



MEDIA ARCHITECTURE BIENNALE
AMSTERDAM
FUTURE IMPLIED

BAUHAUS MODUL
BAUHAUS UNIVERSITÄT WEIMAR
SOMMERSEMESTER 2020

RUO XUAN WU AND ANN BÖTTCHER

CHAIR OF MEDIA ARCHITECTURE

CURRENT ISSUES

BLACKLIVESMATTER

ICHBINKEINVIRUS

LGBTQ+

BLACKLIVESMATTER

1.347 rechts, rassistisch und antisemitisch motivierte Angriffe in Deutschland 2019

This is the biggest collective demonstration of civil unrest around state violence in our generation's memory. The unifying theme, for the first time in America's history, is at last: Black Lives Matter. – NY Times

Auch in Deutschland ist struktureller und institutioneller Rassismus tief verankert. – Greenpeace

ICHBINKEINVIRUS

Krisenzeiten wie die Coronavirus-Pandemie führen dazu, dass marginalisierte Gruppen noch stärker ausgegrenzt und entmenschlicht werden. –

Dr. Liya Yu', Politikwissenschaftlerin

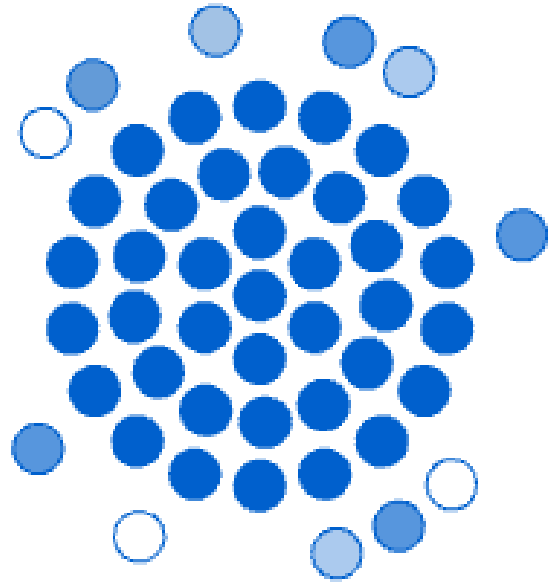
Seit sich das Coronavirus ausbreitet, gibt es weltweit und auch in Deutschland zahlreiche Fälle von rassistischen Beleidigungen und Diskriminierung gegenüber Menschen, denen eine chinesische oder auch ganz allgemein eine asiatische Herkunft unterstellt wird – auch tätliche Angriffe sind darunter.

LGBTQ+

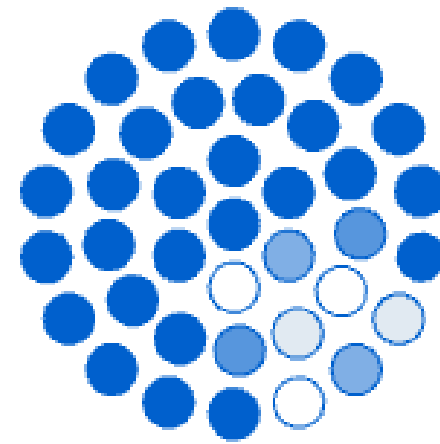
Die US-Regierung hat unter Präsident Donald Trump kontinuierlich daran gearbeitet, die Rechte von LGBTI zu schwächen. – queer.de

In Deutschland haben sich Lesben und Schwule ein großes Stück Gleichstellung erkämpft. In Polen hat die PiS-Partei sie zum Feindbild erklärt. Mehr als 100 Lokalregierungen haben sich zu sogenannten „LGBT-freien Zonen“ erklärt – deutschlandfunk

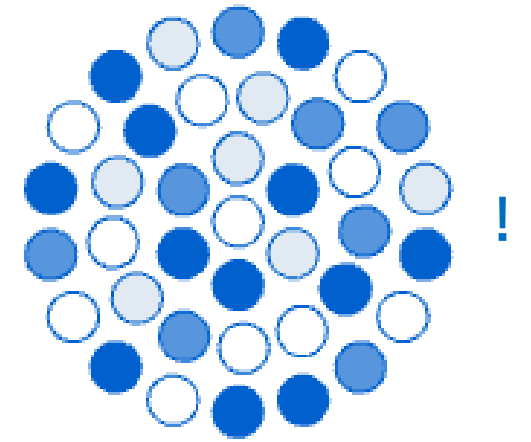
MAIN PROBLEM



EXCLUSION / DISCRIMINATION



INTEGRATION



INCLUSION

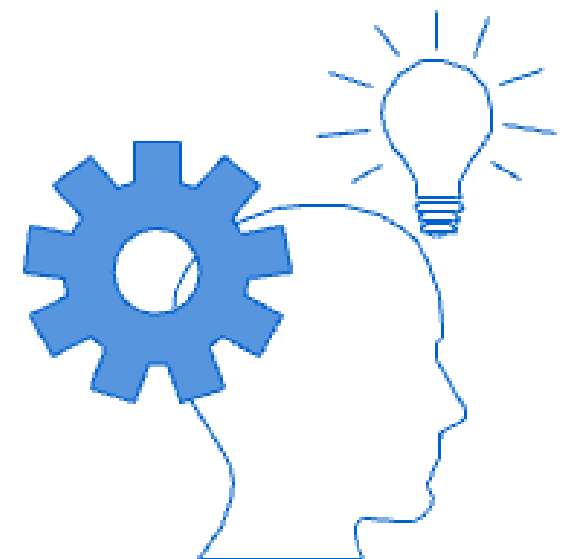
PROBLEM SOLVING



PLAYFUL



COMMUNICATION

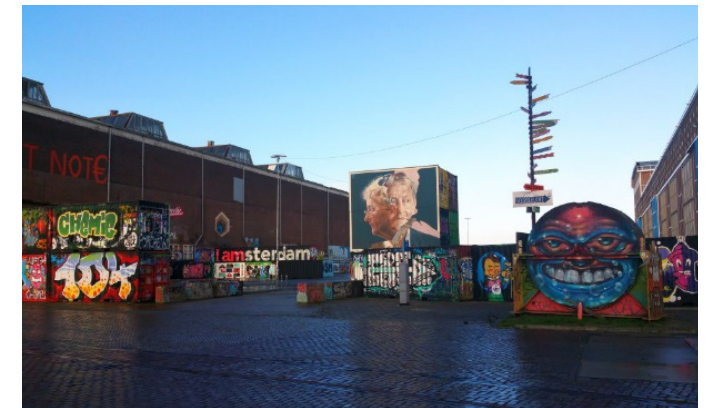
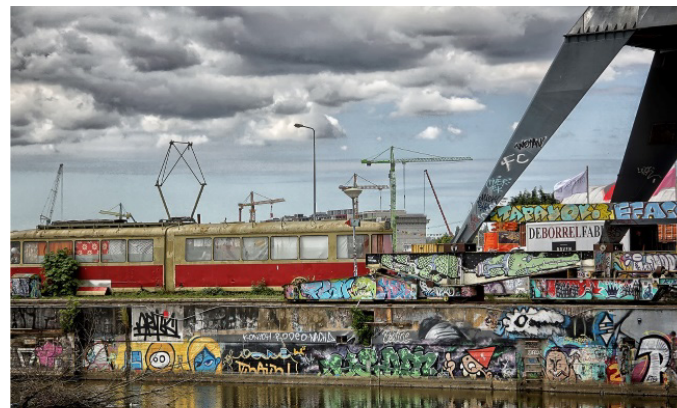


INFORMATION

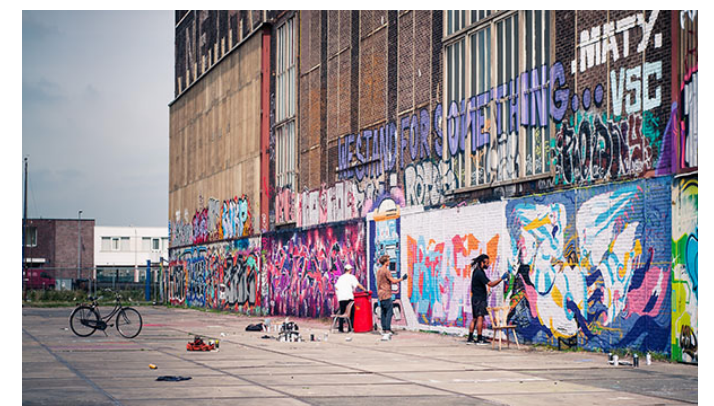
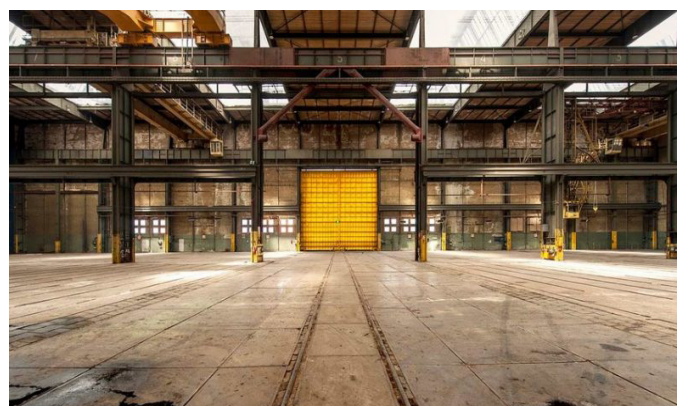
LOCATION

SPATIAL EXHIBITION CONTEXT

- > NDSM Warft
- > Access
Bike / Foot / Ferry / Car
- > Interesting place for tourists and locals
- > Common festival and event area existing infrastructure
- > Interesting architecture
- > Huge available space
Inside and outdoors



- ### PROBLEM - COVID 19
- > no large events allowed
 - > social distancing
 - > area relies on events



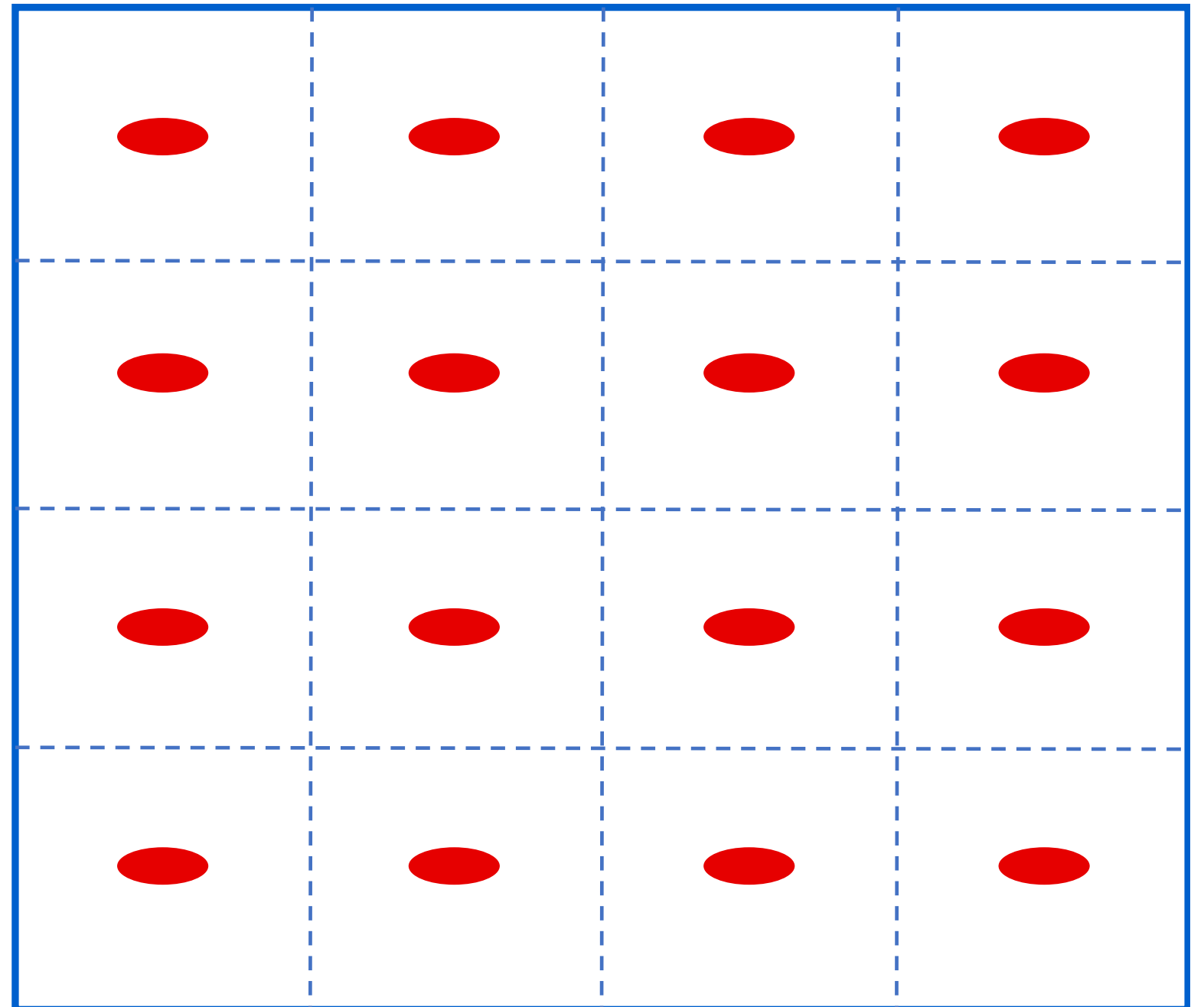
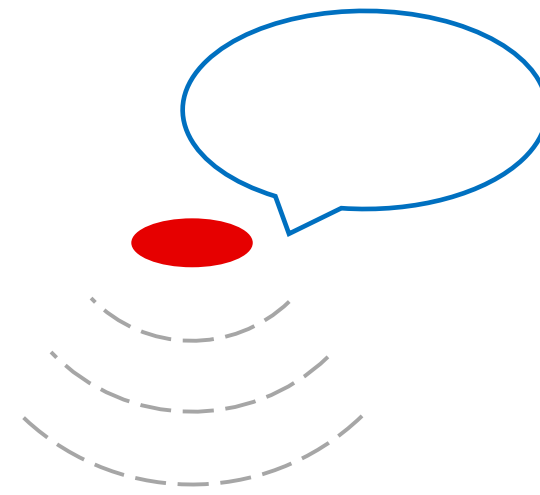
GAME ALTERNATIVE

ALTERNATIVE USE OF OUR INSTALLATION

- > distancing
- > Information
- > safe interaction
- > improves local economy
- > can be used in the future

Enables again

- > lecture with social distancing
- > bigger events
- > save alternative



GAME INTRODUCTION

FOR EVERYONE

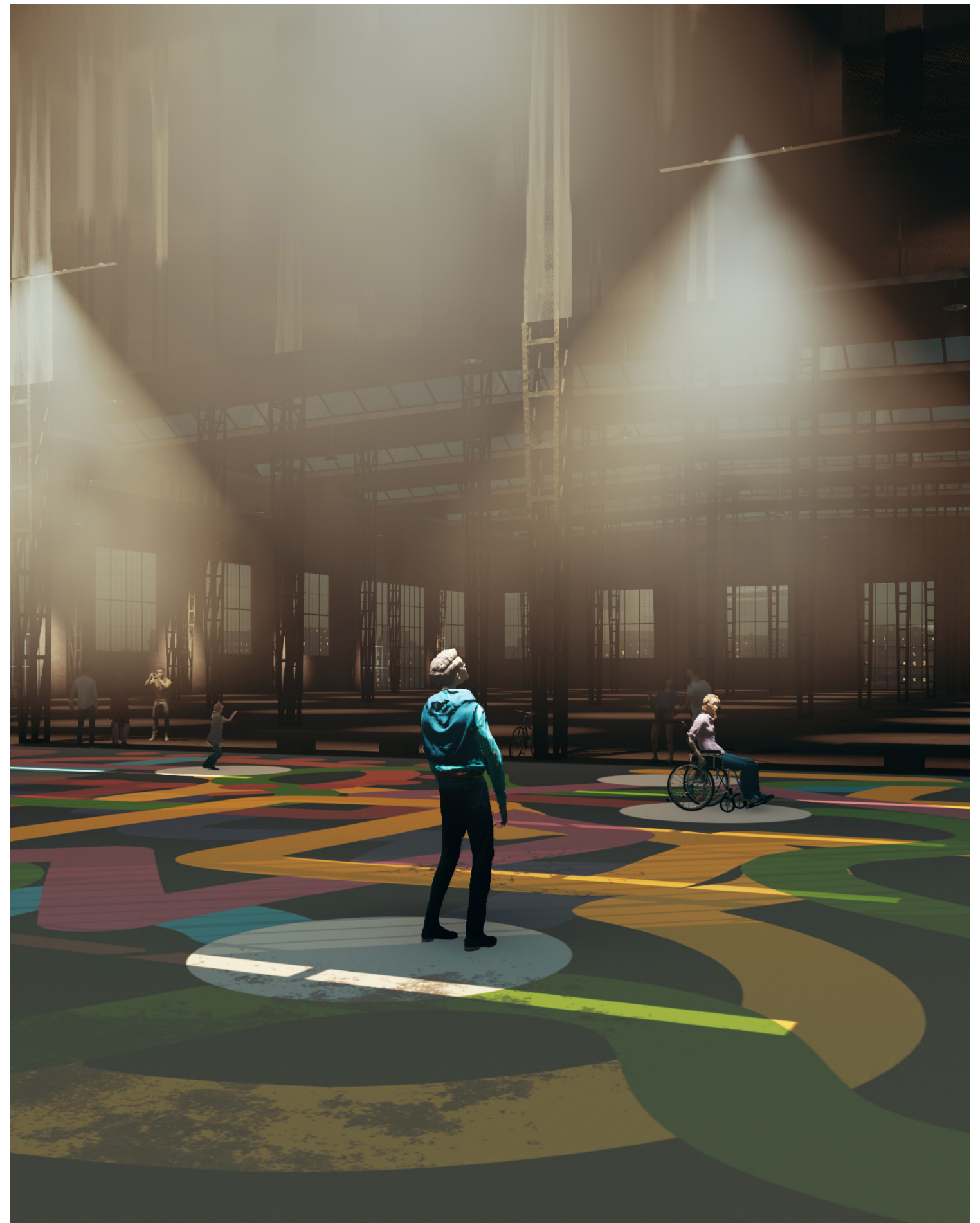
- > no specific target group
- > unlimited number of participants
- > interacts with participants and spectators

GAME

- > simple rules
- > interactive visual effects
- > interactive sound effects
- > circuit of game - 10 Minutes

AIM OF GAME

- > deliver the Topic: DISCRIMINATION
- > change of perspective/role
- > Show exclusion
- > "How can we overcome the exclusion?"
- > "How to overcome the inequalities?"
- > Visualization
- > Humans are not objects
- > different starting points in life
- > Building communication areas



GAME PROCEDURE

QUESTION

1. Start

Questions about the human body

- > „What eye color do you have?“
- > „Are you left handed or right handed?“
- > „How long is your hair?“
- > „What hair color do you have?“

2. Possible answers

- > „What eye color do you have?“

3. Answer

- > „What eye color do you have?“

4. Geometries

- > MINORITY gets a different shape
- > MINORITY - Square

5. Creating the DIGITAL PAINTING

- > shapes are starting to move

GAME PROCEDURE

GEOMETRY BASICS

VARIETY OF GEOMETRIES

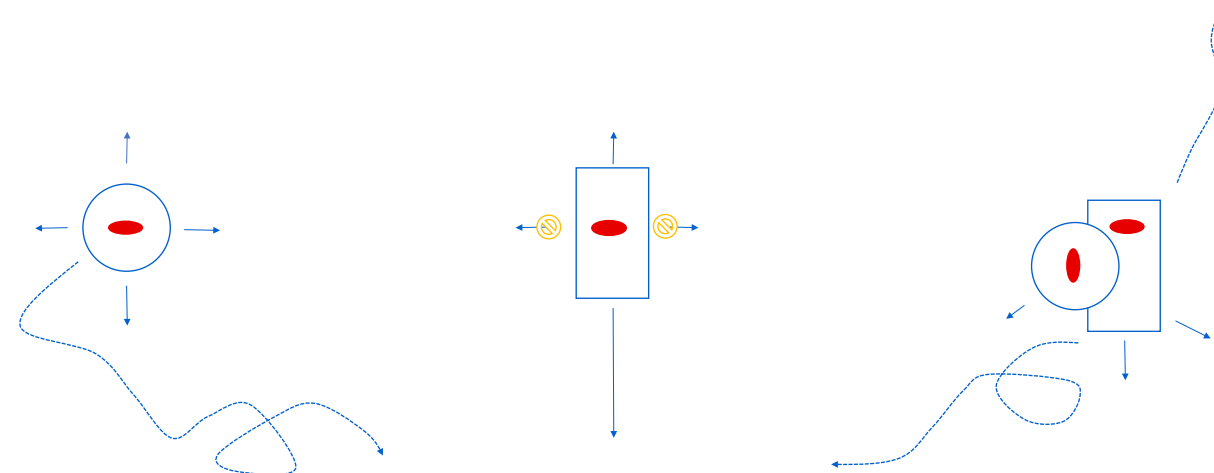
- > Visualization of different starting points
- > Different shapes – different abilities
- > Geometries are based on the answer the participants have given

1. CIRCLES – move in any direction

2. SQUARE – moves only in 2 directions

3. SQUARE – with docking option

- > able to move in all directions as well
- > Symbolizes:
- > together we can change
- > not excluded anymore
- > creating communication space



What eyecolor do you have?

What eyecolor do you have?

What eyecolor do you have?

BROWN	BLUE
GREEN	

BROWN	BLUE
GREEN	

BROWN	BLUE
GREEN	

GAME PROCEDURE

QUESTION

VISUAL EFFECTS

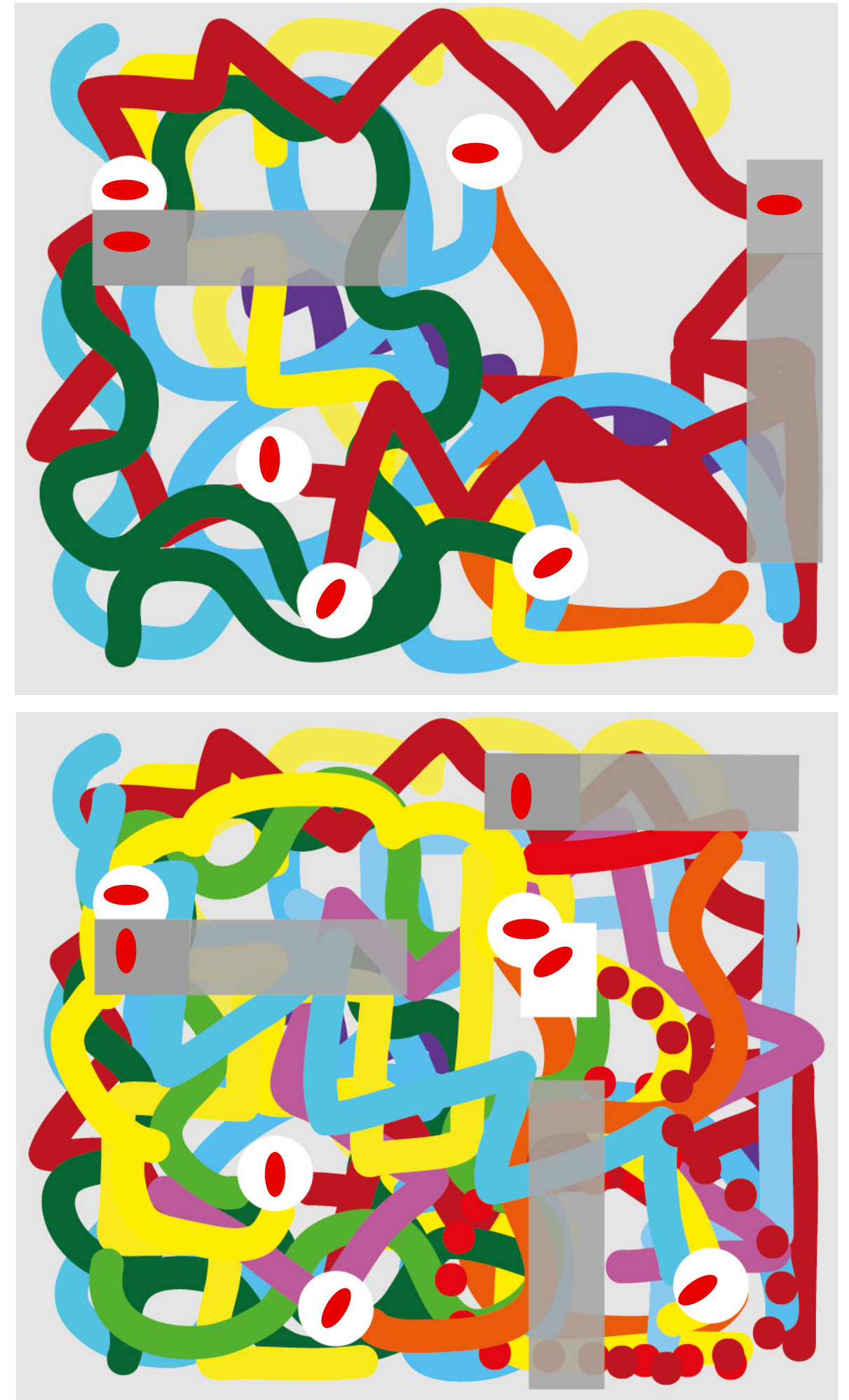
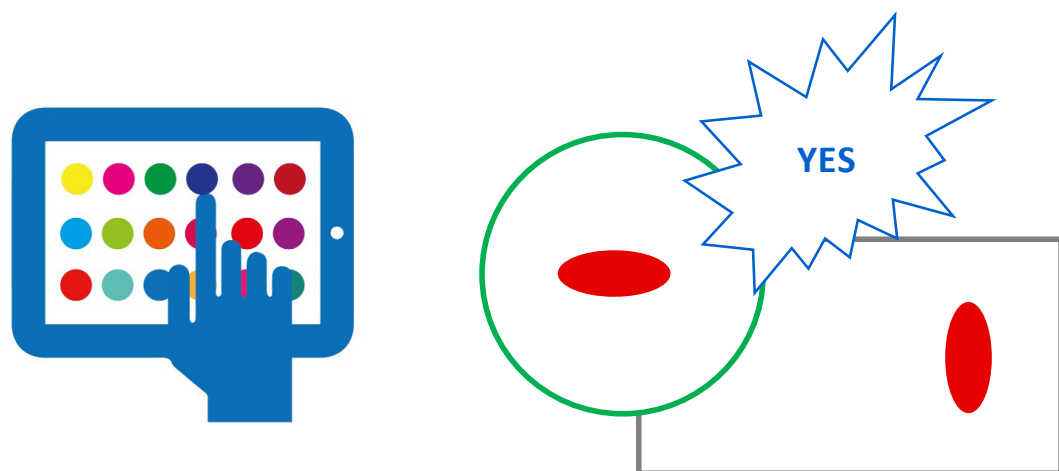
- > GEOMETRIES – affect digital painting
- > SQUARE – eraser effect / shadow
- > LINES – created by the movement of the participants
- > LINETYPES – Successful interaction between geometries
- > CHANGE OF COLOR – done by spectators

SOUND EFFECTS

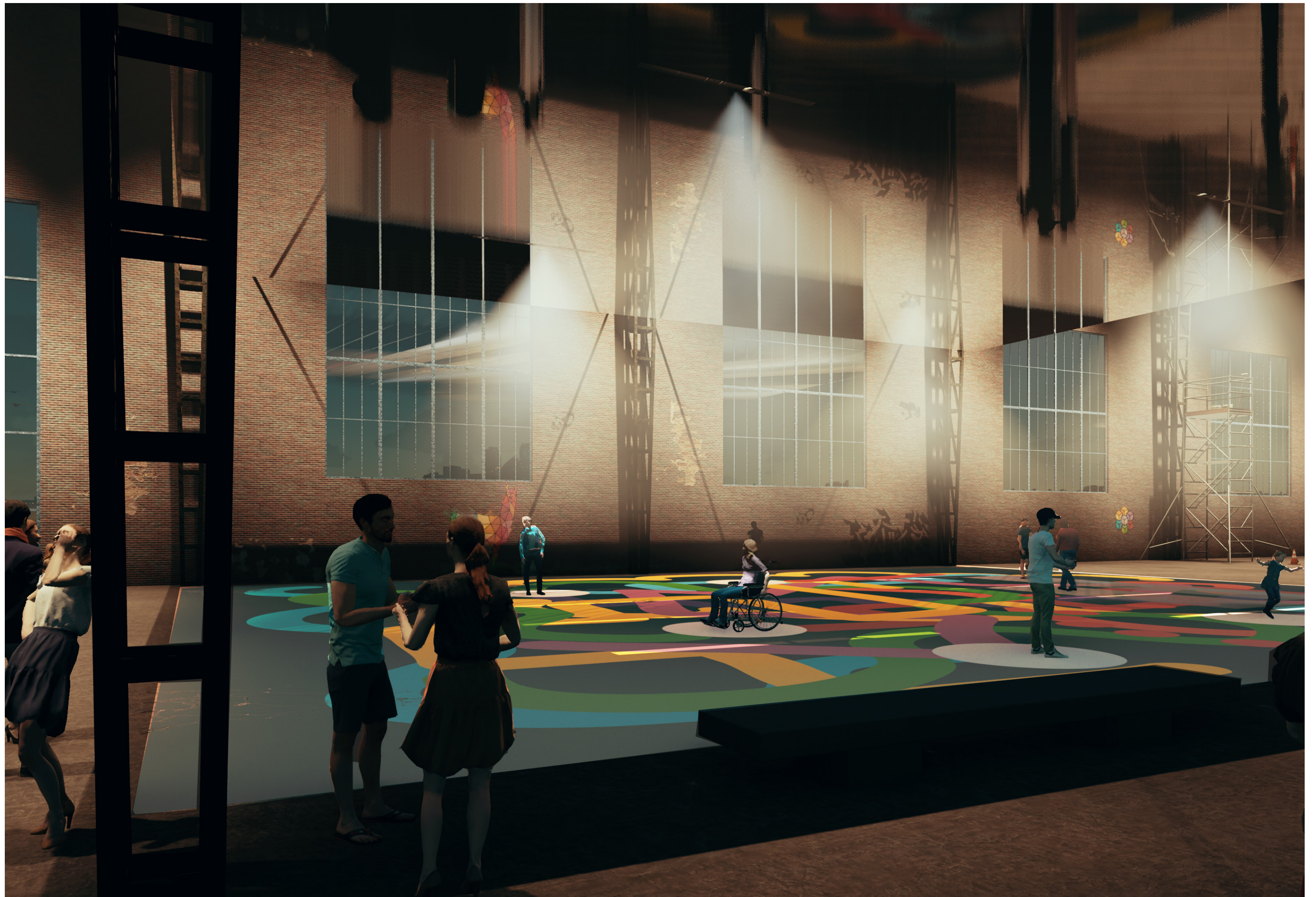
- > POSITIV SOUND – interaction with neglected shape

1 cycle - 10 minutes

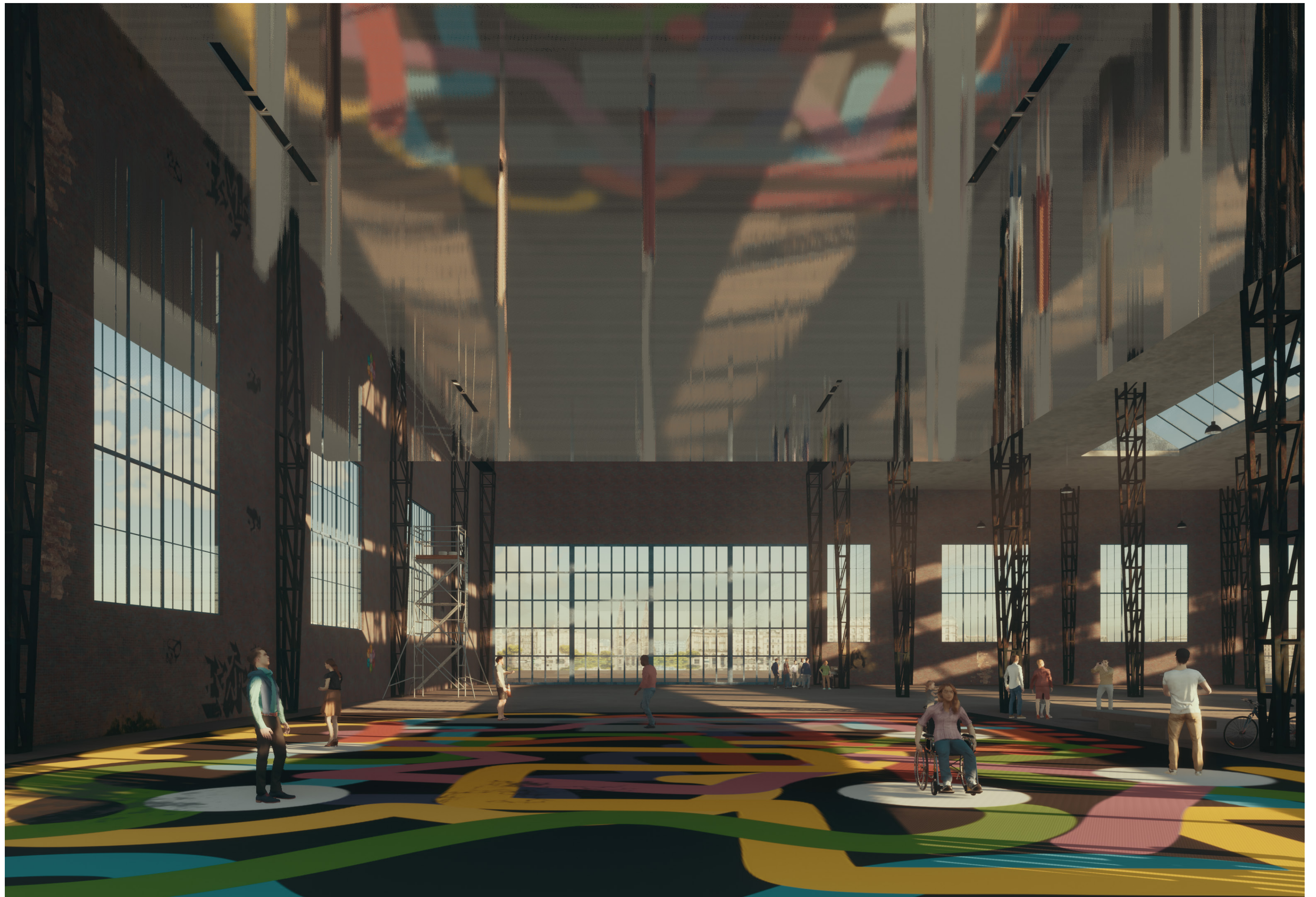
2 cycle- reset - new digital painting





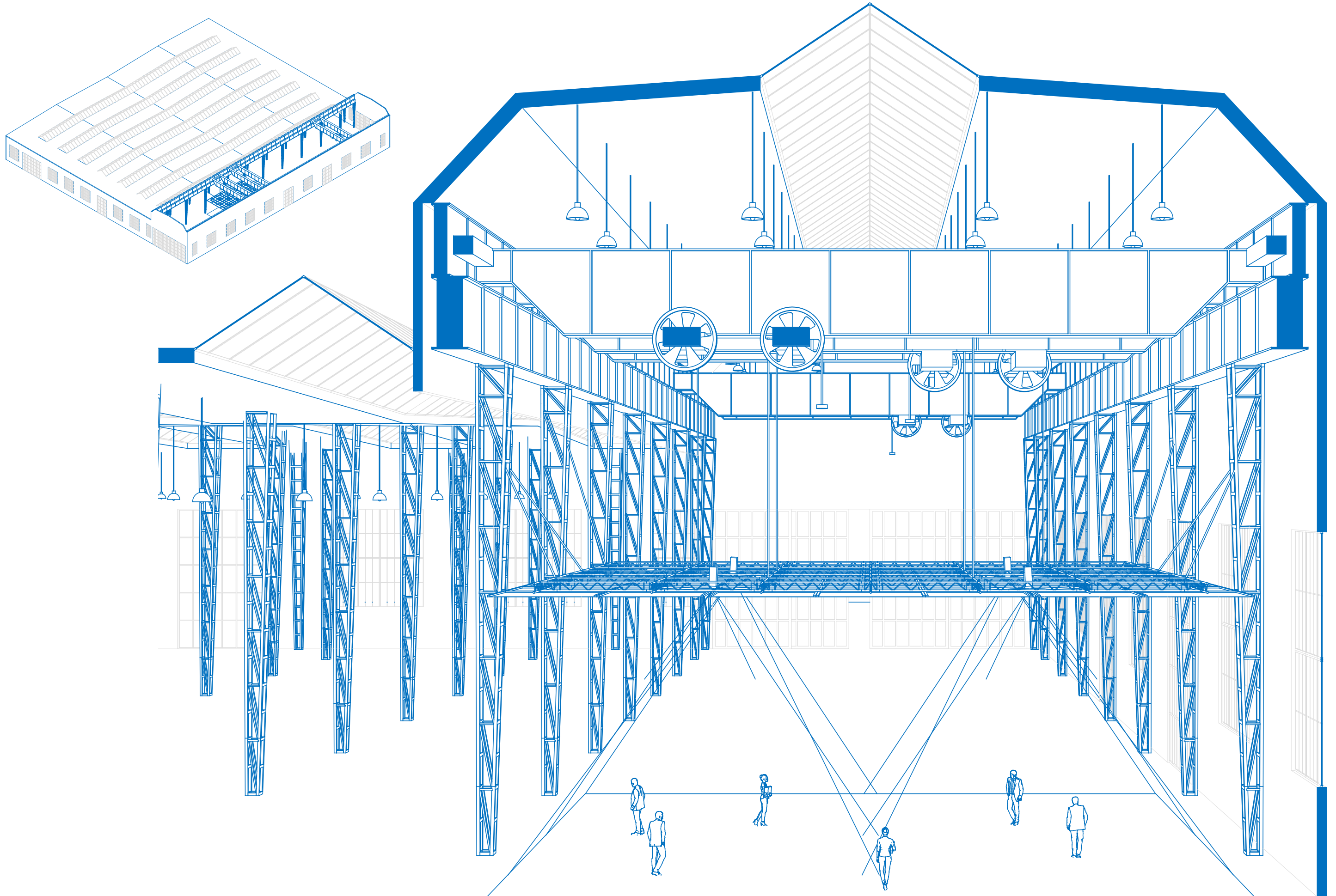








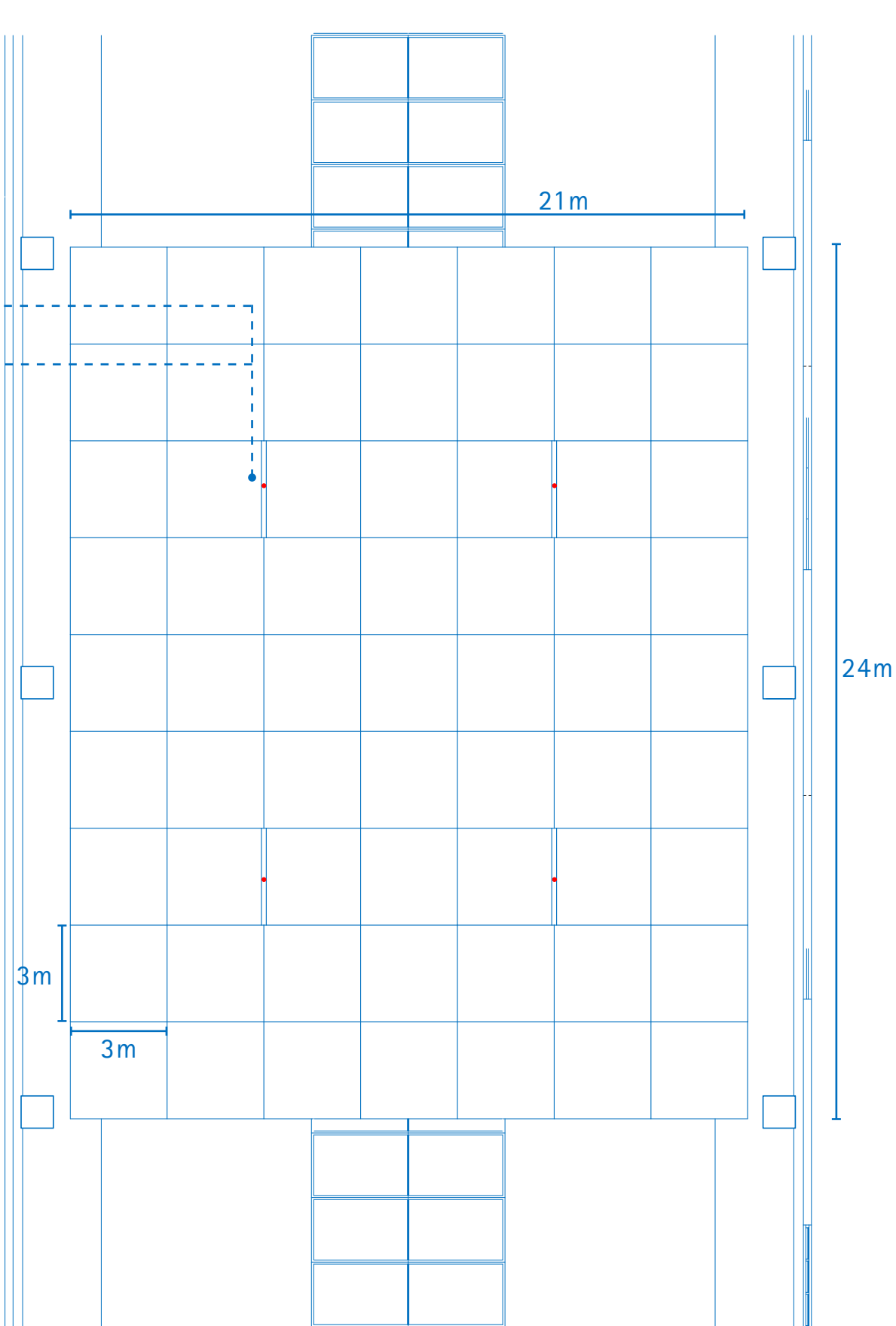
GAME SETUP



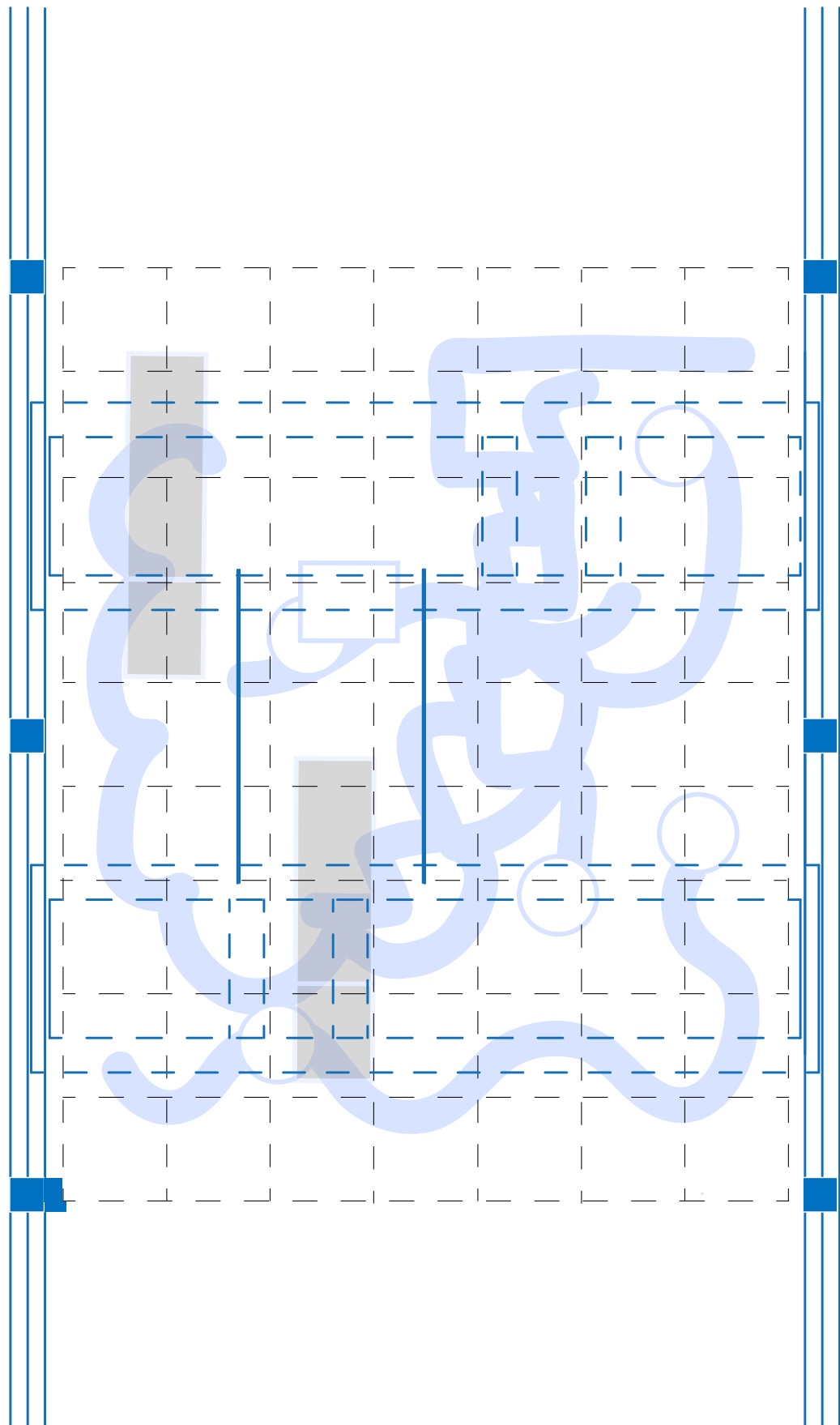


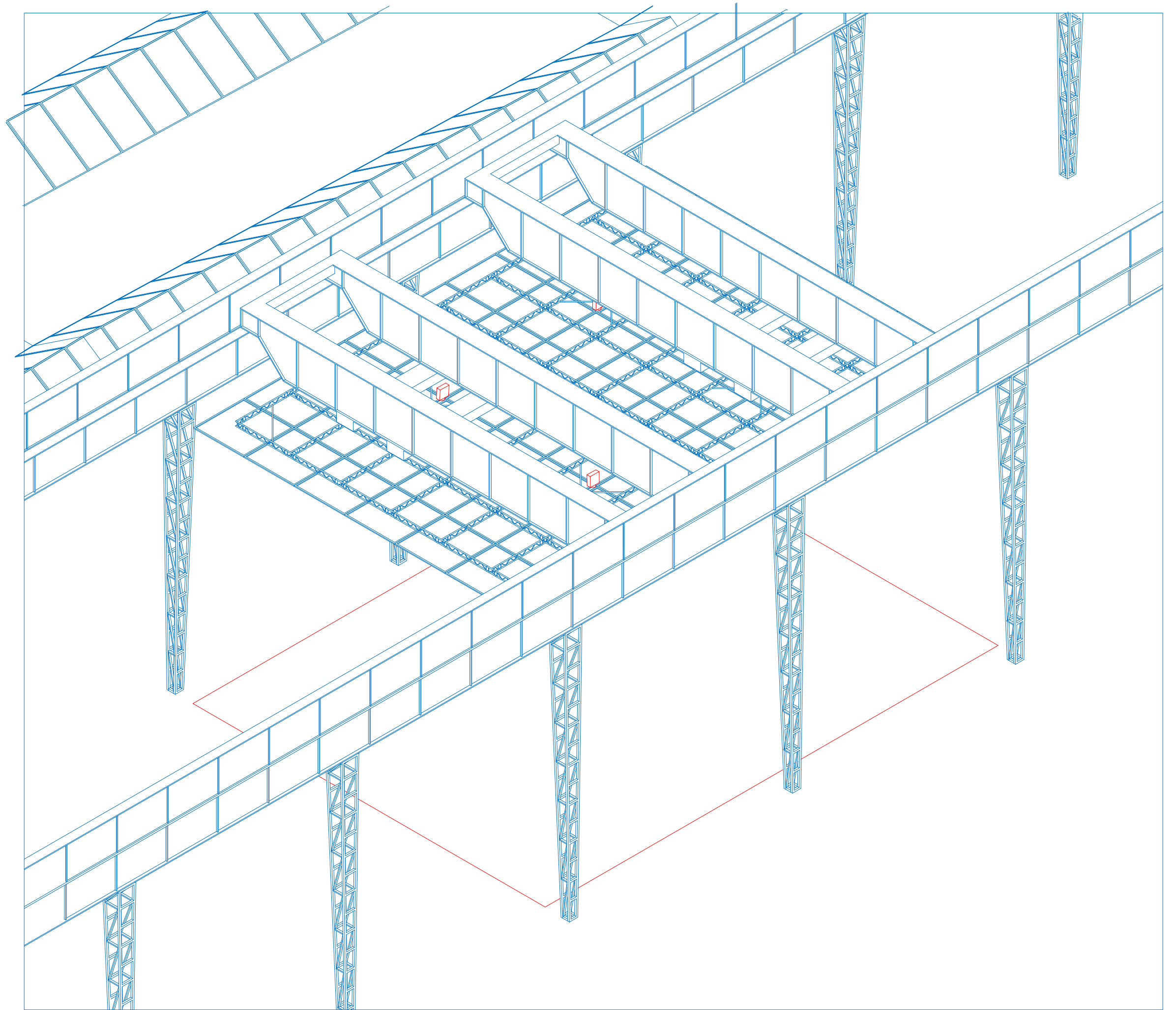
GAME SETUP

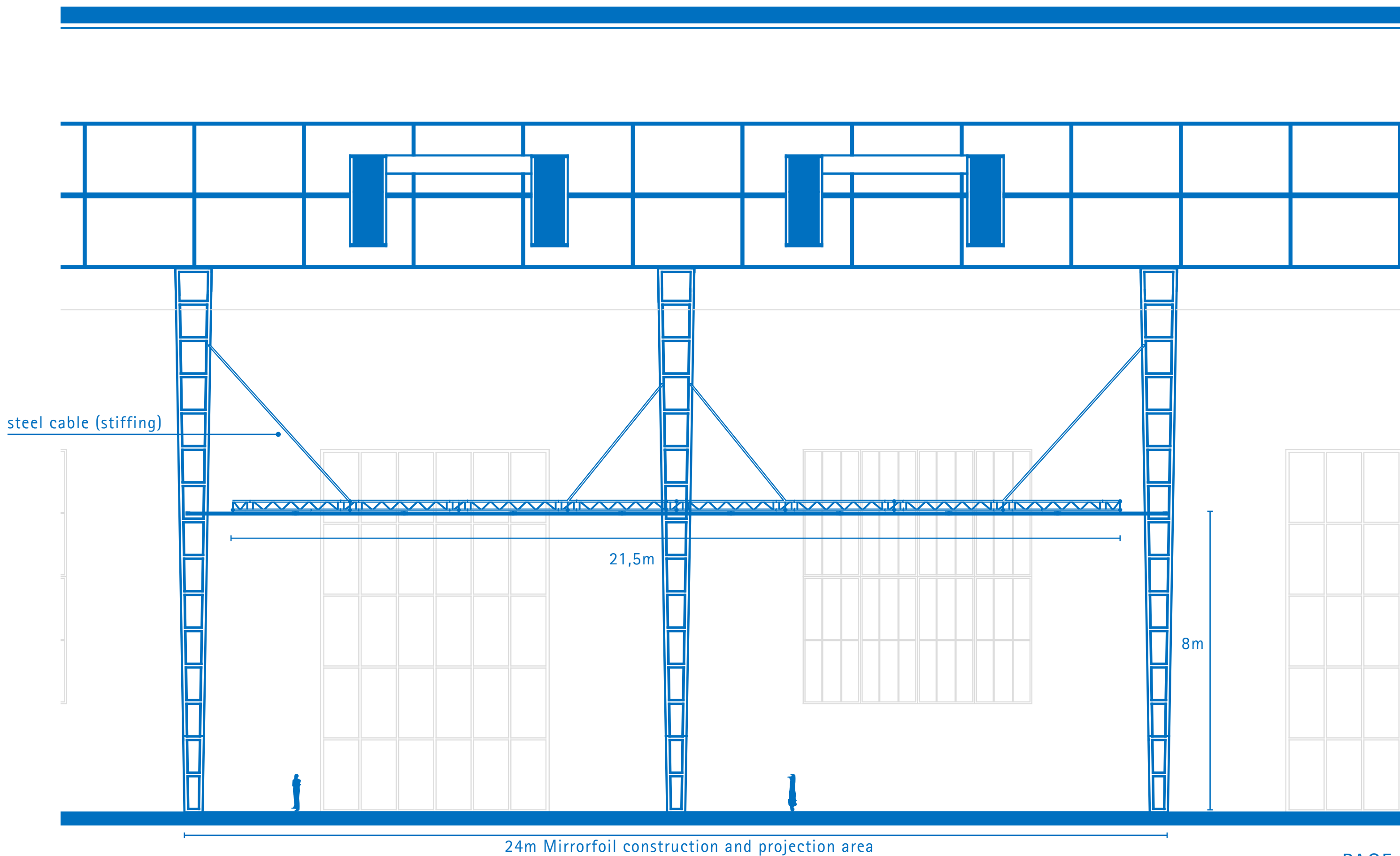
CELING PLAN

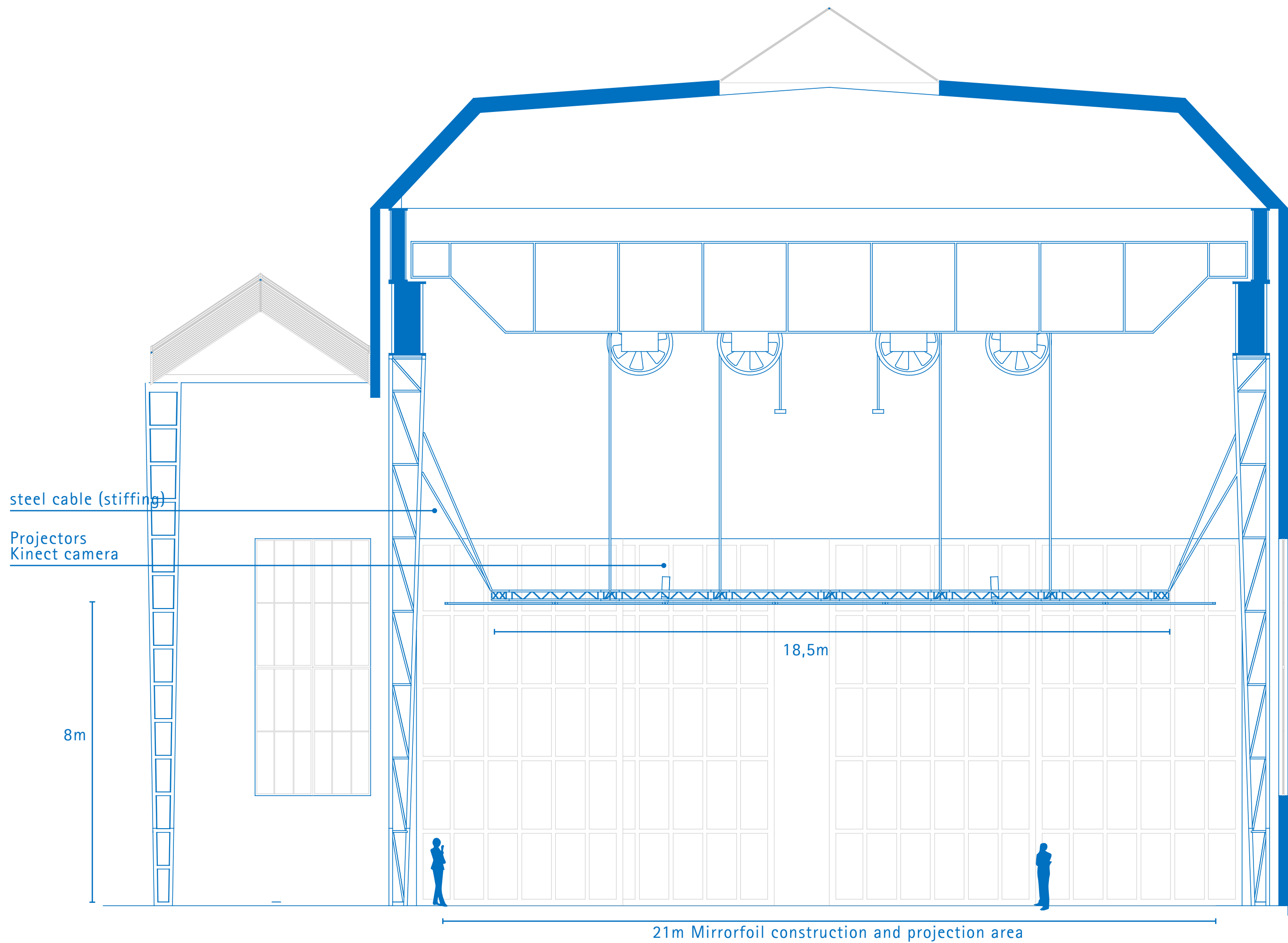


FLOOR PLAN









GAME SETUP

RENTAL

> Trusssystem

EuroTruss HD32 – C90 4 pcs.,

TV 24 pcs., XV 35 pcs.,

HD32 – 250 110 pcs.

DCPF (One Point Adapter)

HCKC – 300 (Baldon Corner Brace) – 8 pcs.

HCKC – 200 (Baldon Corner Brace) – 4 pcs.

> Steel-cable

COSTS

> prefabricated Mirrorfoil construction
(Genriets)

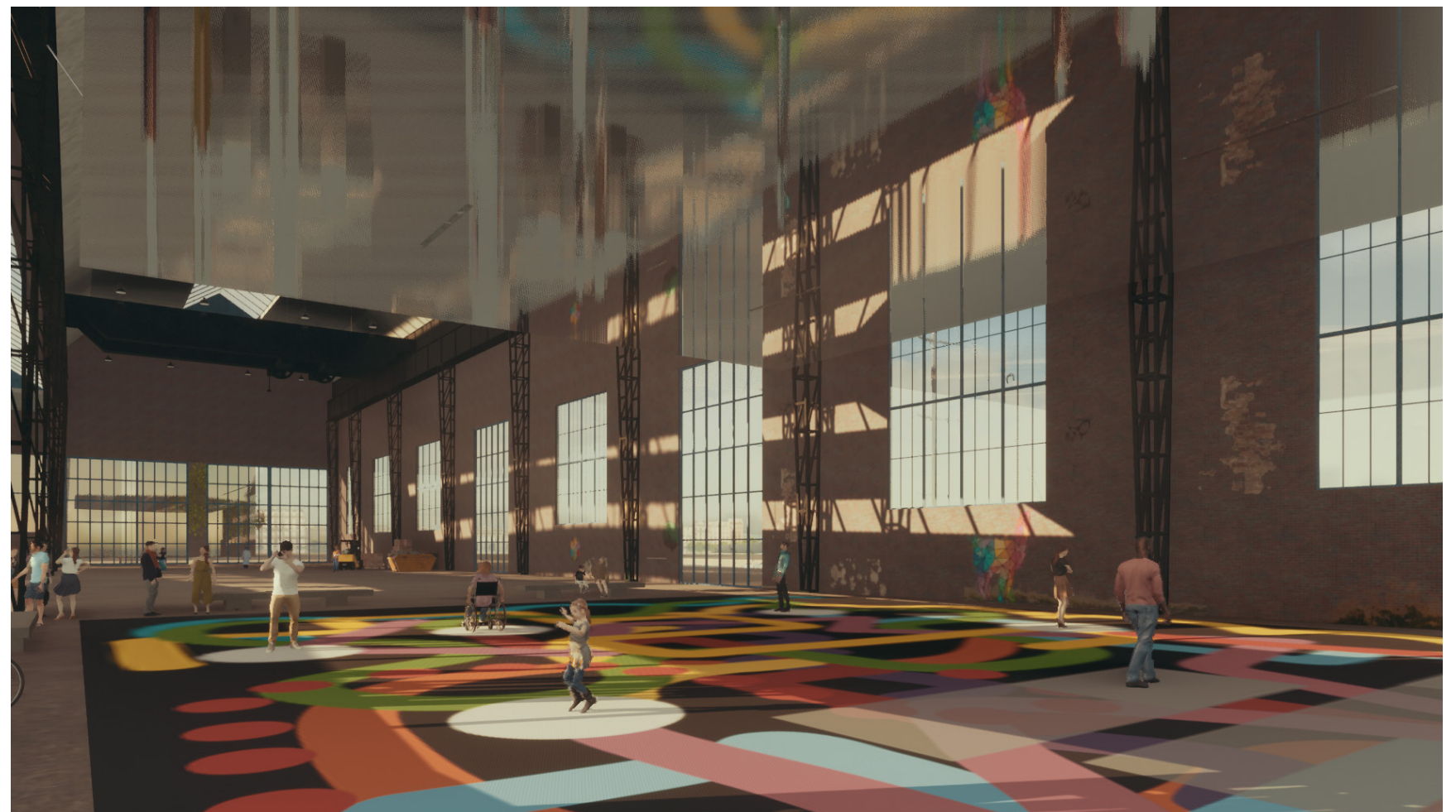
3x3m aluminium frames – 55 pcs.

2,925x3m aluminium frames – 8 pcs.

> Tablet for color control

TIME

> estimate 1 week



GAME REALISATION

KINECT CAMERA (version 1)

- > detection people

PROCESSING

- > information transformation to touchdesigner

TOUCHDESIGNER

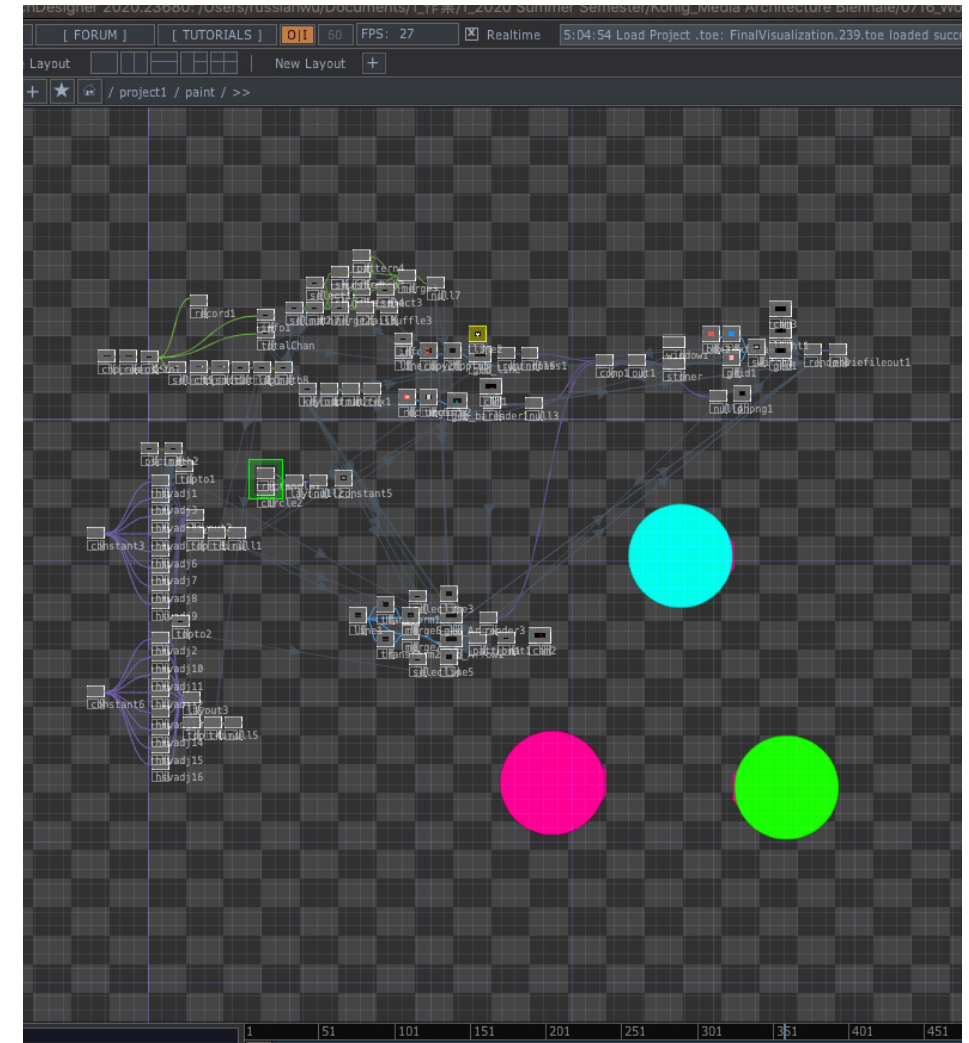
- > combining all information
- > drawing the digital painting
- > programming componants for our game

PROTOTYPE

- > movement tracking of cups
 - cups-people
- > kinect tracks position from above
 - cupboard-riggingsystem

EXPLONATON VIDEO

- > <https://youtu.be/w6wtjP8yvKY>



```
void draw() {  
    background(0);  
    image(kinect.getVideoImage(), 0, 0);  
    img.loadPixels();  
  
    ArrayList<Blob> currentBlobs = new ArrayList<Blob>();  
    int[] depth = kinect.getRawDepth();  
    for (int x = 0; x < kinect.width; x++) {  
        for (int y = 0; y < kinect.height; y++) {  
            int offset = x + y * kinect.width;  
            int d = depth[offset];  
  
            if (d > minThresh && d < maxThresh) {  
                img.pixels[offset] = color(255, 0, 150);  
                boolean found = false;  
                for (Blob b : currentBlobs) {  
                    if (b.isNear(x, y) && b.isSmall()) {  
                        b.add(x, y);  
                        found = true;  
                    }  
                }  
            }  
        }  
    }  
}
```