



DESIGN FOR IMMERSIVE, MIXED, AND VIRTUAL REALITIES

meaghan dee
virginia tech
meaghand.com

VR TYPE RULES

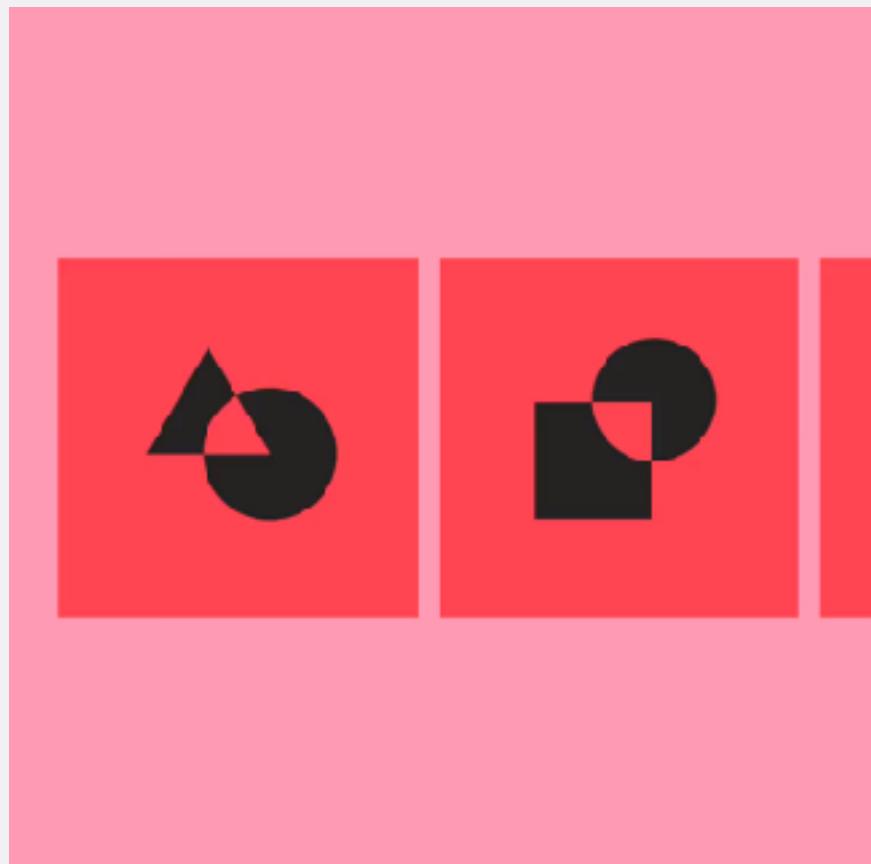
volodymyr kurbatov
medium.com

mined not by how well we say
stood. Andrew Grove. 65 symbols

How well we
not by how
well we are
40 symbols

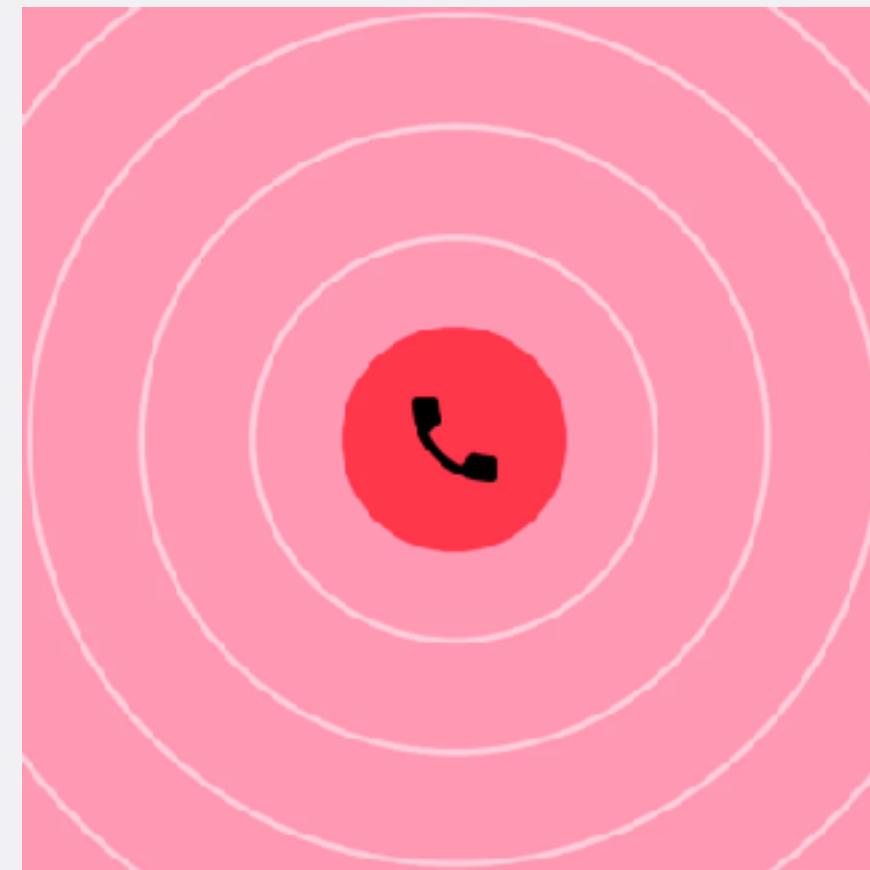
Roboto Thin
Roboto Light
Roboto Regular
Roboto Medium
Roboto Bold
Roboto Black

Principles



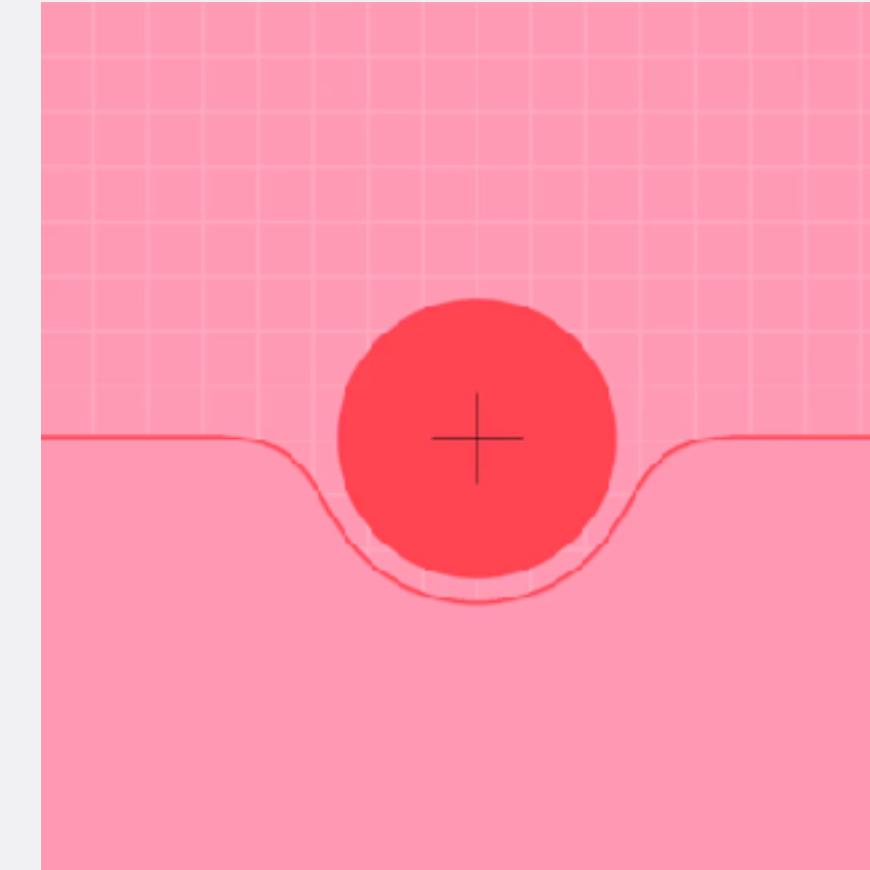
Informative

Motion shows spatial and hierarchical relationships between elements, which actions are available, and what will happen if an action is taken.



Focused

Motion focuses attention on what's important without creating unnecessary distraction.



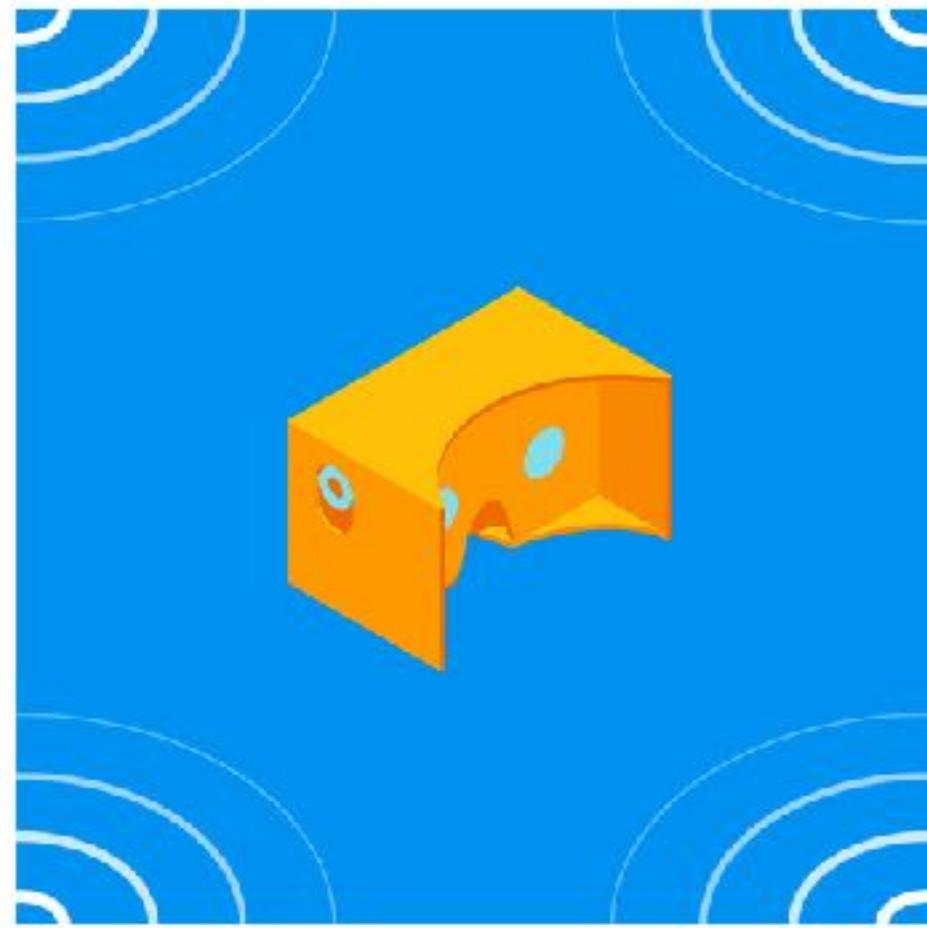
Expressive

Motion celebrates moments in user journeys, adds character to common interactions, and expresses a brand's personality and style.

google

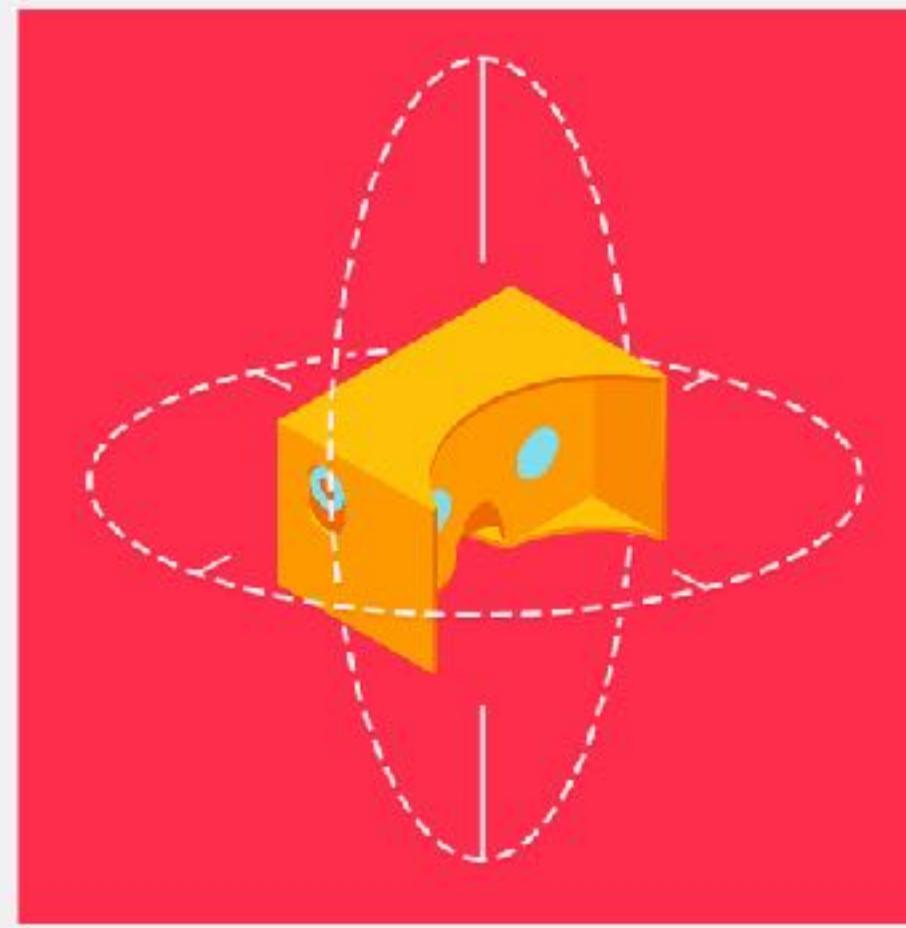
material.io/design/motion

Audio

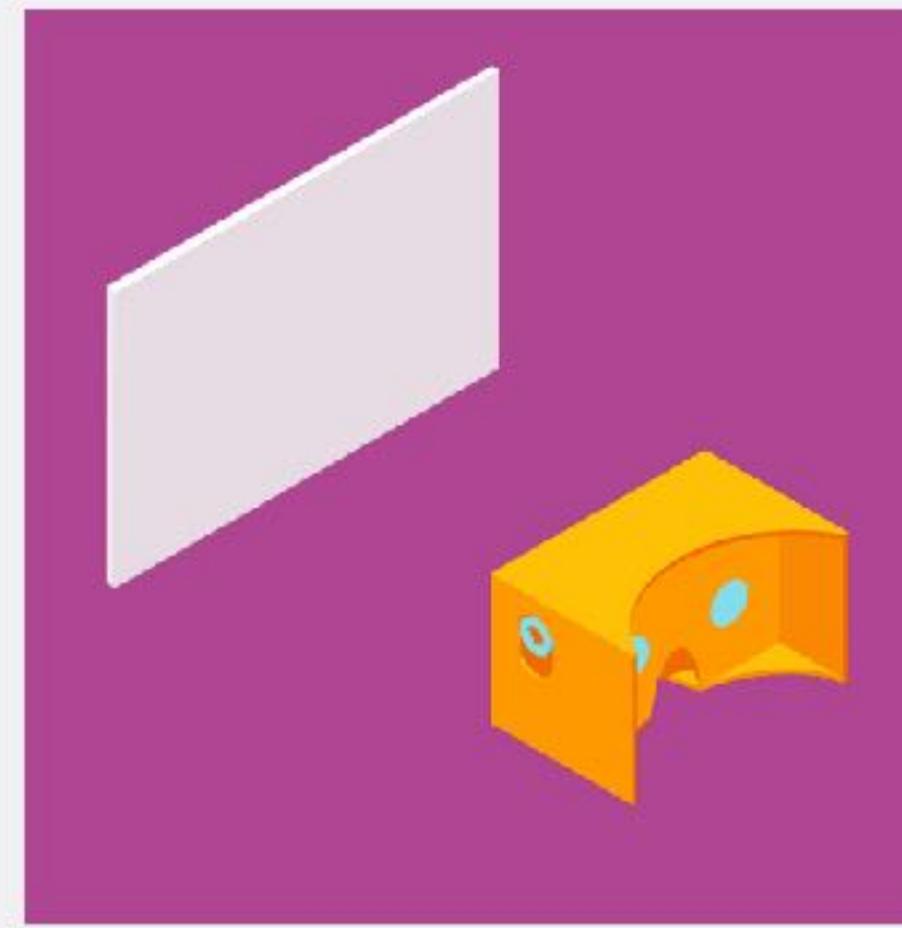


Text instructions don't perform well in virtual reality for a number of reasons. Small text is hard to read. Users are often overloaded with visual information from the virtual environment around them. Consider including short audio summaries instead.

Head Tracking



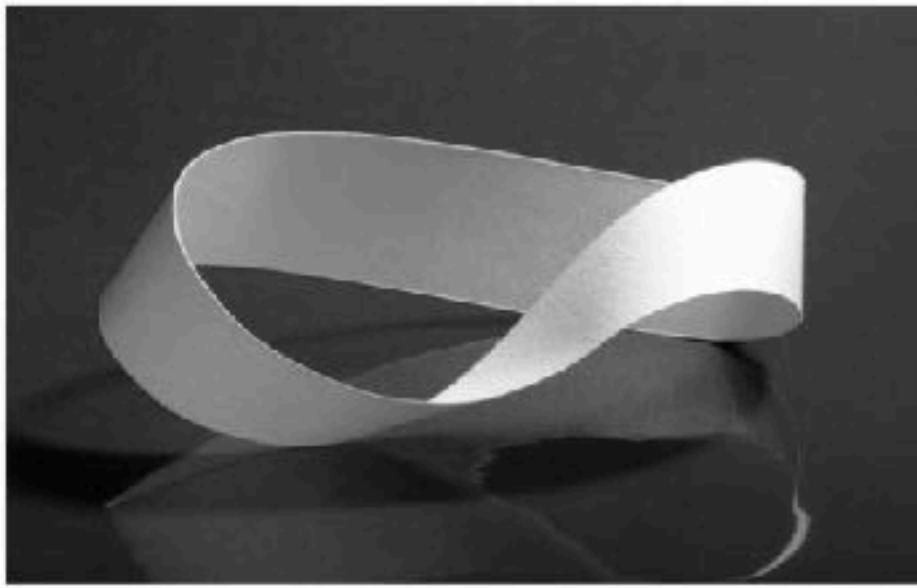
Head tracking enables objects in virtual space to maintain fixed positions regardless of how you move your head, creating the perception of a virtual world surrounding you.



Render 2D splash screens in 3D space. Fixing the splash screen, or any graphic, to the user's head and turning off head tracking may cause discomfort.

CARDBOARD

google design
designguidelines.withgoogle



to the reader: For the complete “Möbius Strip” effect, Xerox two copies of this poem. Scotch tape the pages together into two long pages, each containing the entire poem, then cut away the title and anything under the last line of the poem which now reads, “little dog.” Trim away any white space beyond the left and right margins, leaving no more than an inch on each side to make a “strip” of words. Scotch tape, glue, or staple the trimmed poems back to back, so that both copies run parallel to each other, but in a mirrored image. The first lines of both copies, “she tries,” should be back to back to one another, and so on. Loop the poem into a cylinder, then twist it once before splicing and scotch taping what is currently the first line and last line together.

The last line/first line should now read, “little dog she tries” on both sides of the Möbius. (If, at this point, you need any assistance, or a visual guide, please consult your dictionary for an illustration of a Möbius strip.)

You can begin and/or end your reading of this “Möbius Strip” poem at any point you like — I suggest beginning where there is block of white space.

Möbius Strip: Forgetfulness

(after Luc Etienne, a variation)

she tries
to pee in the trash can but
misses she puts
her socks over her
shoes she wears
all her necklaces at
once she has
another bruise she
loses her rings in the
toaster slots she
shoves the toast in the
VCR she holds
the Chili's menu upside
down she tries to
eat an acorn she
likes to eat canned
frosting she is
small and curled on
the bed she forgets
her underwear she
feeds her stuffed dog so
its mouth is sticky with
chocolate she's sure
the hippopotamus on TV
is real sometimes
she can still say “Sprite”
or “Coke” someone
sticks her thumb into
ink she stacks
m&m's like ammunition
in her silver lipstick
tube she holds
her plastic fork by the
tines someone
pushes down her thumb
on the signature line
for a thumbprint her
bright costume necklaces
jangle she doesn't
recognize the baby
anymore someone
is telling her to lift her
arms someone is
telling her she has to
sing she waters
the silk lilies she
waters the silk lilies with
orange juice she
waters the silk lilies
with milk she
tries to write something
down with a spoon she
forgets her wig some-
times she can still say
“papa” she can't
open her closet since
they locked it at
3 a.m. she leaves the
hotel room to wander
the beige carpeted
halls she looks
at pink mums as
though she's about to
cry all the room
numbers are a twisting
ruckus and what's her
name anyway the
front desk clerk finds
her curled on a lobby
couch, pee wetting her

FORGETFULNESS

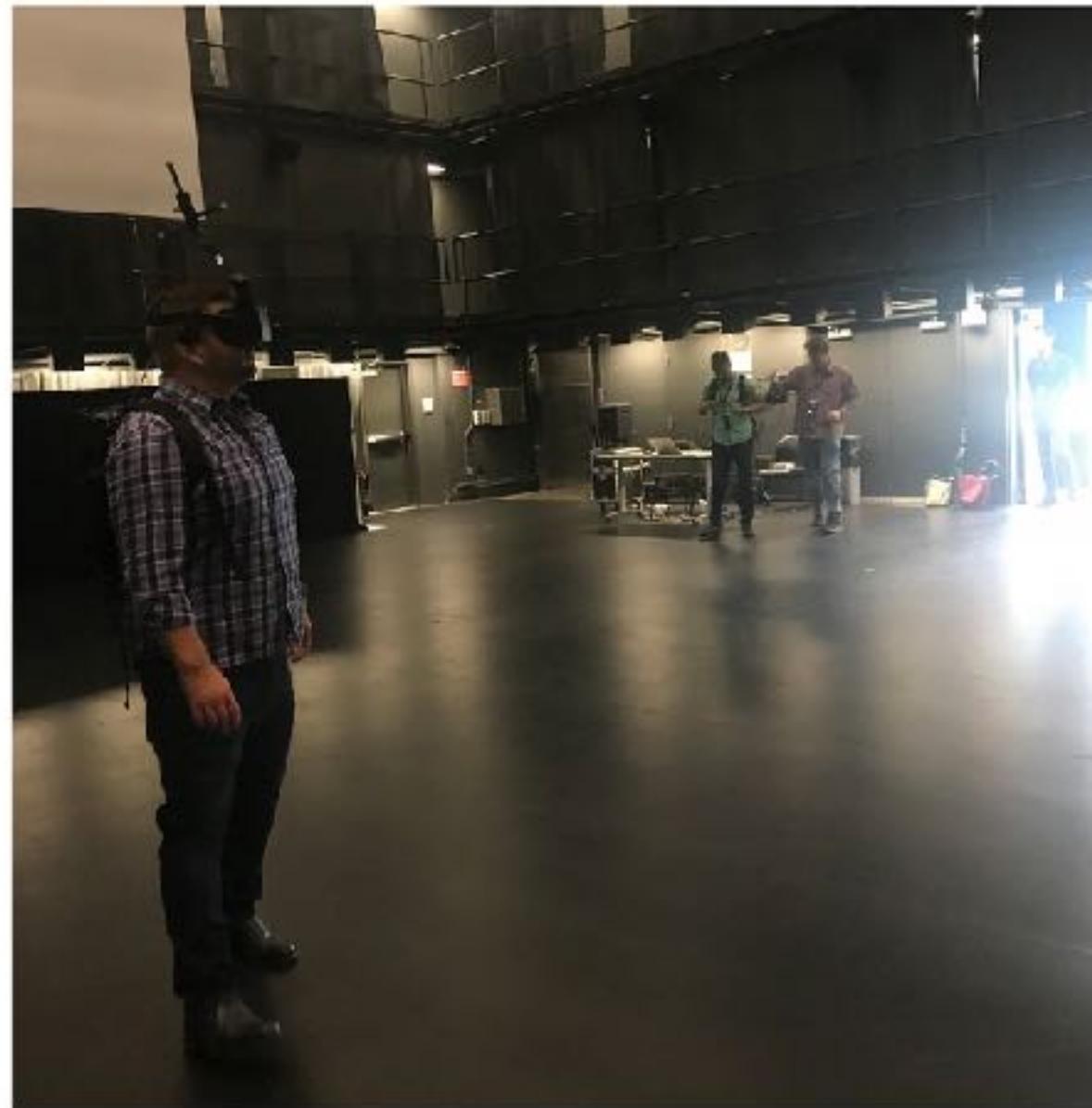
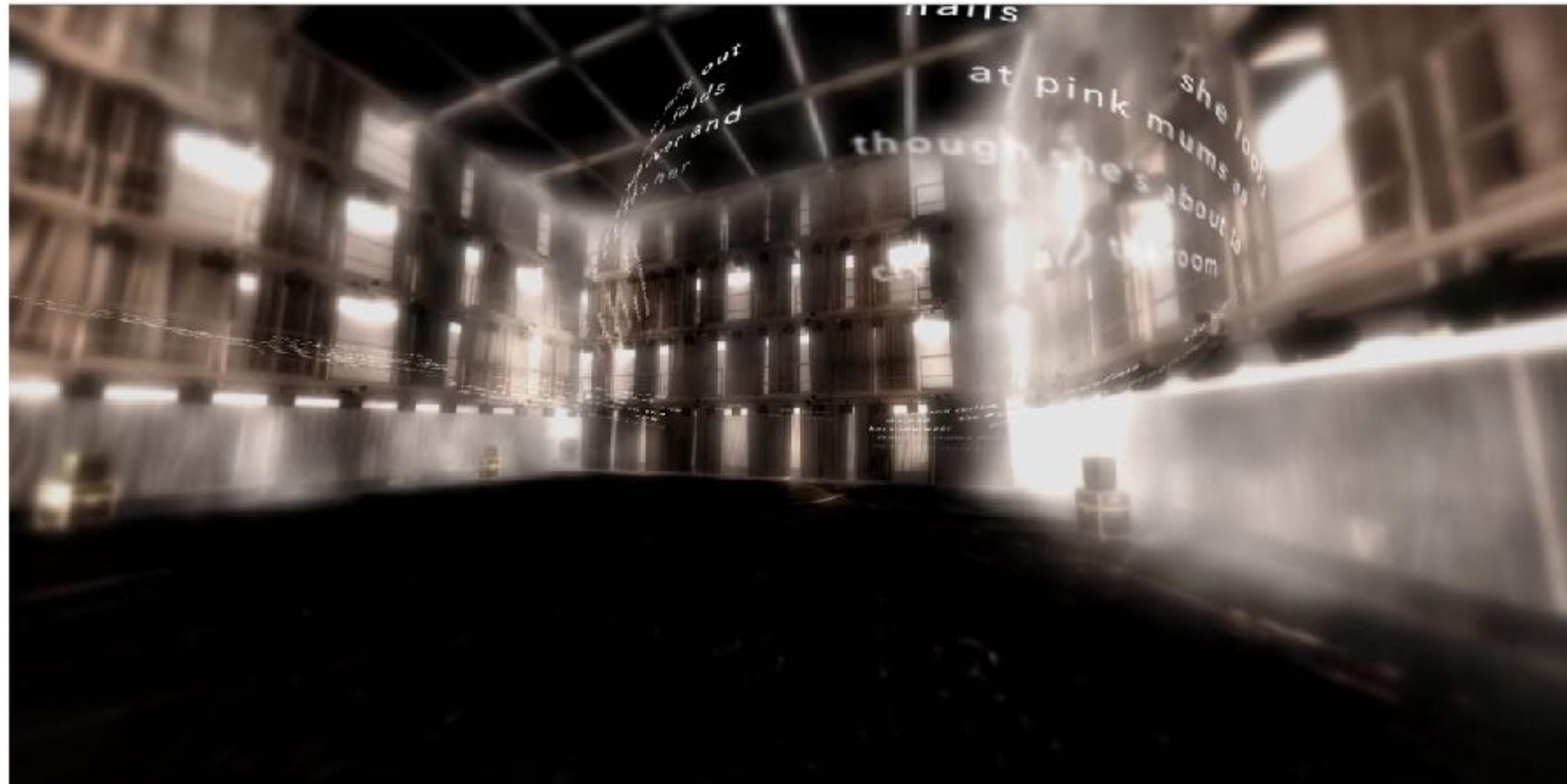
poem by denise duhamel

a collaboration with
ico bukvic and
zach duer

FORGETFULNESS

poem by denise duhamel

a collaboration with
ico bukvic and
zach duer



she tries
to pee in the trash can but
misses
she puts
her socks over her
shoes she wears

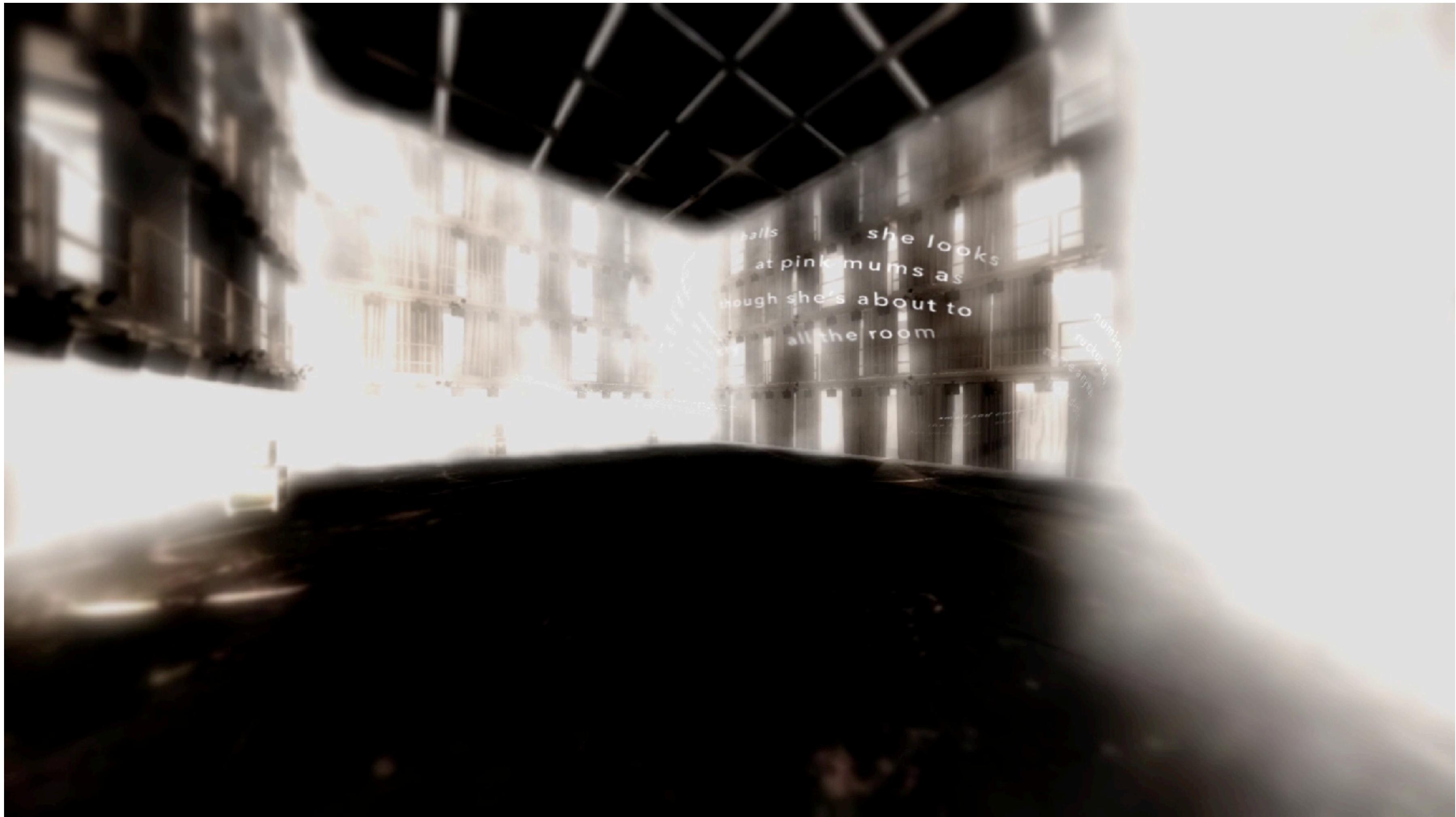
FORGETFULNESS

h blue flowers she bowl
as a tries to eat a checker, then of bed
the a domino she plops the same v
the a can of Chicken of over
the Sea tuna in the toilet lit

e doesn't recognize her on t
he son she wears a the fla
npty baseball cap she stole we
she hat
ze th

poem by denise duhamel

a collaboration with
ico bukvic and
zach duer



FORGETFULNESS

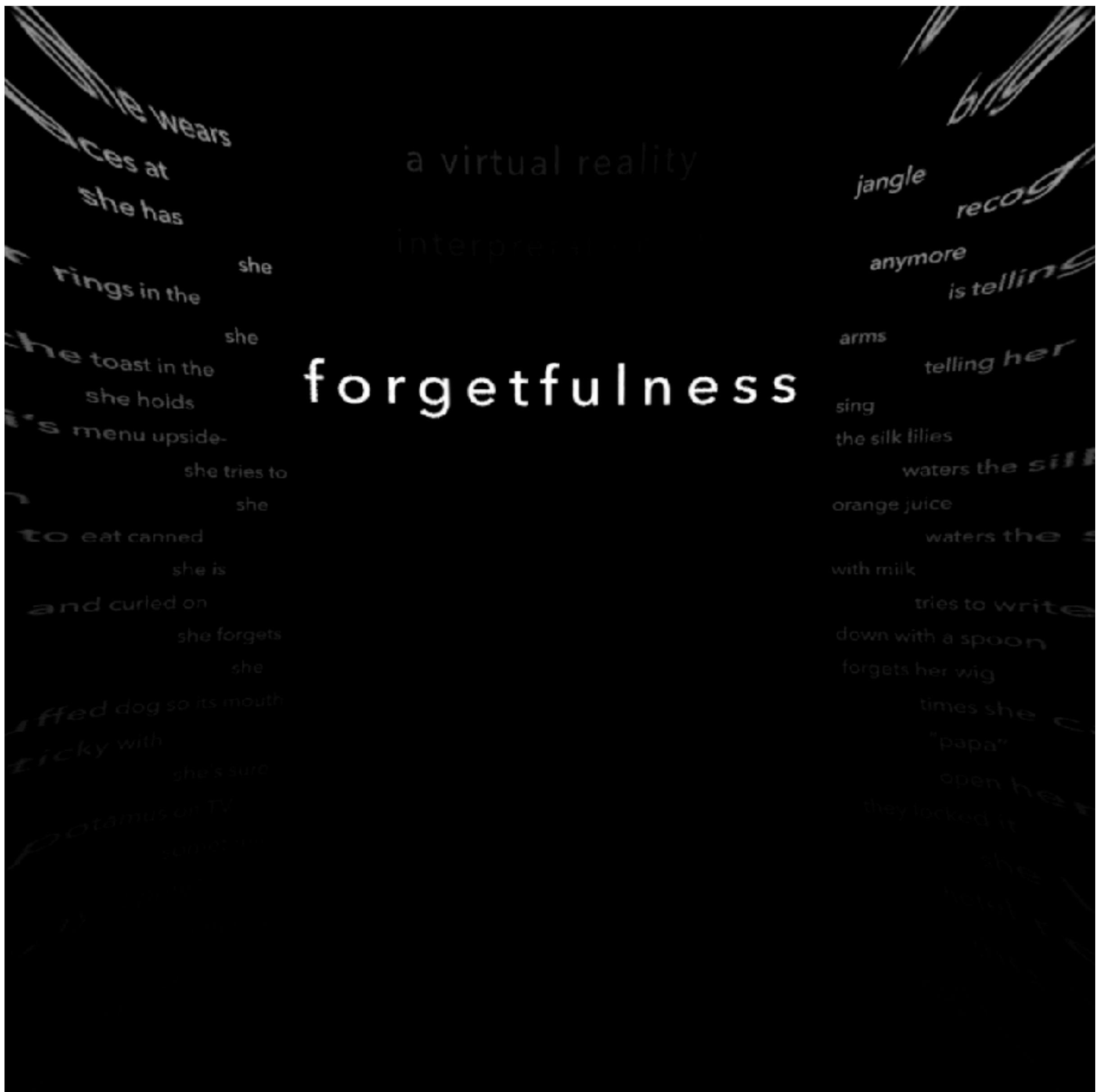
poem by denise duhamel

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FORGETFULNESS

poem by denise duhamel

a collaboration with
ico bukvic and
zach duer



a virtual reality

interprets

forgetfulness

she wears
aces at
she has

she
rings in the

she
the toast in the

she holds
it's menu upside-

she tries to

she

to eat canned

she is

and curled on

she forgets

she

fed dog so its mouth

sticky with

she's sure

potamus on TV

she can't

she

they

she

she

she

she

she

jangle

anymore

is telling

arms

telling her

sing

the silk lilies

waters the silk lilies

orange juice

waters the silk lilies

with milk

tries to write

down with a spoon

forgets her wig

times she

"papa"

open her

they locked it

she

she

she

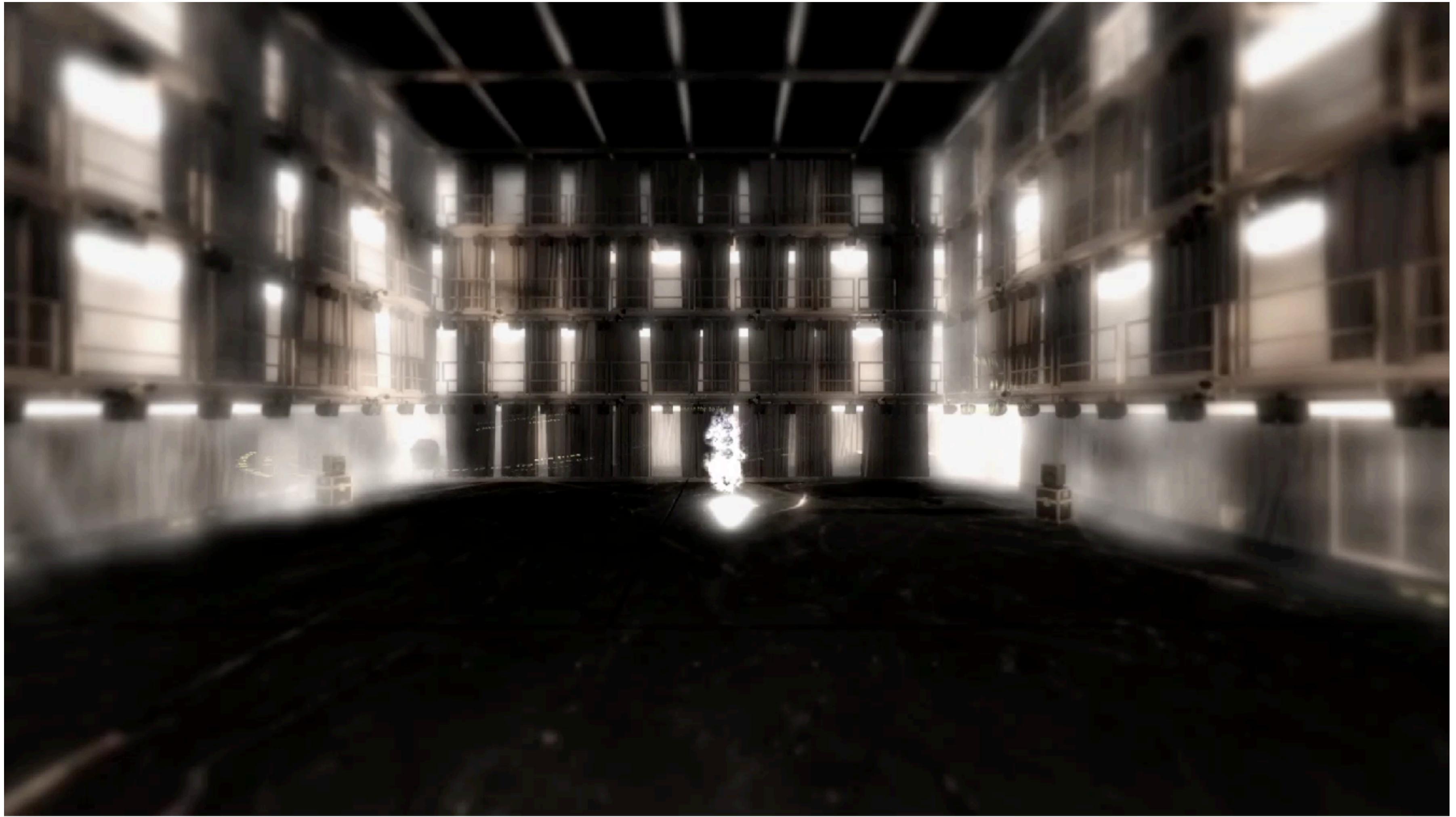
she

she

she

she

she



FORGETFULNESS

poem by denise duhamel

a collaboration with
ico bukvic and
zach duer



THE CUBE

a black box theater
at virginia tech

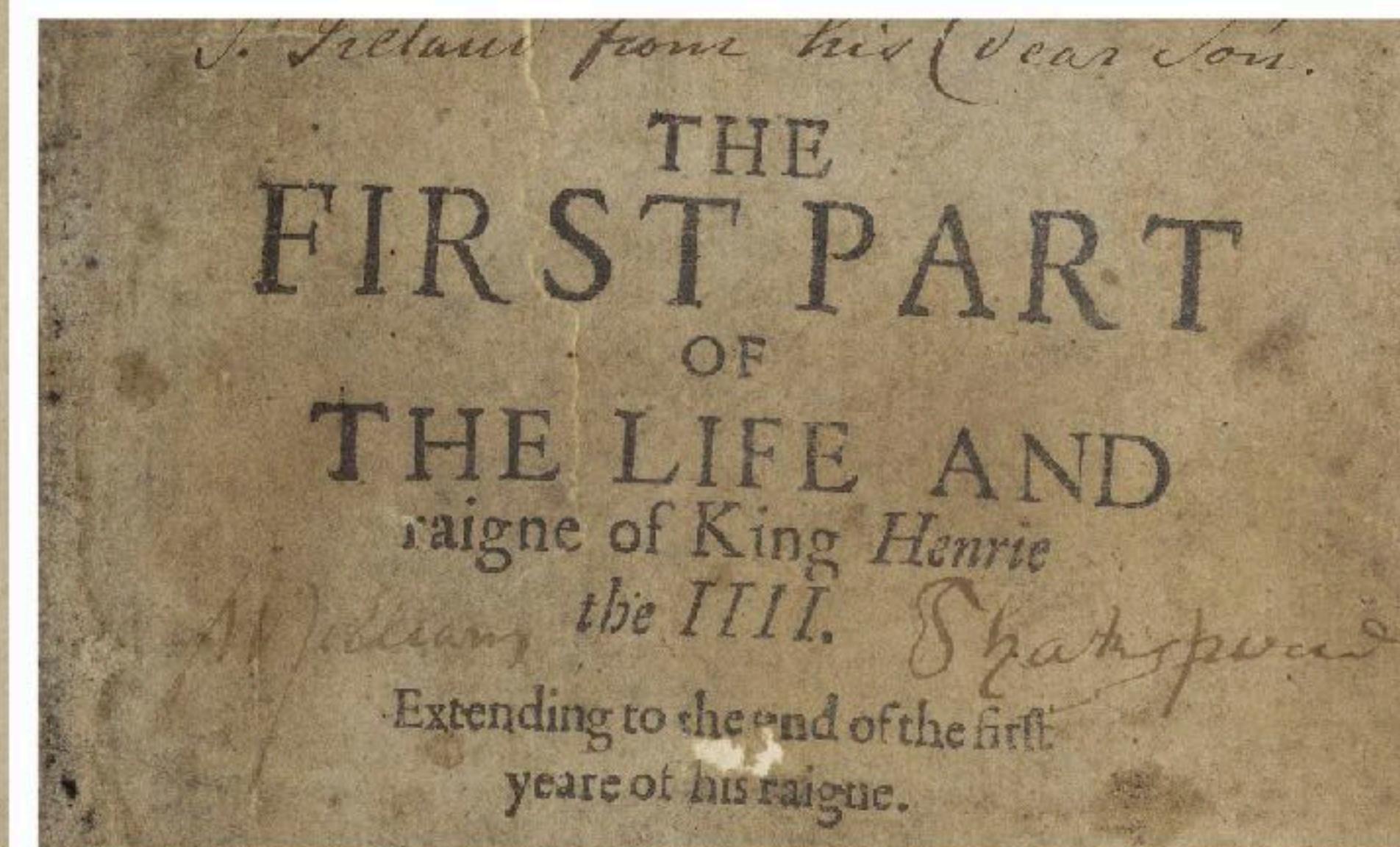
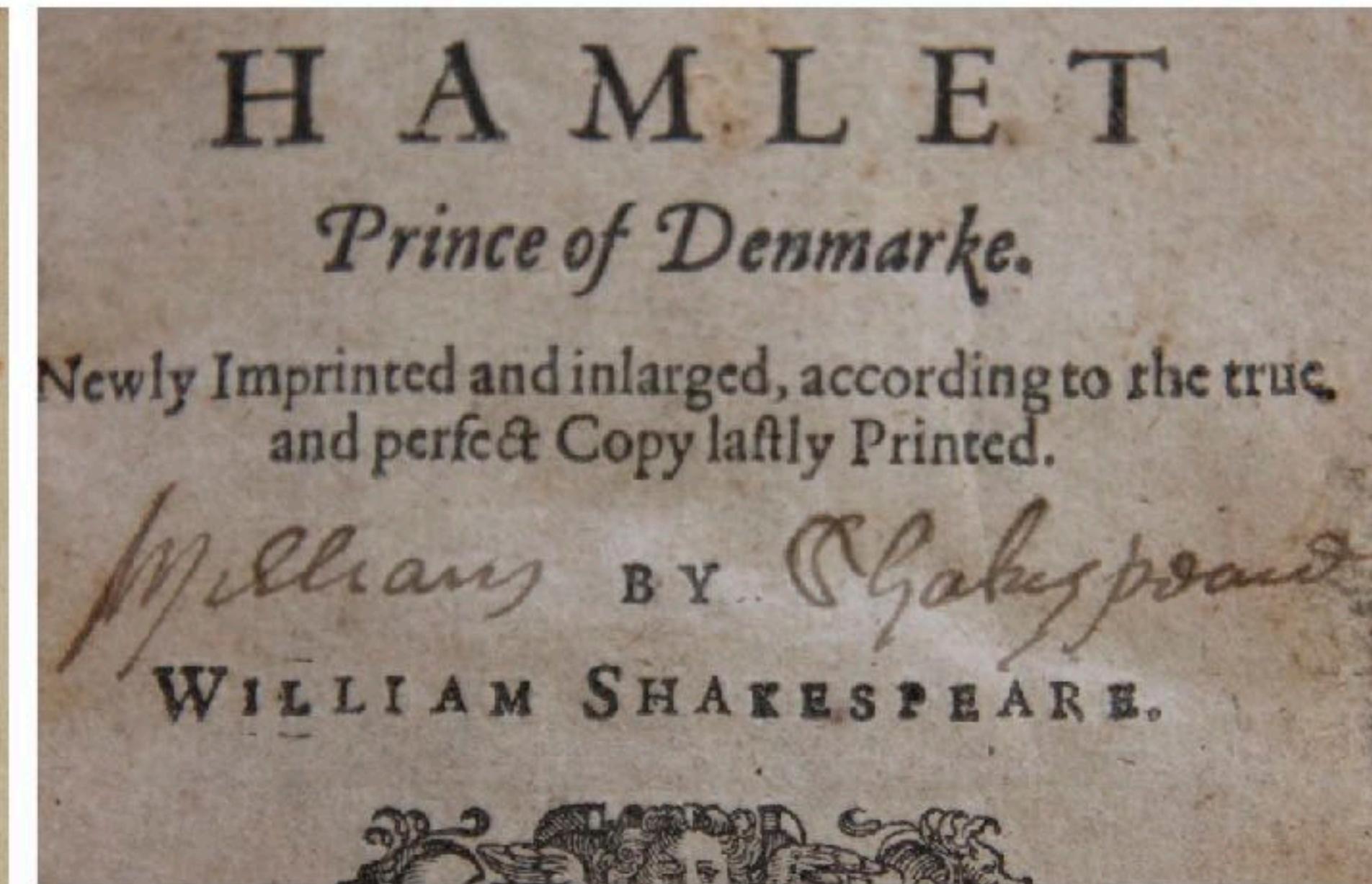
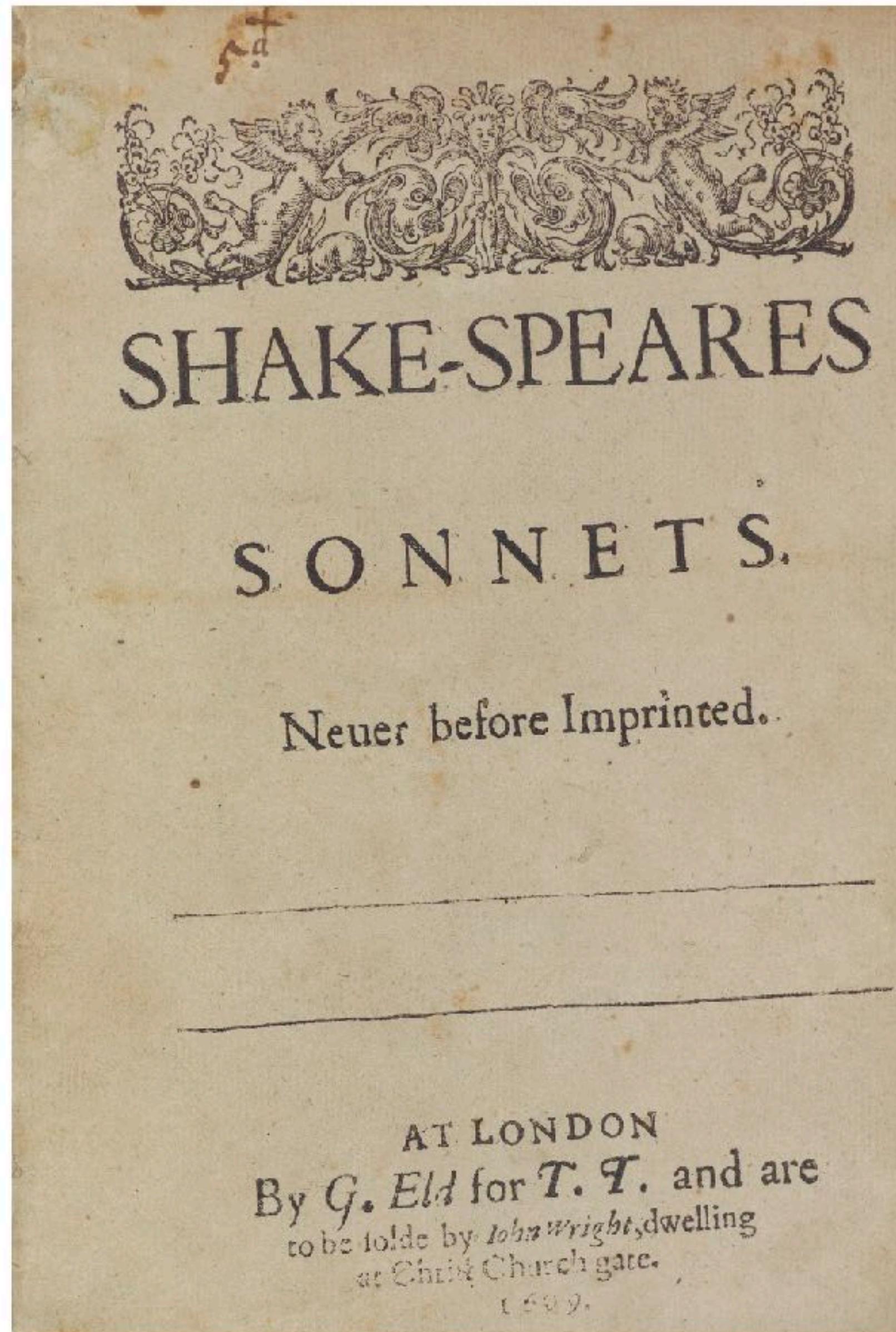


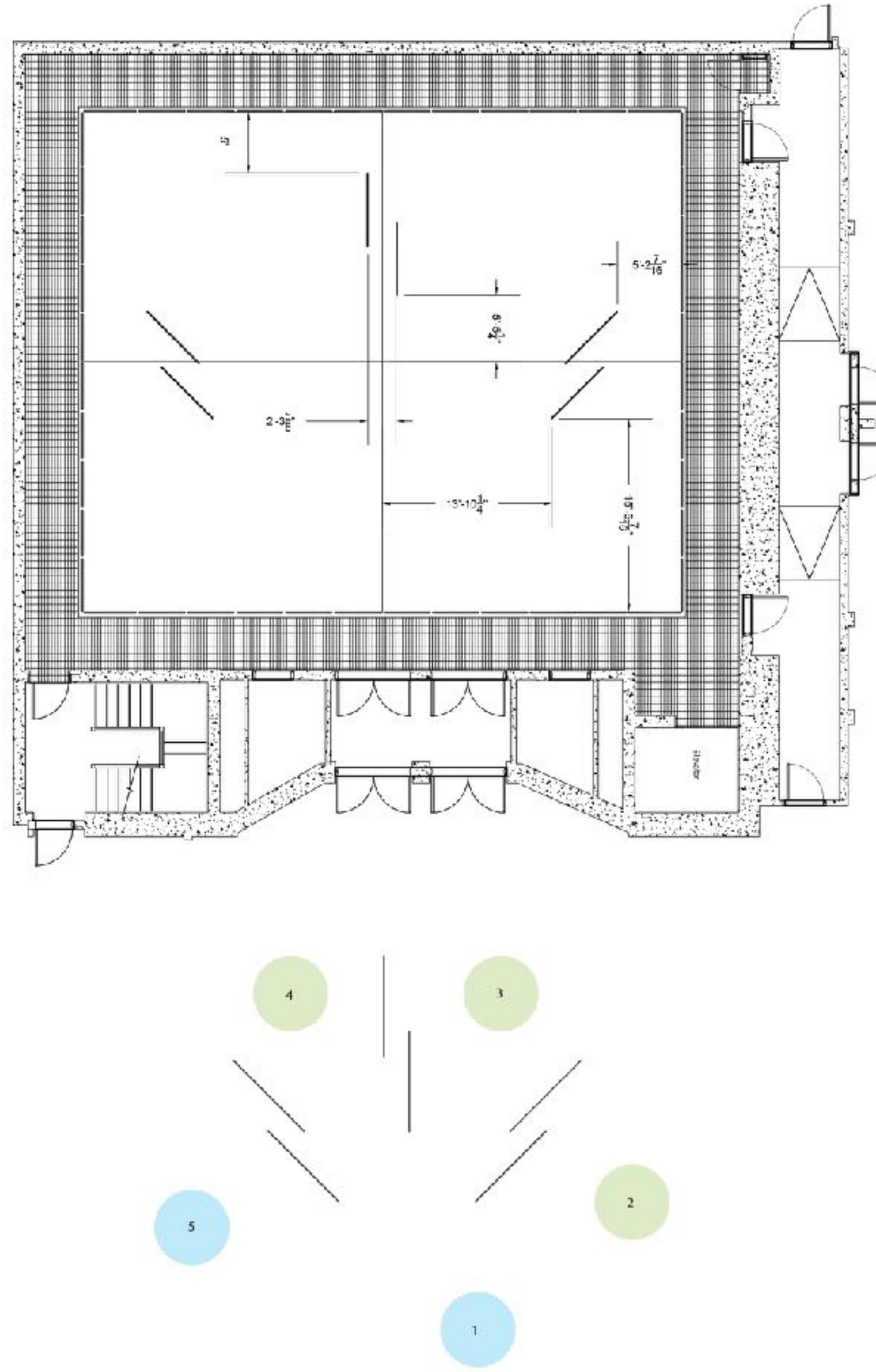
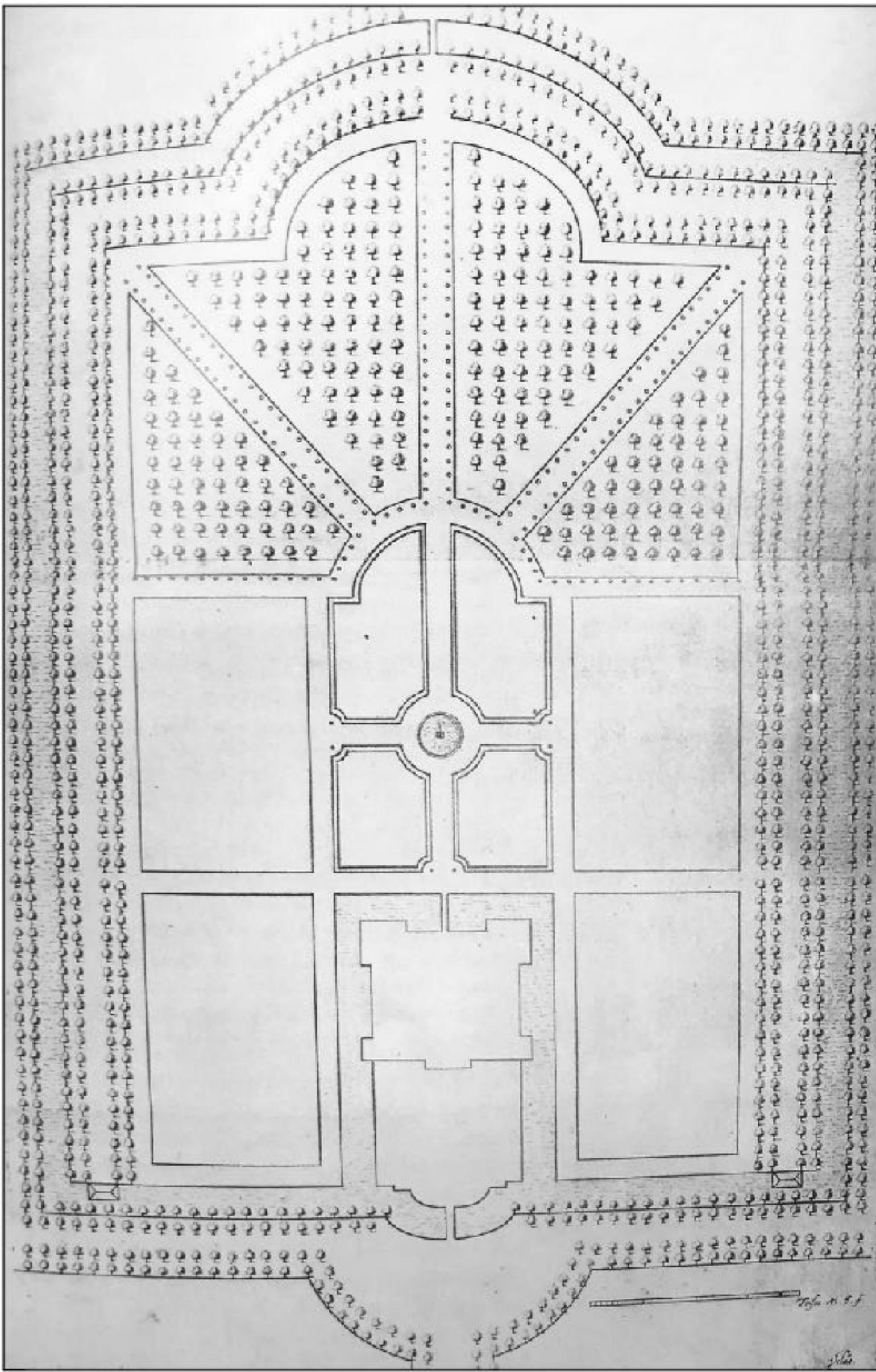
Upon the wings of death we fly,
Soon Dido's victim to begin
To share a grecian's fate.

He did not know that he
Was to be born in his shade,
Nor shall Death drag you down
When in eternal misery.

EARLY TEXTS

shakespeare
letterpress





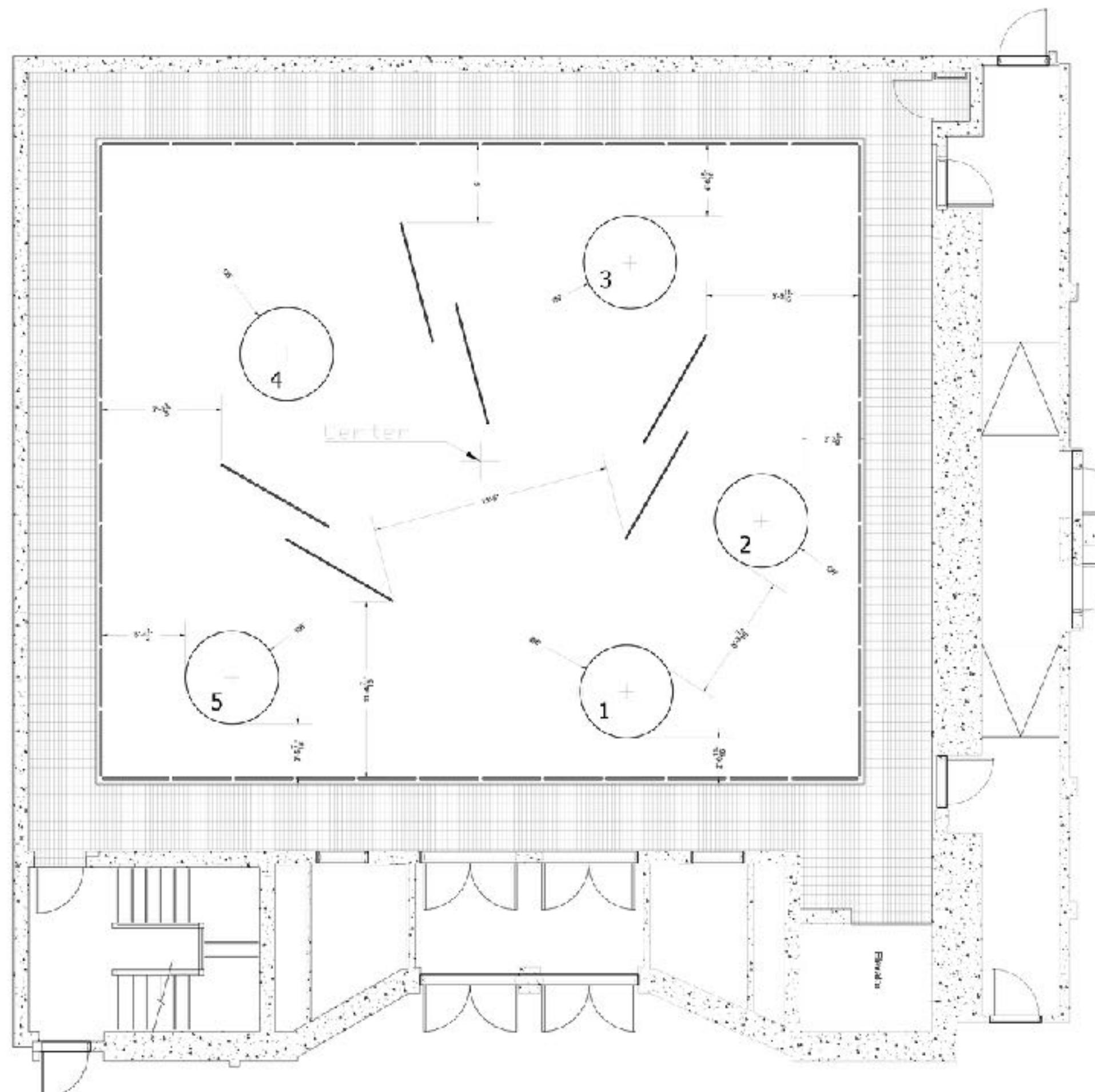
FLOORPLAN

renaissance
garden inspiration
le jardin de plaisir



SCRIMS

with placement
in the cube



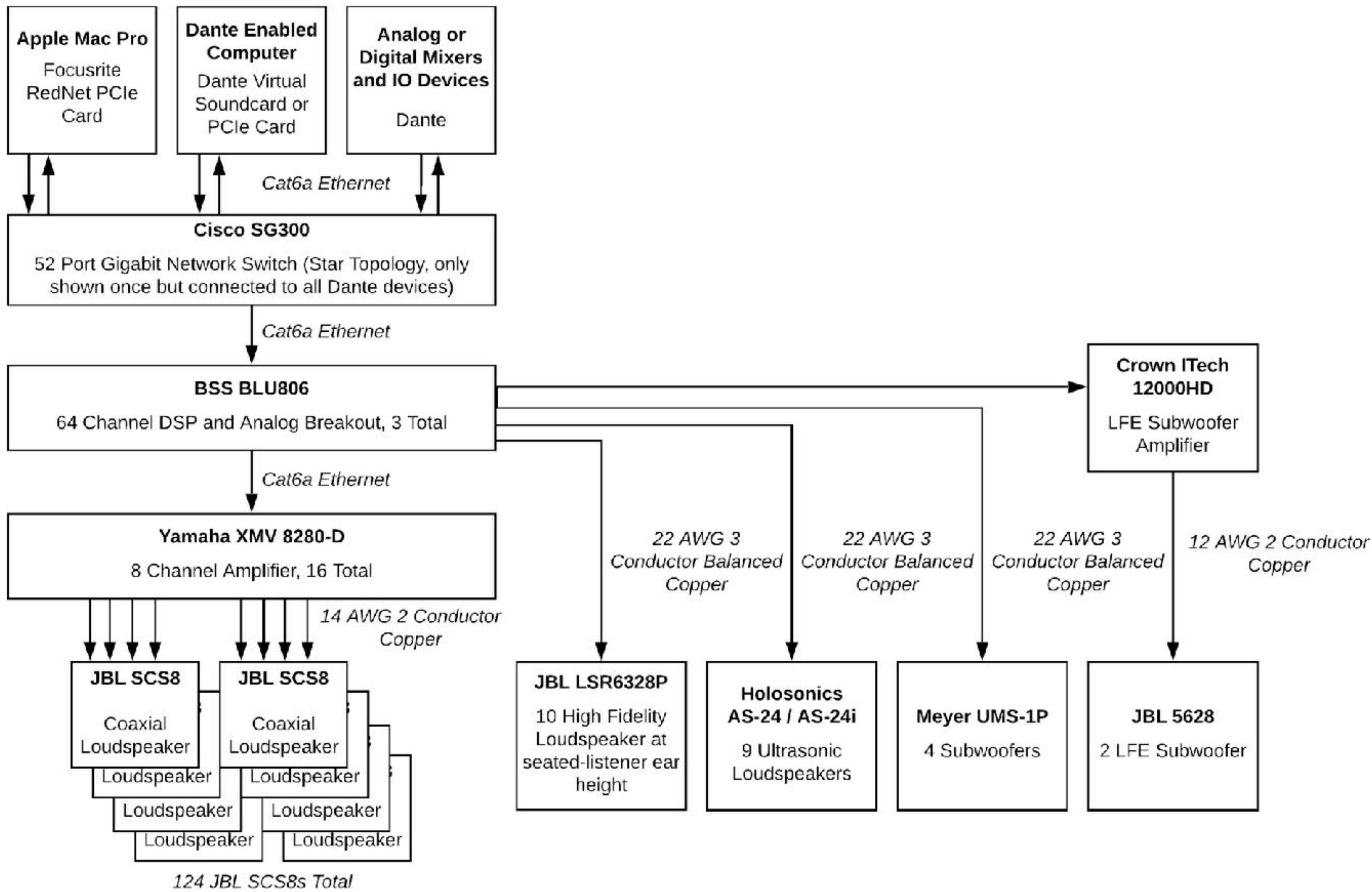
RECORDING TEAM

school of performing arts
students at virginia tech



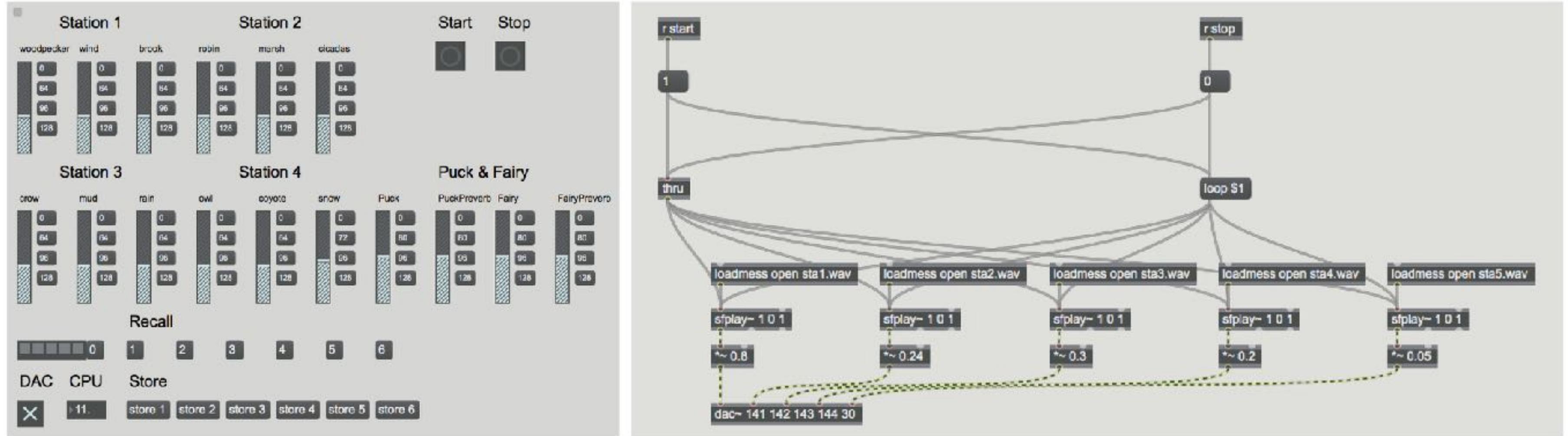
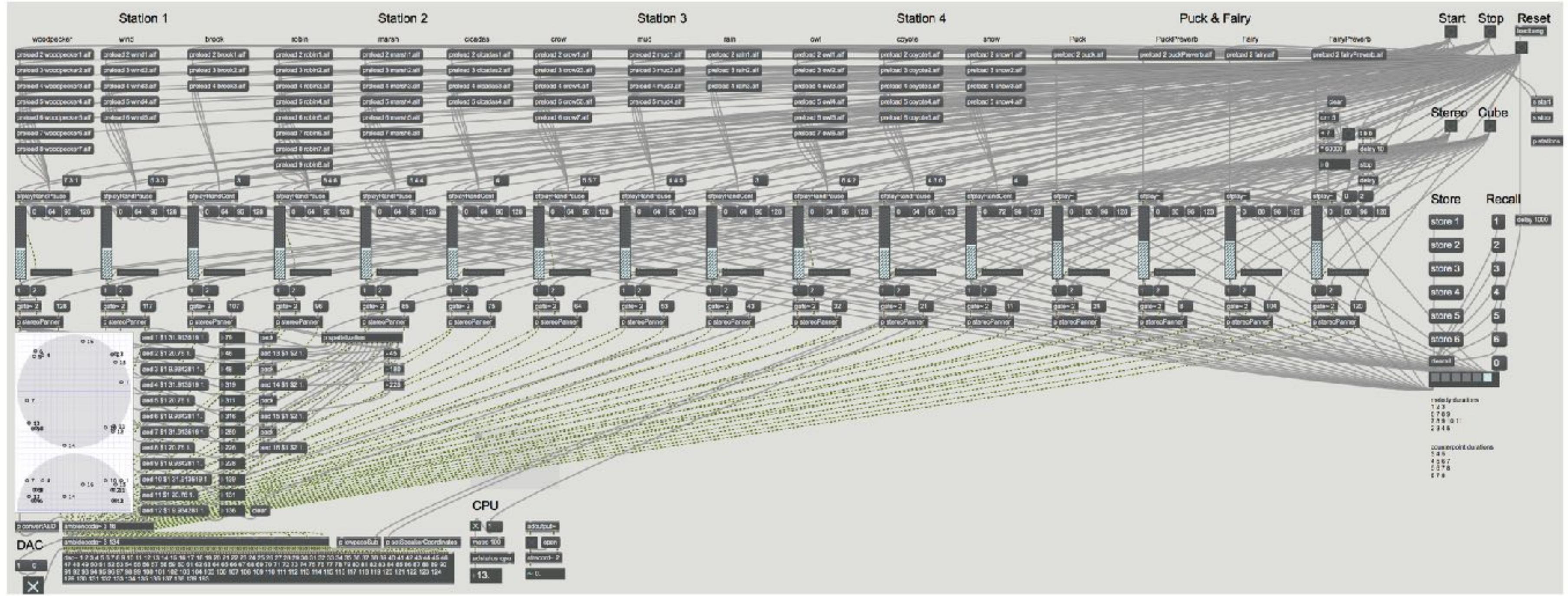
SOUND DESIGN

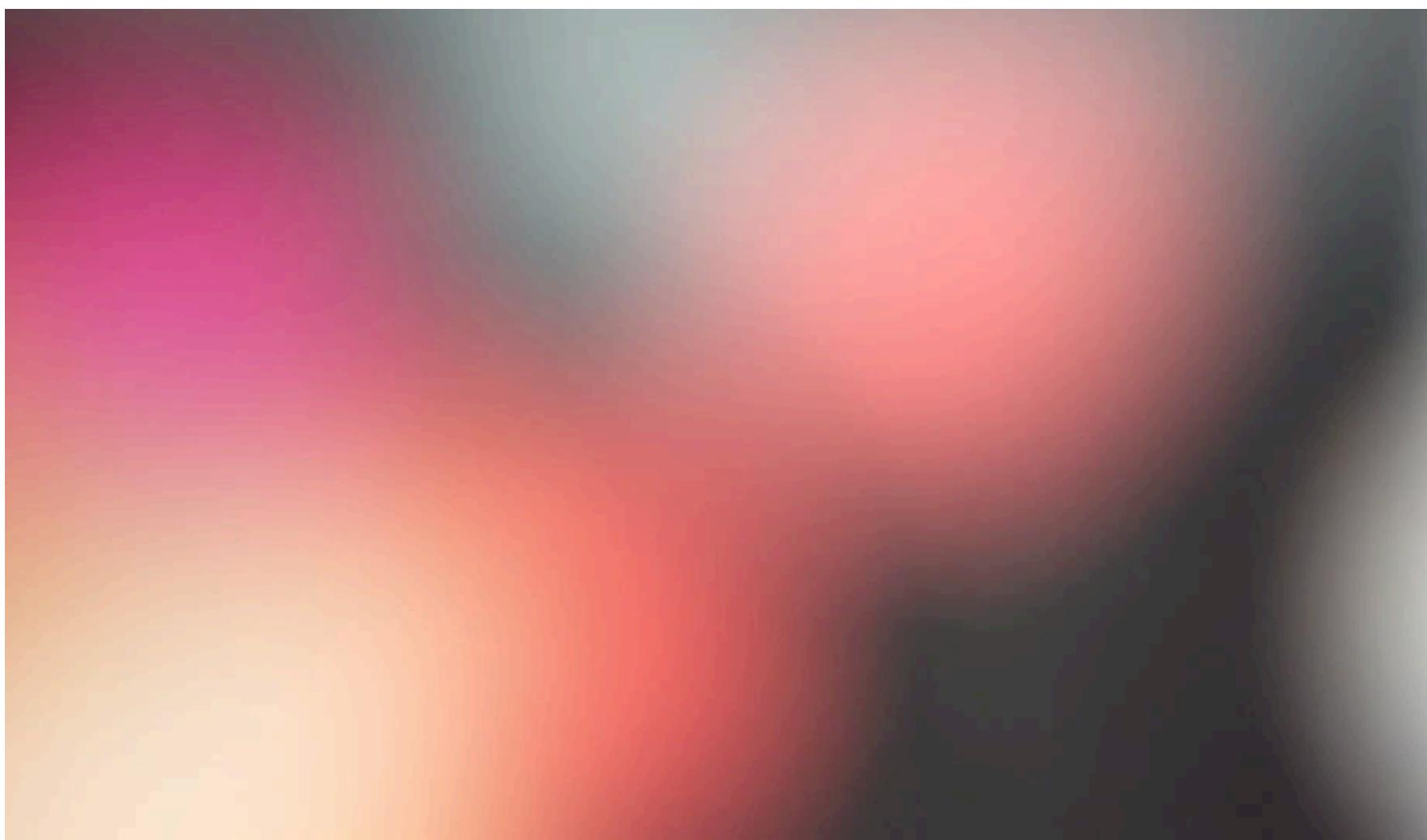
behind the scenes
sound design
in the cube



SOUND DESIGN

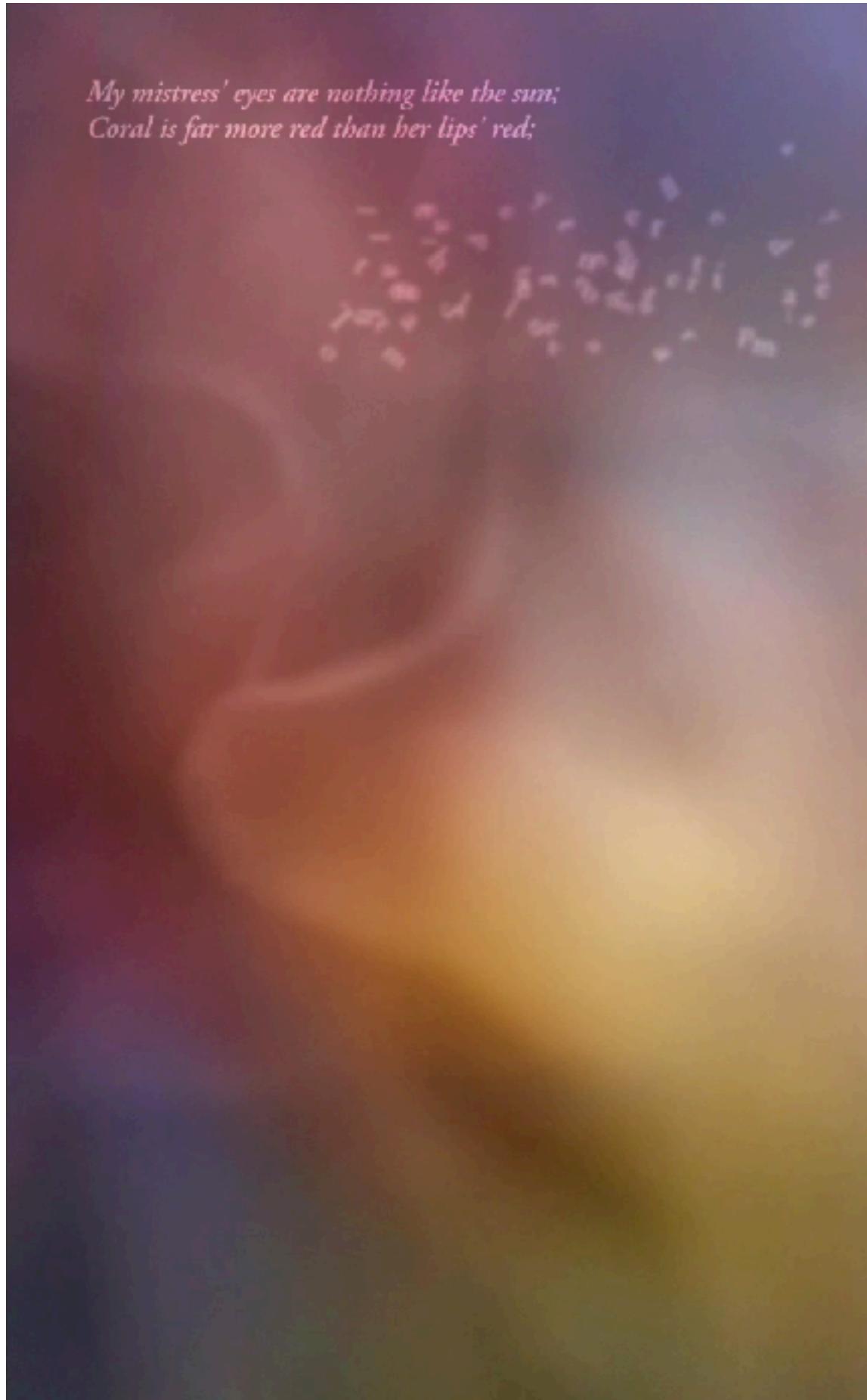
behind the scenes
sound design
in the cube



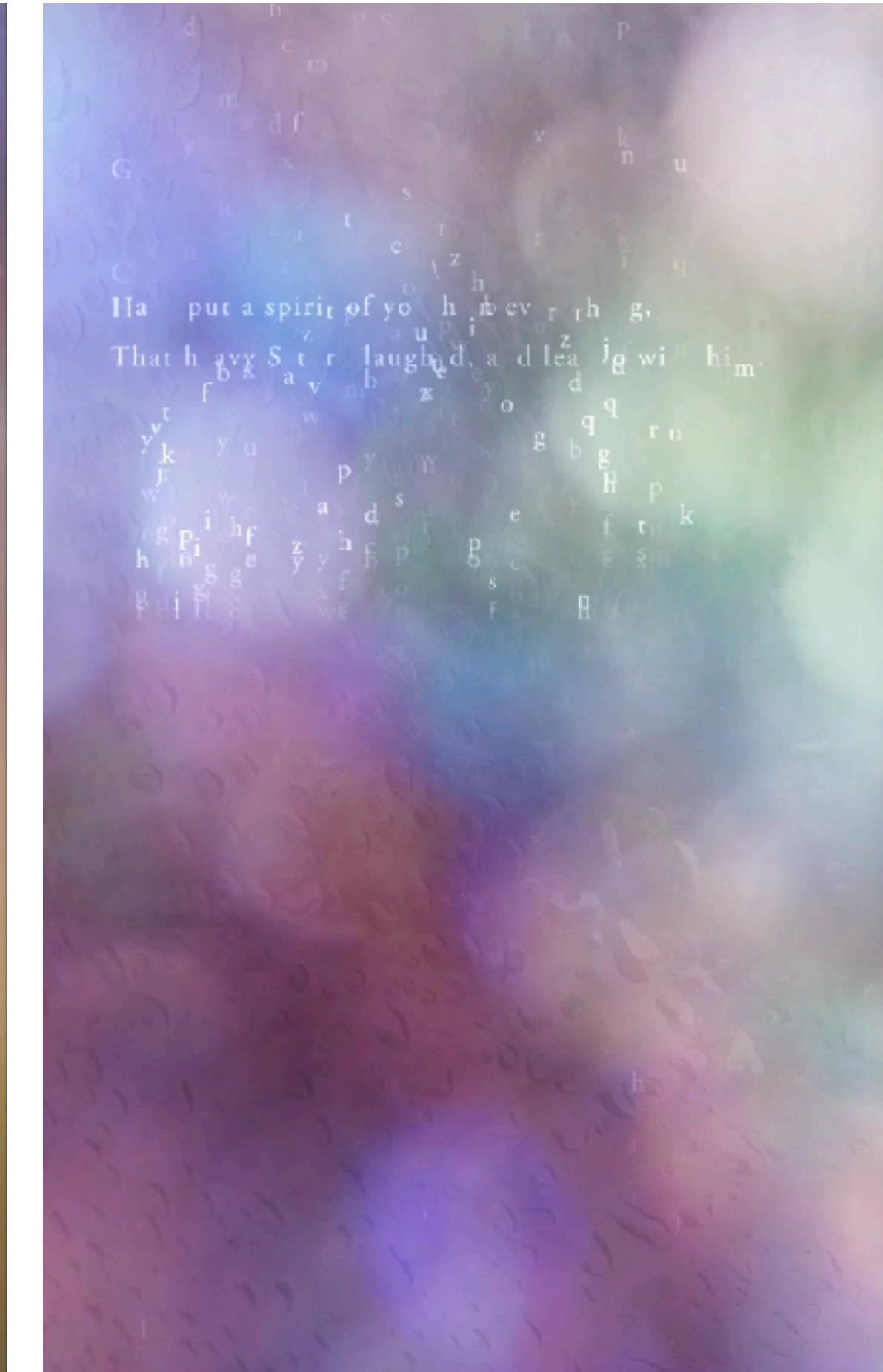


VIDEO OVERLAY

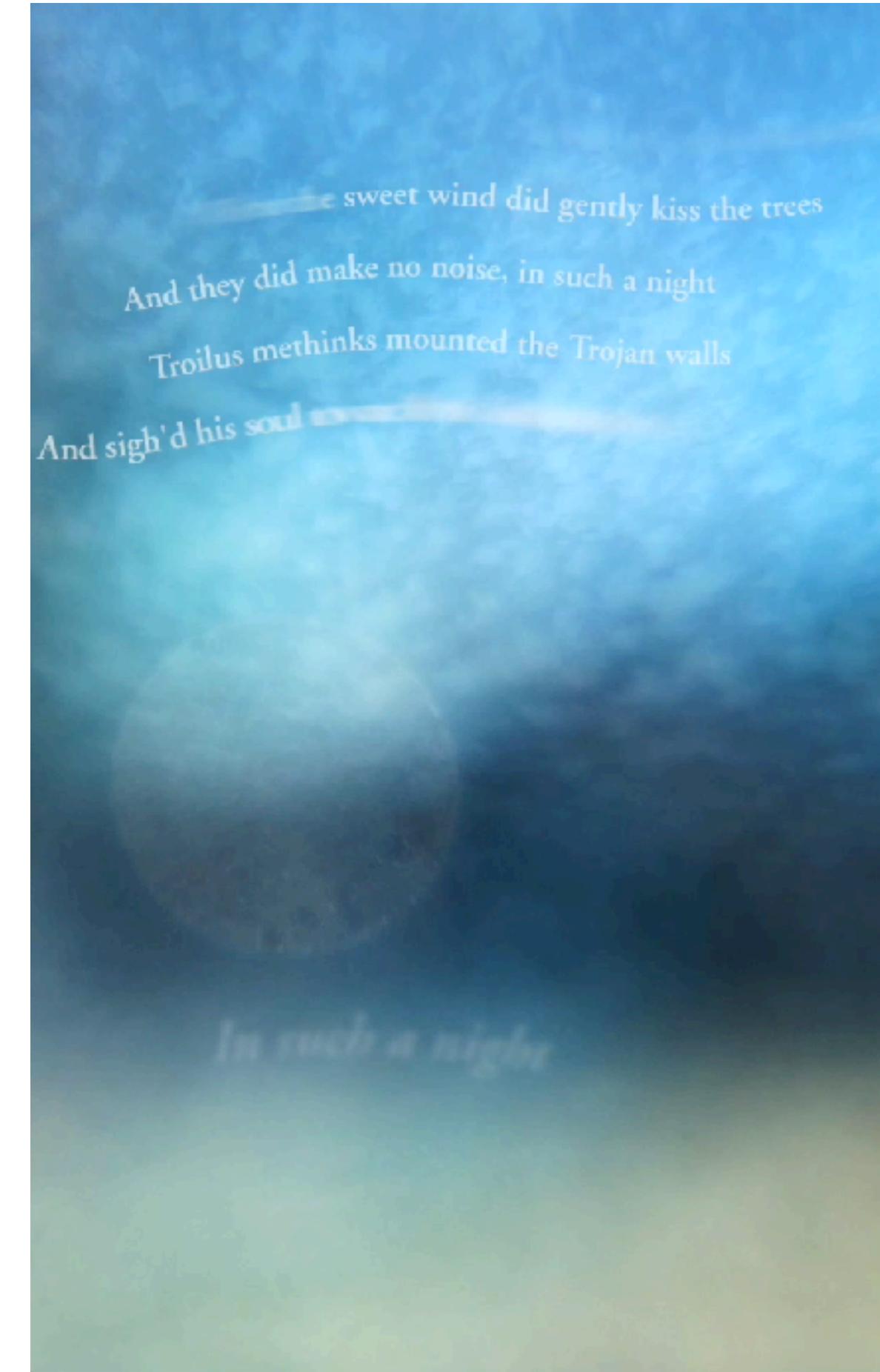
source images
and video
layers of motion graphics



*My mistress' eyes are nothing like the sun;
Coral is far more red than her lips' red;*



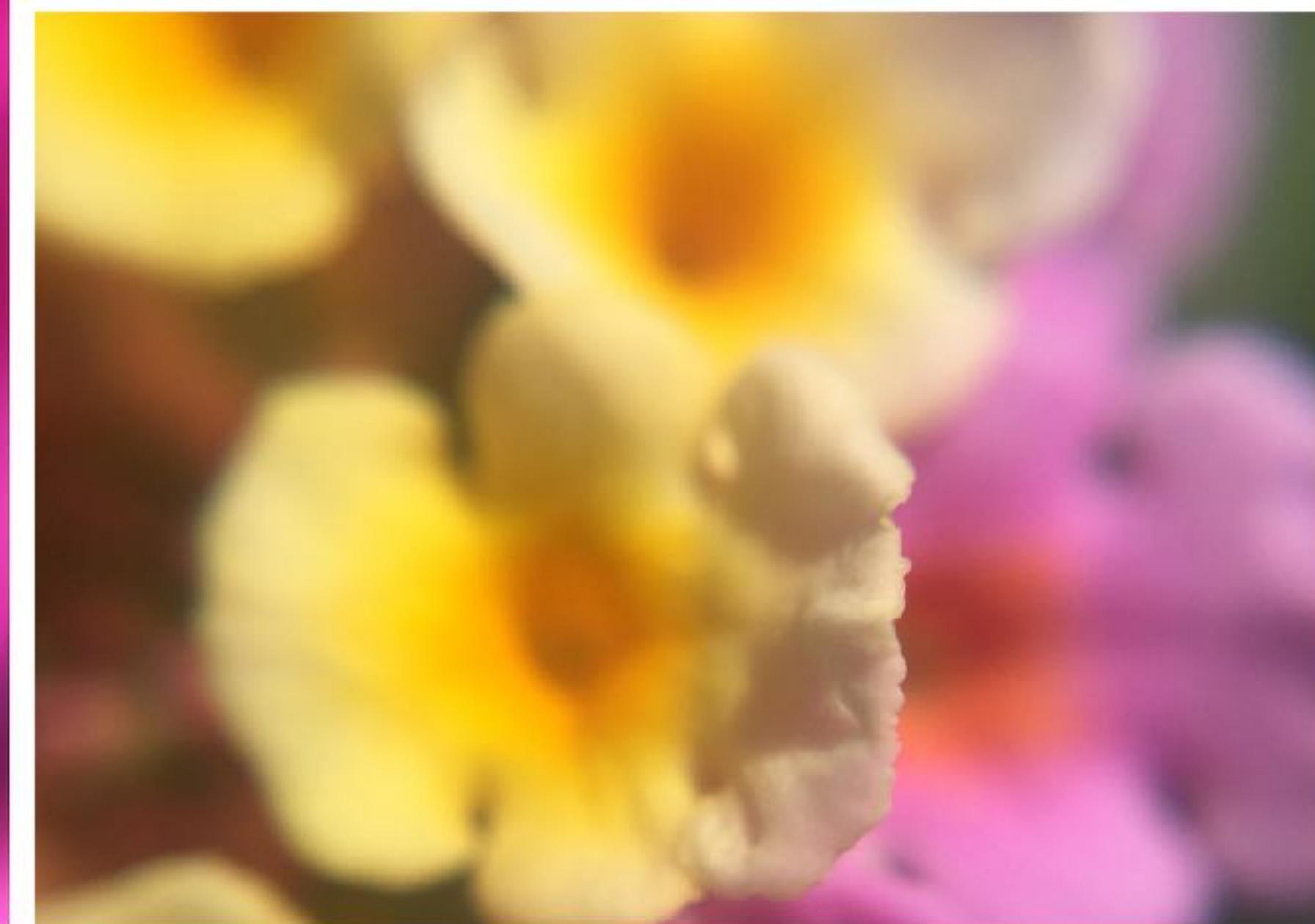
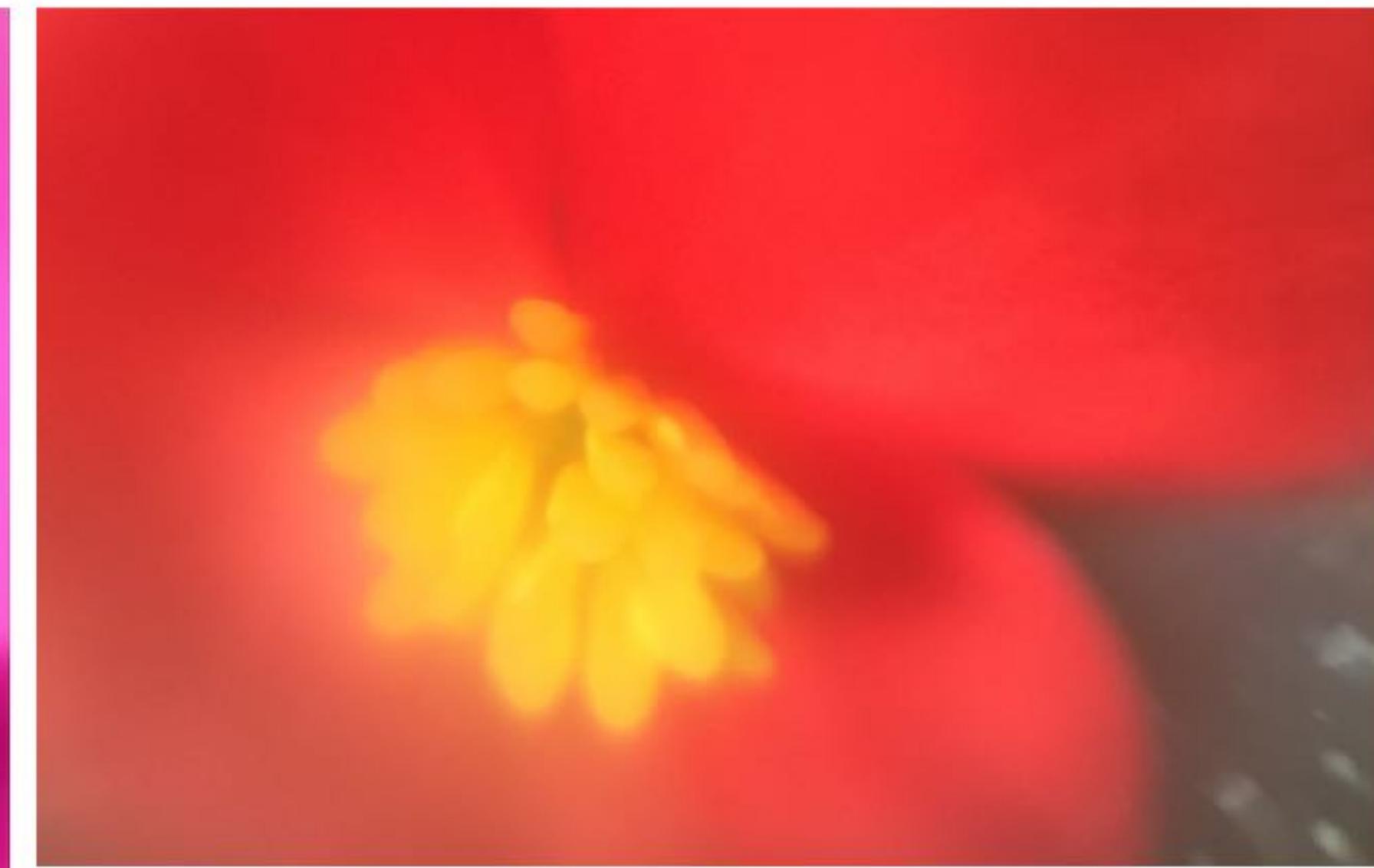
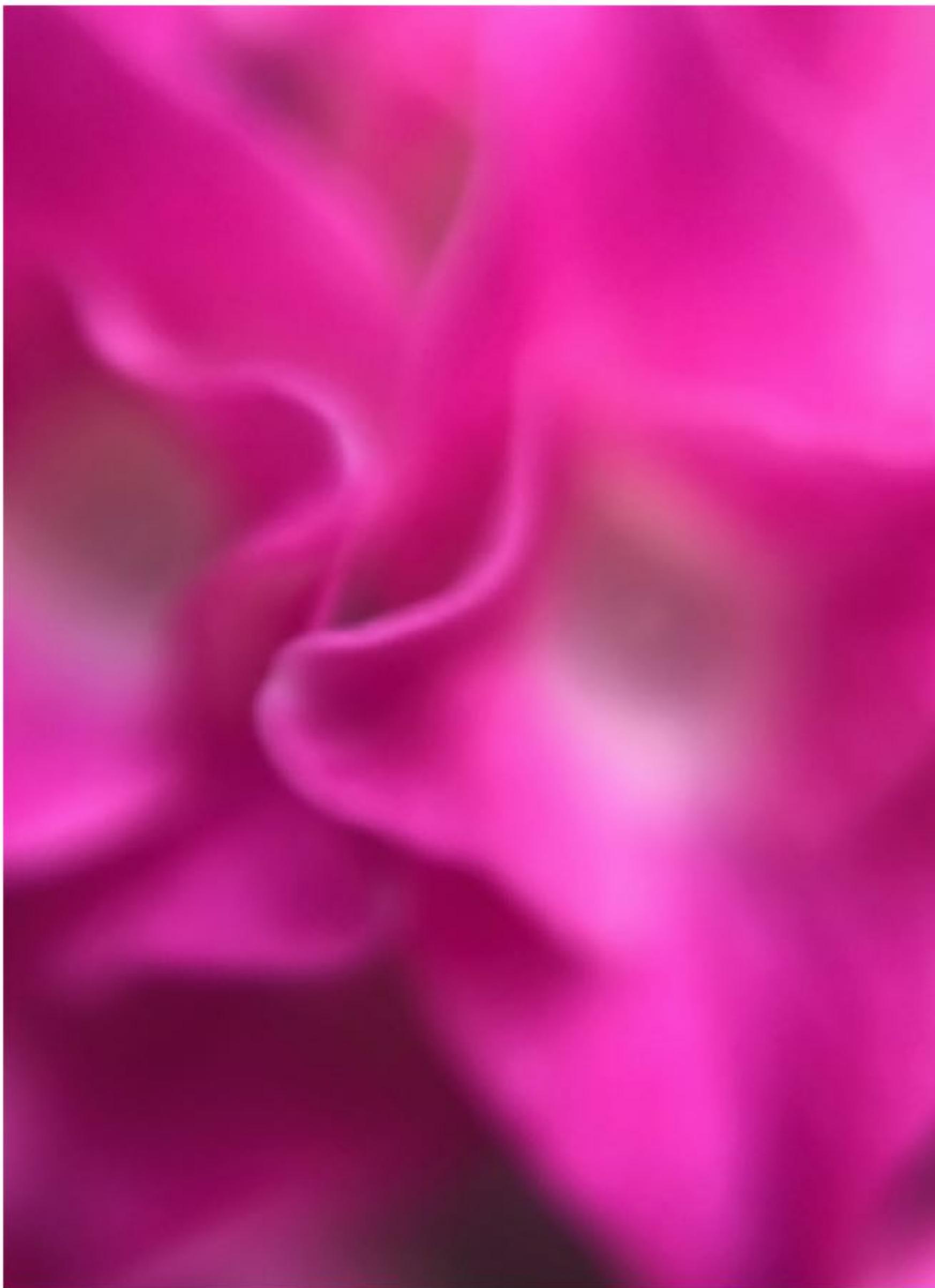
d h p s t p
c m v l n u
G y d f x r q
C h z t e r z i q
Ha put a spirit of yo h b ev r th g,
That h gyx S t r laughe d, a d lea j g wi n him.
y k y u p y g q r n
F w p y g h p k
h g p i h f z y h p b e y f t n k
g j g g y f o s f H Q



e sweet wind did gently kiss the trees
And they did make no noise, in such a night
Troilus methinks mounted the Trojan walls
And sigh'd his soul

THREE SCRIMS

warm summer
cool rain
breezy winter balcony

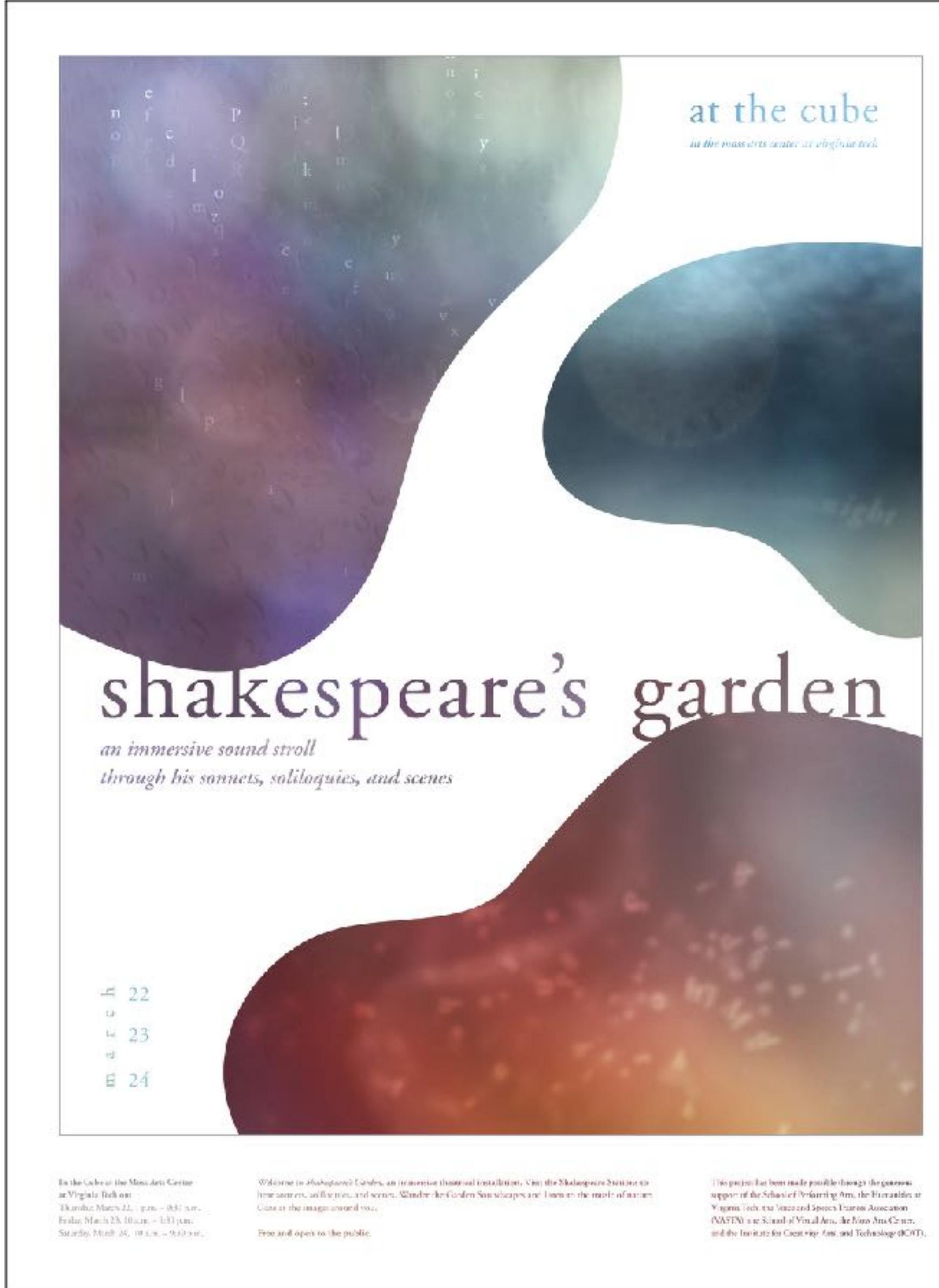


SOURCE IMAGERY

underlying images
garden theme
various flowers

PROGRAM

and poster



shakespeare's garden

an immersive sound stroll through his sonnets, soliloquies, and scenes

Explore Shakespeare's Garden as your ticket
and guide to the Shakespeare Station's four
immersive performances and scenes. Wherever you
choose to explore, you'll find us in the words of
a Shakespearean. Cost of the stages: \$100 per person.

What is mentioned? "Thou art the朝朝
sunne, wee concomitantes by setting the insinuated
dayes together shew vnto every blithe to
In second Sonnet at endnes 2, 9, and 5.

The layout of the garden is done in reverse rotation
of a hexagonal grid. The three perspectives
designed by Brighton Day, incorporate the first three
Shakespeare Sonnets 2, 3, and 4. The entries and
the perspective of "Gardener" which was designed
by David Almonson in 1548 and would have been
in widespread use during Shakespeare's lifetime.

Diagram of Areas, Seats, Activities, and Shakespeare Stations.

Please note: the Shakespeare Stations can only be experienced fully. Recently, we've made a decision to the nature of our dialogue, music, and scenes. Tell me more about the Shakespeare Station, or leave the complete story.

From one perspective, you may be
on a walk through the garden.

Or like a

In the first quadrant (Grid 1) hexagonal
A, B, C, and C are our stations to the Shakespeare
station horizontally and stranded vertically.
across our entrance to the Grid, a corner
there. Already presented full meaning of
music, including a standing hand, some
working area, a field, a garden, a wood, a rocky
path, and subtle shapes to make several
different emphasis and various themes.
also presented a subtle meaning of dialogue
between Shakespeare Appear! These characters
have and keep, meaning the texts remain
extremely interesting, this particularly
from historically and visually through the
four stations. Shakespeare

Shakespeare Station 1
Area 1A: The Garden
Area 1B: The Garden
Area 1C: The Garden
Area 1D: The Garden

Shakespeare Station 1
Area 1A: The Garden
Area 1B: The Garden
Area 1C: The Garden
Area 1D: The Garden

Shakespeare Station 2
Station 1A: William Johnson
Station 1B: Ruth Dougall
Station 1C: William Johnson and Ruth Dougall

Shakespeare Station 3
Station 1A: Ruth Dougall
Station 1B: Michaela Tabb
Station 1C: Ruth Dougall and Michaela Tabb

Shakespeare Station 4
The Merchant of Venice
Act V, Scene 1
Lorenzo: Andrew Batt
Portia: Carynne Gittens

Shakespeare Station 5
Sonnet 12: Mary Jo Gilligan
Sonnet 13: Cecilia McMillan
Sonnet 14: Mary Jo Gilligan and Cecilia McMillan

Spatial Shakespeare

A Collaboration with: Dennis Avi, Elie Saab,
Steve Goldblatt, Shuki Chayen, George
Tak, • Edit solutions

Creative Team

Concept and Co-Execution by Amanda Valenz
Co-Director/Dy. Director/Solo:
Music Composition: Clark Michael
Singers and Singers: Douglas Mayfield
Singing Trainer: John Lawrence
Sound Design: Captain of Class
Visual engineer: James L. Chapman
Video Producer: David L. Lissner
Technical Director: Joseph Roff
Production Advisor: Georgia East Morris

Partners

This project has been made possible through the
generous support of the Society of Performing Arts,
the Humanities at Virginia Tech, the Arts and
Services Technicians Association (ASTA), the School of
Music, Arts, the Fine Arts Center, and the Institute
for Gender Studies and Technology (IGAT).

Special Thanks

John Michael Davis, Curtis
Singer, Jim
Perryman
Dawn, Weiss

ANIMATED POSTER

shakespeare's garden
incorporates three scrims

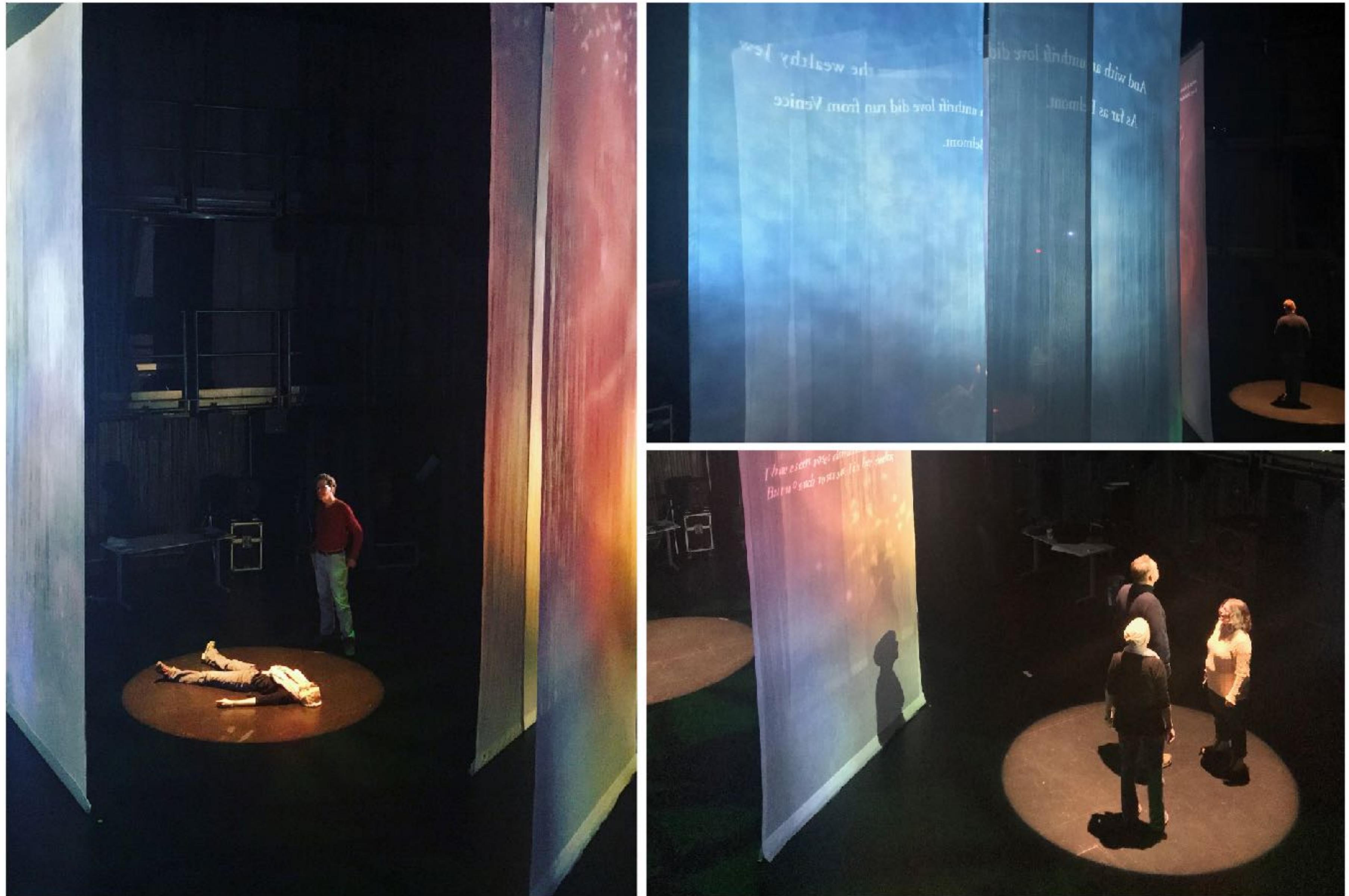
shakespeare's garden

*an immersive sound stroll
through his sonnets, soliloquies, and scenes*

o h g e c o v h e n
d F n i o s h g l m o q R h o d s n j d
t

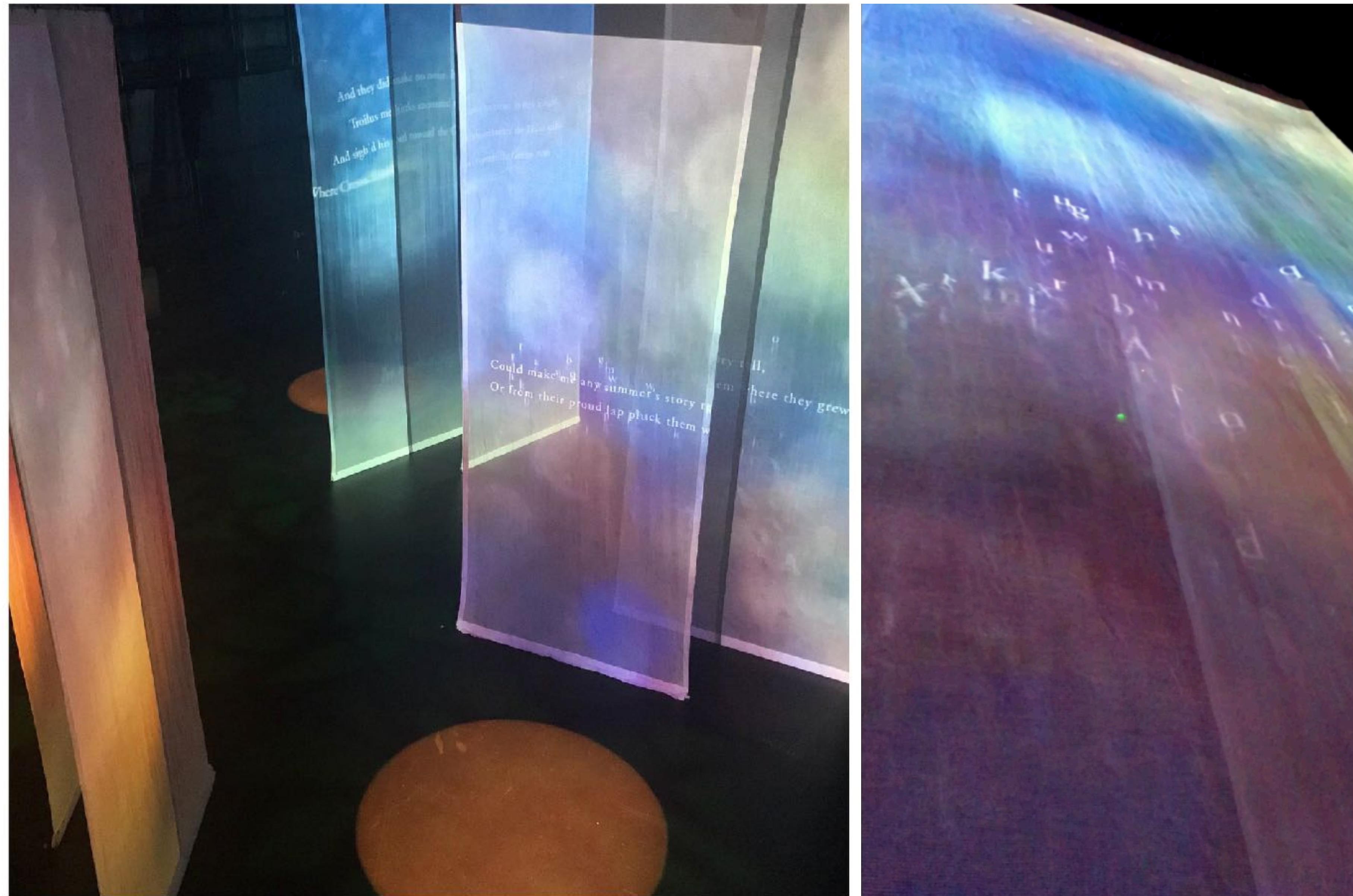
CUBE EXHIBITION

shakespeare's garden
moss arts center
virginia tech



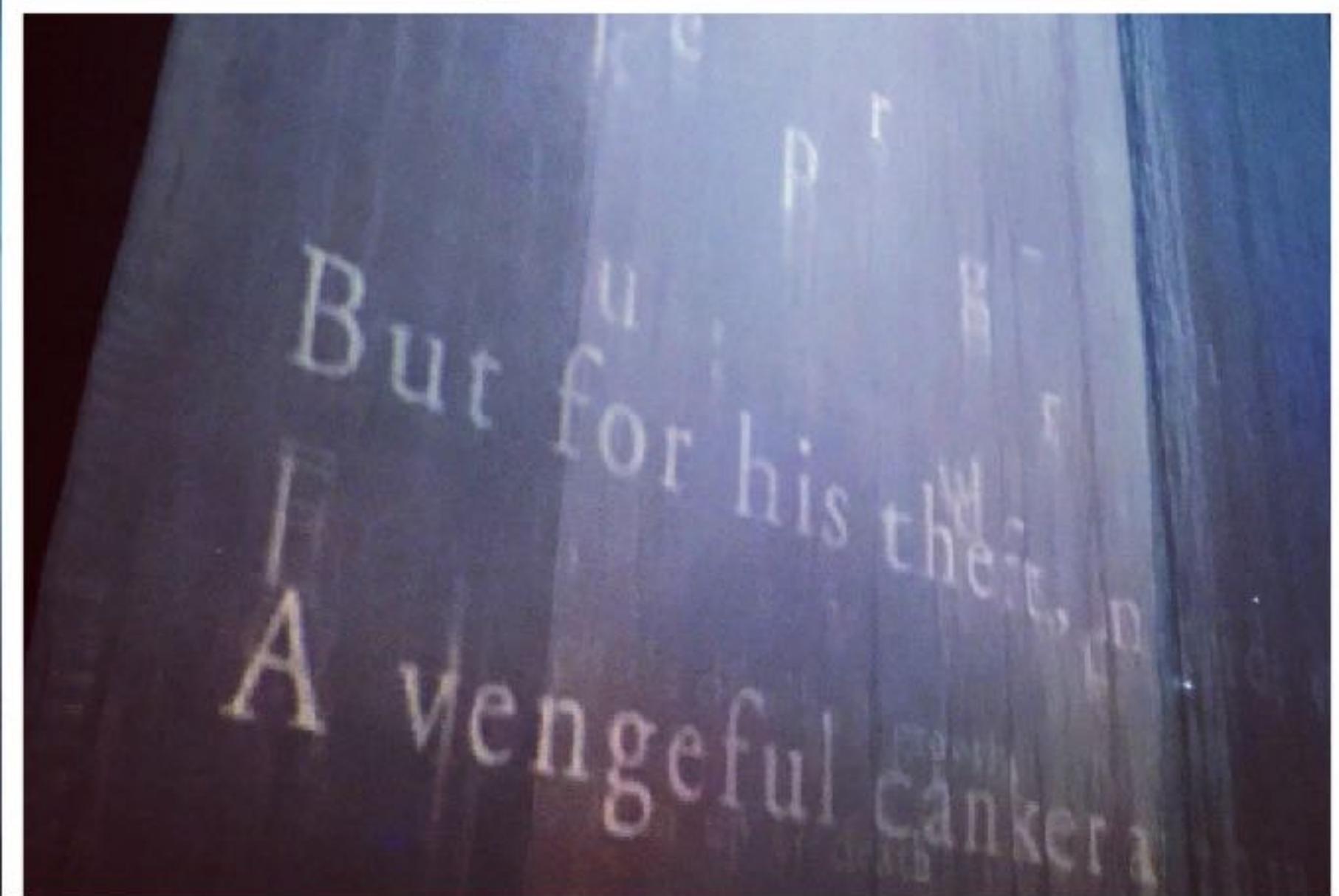
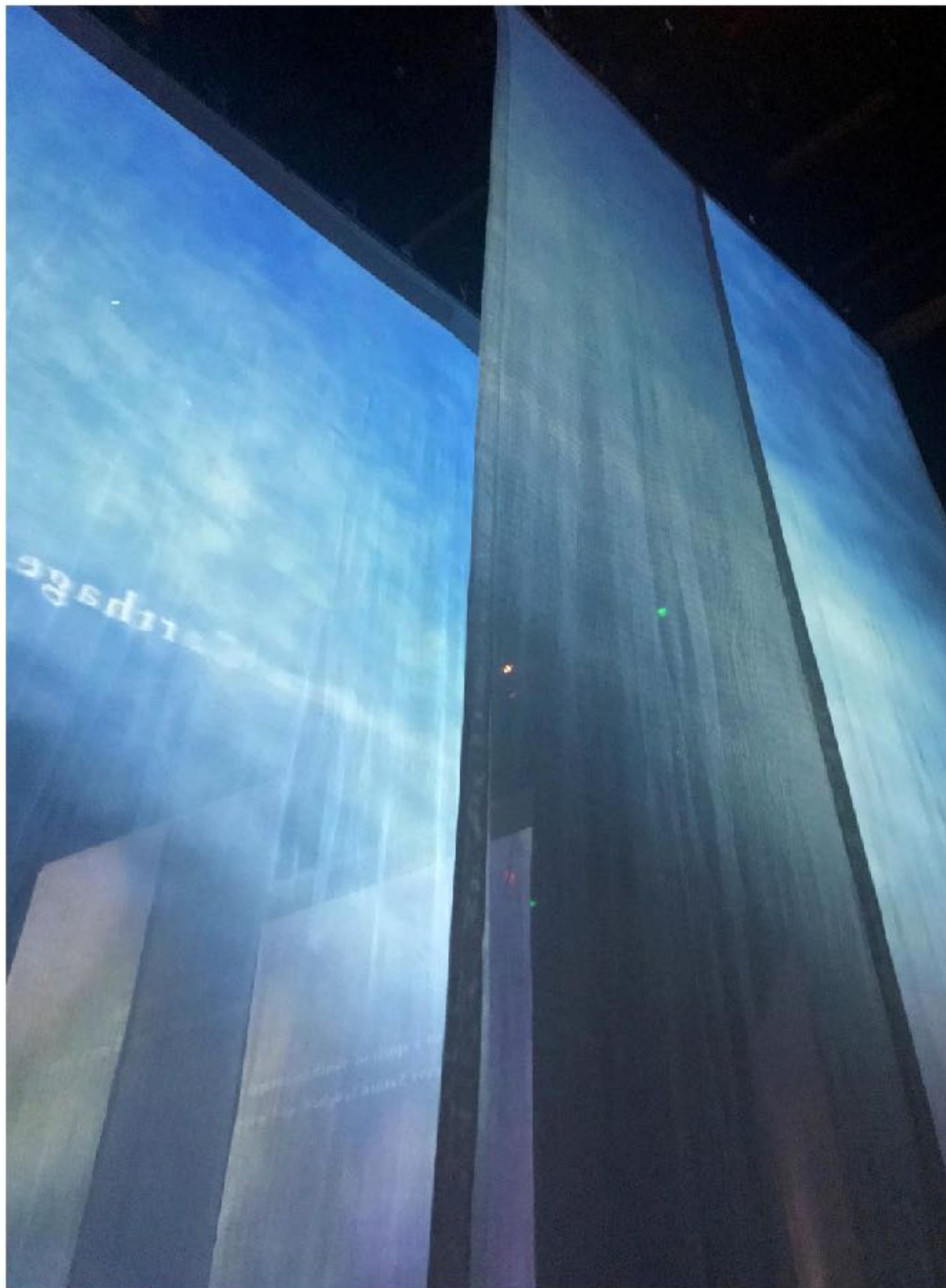
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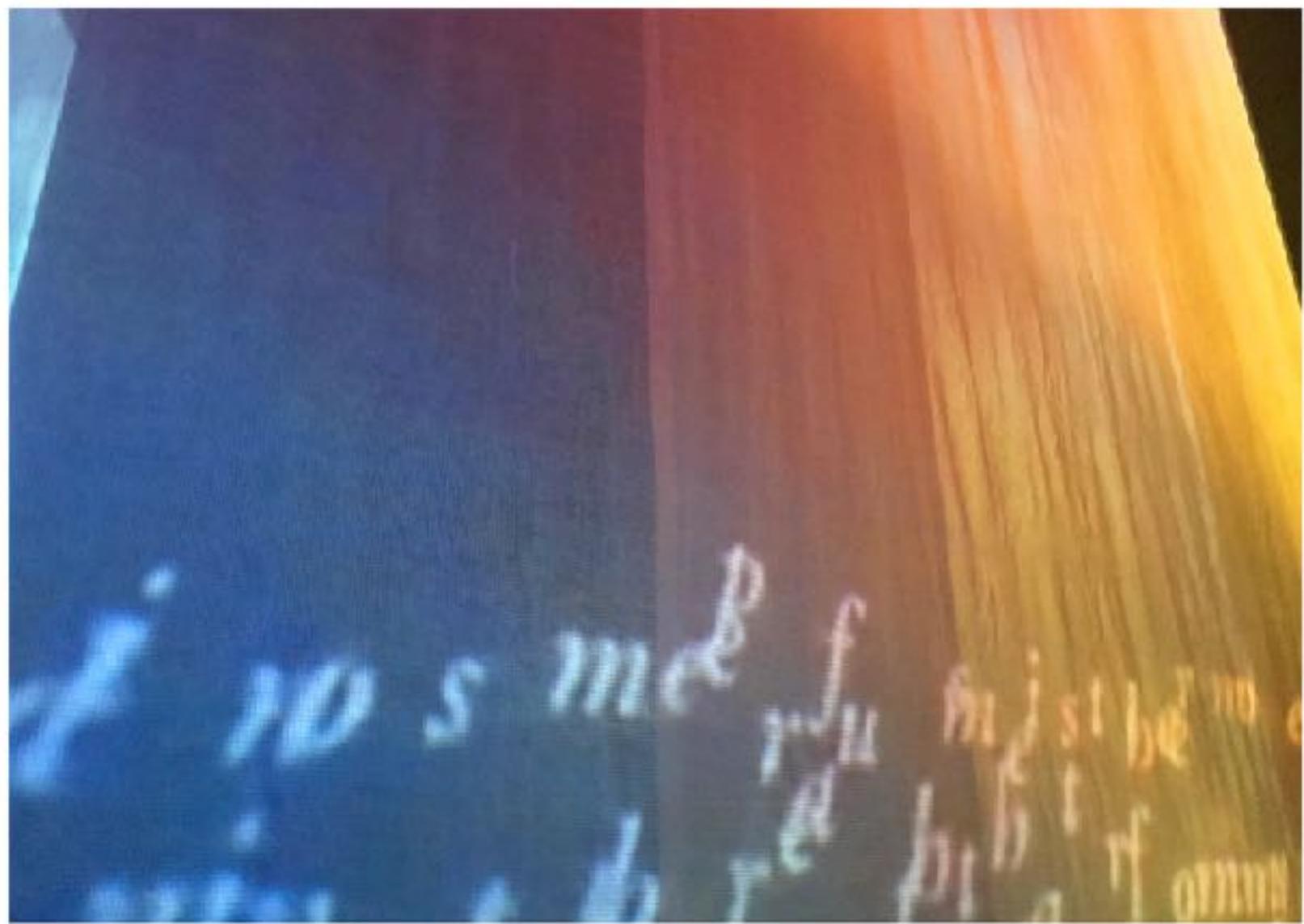
CUBE EXHIBITION

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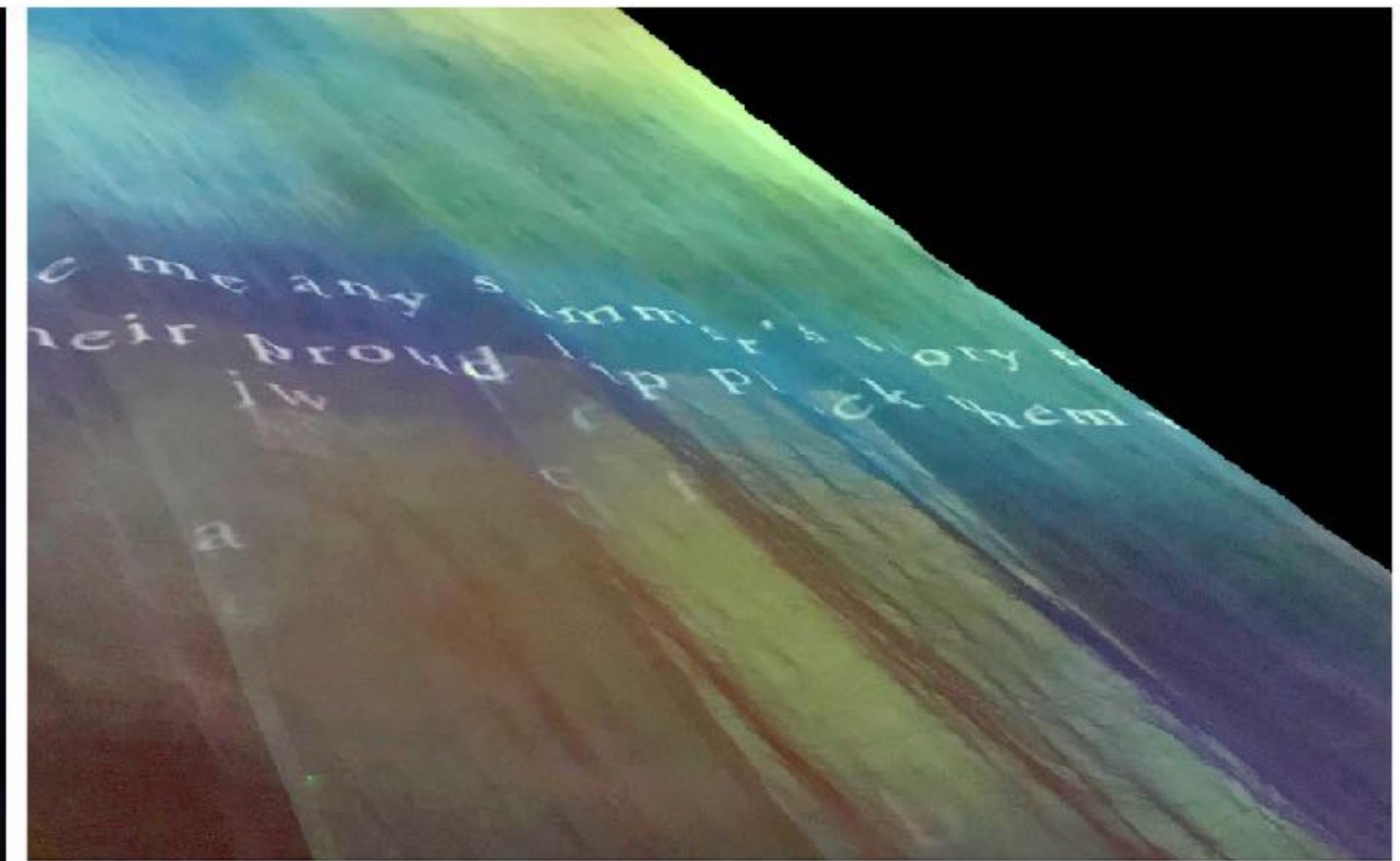
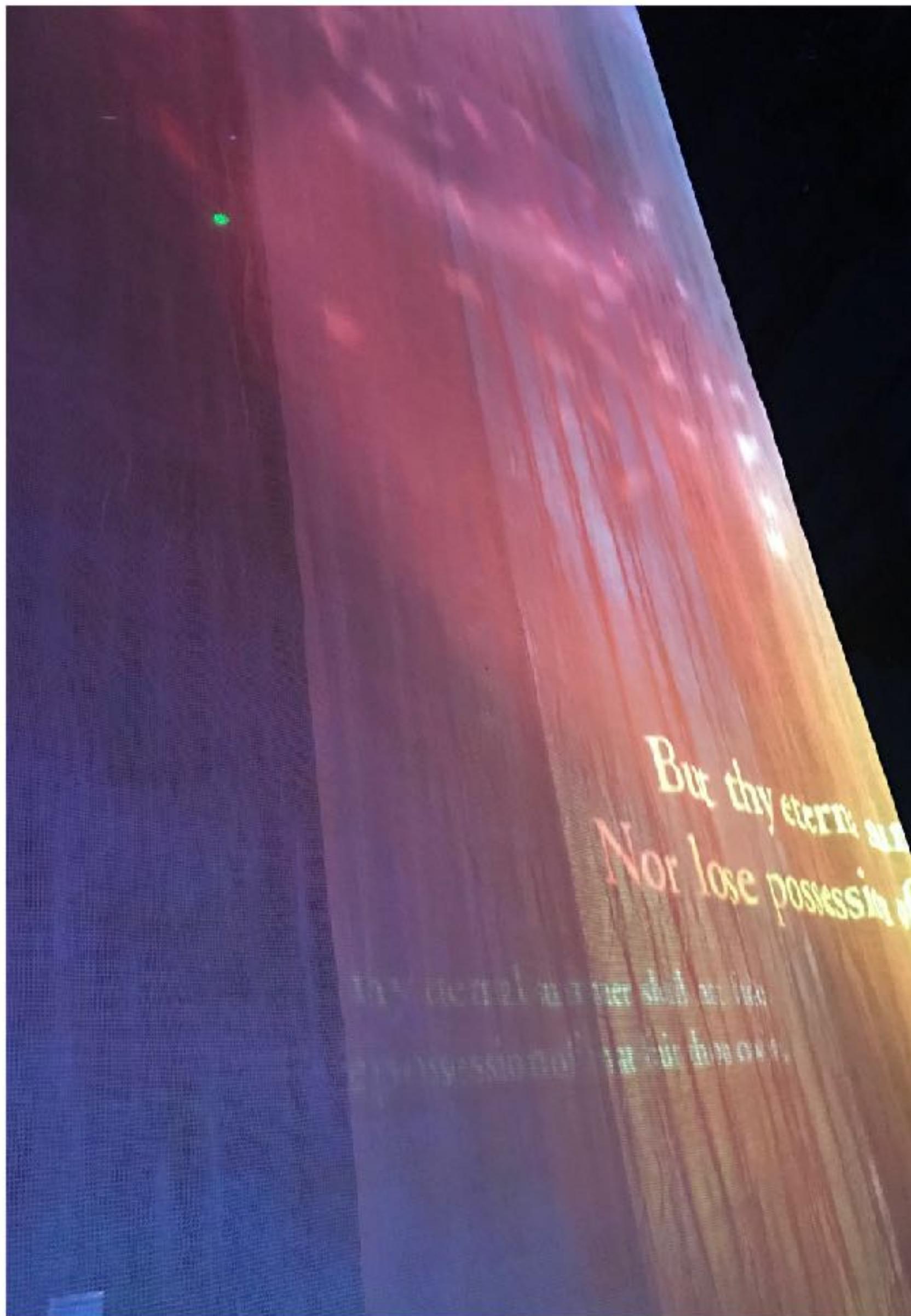
CUBE EXHIBITION

shakespeare's garden
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CUBE EXHIBITION

shakespeare's garden
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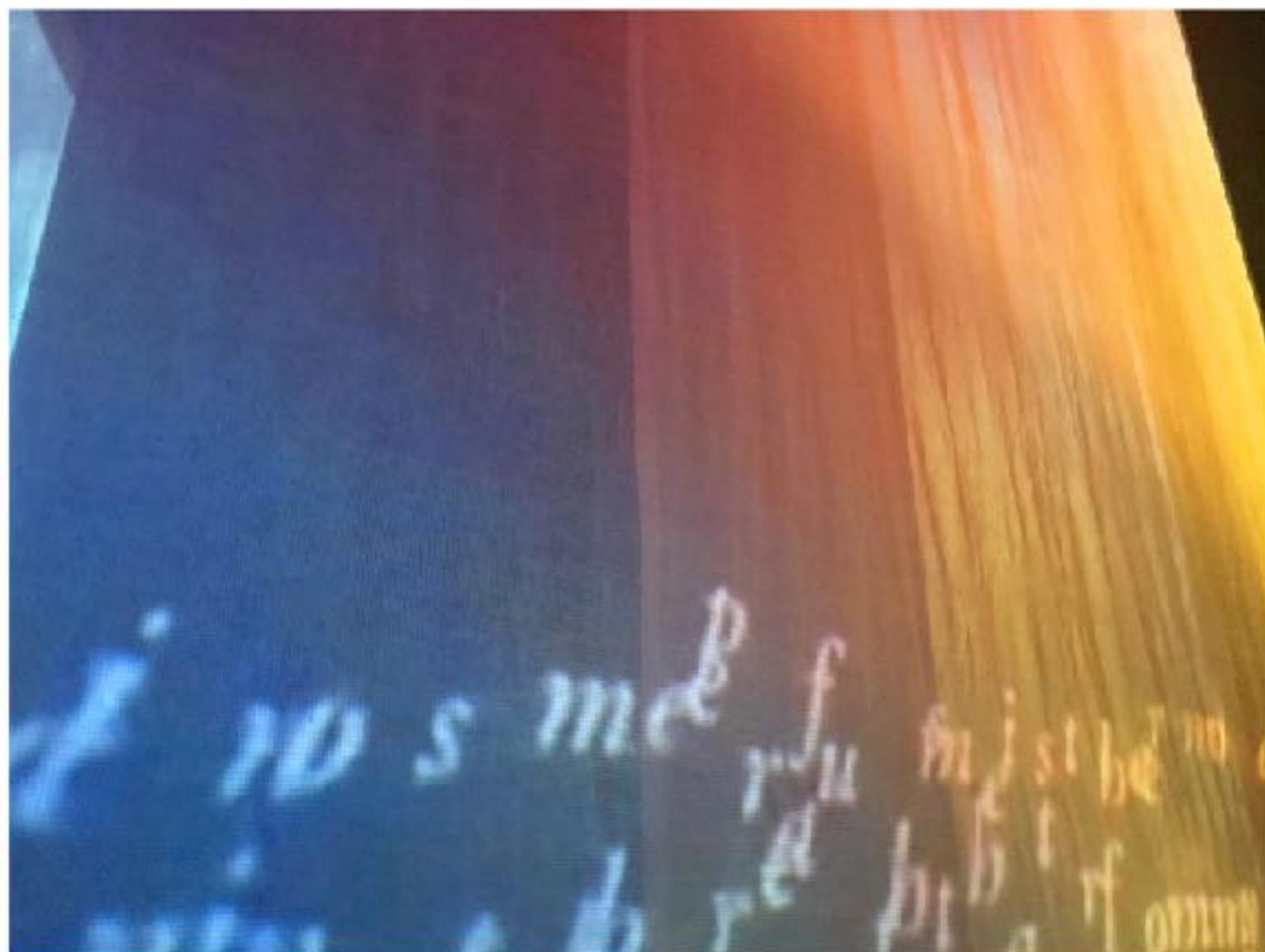
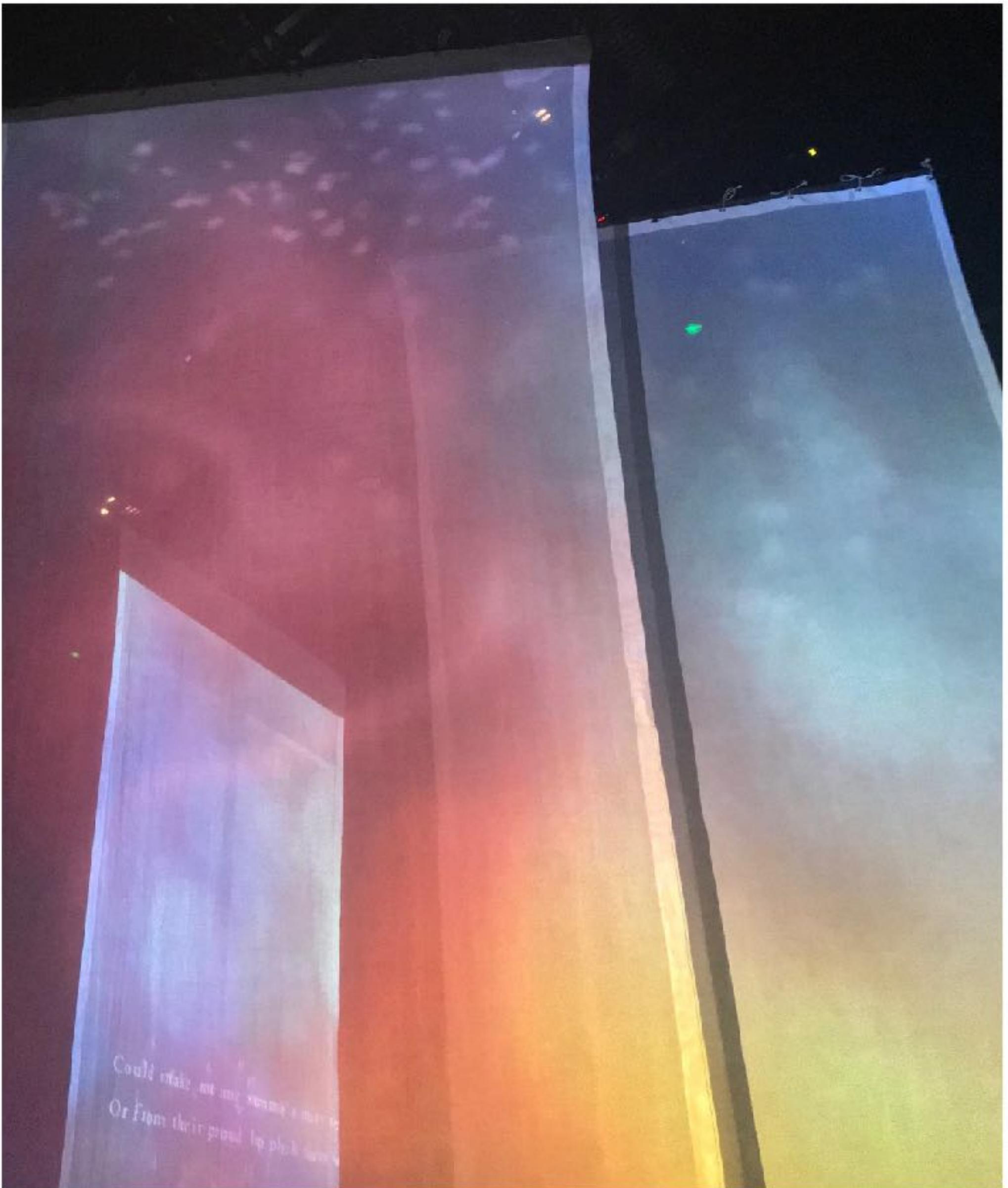
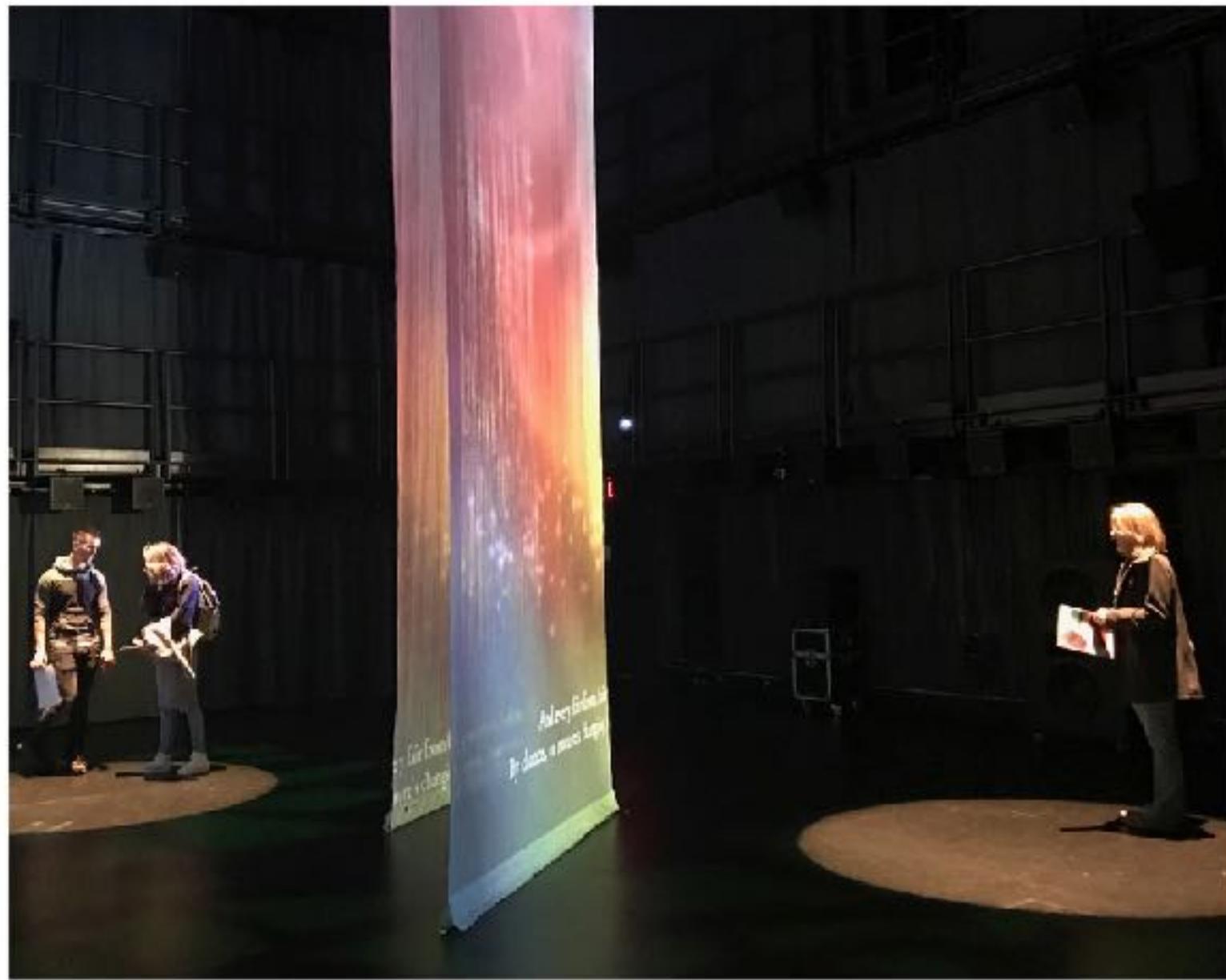
CUBE EXHIBITION

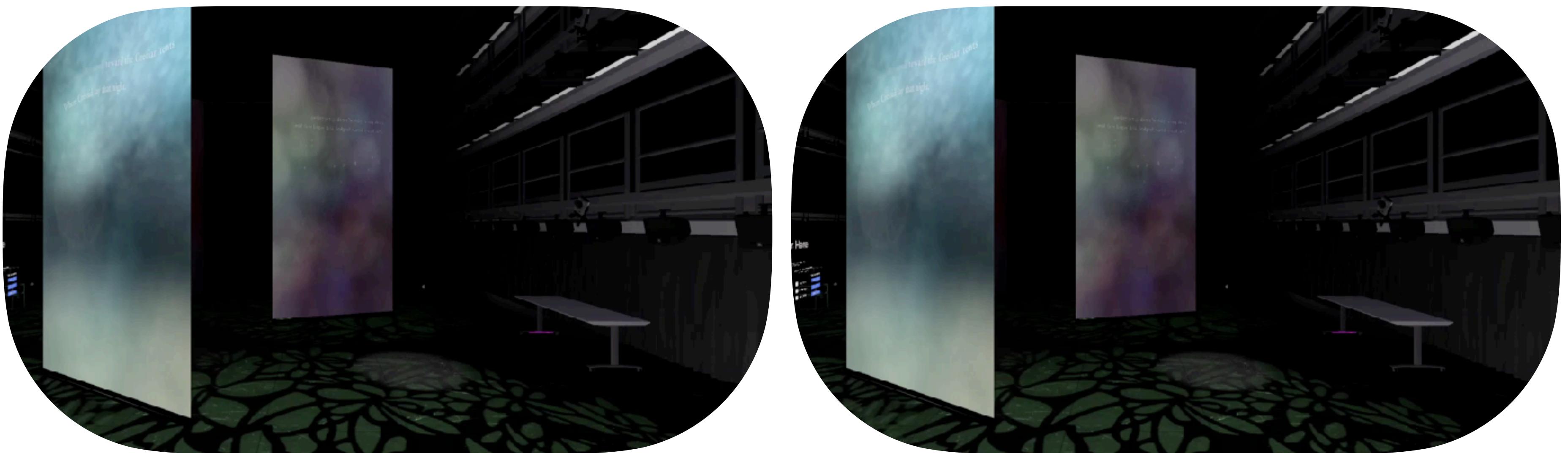
shakespeare's garden
moss arts center
virginia tech



CUBE EXHIBITION

shakespeare's garden
moss arts center
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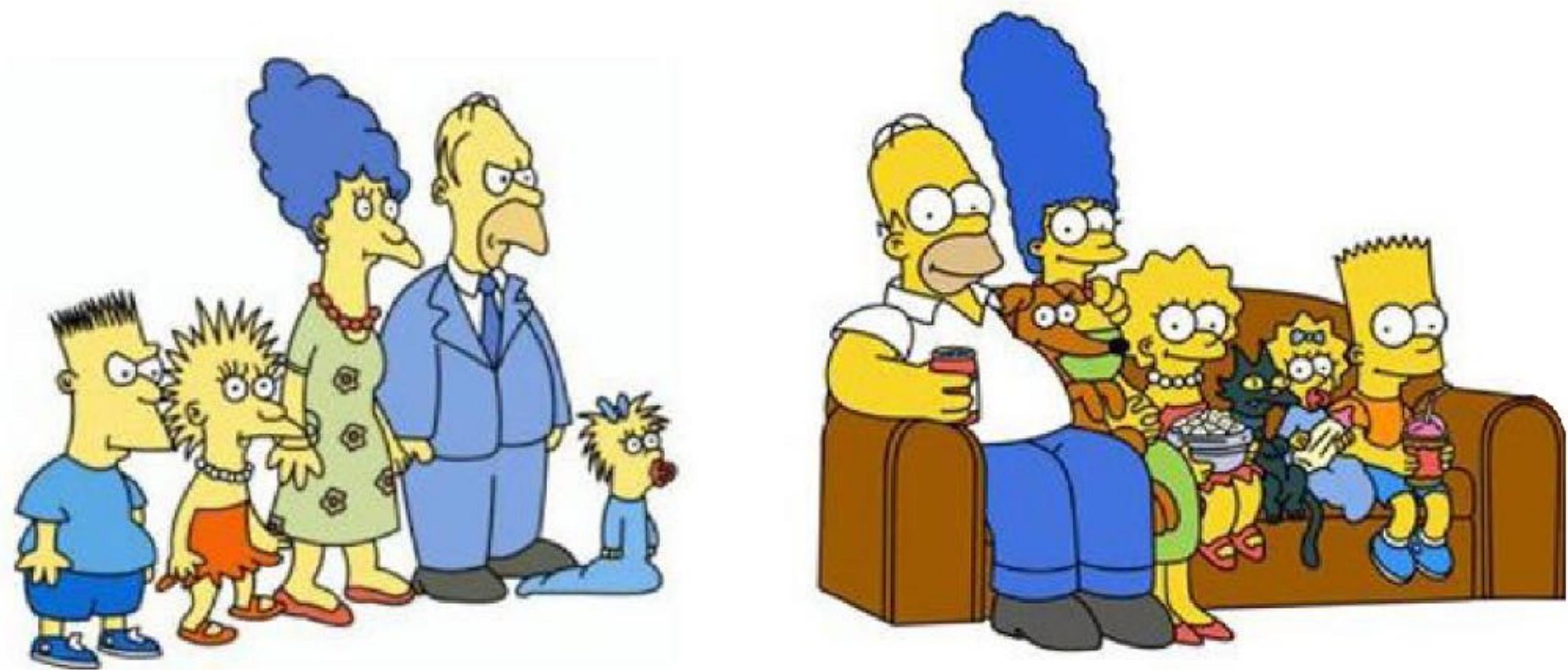


VR SHAKESPEARE

virginia tech
with dillon m. cutaiar
vr + ar developer

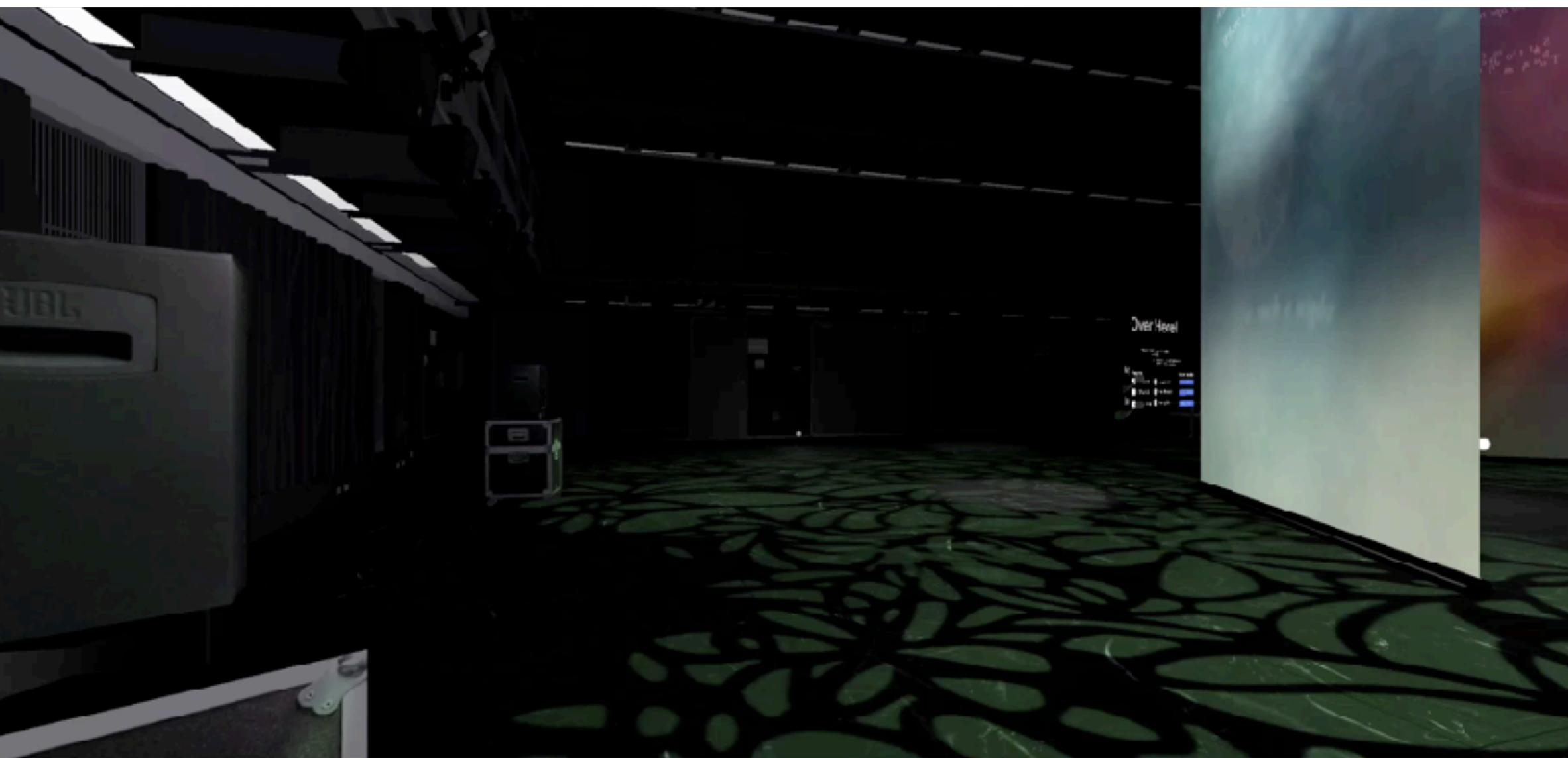
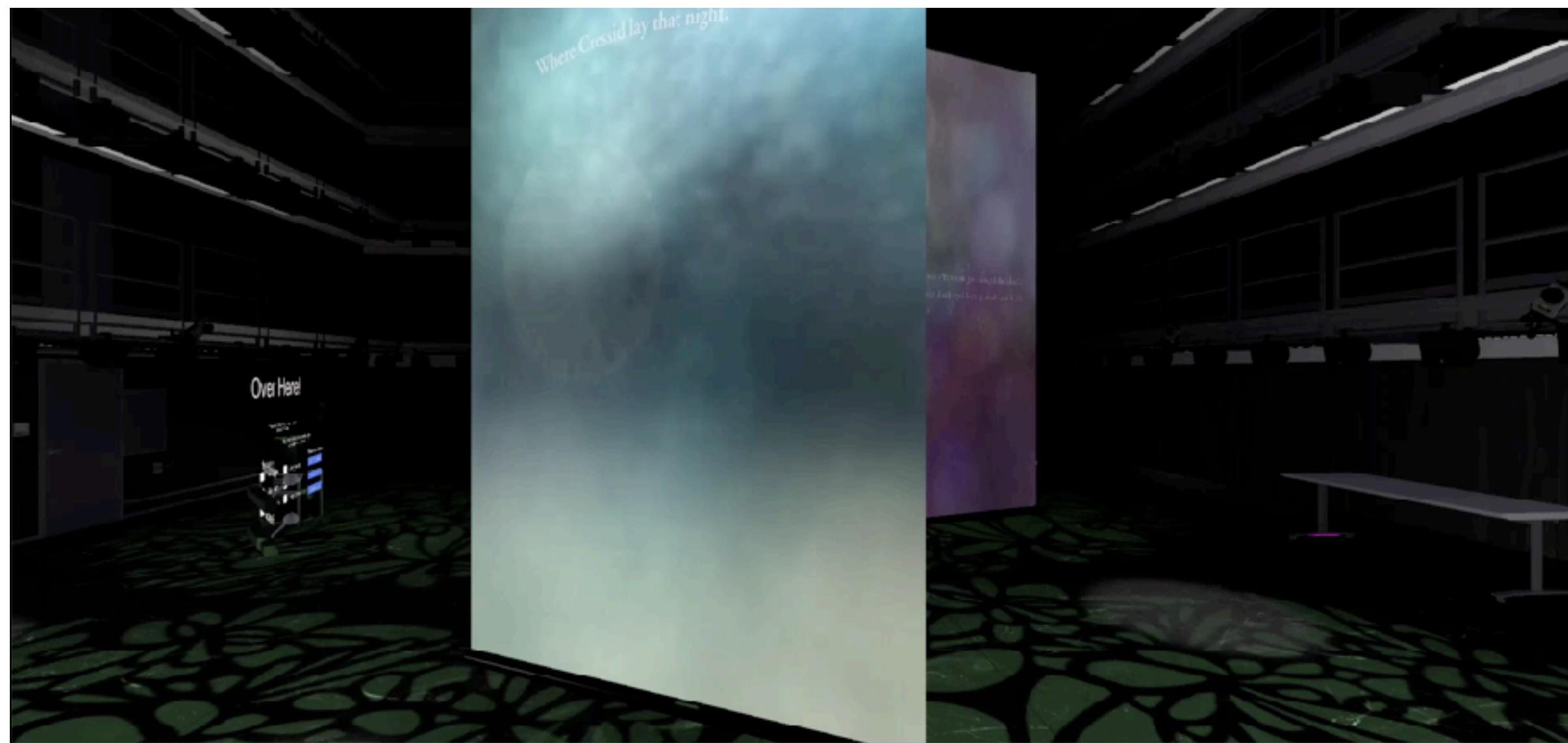
SIMPSONS

old v. new



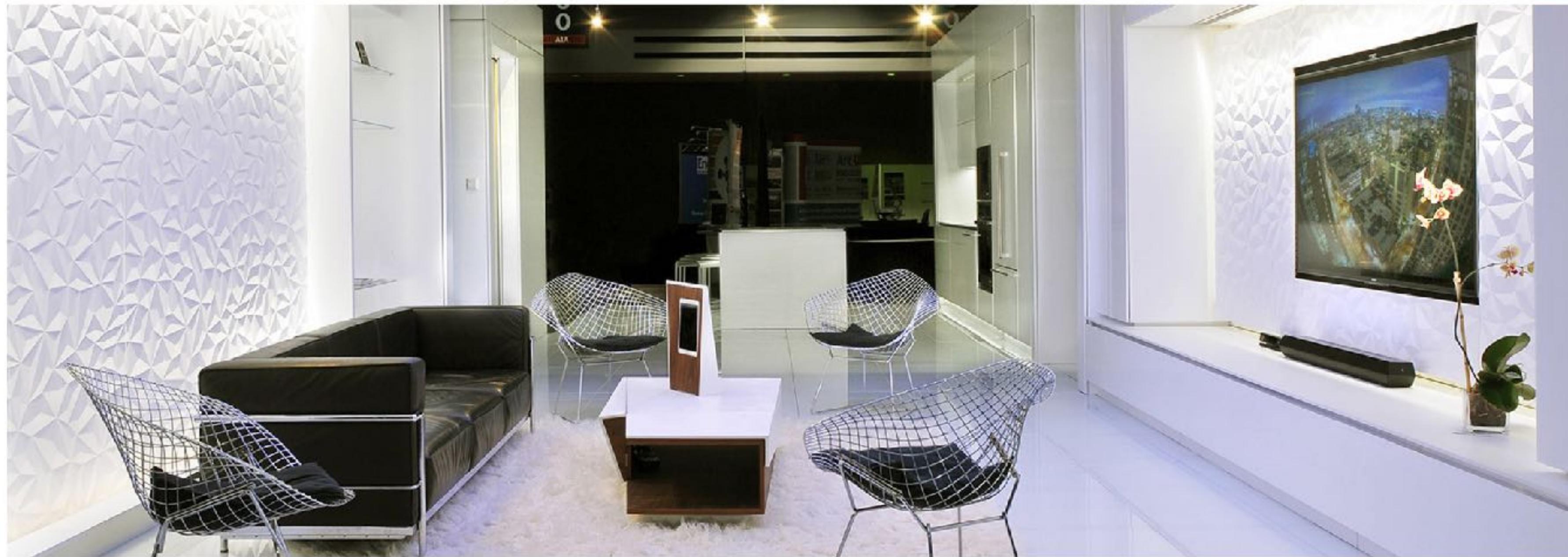
VR SHAKESPEARE

virginia tech
with dillon m. cutaiar
vr + ar developer



FUTUREHAUS IRL

smart home prototype
virginia tech



FUTUREHAUS

VR walkthrough
virginia tech



FUTUREHAUS

smart home
virginia tech



FUTUREHAUS

smart home
virginia tech



Aa San Francisco

TITLE

More of the future.

Welcome to the future.

BODY

Lorem ipsum dolor sit amet, putent voluptaria consetetur
at vim, cum no graeco reformidans. Eu choro graece
definitiones quo, eu sed dicant habemus.

WELCOME TO THE FUTURE

ACTION

Status Status

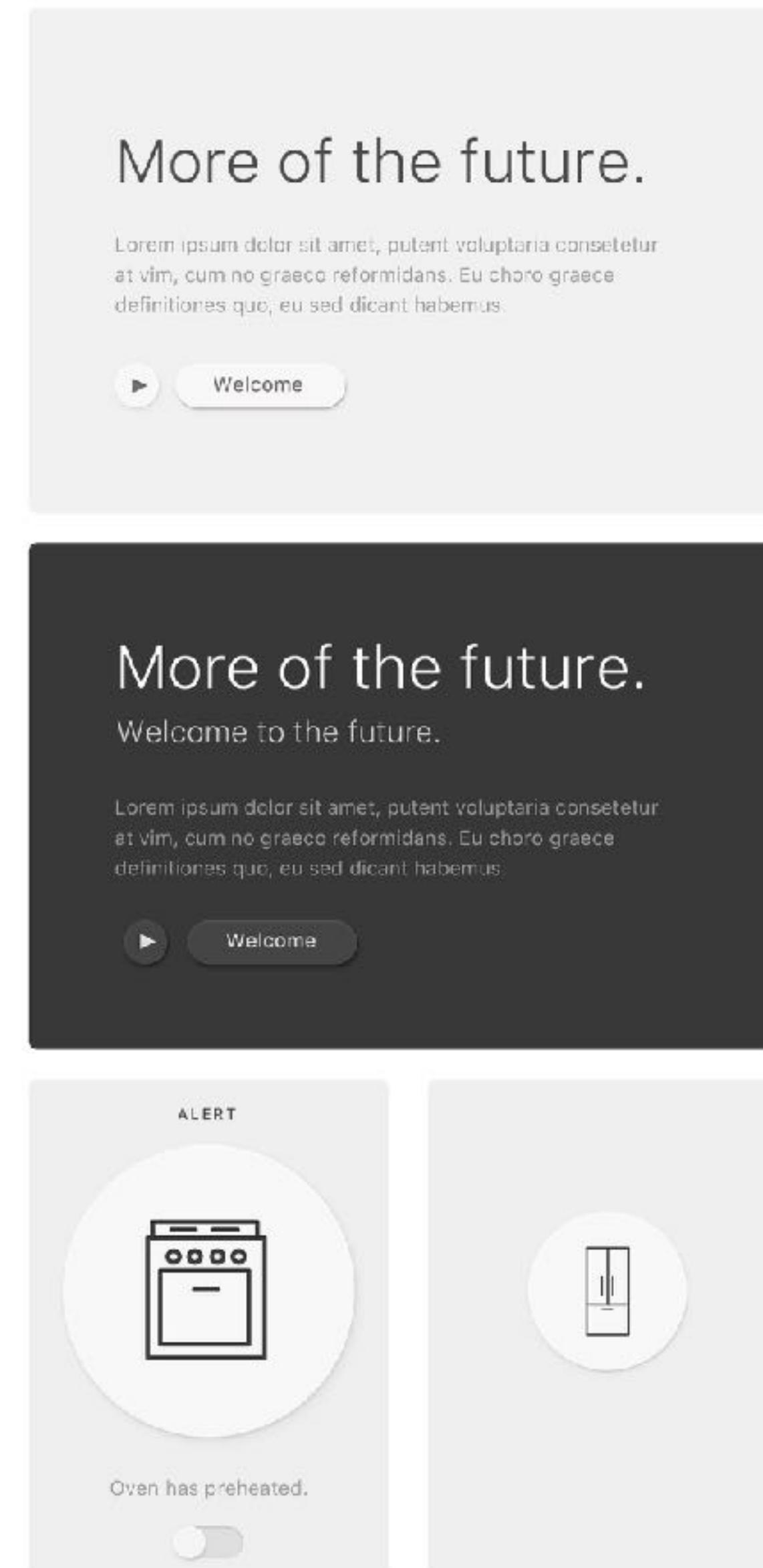
BUTTON



ICONS



COLORS



FUTUREHAUS

visual interface design team:

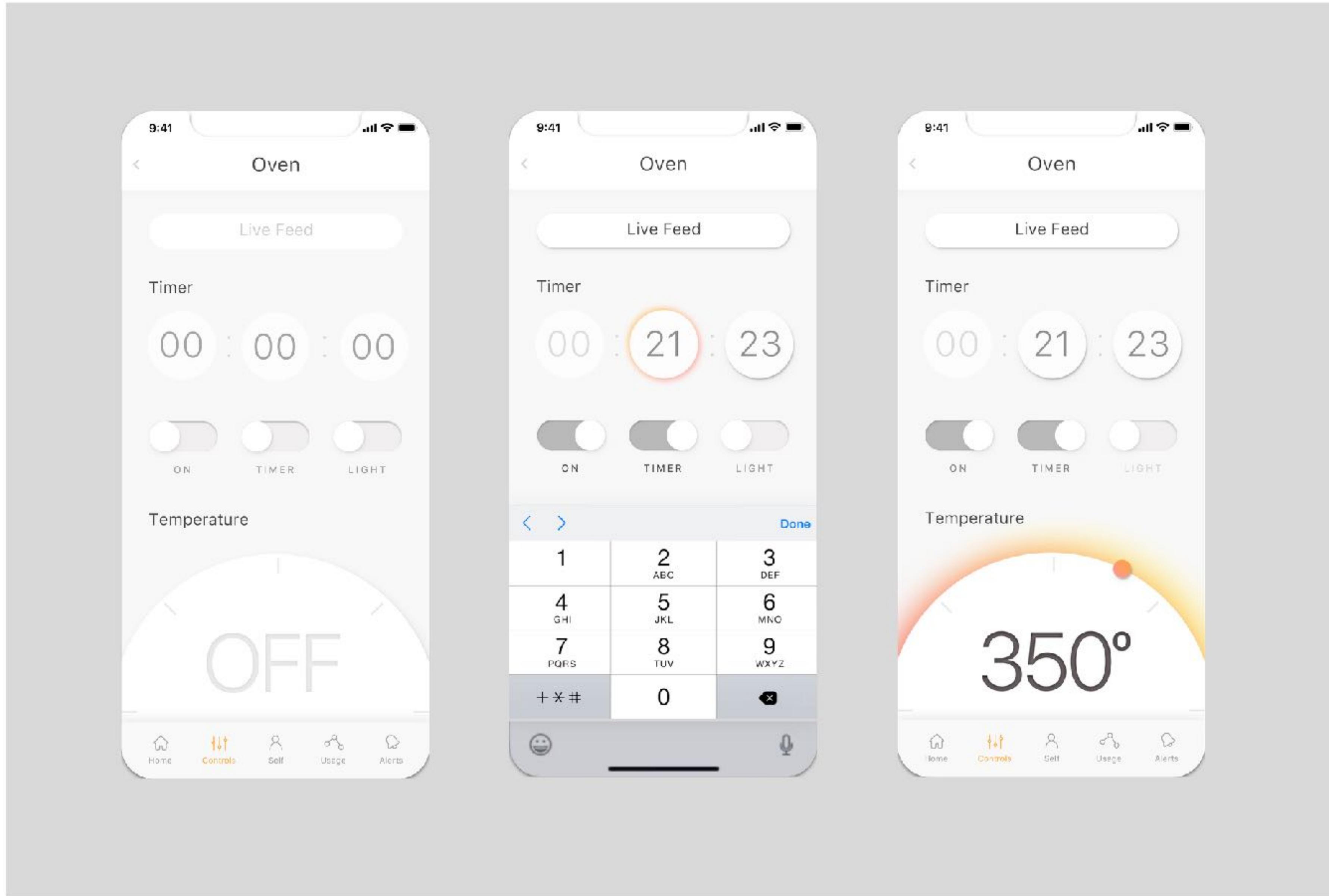
izzy cruz

charlotte de wolfe

tam hoang

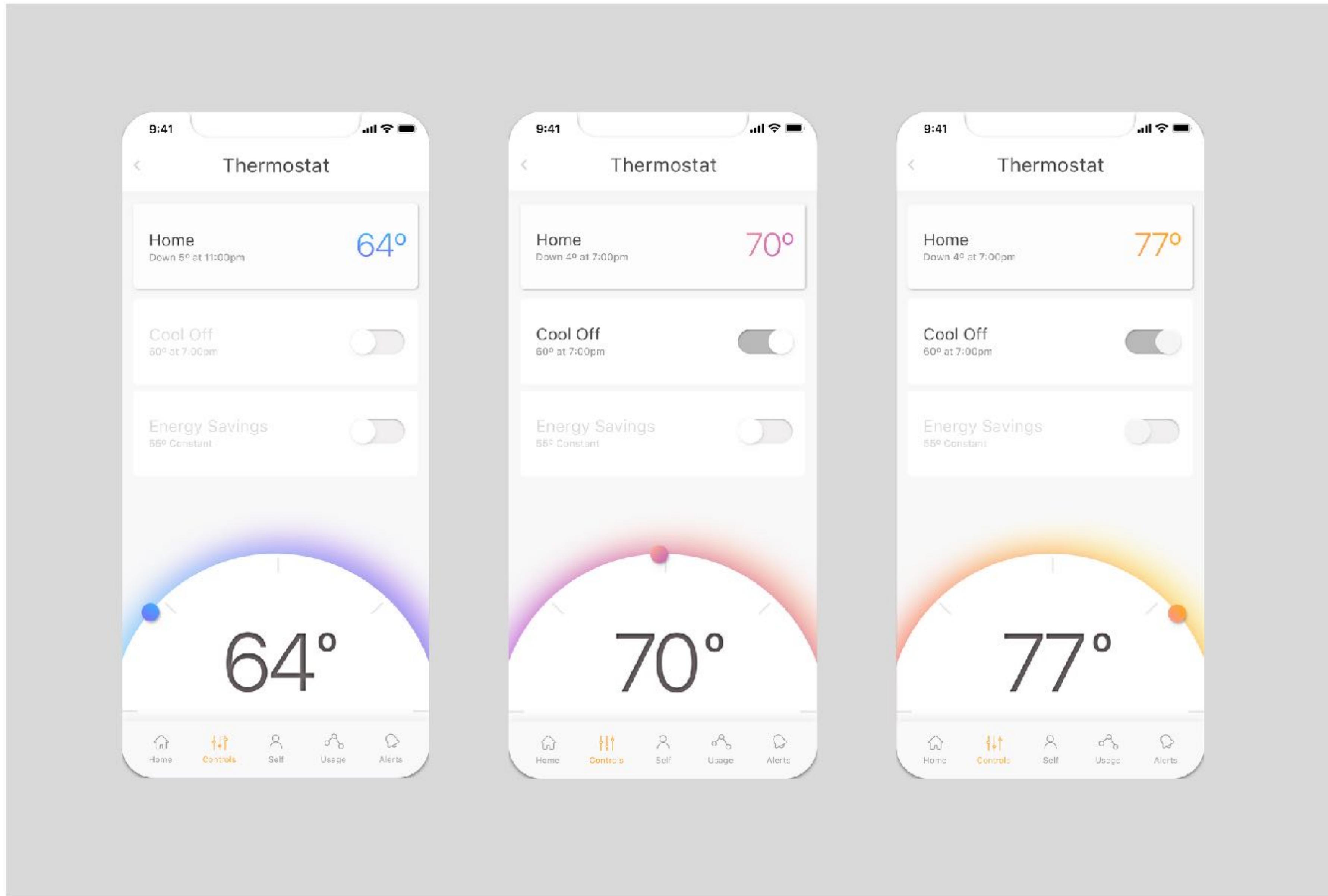
julia rater

FUTUREHAUS



visual interface design team:
izzy cruz
charlotte de wolfe
tam hoang
julia rater

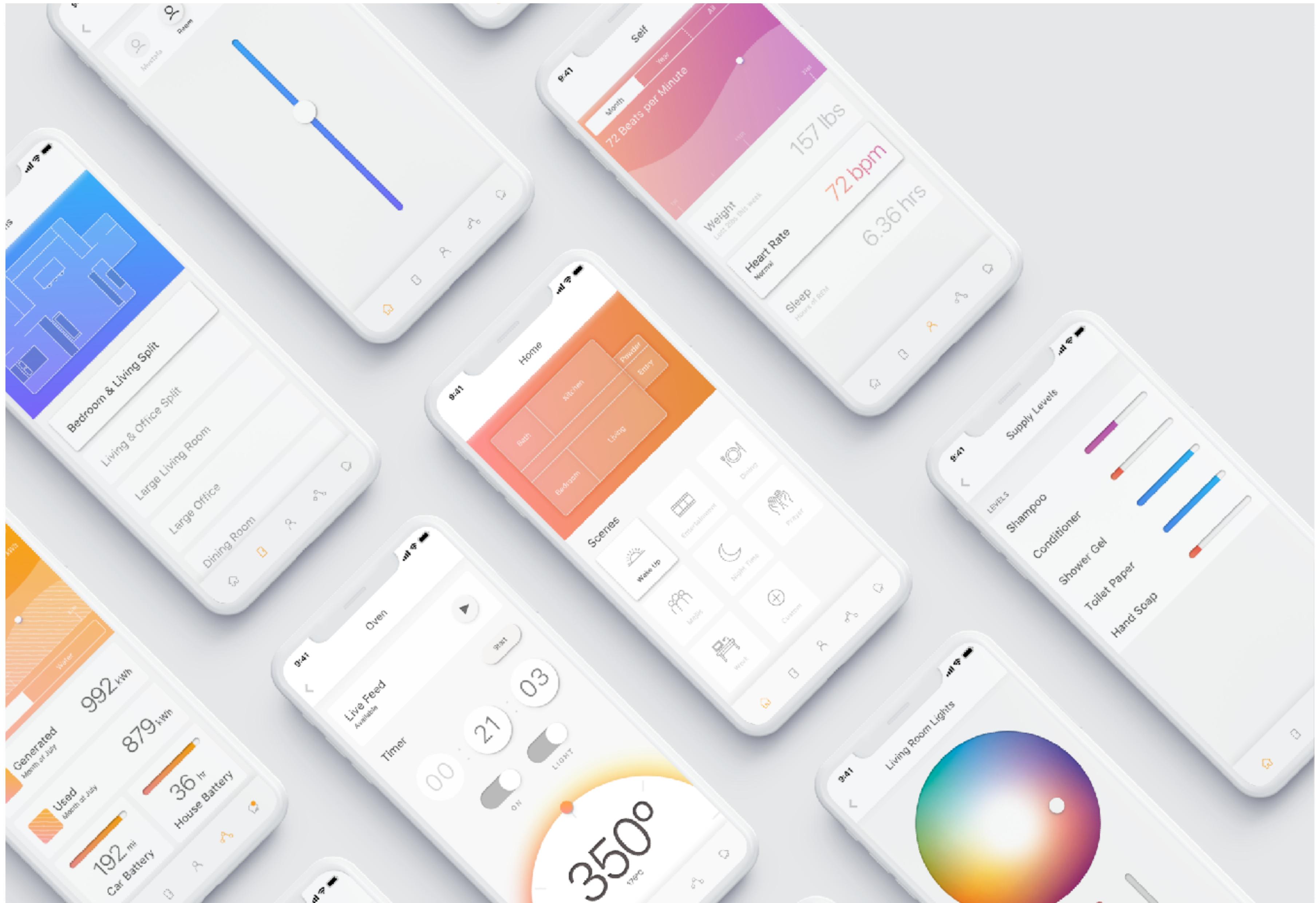
FUTUREHAUS



visual interface design team:
izzy cruz
charlotte de wolfe
tam hoang
julia rater

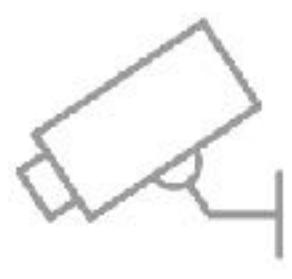
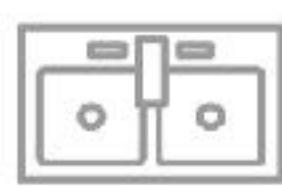
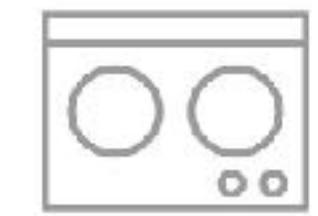
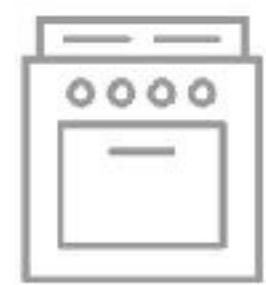
FUTUREHAUS

visual interface design team:
izzy cruz
charlotte de wolfe
tam hoang
julia rater



ICON SYSTEM

futurehaus
virginia tech



FUTUREHAUS

smart home
virginia tech

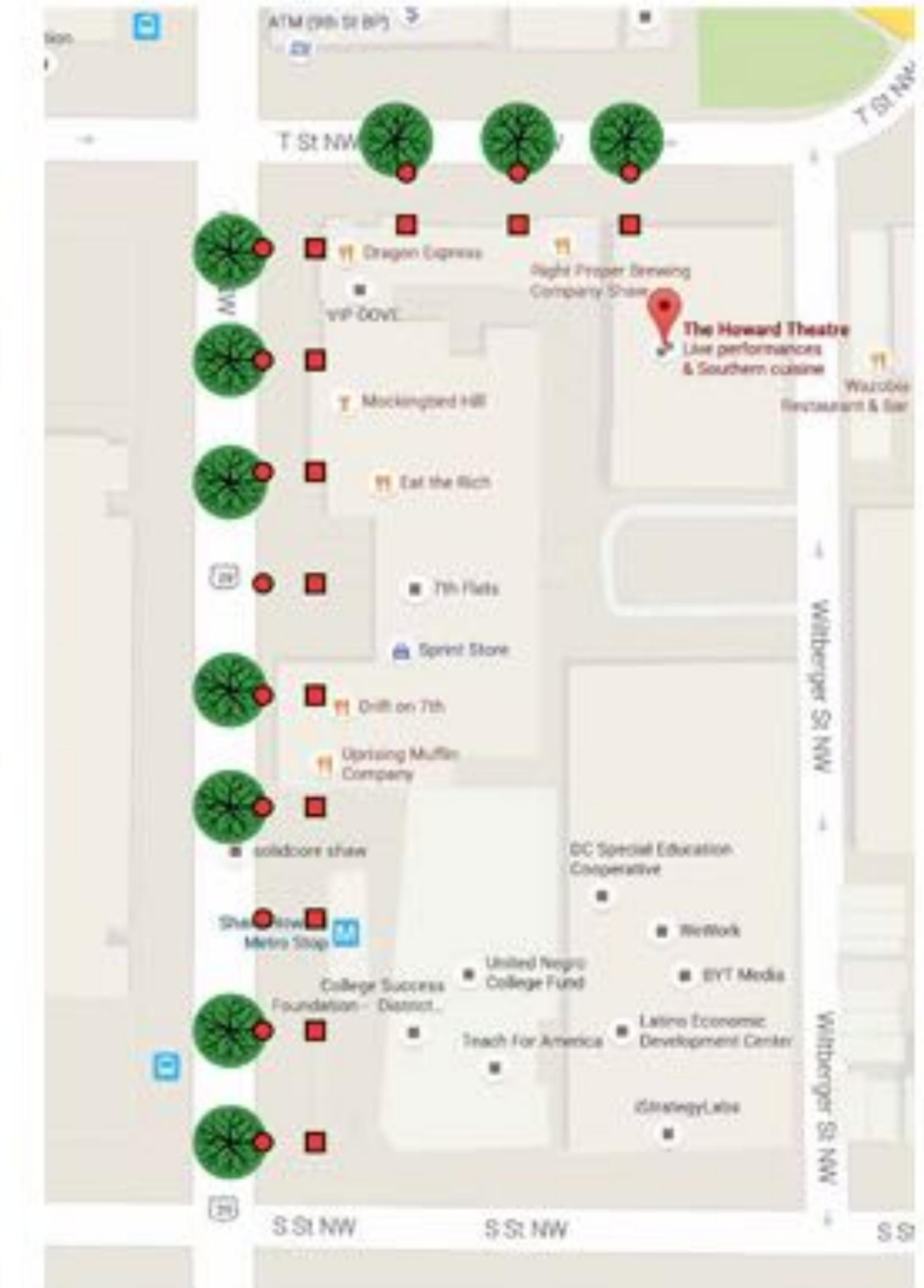


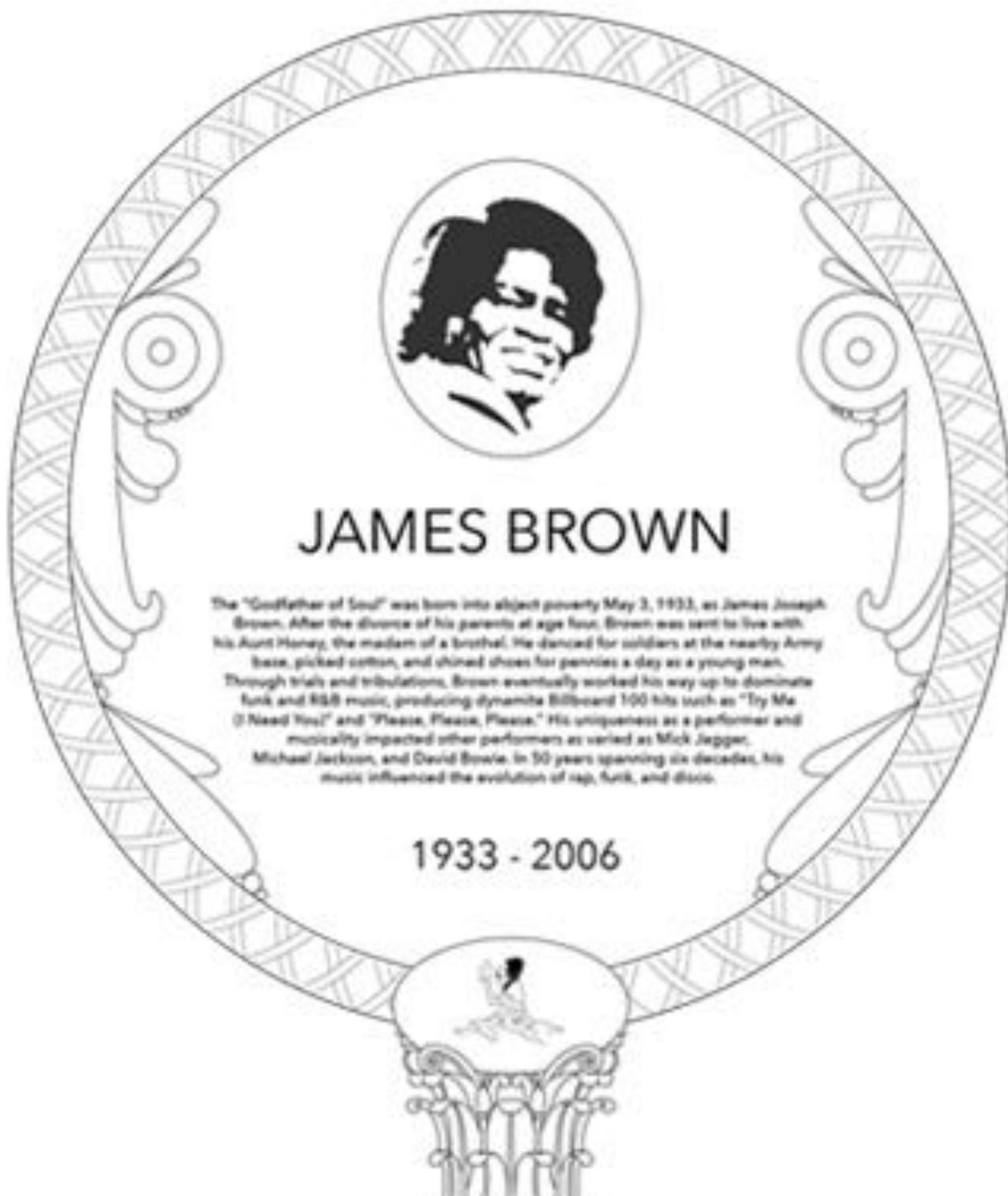


THE HOWARD THEATRE



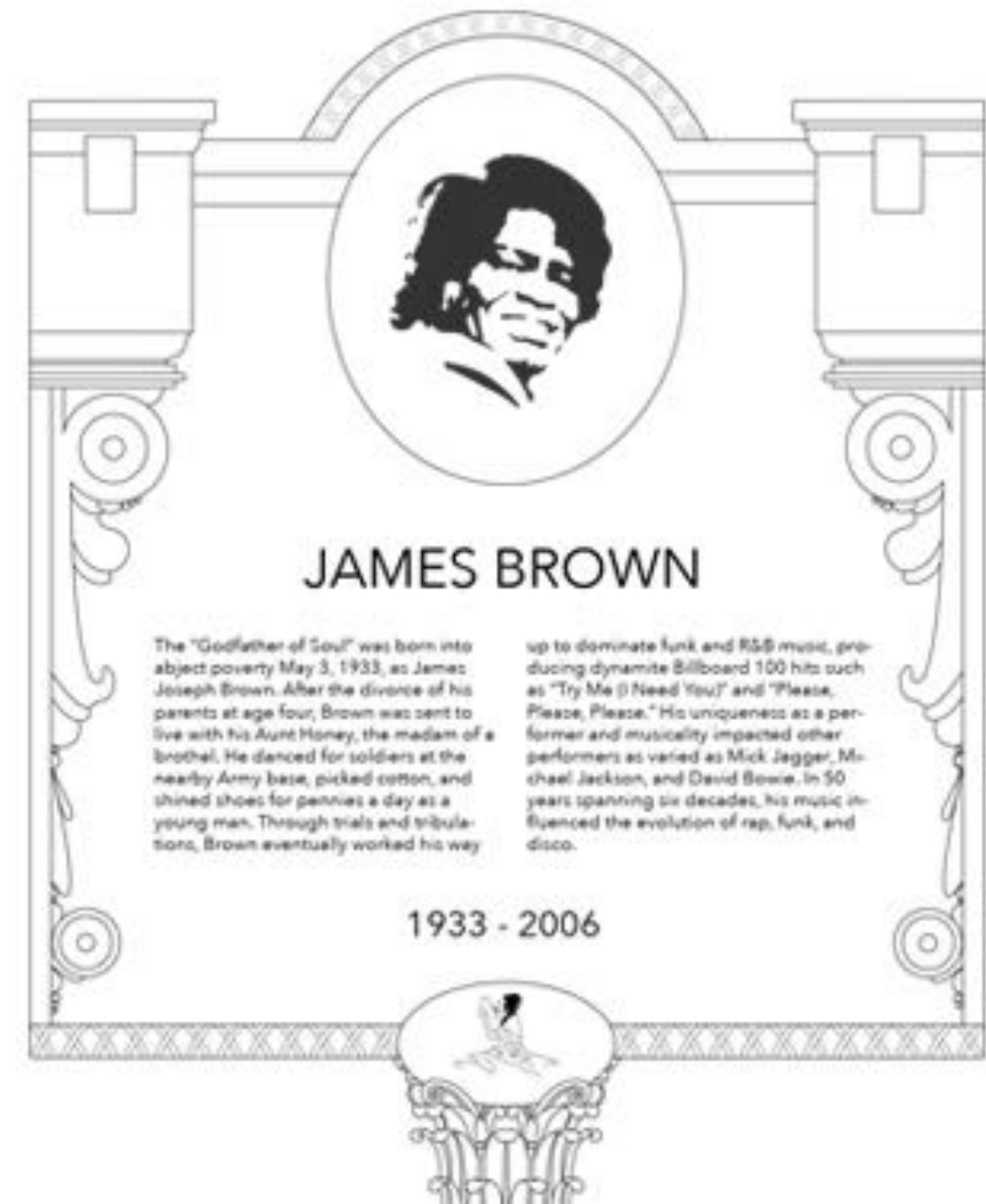
WALK OF FAME





The "Godfather of Soul" was born into abject poverty May 3, 1933, as James Joseph Brown. After the divorce of his parents at age four, Brown was sent to live with his Aunt Honey, the madam of a brothel. He danced for soldiers at the nearby Army base, picked cotton, and shined shoes for pennies a day as a young man. Through trials and tribulations, Brown eventually worked his way up to dominate funk and R&B music, producing dynamite Billboard 100 hits such as "Try Me (I Need You)" and "Please, Please, Please." His uniqueness as a performer and musicality impacted other performers as varied as Mick Jagger, Michael Jackson, and David Bowie. In 50 years spanning six decades, his music influenced the evolution of rap, funk, and disco.

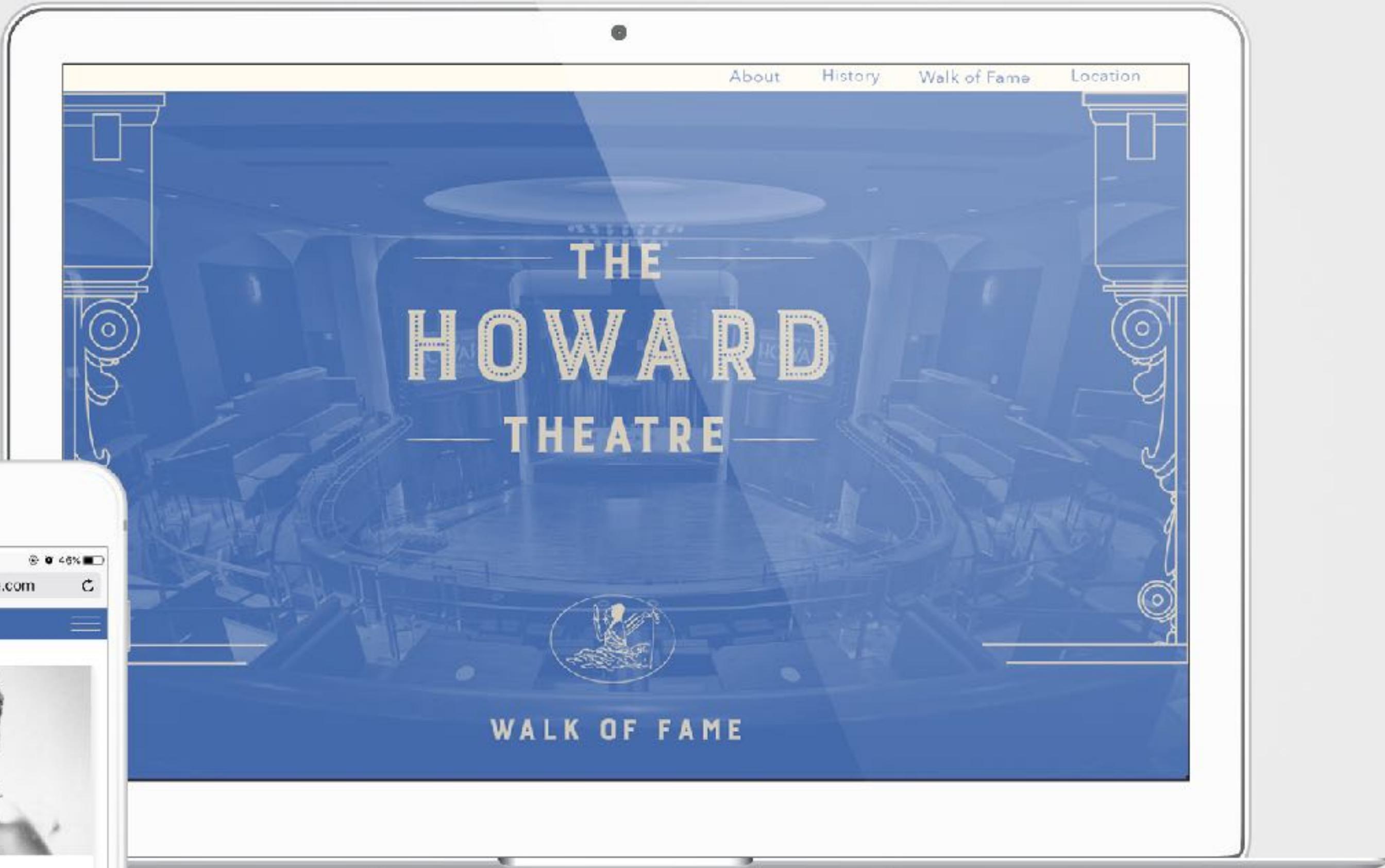
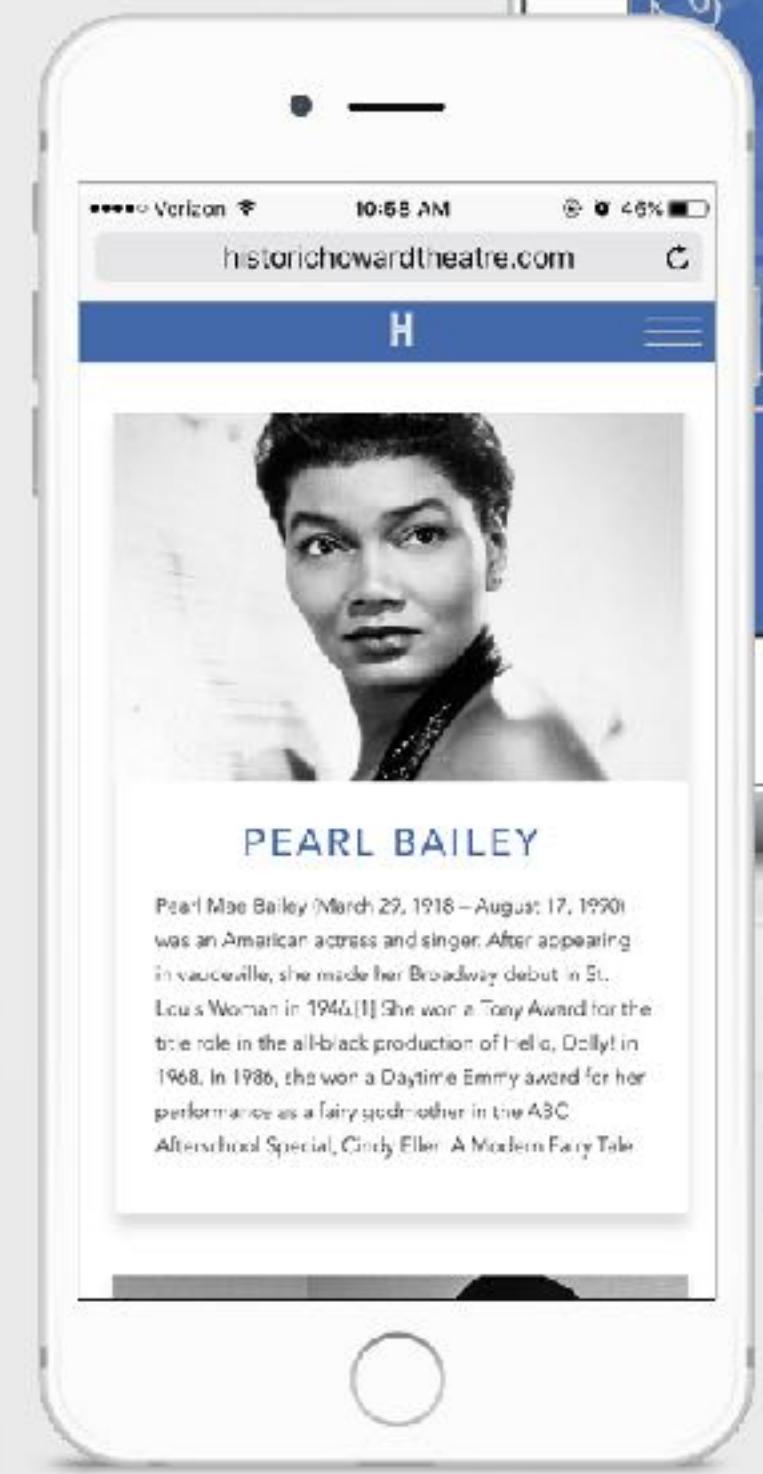
1933 - 2006

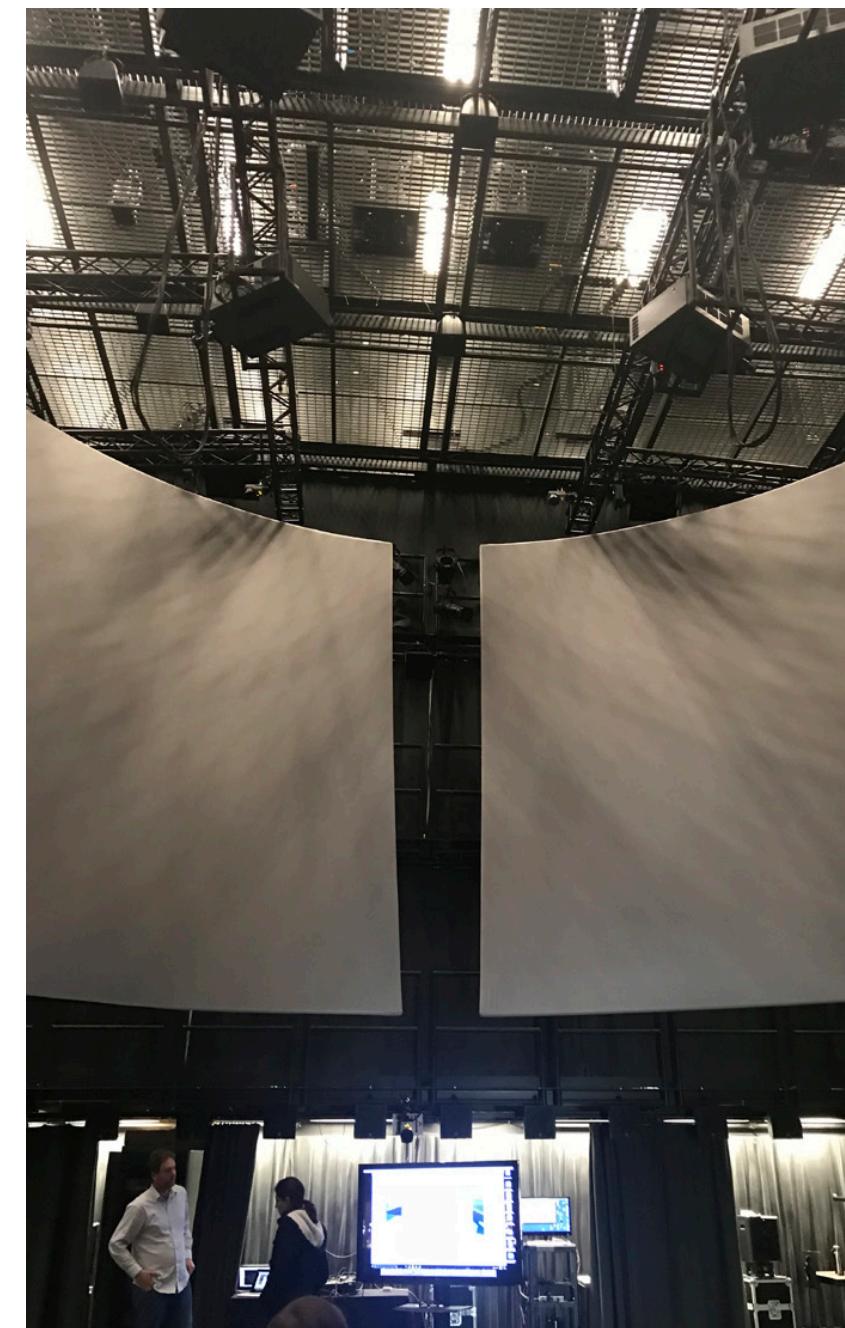


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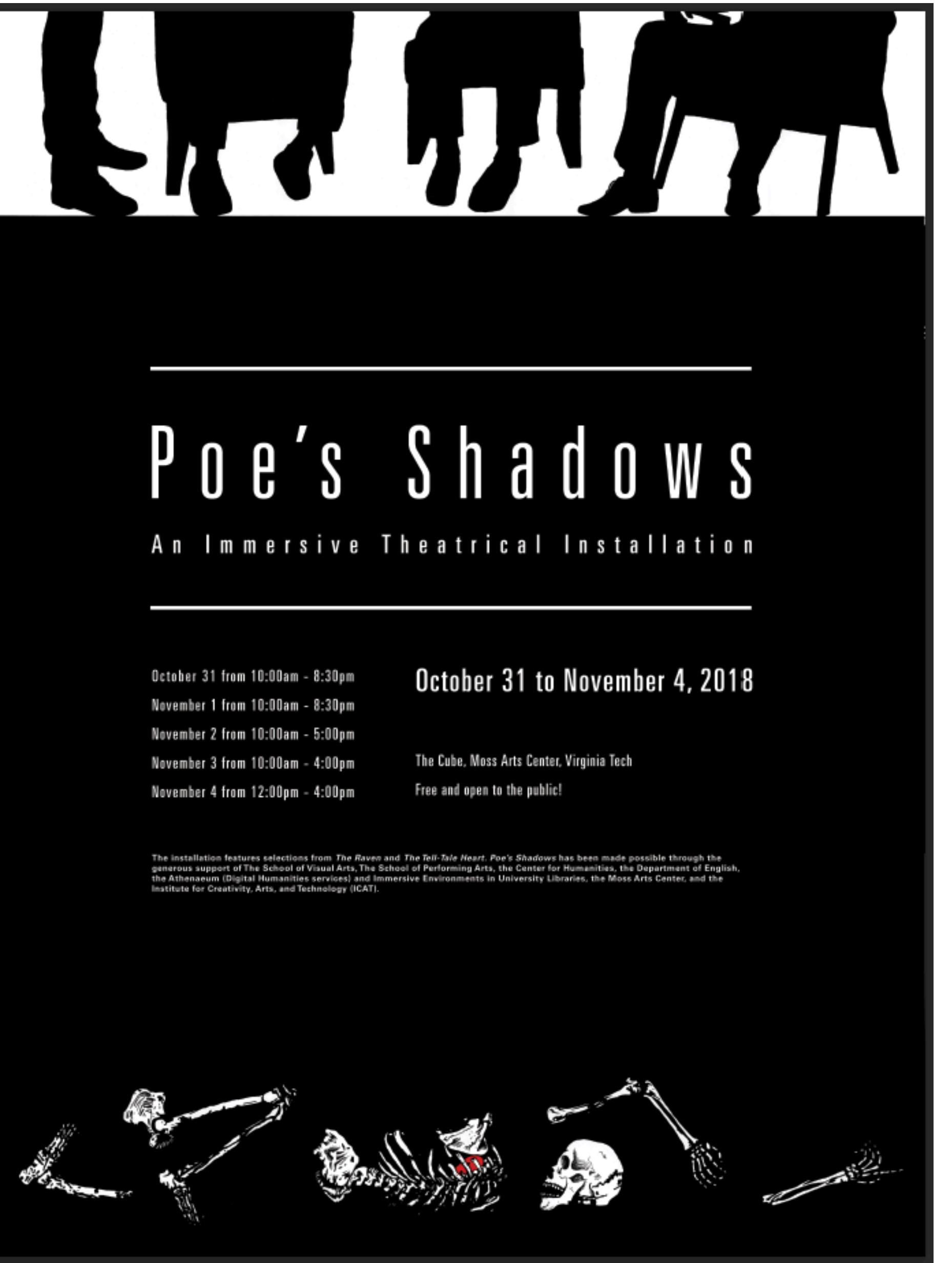


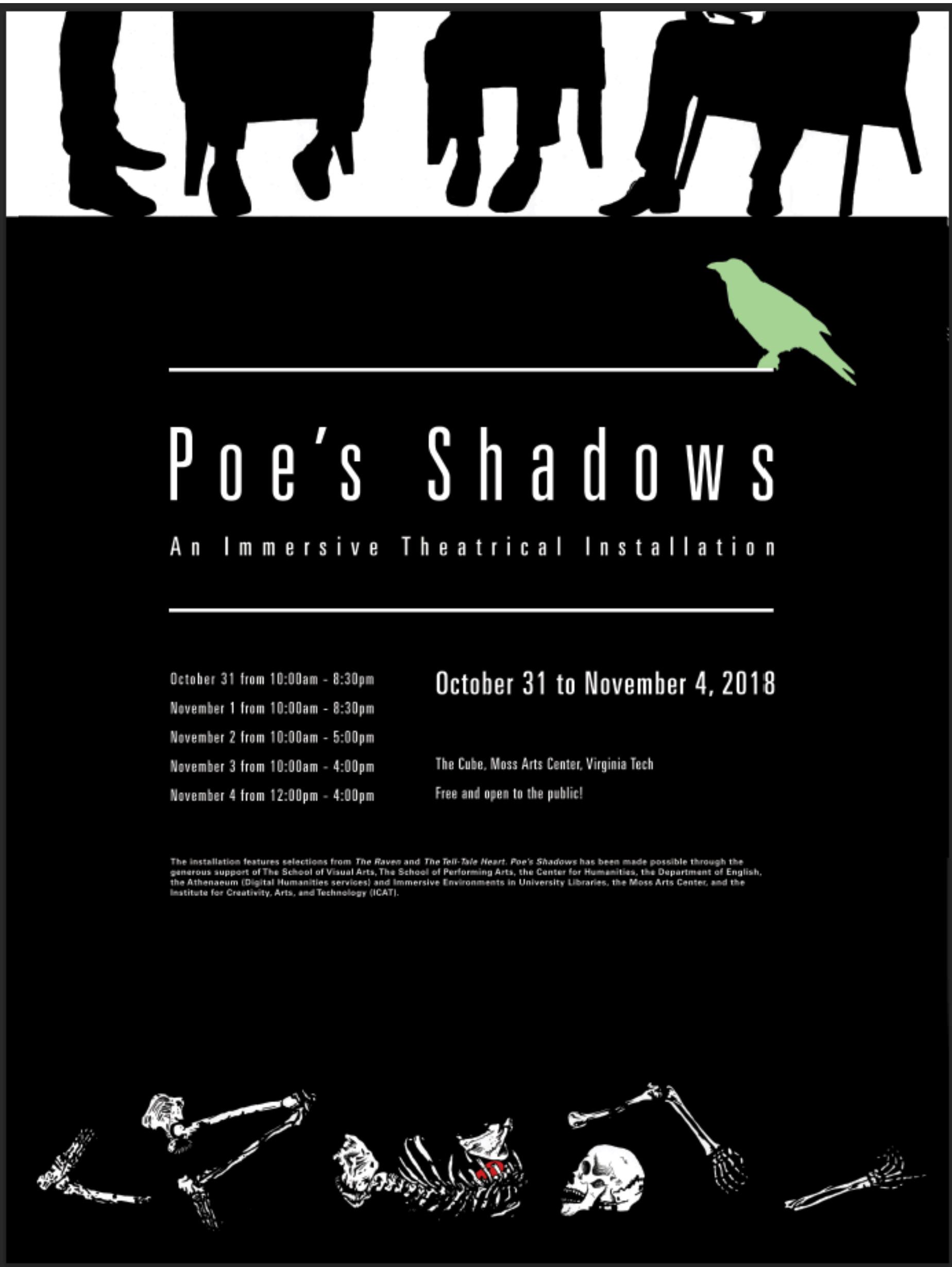












October 31 from 10:00am - 8:30pm

November 1 from 10:00am - 8:30pm

November 2 from 10:00am - 5:00pm

November 3 from 10:00am - 4:00pm

November 4 from 12:00pm - 4:00pm

October 31 to November 4, 2018

The Cube, Moss Arts Center, Virginia Tech

Free and open to the public!

The installation features selections from *The Raven* and *The Tell-Tale Heart*. Poe's Shadows has been made possible through the generous support of The School of Visual Arts, The School of Performing Arts, the Center for Humanities, the Department of English, the Athenaeum (Digital Humanities services) and Immersive Environments in University Libraries, the Moss Arts Center, and the Institute for Creativity, Arts, and Technology (ICAT).

THANK YOU

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