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open / close: assimilating immersive spaces in visual communication

Anika Sarin

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Anika Sarin

B.Des. in Communication Design
National Institute of Fashion Technology
New Delhi, 2012

Virginia Commonwealth University
Richmond, Virginia
May 2017

Main Advisor

David Shields

Chair and Associate Professor
Department of Graphic Design

Secondary Advisor

Lauren Thorson

Faculty and Designer-in-residence
Department of Graphic Design

External Advisor

Mariam Eqbal

Adjunct Faculty
Department of Kinetic Imaging

Graduate Program Director

Steven Hoskins

Associate Professor
Department of Graphic Design

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inception

My father is a veteran. His job led us to travel through the breadth of India and across its borders. By the age of twelve, I had lived in nine cities and seventeen houses.

Each city unfolded a distinctive cultural and social experience for me. Walking around the neighborhood was a way to discover and understand the new land and its people...

Streets

became



spaces of d i s c o v e r y

I familiarized myself with the city's texture by taking part in the everyday social activities and gatherings that transpired on the streets. In these streets, I met people from various backgrounds, explored historic monuments and through them the architecture from different centuries, and learned how cultural and economical lifestyles alter the aesthetics of space. These open spaces became places to connect, cherish and experience a city's fabric. Beyond an experience, these places became ways to question and learn about new ideas in urban environments.

In the novel *Invisible Cities*, journalist and writer, Italo Calvino walks us through the streets of fictional cities that differ in social and cultural tales, architecture and aesthetics. These cities are read in unimaginable ways and give us a sense of discovery as we try to envision them. They are not constructed from concrete, glass, and bricks but from ideas. Each city is an exploration of a sense of being, or, as Marco Polo tells Khan at one point, "[y]ou take delight not in a city's seven or seventy wonders but in the answer, it gives to a question of yours" (Calvino 44). It is a statement on our human condition as we dwell in the civilized world.

How we experience different parts of the city becomes a way for classifying spaces. Open green spaces give us the freedom to move around and indulge in leisure activities while being close to nature. Subway stations create a sense of urgency and our body moves with rapid speed to transit from one station to the next. Shopping districts are designed to foreground commercial activities while derelict buildings are old, forgotten places that are ready to be demolished and yet facilitate activities that are free and unrestrained in nature. Here, vandalism becomes an act of expression and the space turns from useless to creative. How people respond to different spaces defines its potential and characteristic.

I am interested in two spaces obverse to each other: open and closed. An open space develops organically based on how people inhabit it. Interacting with an open space is a dynamic, sporadic, multisensory, immersive, and subjective experience. In such spaces, we are confronted with an alternative aesthetic, one that is in conflict with the seamlessness of a closed space.

A closed space is anchored on definite variables like structure, use and boundaries. While interaction between people and space is important, the space is tightly controlled and interaction is designed. Through this thesis project, I present a method that metaphorically transforms the experience of a walk through a closed space into an open-ended and immersive experience.

abstract



When space develops as a response to our actions, it affords intimacy and a sense of belonging. It facilitates deeper expressiveness through engagement. By applying a method that uses fragmentation, recurrence and motion, I am metaphorically transforming an urban closed space to open. Through this transformation, I am creating a fresh person-space dialogue that temporarily destabilizes perception and encourages physical sensation which allows for an intimate experience of the space. An immersive interaction with an open space transgresses the urban sterility of a closed space and is capable of creating a diversity of distinct experiences.

Urban intimacy

Urban land is divided and designed to create highly functional cities. There are separate areas for recreation, education, leisure, business, and food. These designed spaces are less responsive and more controlling towards people who use or travel through them. Closed spaces create a mode of transit and not a place of dwelling; places where communication engulfs users leaving little margin for convivial language. Power is held by space and less by people who use it. Moving through the city becomes an act of pacifying our bodies and tuning our minds to one single frequency. It is easy to get habituated to these spaces and lose sense of a deeper connection with the environment that we live in every day. As a result, our experience of the city becomes mundane and monotonous.

By breaking order, a unique way to experience closed spaces emerges; one that defamiliarizes the encounter between the feet and city. A responsive space opens the gates to engagement, immersion and eventually, intimacy. It widens our understanding that space can be experienced, used, and created as a result of our actions. An open experience of a closed space can activate sensation, create participation, grant liberty of expression, and provide a more satisfying exposure. Tim Edensor, a reader in Cultural Geography at Manchester Metropolitan University writes in the book *City Visions*, “[w]e should celebrate and foster spaces which contain confusion and the energy created by contrasts and clashes. The value of disruption – that which ordering processes try to expunge – lies in its potential

to dramatize and reveal the complexities of co-existence, difference and friction that permeate the city. Moments of confrontation, of self-displacement, are vital to preserve openness to stimuli, to awaken the senses” (Edensor 136).

Immersion is an act of transporting oneself to a place where reality is experienced subjectively. Open space makes an alternative connection with our cognition, one that doesn't dictate what space should communicate to us but allows for communication to permeate through its experience. These experiences heighten the absorption of communication in space and strengthens the connections formed between people and the urban environment.

problem statement



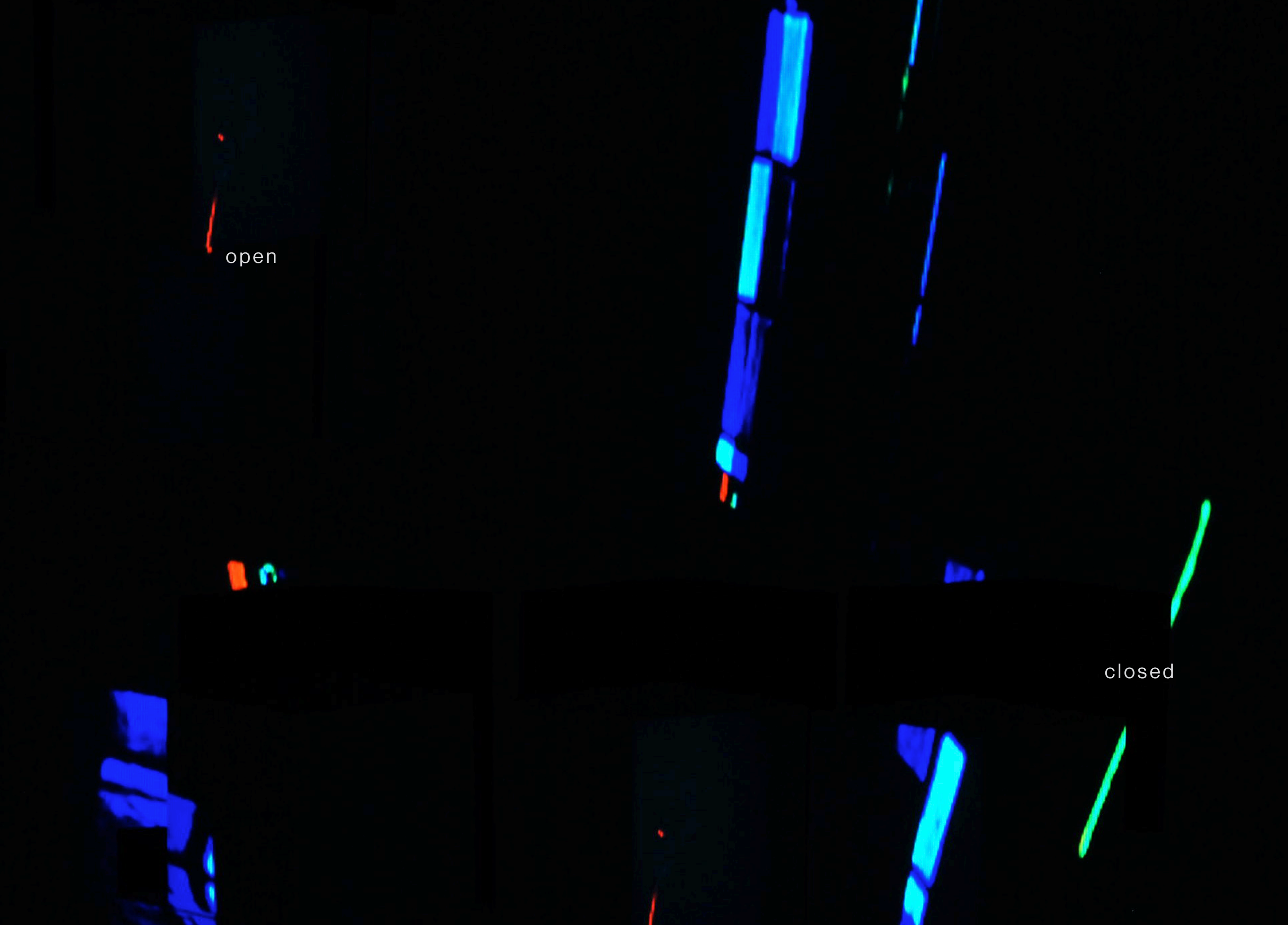
Graphic design and space

Designing and thinking through space is traditionally exclusive to fields like architecture, interior design and urban planning. However, I believe that a multidisciplinary approach to problem solving is essential in the contemporary design world. Architecture collaborates with the field of virtual reality to fully realize the experience of walking through a designed space before it is even built. In this way, architects experience a space without being in it. Urban planning derives its information on people-space interaction from the field of environmental psychology to design more engaging urban environments.

A city is an ultra-complex system, comparable to one found in a living organism. With its rapidly growing economic, social, cultural, political, and environmental networks, it has in fact stepped beyond the behavior of any recognized living organism. Cities are unpredictable, incomprehensible and sometimes escape the potential of our full understanding of their multifaceted nature. It is therefore valuable to work on city related design problems in collaboration rather than individually.

Graphic design has the potential to transform architectural spaces without making any changes to the physical structure through the use of graphics, color and typography. Space is both the medium to explore and the subject of transformation. Going beyond the realm of wayfinding and space graphics, this thesis project presents a new way to work with space that has the ability to transform urban environments and through that, alter a city's texture.





open

closed

Open and closed space can be found in parts of the same cities. To explain them in detail, I draw a comparison between an Indian market in Delhi named Chandni Chowk and an American market in Richmond, Virginia named Carytown. These locations are used as examples, as means to explore the ideas of open and close.

The concept of an open space can be described well through the example of an Indian market named Chandni Chowk in Old Delhi. The market is not designed with the guidelines of a grid system, but continues to develop organically based on how people inhabit it. Built in 1650 CE, the market has since grown and evolved in response to the interaction from the inhabitants and visitors.

In its structure and utility, the space is adaptable and flexible towards its users. Some sellers display their wares on tall panels and place them outside their shops, covering a part of the street. The space gives the vendors freedom to venture into different sections of the market. The street is enriched with temporary uses and functions. The same section of the market being used for commercial activities is transformed to accommodate

social gatherings & festivals. While defining open-ended space in the book *Loose Space: Possibility and Diversity in Urban Life*, Architect Nisha A. Fernando writes, “[o]pen-ended streets enable a wide range of commercial and social activities that contribute to public life in cities without significant modifications to their overall physical fabric” (Fernando 54). Physical features that can be arranged and rearranged play a significant role in making a street adaptable to diverse uses.

Walking in the bazaar is an organic and sensory experience. The space exerts minimum control over its users. There are no signs providing directions for pedestrians, no street signs that help them identify their location, and most street vendors’ shops do not have branded signage to persuade customers to buy their merchan-

dise. The market exists in the absence of any stringent attempts to maintain aesthetic order or of rigid understandings about how space should be designed and used. People move randomly and in an unplanned manner across the market and stop at what attracts them. Due to the absence of a system of utilitarian and commercial signs in the bazaar, the less overt signs such as products, color, people, smell, and sound dominate the space. These signs overlap and intersect in space and constantly move around.

Movement through the streets happens in fits and starts and in relation to the other things in the street. This phenomenon can be related to Architect Ray Lucas’s experience of navigating through

open space





Chandni Chowk, Dotphoto



Old Delhi with its sea of people, Beniamuna



moods of bazaar, Mridula Dwivedi



The streets during night, PTI



View of Old Delhi in the background of Jama Masjid, F.S.Shazuddin

The richness of the environment both entices and frustrates. The scene is one of disorder where things of unlike categories are juxtaposed oddly against each other in space.

the vast subway interchange station of Shinjuku, Tokyo during the rush hour. Transiting through a subway station and moving with and counter to the crowd, Lucas recorded his bodily movement in the form of notations. The records showed many recurrent motifs which he describes using the conventions of architectural drawing. “[e]ach motif takes the form of a corridor whose lineal axis corresponds to the passage of time. In this way, Lucas is able to reconstruct the actual architectural experience of individual subway walkers as they deal with the movements of crowds, the distractions of advertising and signage, and the many obstacles placed in their path. Instead of regarding walking as a practice of occupation, channeled within the confines of a predetermined architectural space, he can show us how for the inhabitant of the subway, walking itself is a practice of architecture that generates its own form” (Ingold 14).

The richness of the environment both entices and frustrates. The scene is one of disorder where things of unlike categories are juxtaposed oddly against each other in space. Tim Edensor writes about the sensory experience of walking through an Indian market in the book *City visions*, “[i]n less regulated urban spaces, such as an Indian bazaar, fluid events, activities and movements arise, random juxtapositions of objects and people occur, and sensory stimulation precludes anything other than a contingent performance. Such spaces are more likely to stimulate sense, feeling, dialogue, excitement, a sense of commonality and diversity” (Edensor 136). The market never remains the same when visited again. The space transforms based on how people interact with it.

An open space comes together as a response to people’s interaction with it. It is a space created by the community and isn’t designed by one person for a group of people. The multifarious experience of an open space gives us a new vision for an urban environment.



I walk down a road enclosed on both sides

by
t
i
n
y

shops selling

jewelry, perfumes,

spices,

electrical equipment,

fabric,

street food,

textbooks,

paintings

and

antiques.

A loud voice yelling

"Chandni Chowk to

India gate,

100 Rupees,"

a
c
c
e
l
e
r
a
t
e
s
t
o
w
a
r
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e.

I
t
u
r
n

in its direction and an auto rickshaw brushes pass me.

The voice fades into the blur of the d e n s e

The market is a lot like a 'crowded space' as defined by anthropologist Tim Ingold in the book *Ways of Walking*, "[i]n a densely-populated encounter area, civic space is transformed from a static array of geometrically circumscribed zones and structures into something more like a whirlpool of humanity-on-the-move. For the individual pedestrian, surrounded on all sides by the ebb and flow of the crowd, it takes on the character of a labyrinth" (Ingold 14).

...crowd...

Left,

d
i
a
g
o
n
a
l,

right,

"Excuse me sir!"...

I walk

deeper

into the market and s p l a s h e s

of colors begin to

a p p e a r.

A bright blue sweater is h
a
n
g
i
n
g

from a w i r e

t
i
e
d

to two poles,

a magenta radio
box

is blasting Bollywood dance music,

a lady with a purple sari is fighting with a man with a bright pink turban.

I take another t u r n

and am encountered by a

neon yellow
w
a
l
l

with big red painted letters that say 'Fight Violence'.



Multiple voices emanating from different people walking on the street beside me begins to turn into a blanket of noise.

The smell of the merchandise

is mixed with the aroma of Indian street food permeates the atmosphere

Residential apartments are stacked on top of commercial spaces.

Clothes drying on a wire

apartments begin to merge with clothes hanging in the shops.

the atmosphere

The food stalls are not visible but I can hear the sound of a karchi (metal ladle) hitting a karahi (a big metal pot used for cooking).

the atmosphere

the sound of a karchi (metal ladle) hitting

a karahi (a big metal pot used for cooking).

the atmosphere

the sound of a karchi (metal ladle) hitting a karahi (a big metal pot used for cooking).

apartments begin to

merge

with

clothes

in the shops.

The concept of a closed space can be described well through the example of Carytown in Richmond, Virginia. Carytown is an urban retail district lining Cary Street at the southern end of the Museum District. Many of the shops in Carytown are located in historical buildings (although of a much more recent era than those of Chandi Chowk). The Cary Street Park and Shop Center was built in the 1930s and opened for business in 1938. As more shops developed on the surrounding property, the entire area became bustling with customers and tourists.

In contrast to the bazaar in India, Carytown is comprised primarily of a central main thoroughfare (W. Cary Street) that is lined with stores selling various goods (handmade products, bikes, burgers, vinyl records, etc.). The urban retail market exists in an area that is designed with an explicit, gridded street plan. There are well-defined spaces for shops, walking and recreation within that grid. Many streets run perpendicular to the main street in the market to form blocks. The stores occupy sequential spaces within these blocks. In comparison to the Indian bazaar, the urban market is highly organized and spacious.

Laws regulate space assignments and control pedestrian and traffic movement. These laws diminish adaptability and flexibility in space. Logos, branding, traffic signs, and advertisements classify space and guide people. In the Indian market, minimal undesigned commercial signs become invisible in space as they are dominated by business and social activities, and sensory stimulation. In Carytown the billboards and store signage displaying store names can be seen at a distance creating an indexical catalog of potential businesses to visit.

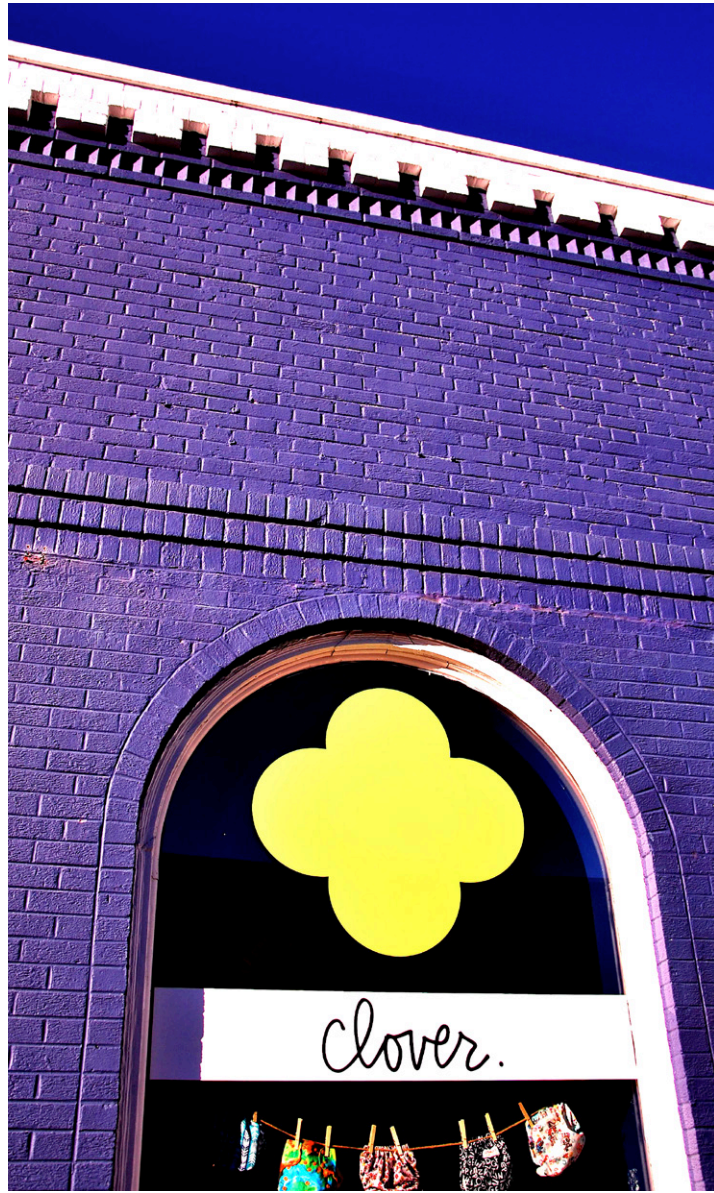
The space follows the 'syntax' of linearity, order, and procedure. While individual brand signage position commercial space, the shopping district is itself branded under the umbrella of 'Carytown: eat, shop, play.' The market's logo is displayed on banners in and around the market. The buildings are colored in different shades of pink, blue and green to add an element of fun to the space and the experience of shopping. Walls covered in graffiti in some parts of the market add an atmosphere of artistic expression. Landscaped green spaces provide the shoppers with peaceful breaks from shopping.

Temporary uses and functions are not spontaneous but planned and executed in an orderly manner. The space is designed to maximize its function for its users. Chris Rojek, a cultural sociologist, argues in his book *Decentering Leisure*, that urban spaces are typically designed to shut out "extraneous, chaotic elements" and reduce "visual and functional forms to a few key images. By framing views, drawing attention to privileged sights and highlighting particular cultural themes, tourist managers and designers foreground the visual consumption of a place" (Rojek 120).

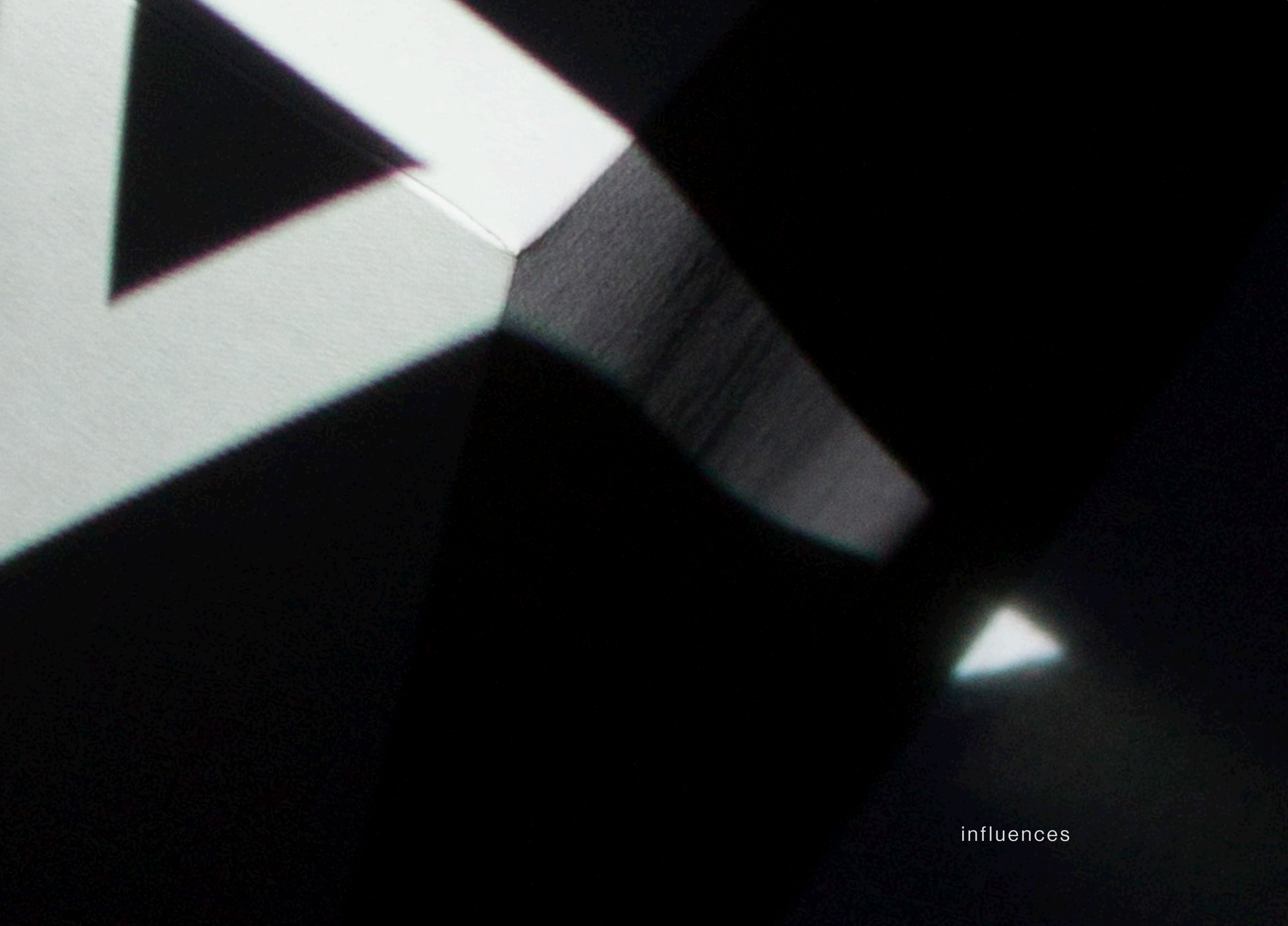
A closed space exists in a restricted environment where activities are directed. These spaces prioritize purpose and diminish the experience. There is a strong need to broader the vision for the design of closed spaces.

closed space





Tim Edensor in the book *Ways of Walking* writes "[i]n aesthetically regulated urban space, the gaze of pedestrians is organized so as to repress the kinesthetic qualities of vision, which becomes desensualized through the distancing of the tactile, auditory and aromatic qualities of what is beheld" (Edensor 134).



influences

In the development of the method used in this thesis project for transforming a closed space to open, many artists, designers, writers, and musicians influenced my thinking and process of working. Valuable precedents include; a focus on mapping city environments, the creation of immersive spaces through the use of light and structure and sound as a transportation device for listeners.

The People, Place and Space Reader

The interaction between space and people has been studied through the lens of psychology, sociology, anthropology, geography, architecture and urban planning. In his book, *The People, Place and Space Reader*, cultural geographer and environmental psychologist Jen Jack Gieseeking defines Environmental Psychology as Environmental Social Science that “[e]xamines how people relate to, create, and define space and place; and how space and place relate to, shape, and define people and their experiences” (Gieseeking 20). The field defines the term environment broadly, encompassing natural environments, social settings, built environments, learning environments, and informational environments. Through Environmental Social Science, my work focusses on the interaction between the built environment and its inhabitants. This book was influential in looking at the intersection between people and space from the lens of fields like sociology, geography and urban planning which are very distinct

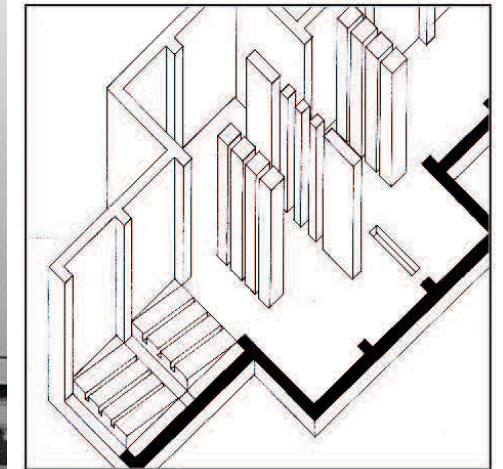
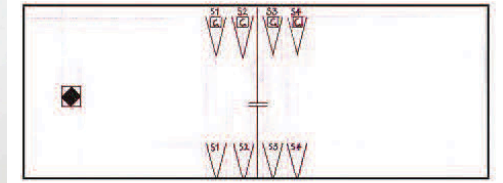
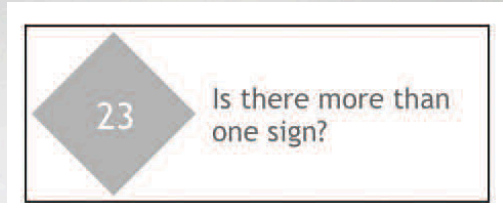
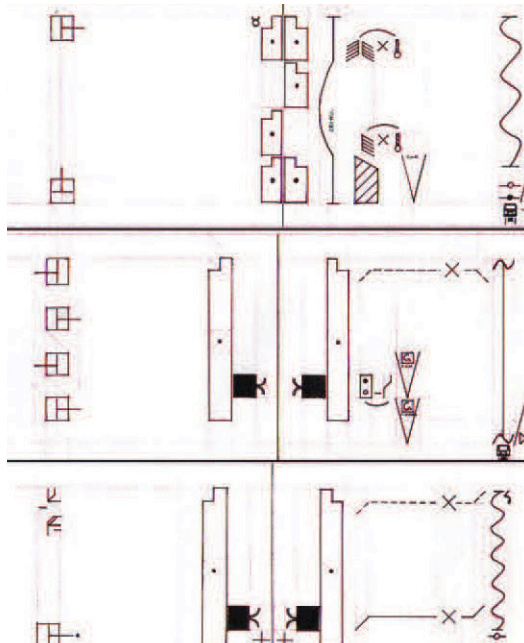
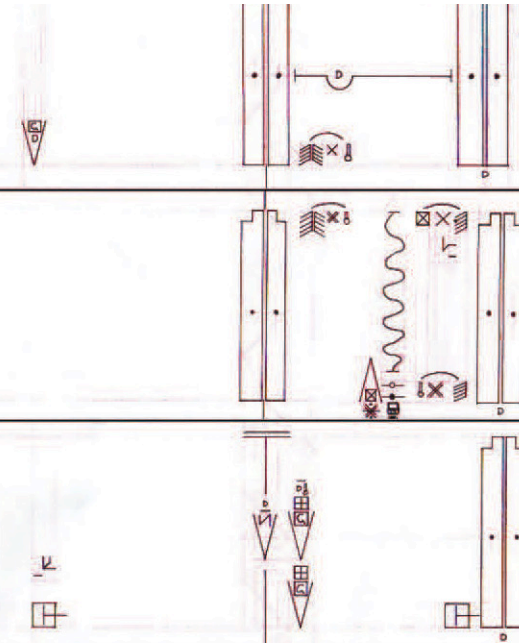
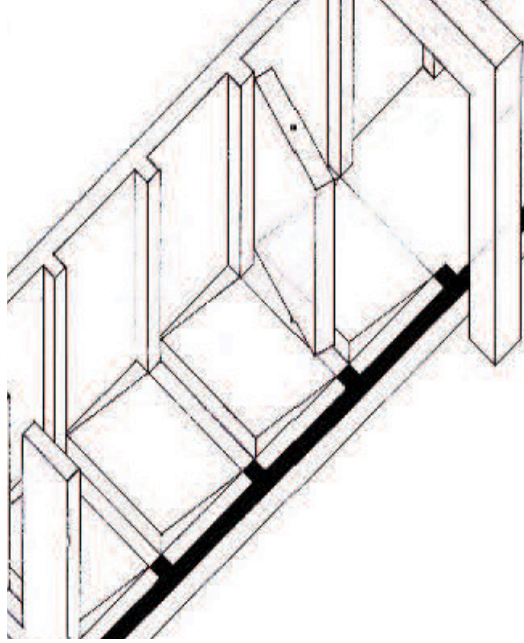
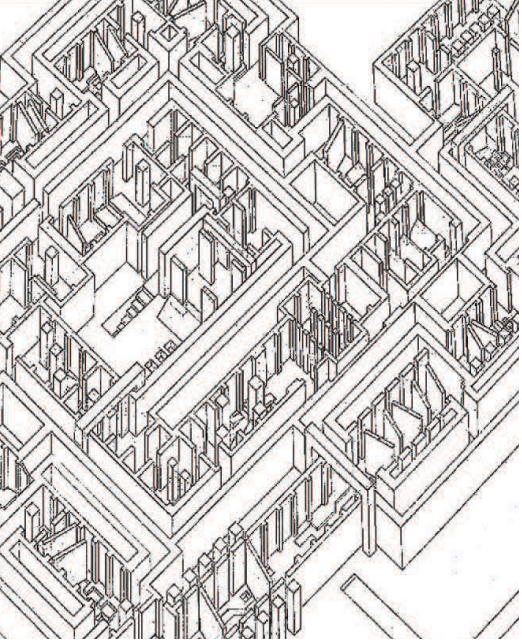
to graphic design. It broadened my perspective on how experiences are created and defined in urban cities and helped me think of the urban experience as fragmented and uneven, stimulating and liberating. Of special interest was Section seven in the book that includes essays that provide variant viewpoints on Urban Experience by the likes of Jane Jacobs and Michel de Certeau. From looking at urban experiences as diverse and dynamic, changing often with advances in technology, cultural and social histories, and migrations of people to understanding urbanity through urban people, this section gives the reader a complete sense of what it is like to live in an urban city. It also emphasizes how getting from place to place puts a city dweller in contact with a stimulating variety of people and material conditions. At the same time, these experiences can tend to render the urbanite anonymous within the crowd.

Noriyuki Fujimura in the Conflux festival

Conflux festival, launched in 2003, is an annual event produced by Glowlab dedicated to current artistic and social investigations in psychogeography (the study of the effects of the geographic environment on the emotions and behavior of individuals). Part festival and part conference, it brings visual and sound artists, writers, urban adventurers and the public together in New York to explore the physical and psychological landscape of the city. Artist Noriyuki Fujimura, an interactive media artist, presented a project called *Footprint mapping* in the Conflux festival in which she provided the participants with tools such as a cheap pedometer (step meter), digital compass, microprocessor, webcam, and laptop computer. Through these tools, the participants were able to map out their walks in the form of digital photographs. At the end of each day, the

city and people





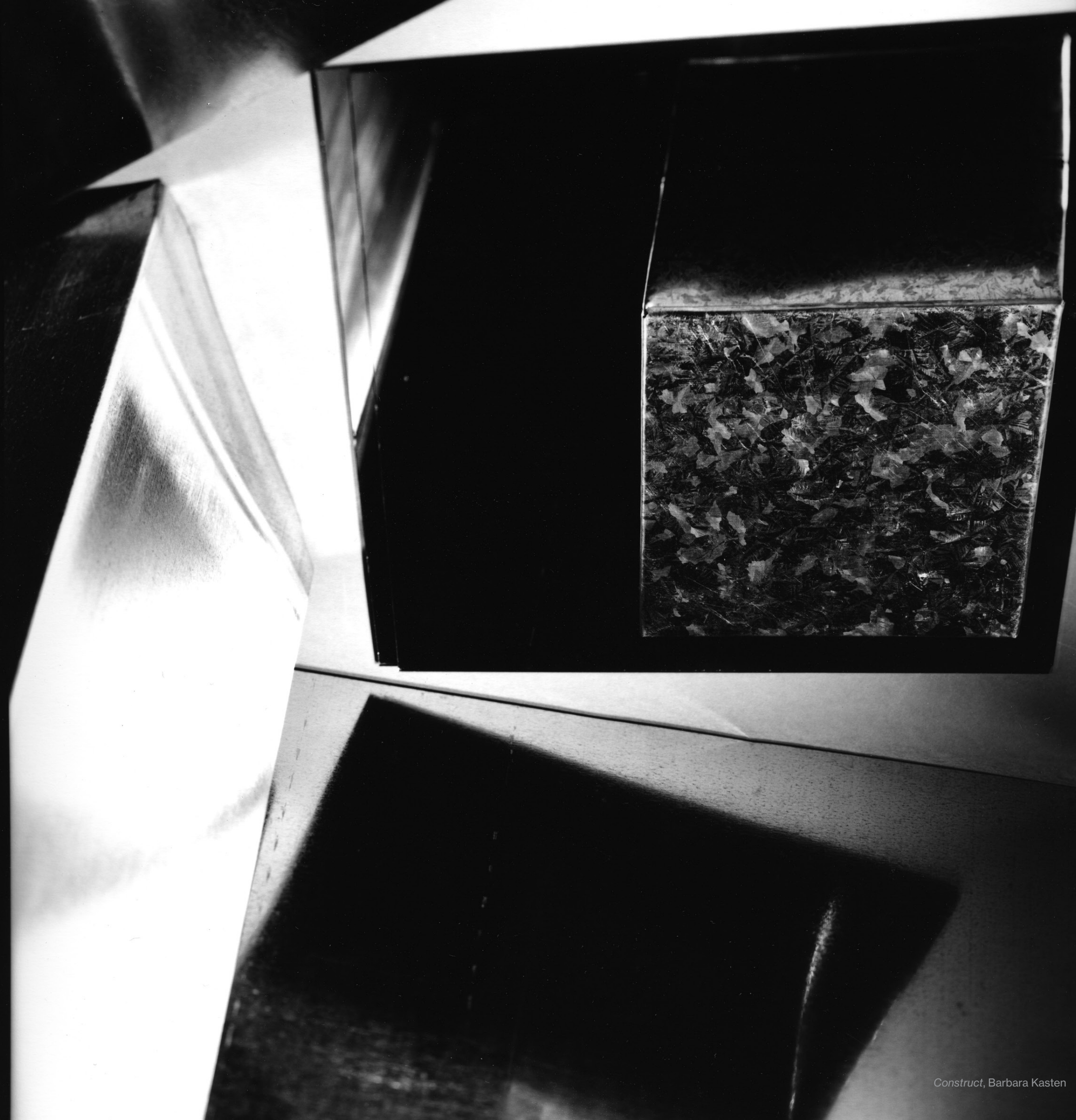
Getting lost in Tokyo, Raymond Lucas

I used photographs to gather my point of view on the street and many times used a top-down perspective to record my walk along with other views of front and side.

artist aggregated each participant's footprint map into a single digital collage. Then other participants discovered that they had possibly walked in someone else's footprint. I was interested in the method developed by Noriyuki for condensing the long walks of different people in the urban environment through photographs. Exploring the city from the top-down perspective of a person walking on the streets transforms how we experience a street and renders a beautiful journey of a walk through a street. In my own method, developed for this thesis project, I used photographs to gather my point of view on the street and many times used a top-down perspective to record my walk along with other views of front and side.

Raymond Lucas

Transiting in a subway station and moving with and counter to the crowd, Lucas recorded his bodily movement in the form of notations. The records showed many recurrent motifs which he describes using the conventions of architectural drawing. These notations indicated the passage of time through space. "[i]n this way Lucas is able to reconstruct the actual architectural experience of individual subway walkers as they deal with the movements of crowds, the distractions of advertising and signage, and the many obstacles placed in their path. Instead of regarding walking as a practice of occupation, channeled within the confines of a predetermined architectural space, he can show us how for the inhabitant of the subway, walking itself is a practice of architecture that generates its own form" (Ingold 15). While moving through an Indian market, I examined my movement and thought a lot about how this movement is distinct to walking anywhere in the world; it's architectural nature in contrast to its organic driving forces. Lucas's work was influential in that it aligned with my own thoughts about walking as an act of creating form. Sensory, visual, and auditory experience combined with this form begins to develop space metaphorically. This metaphorical space has the potential to exist in the real world and creates an experience that is distinct from the space it is derived.



Barbara Kasten

Photographer and artist Barbara Kasten creates abstracted images of interior architectural settings and uses photography to create dynamic reinterpretations of familiar environments. She makes photographs and video projections in her studio that evoke an experience of movement through modernist architecture. She photographs elaborate compositions of objects in the studio such as Platonic shapes, paper, plexiglass, and wire, often illuminated by theatrical lighting and colored gels. When recorded by her large-format camera and without digital manipulation, Kasten's arrangements become ambiguous in scale, confusing in spatial dimensions, and uncertain in differentiation between surface, shape, and shadow. On a grander scale, Kasten also pictures architectural spaces and landscapes, manipulating the environment through carefully placed mirrors and dramatic gemlike tones.

While abstract, her work is subversively political, asking viewers to question their perceptions fundamentally. Barbara Kasten's work impacted my thinking in many ways. Her approach to manipulate existing architectural landscapes and build her own environments with light, shadow, form, structure and photography influenced my approach of using cubes, light, projection and camera to build spaces that transform how we experience existing urban environment. Through these tools, I am building environments that ask of my viewers to understand space through physical sensation. While creating my video work that produces abstract shapes, rhythmic motion and a landscape of colors, I was influenced by Kasten's video projections of rotating objects and planes of drifting color that were cast onto building exteriors and interiors to destabilize the architecture through the optical fragmentation of forms.

James Turrell has innovated photographic techniques that allow light to have a physical presence. Using holography to make the light itself the subject rather than the medium, Turrell creates colored light installations that appear to possess mass and take up space as planes, cubes, pyramids, and tunnels. Turrell's work involves explorations in light and space that speak to viewers without words, impacting the eye, body, and mind with the force of a spiritual awakening. Whether harnessing the light at sunset or transforming the glow of a television into a fluctuating portal, Turrell's art places viewers in a realm of pure experience.

James Turrell



I am interested in this experience that is immersive and invites the viewer to break the boundaries between themselves and the work. Turrell uses a room as his container and transforms it into a limitless space where seeing takes place. To visualize limitlessness, a minimum of architecture is needed; one that emphasizes the art of joints, the partitions and edges, of light and shadow. I am inspired by his use of light as an incandescent or nocturnal material. His spaces create a sensation that is very different to the ordinary reality. The viewer is asked to submit themselves to the power of the space that distances them from visible things by focusing on the gaze itself. It is an intimate act of closing one's eyes to open one's vision.



Anthony McCall

Anthony McCall is an artist known for his 'solid-light' installations, a series that he began in 1973 with *Line Describing a Cone*, in which a volumetric form composed of projected light slowly evolves in three-dimensional space. Occupying a space between cinema, sculpture, and drawing, these works are simple projections that strikingly emphasize the sculptural qualities of a beam of light. His work was of special interest to me as it shifts the relationship of the audience to film, as viewers become participants, their bodies intersecting and modifying the transitory forms.

Ikeda's music is concerned primarily with sound in a variety of raw states, such as sine tones and noise, often using frequencies at the edges of the range of human hearing. He uses high-frequency sound that the listener becomes aware of only upon its disappearance. I was inspired by Ikeda's visual and sonic environments where visitors are submerged in an extreme illustration of projected and synchronized data. His work uses scale, light, shade, volume, shadow, electronic sounds, and rhythm to flood the senses. He uses a stream of video projection that is sometime 54 feet wide by 40 feet tall. Through his work, I was able to visualize and understand the power of large-scale projections that envelop the viewer. His projections become visual landscapes, spaces that you can walk, talk and breathe in. In some ways, his work doesn't just invite immersion but a kind of meditation where the viewer gains knowledge by staring at the work for long periods of time.



Seti

Musicians produce sounds that transport the user into experiencing a distinctive kind of space. Seti is an ambient electronic band formed in 1993 in New York City. The mood of the music is pervasively mysterious, grandiose and occasionally spooky; the sounds used are expansive, even alien in nature. Some songs could be considered noise music, as they include white noise and samples from radio telescopes scanning deep space (including pulsars, radiation, supernovae, and other astronomical phenomena). Many other sounds give the impressions of quiet computers, signals travelling immense distances, garbled radio transmissions, and electrical energies. The net effect of the music is that the listener feels transported to the deep recesses of space, or feel like they're listening to sounds, transmissions, or events happening in deep space. This immersion through sound was influential in the way I began to think about sound and its transportational powers. It helped me realize that sound creates depth in space and allows us to see what is not visible to the eyes. Through sound, we can touch, smell, and walk into an idea of a place that is formed from past memories and sensations.

Alvin Lucier

Alvin Lucier's *I am sitting in a room* was a big inspiration for developing the method for this thesis project that uses fragmentation, repetition, and motion. The piece featured Lucier recording himself narrating a text, and then playing the tape recording back into the room, re-recording it. I am fascinated by the acoustical properties of the space that transform the speech: frequencies resonant to the room are repeatedly reinforced, while the others are attenuated until only the rhythm of the words remains recognizable as the driving force behind a pattern of ringing tones. Alvin Lucier was probably the first composer to real-

ize that an architectural space could be more than a supportive setting for musical instruments, that it could be an instrument itself. His work reminds me of the act of repetitive walking through an environment to discover something new on each walk that changes how we perceive and understand our surroundings. The memories that remain with us and the moments that fade away. His method of recording his voice is an act of projecting himself into a room and works in a loop of response or feedback that the space gives him.

sound and space



method

The intention of the thesis work was to create a method that could metaphorically transform the experience of a walk through a closed space into an open ended, immersive and engaging experience. I used a specific set of tools to create a metaphoric closed space and a set of submethods that broke the existing space to create an open space.

Fragmentation

In an open-ended space, multiple activities happen at the same time. Parsing these activities into commercial and social categories that distinguish one space from another is not an easy task. An open-ended space is not only experienced in fragments, but the space itself is fragmented by uneven structures of buildings and unregulated walking paths.

I use fragmentation as a method to metaphorically transform the experience of a single walk in a closed space into an open-ended experience. Fragmentation destroys existing order in the closed space and encourages organic growth. It helps in transforming a space from objective to subjective, closed to open. It generates new forms and spatial arrangements that are dynamic and surprising. It creates temporary boundaries that constantly merge together to give rise to new places.

Movement

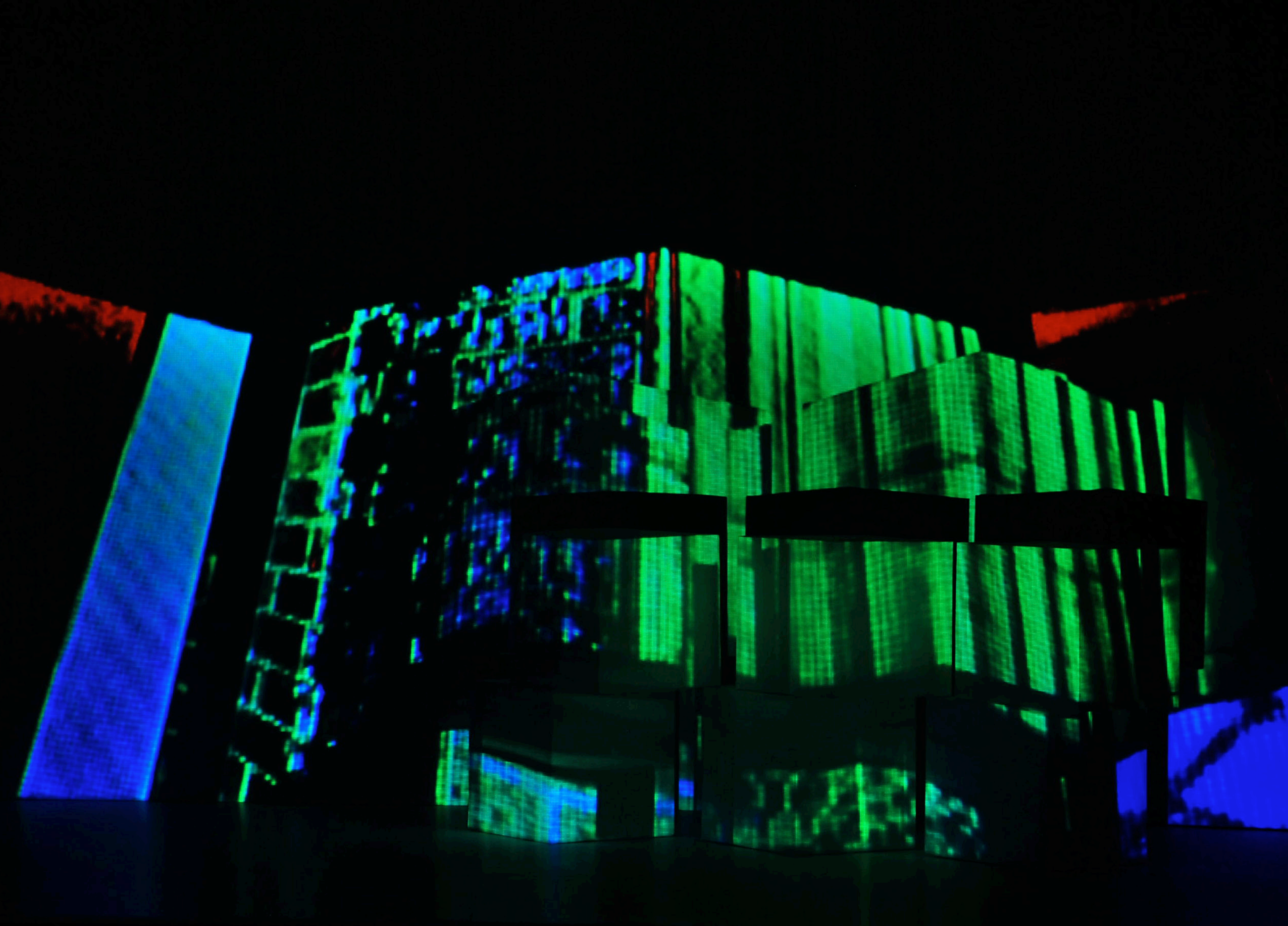
Walking creates movement and through movement, I am able to interact with an outdoor space and collect my experience in the form of photographs. Movement also facilitates my interaction with the closed space formed with cubes and projections. It is the open-ended aspect of this closed method. It is a gesture made by my body; a gesture that facilitates person-space interaction.

Recurrence

Recurrence is an act of repetition, an event that occurs over and over again. Each time that one takes a walk through space, something new is revealed that changes how we perceive the space. I use recurrence as a method to repeatedly facilitate movement and fragmentation and hence continuously transform the experience of the closed space.

submethods

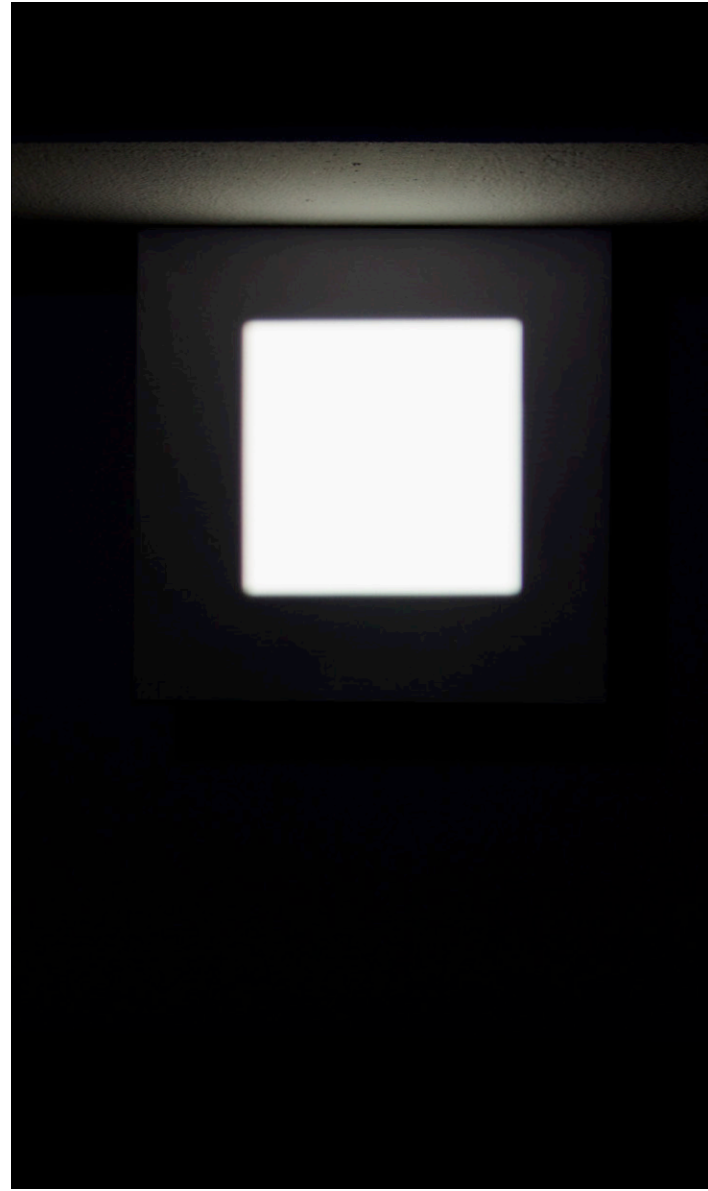






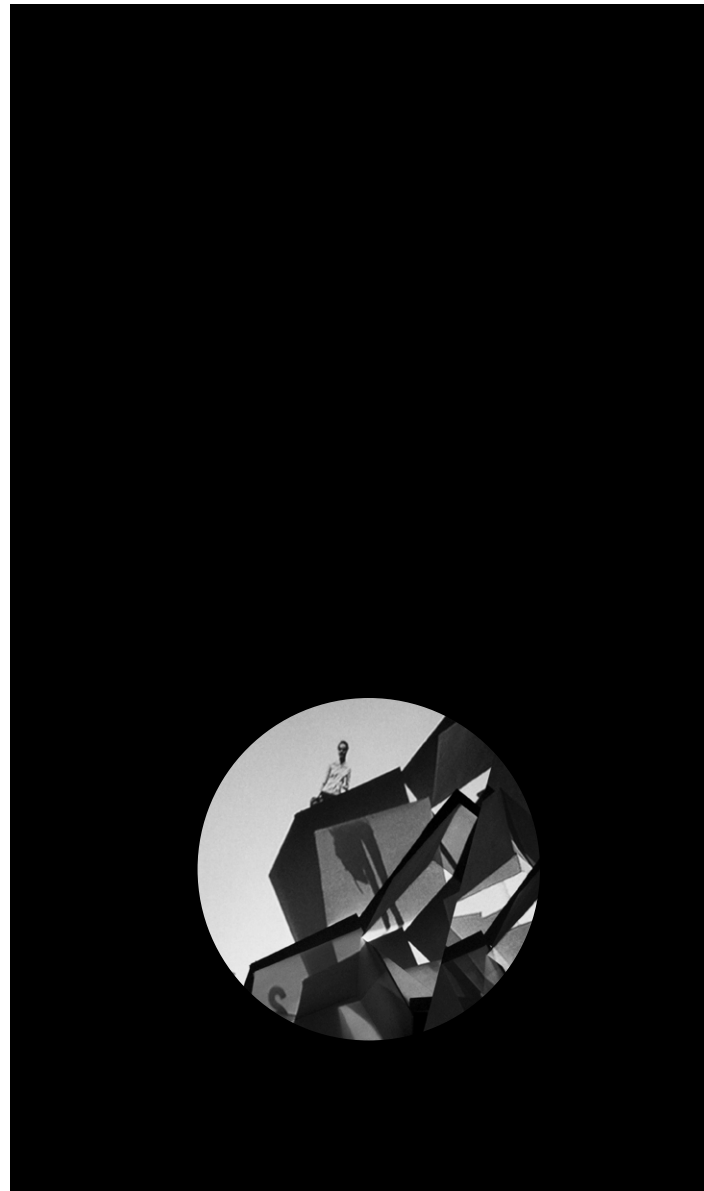
Cube

As a symbol of stability, order, uniformity, symmetry and geometric perfection, the cube represents the idea of a controlled and closed space. It is also representative of a block in an urban city grid system.



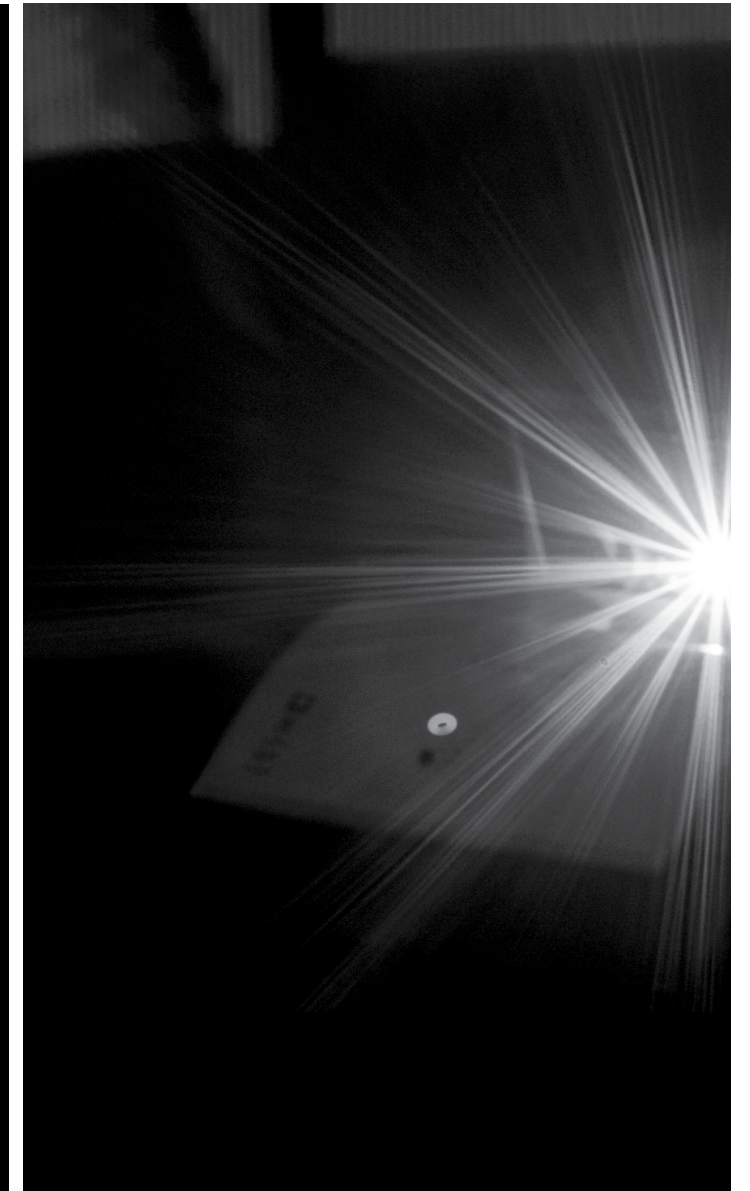
Light

Light is used as a tool for spatial organization in architecture, interior design, stage design, theatre and electrical engineering. Light defines space; illuminates it, reveals form, is essential for functionality and generates an emotional response from the user. I am using light as a tool that carries visual information. The visual information is the recordings of my experiences in urban public spaces. Projection is the hyper sense of realism, a representation of an experience. Through the projection, I am able to recreate my experience of walking through space metaphorically.



Camera

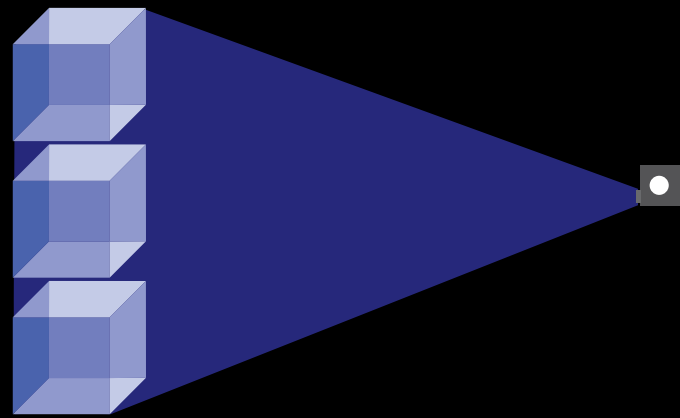
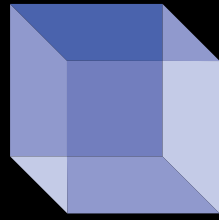
Camera is a tool that captures and facilitates the process of transformation of space from closed to open-ended. The light that forms a projection on the cube is the same light that enters the camera to create an image of itself.



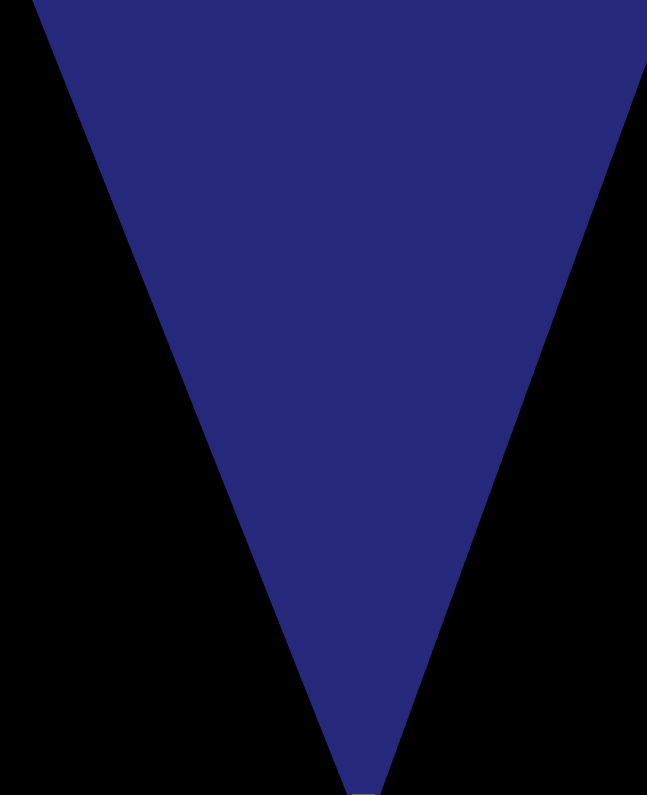
Projector

Using projection as a part of this analog method has been an interesting exploration. In the past, I have only used projectors to present digital work or project movies. In the method, photographing the projections and then projecting the photographs is a fresh mixed-media approach for me. Projector is a tool that is used to create this work and not as just a medium to project the final work produced through the method.

I am projecting light carrying image and typography on cubes.



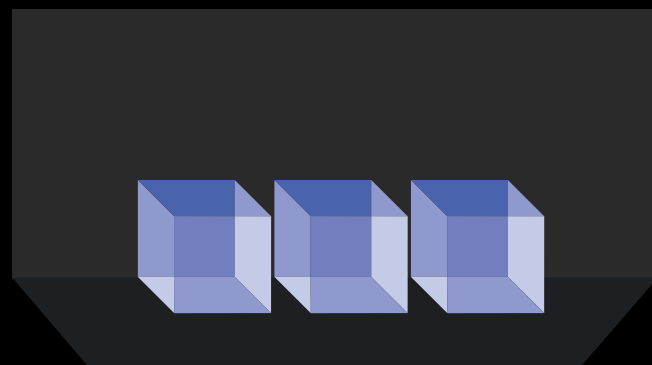
The light is coming from an LCD projector.



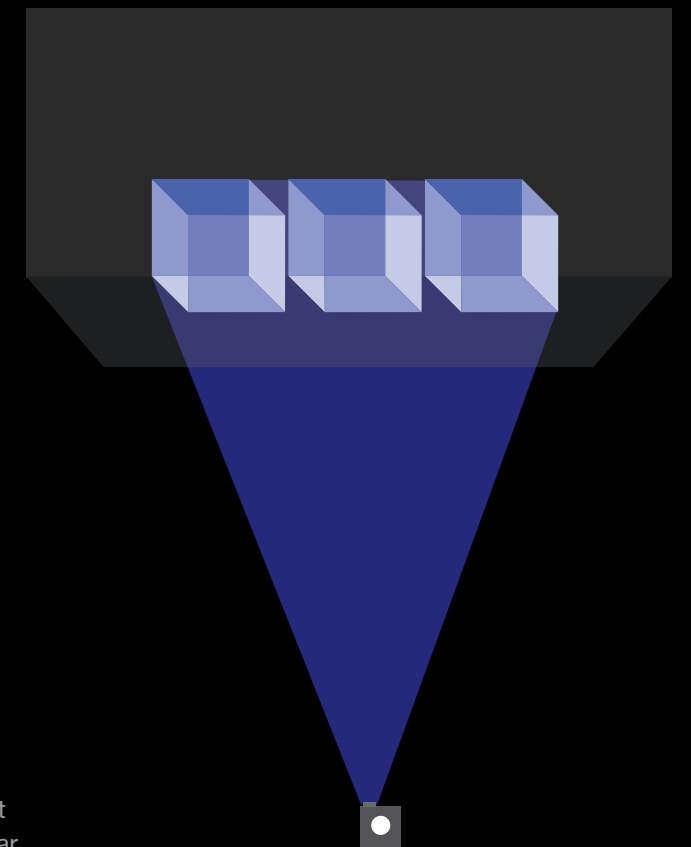
The projector is placed at a constant position in relation to the cube.



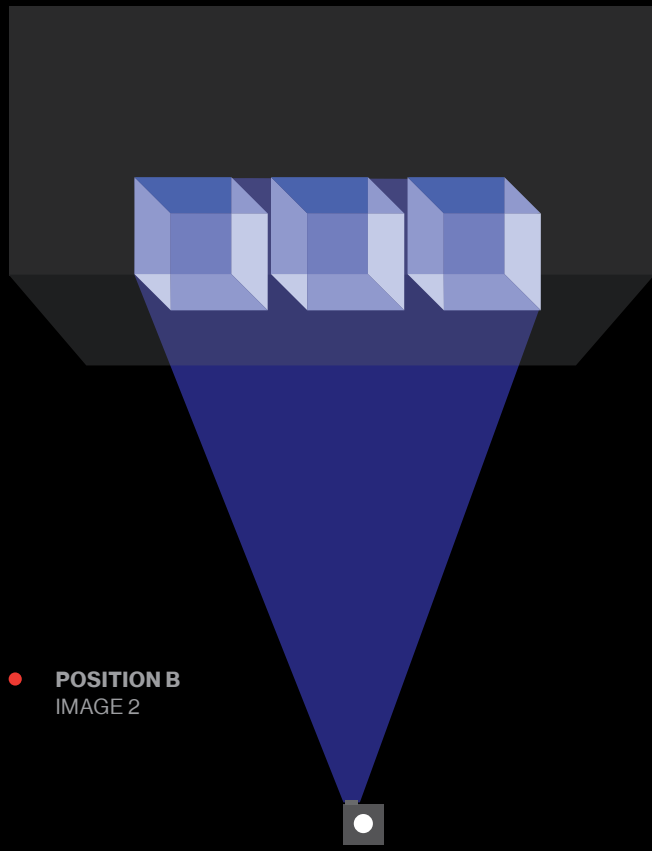
In a dark room, I place a white board behind the cubes and a black or white board at the bottom.



One DSLR camera is placed right behind the projector, perpendicular to the front of the cubes. This is position A.



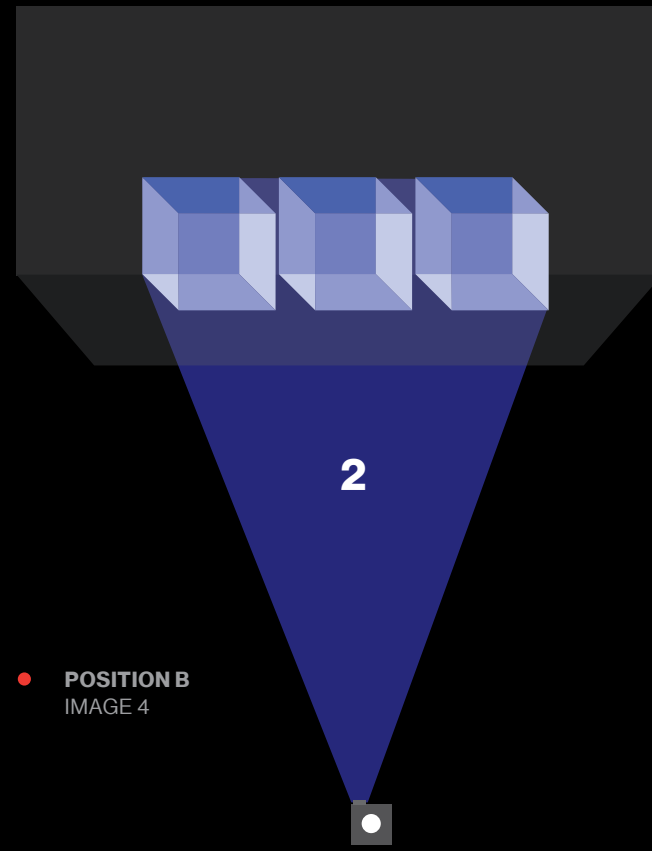
● POSITION A



● POSITION B
IMAGE 2

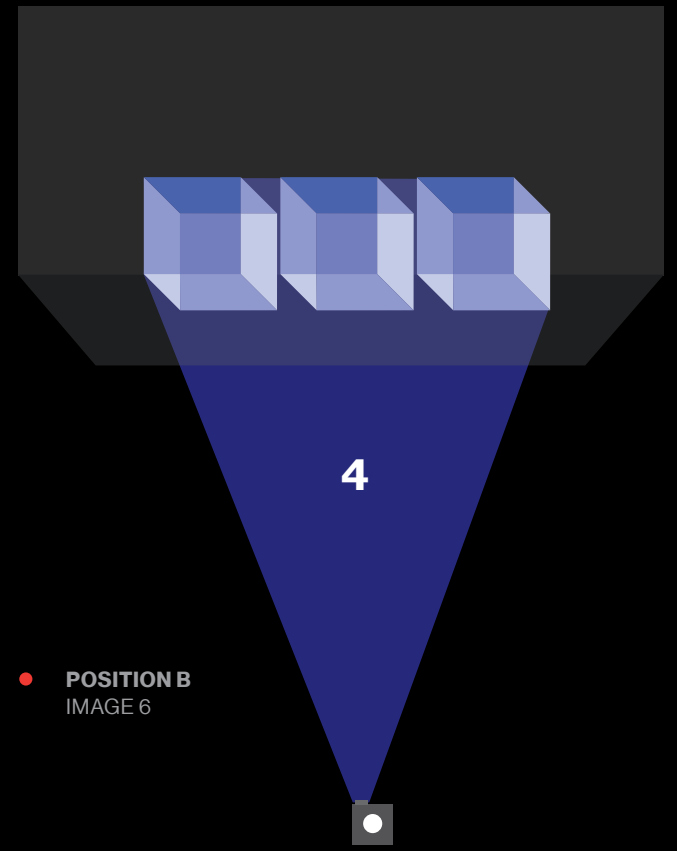
● POSITION A
IMAGE 1

Another DSLR camera is placed at Position B, which could be anywhere in relation to cubes. The images shown in the sequence are taken from Position A.



● POSITION B
IMAGE 4

● POSITION A
IMAGE 3

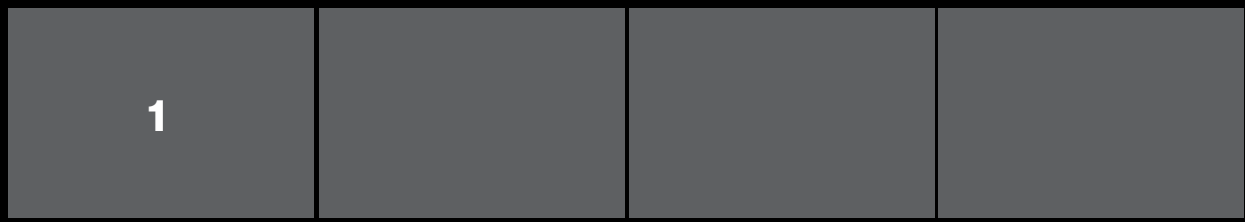


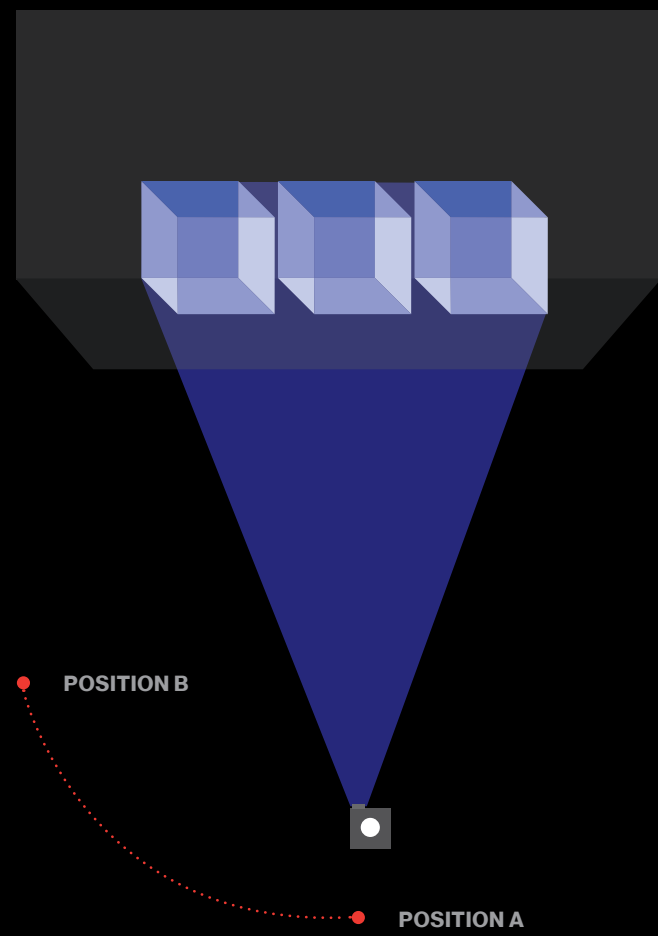
● POSITION B
IMAGE 6

● POSITION A
IMAGE 5

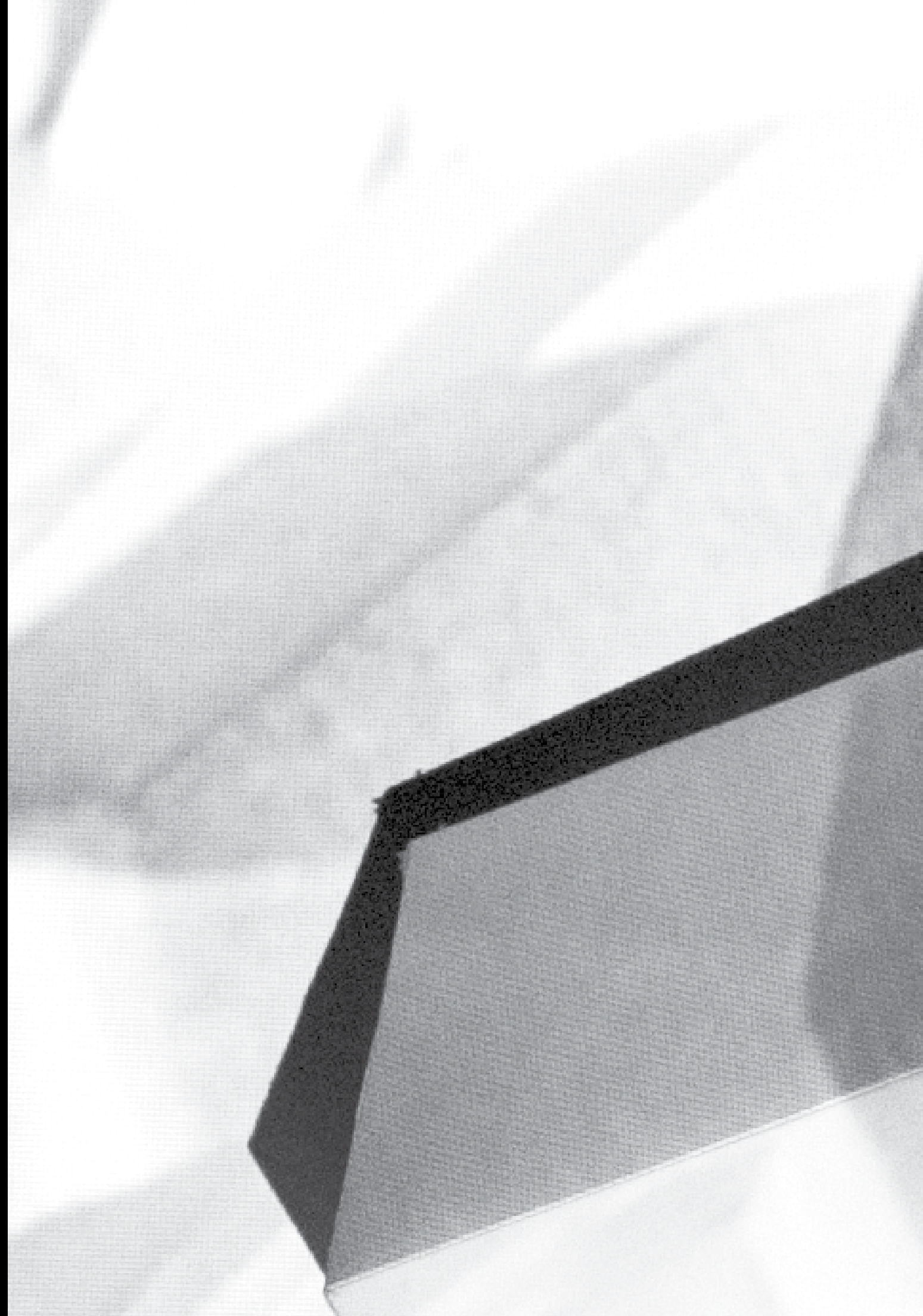
The first picture clicked at Position A is the first image in the sequence. Let's call this 1. The second picture is clicked at Position B. Let's call this 2.

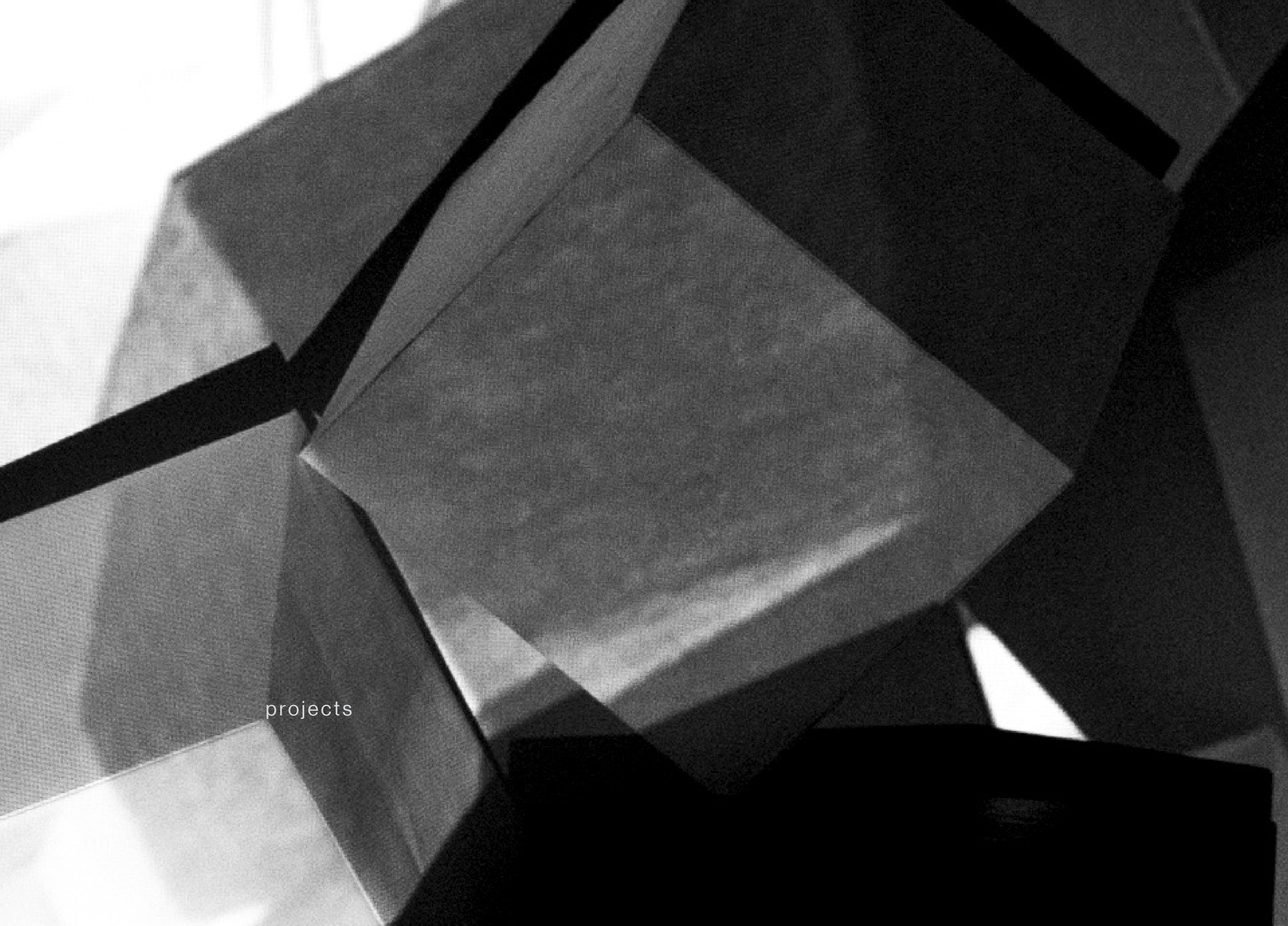
2 is projected on the cubes. The third picture is clicked at Position A. This picture captures the projection of Image 2 on the cubes. This process is repeated till the fragmented elements have reduced to their essential form and color.





The person-space interaction is described as the movement from position A to position B. Through this movement and shifting viewpoints, the person interacts with the space without changing the position and structure of the cubes and without moving any of the tools.





projects

Out of the many projects that I worked on in the past two years, three have provided me with strong breakthroughs that have contributed to my thinking and acted as stepping stones in the development of the method explained in the previous section.

In a dark room, I projected the image of a white cube on a cube made of white paper. Three important things happened with this project:

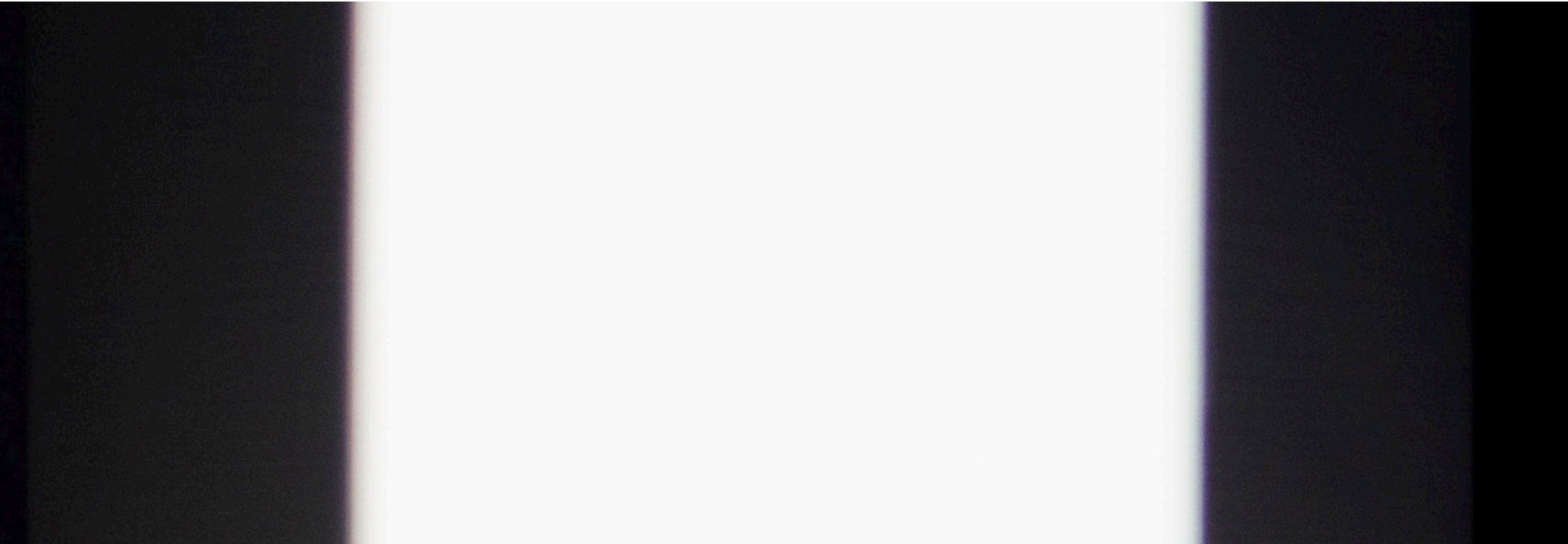
First, I projected an image of a cube on itself. Second, I studied how light reacted to different materials and colors. Third, while studying the interaction between the projected cube and the different planes of the paper cube, I began to move the projection on the cube. This introduced motion in the form of a sequence.

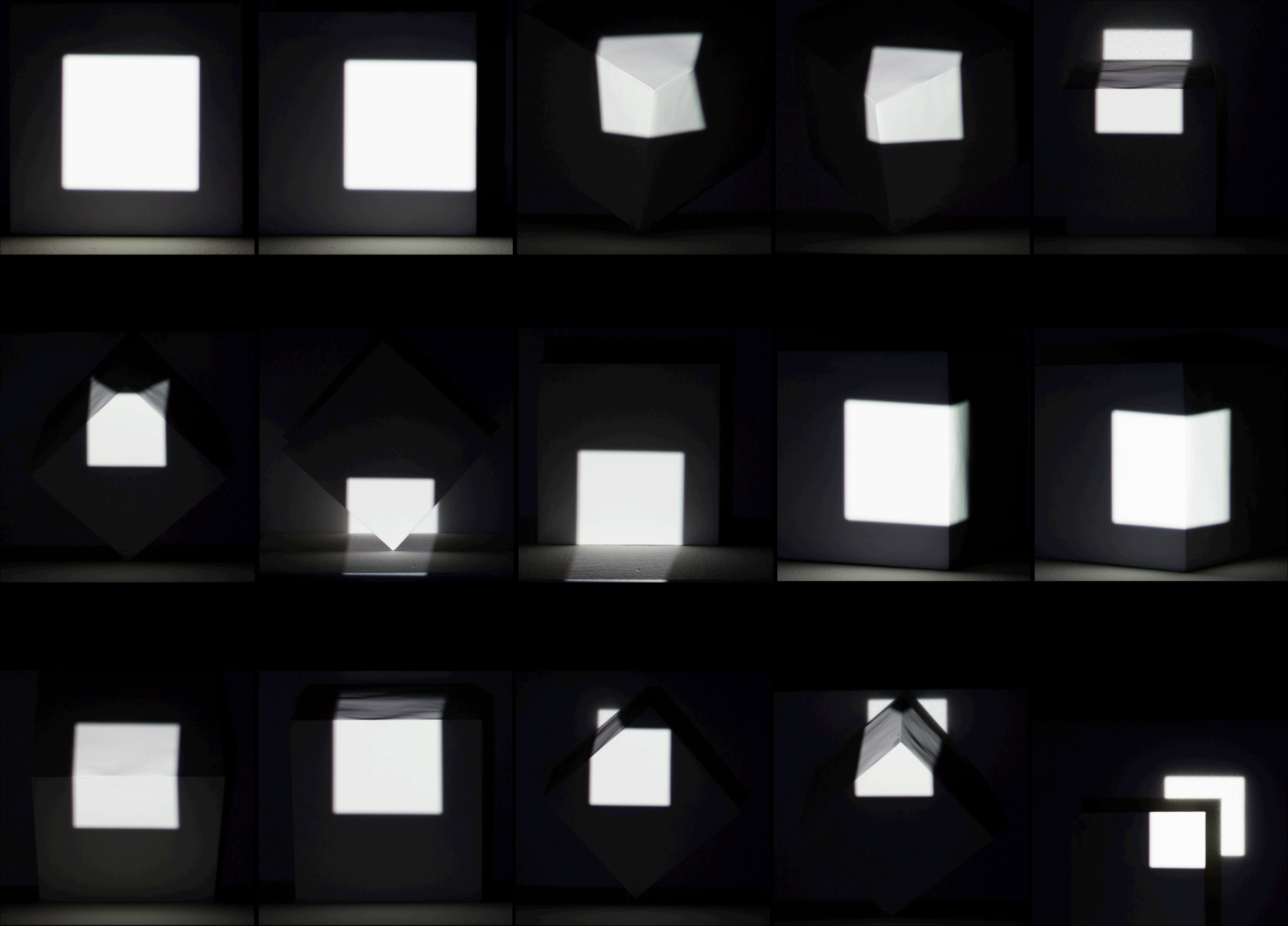
With the first study, I fragmented a cube with its own projection. Fragmenting something with its representation is like fragmenting something with its own fragment. No matter how many times I fragment a cube with a cube, it will always give me a cube as a result. I began to explore the ideas of open and close with this project, through the moving projected cube and static paper cube. By moving the projection to different parts of the paper cube, I was exploring different ways of fragmenting the projected cube.

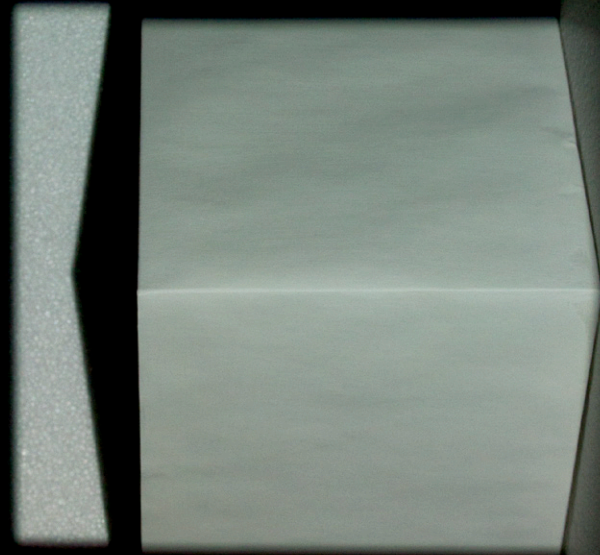
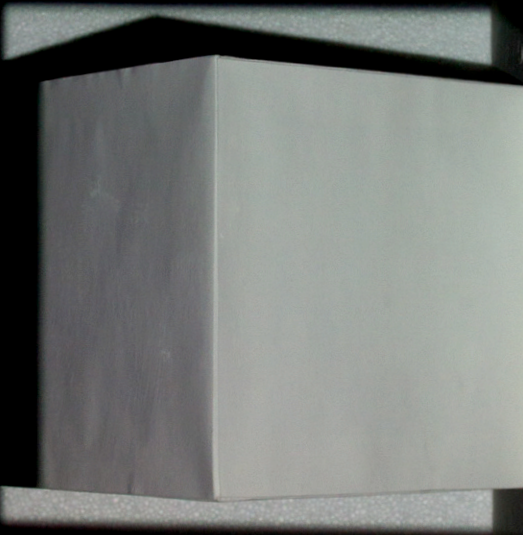
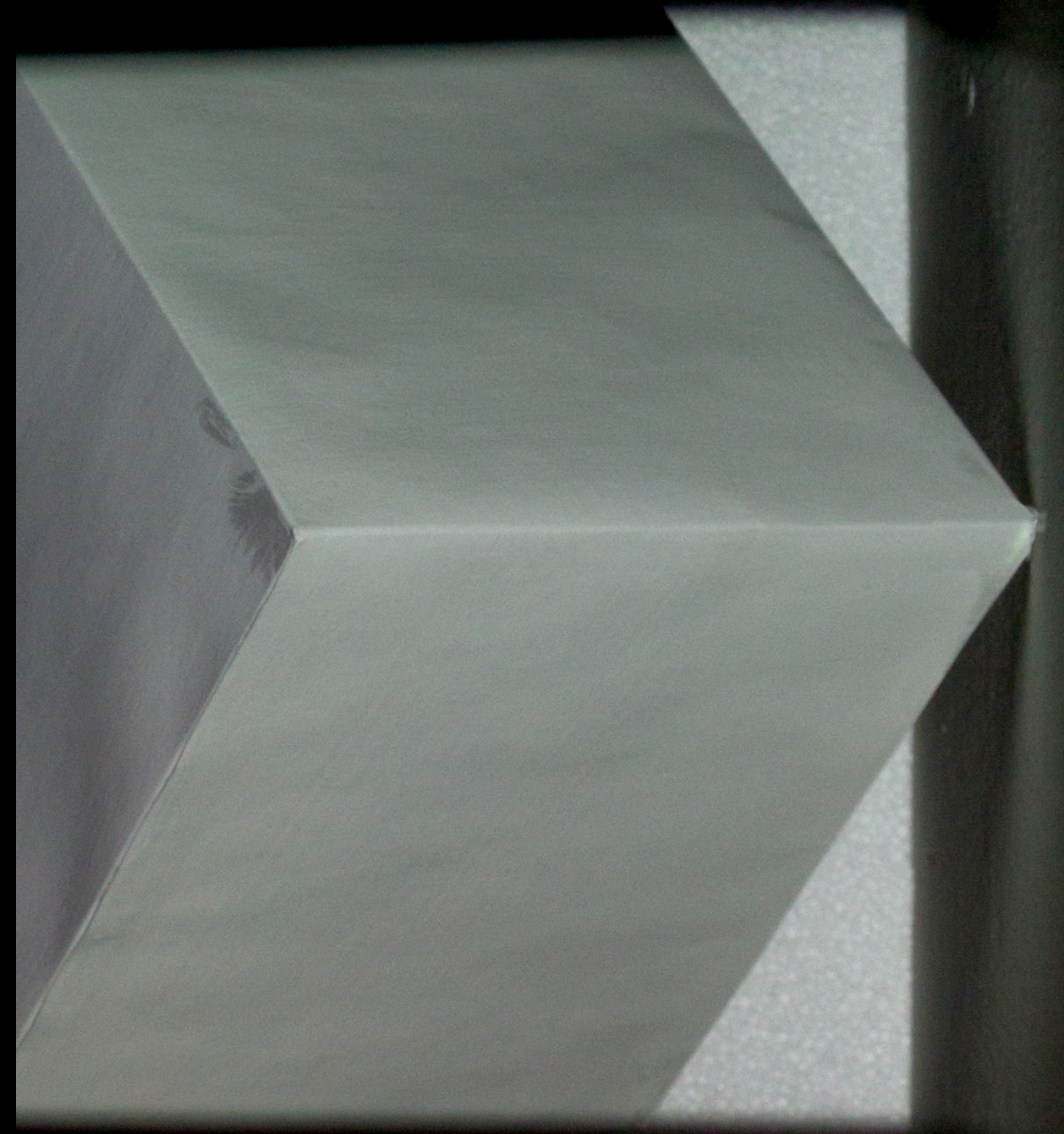
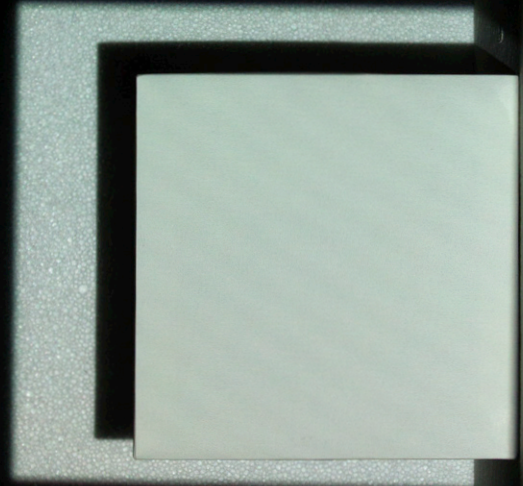
In this study, the projected cube was bigger than the paper cube. The paper cube moved while the projected cube remained static. The projected space began to grow outside of the physical space.

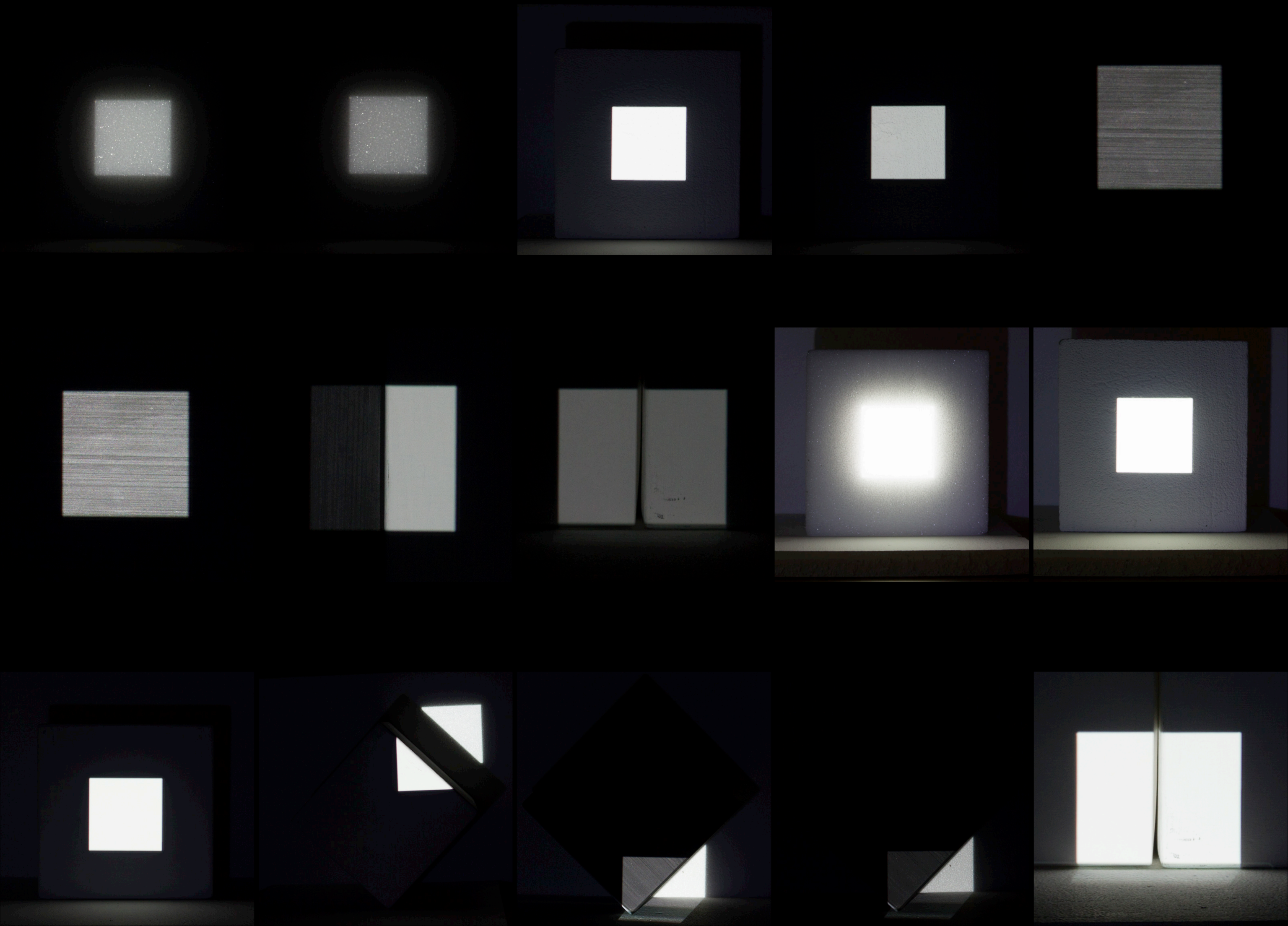
I explored the reflection and absorption of light on different materials and colors like white and black painted wood, paper and Styrofoam. White painted paper became the material of preference as it reflected light well and the texture was smooth. The light remains sharp on a flat plane and distorts and stretches on diagonal planes of the cube. The paper cube creates its shadow on the whiteboard. The further away the cube is from the board, the bigger the shadow.

droste cubes











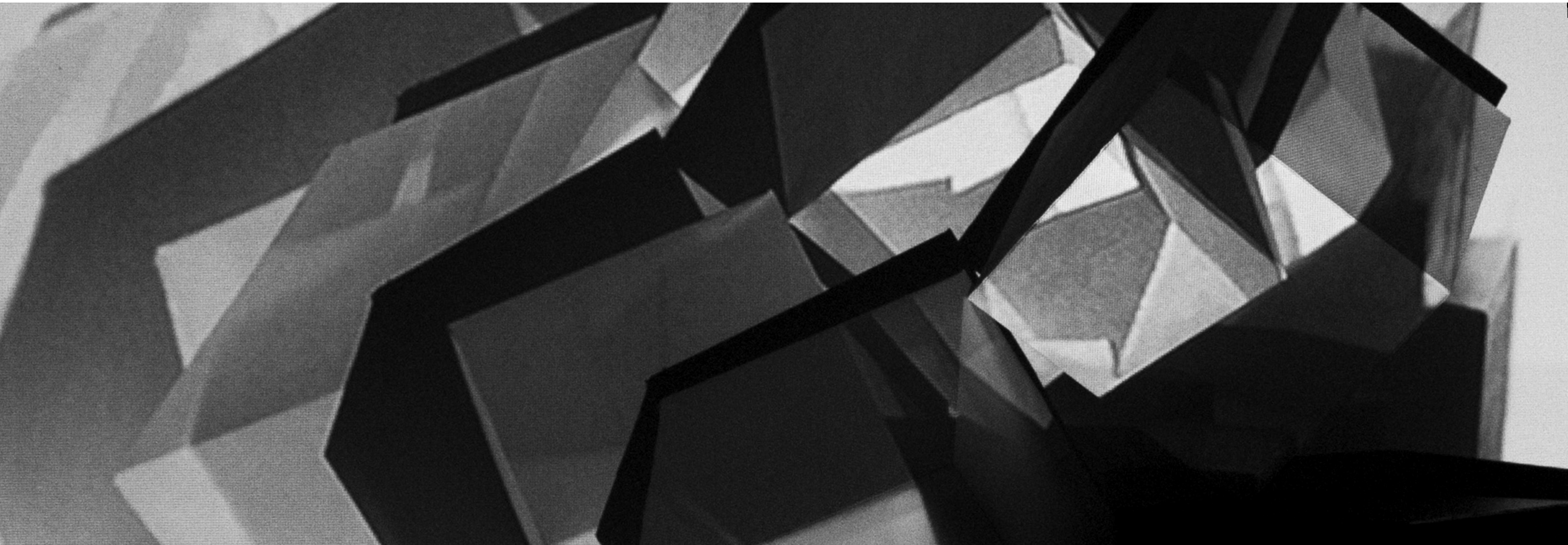
I did the same explorations with a letter as a projection on cubes made of different materials. The goal was to explore how a recognizable image fragmented with the same method. Starting with simple distortions and leading on to complex fragmentations, I recognized the middle ground between familiarity and abstraction.

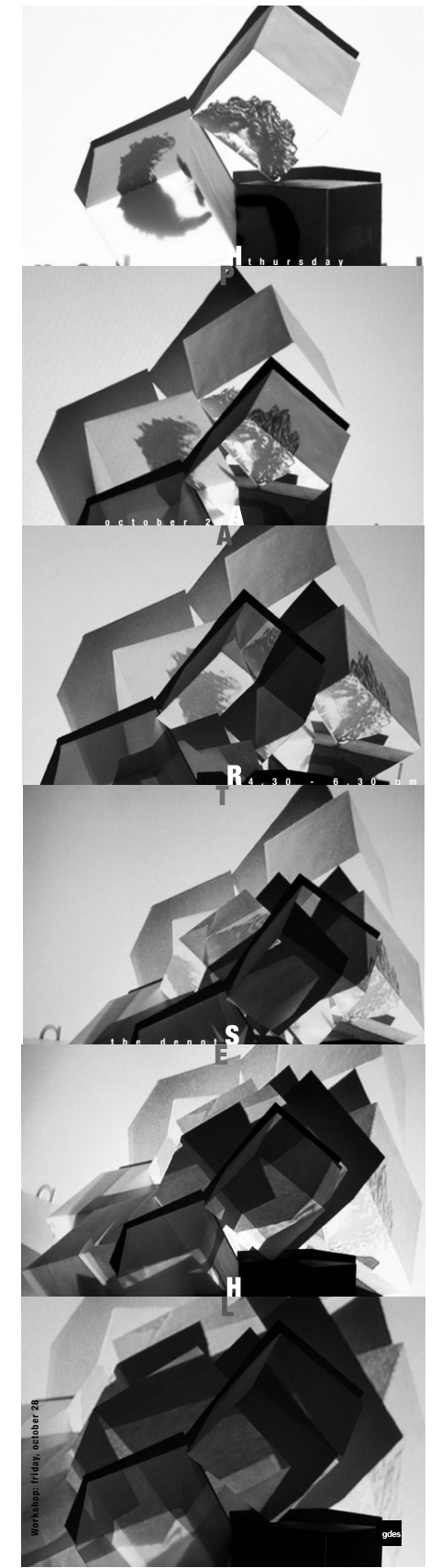
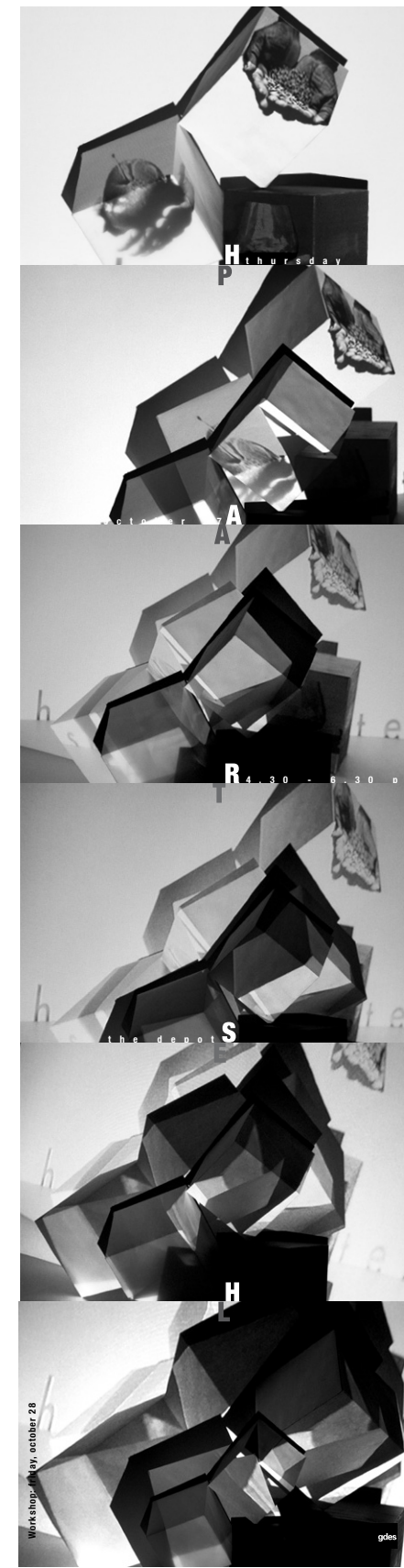
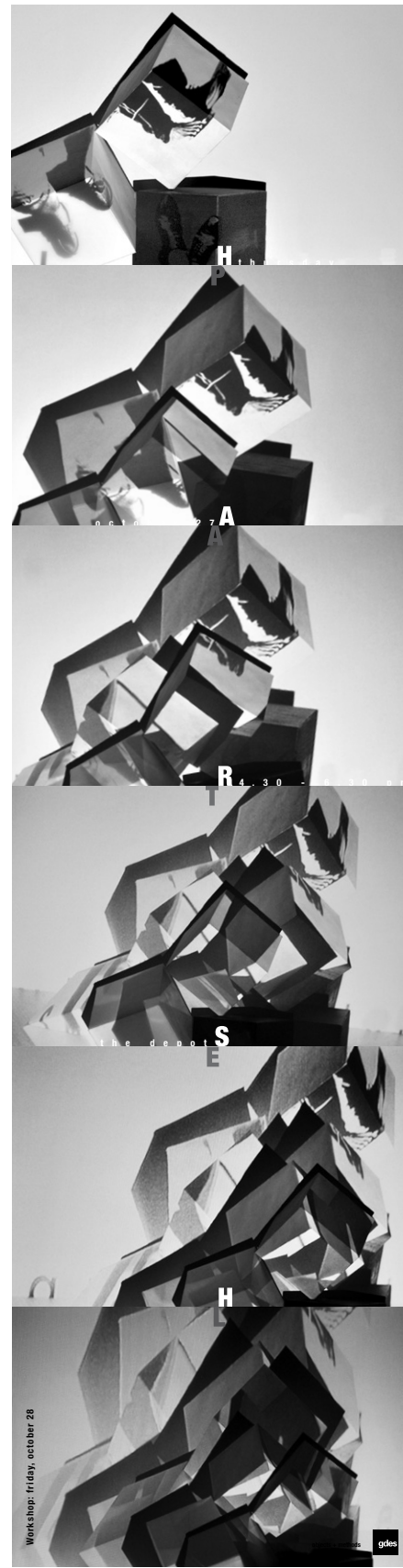
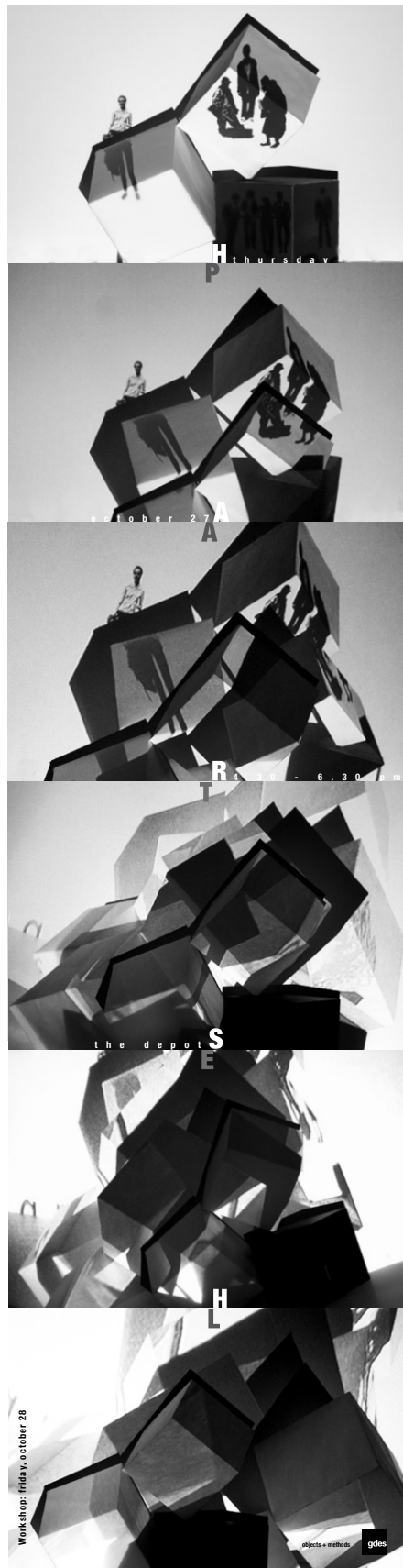
One of the first projects that I applied my method to was while working on a poster for a visiting designer's lecture. These posters were created for Harsh Patel for his lecture as part of the department's Objects + Methods lecture series. His lecture was on the role of social class in the life of a designer.

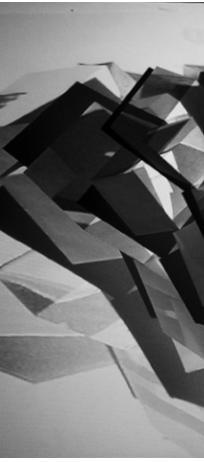
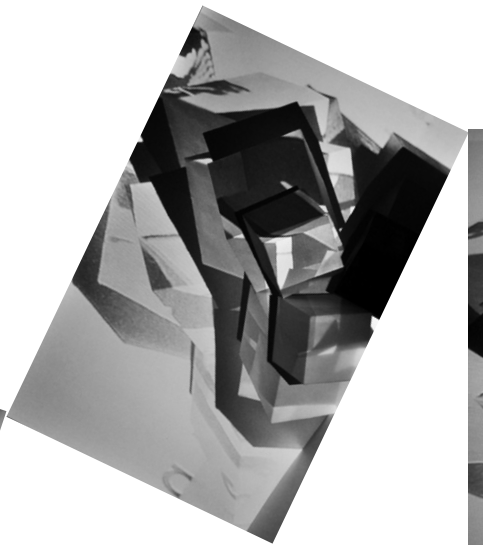
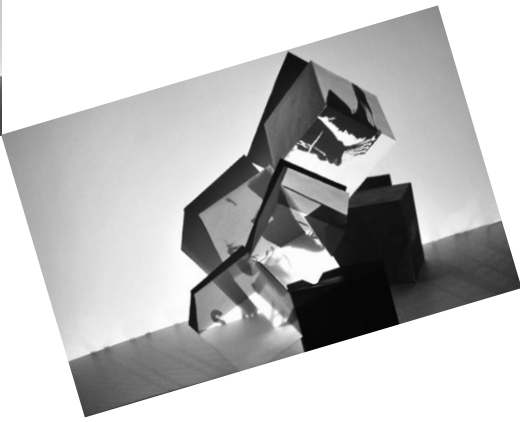
In the transition from home to classroom, a person's inbuilt structure of social behavior and attitude collapses and new learned behavior takes its place. The poster shows this change through the transformation of the cube projections. There are four series representing shoes, hair, social emphasis and food. I felt all of these were strong indicators of social behavior and attitude.

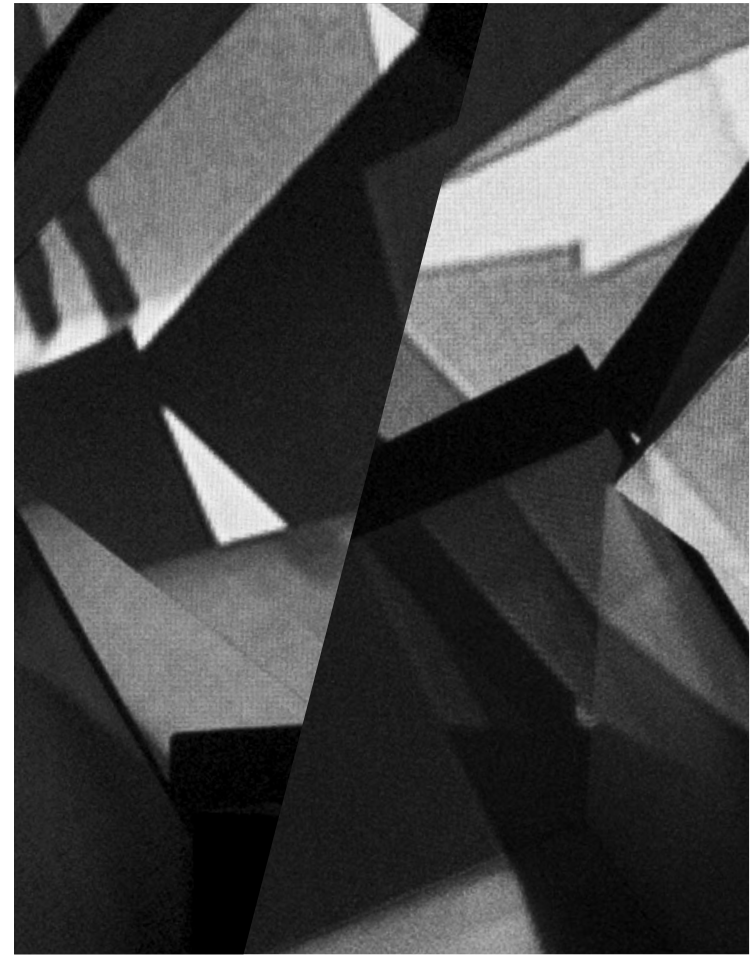
This was the first time that I used my method to transform a closed idea to an open-ended idea – i.e. a definite to adaptive social behavior. In the sequence, the first image creates a structured space with the use of cubes and projection. This structure begins to fragment and break down in the consecutive images with the use of repetition and movement. In the big poster, I combined the first image and last image of the sequence to condense the story of transformation into one frame.

objects + methods : harsh patel









H P A T S H
 Thursday the depot

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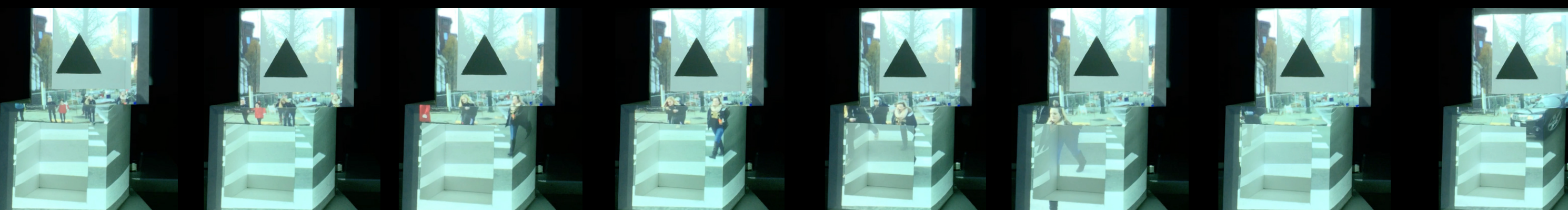
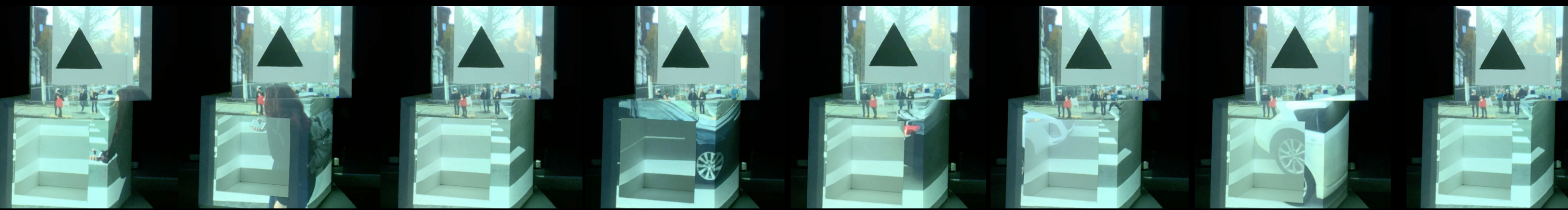
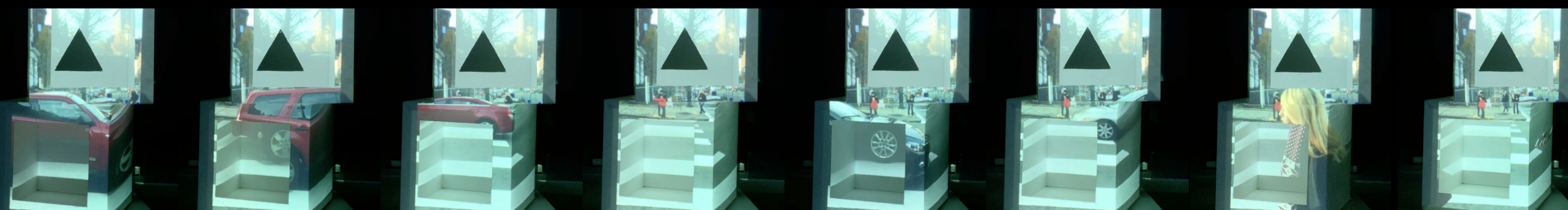
With this study, I ventured out into the urban environment and recorded the rhythm and movements created by people and cars at an intersection in Richmond. The stoplight is an example of a closed space that exerts absolute control over its users. The recording was taken at the intersection of Harrison and recording the activities in motion. The slow movement of people contrasts with the fast movement of cars to create a repetitive pattern in the projection. The diagonal plane of the cube adds dimensionality to the movements.

I cut out the cubes to expose the inside. By creating layers and depth, I was able to add hierarchy to the recording. Important elements in a stoplight area, like the zebra crossing, were moved to the front and elements with less relevance like buildings were moved to the back.

Through this study, I became interested in the elements in space that control or guide people directly or indirectly. Motion is a part of my method, but through this study, I was keen to use it as a way to experience the urban environment.

projection in motion





m o v i n g through Carytown,

c
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t
i
n
g

textures,

products,

colors,

architecture,

signs,

rhythm,

movement.



Moving forward, I chose Carytown as an example of a closed space and began to use the experience of walking through its streets as my content. Any closed space in the city can be used as content for this method. I chose Carytown because the street is dense with variables like commercial and traffic signs, ordered space usage, concrete boundaries, textures, and colors designed to create a trendy environment, rose-hued granite sidewalks, and designed product displays. These variables individually define space and encourage a definite behavior from pedestrians. This corridor, stretching from the Boulevard to the beltway, is pedestrian in scale, similar to the Indian market. However, the experience of walking through Carytown is in complete contrast to Chandi Chowk. Built in 1648, the Indian market has grown organically based on how people inhabited it. While Carytown, built in 1938, has been designed and redesigned in an effort to maximize its function for its users, frame and highlight views, maintain order and facilitate a positive interaction with space.

Coming to VCU for graduate studies was the first time I came to the US. Living in Richmond was the past two years has given me abundant time to observe Carytown as a space that is in complete cultural contrast with Indian markets. I took numerous walks through Carytown and on each walk, I found and recorded elements that were fundamental in creating a closed experience for me in this space. Before venturing out into other closed spaces in the city, it is important for me to realize the potential of Carytown as my content fully. With each walk, my understanding of this closed space grows. The method is not just a way to create an open-ended experience out of a walk in a closed space but also to first observe and study a closed space. Only then could I truly experience transformation of space.

On the first walk through Carytown, I photographed textures and colors from six blocks. While textures and colors add to the immersive character of space, these are explicitly designed and placed in Carytown to create moments of engagement.

I used projection mapping to compose these textures on six cubes. Each cube is representative of a block in Carytown. Arranging these textures and colors on the cubes is an act of designing and building a closed space. This space is a derivative of the six blocks of Cary Street as this exact arrangement is not seen in Carytown.

The position B for this image sequence is at a 45° angle in respect to the cubes. The space increasingly fragments and transforms from closed to open-ended in the progression from left to right. The projection grows beyond the area of the six cubes and flows into the background. The space in-between the cubes in the first image, forms the negative space in the consecutive images. The definite boundaries and structure of the cubes breaks down and accidental spatial formations give rise to abstract shapes. The textures begin to disappear and colors become brighter and sharper. The understanding of space transforms from objective to subjective, pragmatic to poetic.

walk one

The growth of the space is organic, as I do not have control over how the space changes. The growth is an adaptive response to my interaction with the space. The repetition of one gesture of my body in the form of movement, cultivates into a dynamic, energetic and fragmented space scape. New forms are generated and random juxtaposition of these forms occurs. Just like a collection of gestures turn into a drawing of a space, a representation of it. The gesture in this method could be seen as a code used to transform space. The closed experience of the walk through Carytown transforms into something surprising, dynamic, chaotic and immersive.

The tension between two opposite kinds of spaces and in-between hybrid spaces can be experienced simultaneously through this transformation. These two opposite spaces lie on a continuum and are not the ends. The process of transformation from one space to the other ends when its rising complexity blurs its readability.

With movement as the only changing variable, I study how the transformation of space changes in relation to the altering movement. The variables like projector,

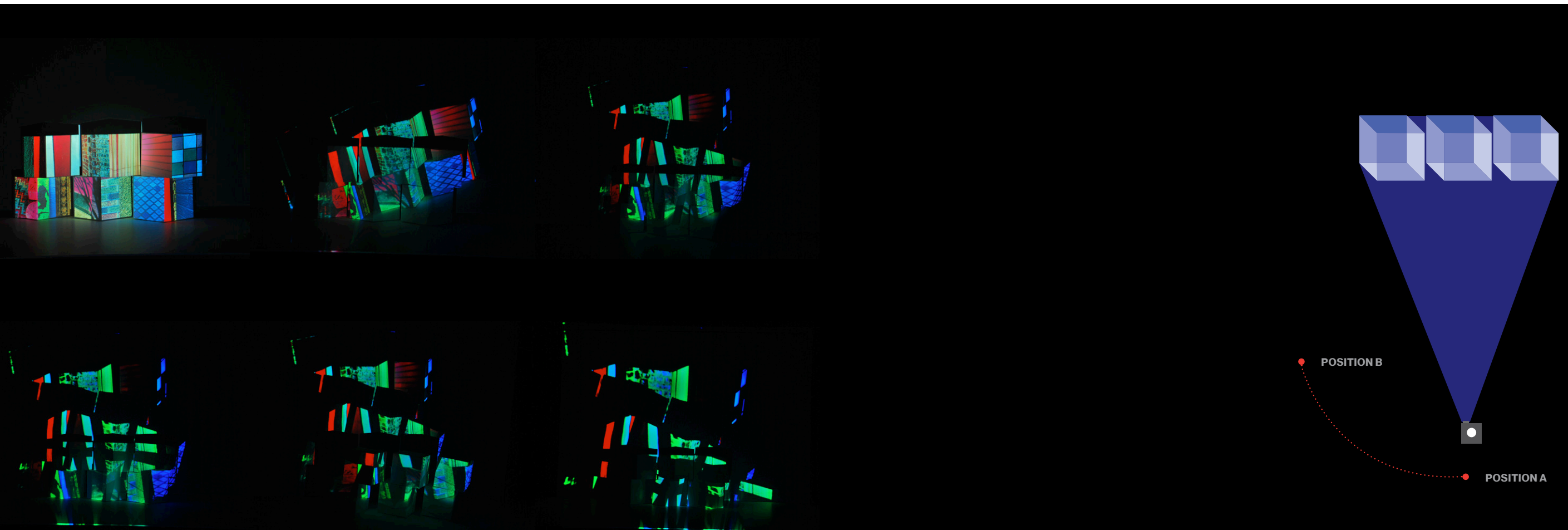
cubes, fragmentation and recurrence in my method remain constant in the sense that the manner in which they are used never changes. The movement from Position A to B is a way to interact with the space. Through these studies, my goal was to understand the relationship between the variable of movement and the transformation of space. While I cannot predict the exact details of how space would transform, I gained an understanding of the form the space could take in response to my movement around it.

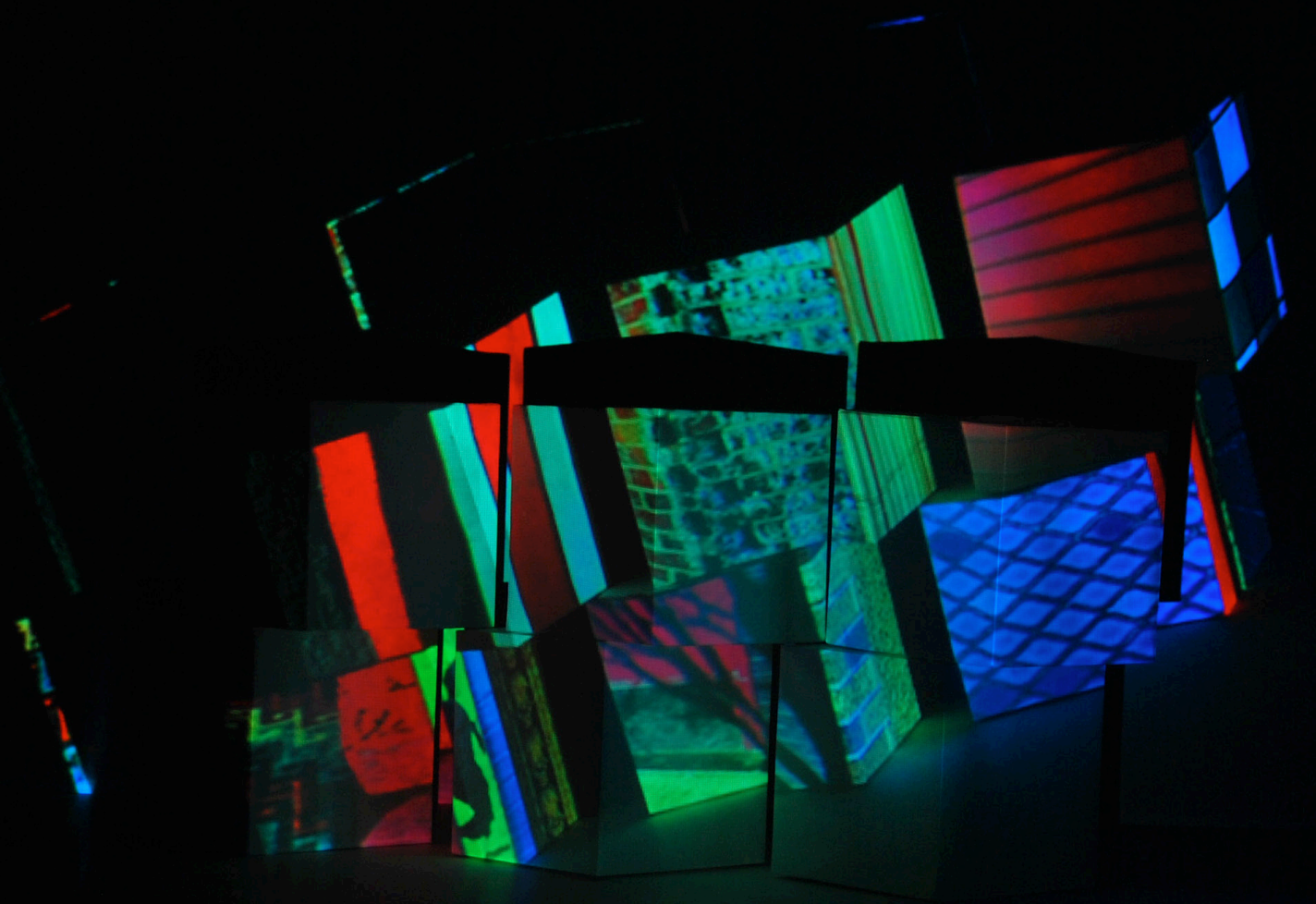
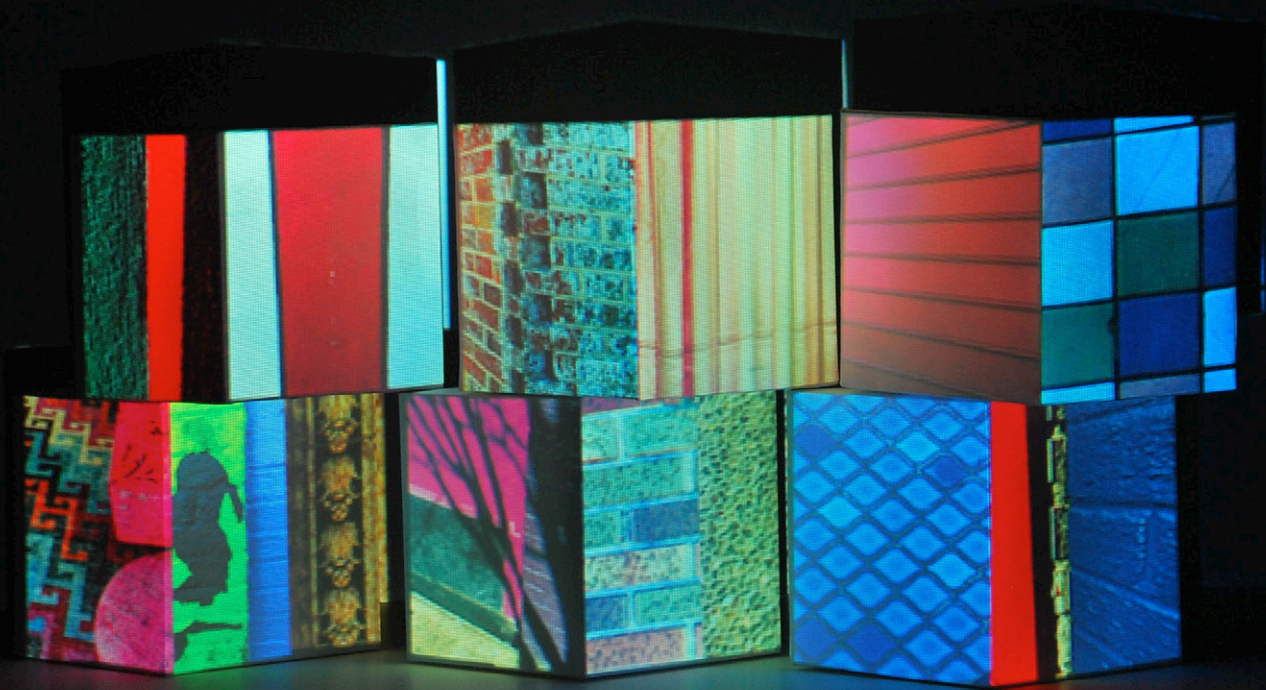
The criteria for choosing the successful studies were the following:

A fluid transformation where the viewer can see elements arranging and rearranging in space.

Some visibility of the movement from Position A to B. While the complete understanding of how the space is transforming remains a mystery, the viewer is able to make connections in between images and develop an understanding that some kind of interaction with space is causing the transformation.

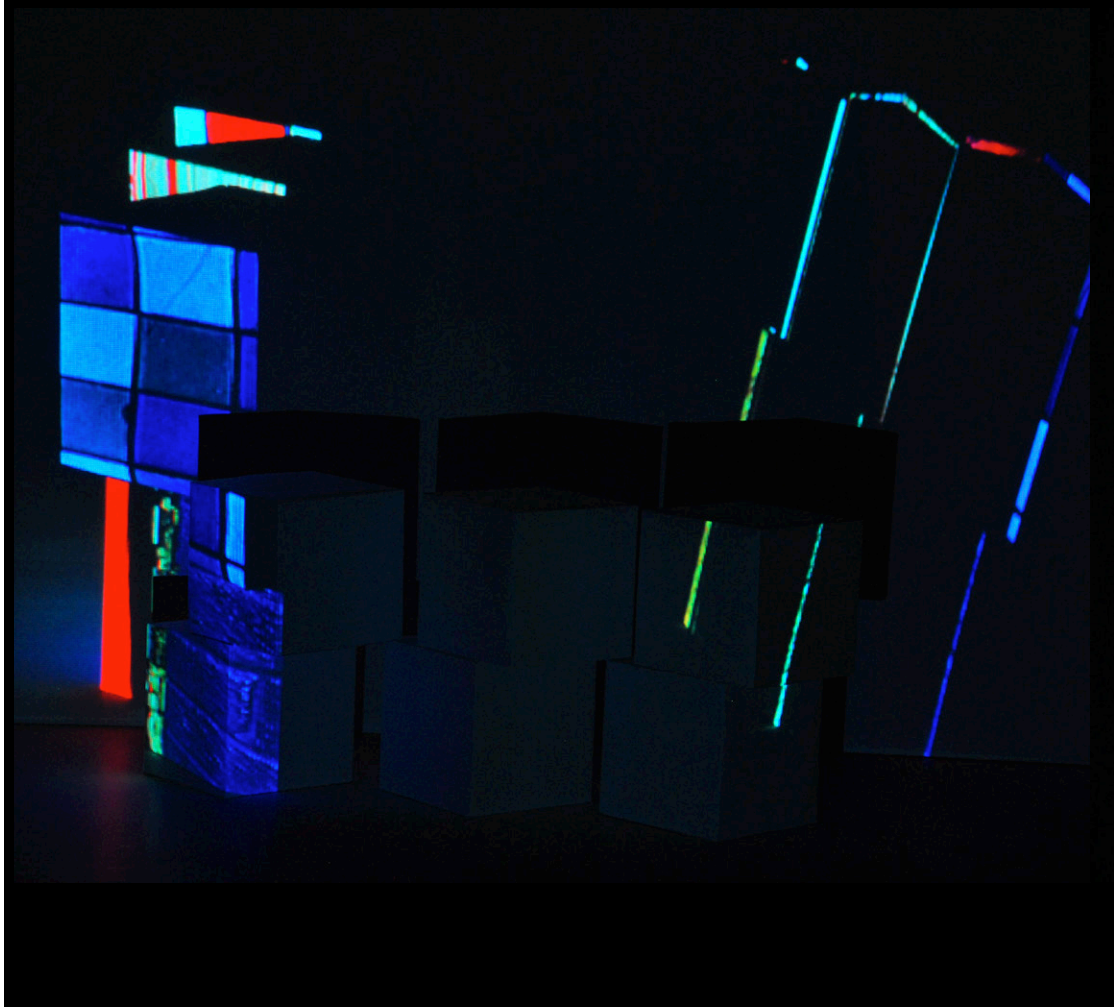
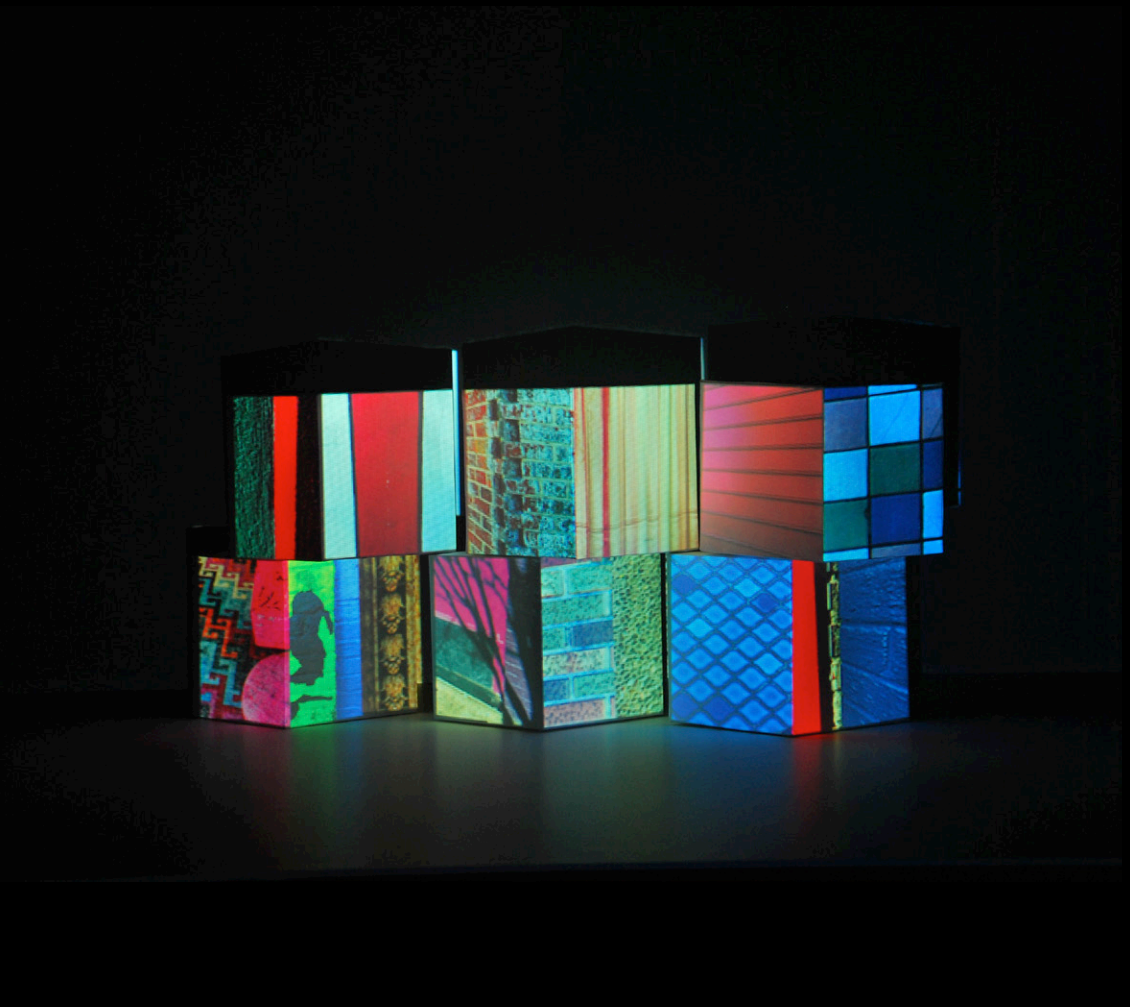
The space progressively becomes immersive and dynamic.



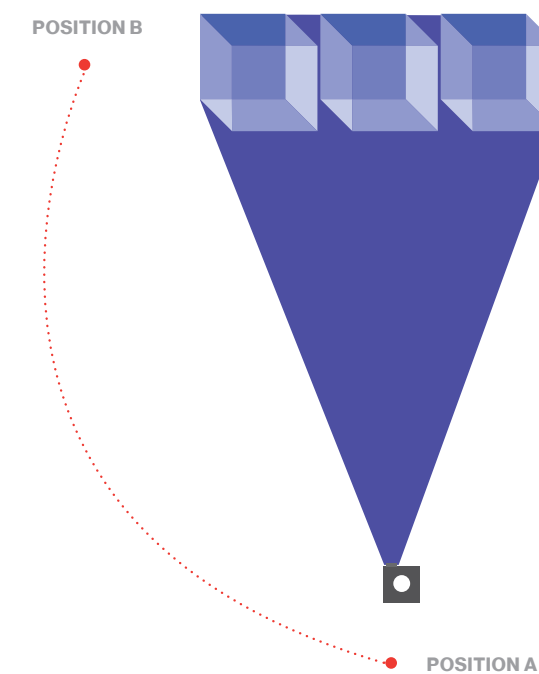
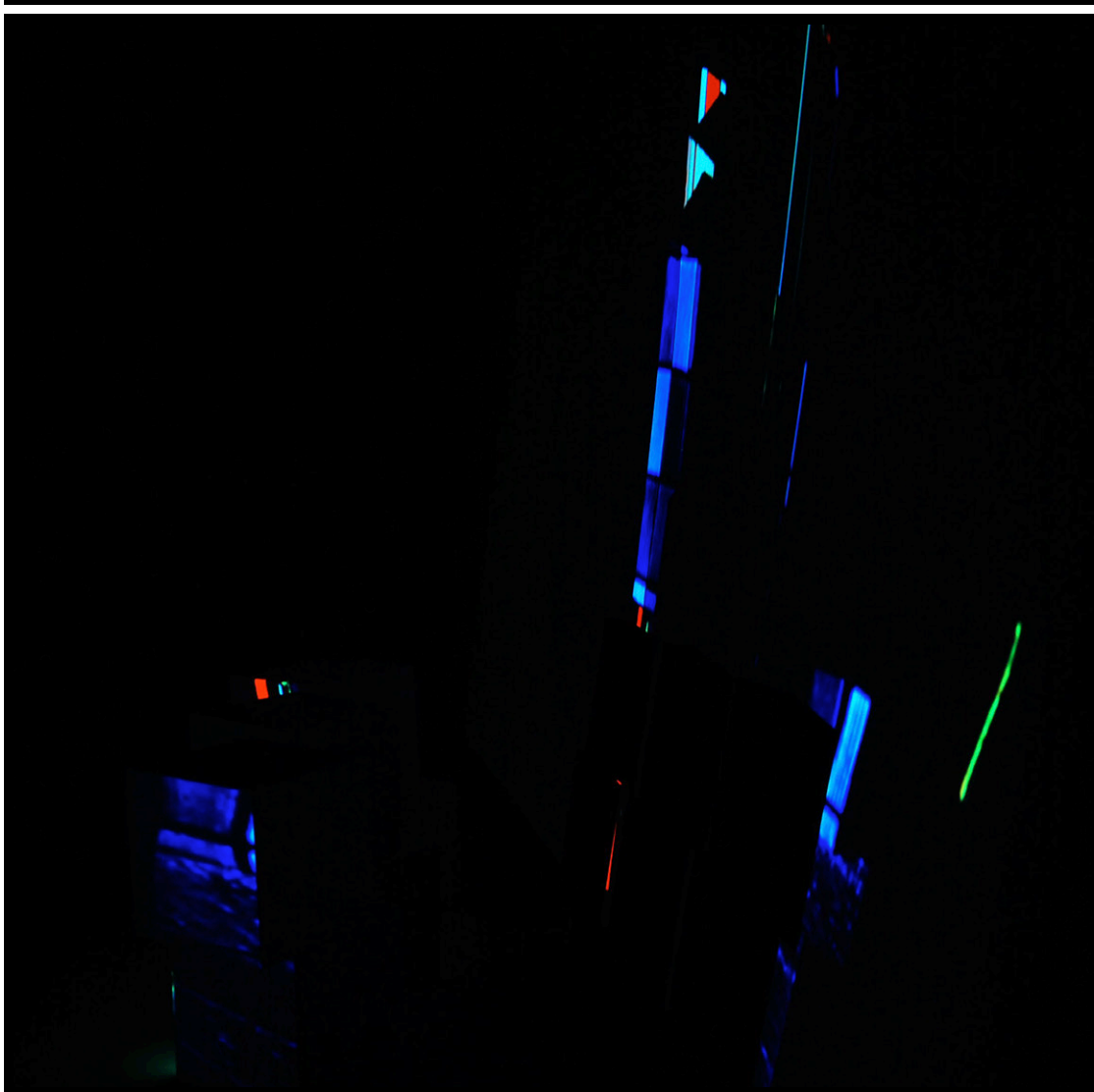
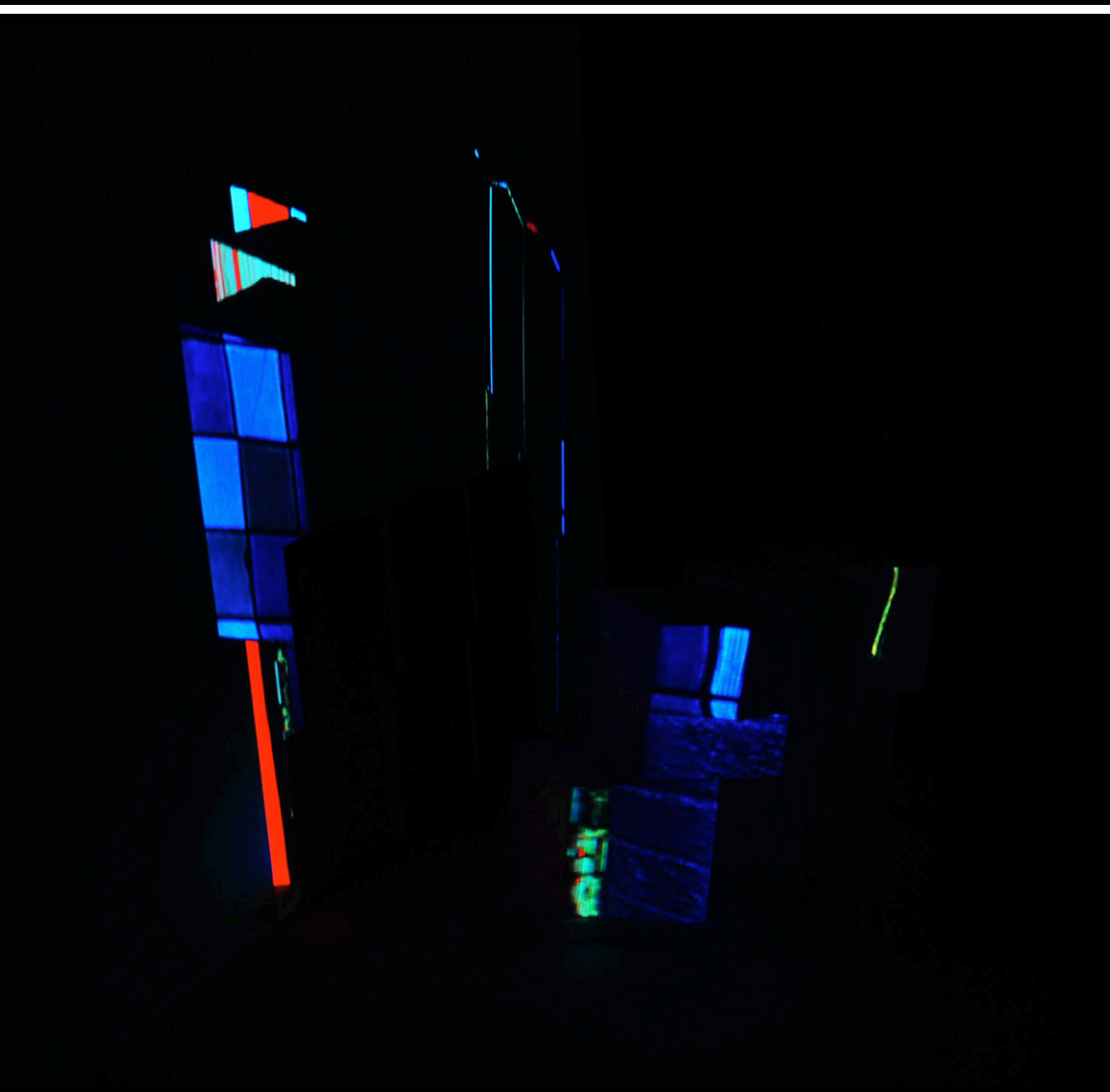




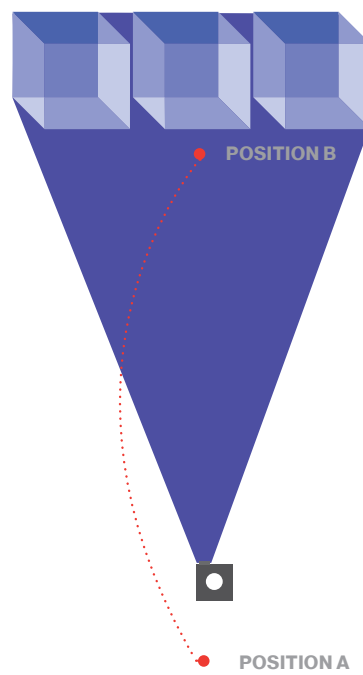




When position B is on the side of the cubes, the space transforms into an array of lines and planes. This sequence is not successful as a big part of the content disappears in the second image itself. While the transformation from first image to second is huge, it is minimal in the consecutive images. It is difficult to understand what is causing the transformation and the space is not immersive.



When position B is at a wide angle from the cubes, the space grows out of the frame horizontally and imitates music like it would be seen on the voice graph of a song. The space changes to create beautiful, immersive, dynamic, architectural forms and begins to mimic a cityscape. The transformation is well paced. Strong connections can be formed in-between the sequence of images. The visibility of the method used to create this sequence is more transparent.





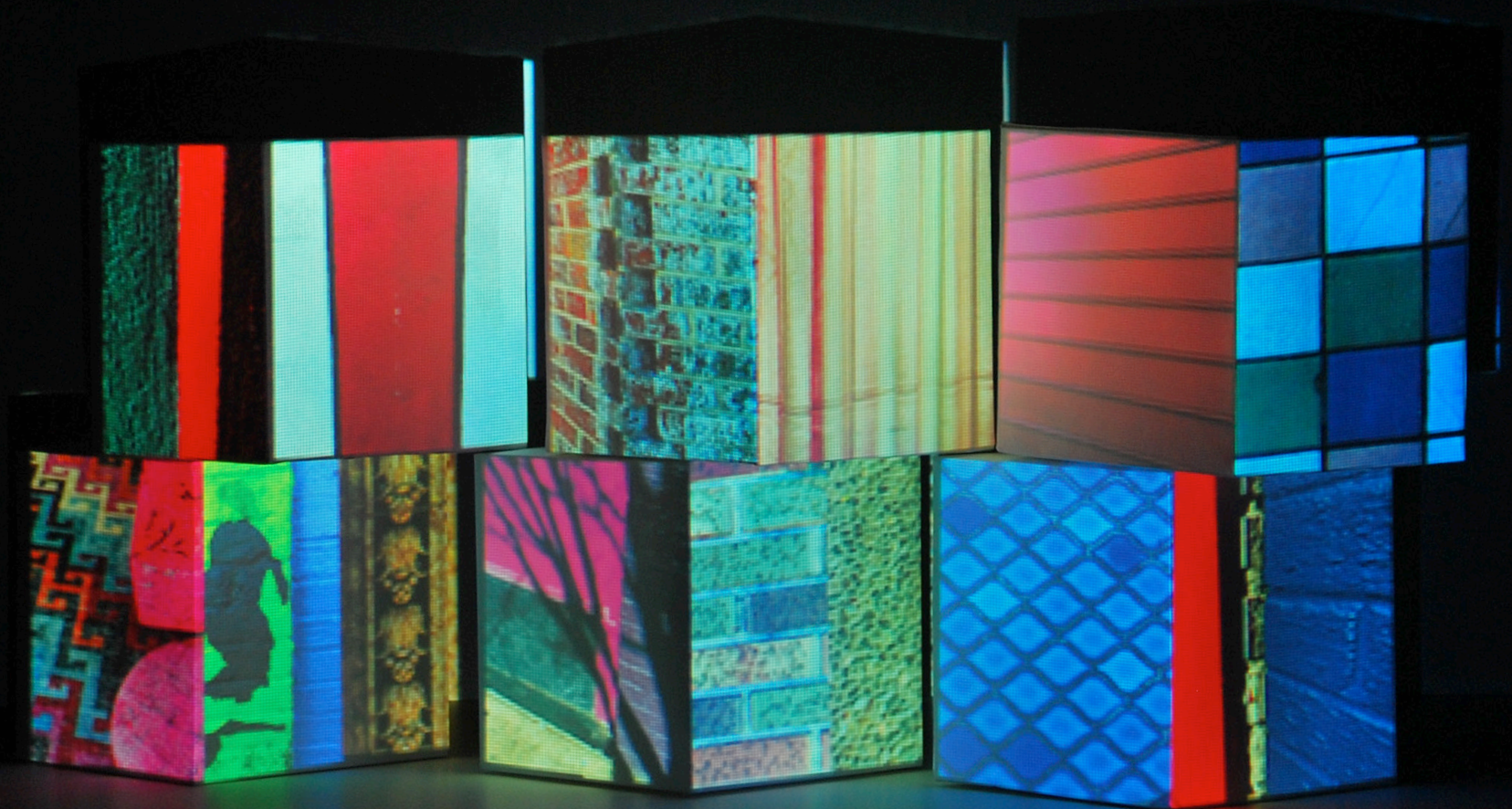
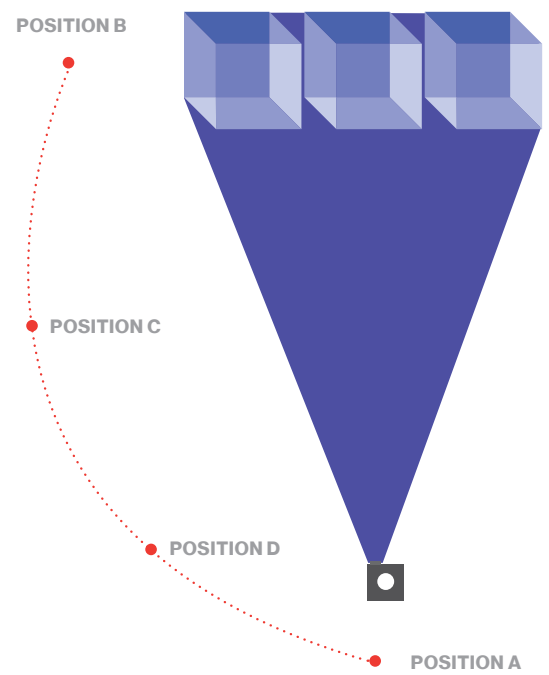


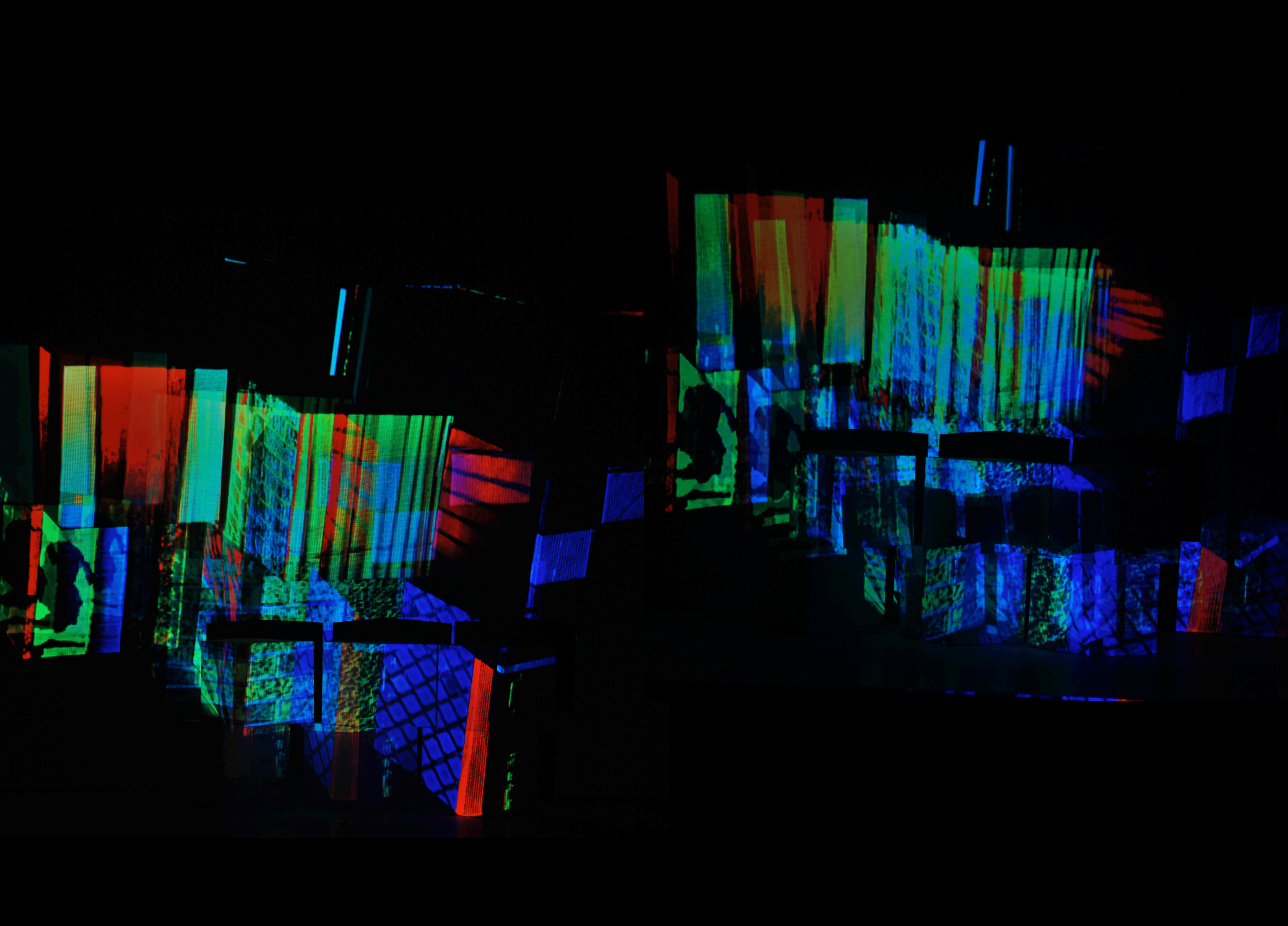


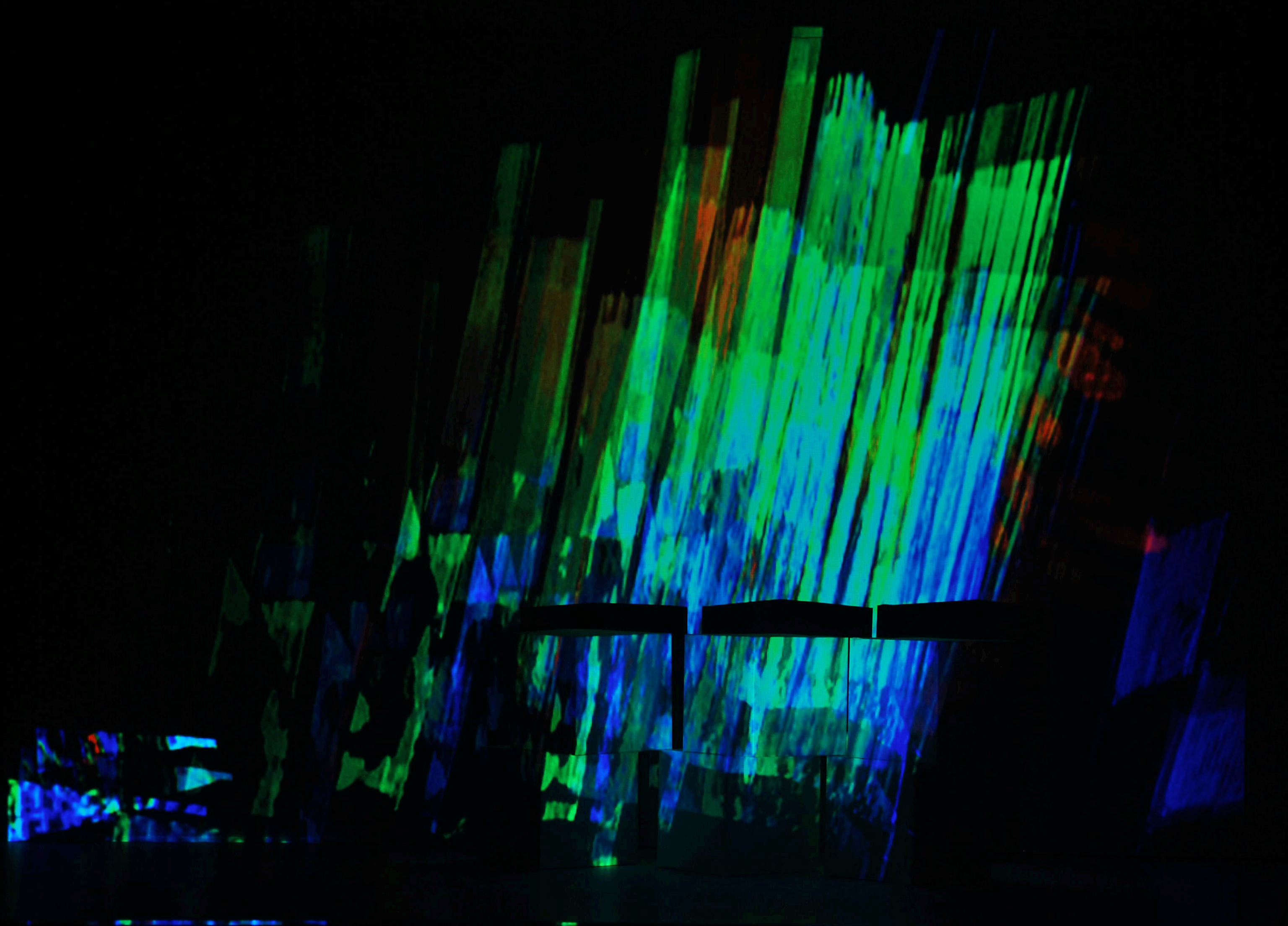


I added a Position C and D in this sequence. At each position, I clicked a photograph. I superimposed the three images on top of each other digitally and projected it back on the cubes. This sequence tested the use of digital manipulation in the analog method and the impact of using multiple pictures at each step.

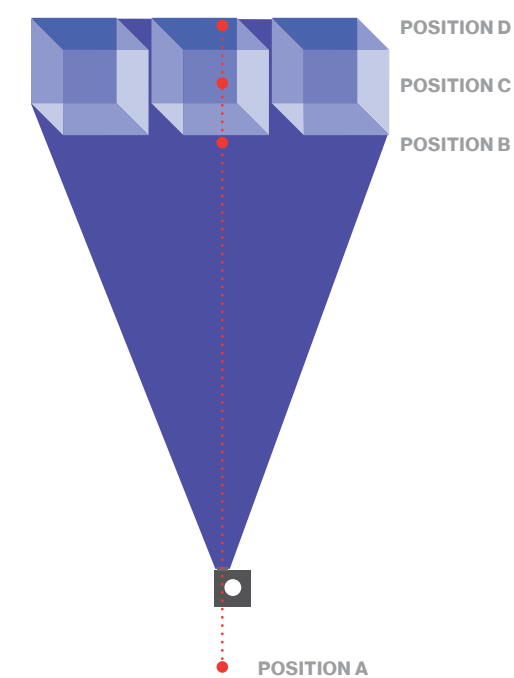
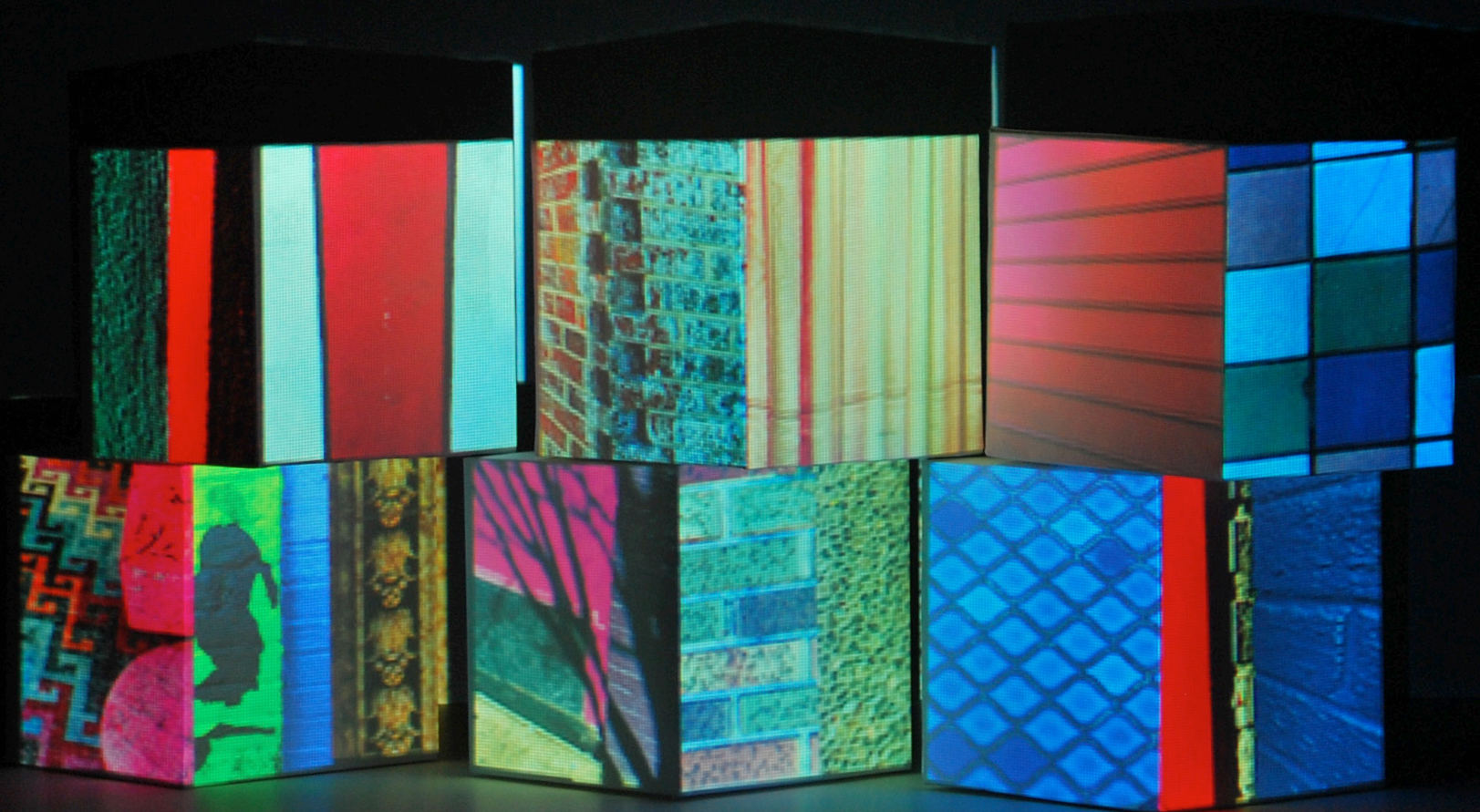
For the first set, the position B, C and D mapped the movement from the front to side of the cubes.



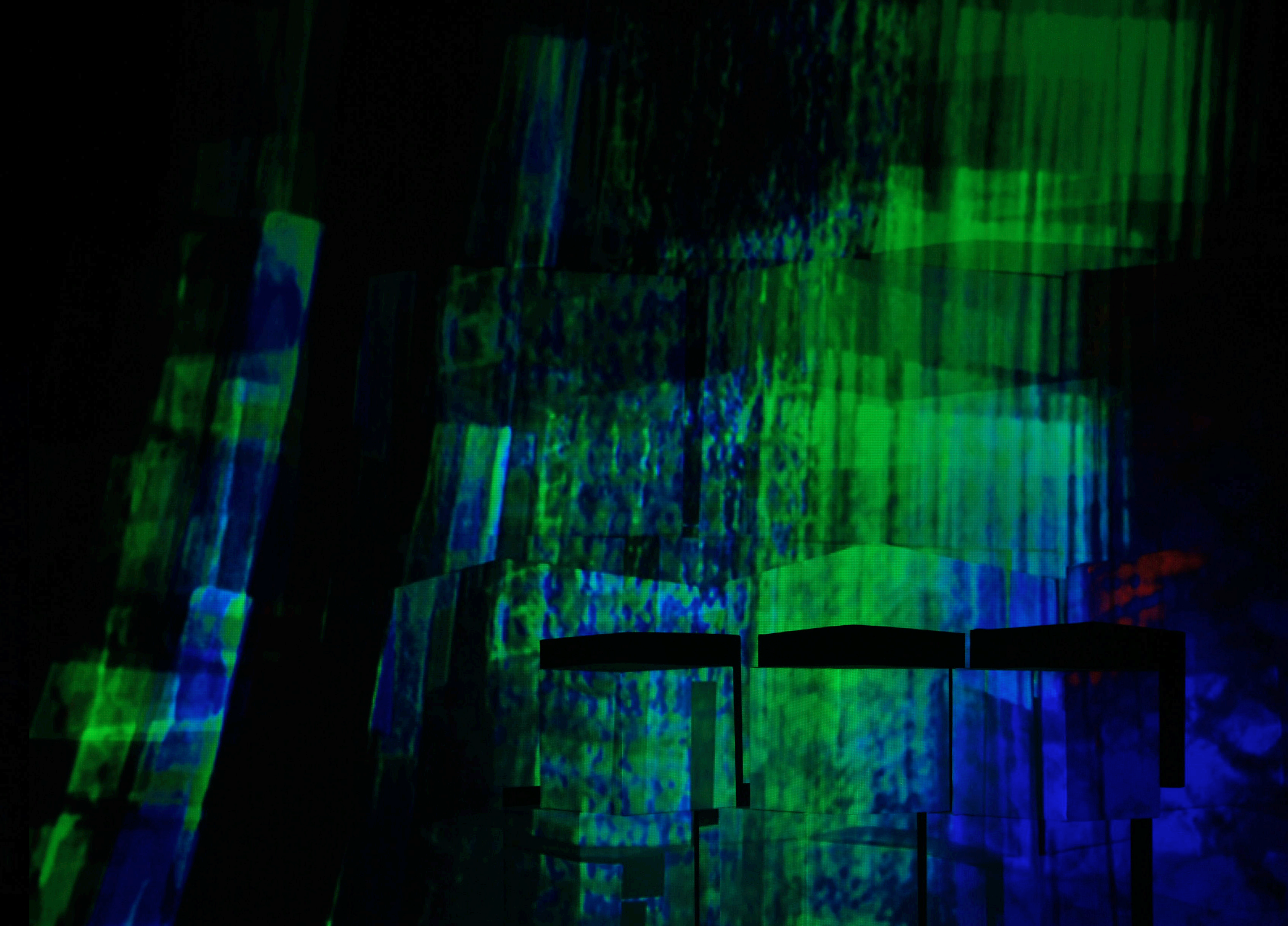




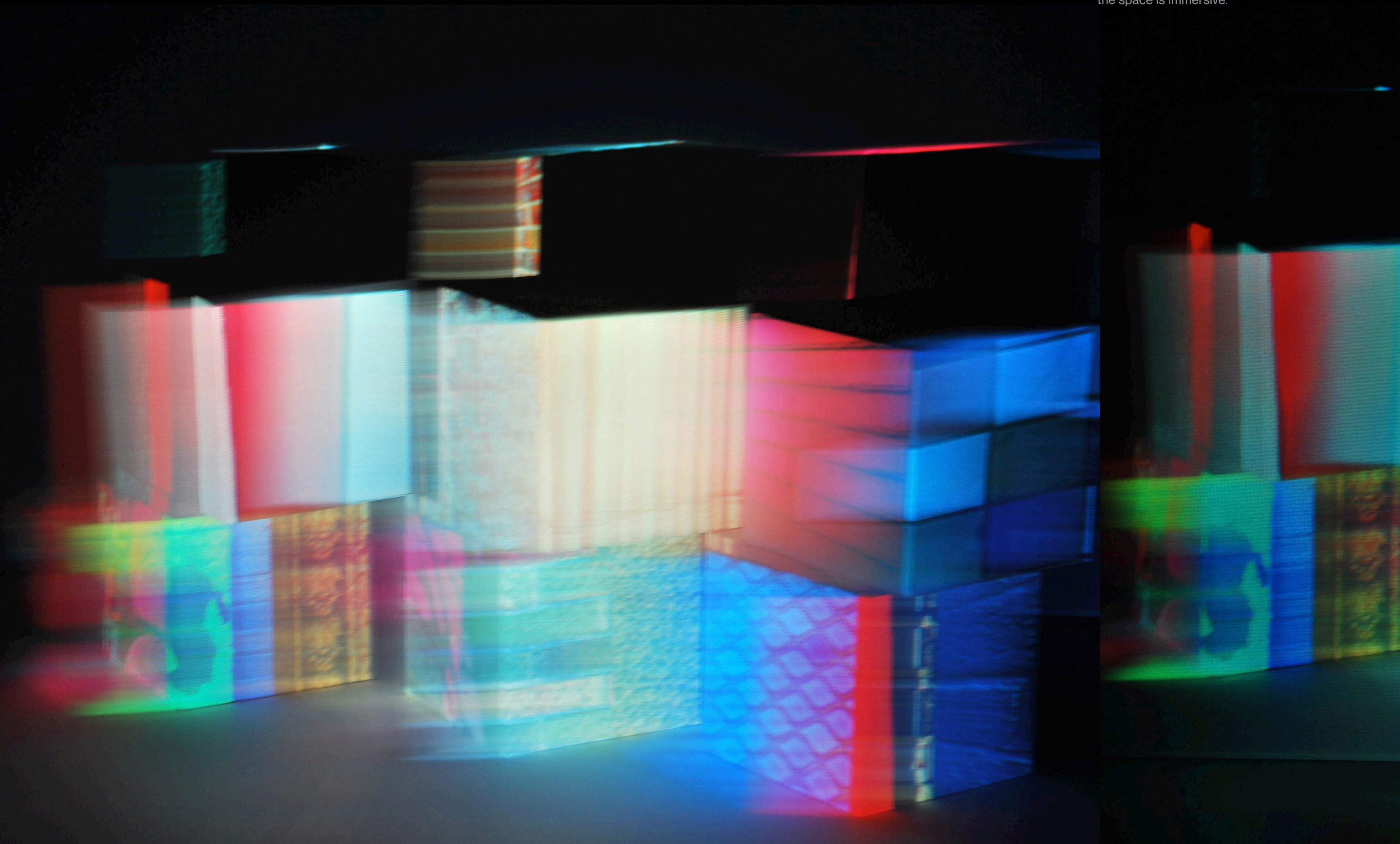
For the second set, the movement was from the front to the bottom. The spaced imitates a stroke of a painter's brush. The sudden jump from the first image to the second is disorienting and it is difficult to make sense of how this transformation took place. While the space is immersive and this sequence represents the gesture of movement clearly, communication through transformation is compromised.

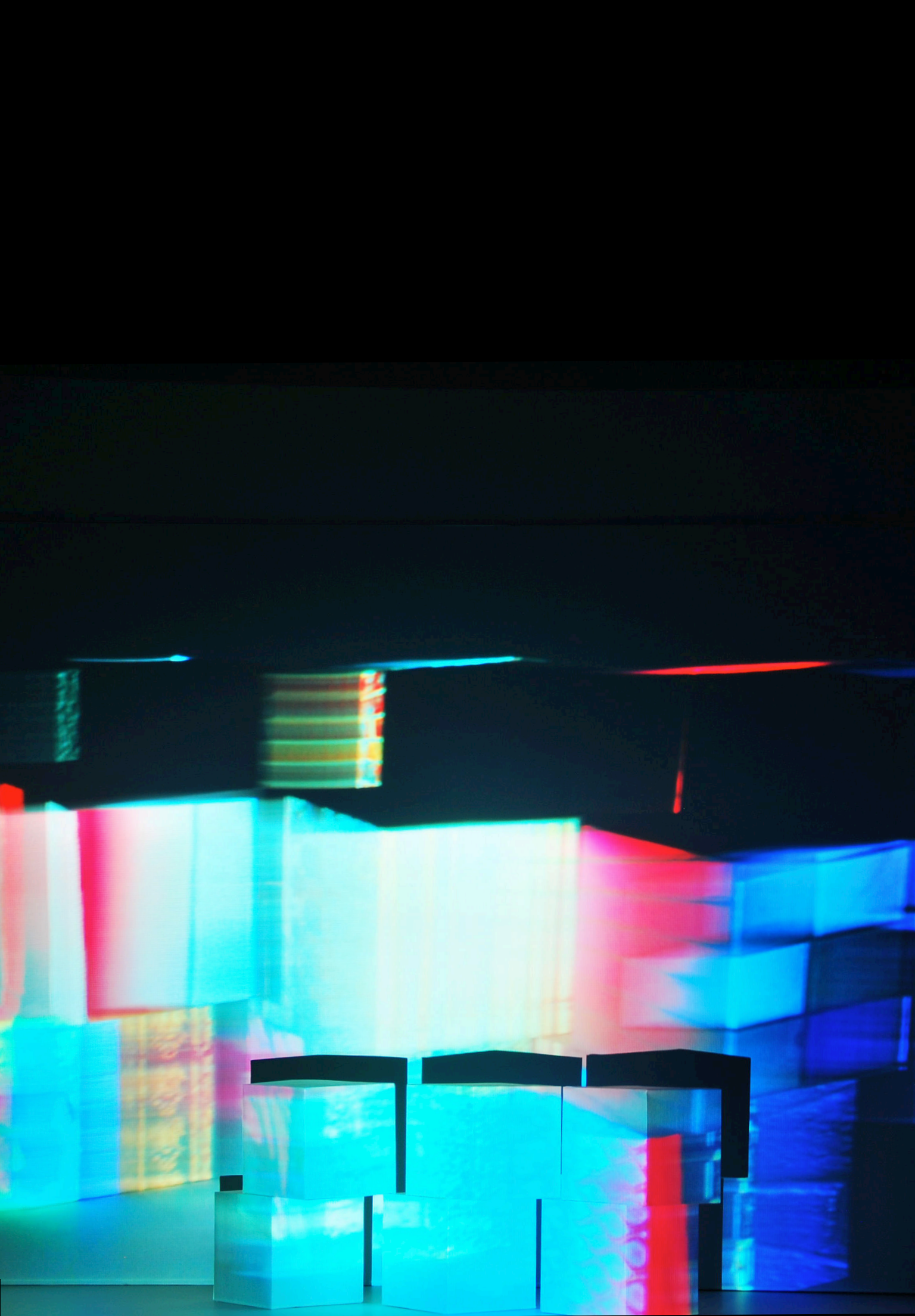






For this sequence, I brought down the exposure of my camera and moved it slightly while clicking the photograph. The colors smear and create an emotive, almost nostalgic space. Transformation is clear and the space is immersive.

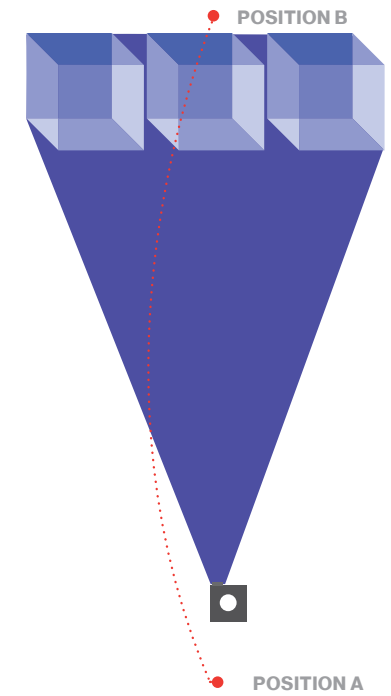




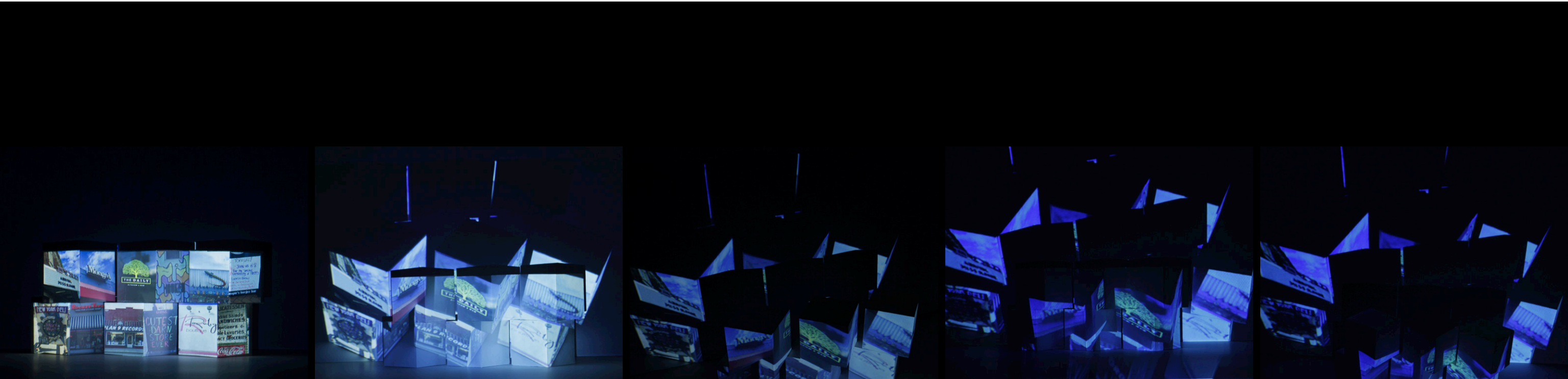


On the second walk through Carytown, I photographed commercial signs. Commercial signs classify space and guide people in retail spaces. The goal was to study how the controlled experience of viewing signs in space can be turned into an open-ended experience. I also wanted to study the effects of fragmentation and transformation on typography.

Position B was at a top 45° angle in respect to the cubes. While the form was visually appealing, the fragmentation of content and typography was not as dynamic and exciting as the other studies.



walk two



On the third walk, I recorded videos of products inside different stores. I did not project one video on one cube but instead fragmented the videos digitally before projecting them. I recorded videos from Position B, which was at a 45° angle in relation to the cubes and projected them back.

The space grew to fragmented itself into small cube like shapes. This was interesting because what did not start as one projection on one cube resulted in several cube-like shapes. The continuity of the gesture in the form of motion is successful. The textures broke down into colors and a rhythm of light and shadow comes into play.

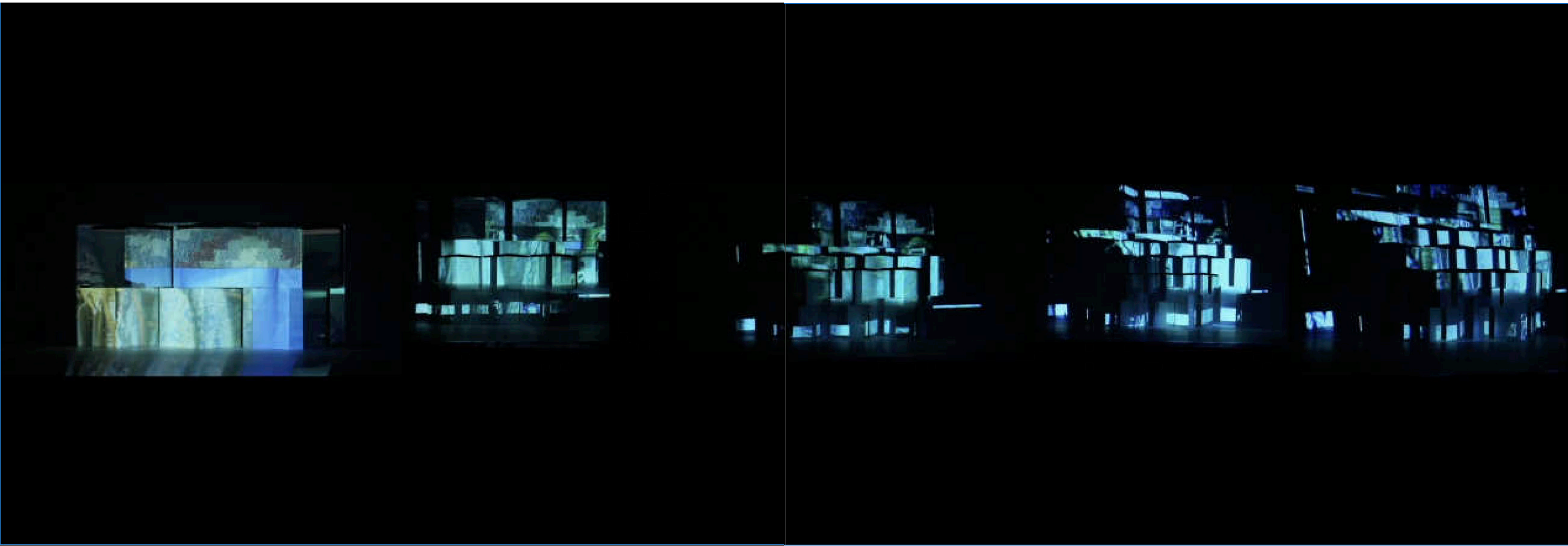
As I continued these explorations, I asked myself the following questions and found answers in the work I created after:

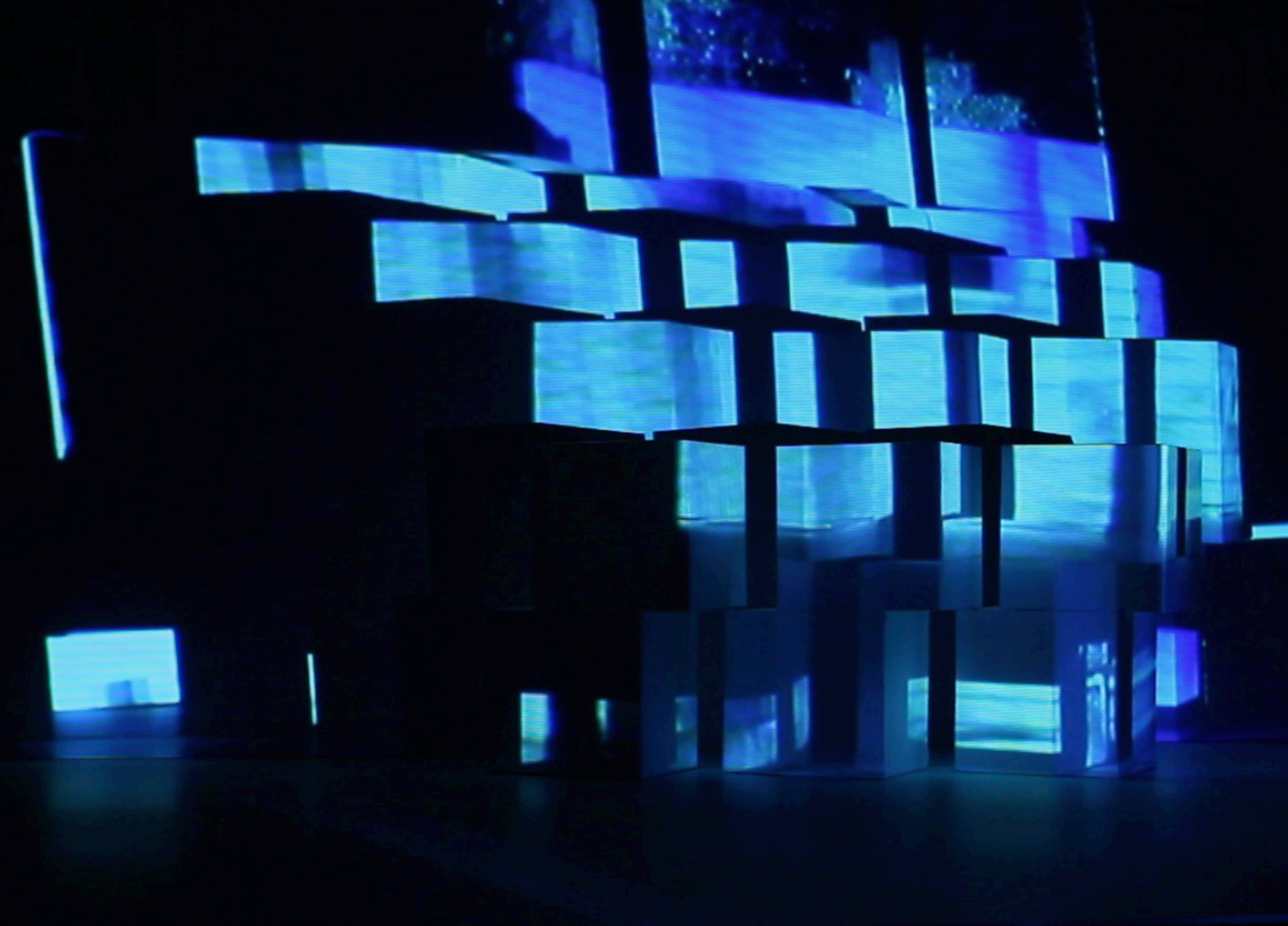
How does the work communicate the idea of transforming a closed experience of a single walk or moment into an open-ended experience on its own? If I was not in the room to explain the work, how would people understand it?

How can I let the method be more visible through the work?

How do I make it evident that the space created in the first image is the experience of a single walk?

walk three





On the fourth walk, I collected many elements from Carytown like textures, colors, products and commercial signs on every walk and also recorded myself walking from four angles. I projected these elements on the cubes and added the recording of my walk to one cube.

On this walk, I recorded from a top down angle. The position B was at a top down angle in relation to the cubes. I added up and down movement while recording the video of the projection. Both Position B and the added movement imitated the angle of shooting and the movements of walking, recorded in the video taken at Carytown.

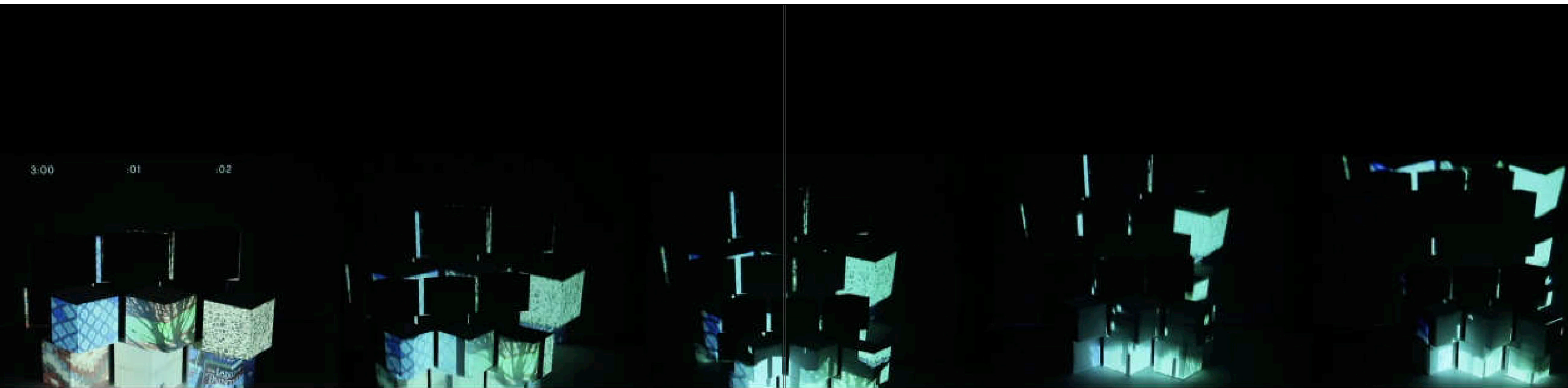
I added typography to show the passage of time. The addition of time communicated a moment within a walk. This began to communicate that a moment in a closed space is being transformed to open-ended.

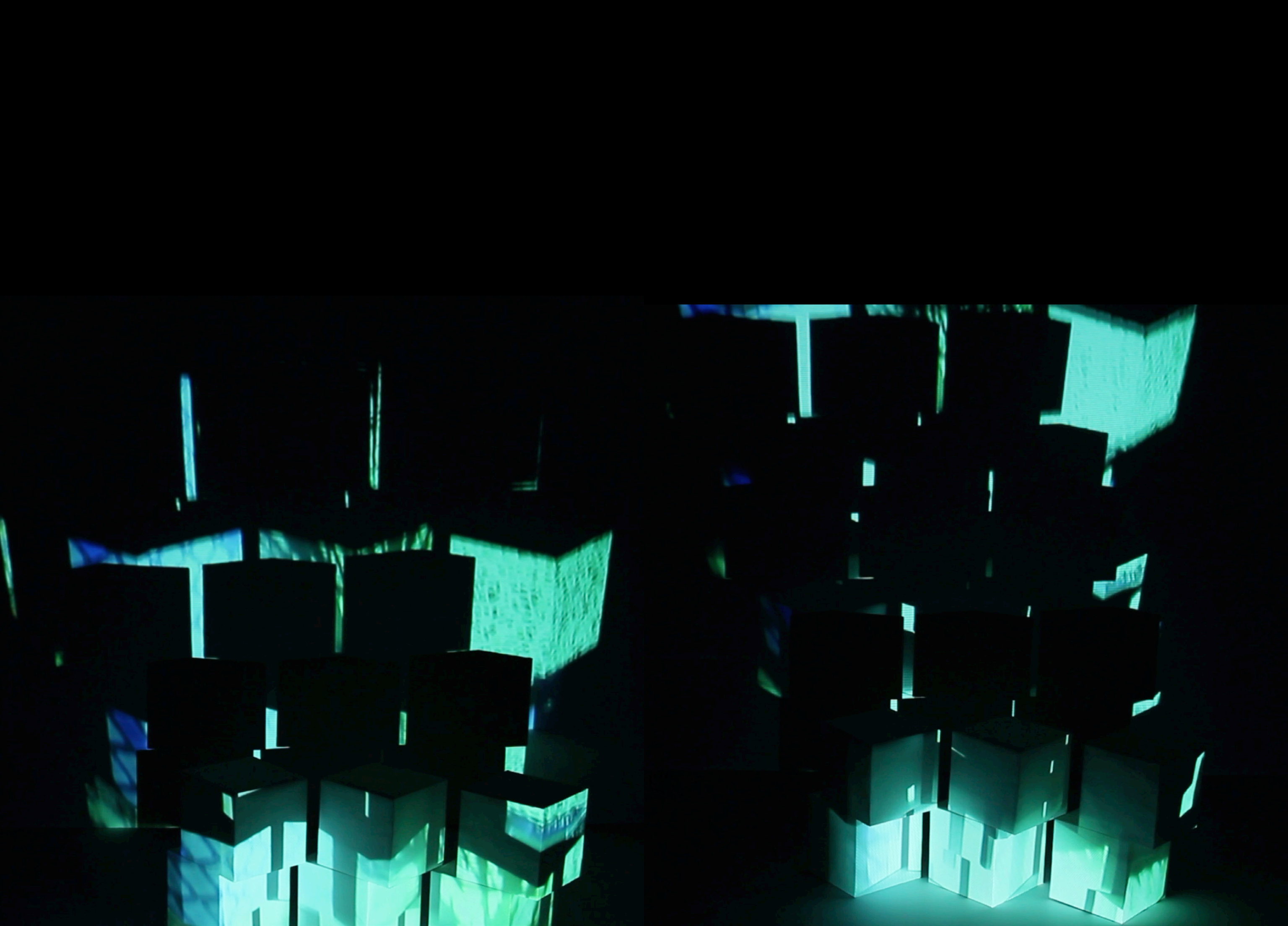
I performed two more studies with the same rules. In the second study, the position B was in the front of the cubes, imitating the front view of walking in space recorded in the video taken at Carytown. I added left and right movements. In the third study, I moved my camera from right to left reflecting the movement in the video recorded in Carytown. The videos were so complex in nature, that understand-

ing of transformation of space and hence, the communication suffered. The space was immersive and dynamic but the added movements could confuse the viewer and make it hard to understand what was really occurring.

I recognized the line at which this method yielded results that were too complex to understand. The typography was getting lost in the second image itself. The successful addition was the video of my walk and time as it communicated a single walk through space.

walk four



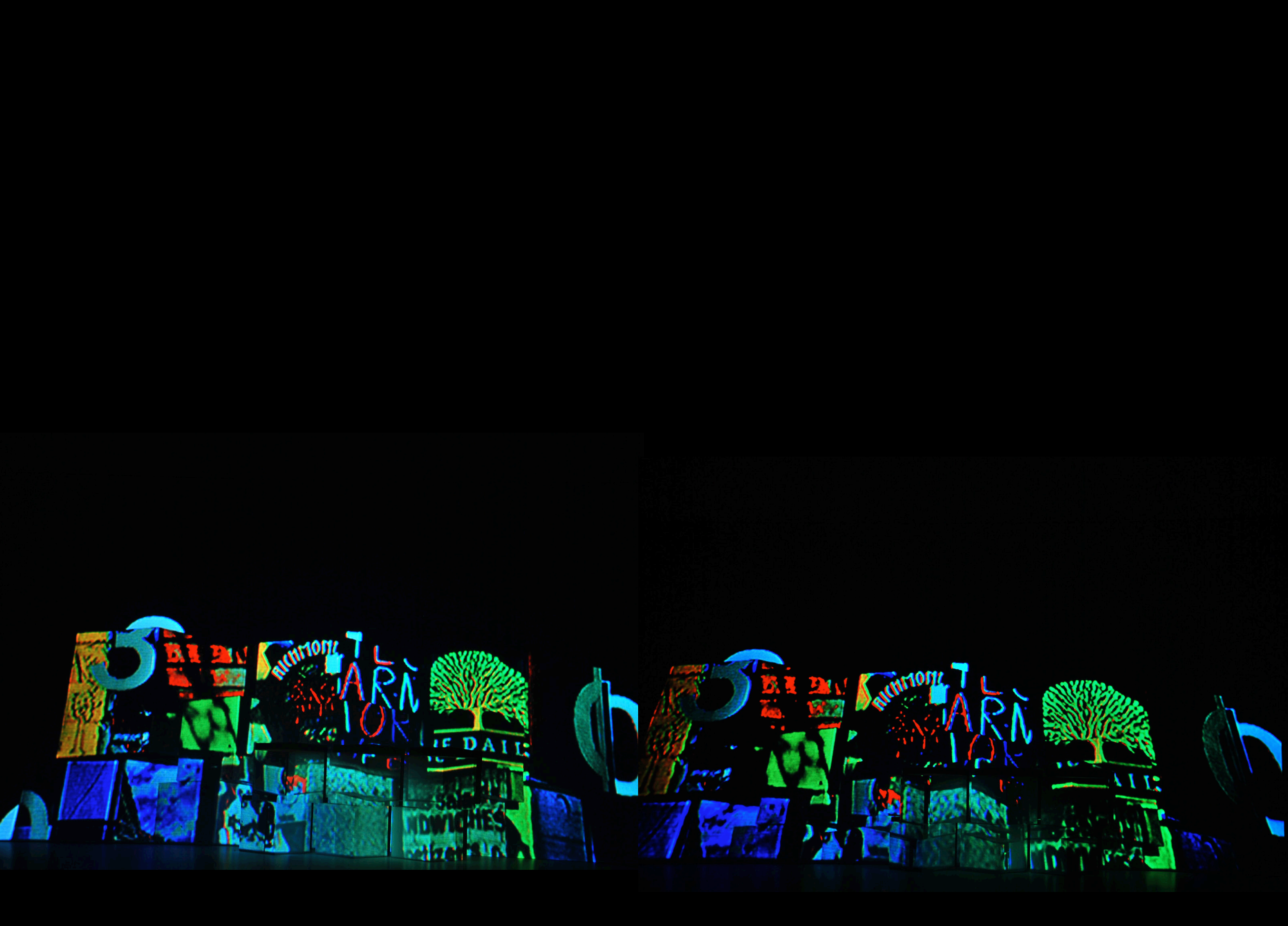


With these studies, my goal was to use typography and through it time displayed more prominently in the sequence. The fragmentation of type and image shows the simultaneous distortion of time and space. By the end of the progression, the readability of time disappears, and the space breaks free of order. Typography on signs taken from Carytown is fragmented clearly in this sequence.

These projects were helpful in realizing the potential of the method and how the results changed with changing variables. Moving forward, I created work by choosing successful parts of previous projects and studies.

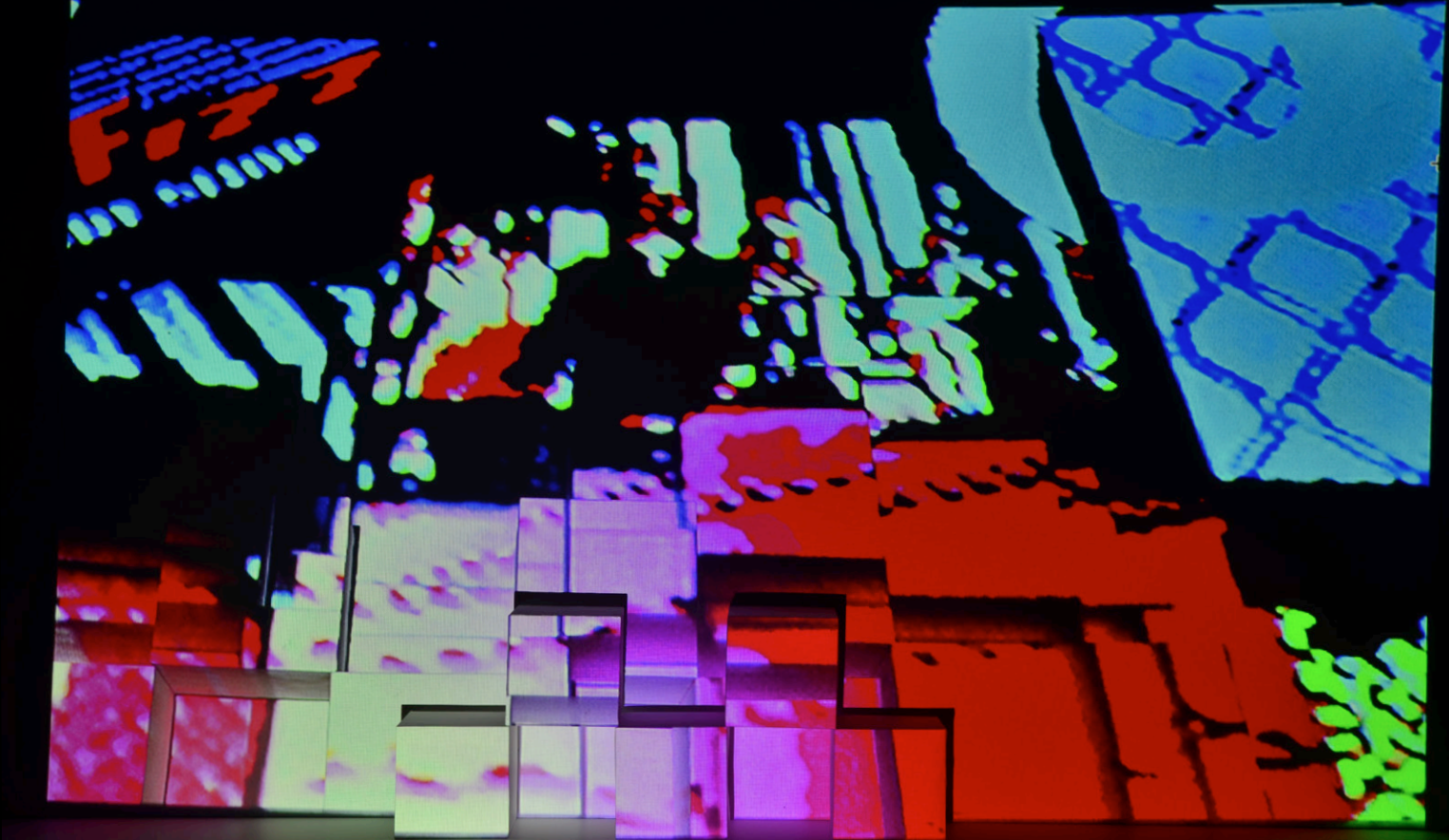
study one

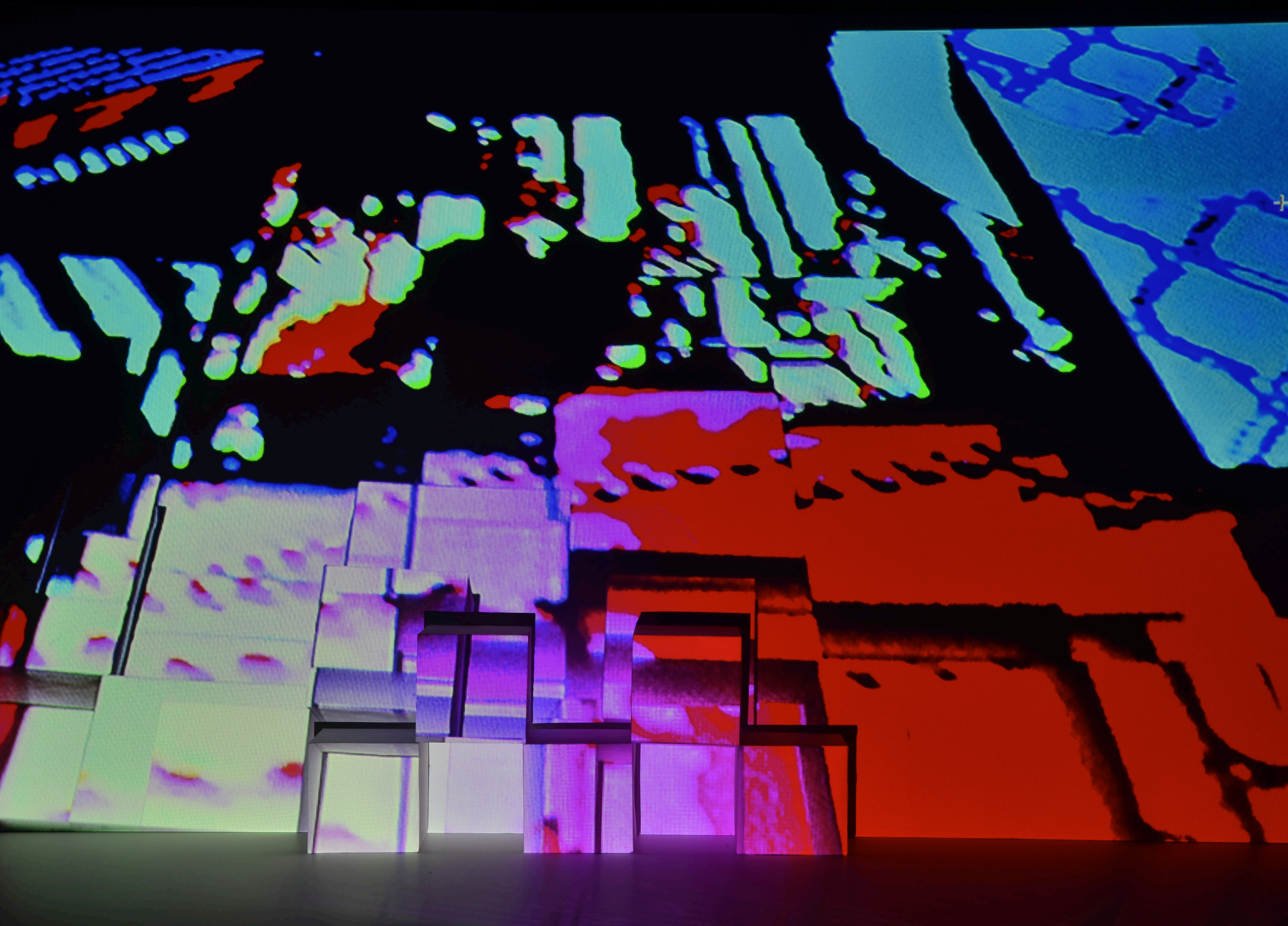




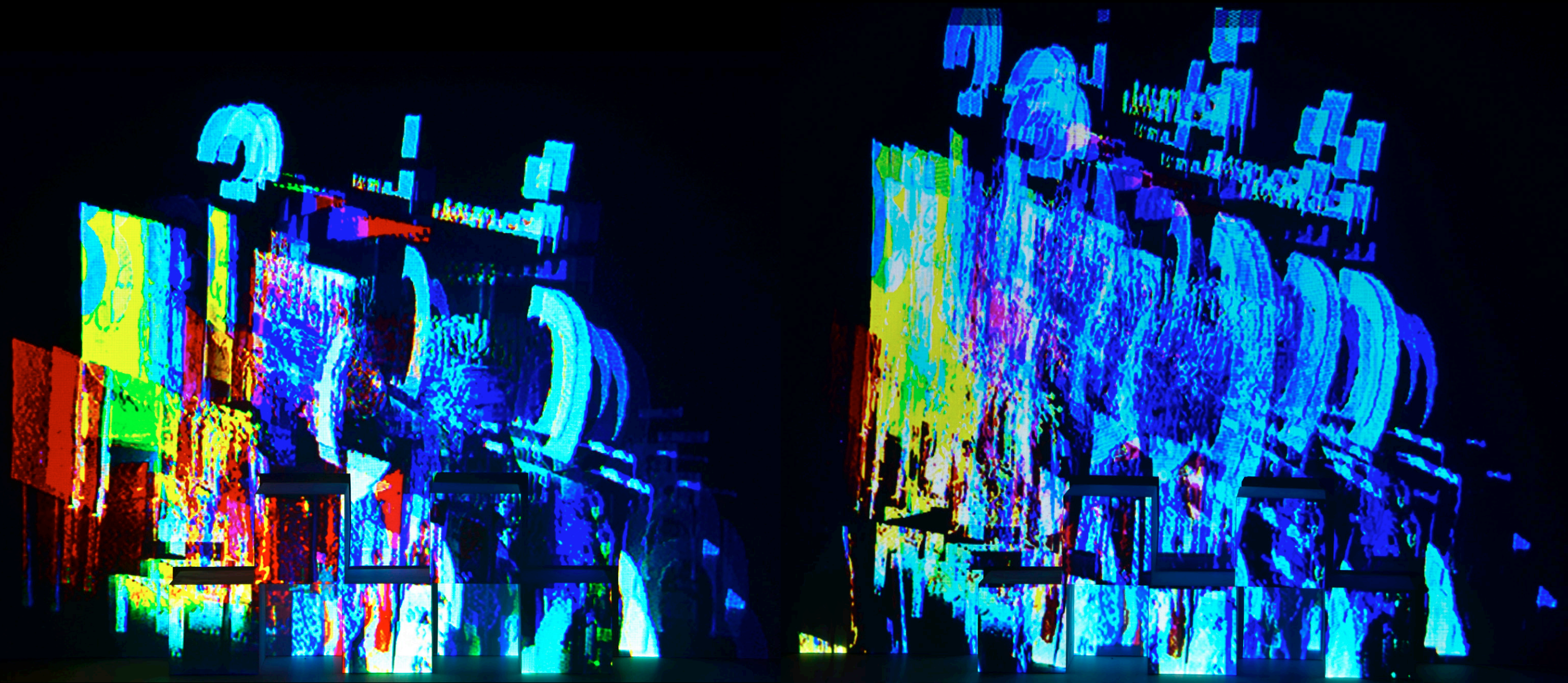


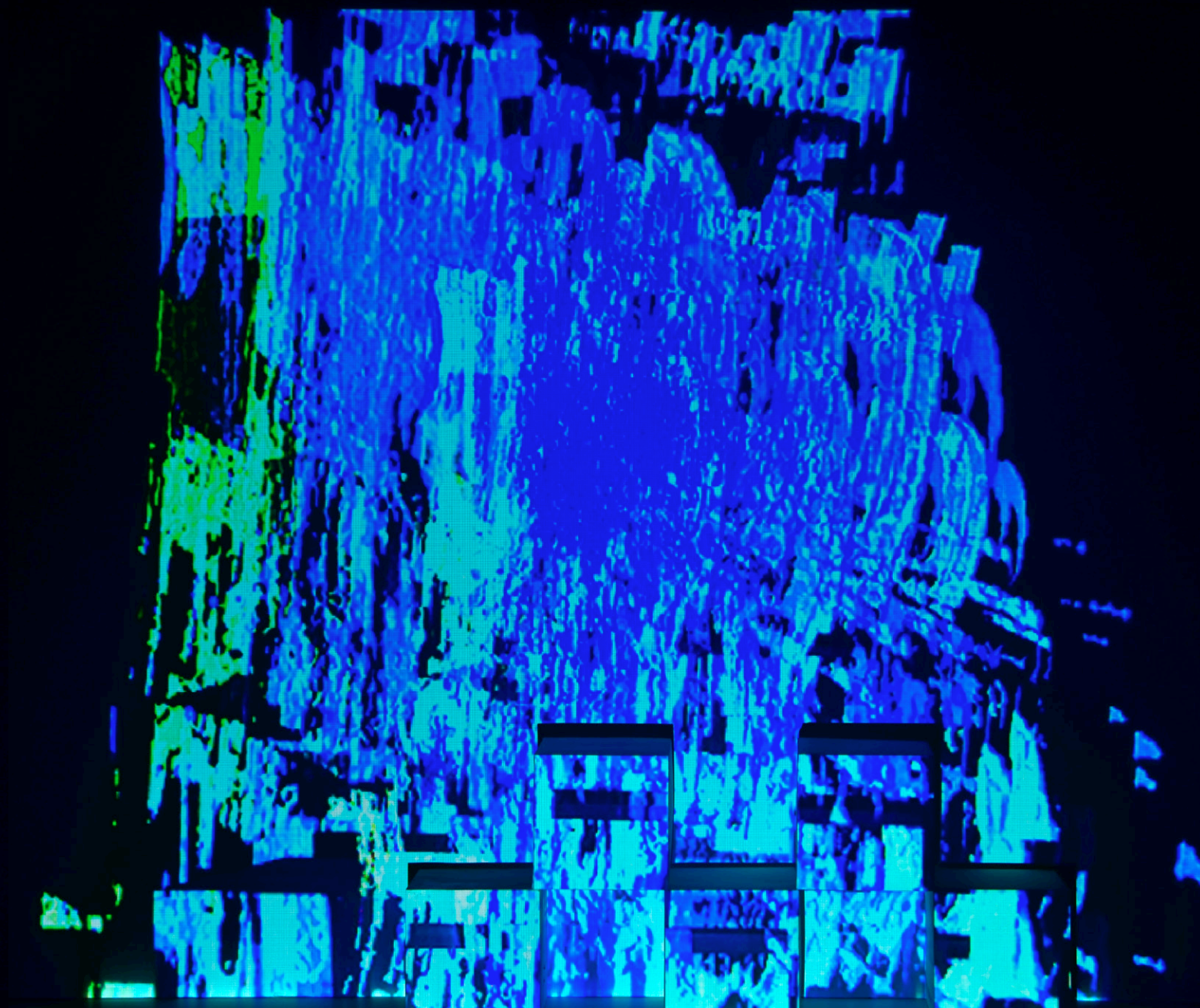
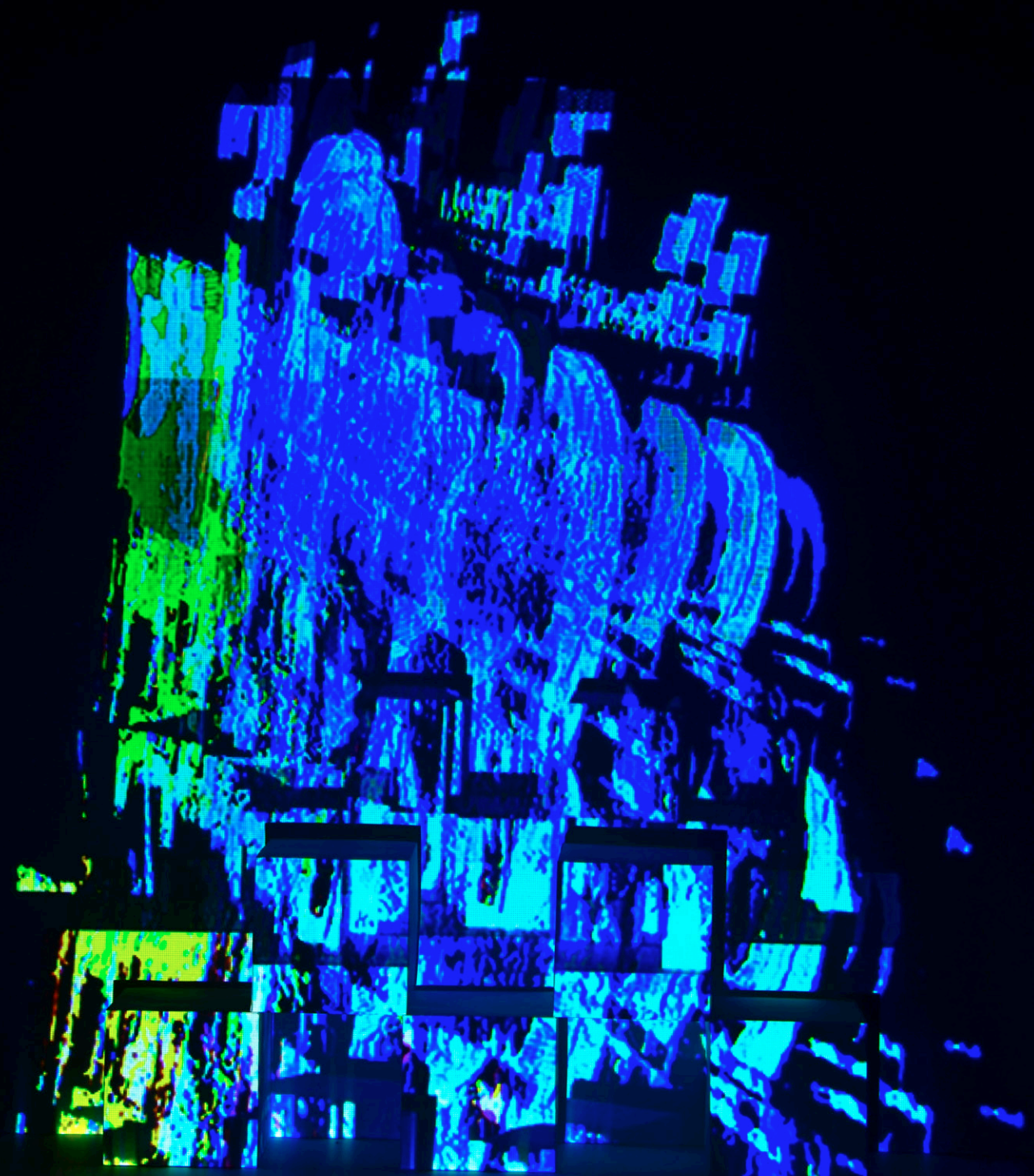


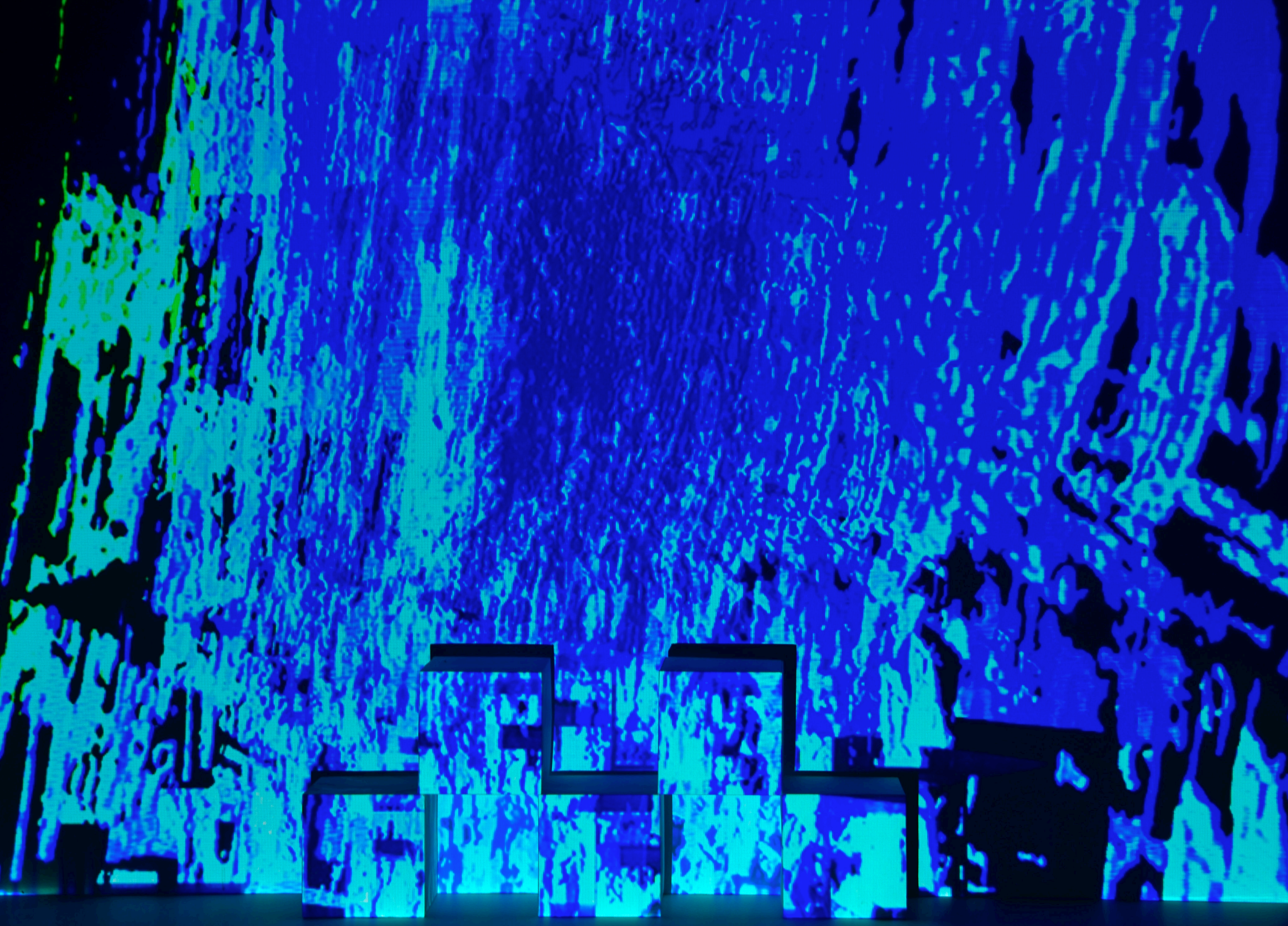














exhibition

The goal for my thesis work was to transform a closed space into an immersive, open-ended experience. While this goal remained metaphoric, the exhibition helped me realize the full potential of the work and gave me fresh eyes from which I now view my work.

Through the thesis exhibition, I intended to transform a closed space in the form of an empty white room into an engaging and open-ended experience. I covered all four walls with a continuous stream of projections. The room broke away from its rigid structure and transformed into an immersive space with no beginning or end. There we three videos projected simultaneously on the walls and they changed at different speeds reflecting the many rhythm of the urban environment.

My work was situated in a dimly lit room where I projected images on cubes and then photographed it from different positions. The format of presenting this work has been a sequence of images. This approach seems more of a documentation of the actual

work and less of an application in itself. By applying the work to an empty white space for my exhibition, I saw that this work existed in a more meaningful way when used dimensionally to create spaces.

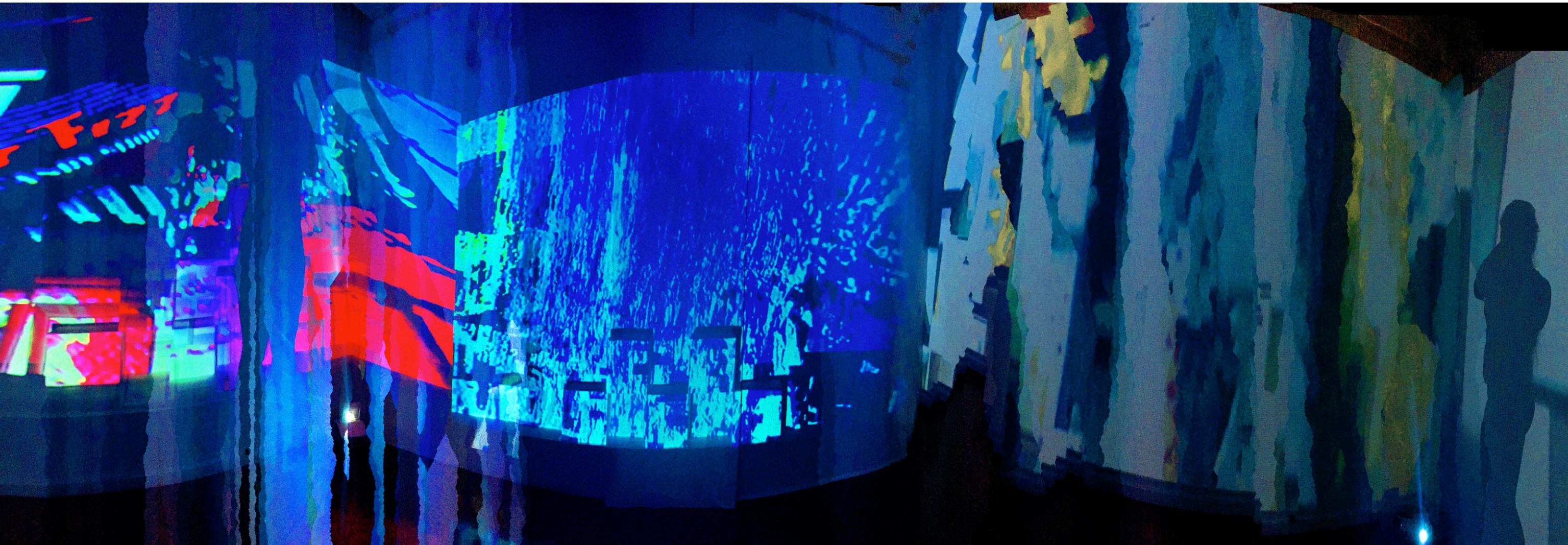
While the content was telling the story of my walks through Carytown, the graphics and typography were transforming the room itself. The graphic images were two-dimensional in format but through their inter-relationship and placement in the room, they developed depth and a spatial characteristic. This led me to discover that my work has potential when used in transforming indoor/outdoor spaces.

The colorful graphics created a dynamic space and the moving typography enhanced the dimensionality of the space as it moved from one wall to the next while also adding communicative value to the piece. The surround

sound in the room echoed city noises. It was recognizable in some parts and abstract in others. It intensified the immersive quality of the space and added depth.

The scale of the projection was essential to an immersive space. The scale greatly enhanced the sense of walking into, and being surrounded by, a space larger than the human body. People formed an essential part of the work as the room became inactive without them. The multiple shadows of a person in the room afforded interaction between people and space. While the shadow was formed in the projection, the projection covered the human bodies. The physical interaction for people was limited to a playful activity with their own shadows in the projections and it would be interesting to add interactive graphics that respond to touch or motion in the future.

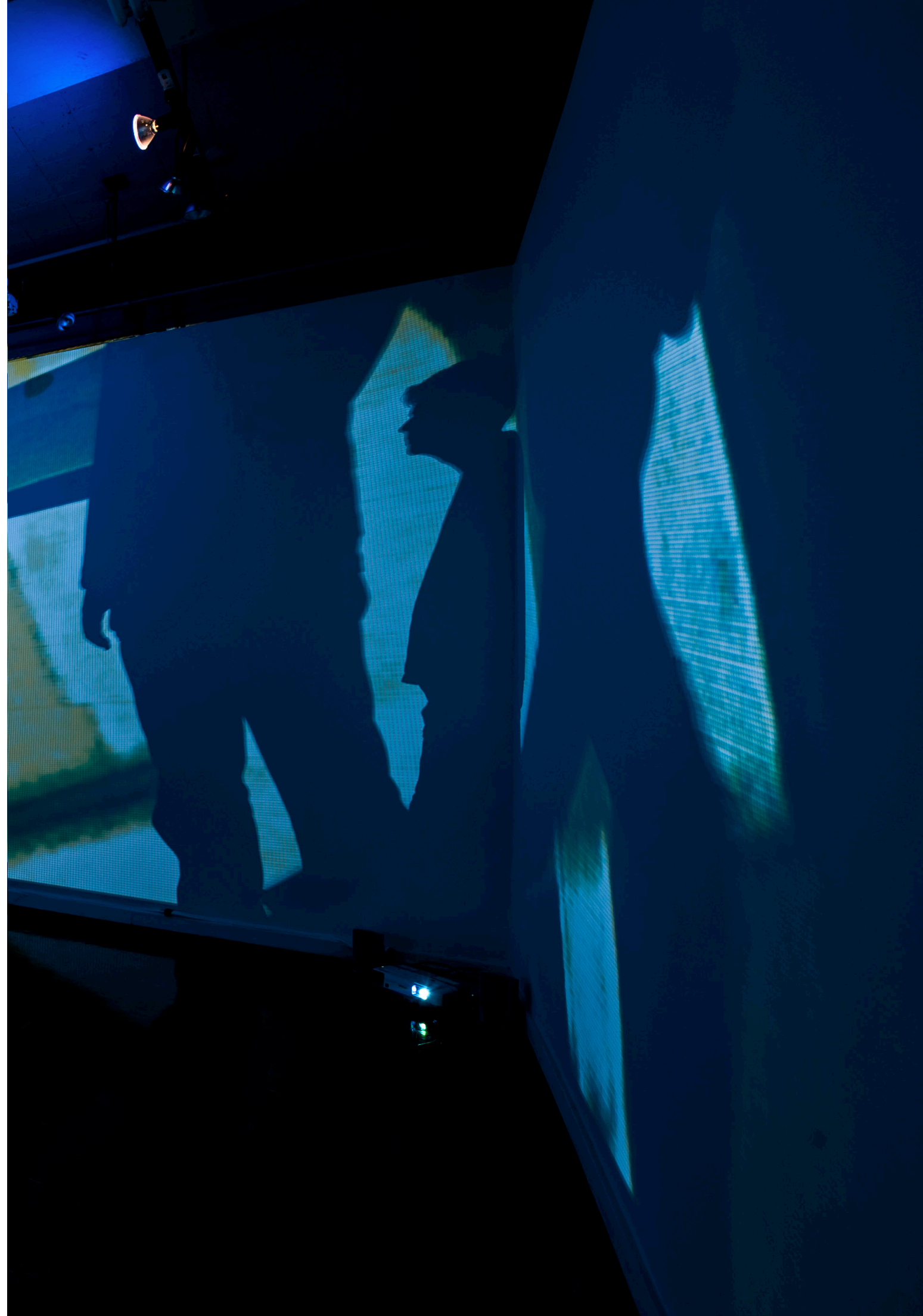
obverse spaces

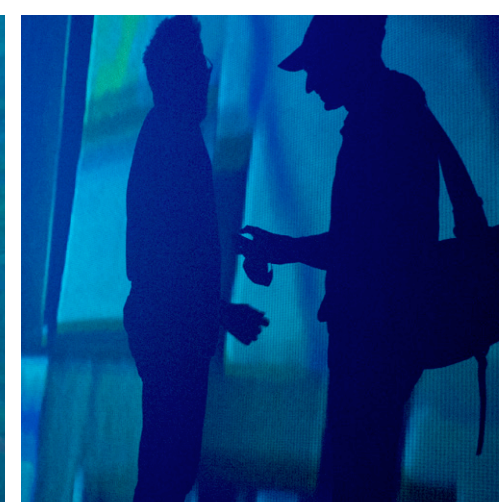
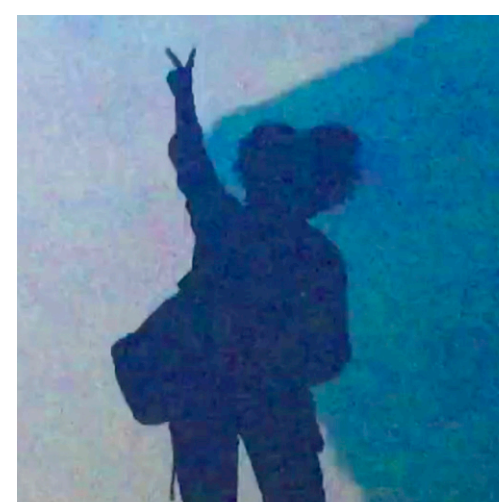
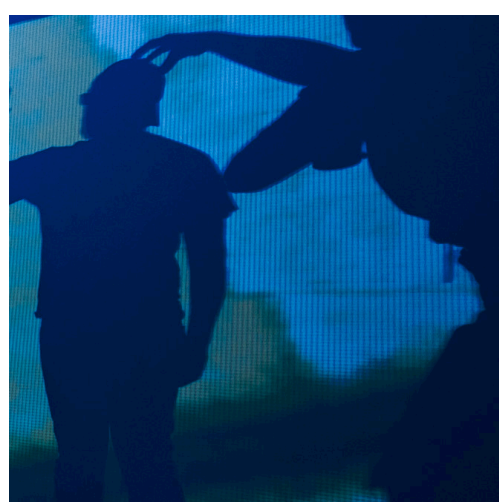
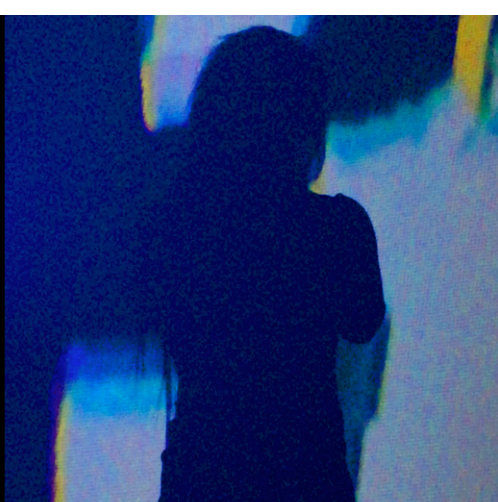
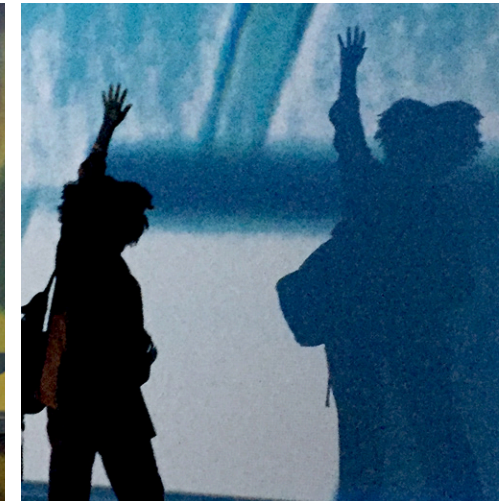


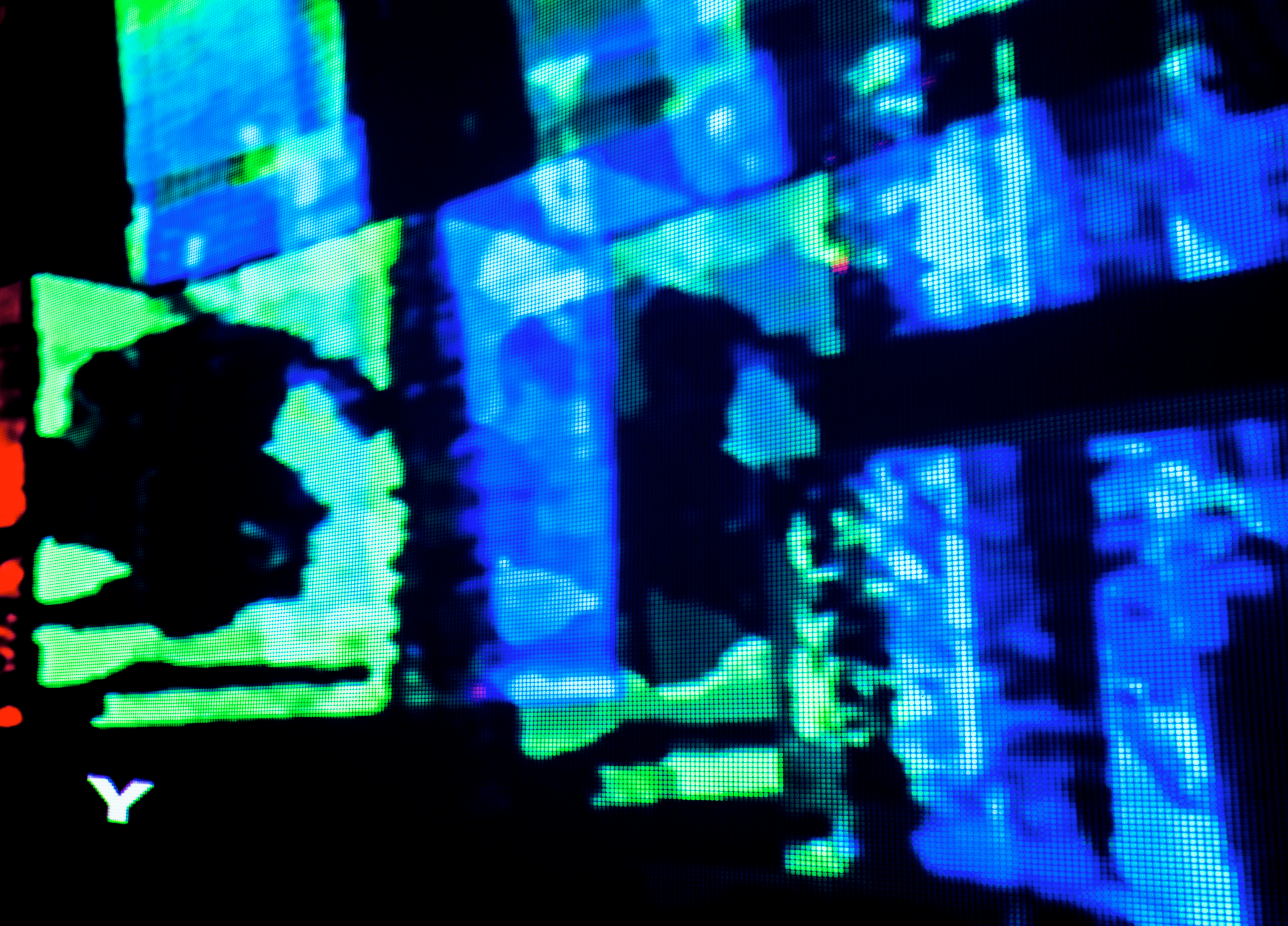














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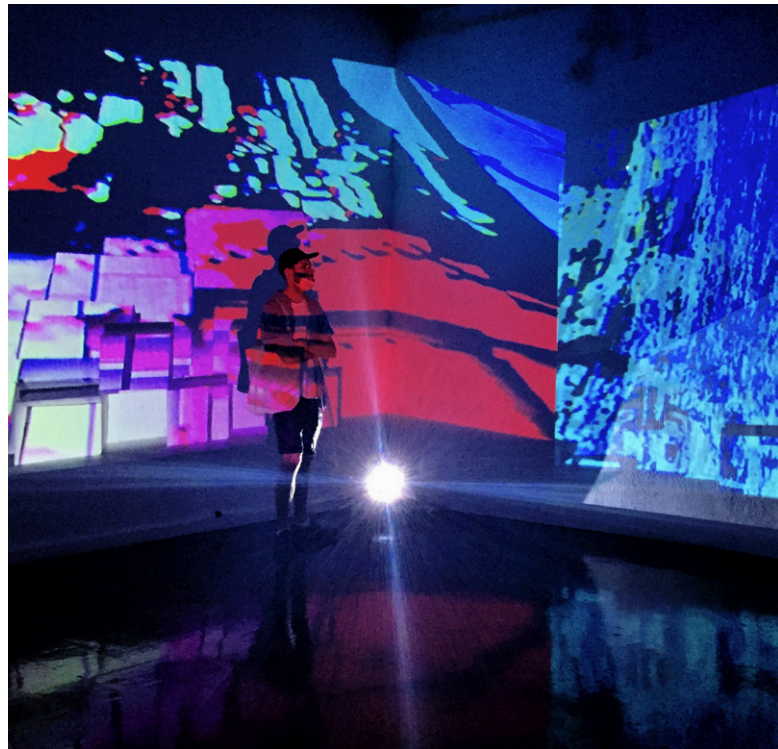
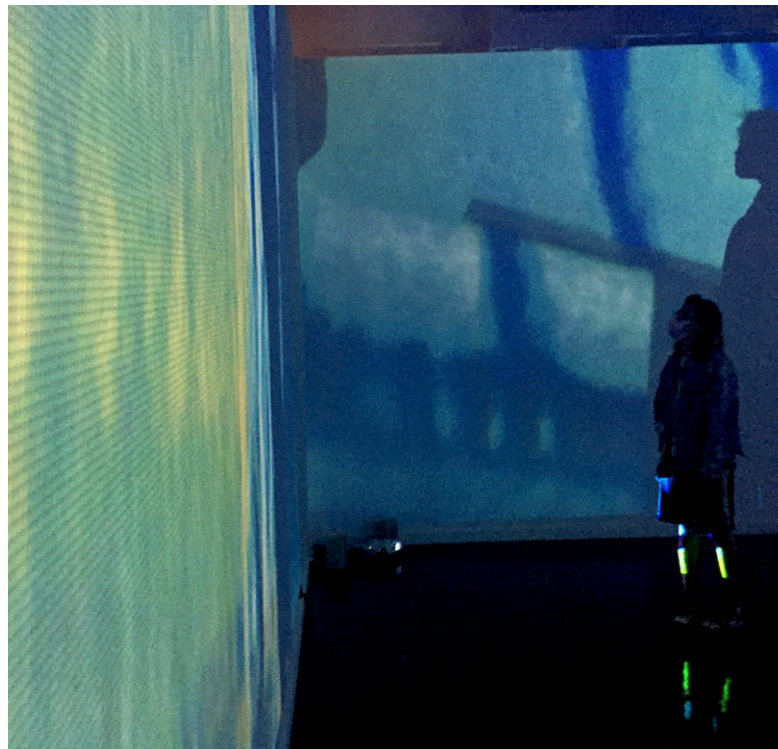
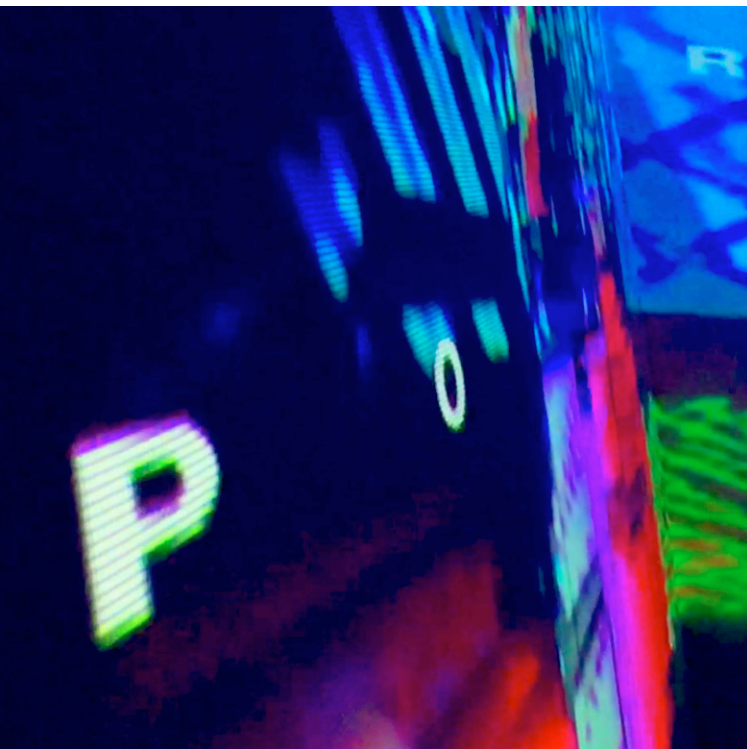
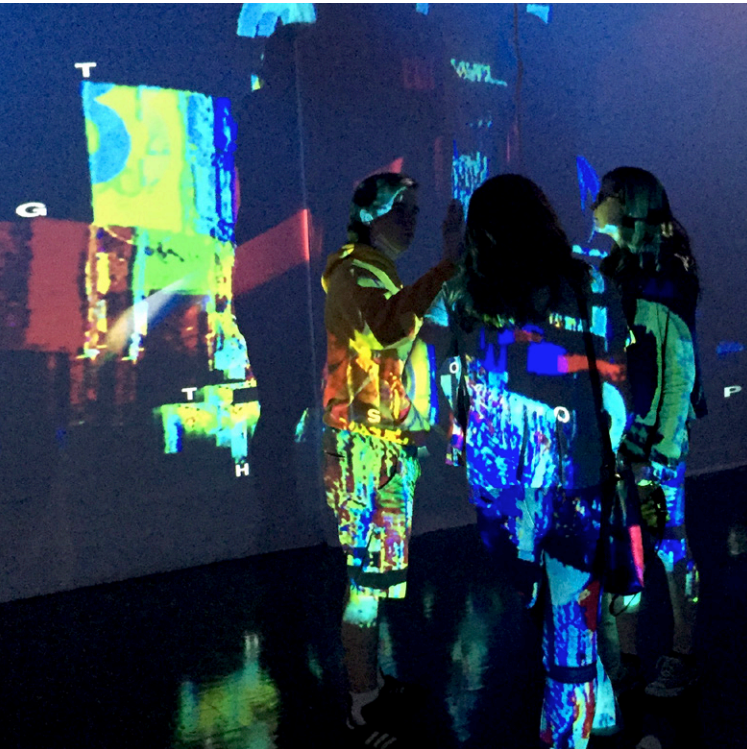
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STOP



The two years of being at graduate school has deepened my design thinking and expanded the mediums with which I work. Prior to school, my practice focused on client based projects and I mostly worked through print and digital mediums. I found myself constrained within the boundaries of commercial design that gave me little liberty to step out and explore a more personal methodology in design. My self-initiated work was inspired by the urban and rural visual culture of India and was the only time that I was able to dig deep into what design was for me. Graduate school radically shifted my practice from sitting in a room and working on a computer to experimenting with different media and deriving ideas from disciplines like Architecture, Art, Geography, Sculpture and Photography. Going through these two years wiped my mind clean of many preconceptions about what design was and gave me new eyes and hands from which to work.

Working with unconventional tools like cubes and light instead of type and image has lead me to see that objects can become tools of communication and that value lies in their abstract symbolic language. Most of my third semester went into exploring the many combinations of light falling on a cube. I learnt how a slight shift in the angle of light source in relation to the cube can cause light to bend, stretch and reflect and that it completely changes the perception and meaning of the assembly. It was a mesmer-

izing experience to work deeply with this visual language and find its communication value. As I step out of school, I take with me a way of thinking that focusses on the emotive and expressive qualities of physical objects and the new environment created by their juxtaposition. I take this thinking to apply it to not just to objects but to typography, illustration and graphics and how their layout on a page can create immersive environments.

My thesis has focused on altering perception but more importantly, it has given me a new way to approach design problems; by seeing them from the perspective of physical sensation. Observing space till there is no distance between the space and how you experience it is fascinating to me. Immersion by activating the senses has become a huge part of problem solving for me. Immersion brings engagement and intimacy. Intimacy leads to greater absorption of an idea. Through interaction with the work, people see beyond the written words, beyond the visual imagery. They begin to understand the work through the feeling it produces.

Using space both as content and medium has been a shift in how I understand and work in graphic design. Design has the ability to alter urban spaces and cause a ripple effect of social and cultural changes. Space is both the medium to explore and the subject of transformation. Going beyond the realm of wayfinding

and super graphics, this thesis project presents a new way to think through space that can transform urban environments and through that alter a city's texture. By developing immersive spaces, I am inviting engagement and participation from people. People are a big part of my work. They are not merely an audience that I design to communicate to.

My observations of urban public spaces throughout my childhood helped me develop a method to explore a new city. I applied this method in my thesis to create form and image. Observing a street on long walks and dissecting every element collected on these walks through fragmentation, recurrence, and motion helped me experience the same space in a personal way. The method is immersive in itself, a form of meditation, a repetitive action that transforms space as a response. The use of fragmentation, recurrence and motion have opened new doors for me. These are methods for me to produce form and image and have introduced the ideas of adaptability and flexibility into image-making.

I have been delicately crossing the line between representation and abstraction. While abstraction produces beautiful forms, representation is essential for communication. I have tried to achieve representation in the first image of the sequence where the cubes are neatly placed and the images collected from Carytown are clearly visible. I added typography to indicate time and through

it communicated a moment in my walk. However, I am not satisfied with the complicated nature of this communication. I want to achieve a simpler and more interesting way to communicate the idea of a walk through a specific space and time while still using the same tools and methods.

Observing, studying and working with extremely complex systems like cities have given me insight into working with systems that grow and alter constantly. As a designer, I am attuned to working with systems that are used in the form of processes and as a methodology. Through this thesis project, I have gained the ability to look deeper and recognize the many layers at play in a system and how to design in and around these systems to create affective and adaptive changes.

Moving forward, I will work on transforming indoor/outdoor spaces. The graphics will be created from the space that the work is being projected on such that the transformation is impactful and has a stronger communication value to it. The work uses form, image, typography as visual tools, sound as an auditory tool and projection as the medium.

Through immersion, I will create intimacy between people and space. Going out of school, I take this objective as a design philosophy to all work that I will do in the realm of Graphic Design. I firmly believe that intimacy and immersion has the power to facilitate the greater absorption of a message and that spatial experiences create deep connections with the audience.

conclusion

Brougher, Kerry, and David Elliott. *Hiroshi Sugimoto. Ostfildern-Ruit, Hatje Cantz Publishers, 2005.*

This book presents the photography works by Hiroshi Sugimoto. I am specifically influenced by his photographs from the work *Theatres* that captures a two-hour movie in a single frame through long exposure. He ventured out into abandoned and functional theatres built in the 1920's and 30's and drive-ins from the 40's and 50's to photograph the projected movies. The photographs have a gleaming white light in the projected area that transports the viewer into another dimension.

Bruno, Giuliana. *Surface: Matters of Aesthetics, Materiality, and Media. Chicago, University of Chicago Press, 2016.*

The author explores questions of materiality in the contemporary world. She argues that materiality is defined as the substance of material relations and investigates the space of those relations and how they appear on the surface of different media. Shedding light on the modern surface condition, she focusses on how the art of projection is reinvented on gallery walls. She talks about the light spaces of artists Robert Irwin, Anthony McCall and James Turrell and the textured surfaces of Isaac Julien's and Wong Kar-wai's filmic screens. She articulates surface as a site in which many form of transformation, memory and meditation can take place.

Calvino, Italo. *Invisible cities. Translated by William Weaver, 1st English ed., New York, Harcourt Brace Jovanovich, 1974.*

Invisible Cities is a fictional novel in which the author narrates a conversation between emperor Kublai Khan and Marco Polo. The book consists of brief prose poems describing 55 fictitious cities that are illustrated by Polo to Khan as prove of the expanse of his empire. This book is of interest to me as each city in it is imagined and conceptual. These cities are not made of concrete, glass and bricks but from ideas that discuss cultural, economic and social lives of people. It is a statement on our human condition as we dwell in the civilized world.

Deschenes, Liz, et al. *Barbara Kasten: Stages. Zurich, JRP Ringier, 2015.*

The book is a compilation of the Chicago-based artist Barbara Kasten's work with abstraction, light, and architectural form. As one of my precedents, I am fascinated by her spatial arrangements of modernist sculpture, and experiments with technical color photography printing methods. She investigates color, line, texture, light and space to create

structures in her studio which she then photographs from angles that changes its scale. She also photographs postmodern architectural space to transform them into abstract, immersive spaces.

Edensor, Tim. "Moving through the City." *City Visions, edited by David Bell and Azzedine Haddour, Harlow, Pearson Education Limited, 2000, pp. 121 – 140.*

This collection of essays from renowned scholars focuses on contemporary issues in urban culture and politics. Some chapters discuss urban practices of tourism, identity, diversity, walking, dancing, while others walk us through the many ways in which we experience distinct spaces like streets, city centers, and ruins in a city. The book also discusses the influence of theoretical perspectives like post modernism and ethics on urban cities. I am very interested in Chapter 9, where Tim Edensor discusses the experience of moving through an Indian bazaar and frames this embodied action in space as a dance performance. He discusses the tension between control and freedom to emphasize that body movement is choreographed in regulated spaces and is free in spaces that enclose many spontaneous cultural and social activities. He places value in the vibrant energy created by disruption, co-existence and friction in regulated spaces.

Edensor, Tim. "Walking through Ruins". *Ways of Walking: Ethnography and Practice on Foot, edited by Tim Ingold and Jo Lee Vergunst, Aldershot, Ashgate Publishing Limited, 2008, pp. 123 – 141.*

In Chapter 9, Walking through Ruins, Tim Edensor presents the experience of walking through ruins in urban cities. He discusses how the presence of danger defamiliarizes space and wears out the human body. The experience of walking through an abandoned building is similar to walking through an open space. He talks about the unique kind of sensory experience produced by unusual immaterialities in ruins that transports the walking body into unfamiliar states. The chapter alters the connection between walking and vision and invites a speculative context while looking at unregulated spaces.

Eliasson, Olafur. *Your Lighthouse: Works with Light 1991-2004. Ostfildern-Ruit, Hatje Cantz Publishers, 2004.*

This book features 138 light and mirror works by Olafur Eliasson. In his work, the artist focuses on the factors that influence human perception in the age of technology. The installation named *The Weather Project* transforms the space of a museum into a mesmeric landscape where

bibliography

viewers gaze into a glowing artificial sun. His work juxtaposes the natural with the artificial and compels us to reassess our notions about the authentic experience of nature. I am inspired by the use of light in a museum space to create an immersive environment.

Ellard, Graham, et al. *Anthony McCall: Notebooks and Conversations*. Farnham, Ashgate, 2015.

This publication features reproductions of pages from McCall's archive of process notebooks. It is formed out of a series of discussions that took place over the last decade between McCall and the artists Graham Ellard and Stephen Johnstone. Anthony McCall is an artist known for his 'solid-light' installations, a series that he began in 1973 with *Line Describing a Cone*, in which a volumetric form composed of projected light slowly evolves in three-dimensional space. Occupying a space between cinema, sculpture, and drawing, these works are simple projections that strikingly emphasize the sculptural qualities of a beam of light. His work is of special interest to me as it shifts the relationship of the audience to film, as viewers become participants, their bodies intersecting and modifying the transitory forms.

Evans, David. *The Art of Walking: a Field Guide*. London, Black Dog Publishing, 2012.

The book presents the practice of walking as an artistic practice and explores themes of footprints and lines; writers and philosophers; marches and processions; aliens, dandies and drifters; slapstick; studios, museums and biennales; and dog walkers. The book is a useful reference for looking at the visual interpretations of walking from many artists.

Fernando, Nisha A. "Open-Ended Space." *Loose Space: Possibility and Diversity in Urban Life*, edited by Karen A. Franck and Quentin Stevens, Abingdon, Routledge, 2006, pp. 54 – 72.

Public spaces are designed and divided into areas that are functional for business, leisure, entertainment, education, etc. The book explores many ways in which urban residents can break out of this monotonous usage of space and appropriate spaces to meet their own desires and needs. Unexpected, spontaneous, momentary or planned, these activities make a city lively and energetic. With a wide historic and social context, this book is influential in my work as it explores the connection between the spatial and behavioral. It addresses issues of architecture and urban planning. The case studies range from a wide network of cities like New York, London, Berlin, Amsterdam, Rome, Guadalajara, Athens, Tel Aviv, Melbourne, Bangkok, Kandy, Buffalo, and the North of England. With a

focus on adaptability, flexibility, and multi-sensory qualities of an open-ended space, Nisha A. Fernando discusses Chinatown and Little Italy in New York City and Colombo and Kandy in Sri Lanka. Through these examples, she emphasizes the unique socio cultural identities of open spaces.

Friedman, Martin L., et al. *Lewitt x 2: Sol Lewitt Structure and Line; Selections from the Lewitt Collection*. Madison, Madison Museum of Contemporary Art, 2006.

The book offers a unique perspective on a huge collection of work by Minimalist and Conceptualist Sol LeWitt. His geometric sculptures, groundbreaking wall drawings and striking works on paper have defined and pushed the limits of art-making for over 40 years. Sol LeWitt's use of variations of cubes in his work *Structures* was very inspiring to me. His method for the application of his wall drawings presented a way to generate form through instructions.

Giesecking, Jen and William Mangold. *The People, Place, and Space Reader*. New York, Routledge, 2014.

The book presents writings from the likes of Rem Koolhaas, Setha Low, Kevin Lynch, Guy Debord, Michel de Certeau, Virginia Woolf, Bernard Tschumi, and many more accomplished scholars, designers, and activists from a variety of fields to understand the makings of the world we inhabit. The book is useful in advancing my understanding of person-space interaction in an urban environment as it extraordinarily expands on the knowledge of how space and place shape people and how people in turn create space and place. The book helps us makes connections between people and environment and the roles individuals, groups, and social structures play in creating an environment inhabited by people. The multiple and diverse ways that people engage with the environment is explored through the vision of urban planning, geography, sociology, ethnography, architecture, environmental social science, and design.

Herrmann, Daniel F. *Josiah McElheny the Past Was a Mirage I'd Left Far Behind*. London, Whitechapel Gallery, 2012.

This catalogue documents Josiah McElheny's recent site-specific installation at the Whitechapel Gallery. A sculptor, performance artist, writer and filmmaker, McElheny work with glass in combination with projection in inspirational to me. With the use of light and mirrors, he transformed the Whitechapel gallery space into a hall of large-scale

mirrored sculptures. He saturated the whole gallery and visitors in images and light. With the use of reflection and refraction, his work addresses how abstraction is used to depict an image of visual enlightenment.

Hoete, Anthony. *ROAM: Reader on the Aesthetics of Mobility*. London, Black Dog Publishing, 2003.

The reader is invited to explore mobility under the themes of narration, representation, globalization, telematics and velocity. The book presents the concept of mobility in an untraditional fashion. Expanding from the architectural understanding of mobility, the book focusses on mobility in the field of art, cultural studies, design and politics. From mobile phones, to cross-country trucking, and cartography, the variety of projects gives the reader a holistic view of the increasingly mobilized society. I am interested in mobility in urban spaces discussed in the book. Spatial mobility focusses on the placement of architectural urban immovable buildings amongst the highly mobile and fluid urban environment and the importance of reconsidering the very foundation for buildings if they are to stay relevant in the contemporary mobile world.

Ingold, Tim, and Jo Lee Vergunst. *Ways of Walking: Ethnography and Practice on Foot*. Aldershot, Ashgate Publishing Limited, 2008.

Walking is an important aspect of how humans access and inhabit their environment. This book combines the discussion on embodiment, place and materiality to present walking as a technique of the body. In my own work, I use walking as a method to explore and interact with the urban environments. I am interested to look at the act of walking from a range of different regional and cultural contexts and this book successfully provides me with variant perceptions on it; how it constitutes space and place, and is used in storytelling. From exploring the walking behavior among Akhoe Hai om hunter-gatherers in northern Namibia to urban residents in the subway station of Tokyo, this book presents the complexity of how we experience our environment through walking.

Lucas, Raymond. *Getting Lost in Tokyo*. Footprint, Vol. 2, 2008.

Transiting in a subway station and moving with and counter to the crowd, Lucas recorded his bodily movement in the form of notations. The records show many recurrent motifs which he describes using the conventions of architectural drawing. These notations show the passage of time through space. In this way, Lucas is able to

reassemble the experience of individual subway walkers and present walking as a practice of architecture itself. While moving through an Indian market, I examined my movement and thought a lot about how this movement is distinct to walking anywhere in the world; it's architectural nature in contrast to its organic driving forces. Lucas's work is influential in that it aligns with my own thoughts about walking as an act of creating form. Sensory, visual, and auditory experience combined with this form begins to develop space metaphorically.

Musser, Charles. *Thomas A. Edison and His Kinetographic Motion Pictures*. New Brunswick, Rutgers Univ. Press, 1995.

The book takes the reader through the invention of motion pictures and Thomas Edison's role in creating the kinetoscope. The Kinetoscope was not a movie projector, but introduced the basic approach that would become the standard for all cinematic projection before the advent of video, by creating the illusion of movement by conveying a strip of perforated film bearing sequential images over a light source with a high-speed shutter. *The Black Maria Studio*, Edison's movie production studio got its name because it resembled the shape of a horse-drawn police cart. The roof could be removed to let daylight in, and the studio was on a turntable that could be revolved to follow the sun.

Muybridge, Eadweard, et al. *Eadweard Muybridge in a Time of Change*. London, Tate Publication, 2010.

The book offers an opportunity to trace the life and the entire body of photography work of Muybridge. I am really interested in how his photographs divide time with the quickest exposure (possible at the time) and by presenting the pictures in a sequence, he is able to introduce the ideas of motion through the camera to the world. He also worked with prints that were meant to give a three-dimensional image when viewed through a stereograph device.

Nicolai Carsten. *Unidisplay*. Berlin, Gestalten, 2013.

The book is about the installation work called unidisplay created by Nicolai Carsten. His work is an important reference for me as it plays with the laws of perception to create an immersive space by using tools such as optical illusion, jitter, flicker, after-image, movement, and complementary color effect. The projection is extended over a long wall with two mirrors on either side. The visual is made up of sequences, motifs and graphic translations of various units of time measurement and acts as a world clock evoking the intertwining of time, between past, present and future.

Rojek, Chris. *Decentring Leisure*. London, SAGE Publications Limited, 1995.

In this book, the author discusses the influence of social constructs such as modernity and postmodernity on the perception of leisure. Chris Rojek brings together the insights of Marxism, feminism, Weber, Elias, Simmel, Nietzsche and Baudrillard to produce a survey and rethinking of leisure theory. The author considers the evolution of the meaning of leisure from what it meant to workers in the capitalist framework and how it's perceived in the age of postmodernity. This reading is specifically influential to my work in that the author discusses the effects of living in a risk society that is rapidly changing. While discussing Postmodernism, he points towards the influence of aesthetically regulated urban spaces on how the contemporary society experiences leisure.

Rubio, Oliva, and Vincenzo Vitiello. *László Moholy-Nagy: The Art of Light*. Madrid, La Fabrica Editorial, 2010.

The book features more than 200 works of Moholy-Nagy ranging from painting, photography, and photograms to collages, films and graphic design. The book brings together his work with light; be it the invention of photograms or crafting light sculptures made of transparent Plexiglass. His understanding of light both as a medium and as art itself significantly affected how I worked with light in my projects. With the advent of the camera as a tool, he uses it to create new vision. Moholy-Nagy's interest in qualities of space, time, and light continued throughout his career and transcended the very different media he employed to create visionary ideas.

Turrell, James. *James Turrell the Other Horizon*. Wien, MAK, 2001.

This book reveals the ways in which Turrell's art has developed, and offers an extensive overview of his work from its earliest stages to the present. James Turrell has innovated photographic techniques that allow light to have a physical presence. Using holography to make the

light itself the subject rather than the medium, Turrell creates colored light installations that appear to possess mass and take up space as planes, cubes, pyramids, and tunnels. I am interested in this experience that is immersive and invites the viewer to break the boundaries between themselves and the work. Turrell uses a room as his container and transforms it into a limitless space where seeing takes place. To visualize the limitless, a minimum of architecture is needed; one that emphasizes the art of joints, partitions and edges, of light and shadow. I am inspired by his use of light as an incandescent or nocturnal material. His spaces create a sensation that is very different to the ordinary reality. The viewer is asked to submit themselves to the power of the space that distances them from visible things by focusing on the gaze itself. It is an intimate act of closing one's eyes to open one's vision.

Venturi, Robert and Denise Scott Brown, et al. *Learning from Las Vegas*. Revised ed., Cambridge, The MIT Press, 1996.

The book was revolutionary in the architectural world and had a major influence on the emergence of postmodernism. The book focuses on recasting ordinary landscapes as objects to be analyzed rather than ignored. The author's collection on various aspects of the architecture in the city, including commercial vernacular, lighting, patterns, styles and symbolism is inspirational to me. Venturi and Scott Brown create a taxonomy for the forms, signs, and symbols they encountered and through them interpret symbolism in architecture and the iconography of urban sprawl.

Zec, Peter, and Achim Lipp. *Mehr Licht: Künstlerhologramme Und Lichtobjekte = More Light*. Hamburg, Ernst Kabel, 1985.

The book brings together the works of several artists who work with light. The work ranges from holograms, photograms, light objects, laser drawings, neon tube installations, and photographs. The book explores the artist's fascination with the possibilities of presenting light with light and using its formative power to visualize their ideas.

