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Christina L. Skavicus Worcester Polytechnic Institute

Eduardo A Paoli Lauria Worcester Polytechnic Institute

Hannah Yeung Worcester Polytechnic Institute

Jameson Moore
Worcester Polytechnic Institute

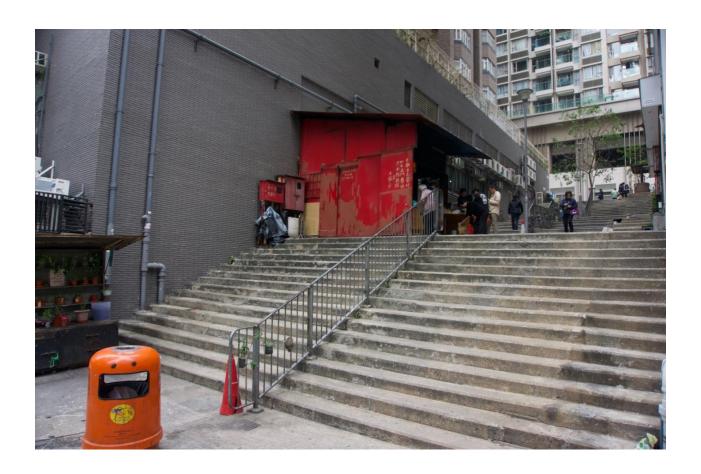
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CREATING OPPORTUNITIES FOR CROSS-GENERATIONAL INTERACTION THROUGH PLACEMAKING IN HONG KONG



By Jameson Moore Eduardo Paoli Lauria Christina Skavicus Hannah Yeung

CREATING OPPORTUNITIES FOR CROSS-GENERATIONAL INTERACTION THROUGH PLACEMAKING IN HONG KONG

An Interactive Qualifying Project
Submitted to the Faculty of
WORCESTER POLYTECHNIC INSTITUTE
In partial fulfillment of the requirements for the
Degree of Bachelor of Science

By: Jameson Moore Eduardo Paoli Lauria Christina Skavicus Hannah Yeung

Date: 3/3/18

Report Submitted to:

Thomas Balistrieri (Co-Advisor) and Stephan Sturm (Co-Advisor) Worcester Polytechnic Institute

> Hendrik Tieben Chinese University of Hong Kong





This report represents work of WPI undergraduate students submitted to the faculty as evidence of a degree requirement. WPI routinely publishes these reports on its website without editorial or peer review. For more information about the projects program at WPI, see http://www.wpi.edu/Academics/Projects

Abstract

The purpose of this project is to develop recommendations for the creation of a public space which encourages cross-generational interaction in Hong Kong. We collaborated with the Chinese University of Hong Kong in their efforts to redevelop Sheung Fung Lane in Sai Ying Pun. To understand the current state of the space as well as document its daily use, we observed the lane and compared it to similar public spaces. We also developed and implemented an interactive design activity within Sheung Fung Lane that engaged the community in the redesign of the space. We recommend a plan to improve the space for its community by implementing intergenerational activities and introducing novel features based on community desires.

Executive Summary

The rapid growth and urbanization of cities across the world has spawned shortages of public and private space, particularly in Hong Kong. The city of Hong Kong has one of the highest population densities in the world, yet shopping malls and banks continue to be built instead of public areas.

The Sai Ying Pun area of Hong Kong has recently suffered from rapid urbanization. The addition of a metro station in 2014 has caused home prices to skyrocket as people clamor to live there. The once quiet neighborhood has become a new center for Hong Kong nightlife, causing a rift between residents as they want to retain the traditional sense of their community.

Sheung Fung Lane, a side alley across from the metro station, is in particular a public space in need of improvement. The addition of the nearby metro station has made the lane into a cutthrough for commuters. Little has been done to improve the quality of space in the area, which has decreased the sense of community and prevented interaction between age groups.

Methods

The goal of this project is to develop recommendations for the creation of a public space which encourages cross-generational interaction in Sheung Fung Lane. To accomplish this goal, we identified five main objectives:

- 1. Identify the usage of public space in Sai Ying Pun
- 2. Develop a design activity for youth and elderly to express their desires for the redesign of Sheung Fung Lane
- 3. Develop an approach to market the event in Sheung Fung Lane
- 4. Execute the design activity during an event in Sheung Fung Lane
- 5. Create recommendations for the improvement of Sheung Fung Lane

In order to fulfill these objectives, we:

- Observed the lane for a 24-hour period to assess its use at all times of day. We also evaluated public spaces to determine how Sheung Fung Lane compares to similar public areas across Hong Kong.
- 2. Utilized archival research and brainstorming to create an interactive design activity, designed to engage the community in the redesign of the space.
- 3. Devised a marketing strategy to increase community interest in our event.
- 4. Conducted a design activity for residents to select their preferred features and activities from an interactive photo collage.
- 5. Developed recommendations to improve the public space in order to increase interaction within the community.

Findings

After analyzing our observation data, we identified demographics of people passing through the lane. In the 24 hours that we observed, only 8% of people used the lane for an activity. Most of those who used the space for an activity either sat on the benches at the top of the lane or visited the temple. Overall, elderly and children were underrepresented in the lane when compared to the district demographics.

According to our evaluation, Sheung Fung Lane is not a well-designed public space. When compared to other public spaces, the lane does not have sufficient elements of comfort, accessibility, sociability, or appearance.

The results from our event indicate that all age groups in the community have similar interests in public space. They are overwhelmingly interested in green space, color, art and group activities. This result was consistent across all age groups.

Recommendations

Based on these findings, we recommend that elements of art and color are included in the redesign of the lane and that distinct areas for group activities are established. We also recommend the addition of intergenerational community activities such as concerts, community gardens, yoga classes, and board game tournaments. We hope that these improvements to Sheung Fung Lane can foster community engagement and interaction.

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1. Introduction

People thrive when their needs for housing, safety, and belonging are fulfilled. Sufficient space, whether public or private, allows people to fulfill these needs; however, space is at a premium as cities increase in population. Therefore, cities must prudently utilize public space in order to improve the well-being of urban residents.

In particular, public and private space is scarce in Hong Kong due to the extremely high population density and small land mass. This issue is magnified as a result of the government shifting its focus away from the development of public space to the development of commercial buildings. The increased construction of shopping malls on what was once public land intensifies the problem. As a result, Hong Kong has one of the lowest amounts of public space in the world.

The composition of the Hong Kong population is undergoing a rapid transformation. The average age of Hong Kong residents is increasing at one of the fastest rates in the world, and the city is struggling to adapt to the needs of its aging population. To accommodate this population shift, the city needs to provide adequate public space and opportunities for crossgenerational interaction. However, the limited public space available in the city separates youth and elderly and leaves no defined areas for both groups to interact. The needs of youth and elderly must be considered in the design of public spaces to relieve the negative impacts of separated generations and cramped housing.

The purpose of our project is to develop recommendations for the creation of a public space which encourages cross-generational interaction. These recommendations are designed to improve the community around Sheung Fung Lane and engage them in the space. Our objectives to achieve this goal are listed below.

- Identify the usage of public space in Sai Ying Pun
- Develop a design activity for youth and elderly to express their desires for the redesign of Sheung Fung Lane
- Develop an approach to market the event in Sheung Fung Lane
- Execute the design activity during an event in Sheung Fung Lane
- Create recommendations for the improvement of Sheung Fung Lane

2. Background

Our intent is to gather, assimilate, and organize information so that we can better formulate our methods and analysis. In this background, we offer an in-depth look at psychology, urban planning, and public participation. The theory, knowledge, and information gleaned from studying these topics support the development of our methodologies.

2.1 Sai Ying Pun

We present information about Sai Ying Pun in an effort to better conceptualize this district of Hong Kong. We focus on the history and demographics of the district, and also describe the lane where the project is located.

2.1.2 History of Sai Ying Pun

Sai Ying Pun is one of the oldest areas of Hong Kong. It is located in the Western District of Hong Kong Island and borders Victoria Harbour (Density Atlas, 2011). The area was established in 1855 as the western encampment of the British military, during their occupation of Hong Kong. Ho (2017) states that the British military chose this location because of its access to the harbor. The area transformed into the 'red light district' of Hong Kong in 1880 as many bars, brothels, and opera businesses opened in the neighborhood. From 1896 to 1905, the area had breakouts of the bubonic plague. This event caused the area to transition into a residential area. The opening of a MTR station in 2014 has brought rapid new development to the surrounding space (Fung, 2017; Ngo, 2012).

2.1.3 Sheung Fung Lane

Sheung Fung Lane is a historic street in the Sai Ying Pun area of Hong Kong. It is located between Second and Third St. Currently, two tutoring centers, a yoga studio, and the newly renovated Magic Lanes community store are located in Sheung Fung Lane. The lane is shown in Figure 1. A senior living facility is on the left side of the photo, and three apartment complexes surround the lane from the Third St.

The red building on the left of the photo is Fuk Tak Temple. It was constructed after the bubonic plague killed nearly 90% of the community in 1894 (Kuah and Liu, 2017). More than 15 local businesses helped fund the construction. The presence of the temple was an attempt to alleviate fears of haunting in the area (Kuah and Liu, 2017).

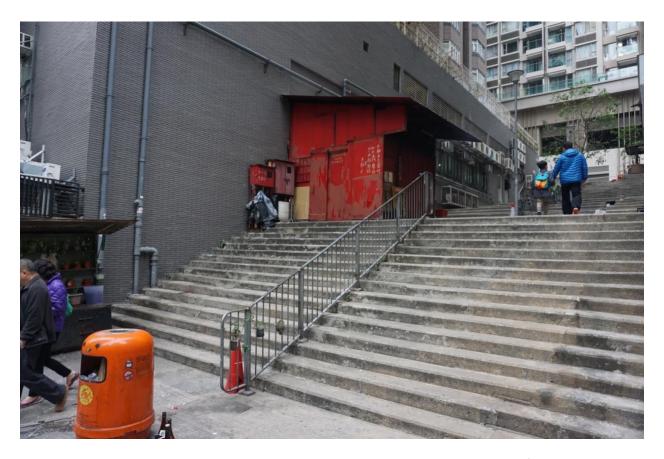


Figure 1: A photo of Sheung Fung Lane in Sai Ying Pun, Hong Kong. January 18th, 2018. Taken by Jameson Moore.

2.2 Psychology

We discuss several psychological theories that we reference in our methodology. We concentrate on *A Theory of Human Motivation* by Maslow, and the *Transtheoretical Model of Change* by Prochaska. These theories form the foundation of our current knowledge of the psychological tendencies of the community we are working with.

2.2.1 Maslow's Hierarchy of Needs

Abraham Maslow published *A Theory of Human Motivation* in 1943, describing the famous principle known as the Hierarchy of Needs. The hierarchy is split into five categories and is often depicted as a pyramid (Figure 2). At the bottom of the pyramid are physiological needs such as food, sleep and water. If a person has not met their physiological needs, they will only be motivated to satisfy those needs. A starving person dreams only of food, not of self-esteem. Safety needs relate to both mental and physical safety. Psychological needs include the need for intimate relationships, friendships, and self-esteem. Love needs stem from the natural desire for belonging and for affection. Maslow explains that esteem needs relate to the desire for individuals to have a high level of self-respect, self-esteem, and esteem for others around them. Self-esteem is satisfied when individuals feel self-confident, strong, and accomplished (Maslow, 1943).

Maslow states that when physiological, safety, belonging, and esteem needs are met, human beings still strive for more. This motivation is characterized as the desire for self-actualization. Maslow states that, "Even if all these needs are satisfied, we may still often (if not always) expect that a new discontent and restlessness will soon develop, unless the individual is doing what he is fitted for. A musician must make music, an artist must paint, a poet must write, if he [or she] is to be ultimately happy." (pg. 383) He continues to argue that self-actualization takes many forms and is different for nearly every individual. For some, this may mean being an ideal mother. To others this may be an intangible desire. Whatever the desire, Maslow theorizes that when satisfied in other basic needs, human beings inherently strive for more in their lives (Maslow, 1943).

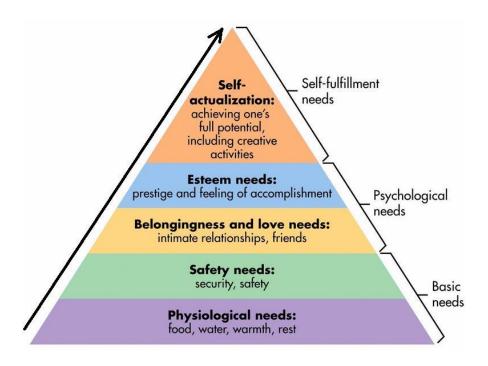


Figure 2: Visual representation of Maslow's Hierarchy of Needs (McLeod, S. A, 2017).

2.2.2 Situational Leadership

Hersey and Blanchard developed the Situational Leadership Model in 1969. This model describes the readiness of an individual as a function of their ability, willingness, and confidence to accomplish a certain task. The authors define ability as the knowledge, experience, and skill that an individual brings to a particular activity. Willingness is the extent to which an individual has the commitment and motivation to accomplish a task. Finally, confidence, more precisely self-confidence, is the feeling of trust in their own abilities. Based on the readiness of an individual, different styles of leadership are detailed.

The Hersey-Blanchard Model defines four basic styles of leadership that are determined by the readiness of an individual. An individual or group that has low readiness is unable, unwilling, and insecure. In this style, the leader emphasizes task-oriented behavior that is direct and autocratic. Hersey and Blanchard identify the selling leadership approach for groups or individuals that are willing to perform a task, but either lack the ability or confidence to do so on their own. In this approach, the leader takes a relationship-oriented approach, where they

provide information with guidance. Participatory leaders provide a relationship approach that concentrates on the self-confidence and willingness of the group or individual. The authors advocate this approach for those with a moderate-to-high readiness, who are able but either unwilling or insecure. Individuals who have high readiness are able, willing, and confident to complete a specific task. Therefore, Hersey and Blanchard endorse the delegating style of leadership, where leaders grant their followers a considerable degree of autonomy, and simply hand off work. In this approach, the leader still monitors the progress of the group, but is much less involved in decisions than in other styles. The Situational Leadership Model defines the readiness of individuals and operates under the consensus that those who are more ready need less leadership (Hersey & Blanchard, 1969).

2.2.3 Transtheoretical Model of Change

The Transtheoretical Model of Change [TTM], as defined by Prochaska in 1994, is currently the most used model for health psychology in the world (Virginia Tech, 2017). The model explains intentional behavior and describes five distinct stages that individuals move through to adopt a different behavior. Pre-contemplation is the first stage of change, where the individual lacks awareness that their life can be improved by a behavioral change. Research identifies individuals in this stage as being resistant to change. They tend to avoid information and thoughts about the behavior. In the contemplation phase, individuals recognize a problem or see the possibility of change. Prochaska claims that in this stage people are open to the benefits of change, but also heavily weigh the costs. Those in the contemplative stage are often described as procrastinators or indecisive. *Preparation* is the final pre-action step. People in this stage reaffirm their need and intent to change their behavior, often involving deep introspection. The action stage is when individuals implement the necessary behavior change. Prochaska characterizes this stage as when an individual puts discernible effort into the modification of a behavior. After action is taken, individuals need to maintain their change to avoid relapsing. Maintenance is defined as "consolidation of the behaviors initiated during the action stage," (Virginia Tech, 2017, pg.4). The maintenance stage is by far the longest, taking up to five years before individuals move into the final stage (Virginia Tech, 2017). Termination is achieved when former behaviors are no longer considered desirable, which indicates a completed change in behavior (Prochaska, 1995).

2.3 Public Space

We discuss the psychology and sociology of public space. We further examine public space in Hong Kong and the benefits of public space. This research serves as the foundation for our project on developing public space in Hong Kong.

2.3.1 Public Spaces in the World

Public spaces are fundamental components in the formation of a community. MacKenzie defines public space as "publicly owned land that, in theory, is open and accessible to all members of a given community—regardless of gender, race, ethnicity, age, or socio-economic level." Cities develop and maintain public spaces to ensure the health of a community and city. According to MacKenzie, the United Nations Human Settlements Program considers "public spaces as key elements of individual and social well-being, the places of a community's collective life, expressions of the diversity of their common natural and cultural richness and a foundation of their identity." (MacKenzie, 2015).

Developing accessible, inclusive, and productive cities may be the greatest challenge confronting humanity today. Project for Public Spaces states that many areas lack a sense of community and neighbors have tense social relationships. The organization argues that there may not be an easy solution to solve the complicated social and economic difficulties of a community. There is, however, promising potential in the development of public spaces. By adopting a people-centric approach to creating and reinvigorating public places, it is possible to transform the spirit of local communities (Project for Public Spaces, 2014).

Cities do not exist without people; thus, it is vital to shape the city for their needs. Certain actions are necessary to create lively and vibrant cities for all people regardless of age, ethnicity, or monetary foundation. Public spaces promote inclusion and economic growth. For

example, the Anacostia River Waterfront in Washington D.C. and the Olympic Park in London enhanced the economies of the surrounding areas. Other examples of creating public space include opening avenues to pedestrians and constructing play zones and parks within short walking distances (Basat, 2016).

In densely populated cities, the significance of public spaces for urban development is diminishing. Basat (2016) asserts that public spaces are critical components of cities but are often poorly integrated into urban developments. However, Basat argues that allocating resources for public spaces can form prosperous cities. Karachi, Pakistan transformed its violent districts into secure and livable communities by directly involving residents in the redevelopment process. The designing of more inclusive places creates a feeling of harmony and safety within cities (Basat, 2016).

2.3.2 Public Spaces in Hong Kong

Small living spaces make public space in Hong Kong vital to the well-being of residents. According to District Profile (2017), the average Hong Kong resident lives in a space approximately 160 square feet. There are approximately 29 square feet of open space per person living in Hong Kong (Civic Exchange, 2017). Park and Tam (2015) state that public space is an essential component of a city. According to Luk (2009), public space is used as a place for cultural and social interaction between people. A University of Exeter (2017) study found that people living with access to green space reported lower mental distress and better well-being.

In total, there are approximately eight square miles of land designated as public space in Hong Kong (Census and Statistics Department, 2017). This includes parks, sport centers, beaches, jogging trails, and public amenities owned and operated by the government. For example, the Hong Kong Global Geopark of China features unique ecosystems that contain volcanic formations, rock columns, and sea caves (GovHK, 2016).

Public space in Hong Kong is disappearing in the face of urbanization. Before Britain took over Hong Kong, public space, such as ancestral shrines, traditional markets, and commercial streets, were used as a place for social interactions. However, Luk (2009) states, the Hong Kong government has diminished their focus on public spaces. Private developers backed by the government intend to make Hong Kong into a tourist destination (Claire, 2013). Claire asserts that this goal enables the government to allow developers to build copious amounts of shopping malls. Today, most of the space in Hong Kong is being used for commercial purposes, and many Hong Kongers are certain that both private property developers and the government have encroached on their public space (Claire, 2013).

Visiting malls is a part of daily life in Hong Kong. Shopping malls in the city are connected to MTR stations, making them convenient to all. However, these quasi-public spaces are ultimately controlled by the private sector. Claire states that the public is not well aware of this issue due to the influence of media. The Hong Kong media advertises air-conditioned shopping malls instead of public spaces, making them look convenient and attractive. Today, the developmental switch from public spaces to shopping malls has changed the Hong Kong way of life (Claire, 2013).

2.4 Placemaking

Placemaking is an urban planning design process used by cities and neighborhoods to transform spaces. Placemaking refers to a collaborative process in which a community can format the public realm in order to maximize shared space. Project for Public Spaces (2009) believes that "with community-based participation at its center, an effective placemaking process capitalizes on a local community's assets, inspiration, and potential, and it results in the creation of quality public spaces that contribute to people's health, happiness, and well-being." Placemaking was first introduced in the 1960's when Jane Jacobs and William H. Whyte promoted the idea to design cities for the people. Project for Public Spaces has 11 principles for creating community spaces through placemaking. These points help communities integrate diverse opinions into a cohesive vision, translate that vision into a plan, and ensure the implementation of the plan.

Figure 3 shows the place diagram developed by Project for Public Spaces (2009). The diagram helps communities evaluate places in their neighborhood. The core values of the space are shown in the center of the diagram and the measurable data of those categories are shown in the outer rings. (Project for Public Spaces, 2009)

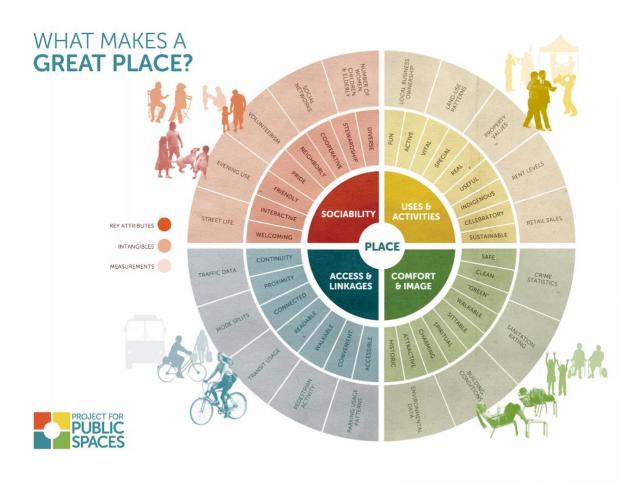


Figure 3: The place diagram. The inner ring represents the core values of a place and the outer rings show the measurable data of those categories (Project for Public Spaces, 2009).

2.5 Youth and Elderly in Urban Design

We present an overview of youth and elderly around the world, and their involvement in urban design. This provides us with the fundamental principles to consider when designing for these groups.

2.5.1 Elderly in Urban Design

Pawlitschko (2017) states that the increasing number of senior citizens has created a need to design space for this population. According to Pawlitschko, senior citizens remain active longer and want to participate in society in an active, autonomous way within a community. He explains that senior citizen design needs to be focused on creating a tight social network within the housing community. Recently, senior citizen design has moved from single rooms for residents with shared bathrooms and kitchens to fully separated units within larger dwellings. This increases the privacy for residents and allows for more autonomous living. Seniors need easy access to medical care and handicap accessible environments. Pawlitschko (2017) states that they also need to be able to stay connected to their communities. A successful example of this method is the Padre Rubinos Foundation, a development that combines a church, elderly home, homeless shelter, and daycare (Wessely, 2017). The development is structured around a central square, which along with the church, is open to the public. This development strengthens the community by encouraging cross-generational interaction, which helps elderly residents stay connected to the outside world (Wessely, 2017).

2.5.2 Youth in Urban Design

The inclusion of youth in the planning of urban design is essential for a successful project. According to Millard (2015), "by being actively engaged in youth-friendly spaces, young people can feel like they have investment in their community and they can develop a strong sense of ownership in these places." Millard states that young people are as much a part of the community as any other age group, and their involvement should reflect that. The Fremantle Esplanade Youth Plaza in Australia is a successful example of a project that brought youth participation in the construction of a skate park. Youth were consulted for their input from the beginning, and their ideas were incorporated into the final product. The city has also reached out to youth through social media; their Facebook page frequently posts information about upcoming events and competitions (Millard, 2015).

Approaching and involving young people in urban design is important. Millard advises that youth can fully participate only when they understand the project and are passionate and invested. Urban developers can connect with youth in the community by reaching out to local organizations, schools, and clubs (Millard, 2015).

2.6 Intergenerational Interaction

Intergenerational interaction is beneficial for both youth and elderly. According to Cybulski et al. (2013), "There is a need for a mutually beneficial integration of seniors and the young. Young people would have an opportunity to learn from seniors' life experience and the elderly would gain a chance of activation in many areas of life." This statement is especially applicable as the world population is aging. Seniors who reside in nursing homes are generally not as physically and socially active compared to their independent peers. Instead, they tend to be more withdrawn, which leads to depression and other psychological problems. Therefore, there is a need for younger generations to be more involved in the lives of the elderly. Cybulski et al. concludes that "in order to minimize the negative effects of aging, the elderly should participate in various forms of activity...strong emotional bonds with friends and family have a positive impact on the health and psychological well-being of older people." (Cybulski et al., 2013).

The results of a study conducted by Sivan determined that elderly residents in Hong Kong participate in seven major categories of activities: intellectual, service, social, hobbies, mass media, and recreational. Elderly and middle-aged adults tend to participate in similar activities. However, seniors participate more frequently. Sivan determined that of the 25% of seniors who participated in recreational activity, 87% participated over ten times a month, double the frequency of other adults. This study concludes that the majority of Hong Kong elderly are still active and participate in these activities more often than other adults (Sivan, 2002).

2.7 Public Participation

The definition and methods of public participation are discussed. We focus on the benefits and limitations of public participation, as well as successful public participatory activities.

2.7.1 Definition of Public Participation

In terms of urban planning, public participation is the inclusion of the community in the design of a public space. This approach has been popularized by urban planners and governments who have recognized the value of involving the public in project development (Conrad, Cassar, Christie, & Fazey, 2011). According to Lane (2005), there are three 'schools' of public participation: blueprint planning, synoptic or systems planning, and theoretical pluralism. The term 'school' is used to refer to an approach of urban planning that follows a single ideological base. All schools highlight the political quality of urban planning. Lane also assumes a varied and diverse public with atomistic views, and that active individuals have multiple and sometimes contradictory opinions. Mahdavinejad and Amini (2011) explain that while the use of public participation varies with every project, it can be split into the categories of planning, design, construction, and operation.

Conrad et al. interviewed both the general public and urban planning professionals about public participation. They found that the public described this process as a transparent two-way exchange between planners and the public. The majority of the public interviewed expected the information to be accessible, the opinions of stakeholders to be accessible, and that public input impacts the project (Conrad et al., 2011).

Public participation creates a positive relationship between the government and the community by introducing effective communication to solve conflicts. After an earthquake struck Dujiangyan, China, the Chinese Government allowed the community to create a large part of the renewal plan. The government provided a set of instructions for project management and public participation that gave citizens the freedom to reconstruct their homes

and their community. This approach was successful as the project was completed on time and with the support of the community (Zhang, 2015).

2.7.2 Benefits of Public Participation

Public participation is widely argued to be beneficial for all stakeholders. Bonnemann (2015) argues that increasing community participation in decision making benefits both residents and planners by creating greater understanding. Understanding of the project minimizes opposition from residents and allows developers to consider community desires that are not obvious (Sharma, 2012). Public participation opens dialogues with the community and prevents conflicts from arising (Sharma, 2012). The World Bank (1992) follows this sentiment, stating, "The Bank has not found community participation to be an impediment to project execution. On the contrary, projects in which affected people's views have been excluded, suffers from more frequent delays and poorer quality." Furthermore, according to Budd (1999), public participation solicits valuable knowledge from community experts that can be applied to future projects.

Possibly the most important benefit, Budd claims, that effective community consultation breeds a sense of ownership. Sharma (2012) continues, stating that communication with the public is crucial to the success of the project and results in. Accepting the public as a valued partner in the process inspires communication that is crucial to the success of the planning. A project that the community is invested in inspires more trust and openness to other developmental works (Sharma, 2012).

Possibly the most important advantage of community consultation, Budd claims, is that residents form a sense of ownership in the project. Sharma agrees that communication with the people the project is designed for is crucial for a successful project. As a result, the residents achieve outcomes that benefit their community, and are more open to other developmental works.

2.7.3 Limitations of Public Participation

Although public participation is a regular part of government development across the world, critics argue that the procedure has several limitations. Irvin and Stansbury (2007) reason that although well intentioned, many public participation events are not effective. They elaborate that the primary reason for the unsuccessful outcome of participatory events is that they are perceived as time consuming and boring to the majority of stakeholders. The primary reason is that the majority of stakeholders perceive participatory events as time-consuming and boring, thus these events are often unsuccessful. The Knight Foundation (2010) found that attending a public meeting reduced the sense of efficacy and attachment to the community for most people. Mark Funkhouser, the former mayor of Kansas City, agrees stating:

Every public official who has served for any length of time has horror stories about these forums. The usual suspects show up -- the self-appointed activists (who sometimes seem to be just a little nuts) and the lobbyists. Regular folks have made the calculation that only in extreme circumstance, when they are really scared or angry, is attending a public hearing worth their time. And who can blame them when it seems clear that the game is rigged, the decisions already have been made, and they'll probably have to sit through hours of blather before they get their three minutes at the microphone? (Funkhouser, 2014).

As referenced above by Funkhouser (2014), Irvin and Stansbury (2007) address the fact that many public participation forums are used as tools by lobbyists for organizations with a vested interest in a project. The concern, according to Irvin and Stansbury (2007), is that these lobbyists have the ability to disproportionately voice the opinions of an organization which may be contrary to the opinions of the affected community. Public participation intends to bring the community and government together. However, it also has the potential to backfire if community advice is not heeded, or if the public expects unrealistic outcomes from the project (Irvin and Stansbury, 2007). In this case, Irvin and Stansbury (2007) suggest that community members lose trust in their government and are less likely to participate in the future.

2.7.4 Types of Public Participation

There are many ways to gather public opinions. Traditional techniques of public participation include interviews, focus groups, and public meetings (United States Environmental Protection Agency [EPA], 2016). Certain techniques are better suited depending on the number of participants and the purpose of the technique. Interviews are typically conducted with individuals or small groups of people to obtain "individual perspectives on issues." Focus groups are held in small groups to discuss "attitudes and opinions in depth." Public meetings involve large groups, and their purpose is to "present information to and receive comments or feedback from the public" (EPA, 2016). However, new methods of public participation, termed playful public participation, are becoming popular (Poplin, 2012). Playful public participation is defined as "participation encouraged or enhanced by play and joy." Poplin proposes that "online storytelling, walking, moving, sketching, drawing and games," are considered elements of playful public participation.

2.7.5 Public Participation Games

Games are a novel way to present public participation. Many people conclude that public participation processes require a significant amount of their time, therefore they do not participate. However, "with its inherent elements of collaboration, competition, reward and fun, game play adds additional motivational factors that could entice people to participate in urban planning processes" (Poplin, 2012). Examples of such activities are sketching and drawing, which are "often used as a method of expressing new ideas and visions."

Computer games and online activities are tested approaches to engage the public in urban planning. Block by Block, a collaboration between the United Nations Human Settlements Programme and the creators of Minecraft, utilizes computer games as a form of public participation. These interventions involve the community by inviting youth to virtually create their vision of a public space in Minecraft. These layouts are then considered for the final design of the public space (Millard, 2015).

3. Methodology

The purpose of our project is to develop recommendations for the creation of a public space which encourages cross-generational interaction. Our recommendations are designed to increase community involvement around Sheung Fung Lane and to improve the space. We identify five objectives to complete this goal.

- Identify the usage of public space in Sai Ying Pun
- Develop a design activity for youth and elderly to express their desires for the redesign of Sheung Fung Lane
- Develop an approach to market the event in Sheung Fung Lane
- Execute the design activity during an event in Sheung Fung Lane
- Create recommendations for the improvement of Sheung Fung Lane

3.1 Identify the Usage of Public Space in Sai Ying Pun

We conduct archival research to gather information on the demographics of Sai Ying Pun. Archival research is an efficient method to obtain specific information on the population including: age, ethnicity, rent, income, and household size.

To obtain quantitative data regarding the current use of Sheung Fung Lane, we utilize observation. In order to minimize the modification of behavior based on our presence, we are observing discreetly. Observing Sheung Fung Lane provides data on who uses the lane and how they use the public space.

We evaluate public spaces across Hong Kong to document their characteristics. These results allow us to compare Sheung Fung Lane to other public spaces in the area and determine what needs to be improved in the lane.

3.2 Develop a Design Activity for Youth and Elderly to Express their Desires for the Redesign of Sheung Fung Lane

We are performing archival research of comparable studies and projects to find methods that engage youth and elderly in urban design. Using this information, we are creating a unique design activity that encourages public participation in the redesign of a public space. The goal of the design activity is to provide a fun way for community members to convey their interests in public space.

Our team is also conducting a series of brainstorming sessions in order to develop this design activity. These informal meetings serve as a venue to gather various ideas regarding creative methods for public participation.

3.3 Develop an Approach to Market the Event in Sheung Fung Lane

We are creating a set of advertisement posters for our event, in order to increase the readiness of the community to participate in our design activity. In the week leading up to the event, we are displaying these posters in Sheung Fung Lane.

3.4 Execute the Design Activity During an Event in Sheung Fung Lane

We are hosting a design activity, which is a form of public participation. The activity involves a set of atmospheric photo collages, where photos are specifically curated for each atmosphere. These photos are a combination of aesthetic features and activities that form an ambience or mood. By conducting this design activity, we obtain insight on community interests.

3.5 Create Recommendations for the Improvement of Sheung Fung Lane

We are analyzing data gathered from the design activity, observation, and evaluation of space in order to make conclusions and recommendations based on this analysis. These recommendations focus on creating an atmosphere for the public space and include physical features and activities that people of different generations both enjoy.

4. Analysis and Conclusions

In this chapter, we present the analysis and conclusions of the information we gathered from completing our objectives.

4.1 Observation

We observed Sheung Fung Lane for 24 hours on Sunday, January 28, 2018. We photographed the top and bottom of the lane every hour, in order to provide a visual representation of our observations. A full protocol of this method is located in Appendix A.

Over the course of our observation, 2,616 people passed through the lane. The peak time for pedestrians was from 9:00 AM to 1:00 PM, when more than 200 people entered the lane every hour. From 2:00 PM until 8:00 PM, the lane continued to be visited approximately 150 times per hour. Our team concludes from this analysis that the lane is almost exclusively used during the daytime hours. Photos from our observation are shown in Figures 4 and 5.

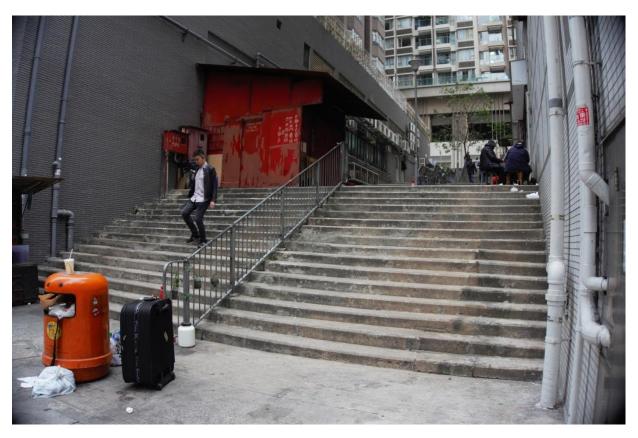




Figure 4: Photo from the top and bottom of Sheung Fung Lane in Sai Ying Pun, Hong Kong. Taken at 12 AM, January 28th, 2018. Both photos taken by Jameson Moore.

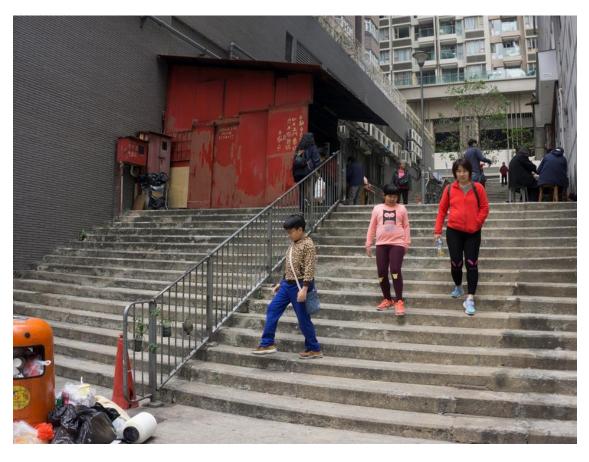




Figure 5: Photo from the top and bottom of Sheung Fung Lane in Sai Ying Pun, Hong Kong. Taken at 1:00 PM, January 28th, 2018. Both photos taken by Jameson Moore.

We observed that the majority of people who used the lane were adults. We found that adults younger than 65 comprised 84% of the total pedestrians in the lane. Elderly comprised just over 10% of the pedestrians observed, while only 5% of the people visiting the lane were either children or teens. However, from demographic information we know that elderly represent 18% of the total population of the area. Youth and teens represent 12% of the total area population (District Profile, 2017).

We conclude that fewer youth, teens, and elderly use Sheung Fung Lane than adults. The reason is unknown. Further studies of the community exploring why these groups do not visit the space may prove to be worthwhile. We also conclude that future interventions be designed with the interests of youth, elderly and teens in mind to attract them to the lane.

During the observation, only 8% of people completed an activity in the lane. Thus, 92% of the people who we observed during the 24-hour period in the lane simply passed through without engaging in an activity.

We conclude that it would be favorable to add features to the lane that would attract more people to spend time there, engaging them in activities they regard as enjoyable.

Of the 224 people who engaged in activities in Sheung Fung Lane, 49 people utilized the Buddhist temple during the 24-hour period. That equates to the Buddhist temple being the most utilized feature in the lane.

For future events, we suggest that organizers of activities occurring in this area must recognize that there is a Buddhist temple in the vicinity and take this into consideration. Dialogues between the temple administrators and the community are recommended to establish relationships, and educate residents about valuable history of the Buddhist temple.

4.2 Evaluation of Space

Through the evaluation of space, we assessed public space in terms of safety, comfort, accessibility, cleanliness, activity, sociability, and appearance. The public spaces we evaluated were Centre St., the Central Stairs, King George V Memorial Park, Sun Yat Sen Memorial Park, Hong Kong Park, and Sheung Fung Lane. We completed the evaluation on February 15, 2018. The full protocols and results of this method are found in Appendix B.

We were particularly interested in the results from the categories of comfort, accessibility, sociability, and appearance. Sheung Fung Lane performed the worst in these categories compared to the other public spaces.

The categories were evaluated based on a series of statements, which were rated on a Likert scale of agreement. The Likert scale defined a rating of a 1 to be Strongly Disagree, 2 to be Disagree, 3 to be Neither Agree nor Disagree, 4 to be Agree, and 5 to be Strongly Agree.

- Comfort was evaluated based on the availability of amenities. For example, there are a sufficient number of public restrooms and places to sit.
- Accessibility was evaluated based on the ease of access. For example, the space is wellmarked and near public transportation.
- Sociability was evaluated based on social interaction happening in the space. For example, there are many groups of people interacting in the area.
- Appearance was evaluated based on the physical appeal of the space. For example, there is a sufficient number of trees and plants in the area.

All of the public spaces we evaluated had sufficient elements of safety, cleanliness, and activity. Lights were available throughout, meaning the public spaces were well-illuminated in the dark.

Handrails were consistently accessible near stairs and inclines. Every public space was relatively well-maintained and lacked evidence of trash. There were also people moving through every space.

Sheung Fung Lane is insufficient in many categories. The team agrees that there are too few places for pedestrians to sit. In addition, the lane is not handicap accessible; the highest rating Sheung Fung Lane received for this statement was a 2. In contrast, the other public spaces rated a 3 or 4 for handicap accessibility. Sheung Fung Lane lacks sufficient color and greenery especially when compared to the other public parks, which received much higher ratings. The lane received the lowest ranking among all spaces we evaluated for sociability; the team unanimously rated it a 2 in all categories.

We conclude that Sheung Fung Lane needs to improve in the areas of comfort, sociability, accessibility, and appearance. We also conclude that there are several features missing from Sheung Fung Lane, including space for activities, sufficient seating, and public facilities. Furthermore, the lane must become more accessible to those with mobility issues. We suggest that in the future, the same evaluation is conducted with a larger sample size in order to get a greater range of data.

4.3 Design Activity

Based on knowledge provided by our sponsors, we determined that the community around Sheung Fung Lane displayed a low readiness to participate in the redesign of the space. We described these residents as able, but not willing to participate in our design activity. Because of these factors, we decided to create our own marketing strategy for the event based on the *Situational Leadership Theory* (Hersey & Blanchard, 1969)

Our intent was to increase the readiness of residents around Sheung Fung Lane to participate in our event. To do this, we designed a marketing campaign that would build interest through absurdity and confusion. We intended for these posters to create a spectacle which would

provoke conversation among members of the community. An example of advertising is shown in Figure 6. A full description of the marketing strategy is found in Appendix C.



Figure 6: Sample marketing photo. Photo of Sheung Fung Lane in Sai Ying Pun, Hong Kong. January 28th, 2018. Created by Jameson Moore.

The design activity was completed on Thursday, February 22nd from 10:00 AM to 6:30 PM. The weather was cloudy with intermittent showers. We displayed five different atmospheric boards with the themes of Nature, Art, Culture, Playful, and Learning. Participants were asked to place six stickers on their favorite pictures. The full protocols and results of this method are found in Appendix D.

Throughout the activity, 841 stickers were placed on photos. The art atmosphere board was the most popular; in total, 211 stickers were placed. The culture board received 196 stickers, making it the second most popular. A picture of the event is shown in Figure 7.



Figure 7: Photo of people completing the design activity in Sheung Fung Lane in Sai Ying Pun, Hong Kong. February 22nd, 2018. Taken by Jameson Moore.

The five most popular photos overall included two photos from the art atmosphere, one photo from culture, one photo from learning, and one photo from the playful atmosphere. Four of these photos involved some type of green space, ranging from grass to forests. Three photos included elements of vibrant color. Both features of public spaces and activities were represented in the five most popular photos, as shown in Figure 8.



Figure 8: Top five photos chosen by all age groups. Citations of photos listed from left to right and from top to bottom. (Almeida, 2017), (Miller Cressman, 2014), (Morfin, 2016), (Jelentkezni, 2013), (Rusnak, 2014)

The five most popular photos of activities contained similar aspects. Four of the five images in this category included elements of green space and intergenerational aspects. All of these activities involved group interaction.



Figure 9: Top five activities chosen by all age groups. Citations of photos listed from left to right and from top to bottom. (Homan, 2016), (Stahl, 2017), (Reyes, 2018), (Eurasia, n.d.), (Miller Cressman, 2014)

The five most popular photos of every age group included at least three scenes with green elements. Every age group other than children selected at least two colorful photos in their top five. The elderly age group picked three activities in their top five, while children and teens chose two, and adults selected only one activity. Both youth and elderly selected the same image of group yoga in a park. Teens, youth, and elderly all selected images depicting board games such as mahjong.

We conclude from the most popular photos of each age group that the community has similar interests in public space. The photos demonstrate that the community is interested in colorful features and green space. Further research should be conducted into the types of colorful and green spaces that residents prefer. We also found that the community has interest in group activities. Specifically, youth, teens, and the elderly are all interested in board games. Actions should be taken to capitalize on these similarities to bring different generations together.

4.4 Limitations

The factors discussed below limited our ability to conduct this project with full potential.

Our group had planned to interview residents in order to understand their desires for the redesign of the space, however our sponsors did not allow us to interview them. The partnering organization, Caritas, had already made efforts to connect with residents although without much progress. They believe that they were not successful since workers from Caritas are considered outsiders by the community. Therefore, they cautioned us against directly connecting with the residents. Similarly, we also were not allowed to conduct focus groups with any of the residents for the same reasons. We were also not allowed access inside the residential buildings adjacent to the lane.

Considering that we had less than two months to complete this project, we did not have enough time to conduct a full-scale intervention. Given enough time, we would have designed an activity or intervention with greater impact.

Several limitations of our design activity may have impacted our results. First, people may have been influenced by the stickers already placed on photos. The photos were also not uniform sizes; therefore, participants may have neglected smaller photos in favor of larger ones. It is also nearly impossible to prove why an individual selects a given photo. When writing our analysis, we assumed only that people selected the six photos they liked the most.

5. Recommendations

We developed a series of recommendations for the improvement of Sheung Fung Lane that involve the community and foster intergenerational interaction.

We recommend the addition of physical features and art to encourage community involvement in the space. The results from our evaluation and design activity indicate that the appearance, comfort, accessibility, and sociability of Sheung Fung Lane should be improved.

Therefore, we recommend the addition of:

- Green space, such as grass, trees, and large plants
- Colorful and artistic elements, such as painted stairs, murals, and colorful decorations
- Seating options, including benches, tables, and places for people to eat
- Space for board games, with seating for activities such as mahjong, chess, checkers, or
 Go
- Large, level areas at the top and bottom of the lane to increase handicap accessibility

We recommend the implementation of activities and events to increase community involvement in Sheung Fung Lane. Based on our design activity, the community conveyed strong interest in several activities.

Therefore, we recommend the implementation of:

- Cultural and traditional activities, such as lantern making and calligraphy, located in and outside of the Magic Lanes store
- A small community garden located in the lane, where members of the community are encouraged to grow their own vegetables, flowers, and herbs for personal or community use
- Introduction of live performances inside the lane, such as musical acts, discussions,
 guest speakers, presentations, and screenings of popular sporting events or movies

- Opportunities for learning through classes or group activities such as traditional crafts lessons, reading groups, or live demonstrations located in and around the Magic Lanes store
- A space created in the lane for children's activities, including small playground features,
 hopscotch areas, and places to play ball

We recommend the implementation of activities and events for the express purpose of promoting intergenerational interaction in Sheung Fung Lane. From our observation, we found that youth and elderly do not use the lane as frequently as adults. However, there is potential for both groups to interact in the lane. The results of our design activity indicate that youth and elderly demonstrate relatively similar interests.

Therefore, we recommend the implementation of:

- Group exercise events for all ages, such as Tai Chi, yoga, and group-walks beginning in the lane
- Board game tournaments or events for all ages. These could be held in the lane or Magic
 Lanes Store over the course of a week. A bracket could be made that pairs youth and
 elderly to compete for a grand prize.
- Classes, taught in the Magic Lanes store to teach traditional or life skills taught by elderly to children, such as pottery, traditional cooking, or traditional dance
- Classes, taught in the Magic Lanes store that teach life skills taught by older children to elderly, such as computer classes
- Live performances catering to the interests of children and elderly. These could be held at the top or bottom of the lane, where people could sit on the stairs to listen. Local artists or performers could perform for free, or to raise money for a community cause.

Bibliography

- Almeida, P. (Photographer). (2017, 04). Flying Umbrellas in Portugal [digital image]. Retrieved from http://www.24hviralphotos.com/16-images-which-prove-the-world-is-a-totally-wonderful-pce-16-pics/
- Barlett, Graeme. (2006). Sheung Fung Lane. Wikimedia Commons. Retrieved from https://commons.wikimedia.org/wiki/File:SheungFungLane.JPG
- Basat, G (2016, May 02). How public spaces will help change cities for the better. Retrieved from http://blogs.worldbank.org/sustainablecities/how-public-spaces-will-help-change-cities-better
- Berg, B. L., & Lune, H. (2012). Qualitative research methods for the social sciences. Boston: Pearson.
- Bonnemann, T. (2015). Irvin and Stansbury: Advantages and disadvantages of public participation. Retrieved from http://www.intellitics.com/blog/2015/06/04/irvin-and-stansbury-advantages-and-disadvantages-of-public-participation/
- Budd, M. (1999). "The application of environmental assessment to marine development and activities in Great Britain". Marine Policy, Vol. 23, No. 4-5, pp. 439-451. Elsevier Sciences.
- Census and Statistics Department. (2017). Hong Kong Annual Digest of Statistics. Retrieved from https://drive.google.com/file/d/1aJtskiG0Nad6x7J QLoO3OxOntIGpE6L/view
- Civic Exchange. (2017). How much open space do Hong Kongers get? Retrieved from http://civic-exchange.org/materials/publicationmanagement/files/20170224PR POSReport en press%20release%281% 29.pdf
- Claire, L. (2013, February 23). A critical study of the public space in Hong Kong. Paper presented at the MCS Symposium, Tsim Sha Tsui, Hong Kong. Retrieved from https://www.ln.edu.hk/cultural/programmes/MCS/Symp%2013/S1P2.pdf
- Concepts of public space. Retrieved from http://www.hkpsi.org/eng/publicspace/concepts/
- Conrad, E., Cassar, L. F., Christie, M., & Fazey, I. (2011). Hearing but not listening? A participatory assessment of public participation in planning. *Environment and Planning C: Government and Policy*, 29(5), 761-782. doi:10.1068/c10137
- Cybulski, M., Krajewska-Kułak, E., Sowa, P., Orzechowska, M., Van Damme-Ostapowicz, K., Rozwadowska, E., & Guzowski, A. (2013). Elderly peoples' perception of young people A preliminary study. *Iranian Journal of Public Health*, 42(10), 1099. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/26060617
- Density Atlas. (2011). Sai Ying Pun, High Street. Retrieved from http://densityatlas.org/casestudies/profile.php?id=84
- District Profile. (2017). Retrieved from http://www.bycensus2016.gov.hk/en/bc-dp.html
- Eurasia (Photographer). (n.d.). Elderly men and women playing Mahjong in the street, Beijing, China, Asia [digital image]. Retrieved from https://www.robertharding.com/preview/834-1901/elderly-men-women-playing-mahjong-street-beijing-china/
- Engagement Lab. (2015a). Community PlanIt. Retrieved from https://elab.emerson.edu/projects/community-planIt
- Engagement Lab. (2015b). Youth @ work Bhutan. Retrieved from http://elabhome.blob.core.windows.net/resources/cpi-summary-report-bhutan.pdf

- The United States Environmental Protection Agency. (2016). Public participation guide: Tools to generate and obtain public input. Retrieved from https://www.epa.gov/international-cooperation/public-participation-guide-tools-generate-and-obtain-public-input
- Fainstein, S. (2016). Urban planning. Encyclopedia Britannica. Retrieved from https://www.britannica.com/topic/urban-planning
- French, J., & Raven, B. (1959). The bases of social power. University of Michigan, Institute for Social Research, 150-167. Retrieved from http://web.mit.edu/curhan/www/docs/Articles/15341_Readings/Power/French_&_Raven_Studies_Social_Power_ch9_pp150-167.pdf
- Fung, G. (2017, May 4). From 'The end' to a new beginning: Sai Ying Pun and Kennedy Town through the years.

 Retrieved from https://www.thedesk.com.hk/from-the-end-to-a-new-beginning-syp-and-k-town-through-the-years/
- Funkhouser, M. (2014). The failure and the promise of public participation. Retrieved from http://www.governing.com/gov-institute/funkhouser/col-failure-promise-public-participation-government.html
- GovHK. (2016). Culture, leisure & sports. Retrieved from https://www.gov.hk/en/residents/culture/trail/index.htm
- Hämaläinen, T. (2017, February 06). Urban lessons from Hong Kong and Tokyo. Retrieved from https://urbanfinland.com/2017/02/06/urban-lessons-from-hong-kong-and-tokyo/#comments
- Hersey, P., & Blanchard, K.H. (1969). Life cycle theory of leadership. Training & Development Journal, 23(5), 26-34.
- Ho, A. (2017, March 13). 10 Sai Ying Pun facts you (probably) didn't know... Retrieved from https://www.thedesk.com.hk/sai-ying-pun-facts-you-probably-didnt-know/
- HK Population. Embracing opportunities in an ageing society. (2014). Retrieved from http://www.hkpopulation.gov.hk/public engagement/pdf/chapter6 eng.pdf
- Homan, E. (Photographer). (2016, 05). Wonders of Outdoor Reading Areas For Schools [digital image]. Retrieved from https://www.pentagonplay.co.uk/news-and-info/the-wonders-of-outdoor-reading-areas-for-school-children
- Hong Kong Special Administrative Region Government. (2017a). GovHK: Hong Kong The facts. Retrieved from https://www.gov.hk/en/about/abouthk/facts.htm
- Hong Kong Special Administrative Region Government. (2017b). Hong Kong in brief. Retrieved from https://www.gov.hk/en/about/abouthk/docs/2017HK in brief.pdf
- Hong Kong Special Administrative Region Government. (2018). SWD elderly information website | Wui Fung Care Home. Retrieved from https://elderlyinfo.swd.gov.hk/en/content/wui-fung-care-home
- Hopper, E. (2015). Individualist or collectivist? How culture influences behavior. Retrieved from https://healthypsych.com/individualist-or-collectivist-how-culture-influences-behavior/
- Huang, W. Y., Wong, S. H., Wong, M. C., Sit, C. H., Sum, R. K., & He, G. (2016). Results from Hong Kong's 2016 report card on physical activity for children and youth. *Journal of Physical Activity & Health*, 13(11 Suppl 2), S175. doi:10.1123/jpah.2016-0302
- Irvin, R. & Stansbury, J. (2004). Citizen participation in decision making: Is it worth the effort? *Public Administration Review*, 64(1), 55-65. doi:10.1111/j.1540-6210.2004.00346.x

- Knight Foundation. (2010). Why people love where they live and why it matters: A national perceptive. Retrieved from https://knightfoundation.org/sotc/overall-findings/
- Kuah, K. E., & Liu, Z. (2016). *Intangible cultural heritage in contemporary China*. Florence: Routledge Ltd. doi:10.4324/9781315628974
- Lane, M. B. (2005). Public participation in planning: An intellectual history. *Australian Geographer*, 36(3), 283-299. doi:10.1080/00049180500325694
- Leisure and Cultural Services Department. (2015). List of facilities & venues. Retrieved from https://www.lcsd.gov.hk/en/facilities/facilitieslist.html
- Lelentkezni, K. (Photographer). (2013, 01). A Nap Képe: Szivárvány lépcsó Bejrútban [digital image]. Retrieved from http://haerdekel.hu/a-nap-kepe-szivarvany-lepcso-bejrutban/
- Leung, G. T. Y., Leung, K. F., & Lam, L. C. W. (2011). Classification of late-life leisure activities among elderly Chinese in Hong Kong. *East Asian Archives of Psychiatry: Official Journal of the Hong Kong College of Psychiatrists*, 21(3), 123-127. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/21921306
- Lumen Learning. (2017). Holism in anthropology, cultural anthropology. Retrieved from https://courses.lumenlearning.com/culturalanthropology/chapter/holism-in-anthropology/
- Luk, W. L. (2009). Privately owned public space in Hong Kong and New York: The urban and spatial influence of the policy. Paper presented at the 4th International Conference of the International Forum on Urbanism (IFoU), Amsterdam, Netherlands. Retrieved from http://newurbanquestion.ifou.org/proceedings/5%20The%20Transformation%20of%20Urban%20Form/full%20papers/d056_luk_winglun_Revised.pdf
- MacKenzie, A. (2015). Placemaking and place-led development: A new paradigm for cities of the future. Retrieved from https://www.pps.org/reference/placemaking-and-place-led-development-a-new-paradigm-for-cities-of-the-future/
- Mahdavinejad, M., & Amini, M. (2011). *Public participation for sustainable urban planning in case of Iran. Procedia Engineering*, 21(Supplement C), 405-413. doi: 10.1016/j.proeng.2011.11.2032
- Maslow, A.H. (1943). A theory of human motivation. Psychological Review, 50, 370-396. Retrieved from http://psychclassics.yorku.ca/Maslow/motivation.htm
- McLeod, S. A. (2017). Maslow's hierarchy of needs. Retrieved from www.simplypsychology.org/maslow.html
- Merriam-Webster. (2017). Definition of holism. Retrieved from https://www.merriam-webster.com/dictionary/holism
- Millard, C. (2015). Young people and placemaking: Engaging youth to create community places. Retrieved from https://www.pps.org/blog/young-people-and-placemaking-engaging-youth-to-create-community-places/
- Miller Cressman, L. (Photographer). (2014, 07). *Teaching Yoga in Public Spaces: The Power of an Outdoor Practice* [digital image]. Retrieved from https://blog.queenstreetyoga.com/2014/07/21/teaching-yoga-in-public-spaces-the-power-of-an-outdoor-practice/
- Montgomery, C. (2013). Happy city. New York, NY: Farrar, Straus and Giroux.
- Morfin, M. (Photographer). (2016, 04). *Esrawe + Cadena's Toy-Inspired "Los Trompos" Installation* [digital image]. Retrieved from https://www.archdaily.com/784418/esrawe-plus-cadena-emplazan-los-trompos-instalacion-temporal-inspirada-en-juguete-mexicano

- Ngo, J. (2012). Sai Ying Pun: A walk among the heritage holdouts. Retrieved from http://www.scmp.com/article/1006648/sai-ying-pun-walk-among-heritage-holdouts
- Nowek, A. (2013). Mall city: Public space in Hong Kong. Retrieved from http://theprotocity.com/mallcity-public-space-in-hong-kong/
- Park, E., & Tam, Z. (2015, April 13). The public private paradox. Retrieved from http://varsity.com.cuhk.edu.hk/index.php/2015/04/privately-owned-public-space/?singlepage=1
- Pawlitschko, R. (2017). Growing old in one's own neighborhood-new housing forms for old age. Detail, 3, pp. 10-16.
- Poplin, A. (2012). Playful public participation in urban planning: A case study for online serious games. Retrieved from doi://doi.org/10.1016/j.compenvurbsys.2011.10.003
- Prochaska, J., Di Clemente, C., & Norcross, J. (1995). Changing for good. New York: Avon Books.
- Project for Public Spaces. (2009, December). What is placemaking? Retrieved from https://www.pps.org/reference/what is placemaking/
- Project of Public Spaces. (2010). Developing public participation tools in transit dependent communities | projects. Retrieved from https://www.pps.org/projects/fta-ptpp
- Project for Public Spaces. (2014, April 30). Ten strategies for transforming cities and public spaces through placemaking. Retrieved from https://www.pps.org/reference/ten-strategies-for-transforming-cities-through-placemaking-public-spaces/
- Reyes, Z (Photographer). (2018, 02). *Music Does Than Simple Entertain* [digital image]. Retrieved from https://medium.com/@isreyes/music-does-more-than-simply-entertain-871e277183a1
- Rusnak, M. (Photographer). (2014, 09). *Building a Bonsai Garden: An Ongoing Summer Project* [digital image]. Retrieved from http://akroncantonbonsai.blogspot.hk/2014/09/building-bonsai-garden-ongoing-summer.html
- Sivan, A. (2002). Leisure participation of Hong Kong elderly. *World Leisure Journal*, 44(1). Retrieved from http://www.tandfonline.com/doi/pdf/10.1080/04419057.2002.9674256?needAccess=true&
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 countries. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). New York: Academic Press. http://dx.doi.org/10.1016/S0065-2601(08)60281-6
- Sharma, S. N. (2012). Benefits of public participation. Retrieved from https://internationaljournalofresearch.com/2012/09/07/benefits-of-public-participation/
- Spacious. (2017a). The Nova 星鑽, Sai Ying Pun, Hong Kong properties. Retrieved from https://www.spacious.hk/en/hong-kong/sai-ying-pun/the-nova
- Spacious. (2017b). Sai Ying Pun properties for sale or rent in Hong Kong. Retrieved from https://www.spacious.hk/en/hong-kong/sai-ying-pun
- Speck, J. (2012). Walkable city. New York: Farrar, Straus and Giroux.
- Stahl, E.M. (Photographer). (2017, 08). *Building a Culture of Health Through Authentic Engagement* [digital image]. Retrieved from https://citiesspeak.org/2017/08/28/building-a-culture-of-health-through-authentic engagement/

- The Street Plans Collaborative. (2016). Tactical urbanist's guide to materials and design. Retrieved from http://tacticalurbanismguide.com/
- Thiel, S. K. (2017). Let's play urban planner: The use of game elements in public participation platforms. Next generation planning. Retrieved from doi: 10.24306/plnxt.2017.04.005.
- Tsang, S. (2007). Modern history of Hong Kong, A (1st ed.). London: LB.Tauris & Co Ltd. Retrieved from https://goo.gl/hzaD5u
- United Nations. (2003). Youth & health issues. Retrieved from http://www.un.org/esa/socdev/unyin/documents/ch04.pdf
- United Nations. Youth civic engagement. (2016). Retrieved from http://www.un.org/esa/socdev/unyin/wyr/2015/report.pdf
- United Nations. (2017). New Urban Agenda. Retrieved from http://habitat3.org/wp-content/uploads/NUA-English.pdf
- United Nations Department of Economic and Social Affairs. (n.d.a). Definition of youth. Retrieved from http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf
- United Nations Department of Economic and Social Affairs. (n.d.b). Youth participation. Retrieved from http://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-participation.pdf
- University of Exeter. (2017). Would you be happier living in a greener urban area?. Retrieved from http://www.ecehh.org/research-projects/urban-green-space/
- Virginia Tech. The stages of change. (2017). Retrieved from http://www.cpe.vt.edu/gttc/presentations/8eStagesofChange.pdf
- Wessely, H. (2017). A mix of generations: Padre Rubinos Social Centre in La Coruñnna. Detail, 3, pp 54-64.
- The World Bank (1992). Participatory development and the World Bank: Potential directions for change. Retrieved from http://documents.worldbank.org/curated/en/789811468765616541/Participatory-development-and-the-World-Bank-potential-directions-for-change
- World Health Organization. Active ageing: A policy framework. (2002). Retrieved from http://apps.who.int/iris/bitstream/10665/67215/1/WHO NMH NPH 02.8.pdf
- World Health Organization. What is "active ageing"? (2017). Retrieved from http://www.who.int/ageing/active ageing/en/
- YouthGovHK. (2017a). Civic education development. Retrieved from https://www.youth.gov.hk/en/info-centre/civic-education/youth-development.htm
- YouthGovHK. (2017b). Extra curricular youth centres study rooms. Retrieved from http://www.youth.gov.hk/en/info-centre/extra-curricular/youth-centres-study-rooms.htm
- Zhang, Y. (2015). Public participation approaches for urban planning in China. Madison: University of Wisconsin-Madison. Retrieved from https://dpla.wisc.edu/sites/dpla.wisc.edu/files/inline-files/15-05-
 https://dpla.wisc.edu/sites/dpla.wisc.edu/files/inline-files/15-05-
 https://dpla.wisc.edu/sites/dpla.wisc.edu/files/inline-files/15-05-
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 <a href="https://dpla.wisc.edu/sites/dpl
- Zimmermann, K. A. (2017). What is culture? Definition of culture. Retrieved from https://www.livescience.com/21478-what-is-culture-definition-of-culture.html

Appendix A: Observation

A.1 Protocol

We are observing Sheung Fung Lane, concentrating on the people who use it. Our observation focuses on five factors: age, gender, pets, activity, and mobility. Our team of four is documenting the observation separately, therefore it is necessary to formulate a set of guidelines to ensure inter-rater reliability. This establishes consistency in our results.

Age is separated into four groups. The characteristics below help guide the observer to categorize pedestrians.

Youth: height of 4 ft. and below, may wear school uniform, undeveloped facial structure, may be with a guardian, perceived to be 0-12 years of age

Teens: above 4 ft. tall, may wear school uniform, normally without a guardian, perceived to be 13-19 years of age

Adults: above 5 ft. tall, fully developed facial structure, may be dressed professionally, perceived to be between 20-64

Elderly: wrinkled appearance, walking at slower pace, possible hunched posture, gray or white hair, perceived to be 65 or older

Gender is categorized into three groups. The observers determine the most fitting category of pedestrians guided by the characteristics outlined below.

Male: people exhibiting traditional masculine features, such as but not limited to: short hair, masculine dress, facial hair, and masculine facial features.

Female: people exhibiting traditional feminine features, such as but not limited to: long

hair, feminine dress, no facial hair, feminine facial features

Gender neutral: people not exhibiting particular masculine or feminine characteristics

as defined above.

Pets are categorized into three groups. The observers determine which group is the best fit for

the subject. If other, the observer notes the specific animal.

Dog

Cat

Other: including but not limited to snakes, rats, monkeys, ferrets, hamsters, guinea pig,

pigs, rabbits, squirrels

Activity is documented in several categories including size of group, the time spent in the lane,

and the behaviors of people in the lane.

Activity: includes but is not limited to smoking, reading, sitting, conversing, attending

the temple, using a cellular phone, eating, or walking

Group: two or more people in the lane walking, talking, or doing any other activity with

each other.

Time: the time when a person enters the lane and exits the lane, including the duration

of any activity inside of the lane. People passing through the lane are designated as in

transit.

Other: any behavior not defined above

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Mobility is documented by assessing the behaviors listed below. No notes are made if subjects do not use participate in any of the following behaviors.

Behaviors: use of a cane or walker, handrail and/or assistance from another person

A.2 Results

To complement our observation, we also took two simultaneous photos of each side of the lane every hour to provide a visual representation of Sheung Fung Lane over time.



Figure 10: Example observation photos from the top and the bottom of Sheung Fung Lane in Sai Ying Pun, Hong Kong. Taken at 5:00 PM on January 28th, 2018. Both photos taken by Eduardo Paoli.

Photos depicting the top and bottom of the lane show different perspectives of the space. To illustrate the data collected, we created a time lapse video. Observation starts at 12:00 AM on Sunday. The group took shifts of 6 hours in pairs. The pair took photos from both the top and bottom of the lane every hour on the hour, for 24 hours. The weather was partly cloudy, with temperatures ranging from 60 to 65 °F.

Below are graphs showing the results from our 24-hour observation. We compare the number of people with a particular observation point, for example, the number of people passing through the lane. In all graphs except activity, the hour of the day is shown on the bottom axis while the number of people or animals is shown on the vertical axis.

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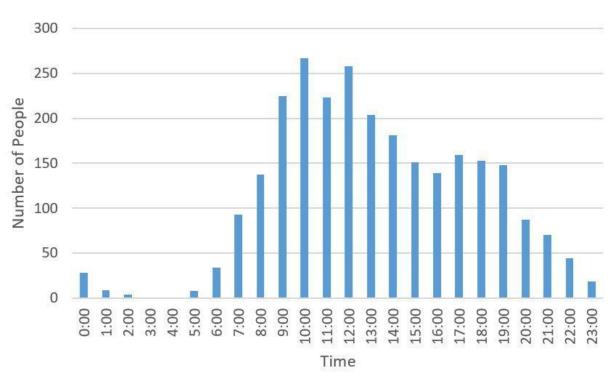


Figure 11: Number of people passing through the lane every hour.

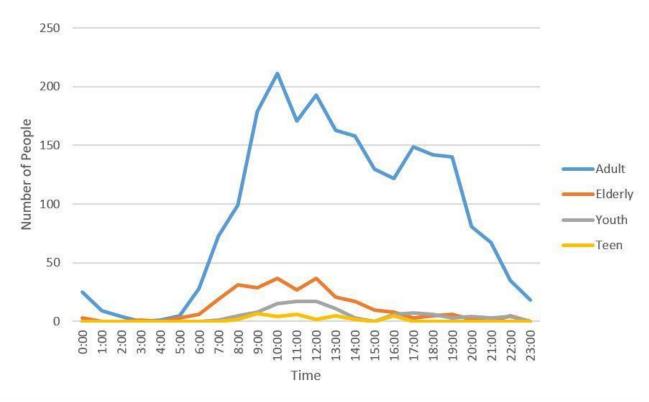


Figure 12: Number of people per age group passing through the lane every hour.

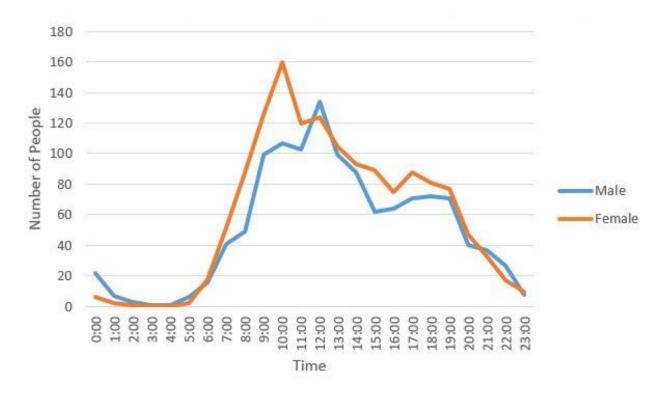


Figure 13: Number of people separated by gender who passed through the lane every hour.

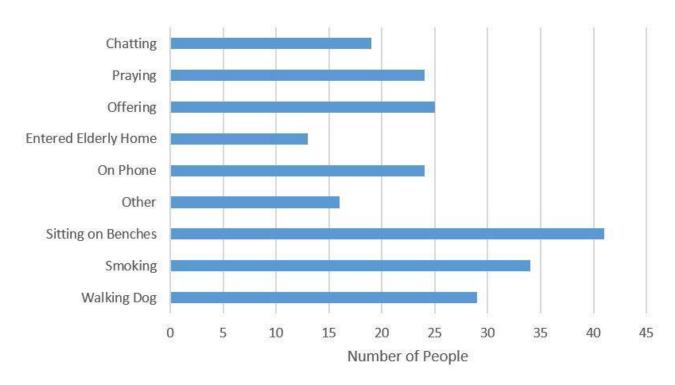


Figure 14: Number of people who completed an activity in the lane during our observation period.

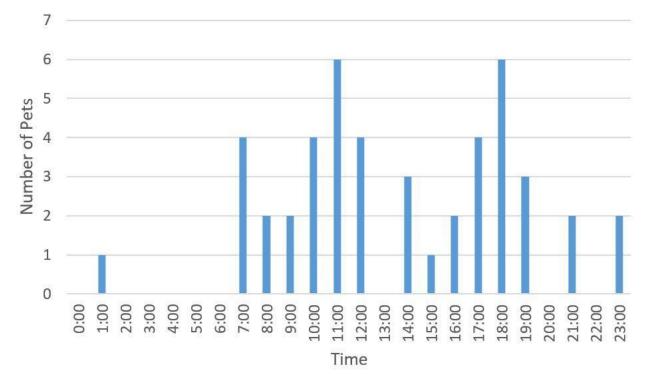


Figure 15: Number of pets passing through the lane every hour.

Appendix B: Evaluation of Space

B.1 Protocol

This evaluation was completed by our four team members. We assessed six public spaces in terms of safety, comfort, accessibility, cleanliness, activity, sociability, and appearance. The areas evaluated are Sheung Fung Lane, Centre St., King George V Memorial Park, Hong Kong Park, Sun Yat Sen Memorial Park, and staired areas in the Central District. The weather during the evaluation was partly cloudy and 65 °F.

We developed a series of statements that evaluate the spaces in terms of each category. A Likert scale of agreement was used to evaluate each statement.

1-strongly disagree. 2-disagree. 3-neither agree nor disagree. 4-agree. 5-strongly agree

Safety

- Handrails are easily accessed near stairs and inclines.
- The area is well illuminated in the dark.
- There is adequate water drainage.

Comfort

- There are a sufficient number of benches and places to sit.
- There are a sufficient number of water fountains.
- There are a sufficient number of public restrooms.
- The space is quiet.
- There are a sufficient number of options to buy food & drinks nearby.

Accessibility

- The space is well marked and easy to enter.
- The space is handicap accessible.
- There are no uneven walkways.
- The space is near public transportation.

Cleanliness

- There is a sufficient number of trash cans in the area.
- There is a sufficient number of recycling opportunities in the area.
- There is no trash on the ground.
- Bathrooms and other facilities are well maintained.
- There is no vandalism in the area.

Activity

- There are many people moving through the space.
- There are sufficient areas dedicated to walking and running.
- There are sufficient areas for lounging.
- There are sufficient areas for athletics.
- There are playgrounds or sufficient spaces for children to play.

Sociability

- There are many groups of people interacting in the area.
- There are many spaces to interact in this area.

Appearance

- There is no rust or chipped paint in the area.
- There is adequate natural light in the area.
- The area is colorful.
- There is a sufficient number of trees and plants in the area.

B.2 Results

The following graphs display the results from our evaluation of space. For each question, there is a graph where the vertical axis represents the number of responses by the members of our group and the horizontal axis represents the public space evaluated. The different colored bars in the graph show the different responses listed from the participants. The 1-5 ranking numbering system corresponds to the Likert scale outlined in **B.2.** The graphs are organized by category.

Safety:

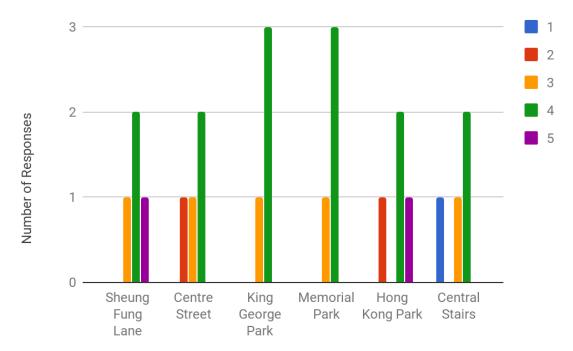


Figure 16: "Handrails are easily accessed near stairs and inclines."

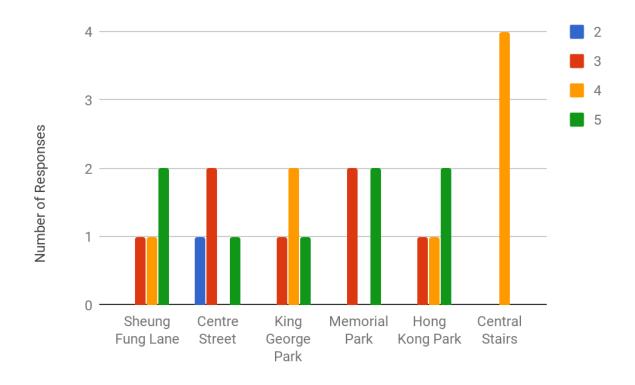


Figure 17: "The area is well illuminated in the dark."

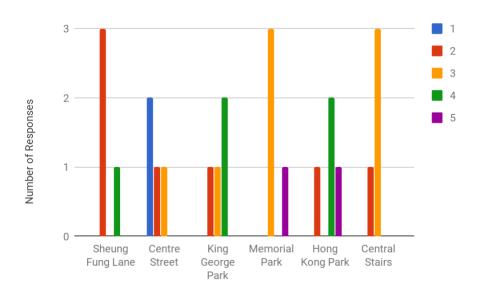


Figure 18: "There is adequate water drainage."

Comfort:

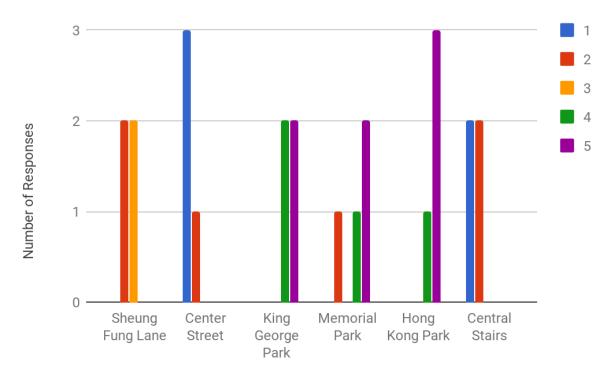


Figure 19: "There are sufficient number of benches and places to sit."

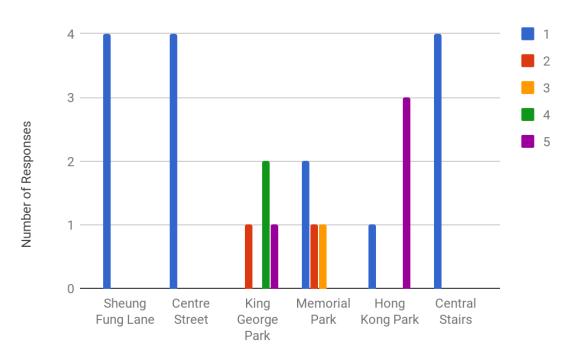


Figure 20: "There are a sufficient number of water fountains."

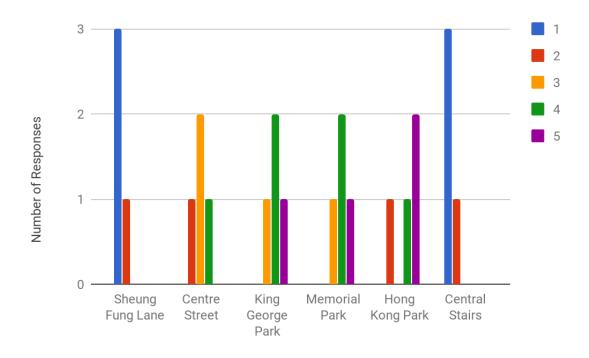


Figure 21: "There are a sufficient number of public restrooms."

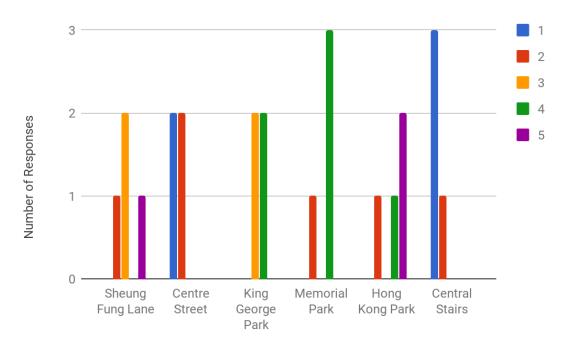


Figure 22: "The space is quiet."

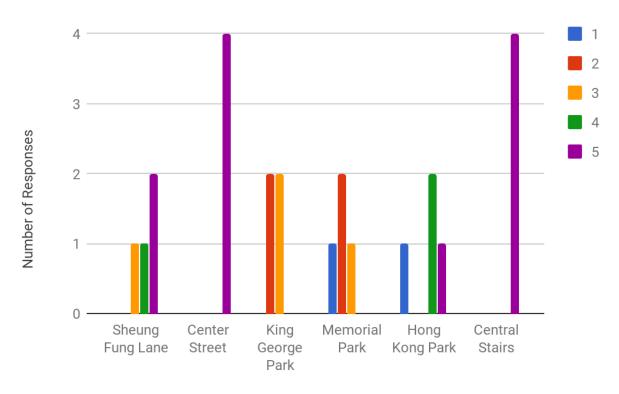


Figure 23: "There are a sufficient number of options to buy food & drink nearby."

Accessibility:

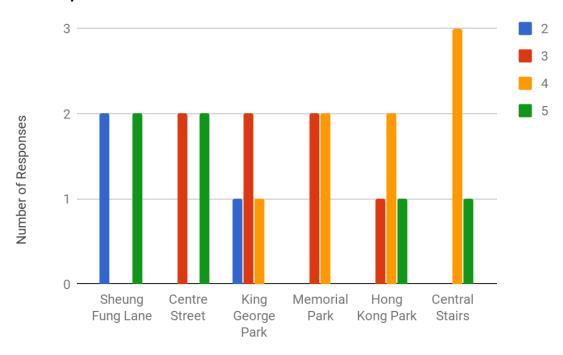


Figure 24: "The space is well-marked and easy to enter."

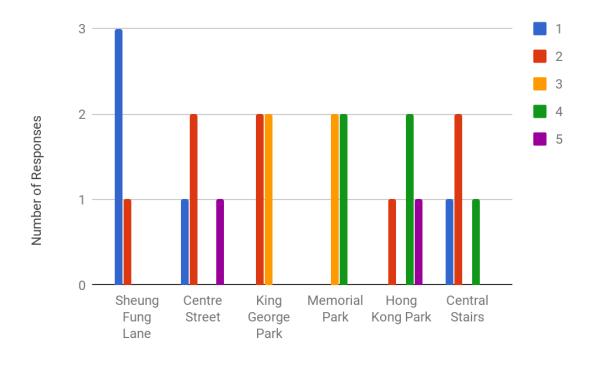


Figure 25: "The space is handicap accessible."

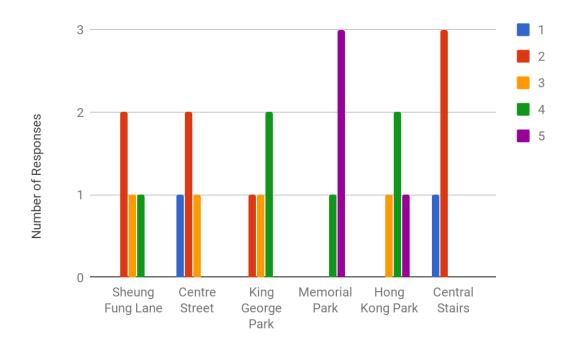


Figure 26: "There are no uneven walkways."

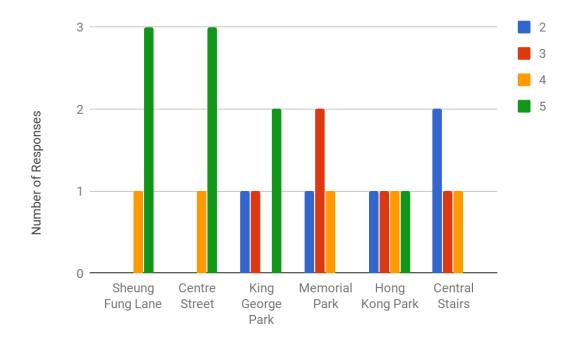


Figure 27: "The space is near public transportation."

Activity:

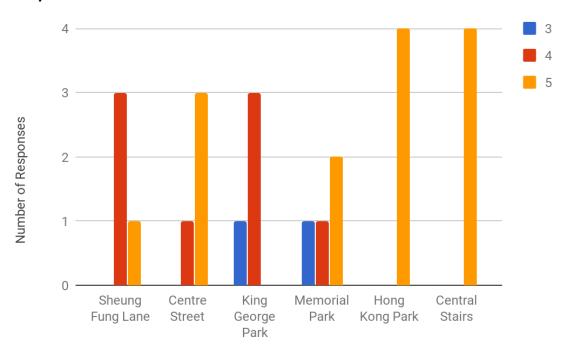


Figure 28: "There are many people moving through the space."

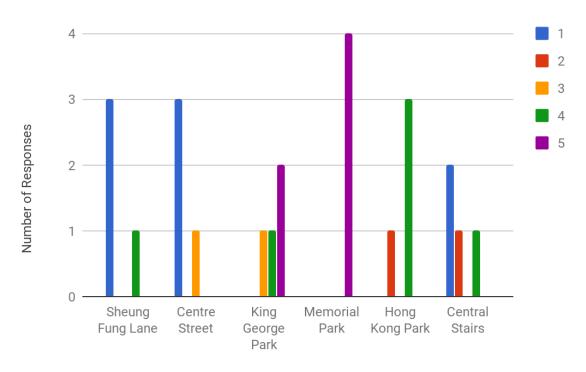


Figure 29: "There are sufficient areas dedicated to walking and running."

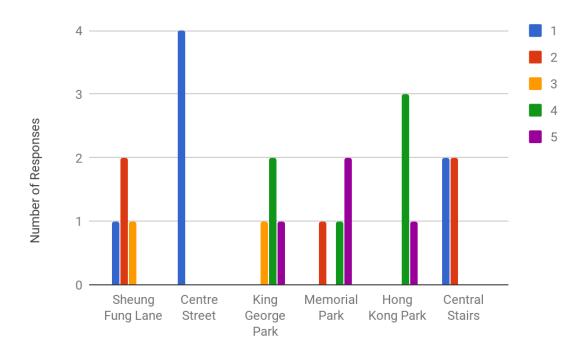


Figure 30: "There are sufficient areas for lounging."

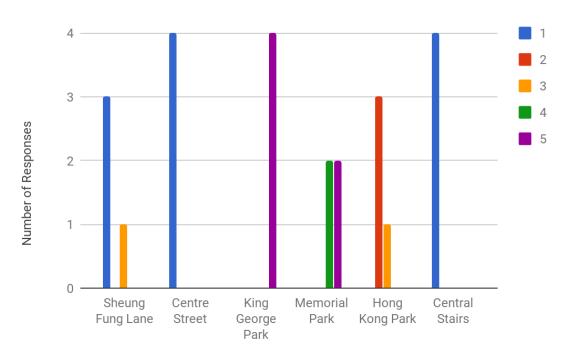


Figure 31: "There are sufficient areas for athletics."

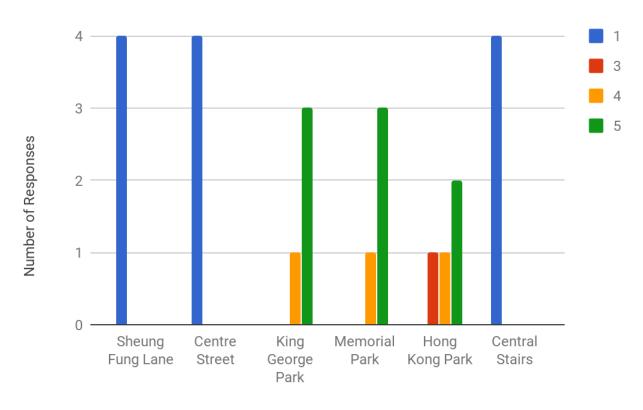


Figure 32: "There are playgrounds or sufficient spaces for children to play."

Cleanliness:

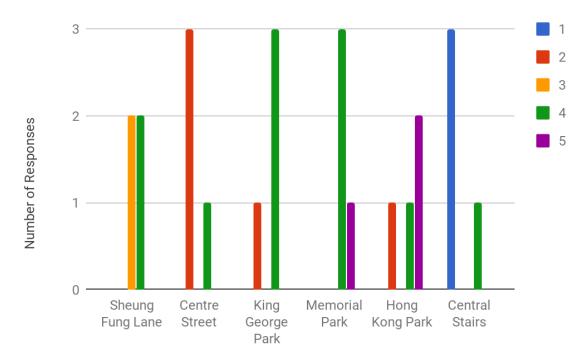


Figure 33: "There is a sufficient number of trash cans in the area."

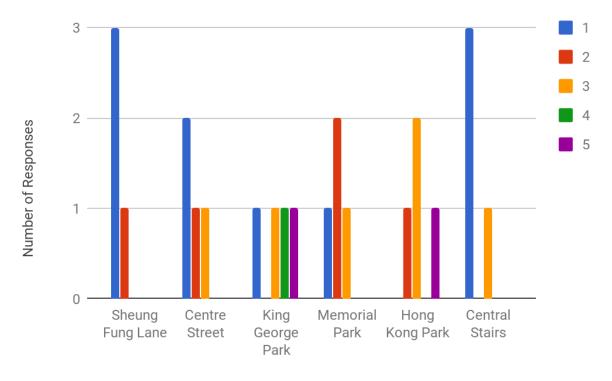


Figure 34: "There is a sufficient number of recycling opportunities in the area."

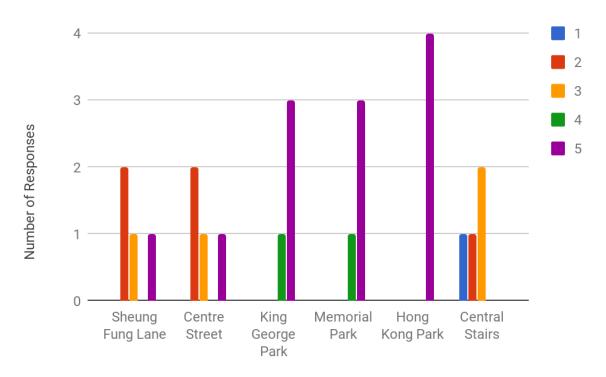


Figure 35: "There is no trash on the ground."

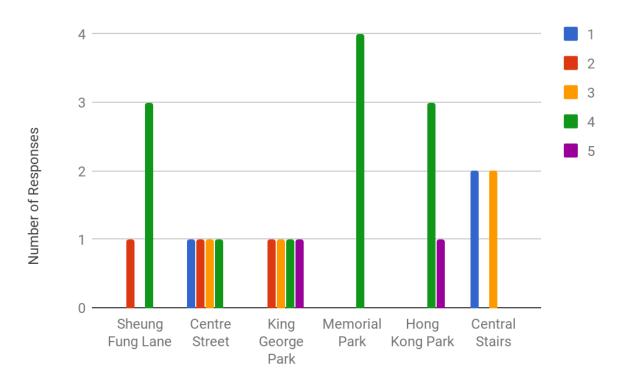


Figure 36: "Bathrooms and other facilities are well maintained."

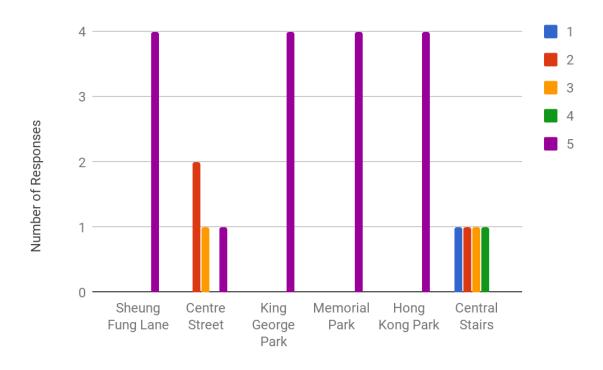


Figure 37: "There is no vandalism in the area."

Sociability:

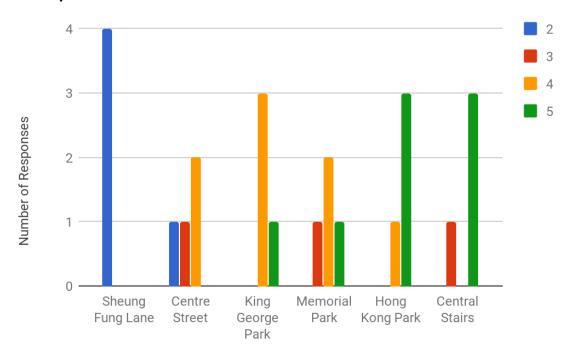


Figure 38: "There are many groups of people interacting in the area."

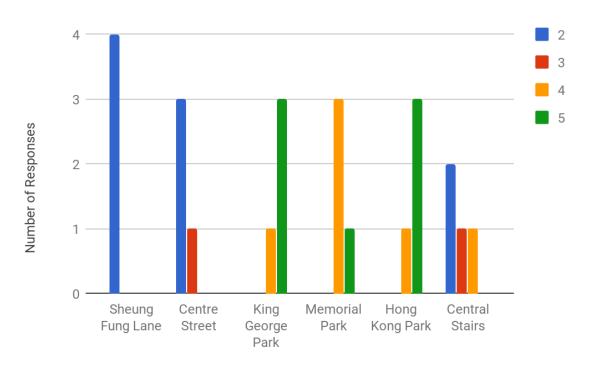


Figure 39: "There are many spaces to interact in this area."

Appearance:

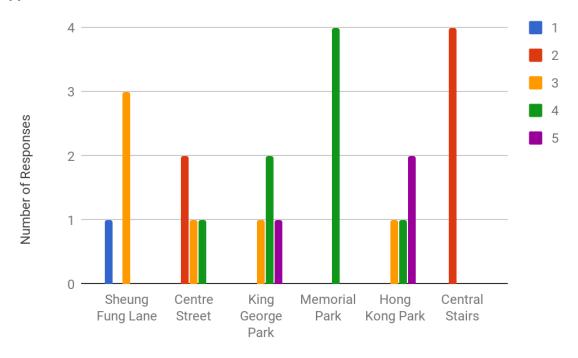


Figure 40: "There is no rust or chipped paint in the area."

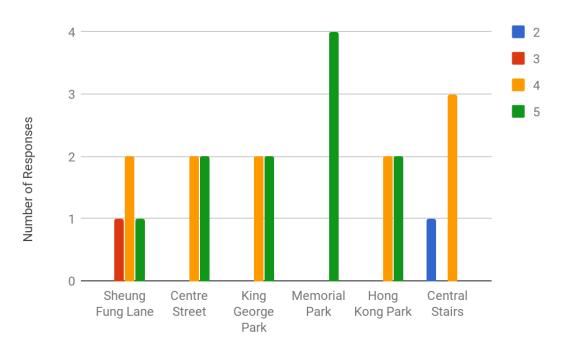


Figure 41: "There is adequate natural light in the area."

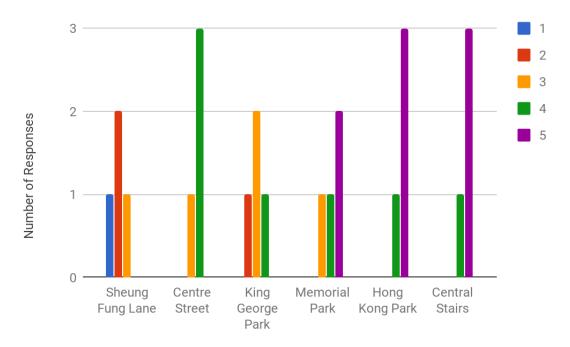


Figure 42: "The area is colorful."

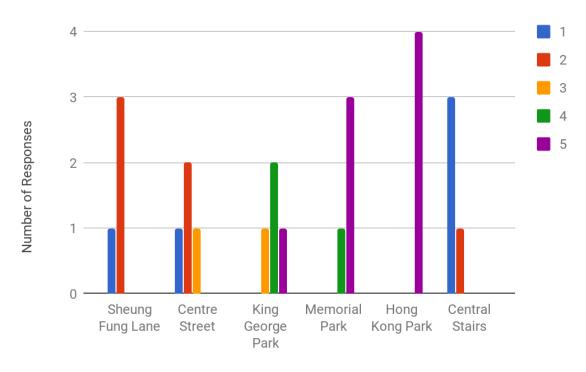


Figure 43: "There is a sufficient number of trees and plants in the area."

Appendix C: Marketing

We developed a marketing plan using ideas from our brainstorming sessions. We decided to implement a poster campaign based on psychological findings about human behavior. The advertisements were created with Adobe Photoshop and incorporated photos of Sheung Fung Lane. We showcased one poster every three days and three posters in total. Each poster added more information about the event, so that individuals would need to look at all three posters in order to get all of the information about the event. The posters were switched at night to avoid residents noticing and associating the posters with us. We hung two copies of each poster on a light post, one facing each direction, so people walking up or down the lane could view the advertisement.

The reasoning behind the design of the poster campaign is the following:

Based on knowledge of the community provided by our sponsors, we determined that the community around Sheung Fung Lane displayed a low readiness to participate in activities around the lane. We therefore did not have confidence that traditional advertising tactics would be effective in engaging the community.

Our intent was to increase the readiness of individuals who live around Sheung Fung Lane to participate in our event. We described these residents as able, but not willing to participate. We also determined that the residents living around the lane were generally precontemplative about the event, due to its lack of advertisement.

In order to increase the readiness of the community, we designed a method that would build interest in the event through absurdity and confusion. It was our intent to create images of the lane that were so absurd that people would stop and look at them. We also intended for these posters to create a spectacle, which would provoke conversation among members of the

community. We hypothesized that the more confusion we created around this event, the more interested the community would be in the event.

We did not collect any data on how many people were affected by this marketing, however numerous people asked us during the event if we were responsible for these posters. The posters are seen in Figures 44, 45 and 46.



Figure 44: First poster of Sheung Fung Lane in Sai Ying Pun, Hong Kong. January 28th, 2018. Created by Jameson Moore.



Figure 45: Second poster of Sheung Fung Lane in Sai Ying Pun, Hong Kong. January 28th, 2018. Created by Jameson Moore.

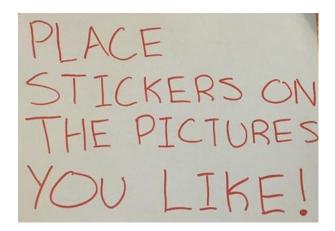


Figure 46: Third poster of Sheung Fung Lane in Sai Ying Pun, Hong Kong. January 28th, 2018. Created by Jameson Moore.

Appendix D: Design Activity

D.1 Protocol

For our design activity, we created an interactive atmospheric photo collage. We displayed 5 different atmospheres on separate boards, with a total of 9 pictures per board. The photos included both features and activities from public spaces around the world. These boards were hung in the center of the lane on a rope that we attached in-between two light posts. The boards were attached to the rope in a way that allowed them to rotate, so people could view the images on both sides. Two people ran the activity at all times. To get people to participate, we asked pedestrians as they passed by if they were interested in participating in our design activity. We had a sign written both in English and in Chinese. These signs are shown in Figure 47.



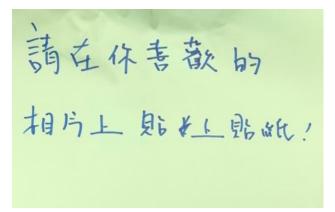


Figure 47: Photos of the signs in English and in Chinese telling participants to put stickers onto their favorite picture. February 22nd, 2018. Both photos taken by Hannah Yeung.

A set of 6 stickers were given to each participant. Participants were asked to affix these stickers to their favorite images. Different colored stickers were given to participants based on their perceived age. We used the age guidelines in our observation protocol to differentiate between age groups. Adults were given blue and magenta stickers, elderly were given pink, teens were given gold, and youth were given orange.

D.2 Results

The event took place in Sheung Fung Lane from 10:00 AM to 6:30 PM. In total, elderly placed 172 stickers, adults placed 447 stickers, teens placed 72 stickers, and youth placed 150 stickers. Overall, 841 stickers were placed by all age groups among the five different atmospheric boards. Graphical representations of these data are shown in Figures 48 and 49.

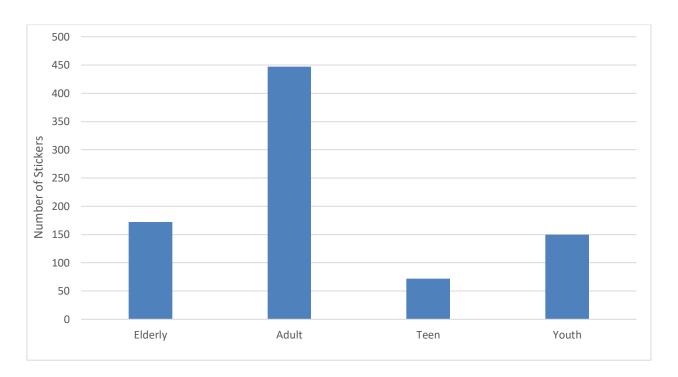


Figure 48: Number of stickers placed by age group.

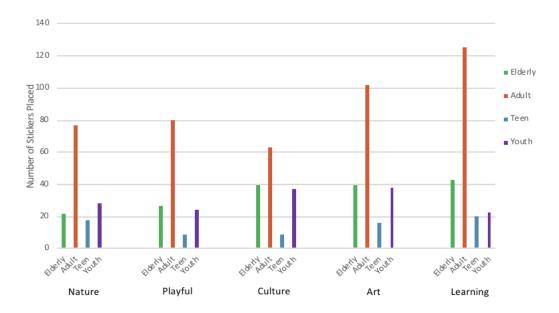


Figure 49: Total number of stickers placed on each atmosphere board separated by age group.

Each atmosphere board was documented and is the basis for the results. The photos of each atmosphere board, taken directly after the event finished, are displayed in Figures 49, 51, 53, 55, and 57.

The total sticker count was transcribed from these images into Excel. The following graphs, sorted by atmosphere, demonstrate the number of stickers on each image.



Figure 50: Photo of the nature atmosphere collage labeled by photo. February 22nd, 2018. Taken by Jameson Moore.

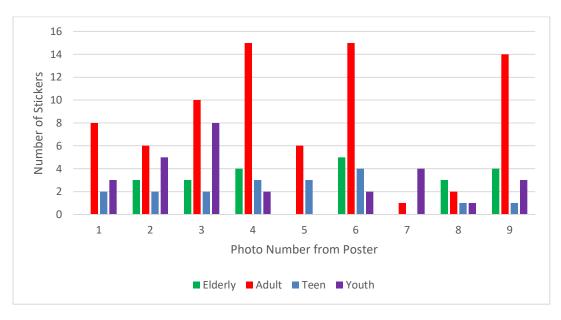


Figure 51: Total number of stickers placed on nature atmosphere board separated by photo.



Figure 52: Photo of the playful atmosphere collage labeled by photo. February 22nd, 2018. Taken by Jameson Moore.

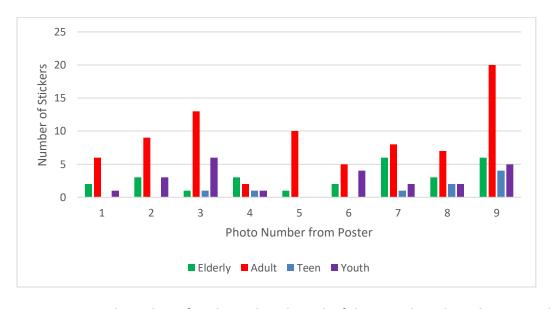


Figure 53: Total number of stickers placed on playful atmosphere board separated by photo.



Figure 54: Photo of the learning atmosphere collage labeled by photo. February 22nd, 2018. Taken by Jameson Moore.

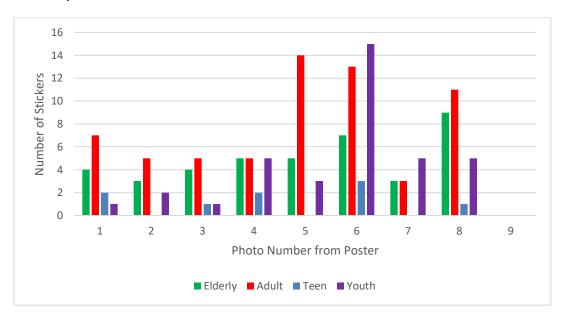


Figure 55: Total number of stickers placed on learning atmosphere board separated by photo.



Figure 56: Photo of the cultural atmosphere collage labeled by photo. February 22nd, 2018. Taken by Jameson Moore.

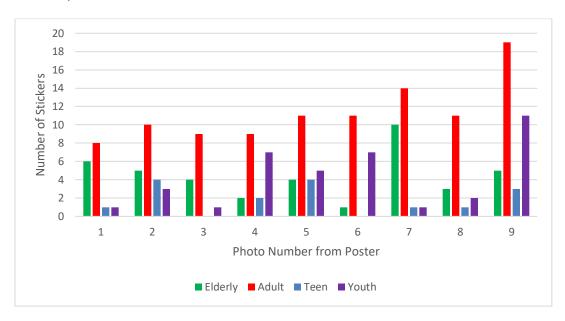


Figure 57: Total number of stickers placed on cultural atmosphere board separated by photo.



Figure 58: Photo of the artistic atmosphere collage labeled by photo. February 22nd, 2018. Taken by Jameson Moore.

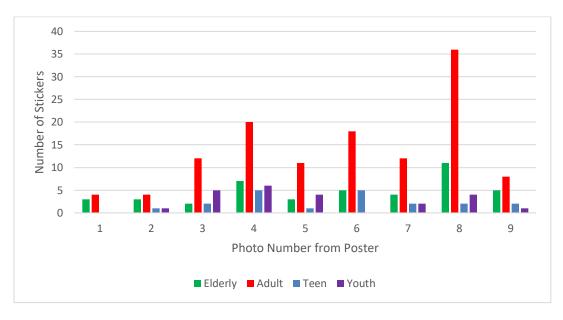


Figure 59: Total number of stickers placed on artistic atmosphere board separated by photo.

Appendix E: Further Literature Review

We conducted a further literature review of topics we deemed necessary to research in order to complete our project. These topics include a short background of Hong Kong, additional psychological principles, a detailed overview of urban planning and urban design, and specific case studies of public participation events.

Hong Kong

We investigate the history and present demographics of Hong Kong to form a working understanding of the city. The history of Sai Ying Pun is discussed, along with Sheung Fung Lane, the site of our project.

Hong Kong History

Hong Kong has a long history of changing rule over the past several centuries. Hong Kong was a part of the Chinese empire until 1842. China lost control of the island after the First Opium War, when Great Britain gained control of Hong Kong. The British implemented the Hong Kong Charter, the primary governing document of the territory under the Treaty of Nanking in 1842. Great Britain maintained control of Hong Kong for 153 years. Great Britain agreed to the peaceful return of Hong Kong to China, in the Sino-British Declaration in 1984. Then in 1997, Hong Kong returned to China as the first special administrative region of the People's Republic of China. The complex history of Hong Kong allowed it to develop its own unique ways of life, culture, and traditions (Tsang, 2007).

Present Day Hong Kong

Hong Kong is located on the southeastern tip of China and is comprised of Hong Kong Island, Kowloon, and the New Territories. Hong Kong has a total area of 1,100 square kilometers (Hong Kong Special Administrative Region Government [HKSAR], 2017a). Hong Kong Island and Kowloon encompass only 130 square kilometers, while the New Territories contain the rest. Less than a quarter of the land in Hong Kong is developed, and country parks and nature

reserves form much of the remaining regions (HKSAR, 2017b). Hong Kong has a subtropical climate where temperatures fall below 50 degrees Fahrenheit in the winter and rise above 90 degrees in the summer. Hong Kong receives an average rainfall of 240 centimeters per year. (HKSAR, 2017a; HKSAR, 2017b)

Hong Kong Population

Hong Kong is one of the most densely populated cities in the world according to Nowek (2013). The city has a total population of 7,336,600 people and a growth rate of 0.6% (Census and Statistics Department, 2017). According to HKSAR (2017b), the city has a population density of 6,780 people per square kilometer. The median age of the Hong Kong population is 43 (Census and Statistics Department, 2017). The Hong Kong Census determined that 73% of the population is between 15 to 64, 11% is between 0 to 14, and 16% is 65 and older. Significant national groups in Hong Kong are from the Philippines, Indonesia, India, and China (HKSAR, 2017b). Chinese and English are the official languages of Hong Kong. The government reports that 90% of the Hong Kong population speak Cantonese as a first language.

Hong Kong Government and Economy

Hong Kong is a Special Administrative Region of the People's Republic of China. HKSAR (2017b) writes that China regained control of Hong Kong in 1997 under the 'one country, two systems' principle. This principle signifies that Hong Kong retains its capitalist system, while considered part of communist China. The constitutional document of Hong Kong is the Basic Law, which ensures that the current democratic system of government remains for 50 years. Basic Law dictates that the rights and freedoms of the people are based on impartial law and an independent jury. The government of Hong Kong is comprised of a chief executive, a cabinet, a legislature of 70 seats, and a court system. The highest court in Hong Kong is the Court of Final Appeal. The official currency is the Hong Kong dollar, which in 2017 had an exchange rate of HK \$7.8 to US \$1 (HKSAR, 2017a). Hong Kong has the 8th largest trading economy in the world, known for its low taxation, free trade, and minimum government intervention (HKSAR, 2017a; HKSAR, 2017b). The country's GDP is HK \$2,489.1 billion with a growth rate of 1.9% and a GDP per capita of HK \$338,806 (HKSAR, 2017b).

Psychology

The 7 Forms of Power

In 1959, social psychologists John French and Bertram Raven published a paper defining the five types of power: legitimate, reward, expert, referent, and coercive. Legitimate power comes from the collected belief that someone has the formal right to make demands. Power from reward is the ability for someone to compensate for the compliance of another person. Power based on skill and knowledge is known as expert power. Referent power, also known as power from character, is the result of perceived attractiveness, worthiness, and the ability to command respect. According to French and Raven, this power is based on charisma. Coercive power, also known as punishment power, comes from the belief that a person has the perceived ability to punish others. In 1965, Raven added a sixth form of power known as informational power. Informational power is defined as the ability to control the information that others need to accomplish something (French & Raven, 1959).

Theory of Values

Shalom Schwartz initially introduced the *Theory of Basic Values* in 1992, defining the six characteristics of values throughout humanity. Schwartz argues that principally, values are beliefs, meaning that they are indistinguishably infused with feelings. Secondly, she defines values as desirable goals that motivate action. Values also transcend specific actions and situations. This feature distinguishes values from norms, which generally refer to situations or specific actions. Schwartz describes values as follows:

Values guide the selection or evaluation of actions, policies, people, and events. People decide what is good or bad, justified or illegitimate, worth doing or avoiding, based on possible consequences for their cherished values. But the impact of values in everyday decisions is rarely conscious. Values enter awareness when the actions or judgments one is considering have conflicting implications for different values one cherishes. (pg. 4).

Values are ordered in a hierarchical structure by relative importance. Actions of an individual are guided by the relative importance of their values. There is often a tradeoff between competing values, which influences the behaviors and attitudes of an individual (Schwartz, 1992).

Culture

Zimmermann (2017) defines culture as the identity of a group of people who share understandings and social behaviors. Individualistic and collective are two categories of cultures described by Hopper (2015). Hopper states that collective cultures place importance in relationships and interdependence. In contrast, people of individualistic cultures have more self-focused views that value independence rather than reliance on others. East Asian cultures are generally collective, while Western cultures are generally more individualistic. However, individuals have varying magnitudes of individualism and collectivism, and they are not stationary characterizations. Exposure to elements of other cultures may cause individuals to fluctuate in their views. Hopper writes, "individuals from two cultural backgrounds became more individualistic when shown images relating to an individualistic culture and more collectivistic when shown images relating to a collectivistic culture. In other words, as humans, we switch between cultural frames depending on the context."

Public Space

Current Trends in Urban Planning

Urban planning is the "design and regulation of the uses of space that focus on the physical form, economic functions, and social impacts of the urban environment" (Fainstein, 2016). According to Speck (2012), a common urban planning trend is to create more pedestrian friendly cities. Montgomery (2013) expresses that urban planning can be used to bring social equality to city streets, by designing for bikes and pedestrians instead of motor vehicles. Montgomery also advises cities to create more green space and to encourage the creation of close knit communities.

Tactical Urbanism

Tactical Urbanism refers to a city, organization, or citizen led approach to urban design using interventions to create long term change. This approach allows citizens and governments to create change by enacting small modifications to the urban landscape, such as adding crosswalks or extending curbs. The use of small term projects as a tool can be used to accomplish the following outcomes: inspire action, draw attention to shortcomings, engage the public, deepen understanding, gather data, encourage interaction, and test projects. Four types of projects are normally completed with tactical urbanism: demonstrations, pilots, interim designs, and long-term projects. An example of tactical urbanism is the Pavement to Plaza initiative which occurred in New York City. This project turned Times Square into a pedestrian plaza by reclaiming space from motor vehicles (Street Plan Collaborative, 2016).

New Urban Agenda

The New Urban Agenda is a United Nations publication adopted at the United Nations

Conference on Housing and Sustainable Urban Development on October 20, 2016. The United

Nations (UN) believes that the New Urban Agenda represents a shared vision for a better and

more sustainable future where all people have equal rights and access to the benefits that cities

offer. The New Urban Agenda lays out standards for planning, construction, development,

management, and improvement of urban areas. These standards are implemented along three principles: creating urban legislation for the UN and member states, getting the local community involved in the design process, and implementing urban planning projects.

Successful urban planning benefits the community by increasing jobs, livelihood opportunities, and quality of life (United Nations, 2016).

Elderly and Youth in Urban Design

Active Ageing

The World Health Organization [WHO] defines active aging as "the process of optimizing opportunities for health, participation and security in order to enhance the quality of life as people age." The roots of active aging stem from two words, active and health. WHO defines the word active as participation in social, economic, cultural, spiritual, and civic activities; not by participation in the workforce. Health is broadly defined as the state of physical, mental and social well-being. The term active aging, formerly known as aging health, was created to promote opportunities for elderly across the world to lead a fulfilling and stimulating life (WHO, 2017).

WHO proposed key policy changes to promote active aging around the world, split into the categories of health, participation, and security. They have a range of goals for elderly health across the world that start with affordable, quality healthcare and social services centered on the needs of older men and women. Their goal of participation focuses on the continuous learning of the elderly, concentrating on basic education and health literacy. They also encourage the promotion of informal work and volunteer activities for older people in their communities. Finally, WHO supports the protection of the elderly through laws defending seniors from fraud and abuse, and by supporting the elderly in moments of crisis (WHO, 2002).

One in three people in Hong Kong will be aged 65 or older by 2041. Knowing this, the Steering Committee on Population Policy has made it a major objective to ensure the active aging of elderly and middle-aged residents. Hong Kong has made efforts to create an age-friendly

environment by providing services such as the Elder Academy Scheme launched in 2007 to offer courses aimed at lifelong learning. The Neighborhood Active-Ageing Project also offers support networks in communities across Hong Kong that engaged over 200,000 people between the years of 2008 and 2011. Hong Kong has implemented a public transport concession for the elderly that reduces prices on public transport, which impacts the daily passenger trips of over 500,000 Hong Kong residents. The Hong Kong government has also devoted over a billion HK dollars to modernize elderly centers (HK Population, 2014).

Youth Initiatives

The United Nations (United Nations Department of Economic and Social Affairs [UNDESA], n.d.a) defines youth as individuals in the age range of 15 and 24 years who are transitioning from childhood to adulthood. The UN (2003, pg. 99) acknowledges that "adolescents who are healthy and happy are better equipped to contribute to their communities as young citizens." Societies have an obligation to form safe environments providing support, which encourages healthy behavior (UN, 2003). Communities are advised to establish youth organizations and networks promoting civic engagement (UNDESA, n.d.b). The organization states:

Against the backdrop of what is viewed as an increasingly individualized society, civic engagement is sometimes seen as a way for youth to strengthen connections with others in the places they live and in the spaces in which they interact, including online spaces such as social media, increasing their sense of social attachment and belonging. (UNDESA, n.d.b, p. 19)

Social and physical health are also improved through participation in sports and physical activities. Interaction and partnership with adults enable youth to develop leadership and life skills; according to the UN (UNDESA, n.d.b, pg. 147), "adults often play a key role as mentors and motivators in youth leadership programs."

Hong Kong administers services and programs supporting youth development. The Commission on Youth (YouthGovHK, 2017a) is an advisory body formed to counsel the government regarding youth concerns. According to YouthGovHK (2017a), the objectives of the commission include "promoting positive values among young people," as well as "encouraging their participation in voluntary and community work." The Hong Kong Government also manages over one-hundred Integrated Children and Youth Services Centres across the region. These services provide counseling and summer programs to disadvantaged youth (YouthGovHK, 2017b).

According to Hong Kong's Report Card on Physical Activity for Children and Youth, Hong Kong children lack physical activity. Overall, 21-40% of Hong Kong children participate in physical activity with their family. Only 40-50% of children participate in organized sports. Hong Kong schools provide 22% less time for physical activity than the world average. Sedentary behaviors, such as internet browsing, contribute to the lack of activity of Hong Kong youth. Approximately 40-60% of Hong Kong children use the internet for more than two hours, well above the world average (Huang, Wong, Sit, Sum, He, 2016).

Case Studies

In order to understand the variety of methods used to encourage public participation, we research case studies of public participation. These case studies provide information on how different organizations and entities approach public participation.

Community PlanIt

Community PlanIt is an internet platform developed by the Engagement Lab at Emerson College. The platform creates a framework that allows the government and citizens to discuss various development plans for the area using fun activities and games. The program has an introduction and seven different modules that explain the gameplay, ask questions, go through activities, and provide feedback for the user. The game utilizes missions to propel users to answer questions that give their opinions to the developers.

By completing missions and challenge questions, the user gets coins which are used to 'fund' projects in their local community. An image of the Community PlanIt interface is shown in Figure 60. A game normally lasts three weeks, with each mission taking one week to complete. A post game seminar is held after the game is completed to discuss the experience of the players. As stated by Thiel, "this platform seeks to 'make community-planning fun, while providing a context for learning and action'" (Thiel, 2017). After the game has been completed, the organizers of Community PlanIt analyze the data and publicize it for future community use.



Figure 60: Sample question on Community PlanIt (Engagement Lab, 2015a).

Community PlanIt is used in several locations. In Cape Cod, the goal was to gather community opinions on a wastewater management strategy. In Philadelphia, the program was used to determine how residents would like to change the transportation system. In 2015, Community PlanIt collaborated with the United Nations Development Program in Bhutan to gather community opinions about youth unemployment in the country, issues that come from this problem, and potential solutions. They targeted the age range of 15-26 years old, but all members of the community were encouraged to participate. The game took place over a 3-week period and focused on three main topics. The first topic, 'Work' focused on the experience of being unemployed. 'Learn' encouraged collaboration between the education

system and job market. Finally, 'Play' analyzed methods to promote interaction among young adults entering the workforce to increase job opportunities.

Of the 1,900 people who signed up for the game, over 1,100 were active players (Engagement Lab, 2015b). In total, these players logged over 29,000 comments on the various missions. This activity gathered data on current job trends, personal stories of unemployment, community opinions, and potential solutions. These data are being used by the United Nations Development Program to shape policy recommendations for the Royal Government of Bhutan.

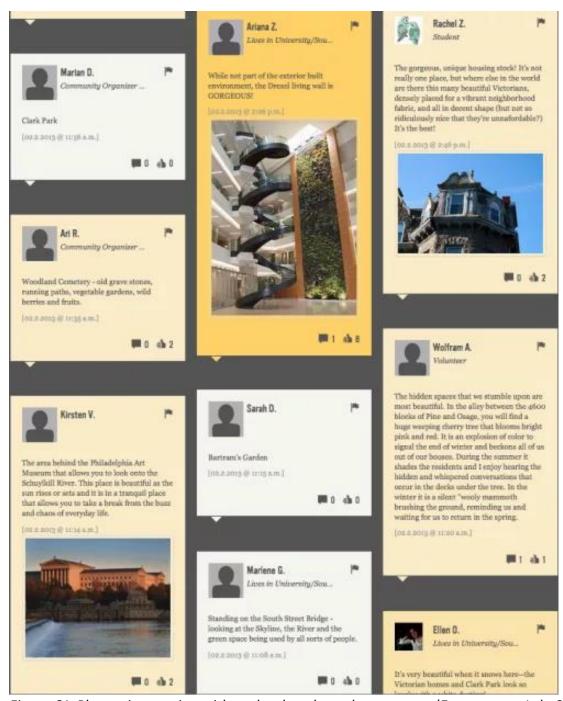


Figure 61: Players interacting with each other through comments (Engagement Lab, 2015a).

<u>Project for Public Spaces in Brooklyn and Los Angeles</u>

In Brooklyn, New York, and in Los Angeles, California, many low-income populations are not involved in urban planning processes because of work or communication issues (Project for Public Spaces, 2010). These populations also walk, bike, and use public transportation more than any other group. To combat this issue, the Project for Public Spaces created a series of tools to engage two pilot communities in each city for the redesign of transit facilities. The methods included assessment maps, rider experience surveys, and transit route mapping. They also included activities such as place-imagination [Figure 62] and modeling exercises [Figure 63] (Project for Public Spaces, 2010).

What activities would you like to do here?

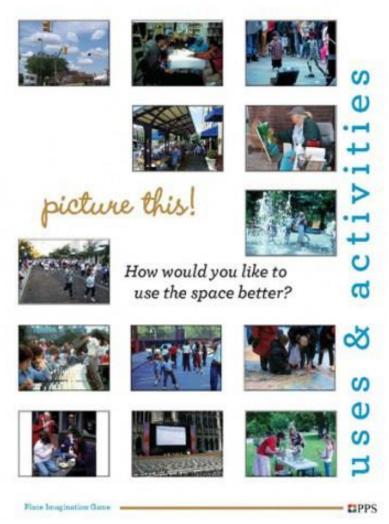


Figure 62: Place Imagination Game Sample Activity Sheet (Project for Public Spaces, 2010).



Figure 63: Modeling Game done by Project for Public Spaces (Project for Public Spaces, 2010).

These activities turned out to be a big success with the communities. They were able to gather data from a variety of people of different races, genders, incomes, ages, and cultures.

Appendix F: Demographics of Sai Ying Pun

The area of Sai Ying Pun is split into three constituencies; Sai Ying Pun, Centre St., and Water St. Sheung Fung Lane is located in the Centre St. constituency, therefore we focused on this area.

The Centre St. district has a population of 14,207 people. The primary ethnicity is Chinese, however there are significant populations of Filipinos, Indonesians, and Caucasians, who make up a combined 9% of the population (District Profile, 2017).

Residents of this district live almost exclusively in privately owned permanent housing, with only 16 residents living in temporary housing. The average household size in the Centre St. district is 2.3 persons, which is 0.4 persons fewer than the average household size of the greater Central & Western district. Residents in this district pay a median of HK\$ 12,000 per month in rent for a median area of 34 square meters. Compared to the larger Central & Western district, Centre St. residents pay approximately HK\$ 2,000 less a month for 7 fewer square meters of space. The median domestic household income of Centre St. is nearly HK\$ 8,000 below average for Central & Western (District Profile, 2017).

The Centre St. district is inhabited primarily by adults aged 20-64, who make up nearly 70% of the population. The elderly is the second largest age group, representing 18% of the total population. Young children aged 0-14 make up 8.5%, while older children aged 15-19 comprise the remaining 3.5%. Overall, the district has a median age of 45.3, only one year higher than the average of Hong Kong Island (District Profile, 2017).

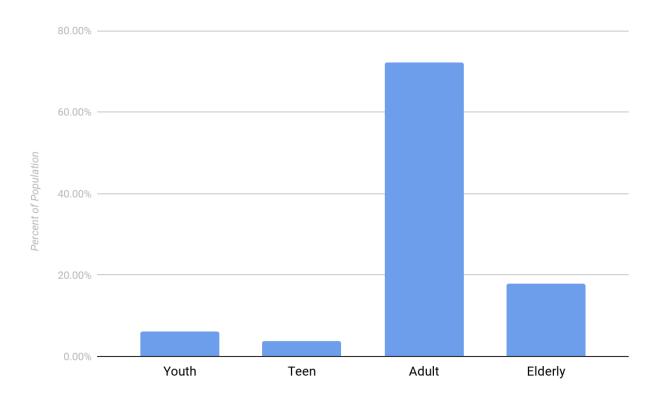


Figure 64: Graphical representation of the population of Centre St. district by age group based on the 2016 Hong Kong Census.

Sheung Fung Lane is surrounded by five apartment buildings, which contain a total of 1,000 units (Spacious, 2017a). Of these five buildings, the Wui Fung Care Home is comprised exclusively of elderly residents. Based on the information Spacious (2017a) gives, three apartment buildings offer moderately priced and sized apartments, with an array of single rooms and full family apartments. The Nova and the Wui Fung Care Home are exceptions. The Nova offers apartments that are significantly more expensive and larger than the surrounding buildings (Spacious, 2017b). To contrast, the Wui Fung Care Home does not disclose prices for their rooms, however the living conditions are very cramped. It is disclosed that approximately 100 of the 144 rooms available in the care home are government subsidized (HKSAR, 2018).