



2019 - 2022

PORTFOLIO

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ANNA ZHOU

Electrical & Computer Engineering
Industrial & Operations Engineering

The exhibition is a living experiential platform: here, every object can be moved, and every connection – changed. Using the Duderstadt Gallery as the design playground, we observe how visitors engage with the artifacts while learning about the world tea culture, reestablishing personal relationships, and evoking memories.

Instructor: Vadim Besprozvany

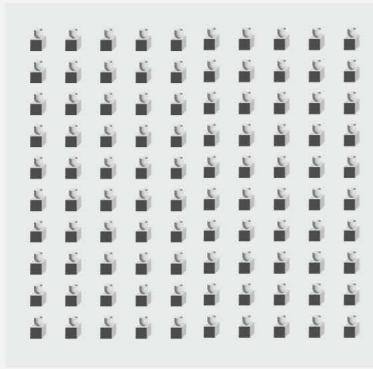
Team Member: Yuchen Zhou, Dev Lamba, Josh Horowitz, Jessie Zhou, Lynette Li

01

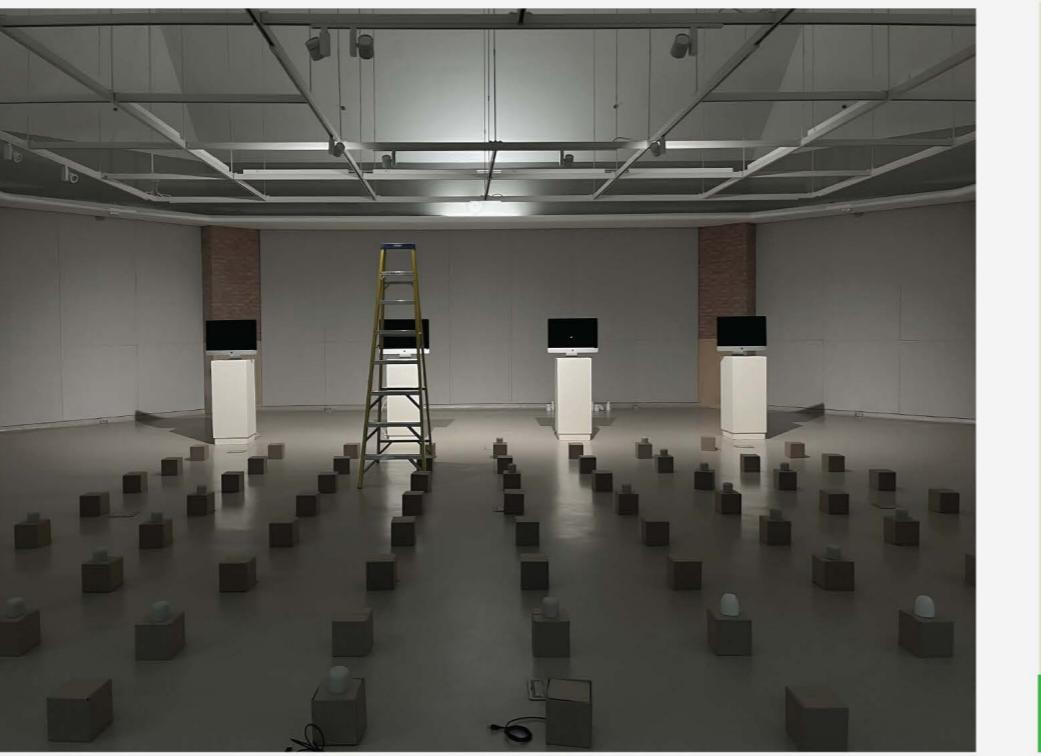
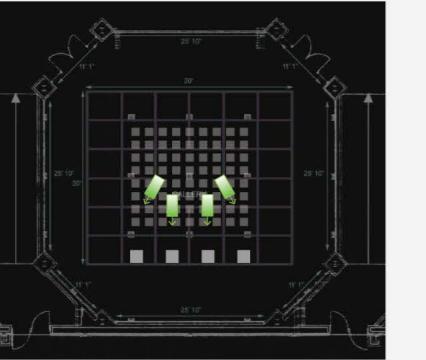
World Wide Tea Participatory Exhibition

Interaction Development/
Graphic Design/
Lighting Design



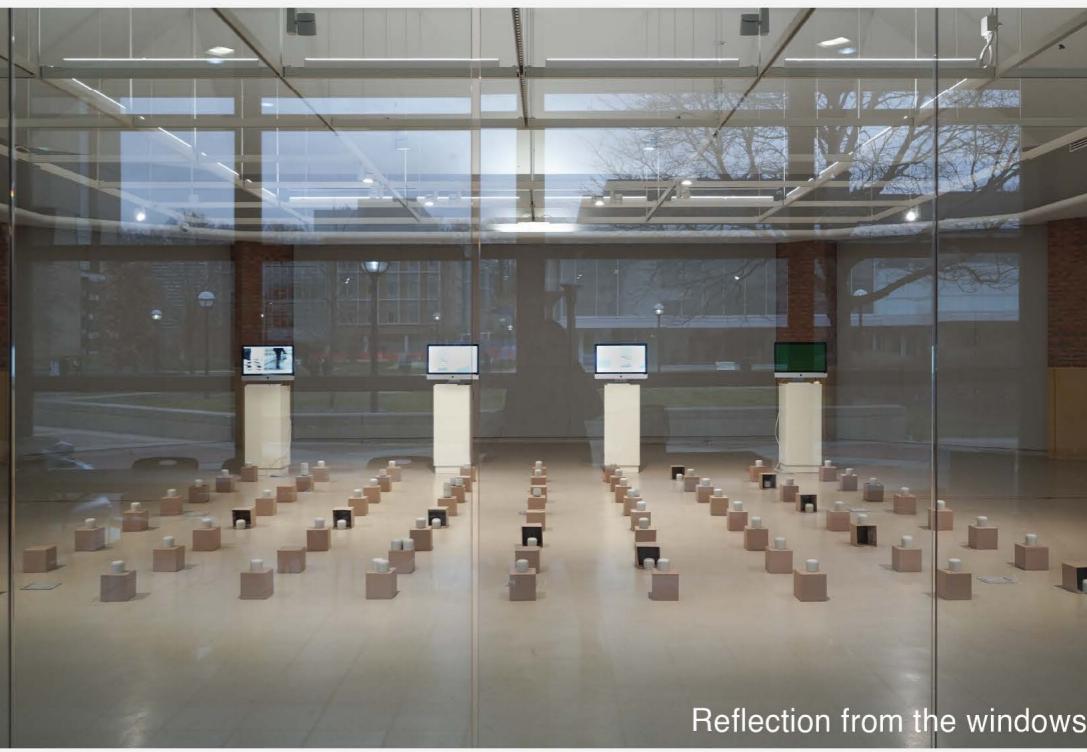


Only
Podium

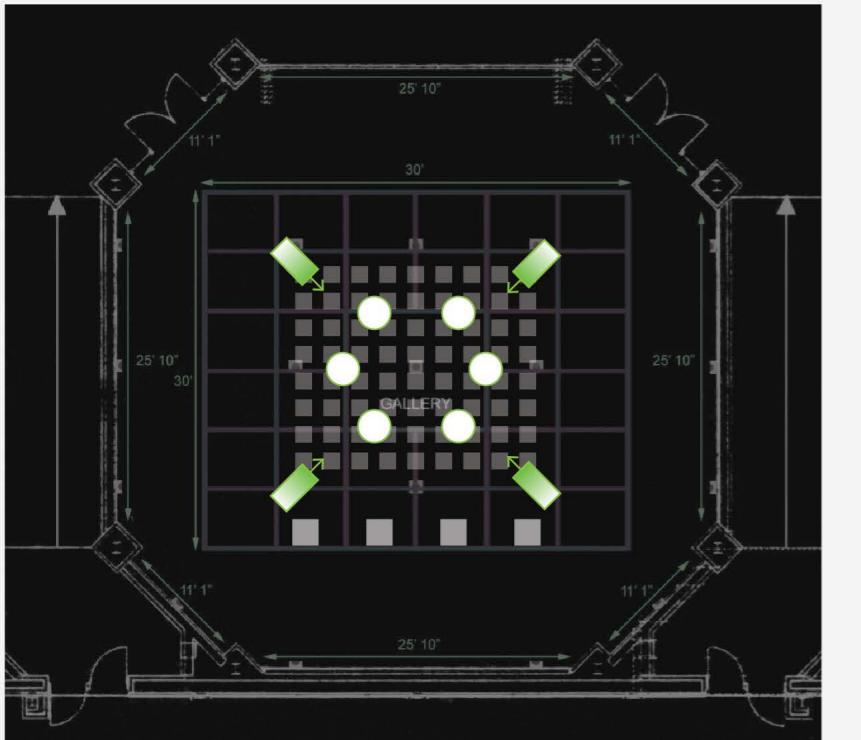


To enhance the projection contrast on the walls, lights are centralized in the middle space. The illumination of the middle ground is stronger than normal to reduce the glare caused by strong natural light and the glass wall on the North side of the gallery.

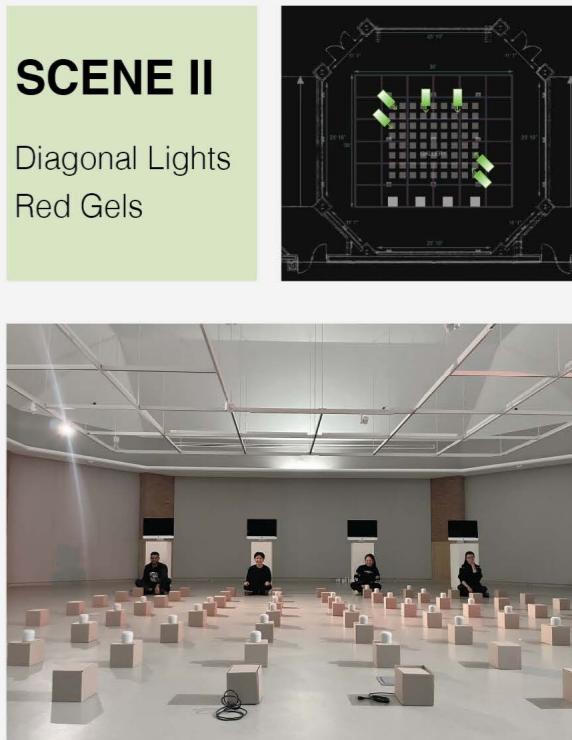
Lighting Design



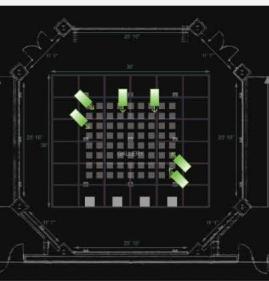
Reflection from the windows

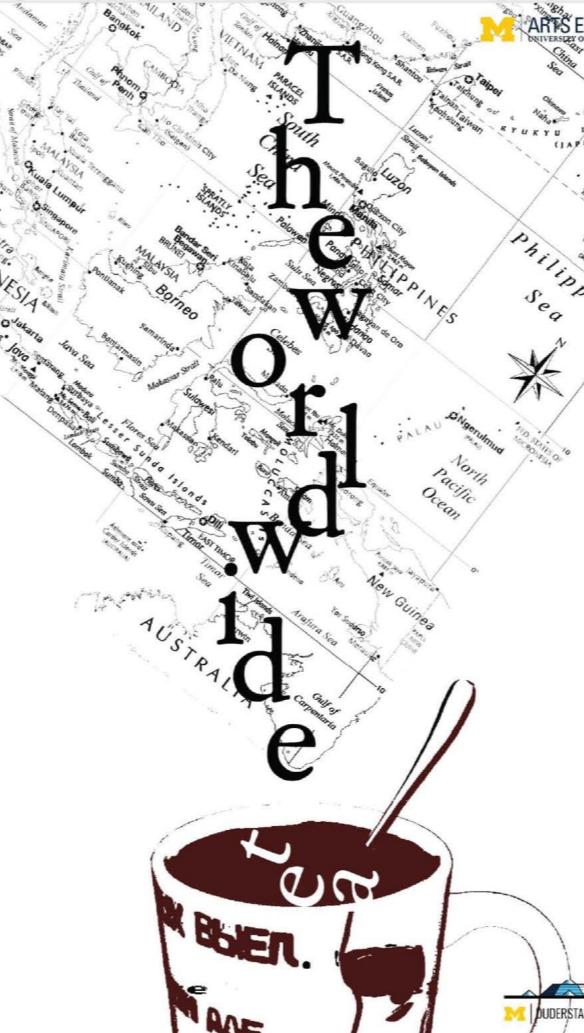
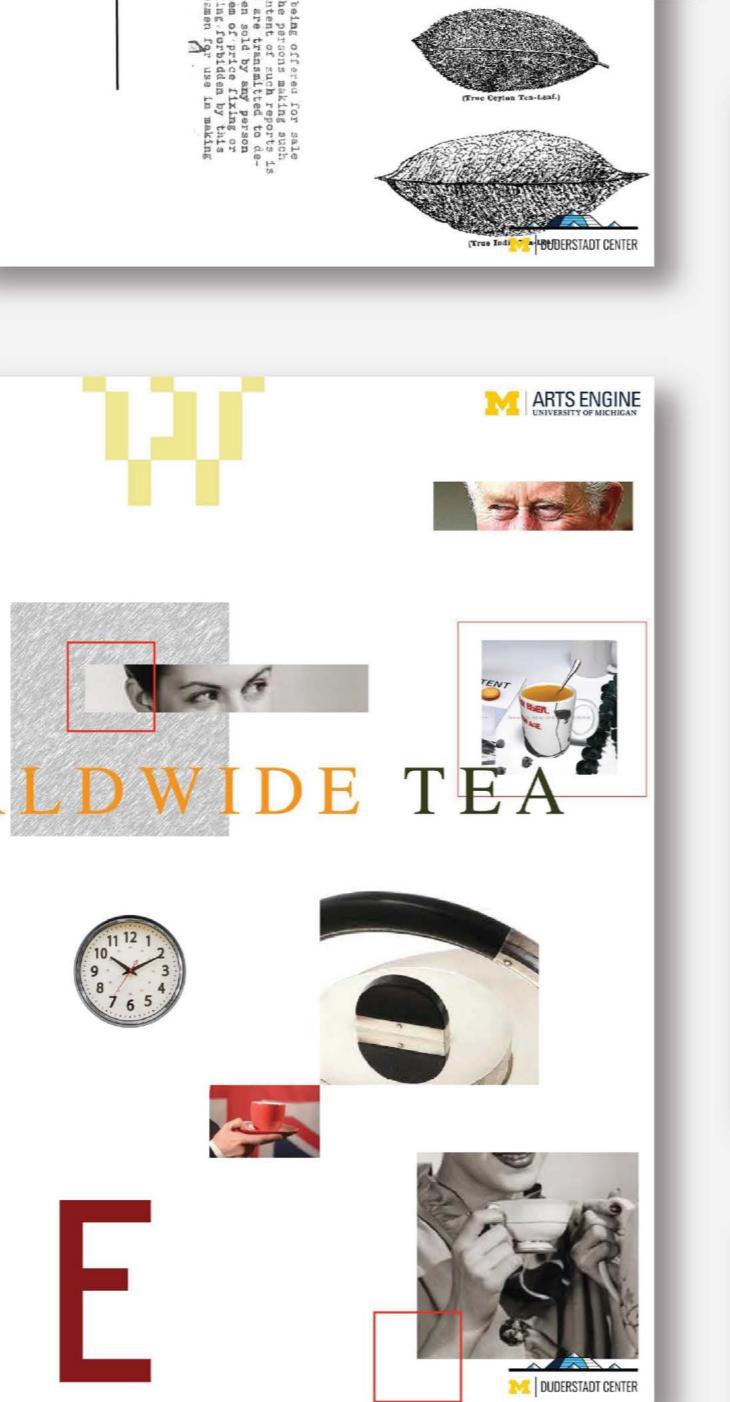
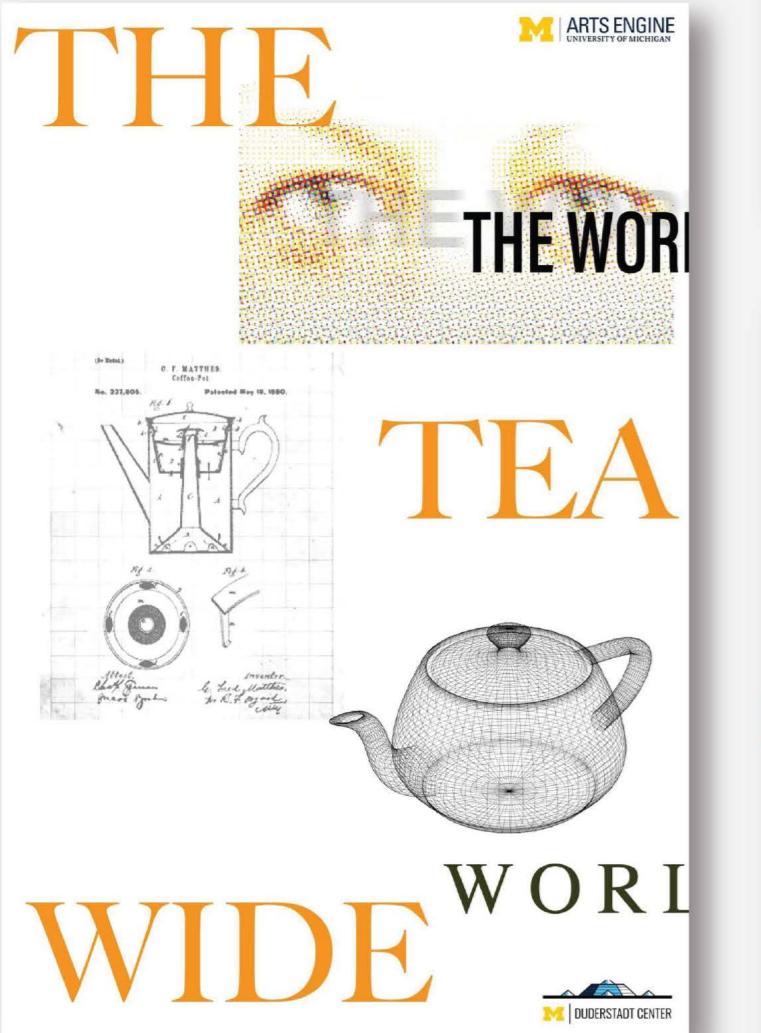


SCENE I
Podium Lights/
Top Lights



SCENE II
Diagonal Lights
Red Gels





Poster Designs

World Wide Tea

The posters include various elements related to the worldwide traditions of tea consumption and trade, modern and historical tea rituals and ceremonies, cultural diffusion, and appropriation. We experiment with onset expectations for forms, shapes, media, functions, and context, as well as the triggers of identity, connection, relationship, comfort, sensations, and pleasure.

Primary Color Palette

#F1D99E

#9C5664

#4D634E

Experiments and Observations

As a prototype for a participatory experience, we ran plenty experiments in the exhibition space. The installation process was recorded with a GoPro camera and played as the screensaver when visitors were not triggering any videos. During the exhibition, we observed the behavior of the visitors and found that visitors were more oriented when the orientations of the cups were forming a pattern. Also, they were more willing to interact when the light is bright and flat, which made the space less like an art installation as a whole.

Installation



GoPro captured installation process

Dance Experiment



To illustrate the idea of participation, we invite dancers to the exhibition space the upon the closure. Aahori, an indian dancer, was dancing like a tea farmer in the farm. The idea for the dance is to present the interaction in an aesthetical way.

Interaction



Visitors interact with the exhibition

ANNA ZHOU

02

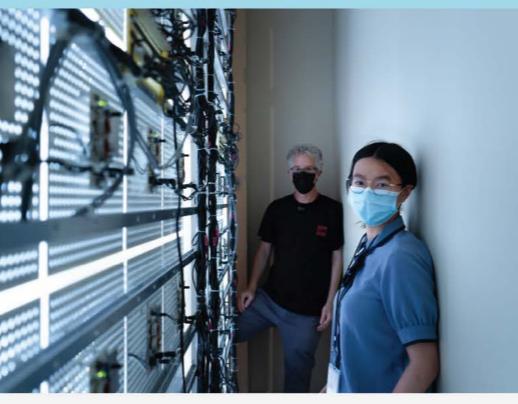
Smithsonian American Art Museum

Lighting Department Intern
Control System Development/
Lighting Design

Practice museum lighting design with guidelines of IES and maximal consideration of conservation. Explore and assist the development of the information technology integrated lighting control system. Tools are developed individually to aid Bluetooth Low Energy communication with multiple protocols.

Supervisor: Scott Rosenfeld, FIES

Lighting Design with 4 degree LEDs



Lighting Design with 4 degree LEDs



Top light on arms



Main front light



Herb and the right arm



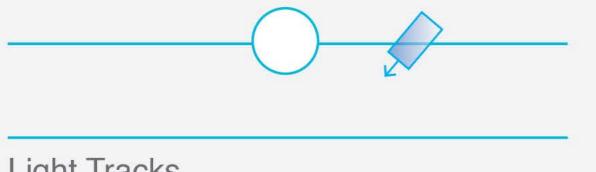
Left arm



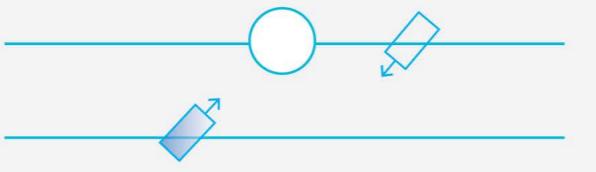
Dress and feet



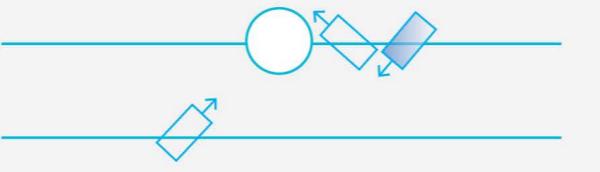
Adjust Intensities



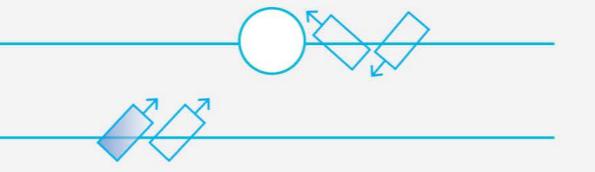
Light Tracks



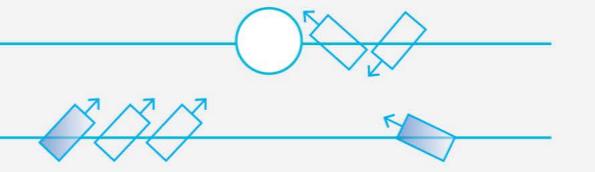
Light Tracks



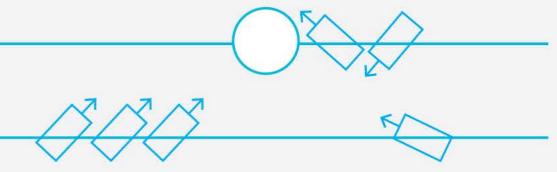
Light Tracks



Light Tracks



Light Tracks



Light Tracks

SAAM - LCS STRUCTURE

Gateway Status Tool

```

0028: M Manager (Led_144.Status = 2)
0029: M Manager (Check_Gateway_URL="http://" + " " + "8000/status")
0030: XIC_HTTP Get(Check_Gateway_URL,DefaultEncoding,Username,pword)
0031: M Manager (Status_Code = XIC_HTTP.HTTPStatusCode)
0032: XIC_HTTP Get(Check_Gateway_URL,,DefaultEncoding,Username,pword)
0033: M Manager If(XIC_HTTP.HTTPStatusCode == 200 | Status_Code == 200)
0034: M Manager (Led_134.Status = 0)
0035: M Manager Else
0036: M Manager Wait(00:02:00/00)
0037: XIC_HTTP Get(Check_Gateway_URL,,DefaultEncoding,Username,pword)
0038: M Manager If(XIC_HTTP.HTTPStatusCode != 200)
0039: Medialon_eM Send( @si.edu..[Gateway] Unexpected shutdown,Check_Gateway_URL)
0040: M Manager (Led_134.Status = 1)
0041: M Manager Else
0042: M Manager (Led_134.Status = 0)
0043: M Manager Endif
0044: M Manager Endif
    
```

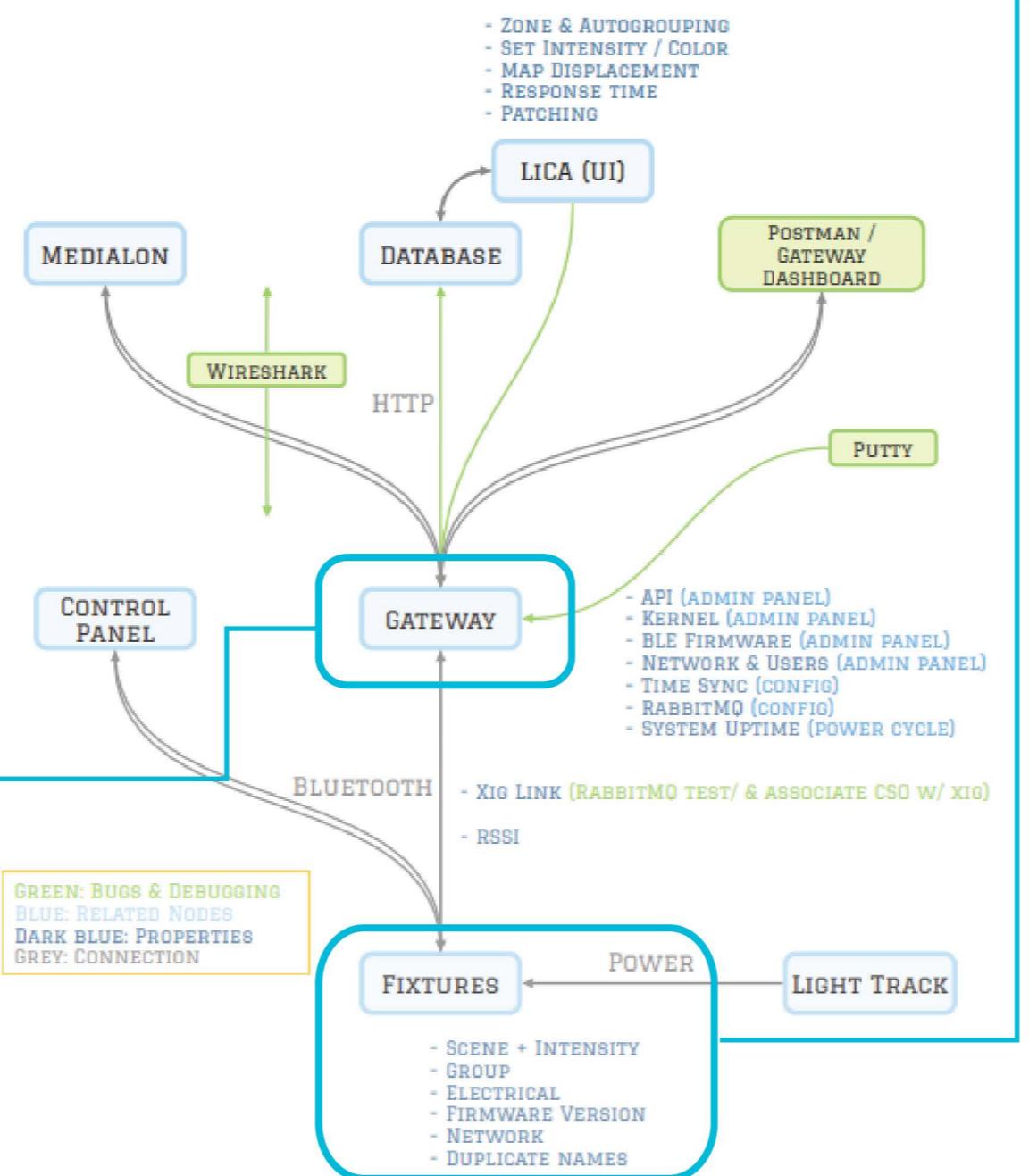
Gateway Status Tool

The program developed in Medialon checks the gateway status automatically twice a day or when the button is pushed.

- The gateways will be checked consequentially by sending HTTP requests
- If “200 OK” is received as a response, the gateway is normal. Otherwise it will send an email to the related employee.
- The color of the Led components shows the status: green – normal; red – off; yellow – not yet checked; black – not yet installed



Gateway



Smart Control Tools

Batch Grouping Tool

- Take in CSV file from CAD softwares (such as VectorWork) as input to add / remove group numbers to batch amount of lights
- Once grouped, the lighting fixtures can be adjusted as a whole which enables convenient adjustments in the design process

```

181
182
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```

SAAM Grouping Tool

Choose File No file chosen

Gateway Number: 0000000000

Append Append Replace Clear

Filter by purpose: FLR Apply

ID	Map	Purpose	Response
10710	DWRC Second Floor	WWS	
10713	DWRC Second Floor	WWS	
10711	DWRC Second Floor	WWS	
10715	DWRC Second Floor	WWS	
10716	DWRC Second Floor	WWS	
10717	DWRC Second Floor	WWS	
10720	DWRC Second Floor	WWS	
10718	DWRC Second Floor	WWS	

SAAM Grouping Tool

Choose File No file chosen

Gateway Number: 0000000000

Append 1 Update Group COUNT: 9

Filter by purpose: FLR Apply

ID	Map	Purpose	Response
10710	DWRC Second Floor	WWS	true
10713	DWRC Second Floor	WWS	true
10711	DWRC Second Floor	WWS	true
10715	DWRC Second Floor	WWS	true
10716	DWRC Second Floor	WWS	true
10717	DWRC Second Floor	WWS	true
10720	DWRC Second Floor	WWS	true
10718	DWRC Second Floor	WWS	true

if (result === true) document.getElementById("aa").innerHTML += fullAddress + "\n";

Interactive Lighting: Achelous & Hercules



Designed Effect and UI



Real Photos of the Scenes



By setting different intensities for different groups to create scenes, the focus of lights can be changed with pushing a button. This potentially serves as the interactive aid the descriptions for storytelling of the painting.

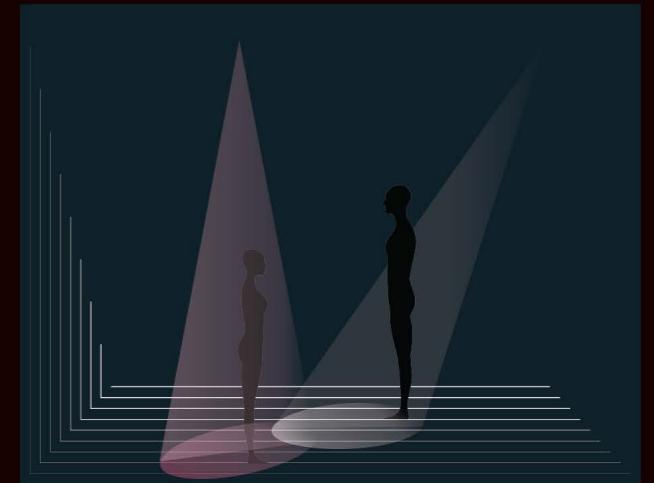
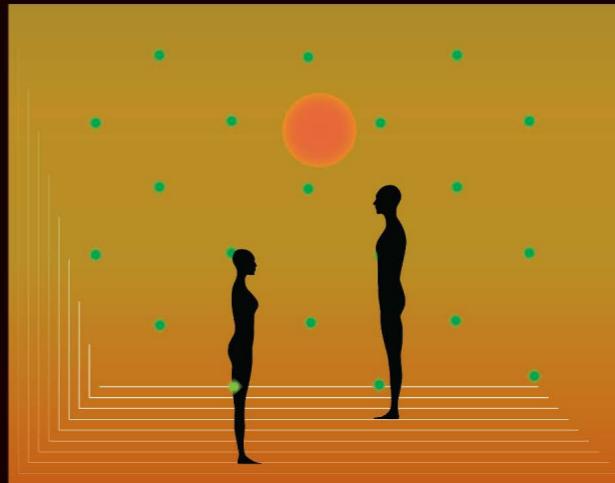
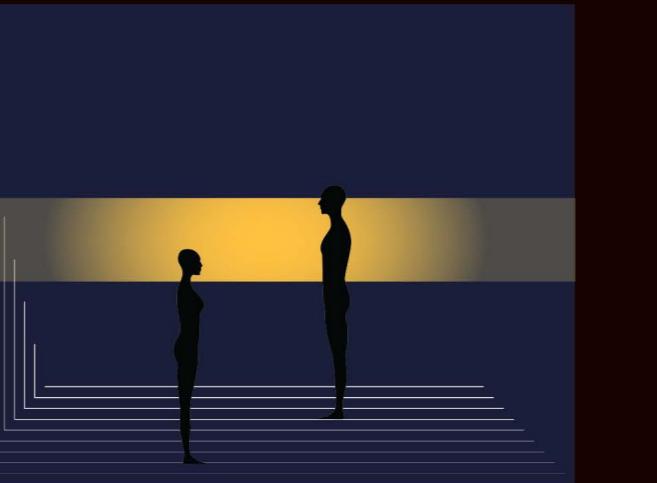
Programming light cues and scenes for the music The Sun Also Rises. In this project, artistic style of surrealism and post-impressionism is applied in lighting design. The interpretative narrative is focusing on the struggle in the long nights, and the eventual sun rise.

03

The Sun Also Rises

Theater Lighting Design

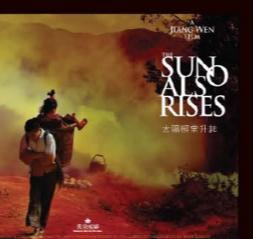
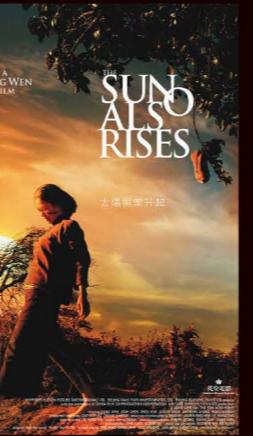
Lighting Design



Sketches & Inspirations

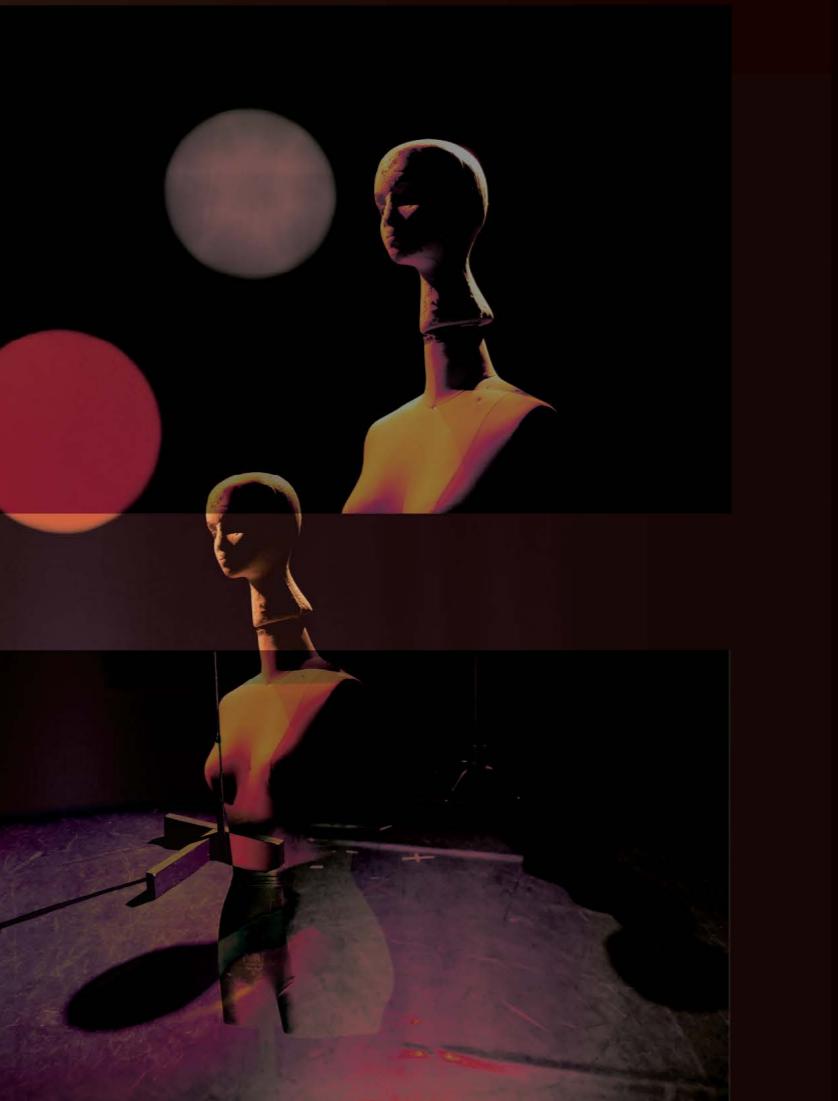
The Sun Also Rises is used as the theme song of Jiang Wen's movie The Sun Also Rises (2007). The movie details four interconnected stories in rural places in China. The music project is trying to catch the mood and tone of the narrative of the movie with two sun rises, a long night and an eventual sun rise.

The color is based on the posters of the movie and post-impressionism, abstraction and surrealism. The colors intend to create the feeling of remote and unfamiliar which aid to the serious narrative.



Final Project

<https://youtu.be/RrFrgnPI-IA>



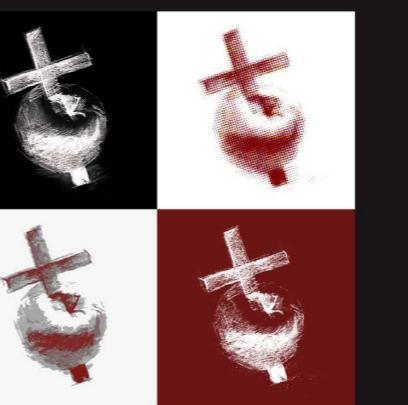
Eden & Elegy

In 2156, a young man fell into the thinking of nihilism in the "good times" when material production is over exceeded. After a long period of self-inspection, he finally proved his individual existence in the fire with the witness of the town. This is a love poem written for oneself, and a carnival in which everyone is enriched with forms.

Modern Drama
↑ (Chinese)

Co-Scriptwriter/
Co-Director/
Graphic Design





Graphic Design Logo, Poster & Tickets

Apple and cross are used as symbolization of Eden and the forbidden fruit. On the back of the tickets, all eight main characters' silhouettes are printed, randomly distributed to audiences.

SCENE VIII

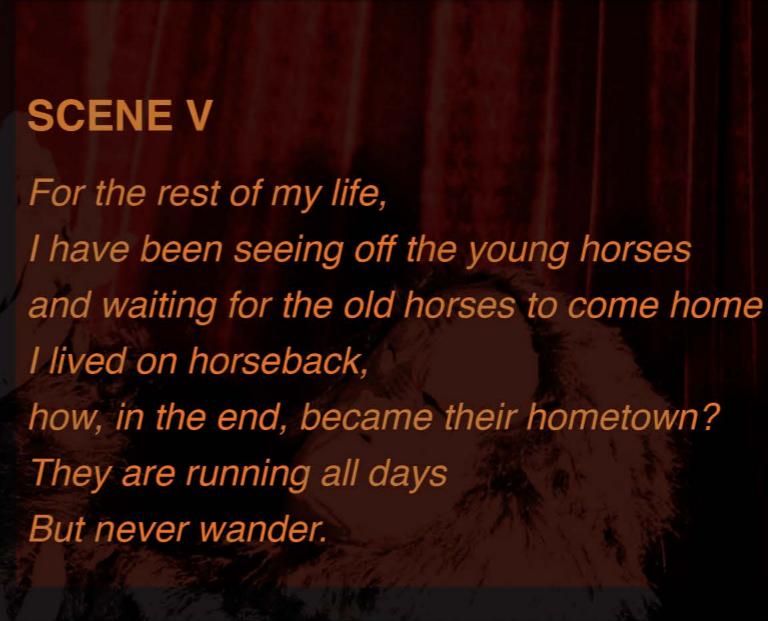
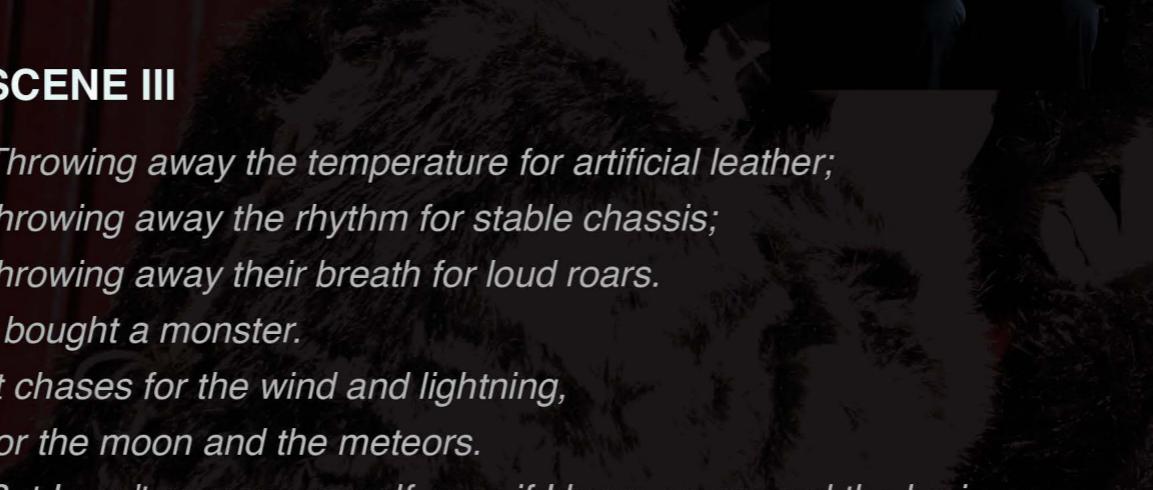
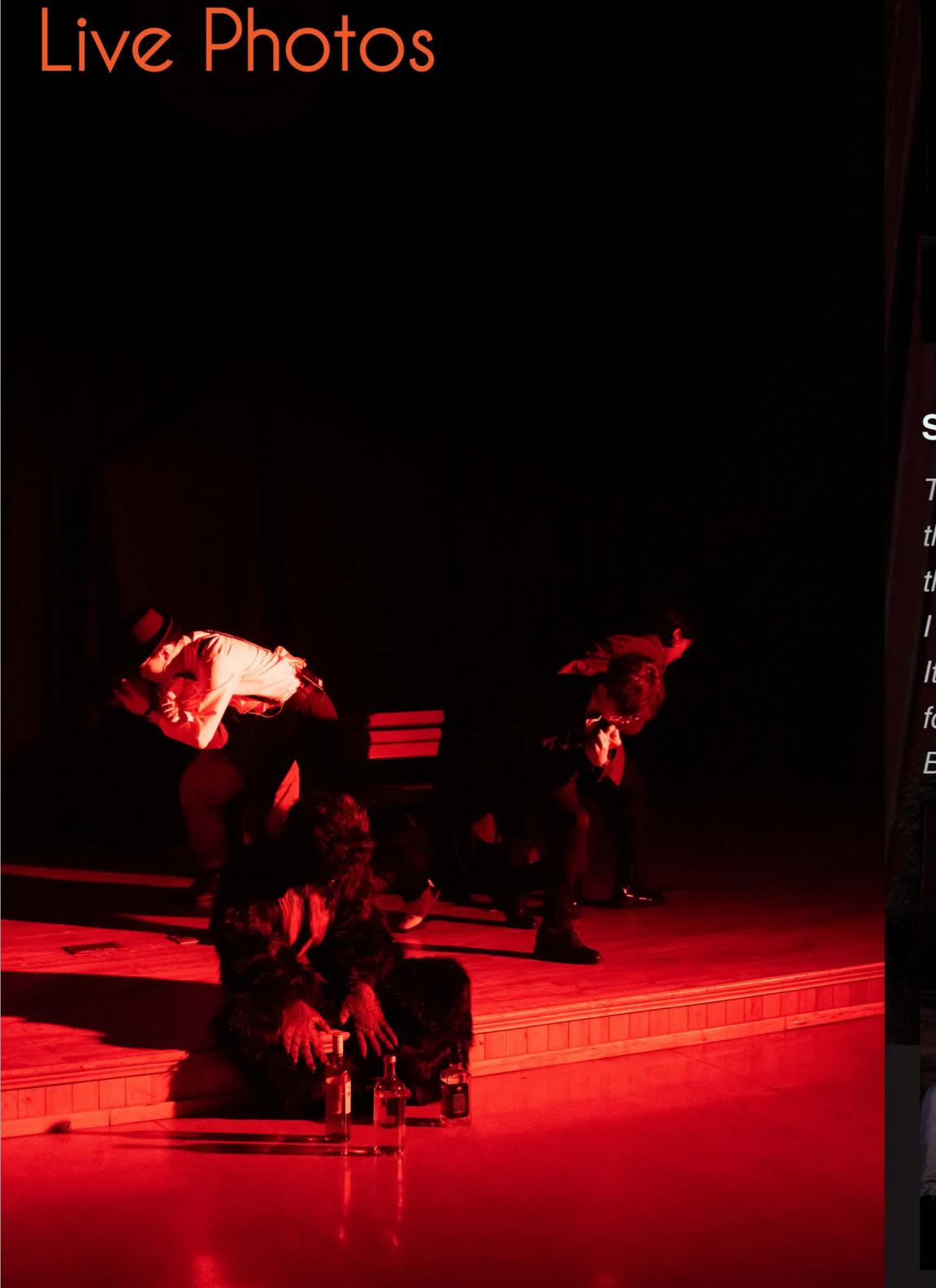
*I saw you, leaving your hometown
for millions of years
From picking up the first flint
and striking a spark
Up to now, riding horses,
taking photos, drinking, clowning,
and dying at the end of the world
Forms are limited,
but you only want to play it over.
Every one of you is full of thoughts
about what to live like
But forgets to attentively eat every grain
of rice, drink every drop of water, look at
every leaf and listen to every wisp of wind
in the past
in the present
in the future?
(laughing)
Measuring infinity with finiteness,
this is a circle!*



Makeup Photos

When considering costumes, we want to use the past to represent the future. Costumes are inspired by the Victorian period, when people, for the first time, connected modern science with humanity.

Live Photos



SCENE V

*For the rest of my life,
I have been seeing off the young horses
and waiting for the old horses to come home
I lived on horseback,
how, in the end, became their hometown?
They are running all days
But never wander.*

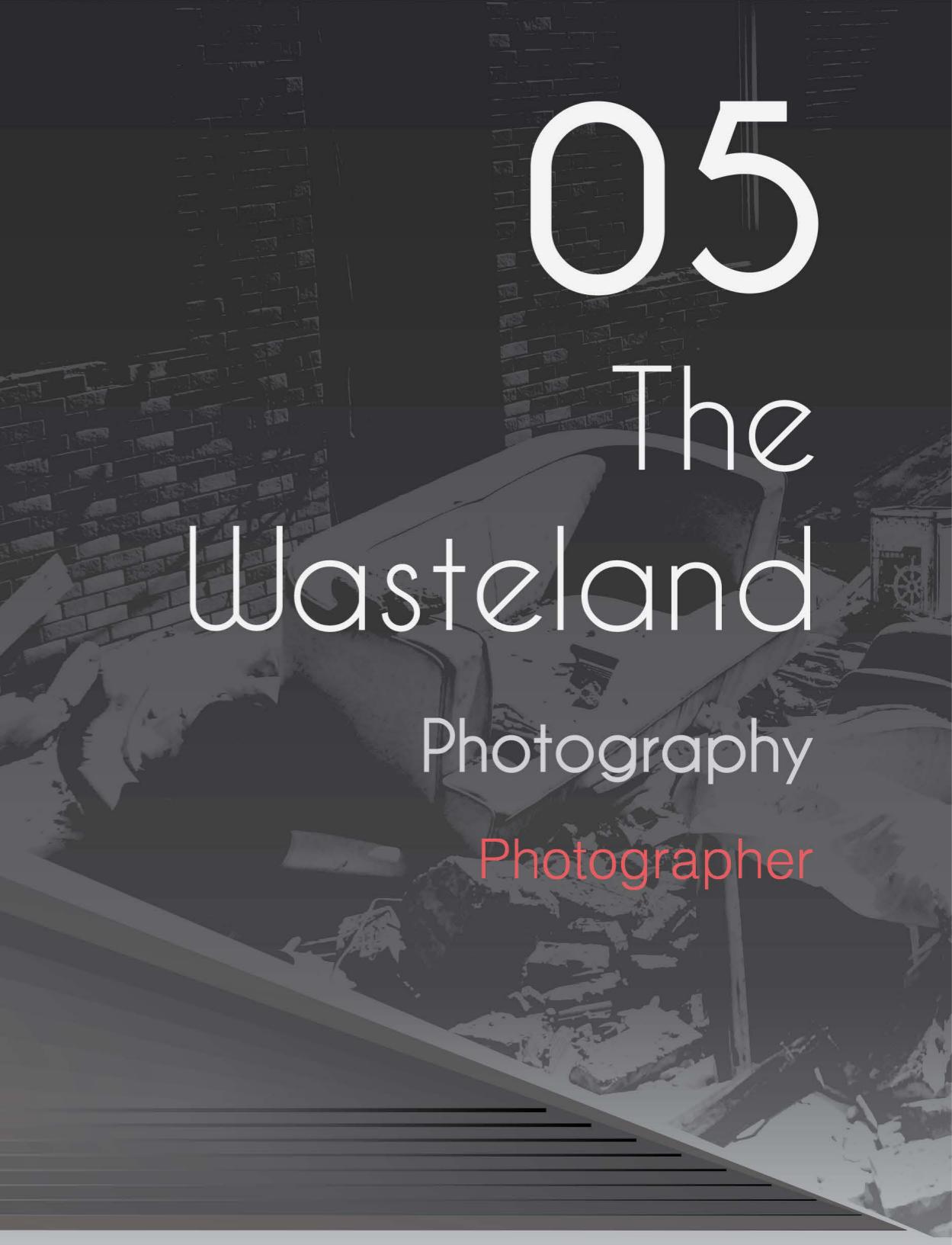
SCENE VIII

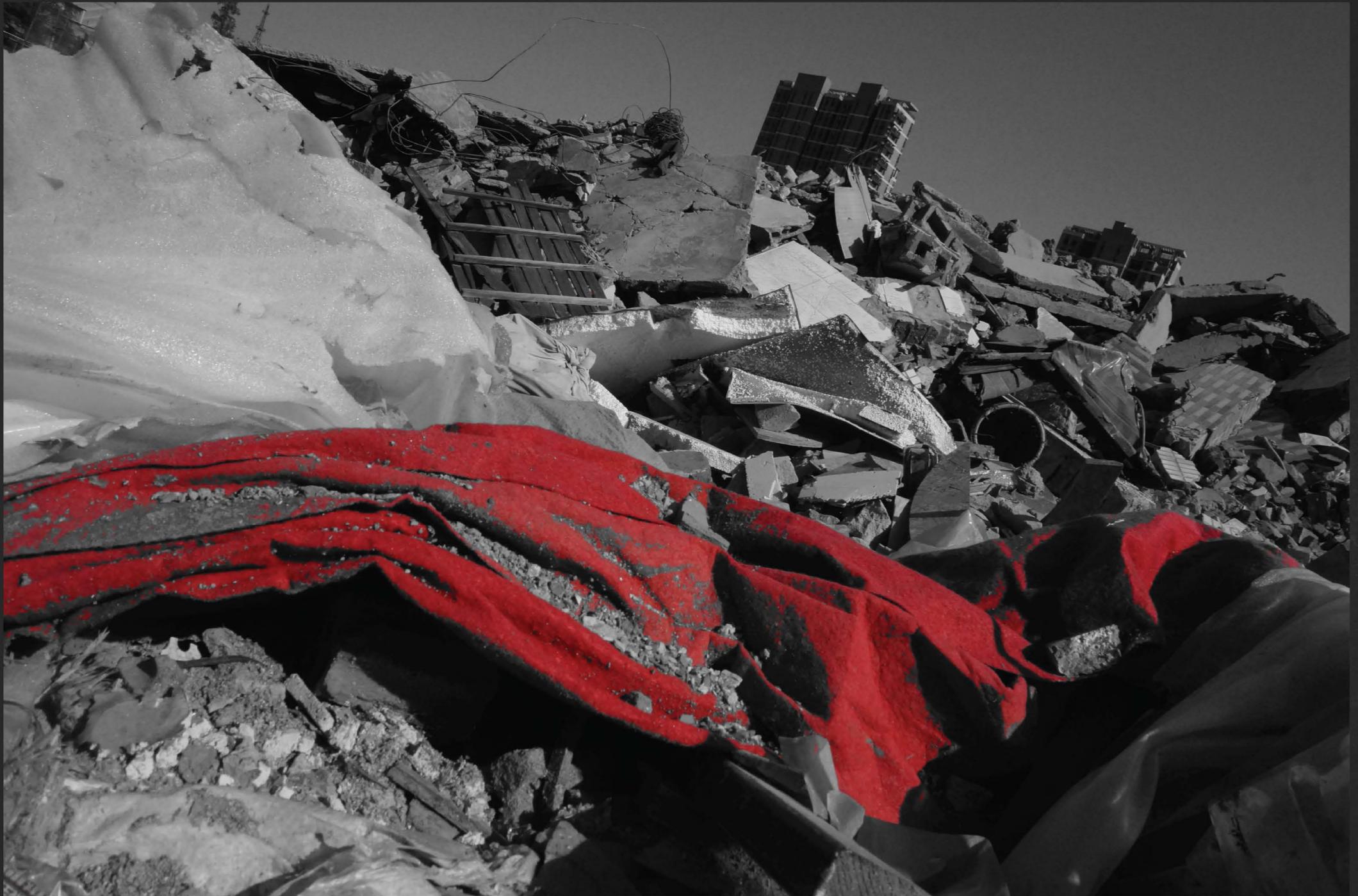
*Metaphor is a migration,
from the fire to the fire,
from the death to the death
In the day I sing "all things go to death"
In the night I sing "death is coming to me"
Today, my day finally shuts its eyelids
I will melt in the arms of the night
and fall asleep with the world
What do you have to ask?*

Modern cities are in continuous hunger, which digest land by land, chewing them up and turning them into new silica body. The former components are abandoned by these forgettable giants, and soon covered by prosperous. The Wasteland project focuses on the ruins in the city, reveal the deconstructed parts of modern architecture and explore the inner construction of modern urban life.

05

The Wasteland Photography Photographer





THE WASTE LAND.

By

T.S.Eliot.

"Did he live his life again in every detail of desire, temptation, and surrender during that supreme moment of complete knowledge? He cried in a whisper at some image, at some vision, - he cried out twice, a cry that was no more than a breath -

'The horror! the Horror!'

"Did he live his life again, in every detail of CONRAD .
desire, temptation and surrender during that
supreme moment of complete knowledge?
He cried in a whisper at some image, at
some vision, - he cried out twice, a cry that
was no more than a breath -

The horror! the Horror!"

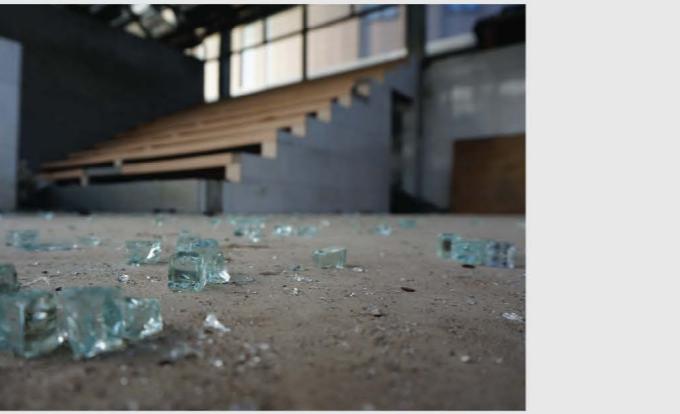
- T.S. Eliot



— 170mm X 240mm / Photography —



96mm X 120mm / Photography



170mm X 240mm / Photography

THANK YOU

✉ ehaema@umich.edu

🌐 www.ehaema.world