



This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Fine Arts in Design and approved by the MFA Design Review Board of the Massachusetts College of Art and Design.

May 2018

Joe Quackenbush Thesis Advisor
Professor of Design
Coordinator of Dynamic Media Institute
Massachusetts College of Art and Design

Martha Rettig Thesis Advisor
Assistant Professor
Dynamic Media Institute
Massachusetts College of Art and Design

#### Jan Kubasiewicz

Professor of Design
Dynamic Media institute
Massachusetts College of Art and Design

#### Gunta Kaza

Professor of Design
Dynamic Media Institute
Massachusetts College of Art and Design

#### Fred Wolflink

Associate Director
Technology for Teaching and Learning
Massachusetts College of Art and Design

# Acknowledgements



I would like to thank the following people for helping me along the way in the development of this thesis...

Joe Quackenbush Anne Welch Martha Rettig Jiayi Xu

Jan KubasiewiczRyan KenneyGunta KazaSiya TakalkarFred WolflinkFish McGillHessam Daraei BafiSaul Baizman

Andrew Ringler Bing Lin

Yao Chen Gillian Liza Recar James Goodwin Chuyang Chen

Lingxi Li Li Ziyang

Paul Fitzgerald all of my DMI classmates...

# CONTENTS

#### ABSTRACT 11

#### **INTRODUCTION** 13

Where Am I From 15 Cultural Struggle 18 KFC Dream 20 Why Dynamic Media? 38 An Overview of My Thesis 41

#### **CULTURAL RESEARCH** 43

What I Mean by Culture 45
My Cultural Pyramid 48
Daily Life 51
Daily Life with Dynamic Media 59

#### AMERICA AND CHINA 61

Chinese Culture 62
American Culture 65
History of Mutual Exploration 67
Current Misunderstandings 73
Relevant Work 76



#### CASE STUDIES 83

Methodology 85
Travel as Metaphor 89
Backpack Journey 93
American Impression 121
The Chinamerican
Grocery Shopping Experience 125
Lingering Garden 149
Rainy Windows 177

#### **CONCLUSION** 199

#### **BIBLIOGRAPHY** 201



# **ABSTRACT**

The Internet and social media have brought us brand new thinking patterns from a global perspective. It helps us to reduce the linguistic barriers and cultural distance among diverse ethnic groups. Modern technologies such as smart phones are helping us to create more convenient bridges of communication. However, misunderstandings between different cultures still exist. How can we avoid cultural misunderstandings? I believe creating appropriate user experiences through dynamic media could be one option.

Compared to the theoretical and academic approaches to culture, religion and art, the study of daily life offers an experience that can be accessible and intimate to a large audience regardless of social economic class and levels of formal education. I wish to explore dynamic media and utilize it to express the daily lives of people in different cultures. I want users to directly feel and experience the daily life in other cultures. In doing so, I hope that users better relate to and develop empathy for people from other cultures.

Due to my bilingual life experience in both China and the United States, I am confident in introducing my audience to the cultural distinctions between these two countries. I hope that my interactive projects will serve as a virtual ambassador that can build bridges between people from various cultural backgrounds.

# INTRODUCTION

Throughout my education and career, I have been looking for a better way of expressing my experience with culture and daily life. After many ways of exploration, the first visual memory of my hometown, my intense design experience in Shanghai, my travel photography and random doodles — I found dynamic media. It gives me an approach to integrating concept, interaction, animation and illustration to express my experience in different cultures.



# Where am I From?

## The Monochromatic Color Palette of My Hometown

I was born in Suzhou, one of the oldest cities in China. Then I grew up within this traditional cultural surrounding. The Chinese traditions such as humbleness, filial piety, Confucianism, and comity accompanied me during these years. Visually, the monochromatic color palette, a palette composed of the black rooves and the white walls was my very first cultural impression. However, the KFC restaurant with the red belts and the gold fried chickens arrived in my hometown. The storm of the red and golden made a huge impact in my black and white kingdom. In 1997, KFC had coloring contest. I tried to use colorful pens to paint the new world. I started to look out of the black and white tradition and dream of exploring the colorful world.

# My Cultural Enlightenment in Beijing and Shanghai

In 2003, I went to Central Academy of Fine Art as an undergraduate major in graphic design. In Beijing, I observed the conflict between the West and the East. In the fall of 2005, thousands of citizens in Beijing protested the Starbucks store that opened in the Forbidden city. They considered it a cultural invasion to have a shop in the royal palace that was thousands of years old. Meanwhile, most of the westerners in Beijing preferred to isolate themselves in Sanlitun, a district filled with bars and restaurants in Western styles. By experiencing these, I recognized the barriers between distinctive cultures even though they shared a similar geographic context. Since then, I have been eager to understand the differences between the two cultures. However, during that time, my only skill was drawing. In 2007, I moved to Shanghai, the most westernized city in China and started my career there. As the major metropolitan area in China, Shanghai was filled with revolutionary western fashion, food, lifestyles, and also values and moral nous. I felt totally

lost in a city aimlessly worshiping Western values. In the meantime, my overwhelming workload and the commercial competition drove me into a life as a competitive designer in a capitalist market. However, after being a commercial slave for several years, I missed the traditional Chinese values of my country. Also, I wanted to learn more about the roots of my culture and become a cultural reporter. My professional experience taught me some upgraded skills such as graphic design, illustration, and multimedia design. All these would be tools for my cultural exploration.

# The Cultural Journey and the Discovery of Daily Life

In the spring of 2011, I quit my job in Shanghai and planned a cultural adventure in Western China. Following the ancient Silk Road in Western China, I started a six-month trip traveling by train, hitch-hiking and walking.

This journey redefined my understanding of aesthetics and design. It is not a simple visual

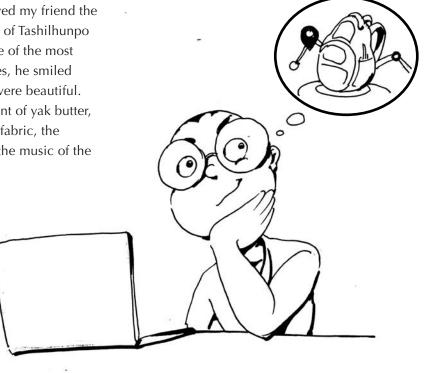
impression, but the vivid lives rooted in their earth. Through rough sketches and photographs, I witnessed and recorded the local people's daily life, and photographed the frescoes and sculptures in caves and the tombs built thousands of years ago. I was impressed by the pristine beauty of the local houses constructed by the native inhabitants in the mountains as well as the bright and pure color of the Tibetan costumes that shone in the strong sun rays. Their ordinary lives in the harsh environment revealed a special beauty. What astonished me the most were those anonymous artists who practiced the crafts a millennium ago. They risked their lives in the remote Gobi Desert to depict with colorful strokes the Nirvana they'd been longing for, only to express their Buddhist beliefs.

Their artistic creation woven intimately with their daily lives became a primary resource for me to observe the history and cultures that had been prosperous thousands of years there ago.

#### Visual of Emotional Stimulation

Back from the journey, I was passionate about sharing my experiences with my friends and my family members. I showed them photos, sketches, and writings. However, I found there was always a barrier between these visual images and the real experience. This visual information was still, static and not dynamic media. Merely relying on these pictures, my audience would never be able to have an immersive experience such as I did. For instance, when I excitedly showed my friend the pictures of the interior of Tashilhunpo monasteries that is one of the most famous Tibetan temples, he smiled slowly and said they were beautiful. Without the heavy scent of yak butter, the tactility of the silk fabric, the figure of the Buddha, the music of the

Oracle, my audience would never experience what I had. I was frustrated and challenged to look for a media that could stimulate the five senses and create an immersive experience for my audience.



# My Struggle in the United States

In the summer of 2010, I moved to the United States with my wife. I was very confident that I could quickly get used to this new world because I had already lived for five years in the most westernized city in China — Shanghai.

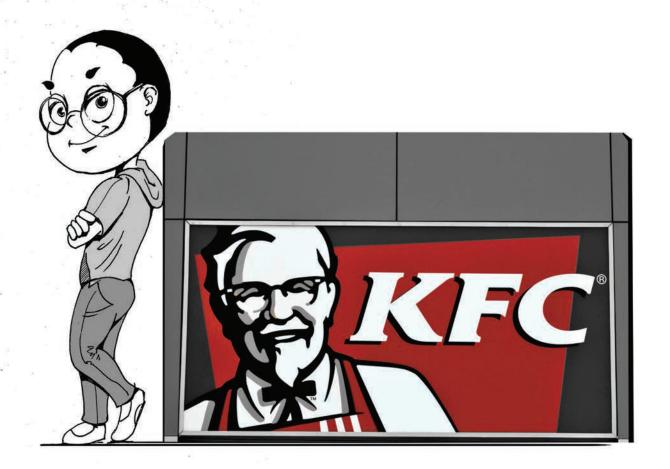
However, I was wrong. In addition to the language barrier, the distinctive living style frustrated me. My life was filled with questions: why couldn't I go out without a car? Why should I leave a tip in a restaurant? Why are these Americans crazy for football games? Why couldn't I find any hot drink for breakfast? During my first several years in the USA, I chose doodling as an outlet to express my emotions. But these illustrations and doodles, like my "American Impression" project, were merely random impressions, and only offered limited information about the American culture. By living in this country for several years, I started to understand the United States not just as visual impressions such as blue and red in the flag but also in the values and ideas of the people.

Similarly, I found few Americans truly understood the Chinese culture. Most of the citizens knew Chinese culture through Americanized Chinese symbols such as Orange Chicken from Panda Express and Chinese Kung Fu from Jackie Chan's movie. Some American intellectuals might understand Chinese Confucian, Dao, and Buddhism, but the Chinese culture was much more than that. The perspective of a teenager and an elderly person would be distinctive. The experience of a janitor would be totally different from that of a teacher. All these perspectives unified a complete picture of contemporary China.

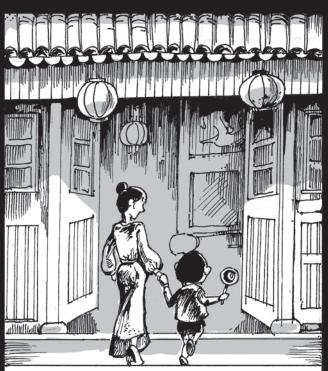
I began to wonder what we could learn through the daily lives of people. For instance, if we tracked a 60-year-old Chinese woman for one day we could experience the details of her daily life. We would see her going to a traditional market on both sides of a narrow street at 5 am. At 3 pm, she would be found in front of an elementary school to pick up her grandchild. Then, at 7 pm, she would be in an exercise group and start to dance in a public square. I wanted to create an experience to connect these individuals and present a vivid China.



# KFC Dream





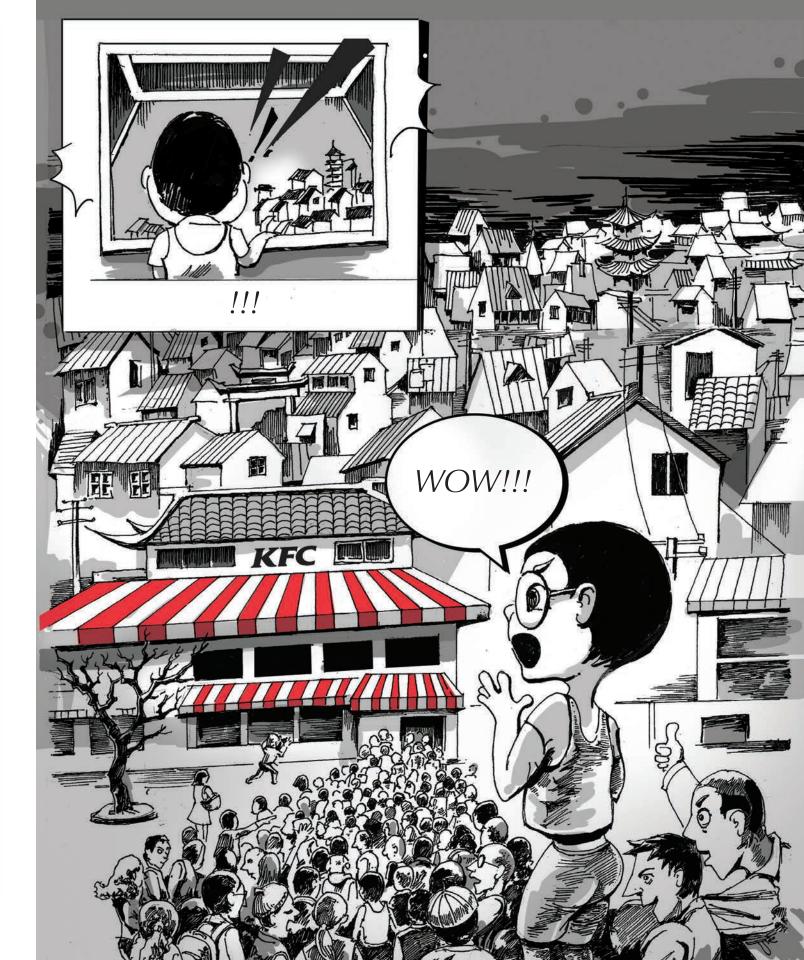


There were 500-year-old historical wood buildings

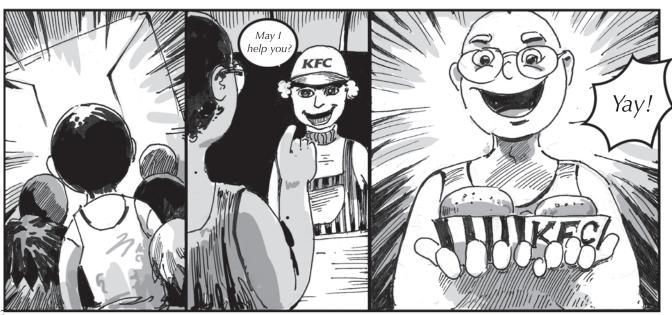


And water channels close to houses





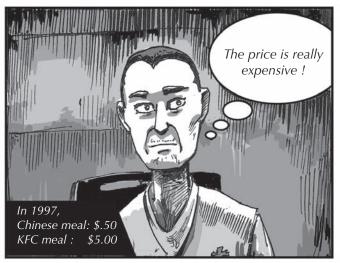










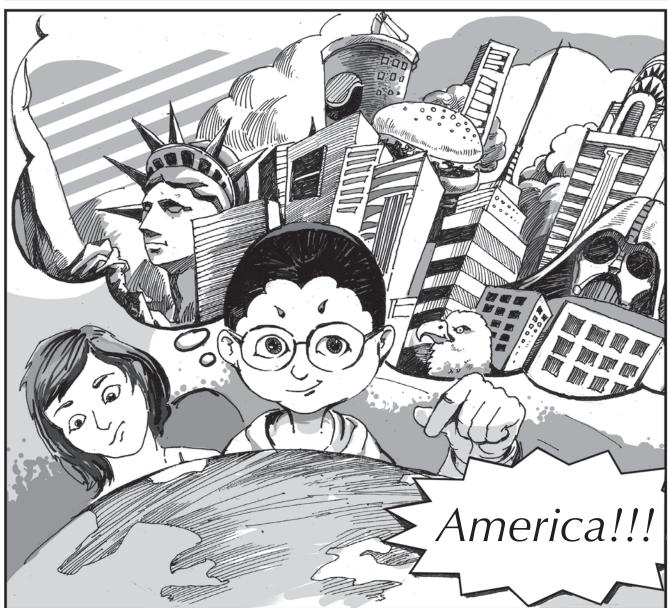


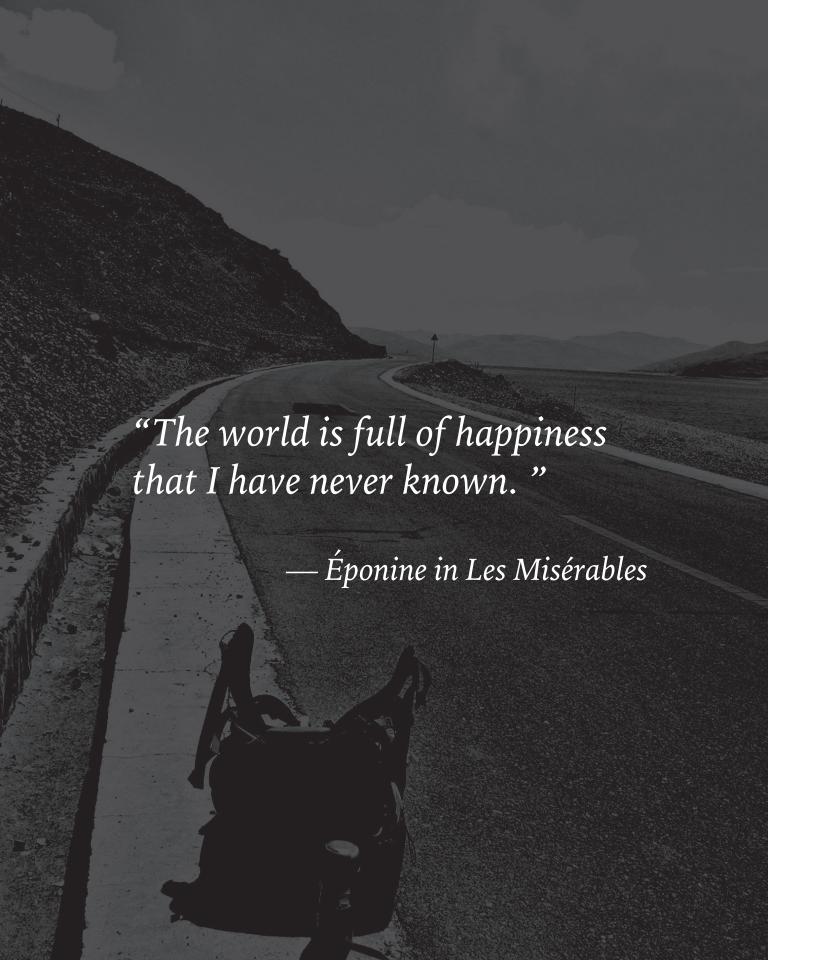










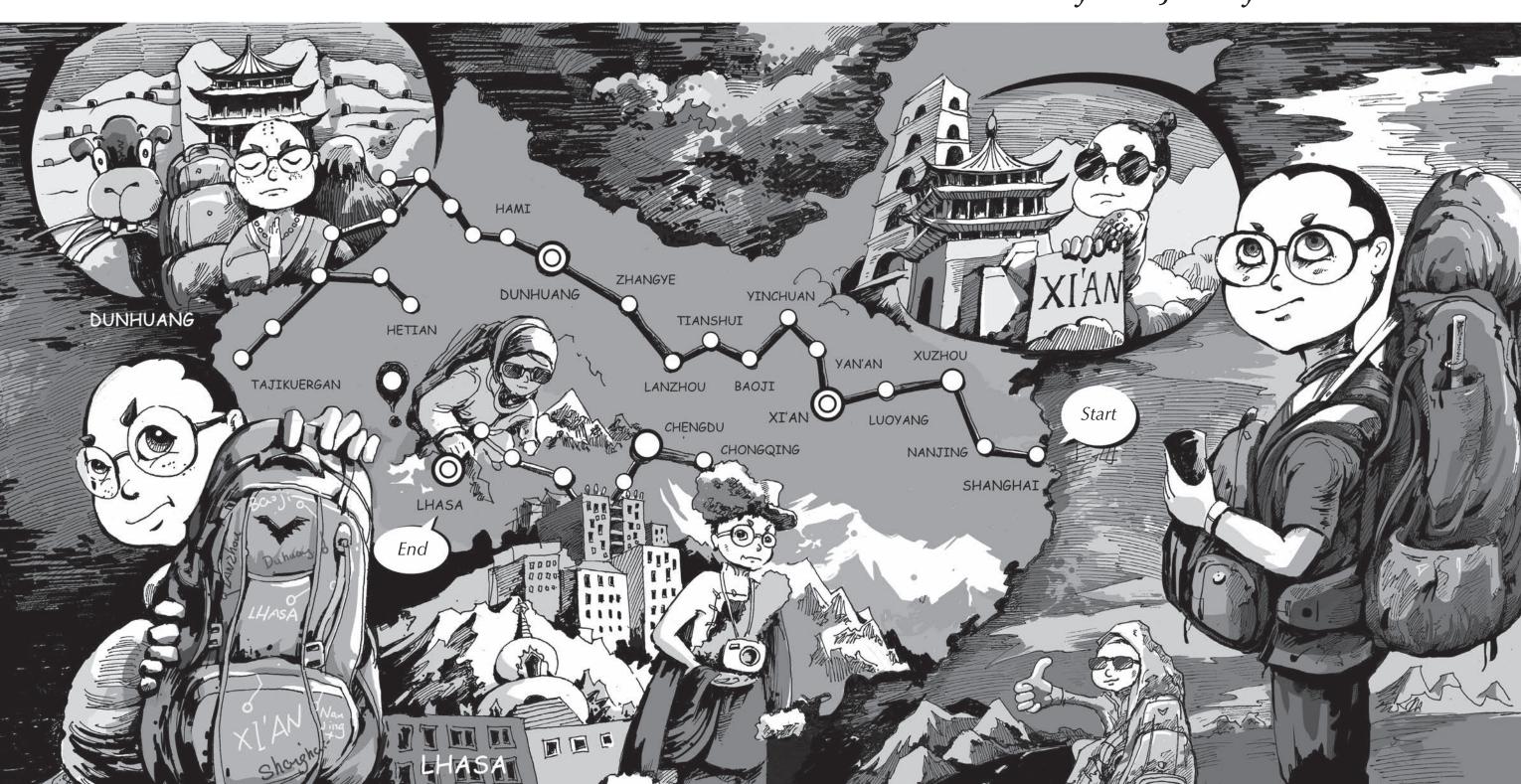


2011, I left my hometown to begin exploring the world ...





My First Journey in Western China









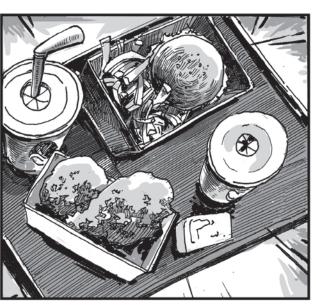


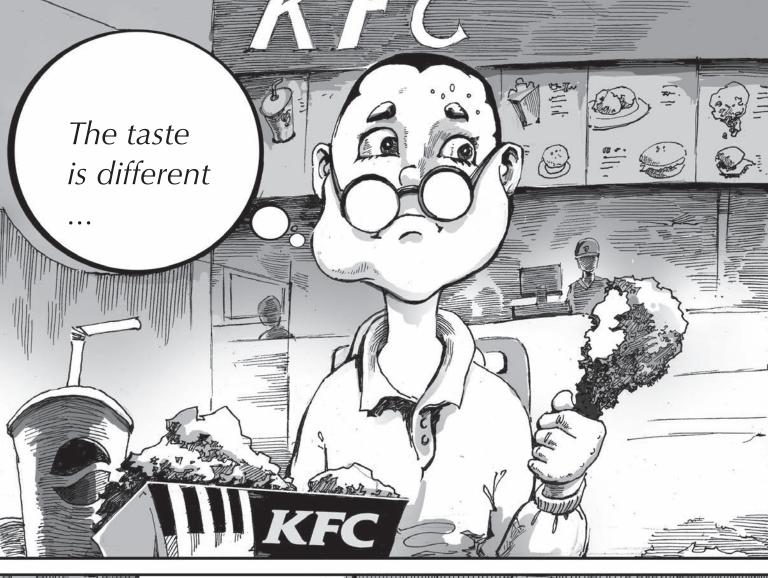












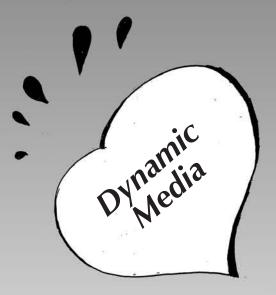






How can I deal with this misunderstanding?





# Why Dynamic Media

As a revolutionary tool, dynamic media broke through the boundaries of several traditional static medias, which range from interactive design, visual storytelling, learning applications, and data visualizations, to participatory narrative, sound, and video installation. It establishes a way to communicate through interaction and data visualization. This experience can stimulate an audience's senses from the visual and audio, to the smell and touch. All these first-hand experiences can weave together a complex vision of another world. From there, they can realistically "feel" the life and culture itself.

In my "Backpack Journey" project, I used dynamic media for the first time to create an immersive setting. I brought my traveling equipment such as my backpack, my sunglasses and my camera to a stage. When audiences touched these items, they could feel a different culture and observe unique individuals' daily lives through videos, sound, photos, and maps that I collected in my journey through Western China. In the 2017 Fresh Media exhibition, many people stopped by my project. They excitedly expressed their opinion about the foreign culture. The project was successful, and it gave me the confidence to continue exploring dynamic media.



# Sympathy Culture Daily Life

# An Overview of My Thesis

My thesis *Culture, Daily Life, and Empathy* is composed of four sections, Abstract, Introduction, Research and Case Studies.

In the Research section, I analysis definitions and structures of culture. Based on my culture research, I found that the culture of daily life is the best way to create empathy between people from different backgrounds. I specifically explore American culture and Chinese culture, including their values, their history of communication with each other and their current misunderstandings.

In the Case Studies section, my primary task is to discuss new ways to understand other cultures. I used dynamic media to express daily life in Chinese and American cultures to explore and understand cultural differences. The "American Impression" project reflects my initial W in the USA. In the posters I made, audiences can see my initial impression of American highway culture, food, and football enthusiasm. "Lingering Garden" and "Rainy Windows" both express the life of Chinese intellectuals to allow western audiences to understand Chinese architecture and Chinese lifestyles.

"The Chinamerican Grocery Shopping Experience" project directly contrasts American and Chinese food shopping by using two tangible interactive baskets and screens. Many cultural distinctions and contrasts are revealed in virtual daily shopping routines.

In addition, travel as my metaphor is also used to observe cultures. I use a global angle to locate a culture in the world, and communicate the daily life of local people as closely as I could. In the "Backpack Journey" project, I use my travel backpack to interact. The users touch the backpack to check my route of 2010 travel in western China.

During five case studies, it is evident that using daily life to understand other cultures is more effective than stereotyped and symbolic cultural propaganda from Chinese Confucius Institute or American Hollywood movie.

# CULTURAL RESEARCH

# Personal Experience of Cultural Conflict and Misunderstanding

As foreigners who tried to set up a life in the United States, my wife and I have been experiencing various challenges and dilemmas. We believe that one of the major reasons is cultural difference. For instance, the legal system and court procedures are drastically different in the US than in China. This distinction leads to very different attitudes and behaviors in legal cases in America and those in China. These distinctions are interesting to follow up on and explore. Sometimes they can be extremely frustrating. All these experiences have led me to my exploration of the major cultural features in the US and in China. How can these two very different countries communicate successfully to solve the cultural conflict in a positive way? What can the contemporary artist contribute to this journey of mutual understanding?



# What I Mean by Culture

The first question we need to answer is: "What is culture?" *Cambridge Advanced Learner's Dictionary* defined about culture:

It is the way of life of a particular people, esp. as shown in their ordinary behavior and habits, their attitudes toward each other, and their moral and religious beliefs.

In the Merriam Website Dictionary, culture is defined as:

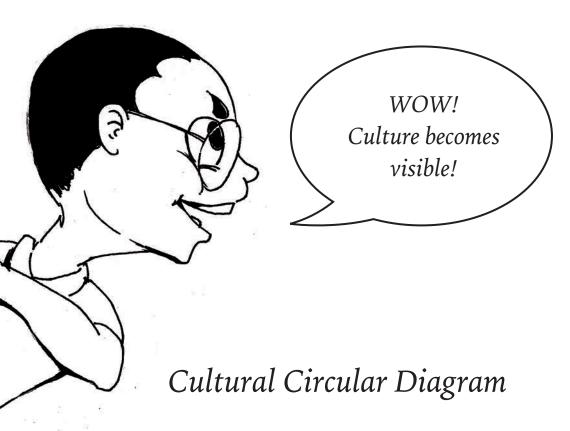
a: the customary beliefs, social forms, and material traits of a racial, religious, or social group; also: the characteristic features of everyday existence (such as diversions or a way of life) shared by people in a place or time popular culture Southern culture

b: the set of shared attitudes, values, goals, and practices that characterizes an institution or organization a corporate culture focused on the bottom line

c: the set of values, conventions, or social practices associated with a particular field, activity, or societal characteristic studying the effect of computers on print culture

d: the integrated pattern of human knowledge, belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations.

Both of these dictionaries explain "culture" in a very academic way. The definition here is complete but overwhelming. As artist Dan Quinn suggested: "There's too much culture. How can you sift through it all?" How can we define culture in a simpler way?



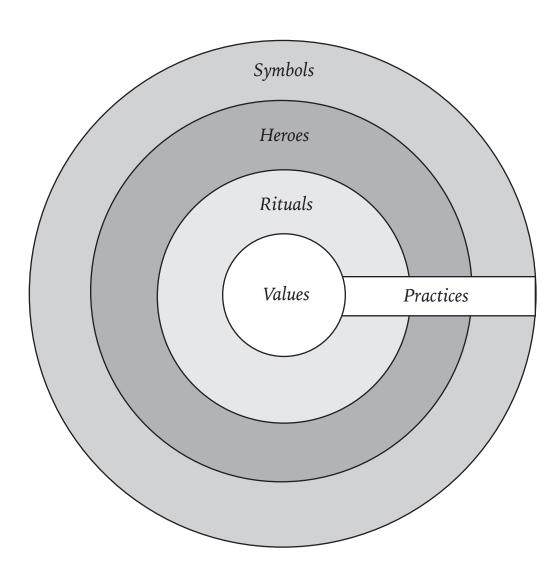
Through my research, I found a diagram of culture from the TAMU Education Institute (Texas A&M University, College Station, TX) which made sense to me. Their definition was:

"Cultural differences manifest themselves in different ways and differing levels of depth. Symbols represent the most superficial and values the deepest manifestations of culture, with heroes and rituals in between."

This concept is presented as a diagram of a circle. Value, the most significant core of the culture, is situated in the

middle. Moving outward, there is ritual, heroes and symbols, all connected by human practices.

TAMU Education explained:
Symbols are words, gestures, pictures, or objects that carry a particular meaning, only recognized by those who share a particular culture. Heroes are people, past or present, real or fictitious, who possess characteristics that are highly prized in a culture.
They also serve as models for behavior. Rituals are collective activities, sometimes superfluous in reaching desired objectives, but are considered as socially essential. They are therefore carried out most of the times for their



Manifestation of Culture at Different Levels of Depth

own sake (ways of greetings, paying respect to others, religious and social ceremonies, etc.). The core of a culture is formed by values.

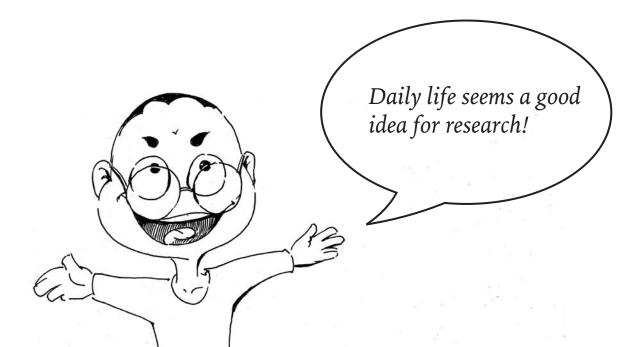
We can recognize that symbols, heroes, and rituals are the tangible or visual

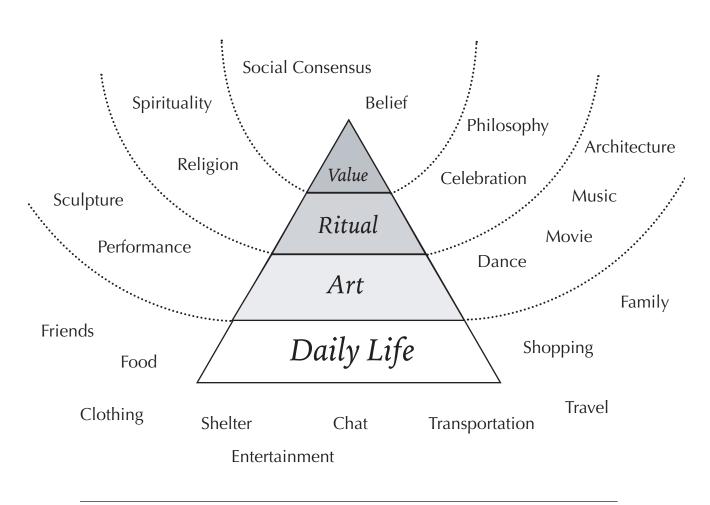
aspects of the practices of a culture. The true cultural meaning of the practices are intangible. This is revealed only when the practices are interpreted by the insiders.

# My Cultural Pyramid

This circular diagram helped me to better understand culture. However, another important factor of culture — hierarchy is missed in this diagram. Thus, I am interested in re-constructing a pyramid diagram to express culture as I understanding it.

My pyramid diagram includes value, ritual, art, and daily life. Value is located on the top of the pyramid and represents the crucial and indispensable belief of a culture. The next layer is ritual, which serves as the practical service of the value, including religion and celebration, and sets up the solid cultural foundation of the society. The third layer is the art that includes performance, painting, and music, which can only be reached and understood by educated people. Last, but not least, daily life is located at the bottom of this pyramid. In this layer, the details of daily life including transportation, diet, family and friends would be in it. Even though much of life itself is very trivial, daily life sets up a fascinating kaleidoscope to present the culture in a meticulous way.





Hierarchy in Culture



Food / Clothing Shelter / Transportation

# Daily Life

#### Why Am I Interested in Daily Life?

I believe that daily life is the foundation of any cultures and is its most tangible feature. Compared to the theoretical and academic approaches to culture, religion and art, the study of daily life offers an experience that can be accessible and intimate to a large audiences regardless of social economic class and level of formal education. For instance, when I was a kid, my family used to travel to Nanjing, a city situated in Jiang Su Province for family visits. My mother was in her 40s at the time. She had no college education. She did not like to focus on the historical and artistic aspects of this new city, even though Nanjing itself is famous for its historical impact as the ancient capital of China for over 600 years, and more recently has experienced terrifying massacres during World War II. While the history and artistic aspect of culture did not draw her attention, the daily life in Nanjing did interest her. She was fascinated by the fresh and unique products in the local market. She loved to chat with the local residents about their lives and the interesting entertainment unique to the area. Compared to the exhibition in the museum and ceremony hall in the city center, the daily lives in Nanjing in her memory was more culturally lively and vivid.

# My Experience of Daily Life

Different travelers concentrate on different aspects of their journey. I was a traveler who was passionate about inspiring scenic views, ancient legends, and history. But more and more, I was drawn to the vivid palette of local daily life. More and more, I discovered that the values, customs and beliefs of a culture are woven into a local community's daily life, intimately, subtlely. For instance, I spent several days with a Tadzhikistan family. Within this short time, I stayed with them, as an outsider to observe their family relationships, food and rituals. Also, I witnessed their trust, love for each other and their work in the tough natural environment. I observed their Muslim prayers five times a day and their three daily meals. On winter nights, they love to dance to imitate their ritual totem of the eagle. Through their dancing, they hope the Eagles' spirit will support them to endure in the severe winter. More

and more, other than art and philosophy, I believe daily life is a more tangible and intimate channel to understanding and experiencing culture.

# My Experience in the United States and China

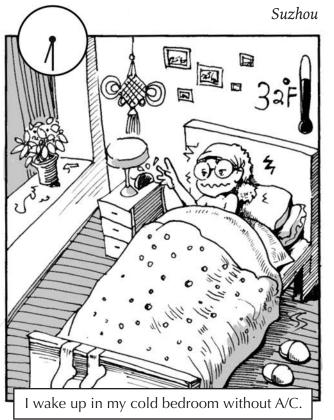
I am fortunate to have living experiences in both the US and China. I present some of the cultural distinctions I have experienced through the illustrations below.

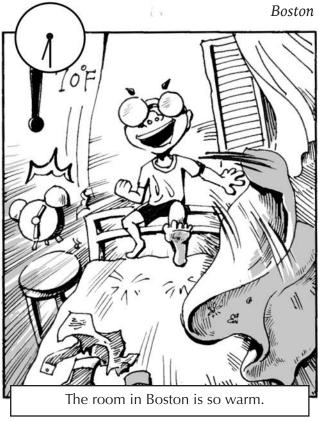
# Suzhou

# Boston



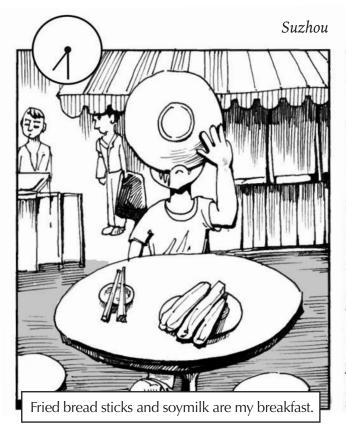




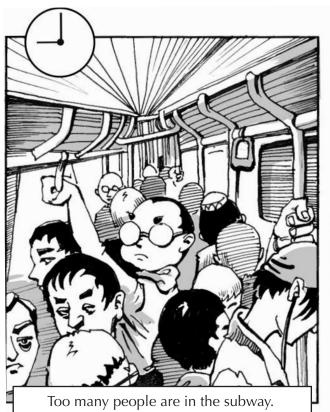




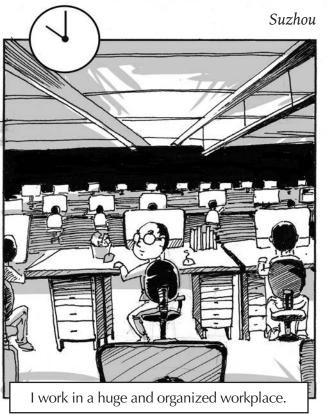


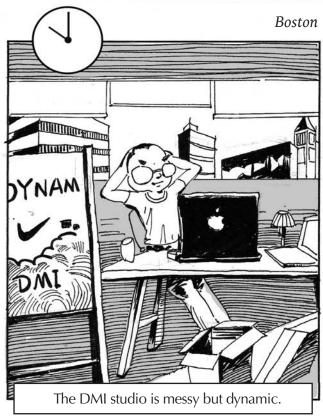


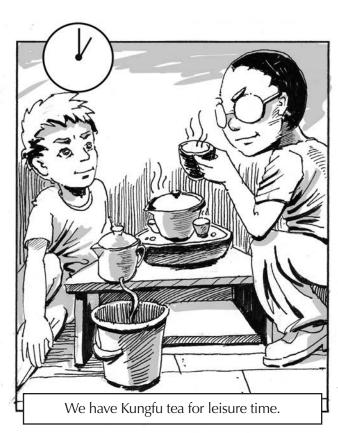


























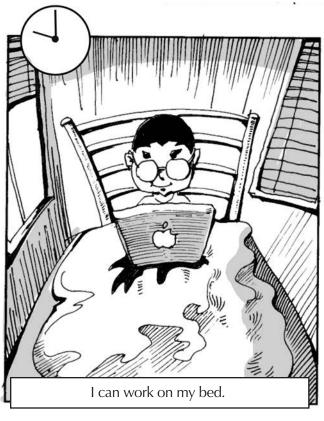












# Daily Life with Dynamic Media

After joining DMI, I began to search for a strong theme that could be presented through dynamic media. Due to my interest in culture, I chose to use daily life as my topic. I began by considering some non-digital graphic design formats, such as posters, illustrations, and typography. But each of these had several limits. The poster format uses symbols, icons and signals. Typography focuses more on the arrangement of words, while illustration tends to be a more personal expression. All of these approaches have their advantages, but none of them can offer a personal experience to imitate daily life through animation, video or virtual reality. However, dynamic media can integrate visual, audio and tangible experiences together. As the result, I would explore these through the chapters of my case studies.

In the "Rainy Windows" project, I used the sound and video of animated raindrops to create an interactive experience of the aesthetic mood of ancient Chinese intellectuals. In "The Chinamerican Grocery Shopping Experience" project, I used market and breakfast recipes as elements of daily life to represent the distinction between Chinese and American culture. The users could play two different housewives, one from China and one from the United States. Their tasks was to select food from the market to prepare breakfast. Through these projects, I successfully used dynamic media to express cultural distinctions in daily life experiences.







# America China

# Chinese Culture

I was born in China and received 25 years of education there. I understand and will explain the characteristics of Chinese culture in next three sections, self-isolation, nature and dependency.

### Self-isolation

"Self-isolation" refers to a hidden lifestyle without much social interaction with others. Chinese intellectuals prefer to enjoy themselves through gardening, literature, art, and drama. These were considered the most advanced spiritual experience in ancient China. The Great Wall and classic Chinese Gardens both reflect to this primary characteristic of Chinese culture.

"Self-isolation" serves as the core concept for traditional Chinese intellectuals. Led by the reigning emperor, the intellectual classes own thousands of miles of land in China. Their belief is considered as a sophisticated and valuable pursuit.



Part of the Great Wall in Badaling.

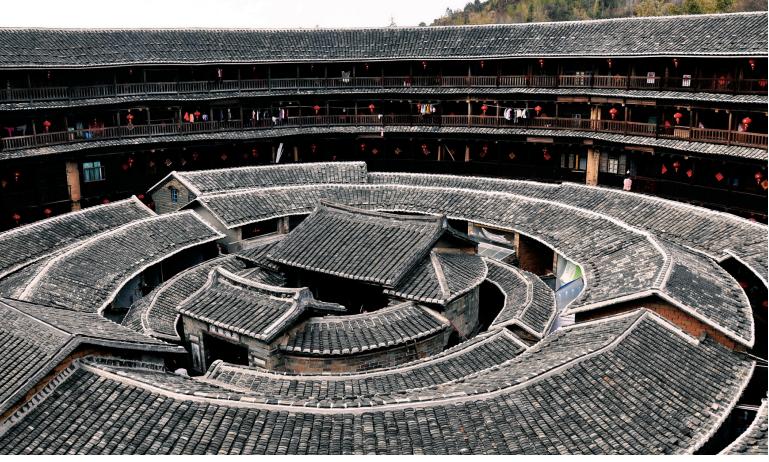


A water way in Jiangsu.

#### Nature

China has always been a vast agricultural country. During feudalism, over 90% of citizens were peasants. They were tied closely to the land and relied heavily on the agricultural products they produced. Any natural weather disaster, either flood or drought would destroy the economy of the country and indeed, the ordinary citizens' lives.

Thus, as the leader of the country, the emperor would host the vast ritual ceremonies such as "Ji Tian" for the fortune of the country every year in his royal palace. One of the most significant parts of this ceremony was to pray for the harvest.



Fujian Tulou for huge Chinese families.

# Dependency

The typical Chinese citizen puts family first, country second and world third. "Family" serves the most critical role in their daily lives. It is the first universe of the ordinary Chinese citizen.

Following this philosophy, Chinese family members are very dependent on each other. They often live in the same city, visit each other on a regular basis, get together on holidays and special events. When there is an internal crisis or drama, they rely on each other to solve it, rather than depend on public systems.

# American Culture

I have lived in the United States for 6 years, and am still learning about the American culture.

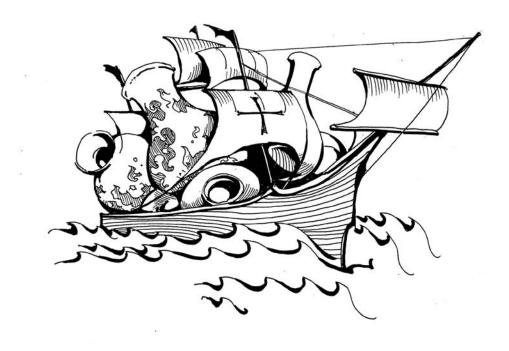




As a cultural melting pot, the United States has accepted thousands of immigrants from around the world since its inception. Different languages, foods, traditions, and values have been inherited and mixed. This rich cultural heritage creates a beautiful kaleidoscope here and also adds to the complexity of this country. The historical site of Ellis Island demonstrates this.

The history of immigration has made American society more tolerant and open to new ideas and concepts. Sometimes its history has led to conflict and misunderstandings among different communities due to racial and religious differences. The competitive nature of capitalism and immigration leads to the rule of "survival of the fittest." Pursuing personal fortune is encouraged in this culture, and there is belief that you could be successful if you were self-reliant, diligent and consistent. This is the quintessential "American Dream."





# History of Mutual Exploration and Understanding

Between the Western and Eastern Worlds

The relationship between the West and the East has been growing for centuries. Over the course of years, people from these two worlds have shared exploration, trade, religion, and communication through various channels. Some examples can be seen below.

# The Silk Road (B.C. 360)

The Silk Road might be the earliest trade channel between East Asia and Europe. Dated back to 360BC, this long trading route started from Chang'an (Today's Xi'an), linking Gansu, Xinjiang, central

Asia, the Middle East, Eastern, Central and Western Europe together. Back then, Westerners were amazed by the high-quality silk, tea, and pottery from the mysterious East. The bright color palettes and the delicate patterns in silk and pottery wove a fantastic dream of Asia.



Delta of the Volga River and the Silk Road, by Stefano Bonsignori 1575-1584.



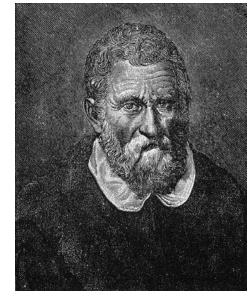
Uzbek painting in Tashkent, one of the ancient trade cernters.

# Marco Polo and Matteo Ricci (14th – 16th Century)

From the 14th to the 17th century, in the Age of Exploration, there were two famous westerners who arrived in China and began to introduce the mystery of China to the Western world. One was the explorer, Marco Polo and the other was Matteo Ricci a Jesuit.

Even though Marco Polo was not the first European that arrived in China, he was the first one who left a detailed chronicle of his experience. His travels are recorded in *The Travels of Marco Polo*. This book described the prosperity of China (Yuan Dynasty), its capital Peking, and other Asian cities and countries to Europeans. There has been controversy about the reliability of this text since much of the book was not precise according to official historical records. Nonetheless, it was the very first introduction to the East for Europeans.

Matteo Ricci, a Jesuit Catholic Priest, was the first European who introduced western scientific knowledge to Chinese intellectuals. He arrived in



Marco Polo Portrait Engraving.

China around 1582 and died in 1610 in Beijing. Other than preaching, he helped to upgrade Chinese research and knowledge about astronomy, geography, and geometry. Chinese intellectuals were shown the world map, and learned geometric principles through him. He also read and commented on Chinese philosophy and value. He brought constructive criticism about Chinese culture as arrogant and overconfident. It was fortunate that Chinese intellectual could witness the world in a whole new way through his knowledge and experience in Europe.



The Italian Jesuit Matteo Ricci (left) and the Chinese mathematician Xu Guangqi (right) in an image from Athanasius Kircher's China Illustrata, published in 1667.

# The popularity of Chinoiserie (AD 1880)

The increasing trade around the silk road in the earlier period, Marco Polo's provocative adventure in the 14th century, Chinese porcelain and prevailing of Japanese Ukiyo-e in late 19th century nurtured the life of "Chinoiserie."

This term refers to a trend in western art that imitated Chinese motifs and techniques. We can see this in furniture, and architecture, especially in the 18th century. The best example I saw was the Chinese Garden at Schloss Sanssouci in Germany.

# Nixon and Mao (1972)

This renewed Sino-American relationship began officially. China started to understand and recognize this the country in the opposite of the earth through stereotype icons, such as rock and roll, Coca-Cola and Hollywood films.



"The Chinese Garden" (Le Jardin Chinois 1742, Museum of Fine Arts, Besancon by Francois Boucher).



1972 Nixon Visit to China.

# Tiananmen Square Protests (1989)

The historical confrontation between the Chinese government and students happened in Tiananmen Square in 1989. It left a significant impression about China in the Western World. Through the analysis and broadcasting of Western mass media, Americans started to witness the historical moments of China and established their own interpretation of this country.

# The Rising of China (1997)

Due to its huge geographic and population impact, there is that no doubt China is the significant power in East Asia. The western world started to recognize the growth and economic expansion of China in the 1990s.

Since then, Westerners began to know more about this country from various perspectives, such as language, food, costume and social values. The passion for China has continued to grow in the past decades.

When Americans realized China's significant position, primary schools began to teach the Chinese language. Chinese has become a popular subject in the second language program in high schools.



The iconic Tiananmen Square "Tank Man" photo.



China's High-speed Rail in 2016.



# Current Misunderstandings

# Symbolization

Even though the communication between the East and the West has lasted for over thousands of years, and the Sino-US relationship has been established over decades, all these contacts were limited to the intellectual classes. There was never a thorough understanding on either side by mass populations. For a normal citizen in each country, most of the cultural impressions about the other nation came from films, mass media, and commercial products. For instance, most Chinese view the United States as a capitalist democratic country that has provided a commercial boost to many Chinese citizens. Many Americans regard the Chinese as living under the tyranny of a one-party government. From the perspective of popular culture, "Chinese" means martial art movies and popular dishes, such as General Gau chicken. True mutual understanding without stereotypes and superficial icons is rare. I list some typical examples to express the misunderstanding on both sides.



73

# Strange American Dream (Chinese Side)

Most of my Chinese friends who live in China all encouraged me not to come back to work or study in China anymore. I think their suggestion is rooted in the fantasy of the American Dream they have seen in Hollywood movies and TV shows. They deeply trust the adventure and risk-taking nature of the United States and think it is a relatively easy way to maintain a comfortable lifestyle here. They overlook the nature of capitalism, competition, heavy workloads, a problematic health system and a social hierarchy.

However, this misconception is understandable due to the incorrect mass media broadcasting and their lack of personal experience in the United States. I wish to reduce these



"The American Dream" from Miss Saigon

misconceptions through my work and establish an objective perspective to view these two different cultures.

# Enthusiasm for Chinese Politics and Religions (American Side)

Generally and especially politically, the western mass media weaves a tale about China to ordinary American citizens. Sometimes, the keywords are not precise and objective. Due to this, I have been involved in an exciting and intensive conversation and discussion about Taiwan, Tibetan, human rights and air pollution with my American peers. Most of them would express their concern about China and its political conflict with other countries in a well-informed manner. Some of them would post their strong opinions to me on social media. For instance, one of my peers used to ask me this question: "Hi Mao, I heard some

uninformed Americans think Taiwan is not an independent country. What do you think?" I was shocked by the number of opinions in this conversation. In addition, it is interesting to discover that almost every American who has had a college education knows about Confucianism. They were passionate to chat with me about several terms. such as "Ru," and "Dao." But they did not really understand their full meaning. My installations might not solve all the misunderstandings on such a complicated political issue, but I still hoped I could plant an objective perspective to my audience through my work.

# Fake Chinese Restaurants in the United States (American Side)

There is also a lot of interesting stereotypes in American daily life. A lot of my American peers were shocked when I mentioned that Panda Express is not the authentic Chinese food as it advertises itself. They hardly believed it was a version of "Americanized" Chinese food. The popular dishes from there, such as "General Gau Chicken" and "Beijing Beef" never existed in China.

# Shen Yun Performance

Another good example of misunderstandings about Chinese culture can be seen in the prevalence of Shen Yun Performance Arts troupe in America. Actually, this group belongs to a Chinese cult called Falun Gong, which has been banned in China for 20 years. They advertise their performances

as a celebration of traditional Chinese beauty and history over five thousand years. But in fact, their performances are gaudy and kitschy. They use colorful flowers and simple projections with postcard style photos of cliche motifs to decorate the stage. Also, actors and dancers wear garish costumes that mix different Chinese dynasties, which does not make sense at all for Chinese audiences. They select and combine a mishmash of Chinese symbols to ingratiate themselves with western audiences. A lot of Americans consider the performances to be excellent and representative authentic Chinese culture. This phenomenon concerns me and inspires me to use new ways to share Chinese culture.



The Family Plan at Panda Express.



Shen Yun Performance at Lincoln Center.

# Relevant Works

In addition to my research of daily life and cultural understanding, I use some artworks as my reference, including Yasujiro Ozu's "Tokyo Story", Ang Lee's "Eat Drink Man Woman", "The Wedding Banquet", "Pushing Hand", Nicholas Felton's "Annual Report" and Katerina Cizek's "Out My Window" website.

# Yasujiro Ozu "Tokyo Story"

Yasujiro Ozu is one of most celebrated Japanese directors. Most of his movies focus on Japanese daily life. "Tokyo Story" is the greatest one. The film expresses the conflicts between members of an ordinary Japanese family and implies that filial piety, in the Japanese tradition, is disappearing. Without fierce conflicts and the plot of dramatic change, Ozu uses ordinary language and actions to discuss the relationships in a Japanese family and the meaning of life. Many Chinese, including me, have a lot of prejudices against Japanese culture. But in this movie, we found we share the same family contradictions and helplessness in life. I think this movie is a perfect reference to explore cultural understanding in daily life.



Cost Photo from Tokyo Story.

# Ang Lee (The Trilogy of a Family)

Ang Lee is an active Hollywood movie director from Taiwan. Even though he has trained and also shoots numerous films in the Western world, it is no doubt that Ang Lee's work represents traditional Chinese philosophy and values.

# Eat Drink Man Woman (1994)

The story starts with the father of the family, a famous chef who is preparing a weekly dinner for his three daughters. The film presents family conflict between fathers and daughters due to their different ages, education, and careers. The film reveals urban life in Taipei in the early 1990s.

Through watching this, you would find out that the "family" is the place where the conflict happens and also is the final link that ties these four people together. Every family dinner would be the context where Ang Lee presents misunderstanding and argument as dramatic plot points.

# The Wedding Banquet (1993)

This film presents different conflicts in regards to East-West cultural differences in generations. But "family" again serves as a significant adhesive to bind these themes together.

The plot is about a young gay man from Taiwan who wishes to follow his parent's expectation that he marry and give them a grandson. He hires a girl to play the role of his fiance. All the tensions in the plot relate to the primary conflict between the traditional Chinese expectation (husband, wife, and children) versus a Western homosexual couple.

# Pushing Hands (1992)

It is a story about cultural conflict within the family. A famous Taiji coach in Beijing is invited to live with his son who settled in the United States. Due to the linguistic barrier and different lifestyles, his relationship with his American daughter-in-law becomes intense and finally breaks. For the good of his son, he retreats from them and supports himself in the United States independently.

In this film, we can see the conflict between the Chinese value of "filial piety" within the family and the pursuit of independence and distance among family members in the American environment.

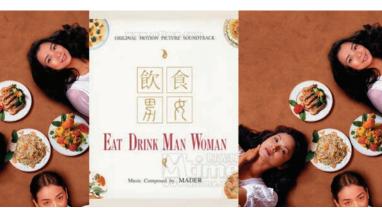


Photo from Eat Drink Man Woman.

The Poster from Eat Drink Man Woman.



# Out My Window

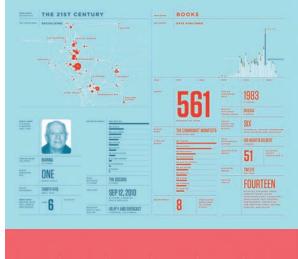
The project is an excellent example of cultural introduction and social observation. It is an interactive website created by Czech-Canadian Filmmaker Katerina Cizek in 2010. Through different windows in the site, the audience can observe daily lives for citizens from 13 different countries through a documentary format.

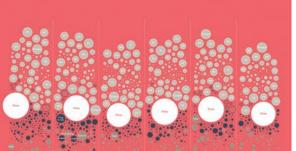


Index Page from Out My Window.

# Annual Report

Nicolas Felton used different shapes, proportions, sizes to express his everyday behaviors, such as sleep, sports, work, entertainment. The reader can understand his daily routines efficiently at a quick glance.

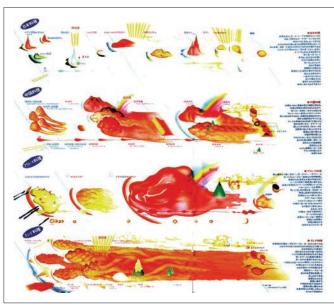




2014 Annual Report.

2014 Annuai Kepoi

Photo from Pushing Hands. Photo from The Wedding Banquet.



Koheri Sugiura's "Taste Visualization."

# Taste Visualization — Koheri Sugiura

Koheri Sugiura's "Eating experience" used graphic design to express the experience with different foods from Japan, China, France, and India. Similarly, I wish to use this visual expression to present different shopping experience in America and China.

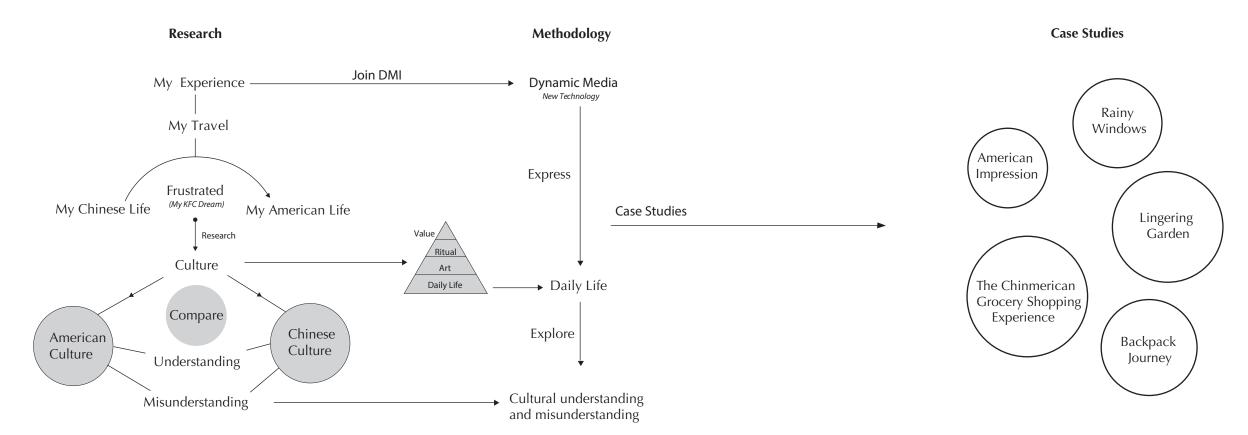
# The Impact and Influence of the Past Works

Establishing a visual bridge from the abstract context of "Family," Daily life" and "Taste" requires building a conceptual vocabulary through specific images. Nicholas Felton's "Annual Report" and Koheri Sugiura's "Eating Experience" established visual context and events that allow viewers to see and feel these concepts. Also, Yasujiro Ozu and Ann Lee's master movies give me enough confidence to use pieces of daily life to express cultural conflict and explore cultural understanding. Based on these works, I used my illustration, interactive design skills and narrations to explain cultural differences in the next section, Case Studies.



# CASE STUDIES

# Map of My Methodology



# Methodology

My personal bilingual experience provides me with the confidence to explore cultural distinctions between America and China. It is critical for me to discover the misunderstandings that can occur between these two cultures and to build a bridge for communication and mutual appreciation. In this cultural matrix, I believe that daily life can be used as a medium for a cultural immersive

experience and I hope that these experiences can help to build cultural bridges little by little.

Even though it is subtle, ordinary and sometimes slow, daily life still acts as a kaleidoscope for us to witness and detect cultural influences. It can also offer tangible experiences and memory to users through smell, audio, and visual approaches. Dynamic media acts as the

best approach to make these physical experiences virtual and broad. In my project "Lingering Garden", I used animation, sound, programming, and coding to express the traditional lifestyle of the ancient Chinese intellectual class. For "The Chinamerican Grocery Shopping Experience" project, I used Makey Makey, After Effects, and Keynote to virtually compare Chinese and American markets. These projects all demonstrated that dynamic media is well-fit to reconstruct daily life virtually.

Additionally, I wished to use daily life to reduce the misunderstanding between peoples from different cultures. America and China are two big countries that hold extremely distinctive cultural values. For instance, each has different religions, political structures, languages, and moral standards. These differences frequently lead to many misunderstandings between these two countries at various levels. However, there are trillions of similarities between them in daily life. In both countries,

daily life is composed of work, leisure time and family. Both countries share the same life path. All citizens enjoy their childhood, teenage and adult years and the need to face senior years and death. These similarities can bring us from a vast cultural divide to a common context. These can also become a bridge between cultural conversation and communication.

Daily life can offer us a more realistic cultural impression compared to superficial and stereotypical understanding. From my research, I discovered that we can often only recognize a new culture through representative icons at first. For instance, for Americans, "Chinese" can refer to a slick martial art movie or the chubby KungFu Panda. From a Chinese perspective, "American" means Uncle Sam and cheap McDonald's. But if a Chinese person takes a road trip through the USA, he would have a much better-refreshed understanding of the McDonald's phenomenon.

As the result of the driving culture in the United States, thousands of McDonald's chains are located in towns and junctions that are linked through highways and freeways. They offer significant services, including food, water, wifi, and bathrooms, for travelers on their journey. It is hard to imagine the American highway without all these restaurants. The real-life experience of an American road trip would be helpful to adjust some stereotypical cultural impressions that a Chinese person may have.



# Common Threads

In addition to daily life, culture differences, and dynamic media, several common threads are shared by my five projects — "Lingering Garden," "Raining Windows," "Backpack Journey," "American Impression" and "The Chinamerican Grocery Shopping Experience". The first similarity is the fact that all my projects come from my personal experience. Secondly, visual communication plays a significant role in all these works which focus on cultural values. In addition, instead of presenting drastic and controversial cultural comparisons, I approach all these topics with a balanced perspective.

# My Personal Experience

All these projects are rooted deeply in my own experience. Since childhood, I have always been fascinated by and interested in exploring the rest of the world. As a traveler, I started to observe distinctive cultures from many different locations which are rooted in history, religion and geographic features. Through the camera, sketching, and writing, I collected precious information from these places as the starting point to recreate these experiences for my

audience. The diversity and vivacity of this world fascinated me, and I hope all these glorious explorations can serve as the beginning of my life journey. "Backpack Journey", and "The Chinamerican Grocery Shopping Experience" both derive from some parts of my travels and I try to introduce the other side of this colorful world to audiences.

# Visual Communication

As an illustrator and graphic designer, visual elements served as my most effective communication tool. My earlier projects were mainly presented as an illustration, a poster or a website. In my recent work, however, I am interested in using specific visual elements to represent cultural features. For instance, ink painting techniques became my dominant visual medium in the "Lingering Garden" and "Rainy Windows" projects. The marriage of ink and brush, black and white established convincing surroundings for the Chinese culture they represented.

The "American Impression" required a caricature style, so I selected a combination of sketching and computer rendering. These two approaches

87

worked well in this project to bring out an idea of modern and contemporary culture.

# Moderate and Generous

I believe in healthy cultural competition and collaboration instead of conflict and hostile acts. I witness so many insulting comments among Chinese and American people who use various social media platforms. All the arrogant language and aggressive attitudes do not help them to listen to each other or to solve crisis and issues. Reasoning and generosity are always constructive instead of being cynical. To create this healthy relationship, communicating with generosity and removing misunderstandings among different cultures would be a very good first step. Thus, all my projects approach cultural distinction from a moderate

and generous perspective. I encourage embracing cultural distinction and conversation through these projects. For instance, even though there were some critical aspects of American culture in my "American Impression" posters, I tried to use a soft tone. Also, as Walker Percy said: "Everyday life is an enemy of drama." "Daily Life" became my primary medium as a cultural ambassador. Instead of being radical and extreme, it is subtle and a consistent way that can lead us to understand and appreciate different cultures.

For instance, in the "Rainy Windows" project, instead of a straightforward speech about Chinese philosophy, I used natural elements to re-create a virtual surrounding for my audience. Through this virtual experience, I want my audience to feel this uniquely Chinese cultural feature themselves through a sense of tranquility.

# Travel as My Metaphor

Travel serves as a primary approach to cultural study that places me directly within a rich cultural context and experiences its features. I use travel as my metaphor for cultural research about America and China. I used this method in several of my projects. For instance, in my "Backpack Journey" project, through photographs, video, sound effects and special souvenirs, I virtually reconstructed my Western China journey and offered my users a tangible experience of culture and unique customs. Traveling can act as both telescope and microscope for cultural observation. It can offer a panoramic view of a culture, including its religion, language, climate, etc. Similarly, it can bring one to observe distinct aspects of an unfamiliar culture, such as bargaining in the markets, patterns in

coin currency, favorite breakfast foods and much more.

In 2011, I visited over 12 provinces, 23 cities, 51 villages, and talked with local people in five major Chinese minority groups — Tibetans, Uygurs, Huis, Mongolians, and Lis. Based on this travel experience, I created my "Backpack Journey" project.

With similar passion, in the summer of 2012, my wife and I experienced another long road trip this time in the United States. We started from Austin, went through nine states and various cities and towns, including Little Rock City, St. Louis, Chicago, Minneapolis, Salt Lake City, LA, San Diego, Las Vegas and Santa Fe. We went to various national parks as well, including Yellow



Discovery with Chinese Map.

I was at Lake Karakuri and Mount Muztagata with local people.

Stone, Yosemite, and Zion. Like an immersive documentary film, this trip allowed me to understand this nation from a brand new perspective. I was astonished when I saw distinctive and splendid geographic features in this nation and when I discovered interesting facts about native people and immigration stories. I had the opportunity to learn about the Chinese immigration route from the oldest American Chinatown situated in San Francisco. I started to understand the decline of American old industry system from the poverty in factory communities I saw in St. Louis, MO, and I witnessed the desire for fortune and luxury in Las Vegas.

Additionally, on this long journey, I discovered answers to questions that were raised when I first landed here. For instance, why fast food plays such a vital role in America's life. I indeed experienced the US as a country "on the go." It is a nation connected by a complex network of highways, and the people here love to use their vehicles as a primary transportation. All these fast food chains, such as Burger King, McDonald's or KFC, acted as an oasis on a rural highway. They are like the lighthouse for the "highway" ocean, offering drivers direction and other necessities such as food, internet, gas, and lodging. Since then, for me, the United States is no longer only about cowboys and corn fields. It is a vivid long scroll with diverse cultures and distinctive color palettes.





# Backpack Journey

My selective project "Backpack Journey" was an interactive installation in the 2017 Fresh Media Exhibition at the Cyberarts Gallery in Jamaica Plain.

# Concept

By participating in my interactive installation, I hope my audience would not only witness my journey as an outsider but also become part of it. Through these tangible experiences, I activate their visual, auditory, olfactory and tactile senses to experience the excitement and challenges of the trip with me. Furthermore, in addition to presenting the beauty of tradition in this old land, I hoped to encourage my western audiences to understand the beauty in the daily lives of local citizens.

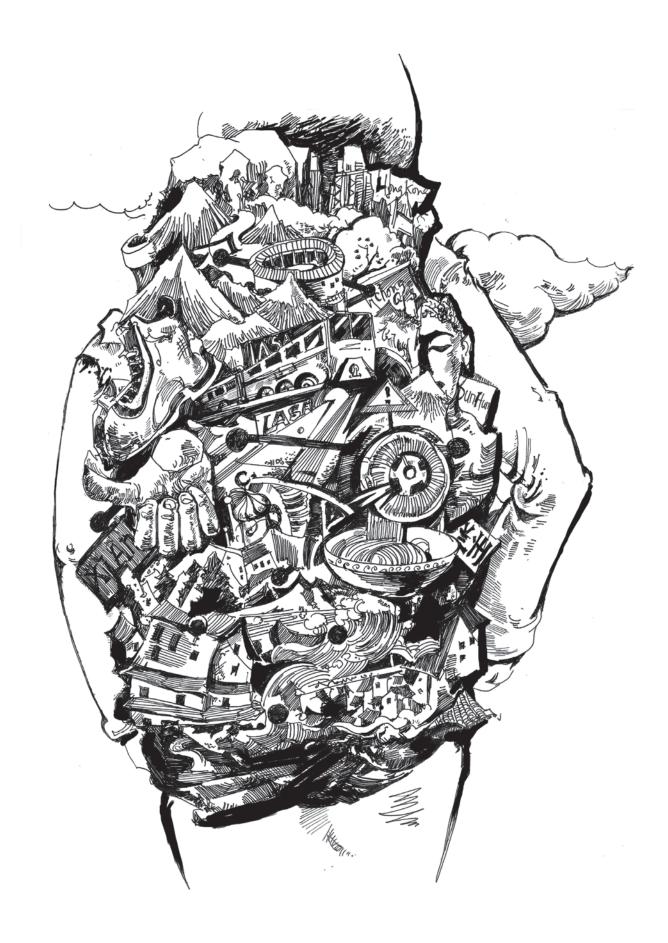
# Exhibited Items

I carefully selected several significant pieces that were obtained and used during my six months' travel in China in 2011. Through these items, I wished to create an interactive experience for my audiences. In this experience, they would "feel" this journey in visual, audio and tangible ways.

My selected items include a 70L backpack, a Nikon D70S Camera, a sketchbook, a winter jacket, a tent and certainly my "lucky pebble and

seashell." All these items represented unique aspects of my journey.

Meanwhile, they helped me to observe, record and experience this journey in multiple ways. The camera and sketchbooks served as my "eyes" and "ears" to enjoy and record beautiful landscapes, various urban views, and various sounds I heard. My winter jacket protected me from freezing air and my tent offered me cozy surroundings during some tough nights in the rural area of northwestern China. Also, they





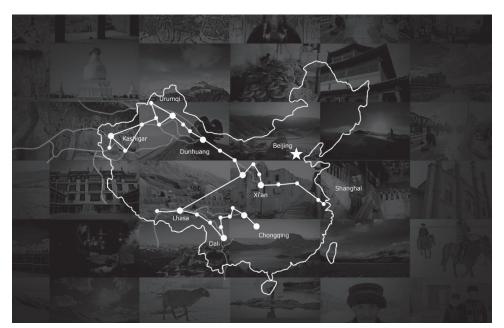
reminded me of the harsh environment where folks from this part China had to deal with every day. My "lucky pebble and seashell" represented some unique souvenirs that I discovered from different locations. They stood for some special personal moments and meditations. Last but not least, the heavy backpack reminded me that I am "on the road" and to respect anything that I might come across on my route.

# Research

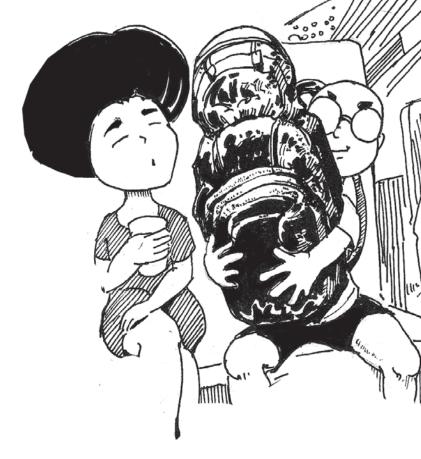
My research contained two steps.

The first step was my journey itself.

It gave me numerous photographs,



My route on my journey in western China.





sketches, videos and special items as an original collection for this exhibition. In the second step, I concentrated on researching past installations/artworks that presented interactive or immersive experiences to the audience. From these two steps, I was looking forward to building a bridge between my original collection and my audience through the interactive approach.

# Journey

Following the ancient silk road, my journey started on January 2, 2011, and lasted over six months.

# Geographic Journey

To express this trip better, I want to summarize it into two genres. One is the geographic journey. The other one is a journey through time. Through this journey, I observed and was fascinated by diverse dialects, foods, customs, transportations, landscapes, and climates in distinctive areas. I visited over 12 provinces, 23 cities, 51 villages, and five major Chinese minority groups — Tibetans, Uighurs, Huis, Mongolians, and Lis. I visited over ten big cities, including Nanjing and Xuzhou in the south, Luoyang, Xi'an, Yinchuan, Baoji, Lanzhou, Dunhuang

in the center, Kumul, Turpan, Urumchi, Korla, Kashgar, Taxkorgan, and Khotan in the northwest.

Among all these towns and villages,

there is one of them that impressed me the most — Lhasa. The capital of Xizang(Tibet) Autonomous Region, is situated in the 12,000 foot Qinghai-Tibet Plateau. All the rough natural conditions there make life itself extremely fragile and sensitive. Generation after generation, local Tibetans comfort themselves through worshipping and praying to all these natural landscapes and the mysterious powers behind them. Thus, Lhasa serves as the heart of Tibetan Buddhism. Thousands of believers travel here by foot from thousands of miles away. Here in this plateau, most of the family income would be dedicated to the temple for Buddha. It is a great honor for a Tibetan traditional family to have a son in the temple as a monk. As the most significant city in Tibet, Lhasa welcomes tourists from the whole world openly and generously. Around the center square where the Potala Palace is situated, the holy temple of Tibetan Buddhism, civilian lives grow vividly and wildly. Streets are filled with vendors, citizens, tourists, and monks.

I found various types of food that represented different regions of China and even the world. The prosperity of economy and the civilian culture there unveil the mystery of Lhasa to make it even more enchanting and charming. I loved the energy I experienced in this old city and presented it in my installation as different sounds interaction. In this part of the installation, the audience would hear chanted sutras from the Potala Palace. Also, at the same time, they would be enchanted by the exotic music and noise from the crowd in the street of modern Lhasa. From there, I hoped they could experience Lhasa's integration of past and present.

# Time Journey

The second genres of my research are the journey of time. I visited a high number of historical sites and museums. All the splendid architectural crafts and artworks there led me to experience over five thousand years of history in my country. From the cradle of two bronze ages to the collapse of feudalism, all these historical heritages lead me on time travel spanning 5,000 years. For instance, in Xi'an, the capital of the first Chinese empire (Qin 221BC – 207BC), I had the opportunity to observe the

delicate crafts in the terracotta army for the first emperor of Qin — sculptural figures devoted to the great emperor as sacrificial offerings. From the scale, setting, postures, and costumes of these figures, I carefully studied these primary materials about the social hierarchy, military order and weapon types in China thousands of years ago.

## Some Projects in the Past

I did broad research about immersive and interactive artwork/installations. Among all these projects, "Google Earth VR" and "Ebbe" inspired me the most. "Google Earth VR" was a very mature virtual reality project made by Google. With the VR headset, the VR app would start people off in space, then zoom in and seek any part of the earth in question. Finally, people can have a bird's eye view to explore and appreciate the new location in the 360° immersive experience. I was impressed by the final visual solution and tried to create the immersive surroundings in the same way.

"Ebbe" was a Puppet dinosaur created by Bay Daniel Ogaard Kanu and Sara Svennevik during the Sensorial and Musical course in Tangible Interaction Design at AHO (Oslo School of



Google Earth VR.

Architecture and Design) run by MusicalFieldsForever. The dinosaur was a physical interaction. The LED lights would turn on, and the music would



Ebbe at AHO.

play inside when some parts of the dinosaur were touched. The toy became very fun, and it inspired my Backpack interaction.

# Design Process

Past is the Foreign Country; They Do Things Differently There (Inspiration / Task Title)

I started the project "Backpack Journey" in my second subject of the studio class. At that moment, The project was about connecting my past to my present because the experience of the journey is the greatest part of my life. However, when I developed my thesis proposal in the next semester, I wanted to develop it into media to connect American culture to Chinese culture.

## Interview

Last semester, I interviewed Hessam and Arly about travel and culture. Also, I asked them to take my large backpack. Hessam was interested in taking my travel tools. He suggested that If he could take my bag and follow my route of travel, the experience could be fantastic. Arly focused on the weight of the backpack. He thought the weight could push him to understand the benefits of travel and felt the harsh environment on the trip.

## Version 1 Prototype Test

After the interview with Hessam and Arly, I initially had an idea of the prototype. I marked three city names on the floor, Xi'an, Dunhuang, and Lhasa to mimic my travel route. I asked them to take my backpack and follow this path. Anytime they stepped on these floor marks, there would be a video or photographs about this city presented on the screen.

However, when I tried to bring this prototype into real life, I found out there was huge confusion for my visitors. They did not know what to step on and what to expect. For example, I put some rocks and one camera on the floor expecting visitors to pick them up since there were some interactions. But because of the complicated process and the lack of clear visual cues, people felt confused — they didn't know when they needed to pick up these items and when they could keep moving. Based on these tests, I planned to simplify the project.

## Version 2 in Fresh Media

In March 2017, I was selected to present my journey as an interactive installation in "Fresh Media" — the annual DMI exhibition hosted by Cyberarts Gallery.

I planed my 5-foot by 5-foot exhibition space into four sections.

- 1. In the first section, I marked the floor with important destinations on my trip. They were Xian, Dun Huang, and Lhasa.
- 2. Following these floor marks, visitors would then see the second section all the tangible items I selected to represent my trip. They were the backpack, winter jacket, camera, sketchbook, tent and special souvenirs.
- 3. In the third section, I displayed the selective photographs I took on the wall.
- 4. The fourth section was the corner part of this interactive installation, where I displayed video clips on a screen from my journey. The video contained natural landscapes, market scenes and traditional festivals with music. There were the primary materials that visitors could use to develop a deeper insight into this journey.

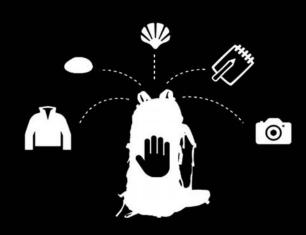
### Interaction

The second and the fourth sections were the primary points of interaction for my audience. For example, when a visitor touched my camera, the sensor on it

# Interaction



Several interactions and sensors in my "Backpack Journey" project.



Touch My Backpack and Others





Projected screen shots from my "Backpack Journey" project.

would activate videos with photos taken by this camera. These clips of videos would then be presented on the screen in the fourth section. Through tangible action, the visitor enjoyed the natural landscapes, civilian street scenes or traditional festivals I experienced during this trip. By touching the seashell, they would activate the sounds I collected from various locations in China. These could be noises from the market crowd, a melody from a street singer or the sound of the wind on the top of Tibetan mountains. By picking up the backpack, the video would focus on my transportation through this journey,

allowing my audiences to pretend that they were on the road with me. They would see different views from a bike, cars, buses, jeeps, trains, and airplanes.

At section two, various items I collected during this trip were also presented. For instance, audiences were welcome to touch the soil collected from the Tibetan plateau and to smell spicy and floral mineral fragrances from Uygur market. When they entered my tent, they would see the items I used during rural camping and also, numerous pictures of different lodgings I used such as hostels and the homes of villagers.

# Conclusion

"Backpack Journey" project is my first complete prototype that had a significant number of user testers. In this project, I created the design process from brainstorming, to research, to prototype establishment and completion. More importantly, I had the opportunity to observe and record the feedback from my audience. A significant number of successes and failures were discovered after this exhibition.

## What Did I Learn and What Would I Do Differently?

1. Updating the interface about how to interact with my installation is absolutely in need. A lot of visitors were lost when they came to my installation. They were confused about whether they should touch all these items and which order they should follow. Most of them figured out their route through quick attempts. However, unfortunately, there were several visitors who just walked away simply because they did not know what to do.

To solve this, I will add more graphic icons to guide and encourage my visitors to explore this installation. The icons such as LED lights or arrows can be considered as options.

I learned people's expectation of the floor marks during the installation. I taped my floor with the name and painting of three critical cities on my journey; they were Xi'an, Lhasa and Dun Huang. It was quite awkward when I discovered visitors jumped up and down on these rounded paintings. Apparently, they were expecting these actions to activate something interesting. However, nothing happened since I linked nothing to these floor marks. I would absolutely use floor marks as part of my tangible experience next time and connect these marks to either visual or auditory piece.

2. There should be a stronger connection between my tangible items and the immersive experience. I wish to create a more precise and more logical link between tangible items and the activated sound/video next time.

- A. The camera should always be connected to the photographs taken during the journey.
- B. The backpack should always activate the traffic tool I used during the trip.
- C. The tent would merely refer to the various lodging I experienced.
- 4. I would add more tangible items in the tent. Some visitors mentioned to me that they went into the tent and expected a magical ride. But what they saw there was not so exciting. How to arouse visitors interests and excitement consistent seem to be a big task I need to consider.

# Did It Lead to Other Projects?

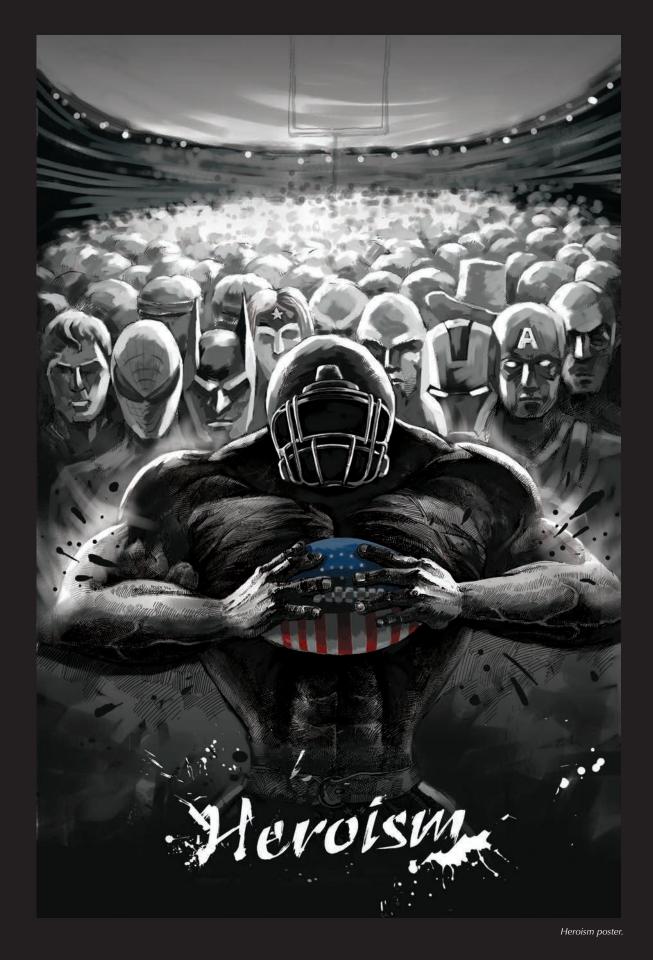
This project worked as a perfect experiment for my thesis project for "Culture and Supermarket." How can I present "culture," "daily life" and "supermarket" on the same platform and how can I introduce the hierarchy among these terms and make this immersive experience well accepted and convincing is my latest challenge.



# American Impression

美国印象





# American Impression

# Project Review

"American Impression" is a collection of three posters created in illustration style, based on my initial impressions of American culture. These represent the cultural shock I experienced upon my arrival in the country in 2011. Based on my daily doodling, I created three 60cm by 90cm size posters titled "Heroism," "Highway Culture," "Junk Food."

# Concept

Each poster represents a genre of American life I experienced. Here, "Heroism" refers to spiritual beliefs derived from American Hollywood movies and football. "Highway Culture" is inspired by American transportation. "Junk Food" is what I perceived to be the predominant diet of many Americans. Based on my initial impression of America, I chose several typical American symbols and icons in this collection. They were combined and presented in an illustration style. For instance, different superheroes such as Batman, Superman, Iron Man and the "Hulk" were combined in the same stadium.

# Research — Heroism

From my initial perspective here in 2012, "Heroism" was one of the unique signatures of the United States that I observed.

Americans seem to have a great passion for their superheroes in football and

film. Also, I used my limited historical knowledge to make sense of American culture. I believed that "Heroism" was deeply rooted in the Western history and philosophy which related to the Greek mythology or biblical legends such as the story of Prometheus and

113





Highway Culture poster.

Junk Food poster.



The Spider-Man game.

Moses. After their arrival on the new continent, early European immigrants to America were confronted with an extremely tough environment and this new world boosted a new round of masculine power worship. I believed because of world wars, the history of early European countries, and the tough environment in early America,

American superheroes were admired. In Austin, my first destination in America, I felt the American masculine power when I watched football players hitting each other at the Darrell K Royal-Texas Memorial Stadium. Fans were all shouting for their heroes in this cowboy town.

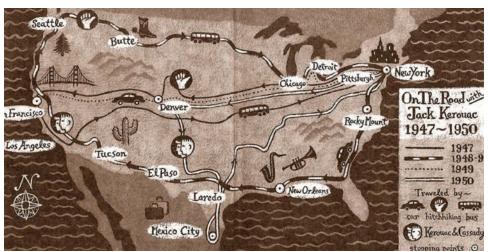
# Highway Culture

There is no doubt that the United States is a nation "on the go." When I was in Austin, I could not go anywhere without a car since public transportation systems there were limited. Americans seem to prefer driving to traveling by train and plane. It seems to me to that Americans liked road trips because they are a more personal and entertaining way to spend time on the road.

After some traveling by car in Texas, more and more, I could see that the USA is a huge country connected by many highways. This huge networking of transportation nurtured a unique American lifestyle — highway culture — which I loved. For instance, I drove on U.S. Route 66 that connects eight states including Illinois, Missouri, Kansas, Oklahoma, Texas, New Mexico,

Arizona, and California. On this trip, ubiquitous McDonalds' restaurants became like lighthouses that not only provided food and drink, they also offered drive-through service, wifi service, restroom, and electricity. Also, I read Jack Kerouac's *On the Road*. I learned that for Kerouac, all these highways and roads became a carnival

of "the beat generation." Thousands of young people preferred this modern bohemian style of "on the road" travel. They drove together across the country, traveled and advocated new freedoms of themselves. Highway culture with many vehicles, gasoline stations, restaurants, and motels became one of the most critical parts of American Culture.



On the Road map.

# Junk Food

I was shocked by the thousands of unhealthy foods in American supermarkets. There were fried foods, sugary drinks, fake cheeses, cookies, chips and ice creams. I observed an overweight Texan filling their shopping carts with big packages of these unhealthy foods at Walmart. This inspired me to create my "Junk Food" poster.

# Design Process

In the summer of 2011, after 2 hours train travel, 14 hours flying and 1 hour driving, I arrived in Austin, TX. The state capital was about 12,014 km far away from my hometown of Suzhou, China. Here, everything was new to me, from food to traffic, from language to social context. In my first year, I had rough experiences as the result of the language barrier, the weak public transportation system, and unique foods. During this period, I preferred to stay at home and isolate myself to stay safe and peaceful. I focused on my English study and more importantly, sketching to deal with this

lonely time. These drawings, included imaginary monsters, lonely mountains, Mexican Taco makers, "Bevo" cartoons, Western cowboys, and animated pickup trucks that wove together my culture shock and early English study. All these witty characters and the joy of creating them enlightened my early "Dark Ages" in America and laid a strong foundation for my serious "American Impression" posters.

I used to think that I would hide these drawing forever, but my wife encouraged me to develop them into



Sketches for my "Highway Culture" poster.



Sketches with vocabulary studies for my early "Dark Ages" in the United States.



a real finished project. She believed all these drawings were precious due to their "freshness" and "truth" from a foreigner's perspective about the United States. Eventually, I decided to transform these doodles into something fun that can covey my initial impressions about American culture to more people.

# Composition and Rendering

After concept development and sketching, I began to consider how to create a unified composition that highlights my initial impression about the United States. I wanted to create several powerful images that reflected the culture shock I experienced. I placed a football player, a man/vehicle and an overweight shopper in the center of three posters. For example, in the "Heroism" poster, I put the muscular football player who represents the ideal stereotypical American hero, in the center, occupying two-thirds of the composition. Other famous American superheroes, such as Spider-Man, Batman, Superman, Captain America, Iron Man, etc gathered around the football player to fill the remaining space. This composition strengthens the visual effect of "Heroism" for my audience and brings my initial impression of this country to them.

After establishing the composition, I used Photoshop to edit the pictures together, enriching and polishing their visual effects through value and saturation adjustment. After two months of working, the three posters called "American Impression" posters were printed and displayed at the 2016 Chinese New Year exhibition at the University of South Florida.



A demo of renderings.

# Conclusion

"American Impression" was my first exploration of an unfamiliar culture. From my perspective as a foreigner, I tried to express my impressions about American society straightforwardly. The general ironic tone of the illustrations has made some audiences feel overwhelmed and challenged.

Maybe some of the information in this project is exaggerated and can be very subjective, but I am glad I had the opportunity to share my emotions and feelings about my arrival here. I was hoping my personal experience could be a catalyst for future conversation and communication about a culture that brings further more sophisticated ideas and suggestions.

How does this project support your overall thesis?

This project is my first experiment to express cultural distinctions. I used several typical American symbols to convey my impressions about American culture. However, I now realized that these American impressions were close to some Chinese prejudices about American culture. American audiences explained to me, how these images were true in some ways but do not cover all of American culture. Chinese audiences looked these posters as a confirmation of American culture. "Yes, this is what we thought." As the result of these reactions, I realized that this project did not make different cultures understand each other, but inspired anger and arrogance.

Since then, I have tried to create more effective methods to compare the distinctions between American and Chinese cultures. In my future work, I wanted to reduce symbolized expressions in order for audiences to directly experience the daily life of these two cultures. Through dynamic media and immersive experiences, the audiences would make their conclusions and questions about new cultural understandings.

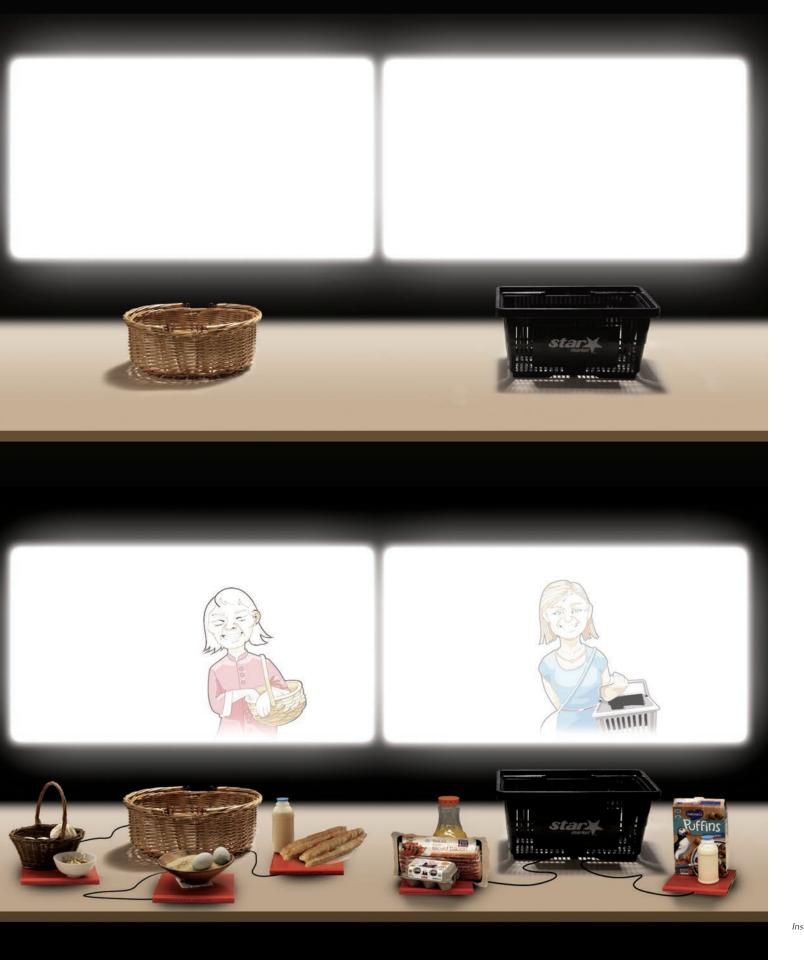




# The Chinamerican

**Grocery Shopping Experience** 

菜场超市体验



# The Chinamerican Grocery Shopping Experience

# Project Overview

"The Chinamerican Grocery Shopping Experience" project examines differences between China and America through the lens of food markets. In this project, I spent three months observing and collecting original data, such as images, text, and video to virtually reconstruct the distinctive morning routines between American and Chinese cultures.

I tried to virtually reconstruct food markets through the experience of two housewives. One is an old Chinese woman, and the other is a young American woman. Both of them are on their way to the market to prepare breakfast for their family. As a role-playing game, the audience would play these roles through the interaction in the virtual market and making choices, such as food options and cooking methods.

The installation is split into two separate projected screens. One represents a Chinese setting; the other represents an American setting. In front of the Chinese setting, there is a table where typical Chinese items sit: a bamboo basket, soybean milk, baozi, and fried bread sticks. One, on the opposite side, lies a plastic basket, orange juice, eggs, pancakes, maple syrup and coffee, which refers to the American lifestyle. Following the voice and visual guide on the screen, the audience will pick up items and put them in the basket.

# Concept

I believe the market is a container of daily life.

Markets, whether street markets, flea markets or supermarkets, play significant roles in our daily life. People need to shop there regularly to obtain necessary living material, such as food, clothes, and utensils. This place gathers all the essential aspects of our life and is a kaleidoscope that can present unique cultural features.



I was quite astonished when I visited a spice market and grand bazaar in Chinese Xingjiang province. In these markets, you can witness the distinct color palette and vivid aesthetic value of this nation. For example, Uygur women would cover their whole faces with colorful scarfs, and shawls due to the Muslim tradition. However, at the same time, they promoted their products passionately in bright and loud voices fearlessly. The local life scene, which mixed Islamic religion heritage and business expertise impressed and inspired me.

Similarly, my shopping experience in an American market led me to understand the food, daily life, and holiday ceremonies of US residents first

hand. Sometimes, it can be a little bit shocking. In a Walmart store located in Austin, TX, I saw a lady filling her shopping cart with a crazy pile of products, including several boxes of soda, four huge bags of chips and 20 boxes of frozen food. I was shocked by the amount of processed and junk food she was taking. Thus, based on my experience, in my project, I hoped to let my audience directly feel the cultural characteristics through virtual food shopping. Also, cultural distinctions and contrasts are revealed when I place American and Chinese shopping experience side by side.



An Uygur woman in a local street market of Xingjiang.

# Research

Supermarkets have been implanted throughout the world successfully due to its well-organized display and efficient check out system. Despite the similarities in the retail format, the products inside are very distinctive from country to country. I spent a lot of time on researching the shopping style of Americans in supermarkets at major commercial chains, such as Star Market, Trader Joe's, and Whole Foods. While in China, rather than focusing on the supermarket setting, I concentrated on the unique street markets there.

## The United States

## Star Market

Star Market seems to be reasonable in price and quality and is loved by a lot of ordinary citizens. It offers all types of necessities, such as pastry, vegetables, fruit, cheese, bread, eggs, dairy products, juice, seafood, and meat. Some secondary products are displayed in corners, including canned food, drinks, wine, snacks, spices, and pet supplies. At the check out counter, you can see magazines, flowers, energy bars, gum, and ice. The customers can purchase all the necessities here at reasonable price. Additionally, it is open 24 hours a day, and many attractive discounts occur during the late night. Star Market is comparatively affordable among US markets.

# Trader Joe's Market

Trader Joe's, being famous for its snacks, bakery, and processed foods, is favored by the younger generation. The products of processed and prepared foods offer young people quicker and more accessible diet options in their intense daily life. A lot my Americans prefer this market because of the various processed food choice and the affordable price. Another reason is a lot of unique products there can hardly be found anywhere, such as dried fruit pieces, nuts, Tiramisu ice cream cake. Furthermore, they are fond of Trader Joe's cozy family style. The layout and visual display in Trader Joe are clean, colorful and delightful. It is a beautiful choice for the customer who does not like modern supermarkets with their

warehouse style. From my perspective, it acts as a supplement to Star Market and Walmart.

## Whole Foods Market

Whole Foods is known for its organic food supply. The products' prices there are much higher compared to Star Market and Trader Joe's. The target customers of Whole Foods are the

upper middle class or upper class. I first learned of this market in Austin around 2012. Its products' price is the 20%-40% higher than other local supermarkets. I rarely shopped at Whole Foods market unless I wish to treat myself with the tasty dishes in its hot bar. Similarly, many people including me consider Whole Foods as a sizeable take-out restaurant.



## China

### Lou Men Street Market

Lou Men Market is a typical street market in China located in my hometown of Suzhou and serves as the primary market for fresh food in my community. It covers 5,000 square meters and includes over 100 independent vendors. There are three zones: vegetable zone, the prepared food zone, and the meat zone. The exploration of this market is like an adventure. You would be amazed by the freshness and diversity of the food here. You can see over a hundred types of vegetables, including buk choys, cabbages, bamboo shoots, zizania latifolia trucks, loofahs, pumpkins, tomatoes, roots of lotus, chestnuts, water chestnuts, cauliflowers, gai lans, lettuce, etc. Most of them are picked the same day. The market offers live seafood and poultry. At the same time, you would see a lot of repetitive product types and the intense competition led by the vendors. Here, business becomes a social game. How to establish a trustful reputation, how to deal with the picky customer, and how to obtain the maximum commercial success is the primary concern for vendors.

The general quality of the products at Lou Men Street Market can't be guaranteed. Visitors need to bear with the stinky smell and the humid environment. The customer would need to be cautious about their choices, and it is quite an adventure to shop here.

### RT-Mart

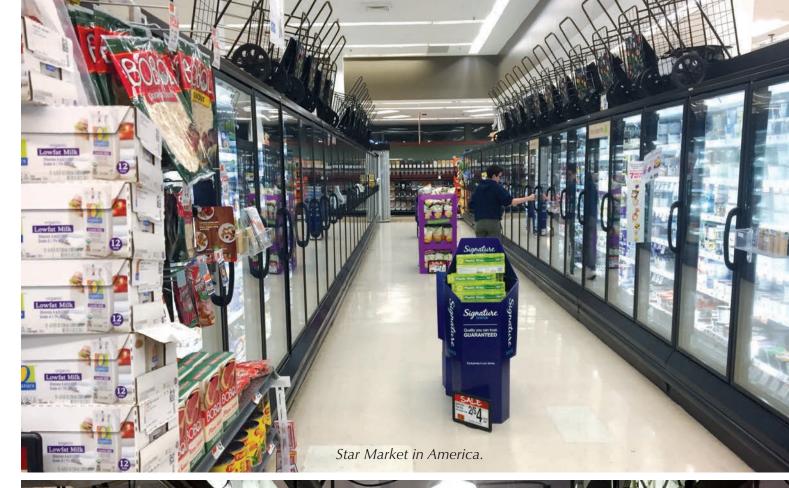
RT-Mart is a retail supermarket chain that is prevalent in China. It uses the typical western market displays and is known for featuring favorite Chinese local products. These include prepared Chinese snacks, processed meat, spices and local fruits with packages.

### Walmart

Walmart's business in China has proven to be a failure, at least in my hometown. It utilizes in all the American shop settings, displays, and catalog.

However, it's prices are not competitive. Eventually, it went out of the business in my hometown.

In conclusion, Chinese markets mainly focus on the freshness and quality of diverse products, while their sanitation cannot be guaranteed. The American products seem to be less varied, but their standard of hygiene is much





higher. The various types of bread on a shelf at Star Market provide an excellent example of this difference. Although the flavor and the ingredients of the bread are similar, they are wrapped in delicate packaging that contains all the information about produce dates, calories, and ingredients. In China, most of the products do not provide this information and are typically unwrapped.

Also, the contrast in shopping habits among American and Chinese food consumers can be presented. The shopping habits are distinctive between China and American regards to time. Most of Americans make grocery shopping weekly while Chinese residents purchase food every day. Thus you would always witness shopping cart filled with food in the US. While in China, you would see housewife carry a handbag for shopping only. They prefer daily shopping due to its freshness and diverse choices in the daily market.

# Breakfast

I initially included all aspects of food markets in this project. However, the overwhelming workload forced me to focus on just one section. I picked the food collection for breakfast as a medium to explore the cultural experience. Many factors influence the procedure of preparing and having breakfast, such as time, budget, personal choice, and shopping habit. American choose processed and packaged foods as their breakfast for convenience and efficiency, while Chinese would pay more attention to the fresh quality the food and raw material. In Chinese markets, housewives are always picky about the freshness and hygiene of the product, since the health of the whole family is significant to them.

Also, how to choose the best food for the next morning is a classic question for every supermarket shopper. For instance, in the United States, you can select between cereal, milk, juice, bacon, pancakes, and potatoes. In China, street vendors can offer abundant options, such as the steamed buns, steamed dumpling, pongee, salted eggs, soy milk, fried bread sticks and Chinese pancakes. These extremely different pictures of breakfast reflect how culture is influenced by local products and geography.

# **Project Process**

I wish to invite my audience to realize, understand, and respect cultural distinctions through my project. Cultural comparisons are the ideal approach to make these understandings happen. Based on my personal experience, traveling is an effective theme that provides an opportunity to observe study and understand another culture. Every individual is raised in a specific cultural environment, including religion, language, food, and social values. All these aspects build in a "comfort zone." How can we walk out from our personal "comfort zone" and begin to observe and explore the outside world? It requires curiosity and of course opportunity as well. Traveling provides a wonderful chance to leave our cultural "Comfort Zone." For instance, I was raised as a city boy in my hometown of Suzhou for 19 years. My world was limited in this middle-size town which was heavily influenced by the Confucius tradition, which I deeply believed in. At the age of 26, I began a journey to explore China and later, move to the United States. I have experienced many beautiful, scenic views. I have met some adventures and dangers. I have also been confused by many social customs which were totally distinctive from my hometown. All these experiences offered me invaluable cultural lessons about the world outside of my "comfort zone" in Suzhou. As a traveler, I have experienced cultural shock, confusion, disagreement, and questions when I put in a totally different cultural environment. But it is the drastic cultural contrasts that I experienced, offer precious opportunities to know the vivid diversity of the world.

## Prototype 1

Base on my travel experience, I recreated my cultural journeys outside my individual "comfort zone" to invite users to join me as we explore a new culture together.

My first prototype is inspired by my different morning routines in Shanghai

and Boston. Through 4 years of working in Shanghai and two years of studying in Boston, I am confident to speak about the distinct features of these two cities. There are a lot of similarities between them. For instance, they are both charming cities with deep historical traditions and international standing.

They are also unique in various aspects as well. From my perspective, mornings are very different in each city. Shanghai, as a famous Asian metropolis, evokes an image of intense traffic through highways, bus stations, and subway. Millions of citizens rush on their way to their professional positions. Street food vendors present these workers with local breakfasts, including fried bread sticks, soybean milk, buns and tea eggs. Shanghai's morning is busy, hustling and intense.

The morning in Boston is much more steady and smooth. This city offers much less commuter traffic. Unlike the brandnew transit system in Shanghai, Boston's metro system is over 100 years old. It seems to be common for passengers to wait a lot due to many train issues. In contrast to the individual vendor in Shanghai who sells homemade goods, fast food chains such as Dunkin' Donuts offer standard breakfast and coffee to fit the calmer pace in Boston.

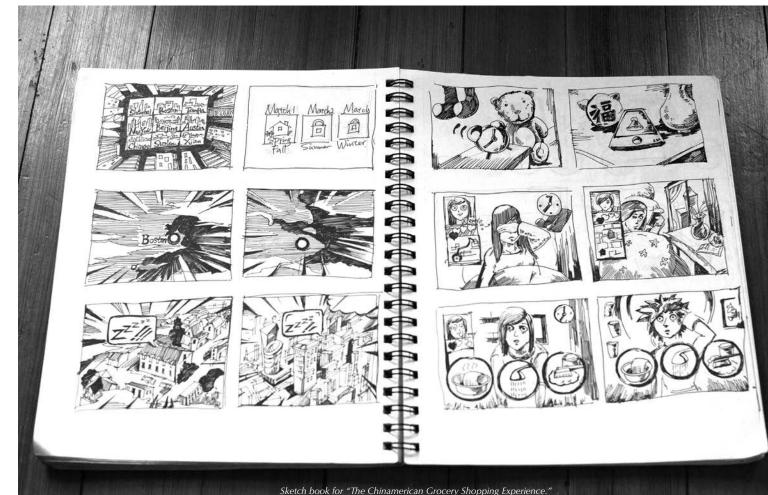
In this prototype, I would virtually reconstruct the different morning routines in Shanghai and Boston to invite users to compare and experience distinctive cultures and environments. The prototype is set up as a competition. Users play a virtual female character

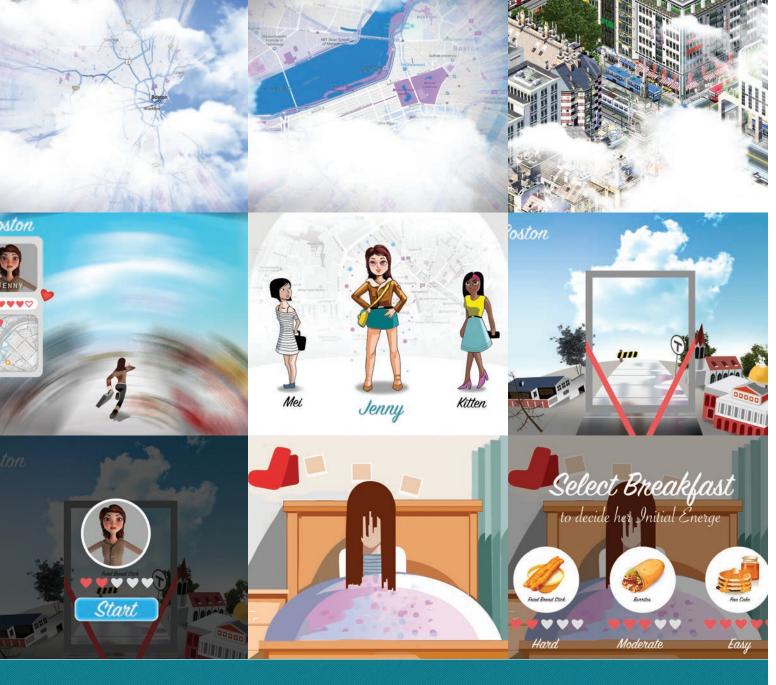
virtually to experience the whole morning process in each city from waking up to arriving at the office. Before departing to work, the character needs to take a shower and finish breakfast. Afterward, she would start her commuter traffic adventure. In Boston, she confronts a lot of challenges in her route that would delay her arrival, including a barking dog in the neighborhood, traffic jams, and train breakdowns. To arrive on time, she would need to work hard to avoid these barriers along the way. If the character can arrive on time, she then proceeds to the next level — experiencing a Shanghai morning. At this level, the figure would be offered a local Shanghai breakfast, then out the door to move along skyscrapers, wet pavements, and crowded people. Similarly, users would use a keyboard to navigate the character to avoid all these obstacles and make sure she arrives on time.

On March 20, 2017, I invited Hessam and Arly to test my first prototype in the DMI studio. They were both instantly immersed in the intense game and tried their best to avoid the "obstacles" I set up. However, after playing the game, they could only remember the different views of each city. Apparently, my intent to show cultural contrast became a city

landscape tour. The prototype did not seem to be successful. For the next step, I needed to look for a better approach to the cultural comparison.







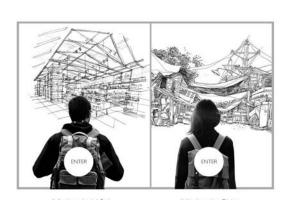




# Market Game for Prototype 2

The challenge for prototype 2 was seeking a better way to contrast cultural differences. I considered different aspects, such as religion, traditional color palettes, and education as options. However, none of them were broad enough to represent a whole culture. During my investigation, I flipped through my album of travel photographs. All the photos that recorded market scenes in different cities drew my attention. The market, as an encyclopedia of daily life, contains almost all aspects of culture. It provides the basic needs, such as food, everyday utensils, and clothes. All these items vary from city to city, culture to culture. I believe "market" could be a perfect medium to express daily life in different cultures. After some research in America and China, I created a virtual market experience and invited users to observe people's daily life through an interactive screen-based game.

Through the program system I set up in this game, users "grab" food within a limited time and budget in a virtual market. Here, each food reflects part of daily life in local culture. When the shopper clicks "Check Out" at the bottom of the screen, all the products would be arranged according to the time of day at which they would be eaten. All the video clips would be shown according to chronological order to present details of local people's life. For example, in a virtual Chinese



Market in U.S.A

Market in China



The entry page. The check out page.

139

market, a user can collect items such as buns, onions, and milk in a shopping cart. When these products are purchased, the user sees a video that pertains to making and eating of each item: bun for breakfast, onion dishes at mid-day and drinking warm milk at 10 pm. Users can observe the whole day of a resident through these items from the market.

I showed this prototype at the 2017 mid-term fall review. However, the idea of expressing cultures through this game was questioned by several professors. In addition, the length of final video was too long for most of the audience. Therefore, I was set out to explore prototype 3.



The main page of "Chinamerican Grocery Shopping Experience."

# The Chinamerican Grocery Shopping Experience for Prototype 3

Based on the two past unsuccessful prototypes, I wanted to bring more direct contrast between American and Chinese culture. Also, I discarded the game format because it carried too many competing forms and technical interactions. Instead, I became interested in pursuing more simplified interactions through verbal, audio and tactile sense.

# Comparison

I chose a street market in Suzhou and Star Market in Boston to compare the Chinese food shopping experience with its American counterpart. To establish a visual comparison, the setting for these two markets was projected on two separate screens. Distinctive shopping baskets and products were



A vendor in a Chinese market.

placed on one table in front of each screen. A traditional bamboo basket was selected for the Chinese shopping cart, and a Star Market plastic basket was chosen for the American shopping cart. Distinctive products from these markets were presented in front of the baskets. For example, chicken eggs and slices of bacon with typical American packaging were in front of the Star Market plastic basket and a bowl of rice and salted duck eggs without any packaging were placed in front of the Chinese bamboo basket. I wanted audiences to intuitively observe these vignettes of two contrasting lifestyles before they interacted with them.

Following the visual instructions on the projected screen, a user would



A shelf in an American supermarket.



be invited to shop in a Chinese street market and in an American supermarket. The Chinese side presents a kinetic scene with loud haggling in the background while the American side is quiet and neat.

# Different Interactions Against Different Shopping Habits

In addition to virtually re-constructing contrasting shopping environments, I also tried to mimic the different habits that distinguish American and Chinese shoppers. For instance, shoppers in American supermarkets are allowed to handle packaged products, while Chinese purchasers are cautious about touching unpackaged foods, especially in street markets. They evaluate food quality according to through color, smell and texture instead of touch. This feature of Chinese shopping was presented in my project.

In my virtual American market, one shopping basket from Star Market and three groups of different breakfast foods were positioned on the table. A young American lady on the screen would invite users to do breakfast shopping. Based on the lady's order, users were requested to touch and pick products accordingly.

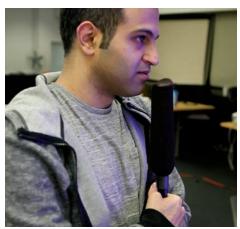
There are a bamboo basket and several pieces of uncooked and unpackaged breakfast food on the virtual Chinese side. An old Chinese lady leads users through a virtual street market. My audience experiences shopping through their interaction with vendors and their products. Once the audience touches the food, they must bargain with the vendor to buy it.

#### User Test

I invited an American friend, who has never been to China, to join my user test. Although she was confused by the two screens and the two markets settings at first, she became more and more clear about the procedure through her interaction with the Chinese and American shoppers. Following the visual orders presented on the screen, she interacted with the American products and the Star Market basket. In her Chinese shopping session, she called out her orders and interacted well with the street vendor. It was interesting to see her laughing when the Chinese vendors stopped her from touching their products. After her user test, She told me how shocked she was by the noise level in the Chinese market, and she recognized how different Chinese grocery shopping is from the American way. Now she wants to experience the street market in China for real.



Touch action.



Voice action.

## Conclusion



User test for "The Chinamerican Grocery Shopping Experience."

It is quite challenging for me to select from the vast database of cultural information provided by the markets. There are so many items in this matrix. How to set up my categories? How to lay out this information? How to present my ideas? I believe daily life is a collage of culture, which can lead people with different backgrounds to better understand different cultures.

I ended up focusing on breakfast as the medium to contrast the different shopping habits from two cultures. It is fortunate that I finally achieved a logical structure for this database.

#### How was the feedback from the users?

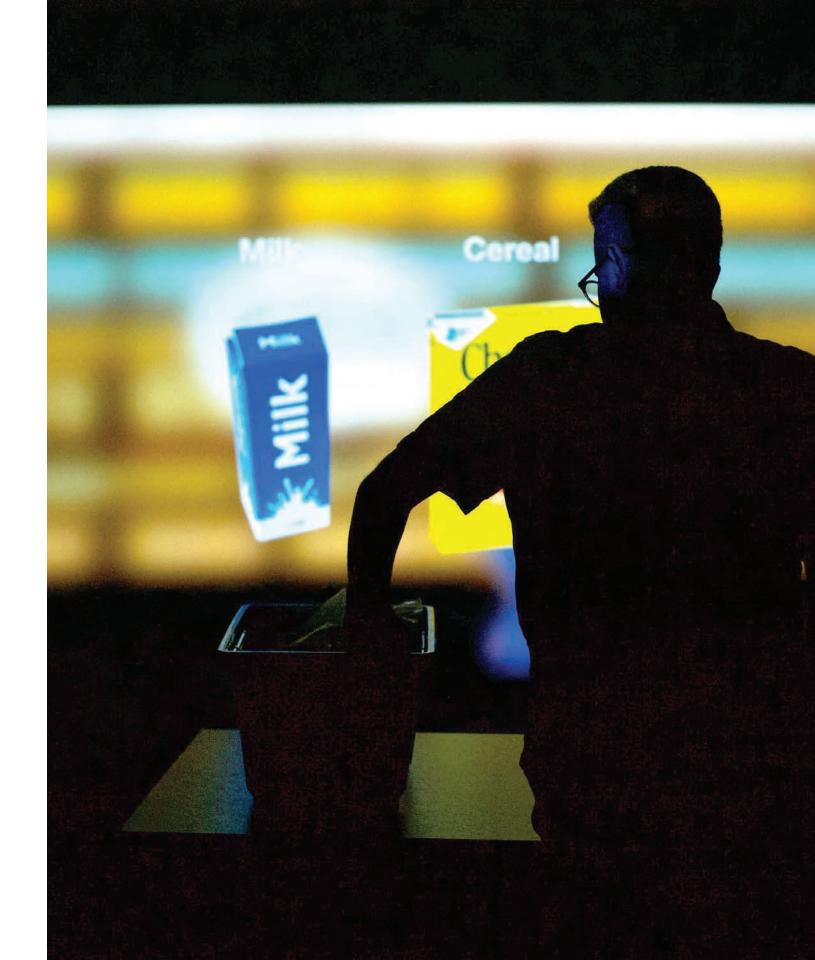
Some people mentioned that the virtual experience of shopping in each culture was too polarized with no examples of a cultural middle ground. For example, people mentioned there are some public markets such as Pike market in Seattle that allow people to communicate with vendors like they do in China. Others argued that they have been to China and always visited a supermarket there that was the same as American style market.

In the future, I will add two more layers to my project in order to show the broader diversity of culture. For example, I can add a Chinese supermarket and an American public market. I would also continue to offer more perspectives to explore the difference between American and Chinese daily lives. Also, I would add more explanations in the project to answer users questions and balance their polarized feeling.

How does this project support your overall thesis?

This project entirely supported my thesis concept. My goal for the thesis is to present pieces of daily life to the user that lets them experience different cultures and avoid misunderstandings. In this project, I focus on the market experience which is a collage of daily life in local culture. Based on user participation and comparison of different food shopping experiences, users can understand a new culture and begin a passion to explore it more.

Also, according to users' feedback, I would love to add more characters and more food categories in each supermarket in order to offer more tangible experiences.



# Lingering Garden







## My Story About Lingering Garden



# Lingering Garden



### Concept and Background

"Lingering Garden" project is an interactive animation that explores traditional Chinese culture through an immersive experience.

Lingering Garden is one of the most famous landscape gardens in my hometown of Suzhou. Built by retired ancient Chinese intellectuals during the 15th century Ming Dynasty, "Lingering Garden" features traditional oriental architecture, land planning, and aesthetics. My project builds a visual and virtual experience of "Lingering Garden" for my visitors. Traditional music, Chinese ink painting, animation, and viewer interaction weaves audiences into an immersive visual environment about the daily life of Chinese people. The transformation in the ink painting animation invited the audience's participation in the dream of Chinese intellectuals, a world composed of vivid mountains, clouds, and mysterious paths. I am hoping this project will be the first stop on a Chinese journey for my western audience.



### Concept

Intellectuals played significant roles in social growth and development through ancient Chinese history. As the most educated group in China, they set up the basic moral values and philosophical beliefs of all citizens. Through exploring and experiencing their environment, you can feel their aesthetic taste. They laid out their sense of beauty and wisdom through an ideal composition made from the elegant pavilion outline, delicate kiln motif, slim bamboo, blossom lotus, and peaceful pond. Visitors experience the roots of these elite cultures that dominated this nation over thousands of years.

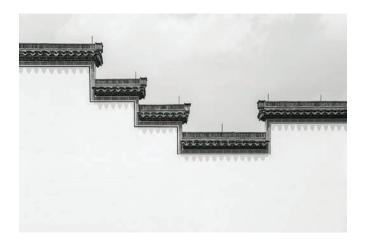


Quyuan, one of the most famous intellecturals.

# The Key Elements of the Project

#### Wall

Walls are one of the most important architectural elements in Chinese culture. For instance, from a national perspective, the "Great Wall" was built 2,239 years ago as a selfprotecting construction from rivals and minor invaders. From a more civilian perspective, "wall," "fence" and "barrier" were used widely during the Ming Dynasty in ancestral homes throughout Fujian Province and Jiang Su province. The wall of the "Linger Garden" refers to protection and isolation, which you would witness mostly in the Chinese intellectual group after retirement. Similarly, "Lingering Garden" was surrounded by a 30 feet tall wall. The owners of this garden along with retiring Chinese intellectuals utilized the wall to isolate and protect themselves from crowded streets and ordinary lives. They created their personal heaven in their own territory through reading, music, writing, theatre, and horticulture.





#### Cloud

The concept of "cloud" is a critical component of the garden as this inner heaven as well. Clouds and fog are both essential elements in Chinese painting. Mostly, they played a crucial role in disguising space and perspective in landscape painting. Also, they were very useful visual elements to express a mysterious and enchanted context. For instance, in an ancient folktale, the cloud was described as a tool or a bridge from ordinary life to the eternal long-ever (fairytale) world.

In "Lingering Garden," "clouds" were a popular motif in architectural trim and pebble road decoration. Additionally, Tai Hu stone — a type of stone from the local lake that has a soft and organic shape — can mimic the elegant contour of clouds perfectly. This type of stone was widely used in the landscape for the motif of "clouds." When the landscape was surrounded by the organic and natural "cloud," the owner would appreciate his garden as part of heaven.



Courtyard view of Lingering Garden, Suzhou.

#### Decorated Windows

In "Lingering Garden," the owner extends the utilitarian function of the window to create a framing device of garden views. Here, the window becomes a tool to enrich the space and to highlight the landscape outside as a crucial part of the scene.

### Project overview

This project was presented in a 30-inch x 30-inch dark space where one screen, one speaker and a desk equipped with trackpad mouse were installed. Components of the installation included the following:

- 1. One intro animation about petals playing on the screen.
- 2. A static frame including a wall and a bunch of plum blossoms when the intro animation ended.

- 3. The interaction section: my audience was invited to click the mouse which was linked to the video projection and the big screen. Delicate plum blossoms appeared on the screen where they float on a breeze and arrive outside the wall of "Lingering Garden". By clicking the plum blossoms, the high wall moved down to reveal the entire landscape of "Lingering Garden".
- 4. Chinese scrolls and stamps: audiences could then explore the virtual landscape of my "Lingering Garden" by clicking on several traditional Chinese stamps that appear on the screen. The experience created through interaction and animation immerses the audience into a continuous scroll of the Chinese ink painting that investigates intimate garden views and the broader landscapes outside.







### Research

# History of the Lingering Garden

As one of the four magnificent Chinese classical gardens, Lingering Garden, was originally commissioned in 1593 CE by Xu Taishi (徐泰时), an impeached and later exonerated official from the Ming Dynasty. Subsequently, the garden was reconstructed and updated by different architects and artists over the next 400 years. In 1997, the garden, along with other classical gardens in my hometown such as the Humble Administrator's Garden (拙政园), Maste of the Nets Garden (网师园), Garden of Cultivation (艺圃) and Canglang Pavilion (沧浪亭), were recorded by UNESCO as World Heritage Sites.

However, these beautiful gardens were documented poorly through trite and cliche postcard reproductions. I was disappointed by these stereotypical introductions and wanted to explain these gardens in more innovative ways.

1. My initial research focused on the Chinese intellectuals' ambitions and frustration. In 587, the Chinese Imperial Examination System was established by Emperor Yang of Sui, Yang Guang,

b. 569 - d. April 11, 618). After that, all Chinese intellectuals were forced to take these official exams and were selected to serve their government in a tough and rigorous way. In this way, over thousands of years, Chinese intellectuals were bound by the destiny of their empires and dynasty instead of determining their own path. Loyalty has been considered as the top moral for the elite intellectual in ancient China. For instance, in 1286, Wen, Tianxiang, prime minister of the Song Dynasty, refused to surrender to Mongolian invaders and committed suicide instead. 200 years later, Gu yawn stated "The rise and fall of the nation is the concern of every citizen," most of them were willing to sacrifice themselves for their nation. However, a few intellectuals rejected their destiny in the government and became "rebellious." Instead of seeking fortune and political success, they preferred to isolate themselves and enjoy themselves in these landscaped gardens surrounded by a tall wall. Here, they built their tranquility and philosophical meditation through art, reading, writing, and music.

2. In the summer of 2017, I returned to my hometown and revisited these classic gardens. Among them, the most important one was Lingering Garden. It featured three prominent areas: a water pond, a courtyard, and an area with a cloud-shaped Taihu stone. The pond field is the center of the garden. Here is surrounded by human-made rock outcrops with woods designed to mimic the hillside, one pavilion, two covered walkways and three bridges embracing a water pond. The courtyard houses are the living area which includes four connected buildings called Wufeng House, Yuan Yang House, Jifeng Pavilion and Quxi building. Decorated windows

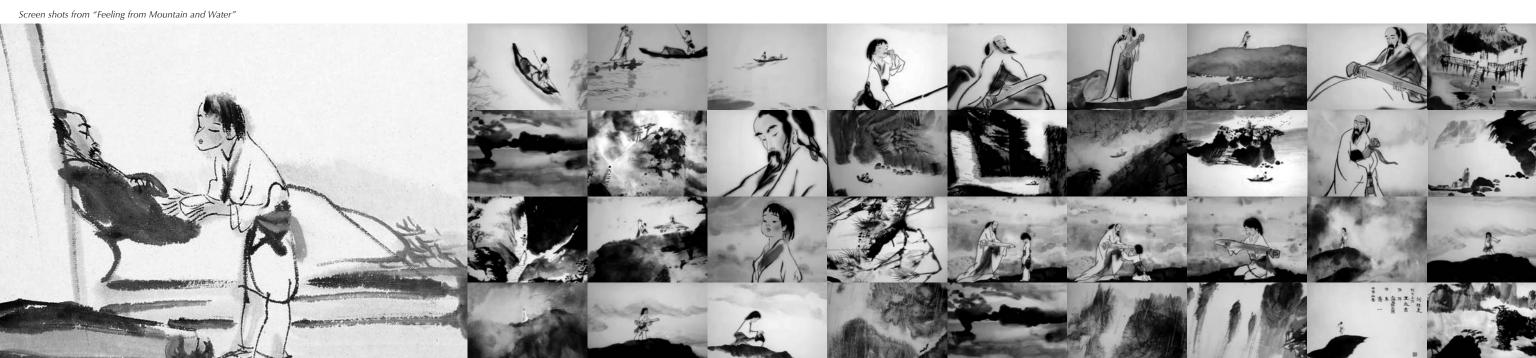
and doors in different shapes divide and diversify the spaces. The Taihu stone area is the newest part of the garden. The fourth owner of the garden "Sheng" obtained this famous Taihu stone known as "Stone-Peak Cloud" at the turn of the 20th century and placed it in the northern garden. Two buildings and one pavilion were built around the stone and were called Stone-Peak Cloud building, Peak Cloud room, and Peak Cloud pavilion. I decided to recreate the experience of visiting the garden. The pond, the decorated windows, the peak cloud stone all became the critical elements to reinterpret in my project.

### Past Projects

The use of traditional Chinese video and film emerged as a medium in China during in the 1960s and 1970s, and included "Where is Mama," "Reed Pipe," "The Deer's Bell" and "Feeling from Mountain and Water." From there, I researched and studied "Feeling from Mountain and Water." This Chinese animation won international awards and secured an outstanding reputation. It was composed of many natural elements that are found in the Lingering Garden such as a pond, rocks, woodlands and plant life.

"Feeling from Mountain and Water" is a 19 minutes short animation film. (山水情) The story is that of a music

master who returns to his hometown and befriends a fishing boy on his journey. He gives his "Chin" a musical instrument to the boy and disappears into the fog and mountains. The film does not contain any dialogue. The only audio effects are sound of the wind, water, bird calls, simple music. The film uses the combination of the stop-motion and splash-ink animation to highlight the freehand brushwork style. In 1990, West audiences firstly were shocked by the unique ink painting effects in animation, and "Feeling from Mountain and Water" won the reward of the best animation short films in Montreal World Film Festival. This work serves as a deep inspiration for my "Lingering Garden" project.



### Design Process

Based on my research of Chinese culture in gardens, I hoped to make an interactive animation that not only introduced the classic Chinese garden — Lingering Garden to western audiences but also recreated the Chinese intellectuals' ideal heaven that was the core of the garden design. How to visualize the Chinese dream and which visual style to use were my first issues.

### Select Ink Painting as the Visual Style for My Animation

Ink paintings recall the golden age of classic Chinese gardens (in the Ming and Qing Dynasty) for the audience. Most importantly, they establish the enchanted atmosphere in which Chinese intellectual developed and enriched their aesthetic ideology. As Wen Zhengming, one of the best painters from Ming Dynasty said: "The gardens with mountains and water are the all-natural stroke of magic ink paintings."

Inspired by "Feeling from Mountain and Water" and those past ink paintings, I created my landscape ink paintings for "Lingering Garden" step-by-step. I painted 53 pictures on papers depicting the main attractions of Lingering Garden. Then I scanned them into Photoshop and separated them into

single elements as a PNG file. These PNG format ink paintings were then prepared for future animation.

### **Building Animated Clouds**

However, after I finished these 53 paintings, I found the feeling of heaven composed of mountains, water, birds and several buildings did not make sense enough. Also, I was thinking how to make the transition of animations more smoothly. So I decided to add cloud that always appeared in heaven pictures and Chinese class gardens. I hoped that the soft movement and mystery with the animated cloud effects were used in every transition. Animated fog was also used, especially for scenes with plants and pebble path. Here, fog and clouds serve as natural curtains that gathered and dispersed, leading audiences from scene to scene.







My ink painting on papers.

#### Wall and Plums at the Entrance

In the research section, I had already discussed the main characteristics of Chinese intellectuals "Isolation." The "Fantastic Heaven" they built was not for the public, but for their selves. So they usually set up a tall wall. The tall walls around the garden itself were built as a barrier between the ordinary world and intellectual heaven.

I used the wall in the virtual entrance of the interactive animation to block audience's eyes. It arouses curiosity and expectation.

But I still needed an attraction spot in the entrance to lead audiences to enter. A poet Ye Shaoweng in Chinese Song Dynasty had a famous sentence: "So full the garden boomed with spring, a

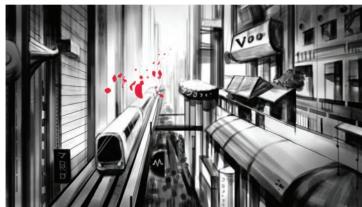


Flowering plum in Lingering Garden, Suzhou.

















Intro animation.

twig of red plums was seen beyond the wall (春色满园关不住,一枝红杏出墙来)." Using a twig of red plums beyond the wall to imply the vivid garden inside was a right way in my project, too.

In my project, by clicking the plum blossom at the edge of the wall, the animation moves the viewers up and over the wall to peek inside the inner garden landscape and its delicacy.

#### Petals in the Intro Animation

Based on the idea of "A Twig of Red Plums beyond the Wall," I explored the use of petals of red plums as a guide. For the contrast between the ordinary world and intellectual heaven, I used the plum petal blossoms to lead the audience view started from the modern skyline, over a smaller city, and then to Suzhou where Lingering Garden is located. Eventually, they dispersed when users arrived at the Lingering Garden wall. The plum petals play the essential role in exploring this garden. Not only because they are vivid in monochromatic ink paintings, but also because they are lightweight and have very flexible movement.

### Project Structure

The project was designed into two parts. The first portion Follows the touring path of the Lingering Garden, to include five primary clips of animations: the intro, the index, the pond, the courtyard, and the peak cloud stone.

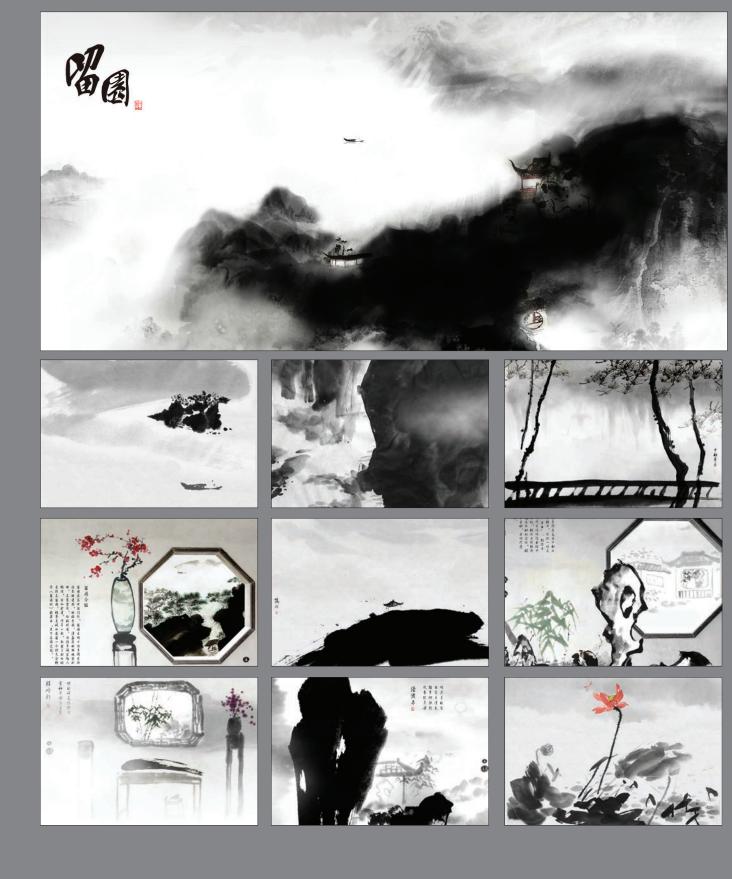
In the second portion, each animation ends in a static position. The audiences could then click the appropriate button to enter into a new ink painting landscape context. All the ink paintings mimic the real scenic view from Lingering Garden.

# Hotspot Placement and Audience Interaction

Also, I placed several hotspots to activate some hidden animations in sections of the interactive video. For example, when audiences click on the fishing-man hot-spot, they are led to the animation of the peak cloud stone with lotus. Likewise, in the page displaying the scenic pond view, a boat serves as a hotspot that links to an animation of traveling to mount Peng Lai.







Screen shots from my "Lingering Garden" project

### Conclusion

"Lingering Garden" is a project portraying classic Chinese philosophy. The concept is literal and abstract. It was challenging for me to find an ideal medium to carry this concept. Through research and personal experience, I am aware of the isolated lifestyle of the ancient Chinese intellectual. They loved to enclose themselves in a beautiful manufactured garden and gather for poetry, drink, and drama. I selected landscape garden as the context and used ink painting as the visual stroke to













Lingering Garden in Suzhou.

Screen shots from my "Lingering Garden" project.

"paint" this virtual experience. I believe that this Chinese tradition and the aesthetic it carries is universal and does not merely belong to the East. Nature and art should serve as the eternal joy for all the human races.

In this project, I discovered that audiences would be much more engaged in the virtual experience if they could make choices and guide themselves. I set up the basic structure of this interactive website in a non-linear order, which means my audiences can explore this virtual garden in whatever order and speed they wished. I think involving audience successfully is a significant victory for a designer.

"Lingering Garden" project is my first test to invite Western audiences into an orthodox Chinese environment. It is affirming for me to discover that traditional Chinese culture can be visualized through an immersive experience. Through this project, the western audience experienced Chinese aesthetic values. Simple objects, such as clouds and water weaves the daily life of ancient Chinese intellectuals.`

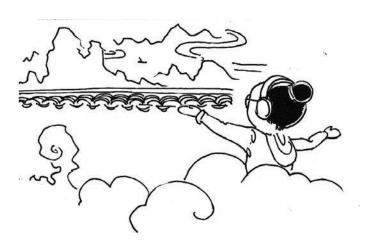


Hessam in my user test of the "Lingering Garden" project.



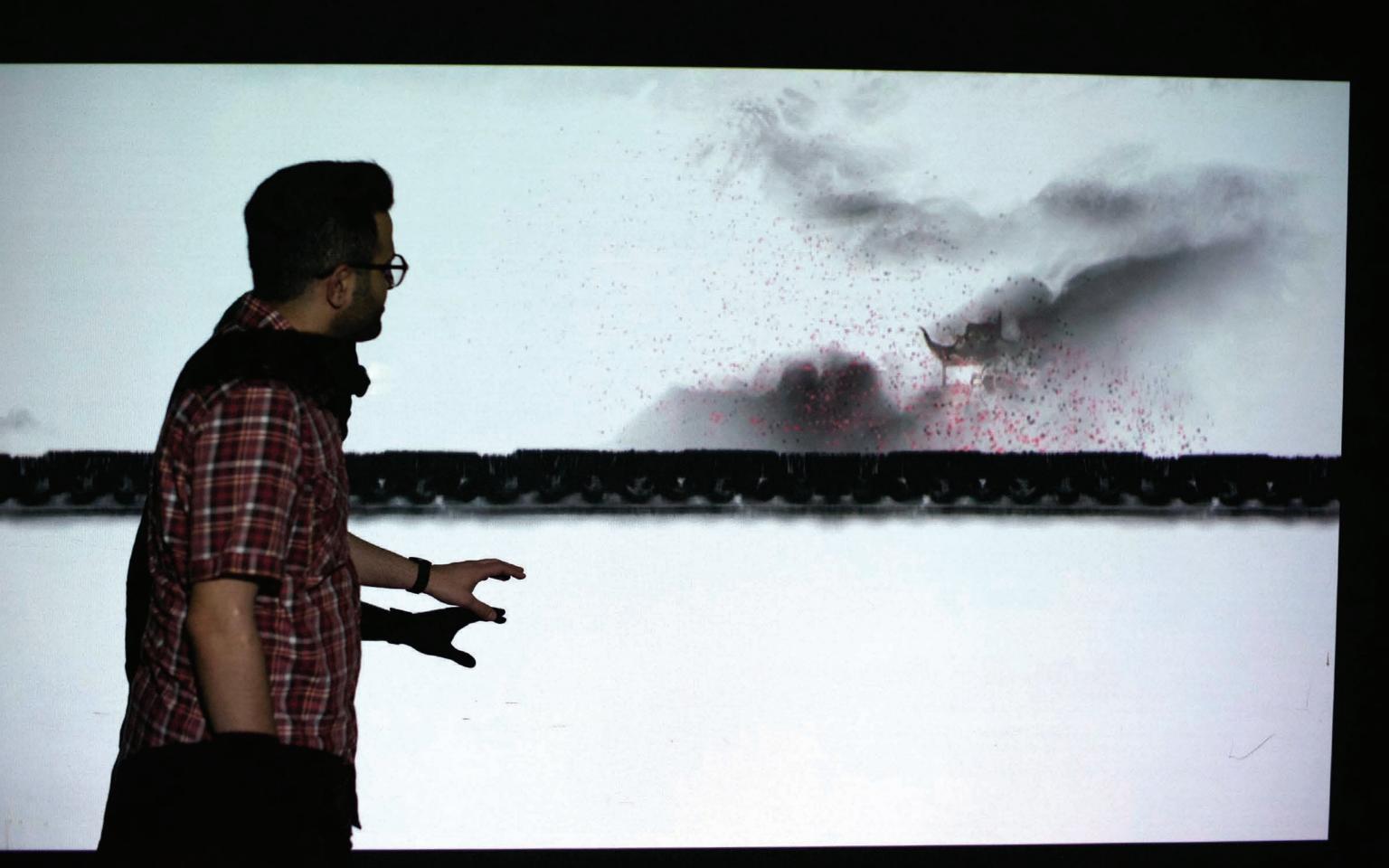






173

Screen shots from my "Lingering Garden" project.





# Rainy Windows

兩窗



# Rainy Windows

### Project Review

The "Rainy Windows" project is an interactive installation inspired by Jan Kubasiewicz's Design Studio II course. In the fall of 2017, the project was set up for the DMI student show "Fresh Media" exhibition" hosted by the Cyberarts Gallery in Boston.

### Concept

Rain is a natural phenomenon which happens everywhere. But the aesthetics of rain are different depending on the local culture or environment. In China, there is a long tradition of people listening to the sound of rain as it beats against vessels in front of windows. The ritual is a crucial part of Chinese architecture design, Chinese aesthetics, and daily life.

My "Rainy Windows" project invites western audiences to participate in the rainy experience of Chinese leisure life. Audience members move six different vessels on the table top to create music. Each vessel is made from different materials including metal, wood, clay. A computer code is attached to the bottom of each vessel. This sensor then interacts with virtual water-drops projected on a screen that fall at different rates of speed. This interaction produces music that is unique in timbre, tone, and pitch. In this way, I hope people could better understand Chinese culture and Chinese aesthetics through the immersive experience.

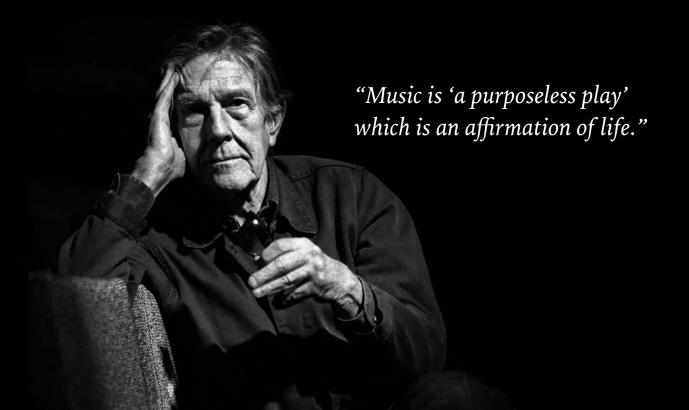
### John Cage's Philosophy

The "Rainy Windows" project was initially inspired by John Cage's philosophy. John Cage was a leading figure in avant-garde music, electroacoustic music, and the nonstandard use of musical instruments. He was mainly influenced by various East and South Asian cultures. In 1957, through his studies of Indian philosophy and Zen Buddhism, Cage came to the idea of aleatoric or chance-controlled music. The idea of aleatoric or chance-controlled music very much matches to the eastern history of culture.

"Music is 'a purposeless play' which is 'an affirmation of life – not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up to the very life we're living.'"

— John Cage "Silence: Lectures and Writings" in 1957.

Following the idea of the American composer, I tried to create a virtual musical instrument based on an aleatoric model that is made the teamwork of humans and nature.





The courtyard interior, Suzhou

## Nature of Chinese Architecture and Leisure Life

Traditional Chinese architects always typically invited nature into their work. For example, architects frequently built a pavilion close to a pond or a river in order to receive the delicate sound from water waves or the fresh wind over the water. They also made a water channel that ran through their pavilion. On a rainy day, residents and visitors would sit around the channels, waiting for a paper boat that was put on the upper stream and flowed down. Once the boat stopped in front of a person, that person was required to recite poems or drink a cup of alcohol.

Another traditional Chinese architectural design was Chinese rainy windows which existed in every Chinese building. Four parts are composing these windows. The first part is a wave-shaped tile eave that overhangs a window and transforms rain-water into a water-curtain. The second part is a decorated pattern under the tile eave, which connects the outside sound and views to inside residents. Also, under the eaves and outside the windows, several vessels, rocks or plants were placed there. They could be beaten by rhythmic water-drops to create a related melody. In this process, nature becomes a concert performer. The fourth part is on the other side of the window.

A deck chair or a couch was placed there to allow residents to watch this nature performance as close as possible. Through the collaboration of these four parts, people would experience water music on a rainy day.

# Interface and Vertical Scrolling Rhythm Game

I used vertical scrolling rhythm games (VSRG) as a model to build the basic interface for my project. A vertically scrolling rhythm game is a video game in which the player clicks a computer keyboard in order to mimic playing percussion instruments. My research of VSRG games included well-known programs such as such as Beatmania IIDX, O2Jam and Dance Dance Revolution.



The interface of vertical scrolling rhythm game.

### Design Process

#### Inspiration in Studio II

In the spring of 2017, I took Design Studio II with Prof. Jan Kubasiewicz, we were asked to create a musical instrument inspired by John Cage's 4.33 performance. From my perspective, Cage focused on nature and aleatoric or chance-controlled aesthetics. The most impressive section from his work was music pieces composed of water and seashells. Cage filled seashells with water and collected the sound effects the action made. The sound effect was so unique that no existing instrument could imitate it. I was very inspired by this concept as I started to brainstorm my project.

Natural elements and Asian philosophy — such as aleatoric or chance-controlled aesthetics — were two primary inspirations for John Cage's artistic creation. I wished to express this concept through my media. As a designer from Southern China, I remembered growing up with consistent rain and enjoying the scenic view of the landscaped garden in my hometown. This memory became my beginning of this exploration.

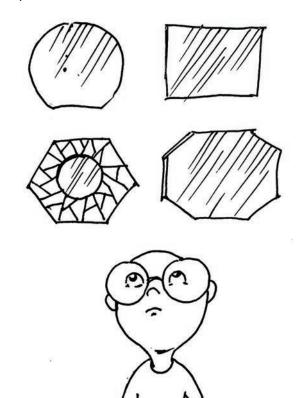
### My First Prototype for Rainy Windows

My first prototype was an animated video projection of decorated windows that frame various landscape and scenic views. In this prototype, I showed different rains in different seasons and recreated the experience that Chinese enjoyed by watching the rain through windows. While users watched the foggy landscapes of Chinese ink painting, they can hear the percussive music from rains. I hoped Chinese cultural understanding was in process when people experienced the rain music, ink-paintings, and Chinese decorated windows.

I selected four windows with different shapes and four kinds of rain to describe

the four seasons in China. For spring, I chose a round shaped window to reveal a pavilion and trees in moderate rain. For summer, I presented heavier rain through a rectangular window. Fall was a foggy mountain view framed by a hexagon. For winter, heavy rain mixed with snow was shown on an octagon window.

This simple installation was exhibited in DMI studio. I projected the four clips of animations one by one on a wall. My friends Lingxi and Hessam enjoyed the experience with ink paintings and rainy effects but suggested that I add more interactions that allowed users to participate.





Spring



Fall



Summer



Winter

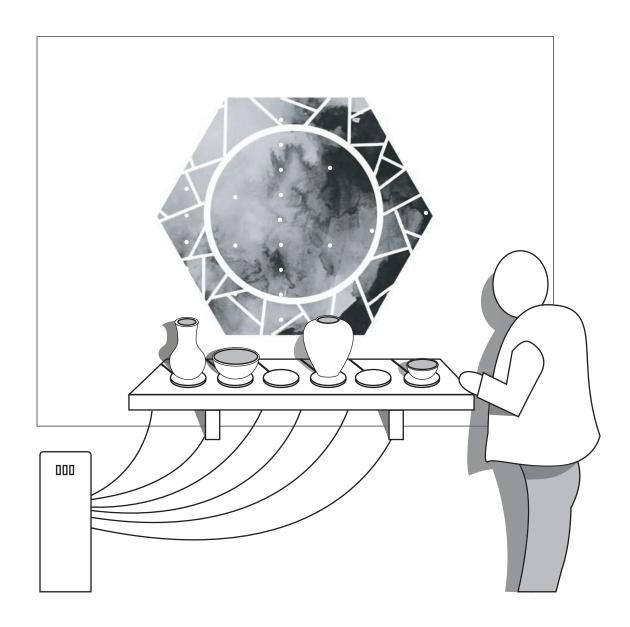


Diagram of My Initial Idea

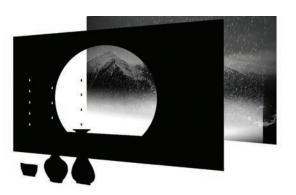
### The Second Prototype for Rainy Windows with Interactive Action

Based on feedback from my first prototype, I started to create an interactive experience. My focus became how to invite my audience to become part of this compositional game with nature.

I thought of playing water drops when I was a kid. In a rainy day, there was "a water-curtain" under the eaves of my house. I placed different kinds of containers to catch water drops. The percussive music that was produced through water drops hitting separate containers impressed me. In my second prototype, I wished to reconstruct this experience in my childhood and encouraged my audiences to move and replace these vessels for playing music.

I placed a pottery pot, a metallic cup, a wooden plate, a ceramic bowl, a glass and a milk cup in front of the projection screen to act as "a receiver" of raindrops. Different textured objects created different pitches when virtual raindrops hit them. For instance, the pottery pot created lower and echoing sound effects while the metallic cup aroused a clear and melodious sound.

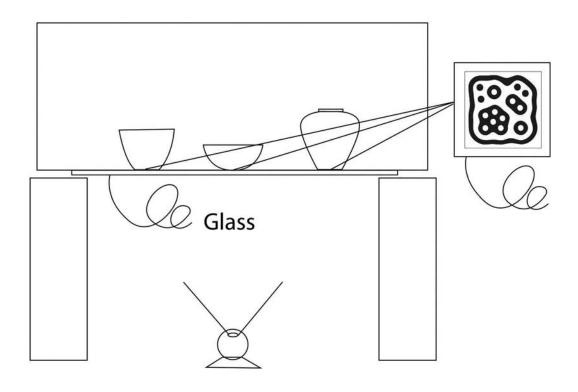
At the same time, six animated raindrops were on the projection screen. They were arranged at different speeds and frequencies. When my audience moved the vessels and placed them below these six raindrops, the different drop speeds and various pitches would work together as a music piece that was virtually composed of humans and nature.



Four layers from the "Rainy Windows" project.

### reacTIVision and Processing

Also, I selected reacTIVision and Processing programs to support this interaction. reacTIVision is an open source, cross-platform computer vision framework for the fast and robust tracking of fiducial markers attached to physical objects. I pasted the fiducial markers on the vessels. Through a



The Diagram of Final Prototype



Fiducial markers of reacTIVision. A test

A test for prototype 2.

preset camera, reacTIVision tracked the position of each vessel and activated the corresponding sound effects. For instance, once the pottery was placed in the appropriate location, the camera would scan the fiducial markers on the surface of the pottery. The program would then activate and play the sound of the raindrops.

In the other side, the six groups of raindrops with different frequencies ran from left to right on the screen. The rates of the animated raindrops and the rhythms of sound were controlled by a Processing program. In support of reacTIVision and Processing, music was played through six vessels with specific sound effects moving under the six groups of raindrops.

I built this prototype and invited Hessam to test it. The performance was surprisingly smooth and was beyond my expectations. In this time, users could experience my project as participants instead of as bystanders.

### Final Prototype

The final installation was made for the 2018 Fresh Media exhibition. I combined the immersive experience from my first prototype and the interaction from my second prototype. On the projection screen, different shapes of Chinese windows framed rainy landscapes in four seasons.

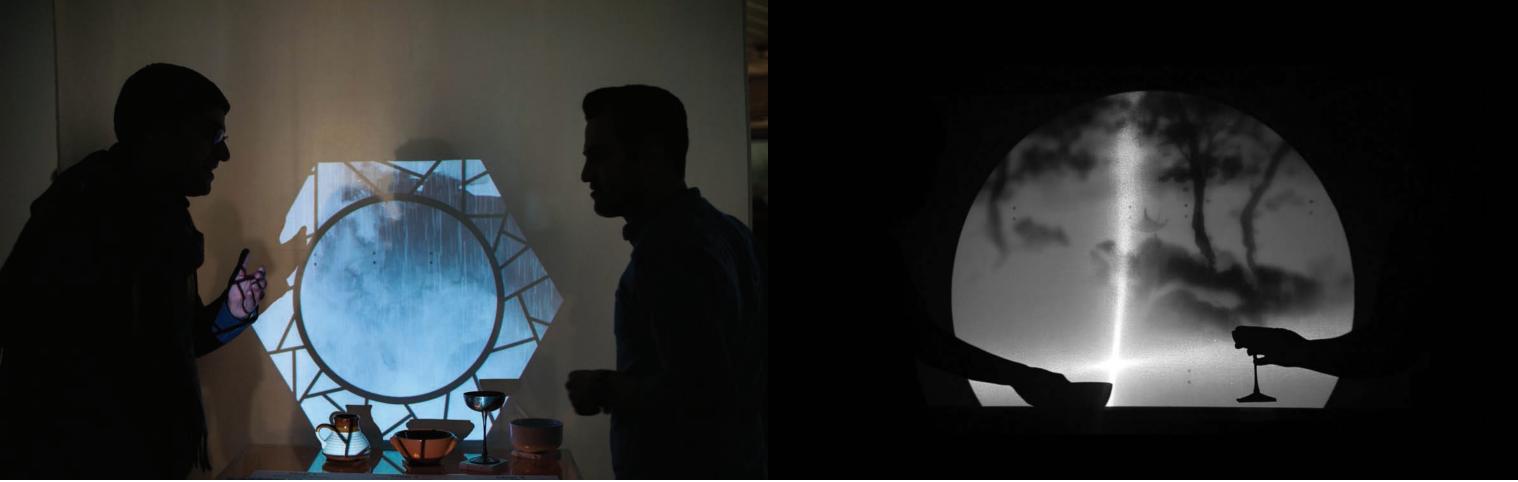
Users can hear light or heavy rains by speakers. In front of the screen, there was one transparent glass on the top of a box. Based on the last prototype, I used six vessels on the glass, several fiducial markers on the bottom of vessels and one HD camera under the glass to build the interaction.



Installation for "Rainy Windows" project.

However, I'm not very satisfied with the visual effects. The different color and textures of these vessels didn't match the monochromatic project screen, which looked chaotic. I wanted to use the shadow of vessels to match the background. My improved decision I made was to replace the opaque projection screen with more transparent fabric. In this way, this project was presented as a shadow puppet show and





Interaction side for the "Rainy Windows" project.

my personal experience. My users can stand behind the screen and interact with the vessels and rainy animation. At the same time, other audience members stood on the other side of the screen and enjoyed this co-composed virtual music piece and black and white visual effects.

#### Fresh Media Exhibition

I presented this project in the "Fresh Media" exhibition 2018 and invited the public to participate too. The project took the space of three square meters, including one 32" x 24" x 35" in one pedestal, one projector, two speakers and one 68"x 72" projected screen.

There were about 20 users of my project in the opening reception on March 16th. I was delighted to see the successful interaction between the installation and the users. The system seemed to work out very smoothly and consistently. My users were excited by the audio and visual effects they created. For instance, when they put two vessels in the similar areas, the overlapping sound effect would be activated. One user put all the vessels on the scanning surface. Various sounds in different speeds and pitches were activated, and through them, a beautiful piano style piece of "music" was composed.

In the meanwhile, some issues occurred too. For instance, the connection of HD camera was unsteady so the whole project might shut down or pause due to it. Also, visual guide for the interaction was not clear and straightforward enough so that some of the audiences were confused about what to do.

Periodically, the users would click icons by mistake so the whole process program would be shut down. For further development, I will put more effort into improving the system

connection and visual navigation.

Effects for the "Rainy Windows" project.



### Conclusion

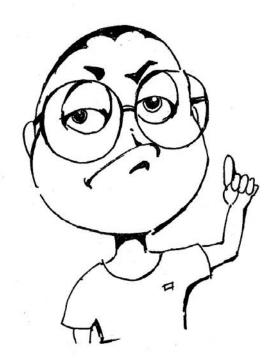
Users testing "Rainy Windows" at the 2018 "Fresh Media" exhibition.

I think "Rainy Windows" is a successful project about interaction, nature, and philosophy. I am happy that in my project, the Western audience can experience tranquility and the idea of aleatoric music. Even though my work is inspired by a very eastern concept and philosophy, Westerners can still understand and embrace it. This project made me feel like a cultural ambassador for the first time, and I am very interested in exploring more in this direction.

Also, I obtained some excellent feedback from my users in Fresh Media exhibit. One person's response was particularly satisfying. He said: "Although there were a lot of Chinese elements such as decorated windows, ink paintings and porcelains, the experience was universal. From your project, I can feel the peaceful mind and nature. I like his comment very much because his feeling is not just my objective of this case study, but also explains the purpose of my thesis research. There are a lot of differences and conflicts between cultures, but people could still understand each other in the ordinary routine I create.

I hope to upgrade and improve this project in the future. Ideally, I am looking forward to using a bigger projection screen and additional interactions for a more immersive experience for my users. The exhibit could be built in an auditorium. Ideally, the rainy view of ink painting and 50 columns of animated water drops would be projected on a screen around 25 feet wide. Over 20 users are invited to move 50 different vessels in front of the screen at the same time. Over 100 people could listen to raindrops from 20 users and enjoy the immersive experience through the huge projection screen and background music.

The updated idea for "Rainy Windows" project.



# CONCLUSION

I am passionate about culture. I wish to become an ambassador who builds bridges between various cultures and communities. In this thesis, I used daily life as a medium to re-construct culture virtually and let audiences explore through immersive experiences. I chose daily life as a representation of culture for two important reasons. First, daily life is a kaleidoscope of cultural elements such as food, climate, color, costume, etc. Second, daily life itself is intimate to everyone since we are all experiencing it already in our own cultures.

In my thesis projects, I tried to observe, record, express and reconstruct daily life as much as I could. I learned to become a storyteller verbally, and visually. Without being a perfect English speaker, I understood it was significant to build up a logical order of events and consequences to make sure the audience can follow the storyline. Visually, various images would need to be present to reflect the verbal expression of my work. In my "Backpack Journey" project, I invited the audience to join my journey in Western China in 2011. It was a year-

long journey to over 30 cities, ten provinces and many villages in the minority occupied areas of China. There are thousands of photographs, videos, and sketches in the original database. In front of this vast amount of information, I decided to use my travel route to set up a geographic path as a primary guide. Through a projected map, audiences followed my path in different minority communities in China. In each stop, vivid information would be uncovered through tangible objects. Sounds, music, video, photographs would be activated as visual images to carry my audience through this yearlong journey.

Later in my work, after the storyline had been established based on a concept, technology became the catalyst to boost the storytelling. All the technical parts would need to support the theme and concept rather than overpowering them. For instance, the visual, audio and tangible interaction would serve and follow the storytelling. In my "Rainy Window" project, I experienced many technical challenges and spent months' for problem-solving. But after the final installation was set up,

I felt the exposure of all the technical parts, computer, sensors, and fiducial markers did not represent the austere and tranquil experience I wanted this installation to carry. After some tests, I switched the position of the screen and projectors. Thus, when one audience became the composer and performer, other viewers would observe his/her actions and listen to the rainy sound effects. The simplicity and mystery here matched my original wish to this project — the calm and tranquil environment of the ancient Chinese intellectual.

Initially, without knowledge of programming, I was extremely frustrated in early projects. Step-by-step, through coding courses, labs, and technical consultation, I was able to assemble my projects using technologies such as Processing and reacTIVision. I took two semesters in Elements of Media course with Andrew Ringler and Fred Wolflink, which has been extremely helpful.

Prototypes offered me precious opportunity to observe users' test. After various projects, I re-define design as a collaborative process between creator and users. However, it has been challenging for me to select which feedback to take action on in my work.

During 2017's "Fresh Media" exhibition, one user loved my "Backpack Journey" and offered me brilliant feedback. He was expecting to feel the road texture, climate, and view at the same time. He suggested hiding different souvenirs in various spots of the exhibit space so the audience can explore and discover new items in this installation. As much as I liked these suggestions, they required a much more extensive budget, more time, and a full technical team. The sheer scope of a fully realized experience is well beyond my resources as a graduate student.

I believe technology functions best when it is hidden behind the main stage of human life. As a designer, I think it is our job to keep the balance between humanity and technology. My hope as a designer is to continue building projects that find that balance.

As a traveler, I am passionate about more extensive journeys around the world. I am anxious to continue exploring the daily lives of diverse communities and using my experiences as inspiration for projects which build cultural bridges.

### **BIBLIOGRAPHY**

Baraldi, Claudio, and Andrea Borsari. *Hybrids, Differences, Visions: On the Study of Culture*. The Davies Group, Publishers, 2011.

Campos, Christian. New Supermarket Design. Collins Design, 2007.

Chan, Kwok B., et al. *East-West Identities Globalization, Localization, and Hybridization*. Brill, 2007.

Coser, Lewis A. *The Idea of Social Structure: Papers in Honor of Robert K. Merton.* Harcourt Brace Jovanovich, 1975.

Huang, Michelle Ying Ling. *Beyond Boundaries: East and West Cross-Cultural Encounters*. Cambridge Scholars, 2011.

Lefebvre, Henri. Everyday Life in the Modern World. Transaction Books, 1984.

Longstreth, Richard. The Drive-in, the Supermarket, and the Transformation of Commercial Space in Los Angeles, 1914-1941. MIT Press, 2000.

Marcus, Paul. Creating Heaven on Earth: the Psychology of Experiencing Immortality in Everyday Life. Karnac Books, 2015.

Mogelonsky, Marcia. *Everybody Eats: Supermarket Consumers in the 1990s*. American Demographics Books, 1995.

Pegler, Martin M. Market, Supermarket, Hypermarket: Design. Retail Reporting Corporation, 1992.

Impey, Oliver. Chinoiserie: the Impact of Oriental Styles on Western Art and Decoration. Oxford University Press, 1977.

Wei, Zhuomin. The Spirit of Chinese Culture. University Microfilms, 1976.