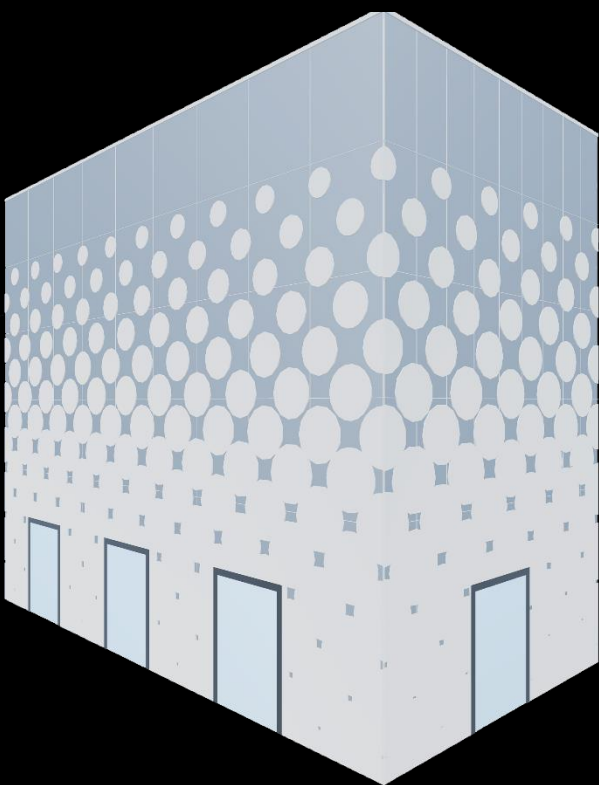
Louis Vuitton Store



Background

Work Developed

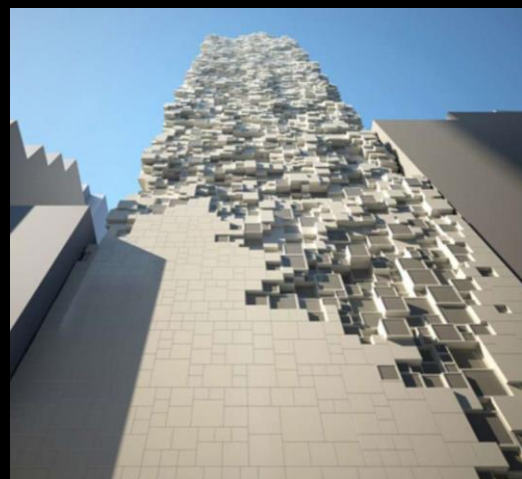
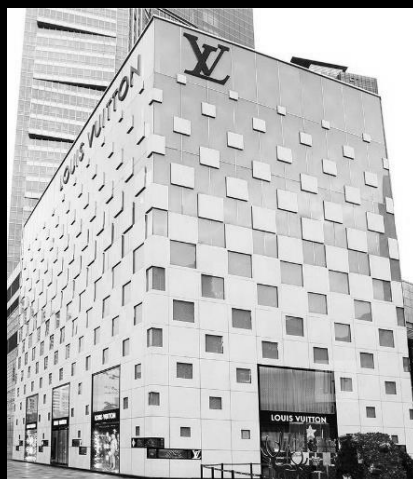
Examples



Background

Work Developed

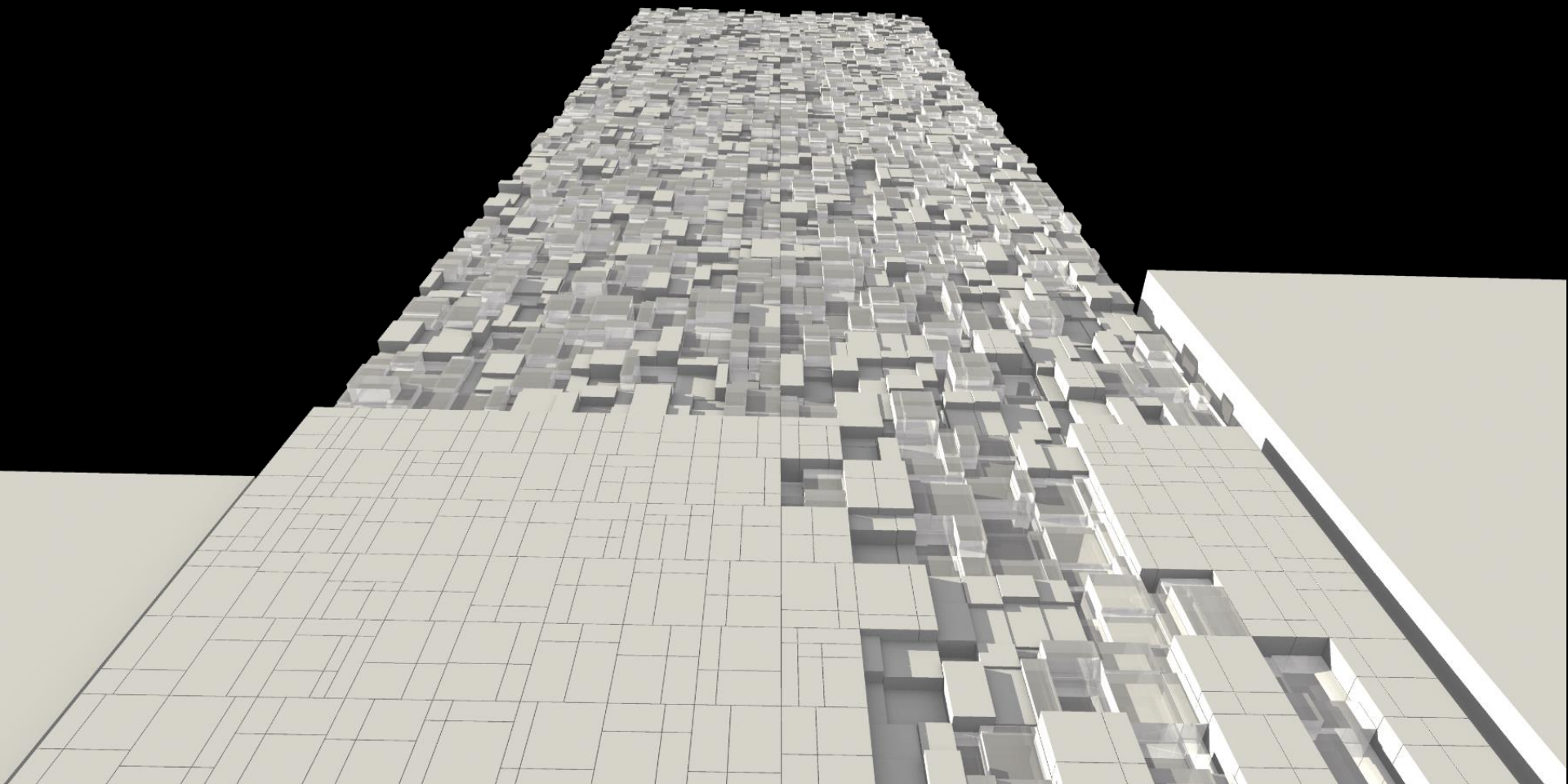
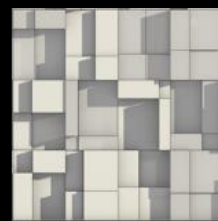
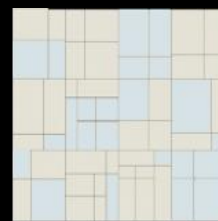
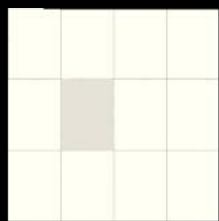
Examples





Sheung Wan Hotel

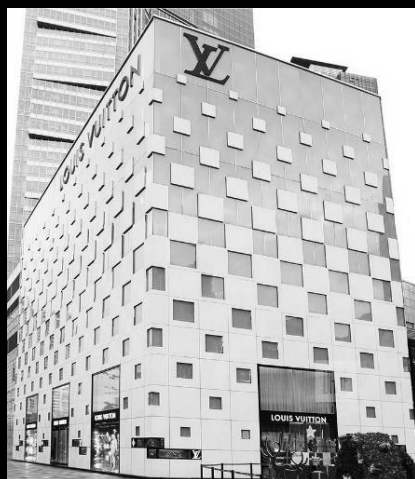
Thomas Heatherwick



Background

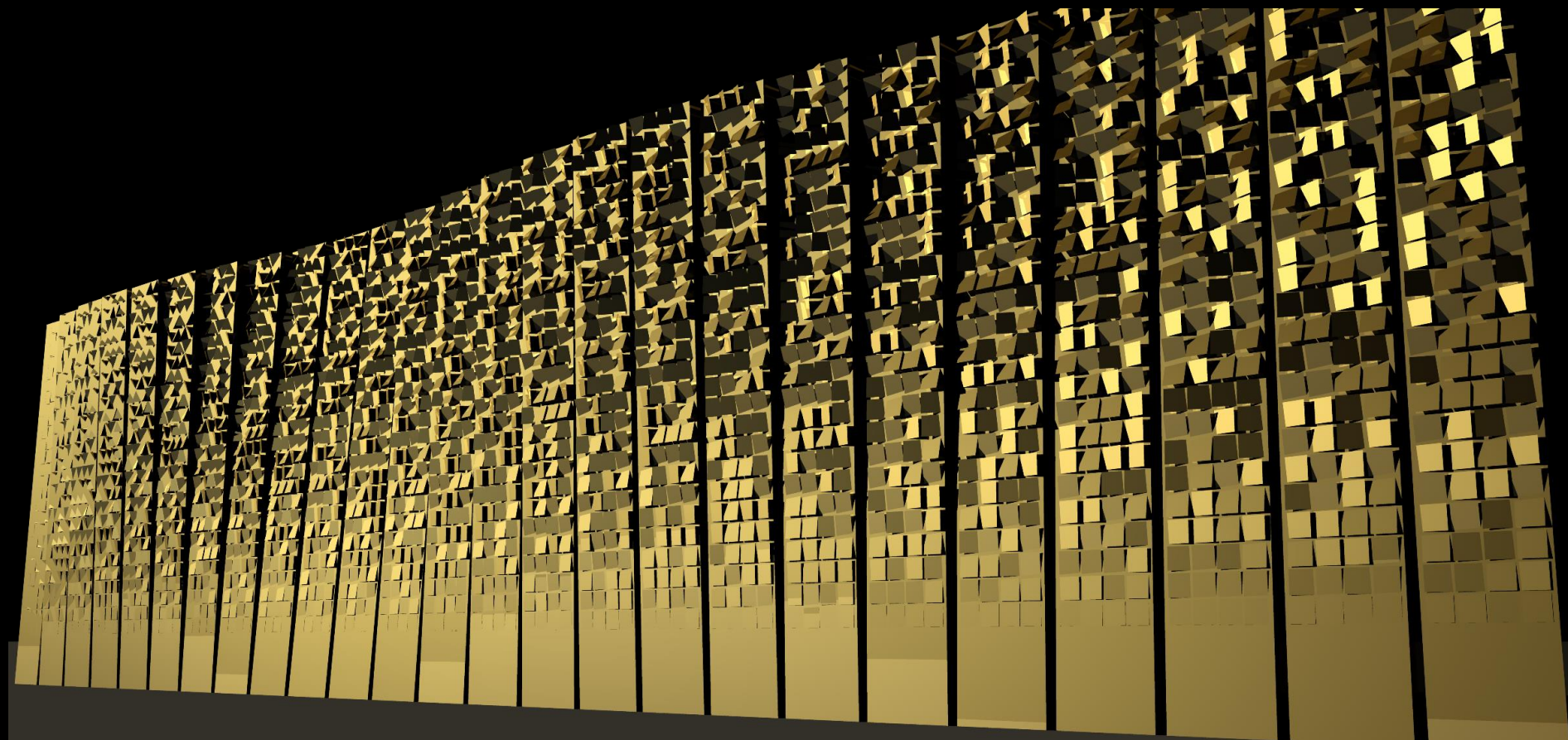
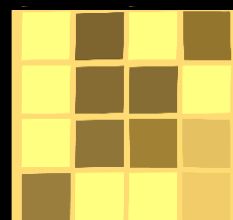
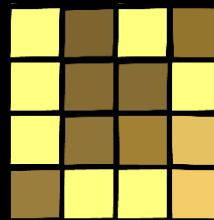
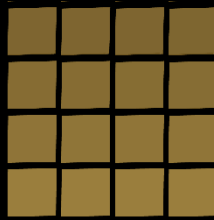
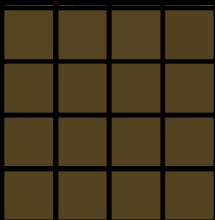
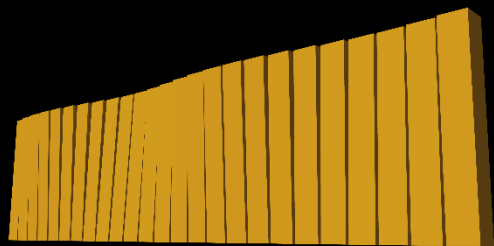
Work Developed

Examples





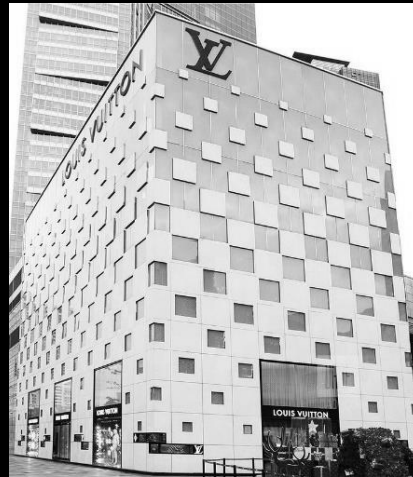
Nolan Building
Plus Architects



Background

Work Developed

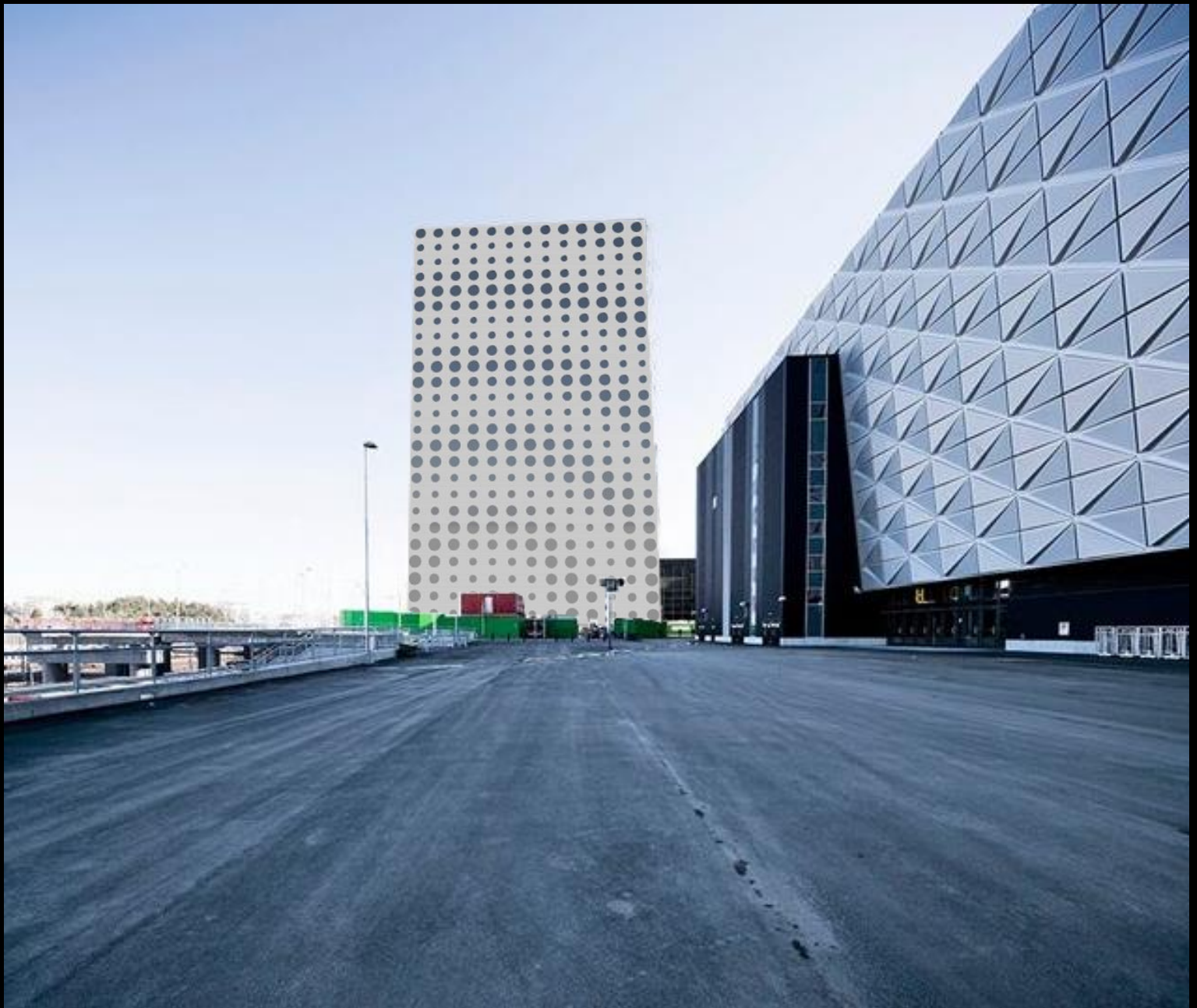
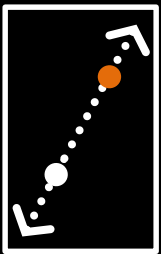
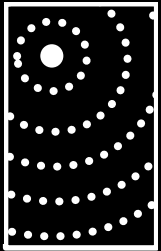
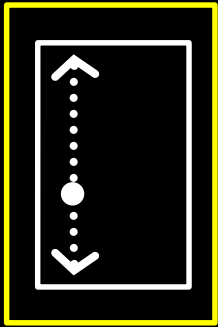
Examples





Hotel Quality Friends

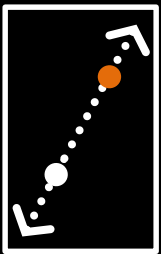
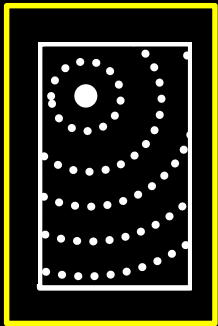
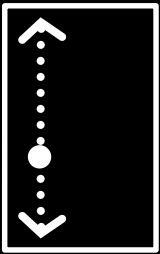
Karolina Keyzer + Wingardhs Architects



Background

Work Developed

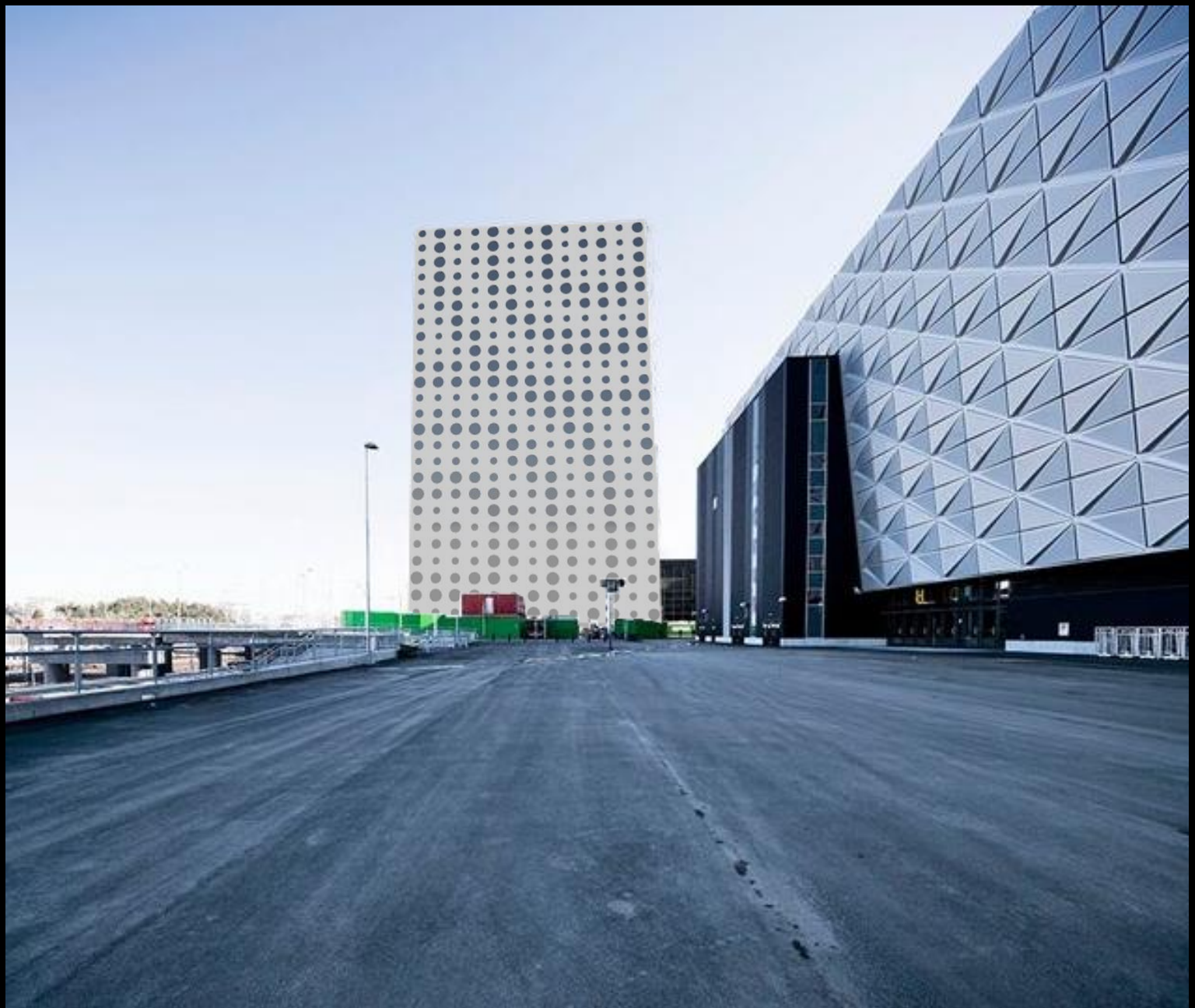
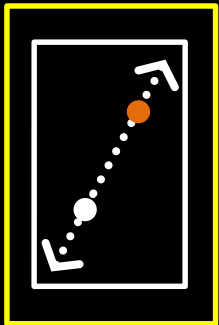
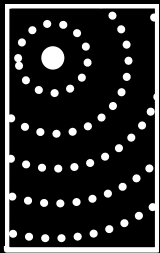
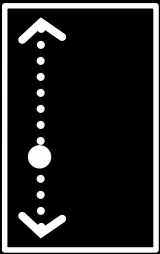
Examples



Background

Work Developed

Examples



Background

Work Developed

Examples

Thank You!

