



EXPLORING AN APPROPRIATE NEW DIGITAL MEDIA AS A MEDIUM IN  
ENHANCING BANG LAMPHU AS VIRTUAL TOURISTS' ATTRACTION



By  
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A Thesis Submitted in Partial Fulfillment of the Requirements  
for Doctor of Philosophy DESIGN ARTS (INTERNATIONAL PROGRAM)

Graduate School, Silpakorn University

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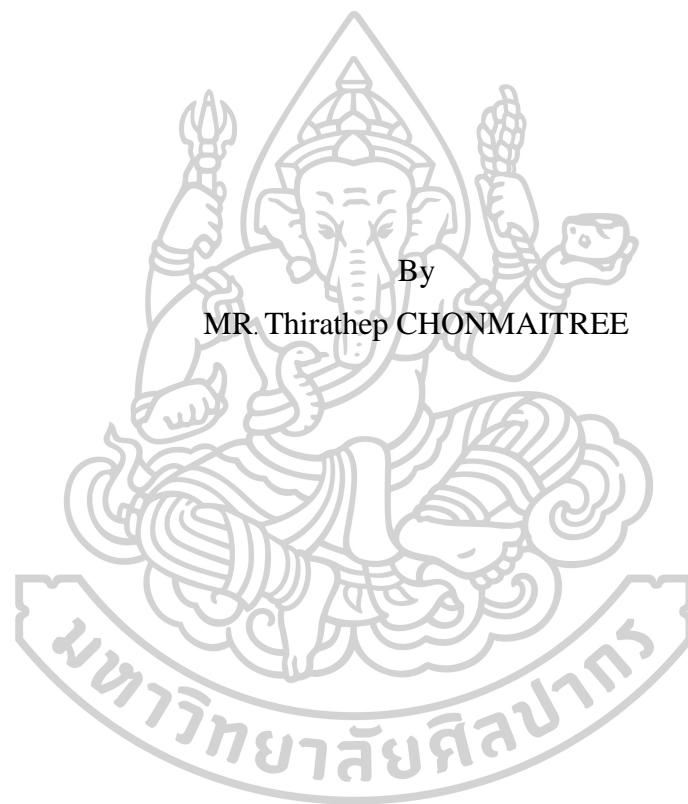
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Title                    Exploring an appropriate New Digital Media as a Medium in  
                              enhancing Bang Lamphu as Virtual Tourists' Attraction  
By                        Thirathep CHONMAITREE  
Field of Study        DESIGN ARTS (INTERNATIONAL PROGRAM)  
Advisor                Professor Eakachat Joneurairatana

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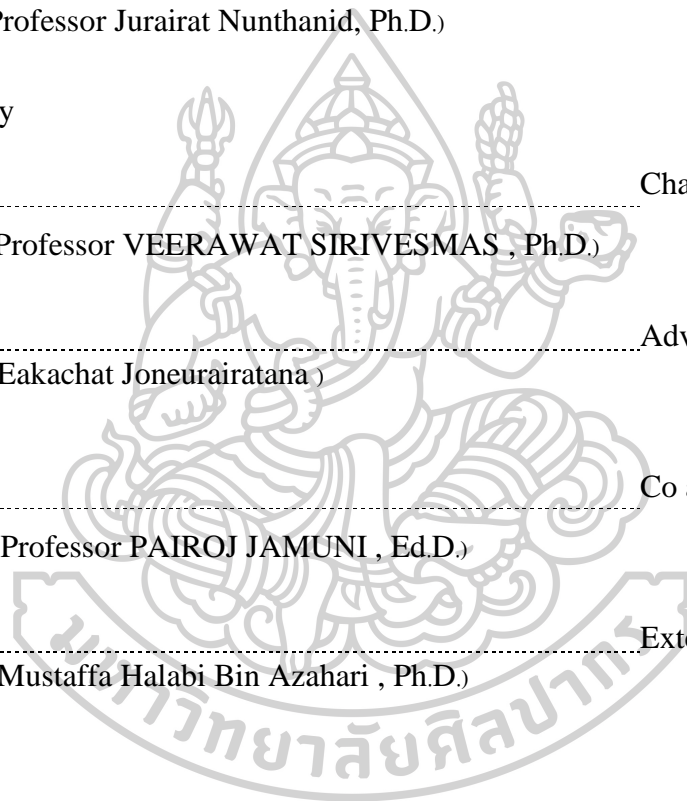
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MR. THIRATHEP CHONMAITREE : EXPLORING AN APPROPRIATE NEW DIGITAL MEDIA AS A MEDIUM IN ENHANCING BANG LAMPHU AS VIRTUAL TOURISTS' ATTRACTION THESIS ADVISOR : PROFESSOR EAKACHAT JONEURAIRATANA

Tourism is one of the fastest-growing industries in Thailand's history. There are lots of connecting industries that tie to tourism - accommodation, food and beverage, guiding, transportation, and so on. The international body comes to Thailand for its hospitality and service mind of Thais. Once the COVID-19 pandemic hit the global environment, the tourism industry gets hit the hardest. The interaction between tourists and tourist attractions was gone in an instance. Replacing physical tourism with virtual tourism can be difficult. The problem is finding the right medium to interact with tourists or users and create a connection with that place representation the most. The connection between tourist and physical tourist attraction is called a sense of place in tourism. It is how tourists connect with the attraction places through their senses and other components within tourism services. The objective of this research is to examine the case study area, explore the digital new media and develop the right medium in enhancing Bang Lamphu as a virtual tourist attraction. Can that connection be created through virtual web technology?

This research attempt to create that environment using web media, indicate the place through place identification, and connect them through web design layout and navigation. The method used is a photographic survey and in-depth interviews with local people and communities to obtain the mood and tone of the case study area. The information gathered has been processed and analyzed through design thinking process methods. Grouping the attraction place information to find the identity of the area in identifying the area through place ID. The photographic information has also been used for connecting with tourists alongside other media - panoramic photography, videography, and sound. Navigation design and layout design have been done in the minimal concept that can express the area without heavy graphical content. More media content expresses the area to connect with the visitor (tourist) in developing a connection between them. Making a pleasant visit is the goal of this research. Color photographs, video tours, and spherical panoramic turns into the most popular in connecting with visitors or tourists as the representative for the place. That interprets the sense of connection between visitors and the place at a higher result.

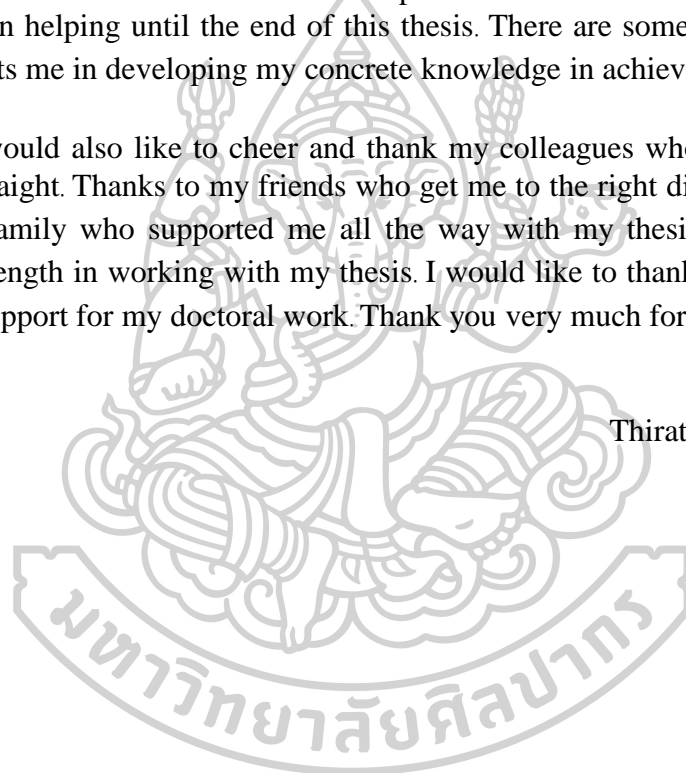
In conclusion, the minimal layout design and navigation design incorporated with web media and place identification can trigger the sense of place for the tourist who visits the place virtually. There are some improvements along the way in the mood and tone fulfillment of the virtual environment. Gaining the strength of the media production might be in future research for focusing on specific attributes and techniques used in each media. That can better specify the technique in connecting with furthering the sense of place.

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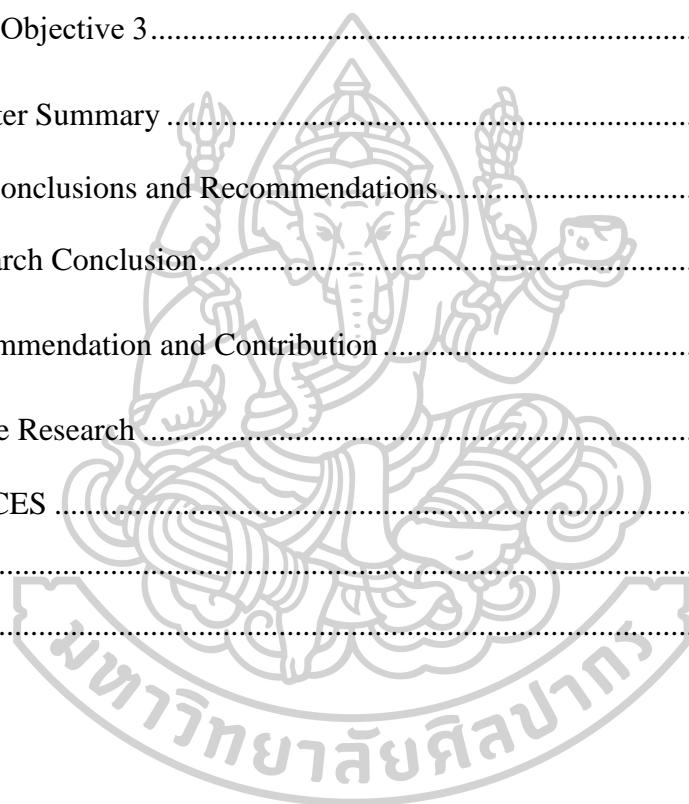
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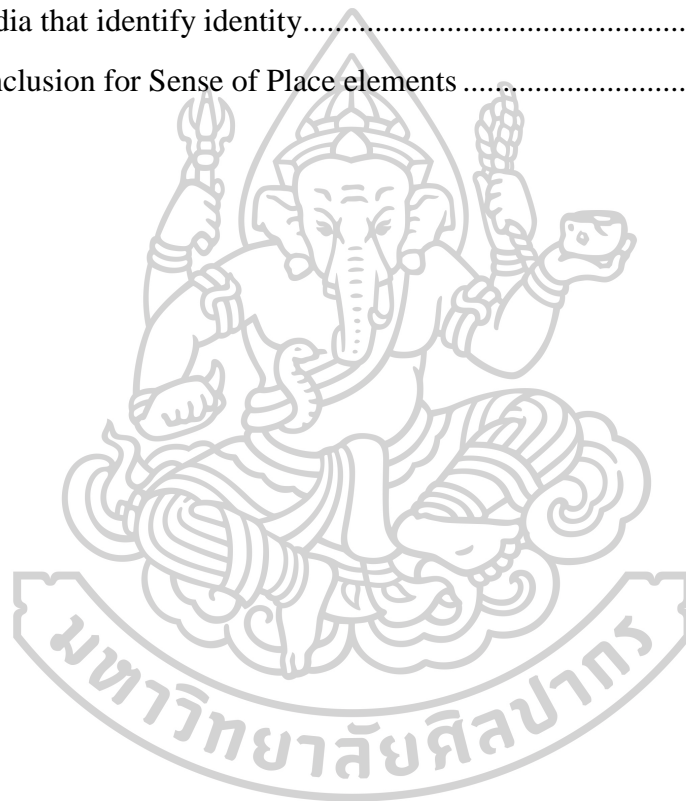
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## **Chapter 1 Introduction**

### **1.1 Background of the Research**

Thailand especially Bangkok has been a number one destination for tourist around the world. Most of the tourists came to Thailand as short visit for its true hospitality and culture of the people. Bangkok, the capital city of Thailand, has been one of a great destination for shopping, historical tourism and other type of tourisms for foreigners from all over the globe. For so many years, foreigners come to know and attract to one special Thai tradition - Songkran festival. Most foreigners know Songkran festival as Water festival. More and more people come to Bangkok and other location in Thailand for this particular festival. The influx of foreign tourists gets to know Songkran and Khaosan Road through these reasons. Far back in about 30 to 40 years in time, Khaosan road has been a destination for American army who came to Bangkok, Thailand during World War II. Khaosan Road became a place for them to stay and rest. That was when that particular group of foreigners knew and love Khaosan Road. As Pandamic has moved into the area, tourism has been decreased drastically.

As physical tourism has been halted by the pandemic. The moving of foreign tourist has gone from the area where most of Bang Lamphu population are foreigner. Some new generation of local people who have lived in the area ever since have moved away. The remaining group of local people are elderly and working generation. They lost the revenue from losing foreign tourist in the area. Some of them has changed their house into guest house in welcoming foreigners. The pandemic forces them to change its way of doing business. Online delivery for food industry is booming dramatically. Many businesses not only in Bang Lamphu area but also anywhere around the world has turned into online business more and more. Tourism

industry as in physical destination has suffered with no or less visitor from domestic tourist. Would online or virtual tourism change this pandemic situation?

## **1.2 Statement of the Problem**

Pandemic has halted the flow of foreign tourist from coming to Bangkok. The losing of revenue and broken business due to the lost of foreign tourist has significantly diminished the tourism economy in Thailand especially in Bangkok. In providing another channel of tourism economy in starting again need to investigate online possibility to deliver the best possible experience for the tourist. Having be able to reach out to tourist around the world in all electronic platform such as computer, smartphone, tablet and alike make this platform a great potential in delivering the tourism content to a great audience who might not has any chance in traveling physically. In gaining optimum experience in virtual tourism, sense of place is the heart of tourist exploration and tourism in attraction place.

Sense of place itself create the connection between tourist and place in the deeper level. This is important to tourist and the impression of tourism experience toward the place. The level of experience for tourist can be in different dimension that combined into a great sense of place within that one place. In virtual tourism, the exploration of this research would find some possible way to deliver different experience through digital new media.

In this research, Bang Lamphu has been selected as case study in seeking virtual historical sense of place. The result of this research can be a model for any other area in developing such the same sense of place in virtual tourism as in Bang Lamphu.

## **1.3 Research Objective**

1. To examine the fundamental characteristics of Bang Lamphu
2. To explore digital new media design by using the above fundamental characteristics for sense of place purposes



3. To develop an effective medium by using web media in enhancing Bang Lamphu as a virtual tourist attraction

#### **1.4 Research Question**

- 1) What are the fundamental characteristics of Bang Lamphu that can attract local and foreign tourists?
- 2) Why is digital new media by using the above fundamental characteristics can define virtual sense of place in Bang Lamphu as a tourist attraction?
- 3) How is the digital new media design can enhance in delivering Bang Lamphu as one of the famous virtual tourist attraction?

#### **1.5 Scope of Research**

This research will use Bang Lamphu area as a case study site. Exploration of Bang Lamphu in different aspects of the site will be its main historical architecture, its religion, its culture and tradition, its environment, its way of local life, and its future development and its migration of people. Each of the exploration can help researcher understand this area and identify the identity of the area along the story behind this historical site. Technology that is used to explore in this research is focus in web technology to represent digital new media as virtual space.

The limitation in this research is only for English speaking country without nationality barrier. Any tourists who can speak English regardless of the country they are coming from can be selected as the sampling group for this research. At the same time, the curriculum of this study uses English as a medium of study. Therefore, language of communication will be limited to English with tourists who can speak English only. COVID-19 Pandemic may breathe some barrier in finding sampling to test the prototype of this research.

## **1.6 Significant of Research**

As one of historical locations within Rattanakosin Island, Bang Lamphu transformed itself into the most talk about and most visited for tourists around the world, however, the identification of the area has not yet been defined. As historical representative in tourism, the identification of Bang Lamphu needs to be explored and investigated further in order to identify the uniqueness of Bang Lamphu in historical sense. There are some elements in each tourist destination that definitely shows and indicates the sense of historical tourism. In each area is also different and yet similar in some. The identity of each tourist destination should be unique and memorable.

In developing virtual sense of place, sense of place is at the heart of the communication between tourist and place. How tourist recognize and memorize the place for future travel is as important as making decision in revisiting the place. Place identity is the only small part for this sense of place research, however, place identity needs to be defined and used in recognizing the place in the future. The visual art elements is also an important part of the whole process of place representation in historical sense of the area. Therefore, identity of Bang Lamphu along with visual art need to be defined and develop in creating the same sense as in physical interaction between tourist and attraction place through virtual web space. Tourists can experience Bang Lamphu through virtual environment during the hardship period as the virus pandemic situated now. Hopefully, the virtual tourism can develop another channel as online business for tourism industry to evolve and adjust into the new economy and change the face of tourism for the future venue.

## **1.7 Research Hypothesis**

Can New Digital Media create sense of place in historical tourism?



## **1.8 The Overview of the Thesis**

The overall thesis is comprised of 6 Chapters. Chapter 1 is focused on the introduction and backgrounds of this research. This includes the introduction and backgrounds of the research, the statements of the problems, objectives, keywords, limitations and delimitation and the significance of the research. Chapter 2 is focused on the Literature on the niche of Bang Lamphu, Tourism, New Media, Digital Media, Web, Web Design, and etc. Chapter 3 is focused on the Research Methodology that is employed in the process of collecting data or information. The overall research data collection is employed by using Qualitative or Quantitative research approaches in the two phases of data collection processes. Chapter 4 is emphasized on the discussions of findings of first phase data collection processes. Meanwhile Chapter 5 is emphasized on the 2<sup>nd</sup> phase data analysis, and finally Chapter 6 is focuses on the conclusion and recommendation of the research and to fulfill the Research Objectives.

## **1.9 Definition of Research Terms**

### **1.9.1 New Media**

New media as defined by Dr. Muhammadali at University of Calicut that it is an interactive communicating medium over the internet in digital form such as social media, text, virtual environment, and other online formats. Internet and computer are required to access the new media. Characteristics of new media is immediacy to send information, flexible in handling many forms of information format such as text, photo, video, graphic, and audio, be able to handle the lack of space and time, interactivity, effectively spend, hyper textuality, and multimedia (N, 2011).

Mitra defined new media as something that can not specifically defined to be one or another. It is the combination of the many different medias and turns into one. It, therefore, can divided into 3 viewpoints - technology, cultural & social, and environmental viewpoints (Mitra, 2011).

The 5 characteristics of new media as discussed by Friedman in "The new media technologies: overview and research framework" that there are community,

collaboration, convergence, communication, and creativity (Friedman and Friedman, 2008).

New Media characteristics as defined by Lister et al in their book "New media: A critical introduction" that there are virtual, simulated, hypertextual, digital, interactive, and networked (Lister, 2009).

### **1.9.2 Digital Media**

Any media that transmitted in digital form of 0 and 1 and then translate into media as audio, video, text, or graphic using computer or digital equipment to display those media. There are multiple types of digital media. There are social media, audio, video, text literature and advertising (Maryville university, 2021).

Digital media according to Dalia Goldberg at Springboard.com gives definition that all media that transmit through screen using software package or websites. Format of digital media can be photos, audio, video, digital art, or even text (Goldberg, 2019).

In Rock Content blog, explained about type of digital media that there are 3 mains types of digital media. There are Earned, owned and paid media. Earned comes from communicated through person to person in online environment. Owned came from each company that owned that digital media. Paid is when user need to pay for spreading the media through online medium (Rock content writer, 2020)

### **1.9.3 Web Design**

Based on Techterms website, web design is the creating website process. It involves many aspects in completing one such as graphic design, content development and layout (Techterms, 2020).

Web design, on the other hands, for Interaction Design Foundation is the design on the website that show through online. The process involves user experience

and involves both for desktop browser and mobile including tablet as well (Interaction Design Foundation, 2020).

One important term uses at this time is responsive web design. OSWebdesign published several terms in web design as "25 Web Design Definitions You Need To Know" article said that responsive web design is the design of the web page with flexible of all web elements including, layout, graphic image, style sheet. The purpose of this concept is to create a flexible environment for all screen size in multiple different device (OSWebDesign, 2018).

Veronica Raducan wrote the definition in "19+ Website Layouts Users Won't Forget" as web layout is the structure of a web page that use pattern or framework to define it. It defines the clear direction of the web page flow within the site. The hierarchy of the elements also lay down and define (Raducan, 2018).

#### **1.9.4 Place ID.**

Place identity means what separated the place from other place. In other words, it defines the uniqueness of the place (Devlin, 2018).

Jianchao Peng gave definition of Place ID as in Proshansky (1978) that defined it as "those dimensions of self that define the individual's personal identity in relation to the physical environment by means of a complex pattern of conscious and unconscious ideas, feelings, values, goals, preferences, skills, and behavioral tendencies relevant to a specific environment" (Peng, 2020).

### **1.9.5 Visual Arts**

Visual art is the visual in nature when create the art pieces. There is photography, videography, film making, ceramic, sculpture, architecture, and crafts (Unboundvisualarts, 2021)

Visual arts are the form of art that create with expression and skill of artist to stimulate emotion. It includes photography, drawing, installation art, and printmaking (Britannica, 2021).

### **1.9.6 Photography**

In this research, photography means the process of creating digital image using electronic medium as smartphone or digital camera (DSLR). The photograph that is created can be as it is or passing through the digital process or retouch to create emotion or mood and tone to meet the research objective.

Jon Sienkiewicz gave definition of photography in "How do you define "Photography?" as the art and science of discovering and capturing consecutively (Sienkiewicz, 2018).

### **1.9.7 Black & White and Color**

Lauren Lim wrote about quality of B&W photograph in "7 Qualities of Stunning Black and Whites" that there are some qualities that make black and white great. First is composition. Second is expression. Third is distracting colors. Forth is texture. Fifth is shadows. Sixth is contrast between subject & background. Finally, seventh is high contrast light (Lim, 2020).

Nicoal Price wrote in "Color vs black and white photography - What makes sense and when?" that timeless is the first and foremost quality in black and white photography. In color photograph removing color would not be able to trace the period of that photograph. Color should be used when the relationship of color hue within the photograph expresses the story (Price, 2020).

Darren Rowse wrote "Why Black and White Photography?" explaining that there are some reasons why choosing black and white photography. There is versatility, No distractions, subtlety of tones and variety (Rowse, 2007).

Spencer Cox published an article called "The Three Elements of a Good Photo" addressing the three elements to look for in good photo - Light, Subject and composition. In composition, there are also simplicity, balance, breathing room and interconnectedness. All of these qualities can identify good photo (Cox, 2018).

### **1.9.8 Panorama**

Panorama in this research means the process of taking photograph in the digital tools to create wide and long image about 180 degrees in the area. It looks different in the single image. It should use specific software or application to view the image in gaining the panoramic effect.

Panorama means the way to stitch photograph together horizontally and vertically creates a wider format of photograph (Mansurov, 2019).

Shaw Academy wrote in "Panorama Photography" describing that there are 3 types of panoramas - Cylindrical panorama, Spherical panorama and little planet (Shaw Academy, 2020).

360 Cities wrote an article called "How to get started in 360 Panoramic Photography" that there are 4 types of panoramic photography. There is partial panorama, cylindrical panorama, spherical panorama and stereoscopic panorama (360 Cities, 2020).

Smith Chen wrote "types of panoramic photography" that there are 5 types of panoramic photography - inner-cylinder panorama, outer-cylinder panorama, inner-sphere panorama, outer-sphere panorama, planar panorama (Chen, 2011).

Alessandro Cantarelli categorized panorama photography in "Ultimate guide to panorama photography" that there are 3 types of panorama photography - virtual tour, vertical panorama and horizontal panorama (Cantarelli, 2020).

Nasim Mansurov said in "Panoramic Photography Tutorial" that there are 4 types of panorama photography - wide-angle panorama, 180-degree panorama, 360-degree panoramas, spherical panoramas (Mansurov, 2019).

### **1.9.9 Videography**

Techopedia defined definition of Videography as the capturing process of moving images with electronic media, for example, tape, DVD, hard drive and the like. It also includes the shooting process and the art of doing it. The process from start to finish in completing the video is also included. The modern camera with digital process also included as the new medium in this definition (Techopedia, 2020).

Victor Jupp gives the definition of Videography in Sage publication website that is the visual anthropology form in gathering, analyzing and displaying visual information audio and visual included as to participate in observational research method (Jupp, 2006).

### **1.9.10 Soundscape**

Nicholas Miller said in the article named "Understanding Soundscapes" that is the environment of sound that is interpret by each person around it. Each soundscape depends on activities that happening. The receiver or observer react to the sound basedon one's individual past history or experience of it (Miller, 2013).

### **1.10 Conceptual Framework**

The following figure 1 expresses the conceptual framework of this research which uses 3 elements - Place Id, Web Media and Web design to create sense of place in virtual web.

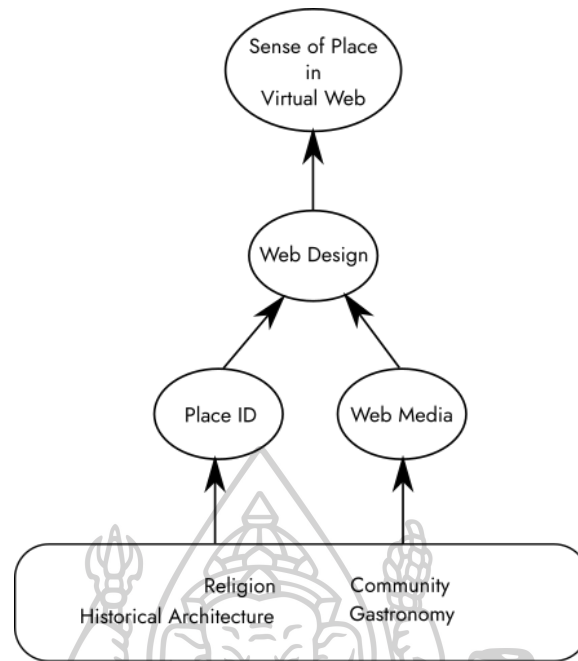


Figure 1 Conceptual Framework

### 1.11 Theoretical Framework

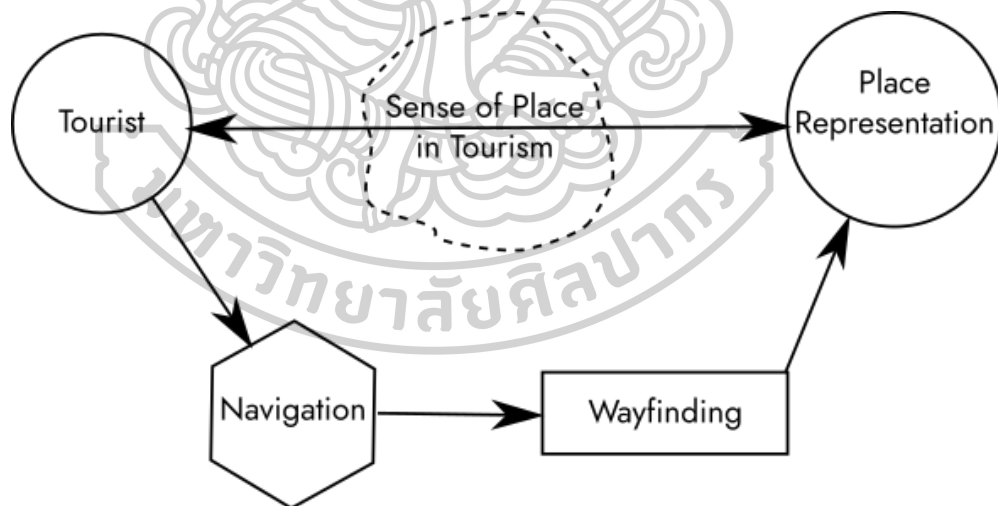


Figure 2 Theoretical Framework

The above figure shows the theoretical framework for sense of place in tourism as the interface of tourist and place representation creates sense of place within. Navigation and wayfinding direct tourist to experience the place itself.

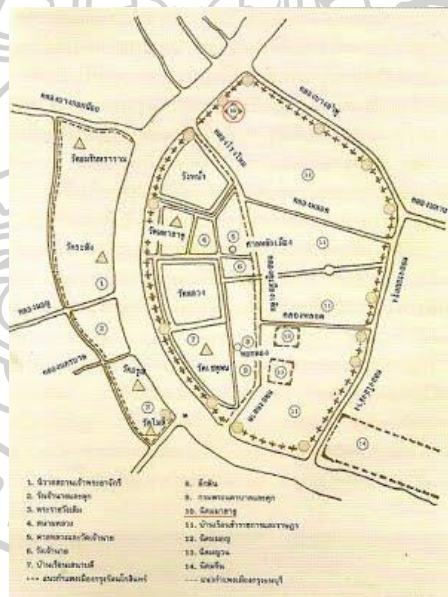
All diagrams in this chapter have been created by Thirathep Chonmaitree.



## Chapter 2 Literature Search and Review

### 2.1 Rattanakosin Island

Rattanakosin named as the center in historic for Bangkok. It housed many historical places such as Grand Palace, Wat Pho among many. It has long history far back in 14th century. During Thonburi as capital city Temple of Dawn or Wat Arun had been built. In 1782, Bangkok has been established as capital city. Fortification has been established to guard the city and now only 2 remains - Mahakan fort and Phra Sumeth fort (RenownTravel, 2021).



*Figure 3 Rattanakosin Island*  
Source: <https://bit.ly/3CMkVxr>

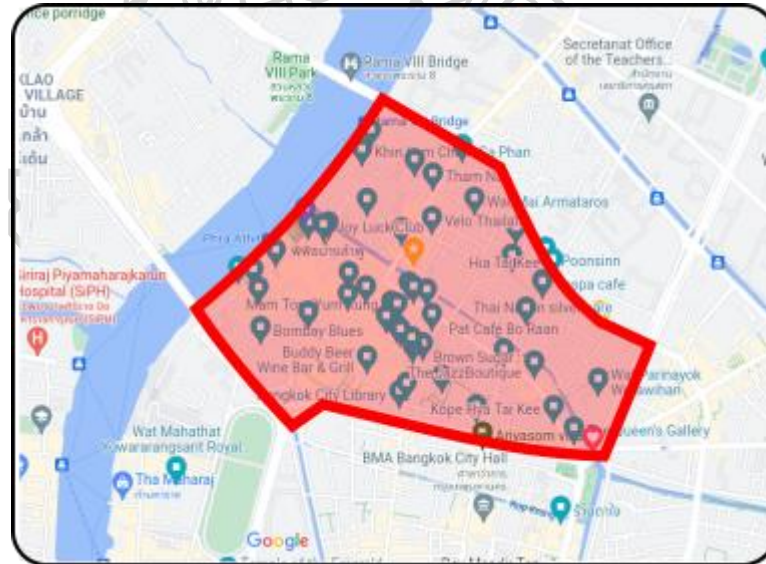
Rattanakosin website discussed about Rattanakosin island that it was established for Western and Chinese to explore and commute through the city with horse riding or walking for that matter. This first road brought the new established community on land in Rattanakosin island. In King Rama the 5th, the first city community design was established and the road was extended to so many more areas. European style bridge was also built (Rattanakosin, 2019). Silpakorn university library



resource said in Rattanakosin Data Center that in King Rama the 6th, the city was extended rapidly. The city was divided into different zone - Western zone in Bangrak, Chinese zone in Yaowarat, Industrial zone along the Chao Phraya River, Agriculture in the northern part of the city, and Thai zone in Bang Lamphu (SU Library, 2019). This Thai zone in Banglamphu area has been expanding ever since.

## 2.2 Bang Lamphu Area

Boundary of Bangumphu according to Surachai Rhunbunrord interview with Thai Health organization in an article titled “Bang Lamphu” A Living History by Donnaya Suvetwethin stated that the north direction reaches Bangkhunprom road. In the south reaches Ratchadumnoen Road. In the East reaches Phanfah intersection. In the west reaches Chao Phraya River, now turns into Santi Chai Prakarn Park as shown in the figure below (Suwetwethin, 2017).



*Figure 4 Bang Lamphu Area in Red*

Area of Banglamphu is covered from Klong Banglamphu through Chao Phraya River and Wisuthi Kasath Road through Somdet Phrapinklao Road along Ratchadamneon Klang Road. It has been a significant commercial area within Rattanakosin island. The name Lamphu means Mangrove apple tree that was planted

in that area along the Chao Phraya River - the main river in Bangkok. The last huge mangrove apple tree was gone in 2012 after the big flood in 2011. Banglamphu area comprised of many different ethnic groups - Mon, Islam, Chinese, and Thai. A pier was built once the canal called Banglamphu canal was excavated. Banglamphu, since then, became major trading area. The trade came from Thonburi along the river and also the land through Khaosan road. Thai Classical music and dance is one of the most valuable assets in Banglamphu (Suvetwethin, 2017).

Nayada Nakhasit said in an article titled "Persistence and gentrification in Rattanakosin, Bangkok" that globalization has impact and walking along with tourism. Moving of people from one place to another and educated the person with local wisdom or lifestyle is one kind of tourism. Accommodation has been one component of tourism. Transforming old house to accommodate tourist is in good progress for Bang Lamphu. The gentrification that is happening does not preserve local people, their lifestyle including heritage resource that can be a valuable asset for experiential tourism (Nayada, 2010).

Gentrification is an article by Monsicha Bejrananda. She discussed that this phenomenon of changing in accommodation for the better that drives local people away from its location has been around for so many years. The better accommodation attracts a new group of residence with new lifestyle that changes the view of old town perspective. Once local people move out so as their lifestyle and its consequence of increasing in the cost of land and housing. This method has been used in city development and planning by most government policy (Bejrananda, 2007).

Banglamphu image is a research from Naweepahb in her Master degree from Department of Architecture said that foreigners can remember street and route much better than Thai. Thai, on the other hands, tends to remember place, location or attraction better. Therefore, in getting tourist attention or gaining good experience, develop activities or impressive physical appearance of attraction or transportation can get a better memory and experience for tourists (Taksayos, 2014).

### 2.3 History of Bang Lamphu and Bang Lamphu Canal

An article called “Back to the past of Bang Lamphu canal” through Manager Online discussed about Klong Bang Lamphu as one main canal passing through Bang Lamphu area. It used to be a commercial canal where most people from Nonthaburi and Thonburi sailing their boat to sell fruit and vegetable. The canal named after what area or attraction place it went through. For example, if the canal passes through Bang Lamphu, they called it Klong Bang Lamphu. Nana market was one of the famous markets in the area with lots of delicious local menu. After the market was gone, the Nuevo city hotel was built. Then, the road was more convenient. When Bangkok Municipal department created the water blockage from Chao Phraya River, water pollution was developed. (Manager Online, 2017)

Touch Bang Lamphu, Historic Life Style discussed in Good Life Update that Bang Lamphu is a location for most royal family of King Rama the 4<sup>th</sup>. It is a famous area for commercial, tourism and religious places. Phra Sumeth fort is one of the two forts in Rattanakosin era surrounding with Santi Chaiprakarn park and next to Chao Phraya river. It is located next to the beginning of the Bang Lamphu canal. Duriyapranee is Thai classical music school ever since King Rama the 5<sup>th</sup>. It has served Chakri Crown for a long time. Bowonniwet Vihara temple was established in King Rama the 4<sup>th</sup>. It used to call “Wat Mai”. There is exquisite wall painting inside the main Vihara (Prominent Hall). Thai Nakhon is the Silverware store from Nakhon Srithammarath province. It is an old store for Silverware. Pipitbanglamphu is a museum for Bang Lamphu area. It hosts all information about Bang Lamphu lifestyle, culture, communities, and tradition of Bang Lamphu in the past. (Goodlifeupdate.com, 2018).

## 2.4 Historical Architecture Places

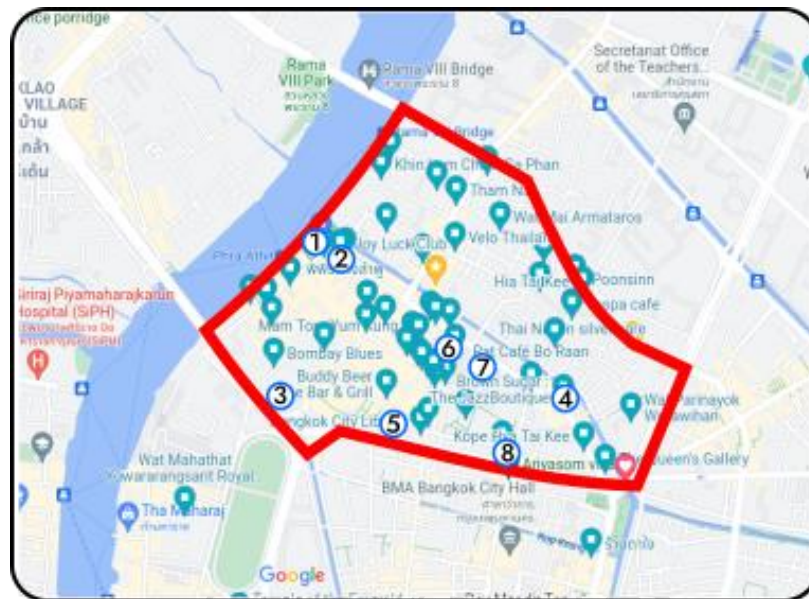


Figure 5 shows Location of Historical Architecture

### 1) Phra Sumeth Fort

Ministry of Tourism and Sport wrote about Phra Sumeth Fort in an article of the same name as one of the two forts from King Rama the first. It was built in hexagonal shape. This has been registered as National Heritage place in Thailand. King Rama the fifth had restored and repaired for a better condition. The surrounding has been established as a public park called Santi Chaiprakarn park. Santi ChaiPrakarn pavilion has also been built for Royal tradition. With comfortable condition and easy to access, it has been a good place to conduct all kind of activities like music, theatre, aerobic exercise, and so on. Lumphu trees had been growing around this public place. The last lumphu tree was here until the big floor happen a couple years back. The new generation of Lumphu tree has been grown around here to replace the old one. It will be protected as a symbol of Bang Lamphu. (Ministry of Tourism and Sports, 2019).

## 2) Pipitbanglamphu

Pai Duaykan wrote about Pipitbanglamphu that it is one of the landmarks in Bang Lamphu. It is located near Phra Sumeth fort along Bang Lamphu River. It was once used as Printing house of Kususapa or Department of Education. This was the first Printing training of Thailand in King Rama the first era. The building was renovated by keeping the wooden building in the back and recreate the interior for museum exhibition. It was built with universal design and equip with multinational tools for international audience to the museum. (Duaykan, 2019)

## 3) National Gallery

The design of this National Gallery building was mimicked from Birmingham factory in the UK. It is neo-classical architectural style. May of late King Bhumibhol painting have been housed here. Priceless painting is owned by this gallery (Theeraphong, 2019).

## 4) Siam House

Siam House Group explained that Siam house is an old colonial style house in the King Rama the fifth period. It locates in Bang Lamphu area and right at the Bang Lamphu River bank along Phra Sumeth road. At the moment, it uses as wedding location and restaurant. This colonial house ages around 180 years old. (Siam House, 2019)



## **5) Bangkok City Library**

Bangkok City Library explained about its building and background due to the identification of Bangkok as World book Capital 2013 from UNESCO. That was how Bangkok City Library was born. Learning City is also a Bangkok policy to turn Bangkok into learning hub and reading city. It subsidized a building from Royal property along the Ratchasumneorn road which were built during King Rama the ninth era along multiple purposed building along Ratchadumneorn road. Its architecture is in Neo-Plastic style. This building is also preserved for its style. (Bangkok City Library, 2019)

## **6) Museum and Library of Abbots of Wat Bowonniwet Vihara**

Aejang Laktae wrote an article title “Library of Wat Bowonniwet Learning center that Buddhist should see” explaining that previously, Manusayanaka Vitayathan Building used to be study hall for Bowonniwet school. Once The high buddhist abbot had reached 8 rounds of his age, the renovation of the building in turning the building into Museum and Library had begun. It was built in King Rama the sixth which had influenced from the west. Its architecture is similar to the western Christian church. Its gothic style erects dominantly within one prominent Buddhist temple. (Laktae, 2019)

## **7) Baan Khun Cherd**

Phusit Intaratud wrote “Khun Cherd Viriyapanich’s Residence” described that European style house at the corner of Wanchart intersection is owned by Khun Cherd Wiriyaoanit. This architecture is dominant with baroque pediment. Luang Pichaibundit, head judge of Thailand, is cousin of khun cherd whose house is in Victorian style on the back. Downstair of this house was a clinic by one of khun cherd son. (Intaratud, 2019)



## 1) Wat Bowonniwet Vihara

Renown travel wrote about Wat Bowonniwet that it is the Royal first-class temple of its all. Wat Bowonniwet Vihara is located in the old city of Bang Lamphu, Rattanakosin Island. The long and interesting history started off with Prince Mongkut as the first abbot who became King Rama the forth. In Wat Bowon, in short for Wat Bowonniwet Vihara, the area consists of Wat Mai, Wat Rangsee Suddhawas in the north and south accordingly. Later on, both temples joined and Wat Bowon was born. In most buddhist temples, it divides into 2 areas - Buddhavasa and Sanghavasa. The first is the area for sacred place of buddha where most buddhist can go and perform buddhist activities. The second reserves as monk residential area. In Wat Bowon also has Buddha Footprint or called Buddhapada inside the temple. (Wat Bowonniwet, 2020) Dominant structure of Wat Bowon is Chedi (Stupa) around 50 meter in height. It contains sacred relics. The scripture library is another interesting structure contains Buddha scripture called Tripitaka written in palm leaf. Ubosot is another interesting structure with an elegance wall painting. Others interesting structure are Viharn Geng and Viharn Phra Sasada, Bodhigara, Phra Tamnak Residences. (Renown travel, 2020)

## 2) Wat Chanasongkram

Thanapat Limhatsanaikul described Wat Chanasongkram that Wat Klangna is the former name of Wat Chanansongkram. It was established since Ayudhaya period. The renovate period and changed its name to Wat Tongpu was in King Rama I period. Later due to the victory to the war with Burma 3 times, King Rama I changed its name again into Wat Chanasongkram. Dominant in Wang Na Architecture is at Sema leaf. Main hall Buddha figure is still the same with once called Wat Tongpu. Wall painting is very exquisite with the history of Buddhism. Highlight of this temple is behind the Ubosot where laid 5 relics of the Head of Wang Na. Somdet Phra Pinklao Chao youhua is one of them. (Limhatsanaikul, 2020)



### 3) Wat Sangwej

Silpakhon University Library Resource Wang Thaphra described Wat Sangwej that its former name is Wat Samchin - Three Chinese established this temple. Later changed into Wat Bang Lamphu. King Rama the first renovated it and King Rama the third moved it to the current location and renovated. King Rama the fourth renovated Main buddha at the Ubosot and changed its name the last time to Wat Sangwej Wisayaram. In 1869, Wat Sangwej gulfed in flame with only Ubosot, Bell tower, Study hall, and Hor Tri remained. King Rama the fifth came to put out fire and renovated the whole temple. (Wang Thaphra Library, 2010)

### 4) Wat Sam Phraya

B. Colby Jennings wrote about Wat Samphraya that Wat Sakbang or Wat Bangkhunprom is the former name of Wat Sam Phraya. It was assumed that this temple was established in Ayudhaya period. In King Rama the third, three Phrayas from Raman had newly established this temple and gave it to King Rama the third named it Wat Sam Phraya. King Rama the third has rebuilt and renovated ever since. (Jennings, 2012)

### 5) Wat Mai Ammatarod

Bangkok Smile wrote about Wat Mai Ammatarod that its former named is Wat Waramataram, later changed to Wat Ammatarod. Most local called it Wat Bang Khunprom alongside Wat Bang Khunprom Nok (Wat Intaravihara). In 1917, officially changed its name to Wat Mai Ammatarod which was really greeny with lots of trees. The popularity was with sacred object. (Bangkok Smile, 2020)

## 6) Wat Tritossathep

This temple was built during King Rama the forth. He built it himself instead of his son who passed away earlier. Its named at that time means three gods built this temple. This temple established with granite and marble. The interior of Phra Ubosot is tapestry and Lai Thai. Relic contains in Ubosot. (Wilson, 2021).

## 7) Wat Iam Worranuch

Manager Online wrote about Wat Iam Worranuch in an article called “Walking along for 11 incredible at Wat Iam Woranuch” that Wat Iam Woranuch is a small temple at Bangkhunprom intersection. This temple was built before 1899. There are 11 sacred figures in this temple. They are Luang Por Phra Bangprasitthichoke or Phra ebang, Luang por sarapatchang, Phra Siwalee, Phra Potisath, Buddha Jedi Parinippan, Luang Pu Tuad, Phra Prom, Phra Ganesh, Luang Puu Archiwok. That is to name some of them. (Manager Online, 2013)

## 8) Wat Parinayok

B. Colby Jennings said about Wat Parinayok that Wat Parinayok was built in King Rama the third. Chao Phraya Bodin Dhecha built this temple based on his faith. At that time, its name was Wat Prom Surin. He was renovated and continued to build this temple. He died later on and King Rama the third has renamed the temple to Wat Parinayok as the pledge for his own Parinayok. (Jennings, 2012)

## 9) Chakkrapong Mosque

“Know Chakkrapong Mosque: The first mosque in the Grand Palace district” was an article described about Chkkrapong Mosque by MP-Muslim that Chakkrapong mosque is the first mosque in Phra Nakhon district or in the Grand Palace area. It was

built since King Rama the first. Imam Sutee said that people around Chakkrapong mosque are Tanee muslim from Pattanee in 1786. King Rama the first gave the place in the north to the muslim workers near Wat Chanasongkram. Most of the goldsmith worked in the Grand Palace. After that, they built mosque called Tongpu mosque at that time and renovate in King Rama the third. The new mosque combined Persian architecture with the modern style architecture. It located at the Chakkrapong road as the name of King Rama the fifth's son. The art at the mosque was exquisite and used for Imam to explain about the religion. In 1941, There was 2 big clocks that was first used in Thailand. In 1964, King Rama the ninth was said to translate and publish Al Kuraarn. Mosque becomes popular in the present time with the help of internet technology. Indonesian and Malasian comes for pray on Friday. (MP-Muslim, 2019)

#### **10) Baan Tuk Din Mosque**

Trawell wrote about Baan Tuk Din Mosque that Baan Tuk Din mosque is the old mosque in the Ratchadumneon road right behind Ratchadumneon buildings. Baan tuk din mosque built with art of Muslim. It is very difficult to see during the day from surrounded building. (Trawell, 2018)

#### **11) Chao Por Nuu Shrine**

Erawan group wrote about Chao Por Nuu shrine that at the edge of Bang Lamphu bridge, one shrine stands dominantly near the bridge and river bank. Chao por Nuu shrine is one sacred place in Bang Lamphu. Once there was a buddha figure found in the Bang Lamphu canal. Archeologist believed that it is in the elementary period of Rattanakosin era. In 1960, there was fire burning Durian market. Nana market which is very nearby did not catch fire. Locals believed that angle helped them from fire. Then, this angle named as "Chao Por Nuu". On November 29, 1981, another fire burned down the cinema near the Nana Market. Chao Por Nuu helped turn the

wind around again. Nana market escaped from fire by the help of Chao Por Nuu again. Then, there are a celebration in November annually. (Erawan group, 2018)

Kong Kungfu also discussed about this shrine that the shrine is Chinese architecture. There is a sacred ceremony every year in November from all believer domestically and internationally. Golden dragon, Lion show, and Orchestra showed at the ceremony. Donation came from all over the place who believes in Chao Por Nuu. (Kungfu, 2009)

## **12) Luang Chakjessada Shrine**

Somdet Phra Chao Nongnang Ther Chaofah Khromluang Jakjessada used to be in Wang Derm with Krom Phraratchawang Bowonmaha Surasinghanart. At present, the remain is Palace door. The previous palace settled there was demolished (Silpawatthanadham, 2017).

## **13) Somdet Phra Chao Taksin**

Pipit Thanarak wrPalace door. ote in “Somdet Phrachao Taksin, Phraya Pichai Dabhak, and Chao Mae Tubtim” that this shrine is most sacred for Bang Lamphu local for good luck. On December 28-29 every year, there is a celebration of Taksin coronation. From the ancient history, Taechew - Chinese group - migrated from China and resided here. Phra Chao Taksin was also Taechew so he was respected by Taechew. Chinese nationality who lives in Bang Lamphu has the most respect to this shrine. Phraya Pichai was Phra Chao Taksin's soldier. With his loyalty and honesty, it is what most chinese believe in. Chao Mae Tubtim is also another female respectful figure for Chinese descent. Shrine architecture is Thai monastery with Chinese decoration. One interesting decoration is the Taksin Symbol appeared in exchanging system in the past. Bat and flower decoration are also inside the building. Bat has long

life based on Chinese believe. Tiger decoration as the year of his birth is another decoration on the edge of the roof. (Pipitthanarak, 2018).

#### **14) Summary of Religion Place**

Based on the variety of migrant and workers during the city establishment, people brought in the culture and religion that make this historical area diverse in believes. Peaceful living among different believes has been formulated in this area of diverse culture and tradition. The understanding of each believes blends into the society and created uniqueness of this historical place in the present day. Sense of believe is quite strong and diverse. Wat Bowonniwet Vihara being the dominant and respectful temple in this area has been center of the Buddhist from everywhere. Chakkrapong mosque is also the first and center for Islamic believe. Other religious place has housed sacred figures and religious practice as the center of communities.

#### **2.6 Community Place**

Sukhumarn Thamwiset wrote an article titled “Multicultural City Development: A Study of connection between Bang Lamphu diversity and Bangkok urban development” described that it is important to preserve communities through architectural environment. Communities is the heart of the zoning within Bang Lamphu. People who live in the communities can pass on the culture and tradition through later generations. Letting people be part of communities and live on for their needs to be recognized. (Thamwiset, 2013).

Wimonsiri said in her research about “Community Participation in tourism resource conservation: A case study of Banglumpoo community” that age of people living in community has an impact on conservation of heritage site. In experiential tourism needs to have heritage conservation program implementing for reality in tourism (Hemthanon, 2014).

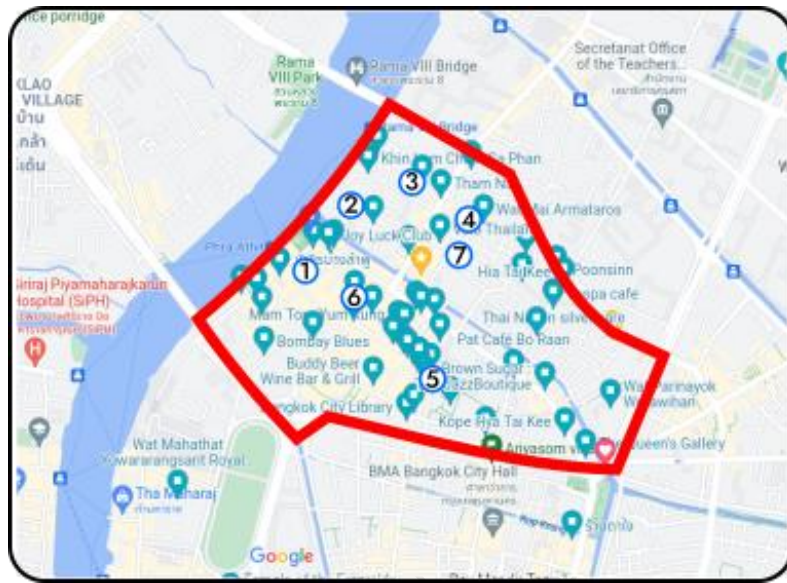


Figure 7 shows Location of Community places

### 1) Kientniwart-Trok Kaijæ Community

Pornpimon Chareonbut wrote an article called “KaiJæ-Kientniwat Satae” described that Trok is a old word from a proverb “Hi-So walks in trok, lay people walk on street”. In the past, the front of trok was situated Phra Nitithanpisek, Head Judgein King Rama the sixth. It was a three-storey house with Chicken direction sign on the roof just like in the western. That is what originated for Trok Kai Jæ (Kai Jæ is one type of Chicken). After the house was bulldozed, Channel 9 thai television came to rent in 1974. Trok Kientniwat, its name came from school of Derm Sanitwong Na Ayudhaya. At the present, the area becomes an asset of the royal with town house. Popular people were from this trok. Trok Satae was a well-known for Yawa beef satae. Trok Satae once was area for Muslim migrated from Indonesia. Housing was like Balæ for religious activities. Yawa male is good at gardening. Yawa female is well known for Beef fermented and Curry noodle, which they sold around Bang Lamphu through Sanamluang. It is the secret recipe and the best in the area. (Chareonbut, 2016).



## 2) Wat Sangwej Community

Pipit Bang Lamphu explained about Wat Sangwej community as famous for Thai classical music and performing art within family. They teach people from all over the area including international tourists who are interested. This community becomes a major area for cinema, singing performance, Likae performance, and Thai classical music house. Currently, Duriyapraneet is the only house that inherits Thai classical music as national asset. (Pipitbanglumphu, 2018)

Pipitthanarak described in T. Ngegchuan store that T. Ngegchuan was established by Mr. Tian Ngegchuan on the Phra Sumeth road. It was selling multiple useful items. The well-known items were necklace and bracelet. This place was the first to sell recording disc and record player. T. Ngegchuan was born on October 1889. He was interested in entertainment industry. He began his entertainment career by selling movie ticket. Then, he moved to accountant and movie controller. He sold movie and music books as a hobby from his own budget. In 1922, he finally invested in his new shop in Bang Lamphu. He received recording disc from Bigrim - one famous department store at that time. In 1925, T. Ngegchuan negotiated with foreign recorder alongside Sutthadilok store. Back then, it was the scratch on the wax plate through speakerphone. After finished recording, the wax box was sent abroad and master into recording disc with Rabbit record as trademark. His business became very popular and also gained a copyright recording from His Majesty King Rama the ninth. on March 1, 1956, King Rama the ninth gave Krut symbol to T. Ngegchuan as record player and record after its 34 years' operation. This was because of his dedication to Thai music industry and his majesty King Ram the Ninth's song. Recording disc slowly disappeared after tape recording era. T. Ngegchuan at the present has been changed to Mae Prapa Tidbit for 50 years now. The Krut and T. Ngegchuan information sign are still there though. (Pipitthanarak, 2018)



### **3) Wat Sam Phraya Community**

OK Nation wrote an article called “The story of nearby resident: Wat Samphraya and Wat Samphraya Community” that Wat Sam phraya is one old community. It is settled at the Baan Lan which is called Bang Khunprom and Wat Samphraya community. Dessert is one of their main careers, such as Lodchong and Triangle Sticky rice (Khao Tomnamwund). One bahts per 100 pieces of Triangle sticky rice was the rate of purchase in the past. Shaping as triangle of sticky rice was not that easy. It was how to put pressure to the corner of the cast to make a perfect triangular shape. This area used to dwell for leader such as Prapart Charusatient. Built in King Ram the first, Luang Wisuthyothamart - Mon Lord - gave a house to Wat Samphraya. At where Baan Lan used to be, there is Lan shop at Samsen 5 alley called Lan thong shop. (OK Nation, 2010)

### **4) Wat Mai Ammatarod Community**

Pipitthanarak described Wat Mai Ammatarod that Wat Waramataram was the previous name of Wat Mai Ammatarod. It was built in late Somdet Phrachao Taksin. It used to be called Wat Bangkhunprom. In King Rama the forth, the road was built pass through Wat Bangkhunprom. Therefore, Wat Bangkhunprom were separated into 2 temples - Wat Mai Ammatarod and Wat Intara vihara. (Pipitthanarak, 2018)

### **5) Bowon Rangsi Community**

Pipitthanarak discussed about Bowon Rangsi community in “Bowon Rangsi Community - The goldsmith as that it has been around for almost 100 years. It was established since King Rama the fifth. It is on the area of Wat Bowonniwet Vihara. This was the area for goldsmith from the palace. It is also an important gold leave area in Bangkok. In 1983, there was a big fire in this community, large amount of Goldsmith moved out of the community. Based on the study of Rattanakosin island,

Silpakorn university, Baan Pa Jam and Pajam's nephew were the only two remaining. Only pure 96.5%, 99.0% and 99.99% would be selected for gold leaves. To spread gold into very thin sheet needs to use 10-kilogram hammer. Most of the goldsmith workers are male. The competition from the factory turned the inherit of goldsmith fading away. (Pipitthanarak, 2018)

## **6) Chakkrapong Mosque Community**

Ikyuki Yuki wrote in “Chakkrapong Mosque Lifestyle in Bang Lamphu at the present day” described that this community was established in King Rama the second and the third period. This was the first muslim community in Phra Nakhon district, Bangkok. Population is Malayu Muslim from the southern part of Thailand. They are specialized in gold. They have been called many names - Trok Suroaw, Suroaw Tongpu which means Suroaw that is located near Wat Tongpu or Wat Chanasongkram, Suroaw Bang Lamphu. the name Chakkrapong mosque came from the name of the road near the location of the mosque. Chakkrapong mosque was mixed between Arab and Persian roman architecture, has 2 poles, dated at almost the 100 years old. The old mosque was built with wood. After the renovation, it still maintains the identity of the previous mosque as before. (Yuki, 2017)

## **7) Baan Panthom Community**

Walailuk Songsiri discussed about Baan Phanthom in an article called “Closing High Talented at Baan Phan” that Baan Phan thom is the name of community established in the beginning of Rattanakosin city. This community was doing Nielloware using black powder mixing with gold filling chemical and pour into pattern and scrubbed it until shine. Nielloware had been used as a gift to Louise 14th of France. Thai Nakhon is the only shop doing Nielloware. This nielloware is the famous craft in Nakhonsrithammarath province. Baan

Phanthom has been found in King Ram the fifth map and old document. Some other old documents stated as Baan phan or Baan Lor. In each area nearby, the density of niello-smith was different. (Songsiri, 2017)

Thai health described Baan Phanthom in “Bang Lamphu Community, Originated of protecting community youth” that youth become addict to electronic or something bad in the present day. Changing the attitude of youth to appreciate the communities is Gasorn Lumphu – Youth group who work in conserving Bang Lamphu communities. Pa Nid – an elderly local Banglumhu who establish this group said with concern that this group is a better way to gather youth in loving and developing their sense of belonging to this community. This project is supported by Thai Health organization. She sees that this project is good project bringing youth together in protecting the area from capitalism. It can prolong the community lifestyle as long as this group is there. This group has been established for 10 years already, Pea, one of its members said. He joined the group by chance without knowing the group before. He addressed the benefit of joining the group that is better for him to walk along the department store. He learns a lot in joining this group through lots of activities. He used to fight over the unfairness within the communities which made him proud of. Tai, another member of this group, said that she was proud of how she can protect the culture and lifestyle of Bang Lamphu. She can also learn a lot in arranging the community tour. She is proud of her community root. She can protect her beloved community from joining this group. This project would develop a new generation of youth to express themselves in the creative way and growing as the new generation to protect our society. (Thai Health, 2012)

## 8) Summary of Community Place

Surachai also talked about 7 communities in Bang Lamphu as followed: First, **Wat Sangwej** community is one of the oldest communities in Bang Lamphu. Another name for this community is called Bang Lamphu community. This community is known for Thai Classical music and Thai classical dance. Second, **Wat SamPhraya** community is known for its Lann leave art and triangle sticky rice. Third, **Kientniwart-Trok Kaijae** community is known for its living history, Khon embroidery. Forth, **Chakkrapong mosque** community is known for its neat goldsmith. Fifth, **Bowon Rangsi** community is known for gold leaves. Sixth, **Wat Mai Ammatarod** community is known for banana tree art. Lastly, **Baan Panthom** community is known for silversmith and Thom art by hand. (Thai health, 2017)

### 2.7 Gastronomic Place

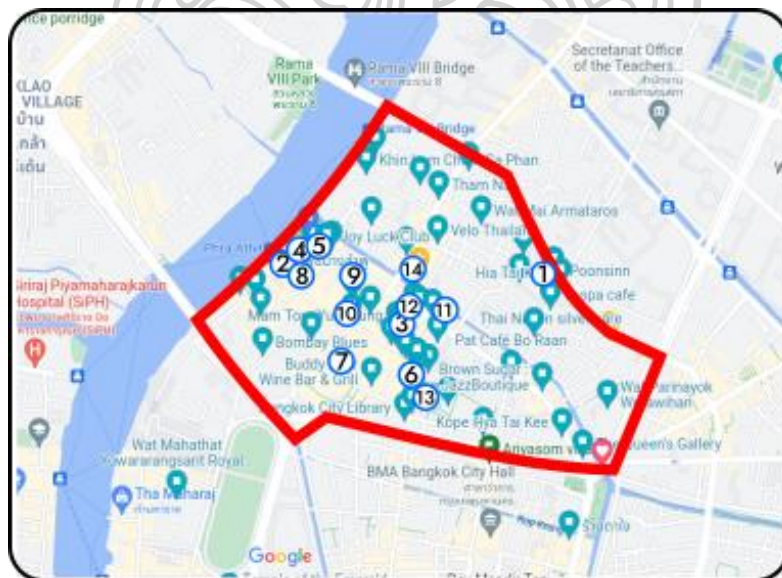


Figure 8 shows Location of Gastronomic places

### 1) Hia Tai Kee

Hia Taai Kee opened since 1952. It is a fabulous place for the tourist to sit and chill. The scene of the place is more like “Cheers” sitcom except that the drink is coffee instead. Its location is at the corner of Wisut Kasat Intersection. Local, mostly Chinese descent, uses as a meeting place in the morning. Food there can be range from simpler coffee through dim sum. Coffee and tea are in the old style brewed in the cloth socking in boiling water. Coffee is quite cheap in the Chinese style mixing. One main dish is khai krata - Egg fried in aluminum pan topping with onion, ground pork, Chinese sausage and green pea. Having it with Chinese style sandwich stuffed with Chinese style sausage (goon chieng). This is one of morning meal tourist should try.

### 2) Mae Chit Crispy Rice

Mae chit is a crispy rice with multiple topping. She has sold this for over 80 years in many generations. In the old time of Bangkok, last line off Monorail and the longest one was still running, Durian market, Nai Hom Huan Likae performance, Nana market, Rental boat, Talad yod were active and alive. Those were the image of the old time. It was a time when business and commerce was booming. Mae chit was one of many foods most people to come for in Bang Lamphu. It is a food you should not miss. The recipe is in the old style. Present day, the crispy rice has topping with coconut and sugar, minced pork with gravy, preserved cabbage stuffed with ground pork and vegetable, and chilli paste. If you stop by at Bang Lamphu, you need to give it a try.

### 3) Patonggo Cafe

Timeout wrote about “Patonggo Cafe” that Patonggo cafe is a Chinese fried food having with coffee or tea in the morning. This is a Michelin star restaurant with ice cream and regular Thai/Chinese food opened in 1968. The signature menu is the

patongkoo with ice cream on top. It was a nice change to have it right at the corner of the Sip sam hang street. (Timeout, 2019)

#### **4) Nopparat Restaurant**

Welcomeguide2thailand.com has an article named “Nopparat Thai Cuisine and Gallery” described that Nopparat is a fine dining restaurant originated from daughter of Pa Nid -- head of the Bang Lamphu community. Pa nid is also the head of Bang Lamphu Association. It has operated for over 30 years. Pa Nid's father used to open the clothing shop att his location in World War II. Booming economy period, his business was operated again after stopping for a while. The business was competed with several other businesses. Pa Nid decided to create a restaurant for herself. That is how the Nopparat Restaurant and Gallery was established. This place was designed by her daughter that combined gallery within. It keeps an original flavor. It is located right next to Karim Rotee Mataba opposite Phra Sumeth Fort. (Welcomeguide2thailand, 2019)

#### **5) Karim Roti Mataba**

Kankanit Wichiantanon wrote an article called “5 best Thai dessert cafes to get your sweet craving fix” that Karim Roti Mataba has been around since 1984. It was originated by Mr. Karim. He opened the restaurant because of flooding in Tha Phrachan. The idea of the restaurant came from his daughter. He improved the recipe based on the comment from his customer. It has 12 types of curry. The yellow rice with multiple type of protein is also in the menu. The restaurant is located at the corner opposite Phra Sumeth fort. (Wisetcholaharn, 2019)



## 6) Sane Cafe and Workshop

BKK Menu described about this shop in “Sane Dessert Cafe & Workshop” that one and only Dessert cafe in Bang Lamphu is Sane Cafe and Workshop. Both Thai dessert saler and Thai Dessert Workshop are here. Workshop is on Tuesday, Thursday, and Saturday. There are variety of desert with 10 - 12 bahts each. Set of dessert and drink can be ordered. The cafe located at Tanao road near Khaosan road. (BKK Menu, Wichiantanon, 2019)

## 7) Aar E Sar

Manager online wrote an article called “Aar E Sar Roddee. Muslim Delicious food” that Muslim food has lots of fragrance and spice with all the color. Aar E Sar is one of such restaurants at Tanao road. Yellow curry rice with stuffing is also the main dish for this restaurant. Meat Satae and Ox tail soup are some delicious main dishes here. It was open to the public for more than 2 - 3 decades. The recipe came from Indonesia by Somjit Sarapen - owner. She brought all the recipe from Indonesia. This restaurant might be difficult to find but once you found it would be one delicious meal to dine for. (Manager Online, 2019)

## 8) Khun Dang Vietnamese Noodle

“Reviewnowz” wrote an article called “Khun Dang Vietnamese Noodle with concentrate soup at Phra Athit Road” that operated at Phra Athit road for over 10 years is Khun Dang Vietnamese noodle by Khun Walaithip Apichayayodanun. This restaurant is well-known internationally. It opens for both lunch and dinner. The recipe came from Ubonratchathani province. The noodle is freshly cook every day. This restaurant is also vegan friendly. All Vietnamese noodle is rich with all the stuff you can get. One dish is full. (Reviewnowz, 2017)



## 9) Mae Prapa Tidbit & T. Ngegchuan

Khieng Makham wrote an article “Mae Prapa Tidbit: Heaven in the kitchen” and Apinya Nonnart wrote an article “Phra Nakhon Memoir: Bang Lamphu as in yesterday” to describe T. Ngegchuan building that housed Mae Prapa Tidbit. T. Ngegchuan used to be a music records store called Rabbit vinyl record. It was established in 1925. It widely known for Suntaraporn record by Kru Eua Sunthornsanan. H. M The King Rama IX was asked by T. Ngegchuan to record the music such as Near dawn, Falling Rain, H.M. Blues, and Love at sun down. This store can be remembered as the first to be in the musical history of Thailand. (Makham, 2018; Nonnart, 2016; welcomeguide2thailand, 2018)

## 10) Jira Yentafoe

“Foodnote.guide” wrote an article about “Jira Yentafoe” that it is a yentafoe with lots of mix fish ball. There are also some other noodles topping that can be added into the dish. The red gravy on top definitely elevates the flavor of the noodle with clear soup. The restaurant is one townhouse block. It is located right opposite Tang Hua Seng department store. (Footnote.guide, 2017)

## 11) Bowon Boiling Rice

Nana Review described “Wat Bowon Boiling Rice” that it is located opposite Wat Bowonniwet Vihara. It has been here for more than a couple of decades. The price is quite moderate. The atmosphere is simple and easy to be around. There are variety of food alongside the boiling rice. Tourist can visit Wat Bowonniwet late afternoon and have dinner here. (Nanareview, 2012)

## 12) Mae Siri Rice in Icy Water

Manager online wrote an article called “Mae Siri Icy Water with Rice: Mon recipe” that in the summer season, most Thai will think of Icy Water rice. Mae Siri is one of the famously originated recipes from Mon. Mae Siri Icy Water Rice initiated ever since King Rama the fifth until now. The recipe came from truly Mon. Every execution of the meal is delicate and meticulous. The cart store located at Kraisi Alley, right next to Krungthai Bank, Bang Lamphu branch. (Manager Online, 2018)

## 13) Tossakan Thai Curry House

Estopolis wrote an article “Tossakan Thai Curry house: Fusion style” that Thai curry has been well-known around the world. Tossakan Thai Curry house is one of such curry restaurants that cook only interesting Thai curry by famous and internationally known Thai chef. The restaurant located in Tanao Road, about 1-minute walk from Khaosan Road. The 121-year-old recipe came from Mansri Srithammarath - Royal teacher. There are only 3 famous curries - Massaman, Green curry, and Red curry - served in this restaurant. Massaman became the most delicious curry in the world in 2011 by Chef Uthai. This restaurant serves the same recipe as Chef Uthai did at the World Kitchen in 2011. (Estopolis, 2020)

## 14) Boke Kia

Sanook wrote about “Boke Kia Icy dessert Hailum style” that is one of Thai famous desserts during the summer time. Boke Kia comes out of the crowd is Boke Kia - Hailum recipe. This street cart located near Chao Por Nuu Shrine. Kantima is the owner of the store. She learned the recipe from China. It comprised of different things mixing together topping with icing and green or red caramel with condensed milk on top if you want. (Sanook, 2017)

## 15) Summary of Gastronomic Place

Historical variation in population and place brings in the diversity of gastronomy.

These differences can create opportunity in community for trade and leverage the economy.

Each kind of food indicates also history of the place and sense of belonging within community. This definitely represents the uniqueness of culture development and good place memory for tourist.

### 2.8 In Memory of Bang Lamphu

Manager online wrote an article called “In memory of Bang Lamphu” that what people remember Bang Lamphu as White fort, cheap sale, Khaosan road night life are not at all right. There is theatre, fresh market, delicious street food, and casino. Those are what originally born in Bang Lamphu would remember of. Know Bang Lamphu through the word of people who live there for a long time. What it was like in the past and how would it be like now.

#### 1) Bowonrangsri's people

Asso Prof. Srisak Wanlipodom – academic lecturer in History was born here. His birth place was near Wat Bowonniwet closed to Bowonrangsri canal. There was no soi, it either street or canal. Community back then was what called Ghetto where people know everyone well. These community has been around for 100 years. When it was King Rama the forth, most of people who lived there was related to the royal family. There were lots of palace around. It was mostly for Department of Fine Art worker living here. Bang Lamphu had lots of monorail passed. Life related to river mostly. Bangkok communities that used to have their own identity has been lost without sight.

## 2) Trok Suraow

Sujit Worraraksith used to live in Trok Suraow. He can still remember what it was like back then. It was a small alley through the Chao Phraya river. He is a generation of goldsmith in this community next to Chakkrapong Mosque. It used to be canal where he used to live. There was small boat selling fruit and vegetable. His ancestor, Muslim, came to Bangkok in King Rama the first era and worked as goldsmith in the palace. Back then, he used lantern to do the medallion. He was asked by the Bangkok Municipal to transfer his knowledge in goldsmith to the next generation. He was doing it for free but there were not too many new generation patients enough to finish practicing it.

## 3) Baan Phra Athit

Phra Athit road used to have palace on both sides. It has now changed into private organization, government department or even row house around. One of them is Baan Phra Athit which is now the head quarter of Manager Newspaper. It is still maintained its architecture as it is. It located at BowonSathanmongkul palace. Goethe institute used to rent office here and later sold off to private company - Manager newspaper.

## 4) Trok Satae

Khaosan road in the past used to be wooden building. It sold Icy smoothie with red and green sweet juice. That is why most people came to Khaosan road for delicious food. Chamaiporn Lothornkul is from this area. Her father came from Yawa, Indonesia migrating to work as gardeners as their great skill in trimming tree into all kind of shape. Another skill was ferment meat as Satae. Satae has to be soft and tender as of Yawa recipe.

## 5) Somjainuk

The most popular for student uniform used to be convenient store – Kai Khong Chom. It transformed into student uniform and grew its business around Bangkok. In 1955, the student uniform business started just like small department store. Then, it focused only with student uniform in 1972 (Manager Online, 2007).

## 6) Khaosan Road

Ministry of Culture laid out “History of Khaosan Road” that Khaosan Road is one of the famous roads in Bangkok. It is a gathering place for almost all foreigners from around the world. It located in Phranakhon district. Khaosan road is a road with lots of cheap guest houses, clothing sale, local Thai food, International pub and bars, and any other commercial things. It was built in King Rama the forth. It used to be the biggest rice delivery in Phranakhon district from the royal storage along city canal through Chao Phraya river and Bang Lamphu canal. Rice was sold to communities around Phranakhon district. Later, Hollywood movie set came for its movie shooting. They, then, rent lots of houses around Khaosan road for their resident. That was the originated of guest house in Khaosan road ever since 1985. Later, guest house gets to welcome backpackers from around the world. It became popular since then. After that, it becomes the hotspot for night life in Phranakhon district and Bang Lamphu. In 1990, Songkran festival or Water festival began in Khaosan road and gain its popularity ever since. It became the most popular in 1999 when the organizer came in and arranged the water festival with all the fun and provided the supply to the international tourists. (Ministry of Culture, 2015)

## 2.9 Aesthetic and Related Theories Review

### 2.9.1 Art as Experience - John Dewey

An educative experience, according to Dewey, is an experience in which we make a connection between what we do to things and what happens to them or us in

consequence; the value of an experience lies in the perception of relationships or continuities among events (Dewey, 1952).

Dewey looks at art as a part of life and social living. Everyone should experience art in the normal life. Artist provides art for everyone to experience. Art can also involve in many aspects of life activities (Goldblatt, 2006).

### **2.9.2 Art as Form - Clive Bell**

Clive bell believes that what trigger aesthetics emotion is the significant form. The significant form for Bell means the combination of art elements that create shape and form to influence the emotion. As emotion invoked by object or the combination of object, each individual has its own different in triggering by object (Bell, 1914).

Significant form for Clive Bell means two different things - one is the combination of art elements created shape and form; another one is the knowledge in historically significant for the art (Snyman, 1993)

### **2.9.3 Art as Expression - R. G. Collingwood**

The making art in Collingwood theory is to express the emotion related to the work of art. The expression come from how artist feels about the work. The main goal is to focus on the expression for the work of art point of view rather than the rational or cause-effect side. The expression can be physical and mental but for Collingwood, the expression is on mental part rather than physical part (Collins, 2014).

Art in Collingwood should come from internal expression that can be argued with the feeling of the work of art. The artist should be truly honest with connection between emotion and emotion expression toward art (Kemp, 2003).

### **2.9.4 Art as Organic (Organization) - Monroe C. Beardsley**

Monroe as Aesthetic theorist looked at art as music composing that every element in the music how big or small in music piece create the whole masterpiece. Monroe interprets that in one piece of artwork, every element big or small are equally



important in developing the artwork. All elements in one piece of art contribute to the whole aesthetics of art piece (Beardsley, 1965).

### **2.9.5 Shape Psychology**

Stephen Peate wrote in an article "Getting your brand in shape: The psychology of logo shapes" that there are 7 ways in using shape for designing logo. They are choosing the right shape through the feeling, combining the shape and color correctly, choosing shape based on industry, remembering the shape that show in the negative space, using typography wisely, combining different shapes correctly, and making it simple. Stephen also indicated that circle expresses positive, unity and strength. Square expresses power and strength. Triangle expresses security, speed, and energy. Horizontal line presents calmness. Vertical, on the other hands, represents strength. Spiral shapes present hypnotized. Organic shape represents comfort and warmth (Peate, 2018).

### **2.9.6 Minimalism in Website Design**

Kate Moran wrote about "The roots of Minimalism in Web Design" that the intent of minimalist web interface is to have clear, concise and simple interface (Moran, 2015).

Again "The Characteristics of Minimalism in Web Design", Kate Moran also mentioned that considering these 5 characteristics in developing minimalism web design. There are using patterns and textures that flatten, using limited color palette, limiting elements and features, increasing negative space, and Using typography dramatically. Use covered video or large background image, use grid layouts, keep global navigation as hidden, and use circular design are in the trend for minimalism of web design (Moran, 2015).

SteelKiwi Inc. published about minimalism in article "Best Practices for Minimalist Website Design" that the minimalism principles in web design are user-



friendly interface; no more than three colors at once; no excess detail. color transitions, shadows, textures; hidden navigation; experimentation with fonts; lots of empty space; no extra buttons (SteelKiwi, 2018).

Julia Zell wrote about “5 principles for minimalism in UX/UI as using negative space wisely, looking at typography as art, choose image intelligently, pick color combination righteously, considering consistency throughout the whole site (Zell, 2020).

### **2.9.7 Place ID Theory**

Kelly Morr wrote in 99design.com site with title "The 7 types of logos (and how to use them)" that there are 7 types of logos. They are Monogram logos (or letter marks), Wordmarks (or logotypes), Pictorial marks (or logo symbols), Abstract logo marks, Mascots, The combination mark, the emblem (Morr, 2019).

Zeynep Lokmanoglu said that there are 6 principles in logo design. They are simplicity, originality, versatility, scalability, balance & proportion, timelessness in the article "The 6 key principles of logo design" (Lokmanoglu, 2019).

In addition, Maggie Macnab said in her article "Logo Design Theory, Part 1: Symbols, Metaphors and the power of intuition" that creating a good logo needs to use metaphor in communicating the logo, refer to conceptual process, make the logo black & white, have scalable logo, create logo that balance, detect subtlety (Macnab, 2015).

### **2.9.8 Web Design Theory**

Marianne wrote about web design principles that some principle of web design is purpose of the website, simplicity, navigation, F-Shaped pattern reading, visual hierarchy, content, grid-based layout, load time, mobile friendly (Marianne, 2018).

Usability.gov wrote “User Interface Design Basics” explained that the best practices in user interface design are keeping it simple, consistency, purposeful, use color and texture strategically, create clarity and visual hierarchy with typography,

Communicate the right message, and keep the initial status in mind (Usability.gov, 2020).

Nick Babich wrote "The 4 Golden Rules of UI Design" described that the golden rule of User Interface design is letting user control over the interface, making users feel at ease with interaction, decrease the cognitive load, and being sure to have consistency (Babich, 2019).

Sujay Pawar said in the article "8 Principles of Good Website Design" that there are 8 specific principles to follow. There is simplicity, consistency, typography & readability, mobile compatibility, color palate and imagery, easy loading, easy navigation, and communication (Pawar, 2018).

On the other hands, Nicole Singh wrote article in Canva website "20 Web design principles to follow" to address some principles for web designer. They are use readable and web-friendly fonts, utilize the 'F' pattern, or the 'Z' pattern, use negative space, keep your design consistent, simple and logical page navigation, use a complementary color palette, keep the audience in mind, optimize buttons and calls-to-action, maintain a visual hierarchy, pay attention to the details, use fitt's law, choose your images wisely, prioritize the user experience, consider using grid systems, avoid big chunks of text, use in variance, hick's law, use symmetry, lastly design for both web and mobile (Singh, 2020).

### **2.9.9 Web Usability Theory**

Sabina Idler published article "5 Key Principles Of Good Website Usability" that there are relevancy, learnability, accessibility and availability, credibility, and clarity (Idler, 2019).

Divya Rawat published article "A 7 Step Guide To Website Usability" that there are some guidelines that make website/webpage usability. There are 1) Good User Interface, 2) Navigation usability, 3) Search Functionality, 4) Content usability, 5)

Image to support content, 6) Videos to Enhance Content, and 7) Fast Loading Web Pages (Rawat, 2020).

Jakob Nielsen published an article "10 Usability Heuristics for User Interface Design" that Jakob developed Usability heuristics with Rolf Molich in the 90's. The principles are Visibility of system status, Match between system and real world, user control and freedom, consistency and standards, error prevention, recognition rather than recall, flexibility and efficiency of use, aesthetic and minimalist design, help users recognize/ diagnose/ and recover from errors, lastly help and documentation (Nielsen, 2013).

Lars wrote also article "Websites Usability Guide" that how to make user-friendly web page is to follow the website guideline in creating usability. There are 1) Optimize for Mobile, 2) Follow the standards of WCAC, 3) Hold on to Common design elements, 4) Use Visual hierarchy, 5) Make navigation simpler, 6) Develop Credibility, 7) Content should be Legible, 8) Consistency across the site.

The WCAC standard has 4 main principles - Perceivable, Robust, Operable and Understandable (Lofgren, 2019).

### **2.9.10 Web Aesthetic**

Mike Gingerich wrote in an article called "Aesthetics VS Usability in Web Design" that Functionality and features indicates usability of the web design. The graphic appeal and visual presentation represent web aesthetics. Both web aesthetics and web usability define how effective user experience and user friendly are in web design (Gingerich, 2020).

## **2.10 Related Research and Article**

### **2.10.1 Sense of Place in general**

National Research Council published in "Community and Quality of Life: Data Needs for Informed Decision Making" describing that people should not think of place

as a location, Place itself includes many aspects of life and communities. The characteristic of place can determine the place and its boundary. The interaction of people in a place, instead, defines the connectedness of a place within community. (National Research Council, 2002)

Ty Abiodun created graphic art through website called “A Sense of Place” that place can identify strong culture and identity of that city based on sense of place graphic art project. This sense of place project uses graphic art to explore the meaning of sense of place and how it can identify the uniqueness of a place. This sense of place can also relate to people in community through culture and tradition. (Abiodun, 2017)

Jennifer Adams wrote in “Sense of Place” that when people go to a place, each person will look at the place differently. That is how the sense of place means – the different way in perceiving place for different people. Each one can perceive it in different aspect of the place – economic, life style, architecture, religion. The respect of place, value the place, interact with place can also reflect the sense of place for each individual. Experience with place and historical sense of the place can reflect out of this sense of place as well. Therefore, sense of place means the interaction and relationship of people with place in so many different aspects of life. Place attachment, on the other hands, means how people attached to place emotionally, economically, historically. That is when each individual gives meaning to place as place meaning. (Adams, 2016)

Project for Public Spaces created “What make a successful place?” to discuss about place. When we talk about place, how do we know that the place can be successful? PPS Project for public spaces define a successful place with 4 characteristics -- accessible, activities, comfortable, and sociable. The place diagram was developed to explain each characteristic in detail. (PPS Project, 2018)

### 2.10.2 Sense of Place in Tourism

Chia-Chin Lin wrote “Sense of place, protected areas and tourism: Two Tasmanian case studies” article explaining that Lin was doing research in sense of place in protected area and tourism. Lin found that sense of place can influence place attachment in tourist or local people. Lin used this finding in tourism management toward sustainability tourism. At that stage, the relationship between sense of place and place attachment can be useful in determining the model for other form of tourism platform. (Lin, 2012) Martin Heidegger was referred about “Poetry, language, thought” by Lin in “place” for tourism as he transformed house to home through the process of dwelling formation. (Heidegger, 1971) R.D. Sack wrote “Homo geographicus: a framework for action, awareness, and moral concern” explaining that another interesting approach for place is from Sack which discussed the structure of place based on meaning, nature and social relations. (Sack, 1997) P. Gustafson wrote “Meanings of place: everyday experience and theoretical conceptualizations” that Environment, other and self are also 3 pillars that Gustafson used to explain “place” in his term. (Gustafson, 2001)

C. J. White wrote “Culture, emotions and behavioral intentions: Implications for tourism research and practice” to say that the main concept of sense of place is the attachment that embraced between place and people emotionally, White stated. (White, 2005)

S. Kianicka, M. Buchecker, M. Hunziker and U. Muller-Boker wrote “Locals' and tourists' sense of place: A case study of a swiss alpine village” explaining that characteristic and activities of place helps shape the sense of place for tourists. The surrounding factors of the place and the strength of mental attachment were found in both tourists and local residents. (Kianicka et al, 2006)

J. Farnum, Hall J. T., and L. E. Kruger wrote “Sense of Place in Natural Resource Recreation and Tourism: An Evaluation and Assessment of Research Findings” that cognitive and spatial involvement establishes sense of place. (farnum et

al, 2005) P. A. Stokowski wrote “Languages of place and discourses of power: Constructing new senses of place” as emotion almost definitely connected with sense of place. (Stokowski, 2002). B. S. Jorgensen and R. C. Stedman wrote “A comparative analysis of predictors of sense of place dimensions: Attachment to, dependence on, and identification with lakeshore properties” as place attachment, place identity and place dependence are included in the sense of place concept. Individual relationship to the place can create emotion as place attachment, belief as place identity and commitment of behavior as place dependency. (Jorgensen and Stedman, 2006)

Therefore, the main concept for sense of place is the development of affection and emotional relation of human and his/her surrounding, Stedman and Farnum concluded. (Stedman, 2003 and Farnum, 2005)

### **2.10.3 Sense of Place in General Media**

O'Reilly had done study about using new media in constructing sense of place. Photography has been used to illustrate the urban life of the case study area. The connection and portrait the connection through photograph create the sense of place through photo-narrative both social and psychological way (O'Reilly, 2015).

Rebecca wrote an article based on the research to say that digital media can enhance user experience with the place through senses. Technology and sense can then be combined to stimulate the experience of user with the place (Breffeilh, 2021).

S. PraveenKumar wrote that media helps greatly in promoting tourism. Media can develop awareness to tourist in choosing and selecting the attraction place. After tourist gain experience through media can turn from potential tourist into actual tourist at the end (PraveenKumar, 2014).

Maria wrote that there is a tight linkage between media and tourism. The tourist place alongside sense of place can be related to converging media (Månsson, 2015).



#### **2.10.4 Sense of Place in Audio**

Gokce worked on making sense of place through sound in 3 environments - real, virtual and augmented - in architectural environment. The result offered another dimension of experiencing architectural structure within the imagination limit of each viewer. The research in audio and sense of place still needs further investigation (Kinayoglu, 2009).

Chueng's research is about expectation in designing sound to develop sense of place. The result found that expectation can stimulate user experience through sound environment that user expected in the first place (Chueng, 2002).

Hugo wrote an article about sound watching to tell the story in using sound for tourism storytelling. Sound for Hugo can tell the story and would be possible for tourists to notice the sound around them. Sound in each place can use to describe the place and develop a tourism story (Branco, 2017).

Adkins wrote an article about "Exploring the Perception and Identity of Place in Sound and Image" using photography and electronic music to create such an environment. The result was divided into 2 sides - objective response connecting sound with atmosphere and artistic subjective response (Adkins, 2014).

#### **2.10.5 Sense of Place in Videography**

Natalja wrote an article involving two case studies. One is using audio and visual to describe memorabilia of emigrant from Latvia to UK. Second is the using place identity to portrait the landscape. Walking along eight district to extract identity has been conducted. Using experience and photography to transform into identity can therefore illustrate the identity in different style - design and art. The research helps the researcher identify one's own identity in the different place (Vikulina, 2016).

Krisztina worked on student assignment in filming the place to construct the global sense of place. The film was shot in documentary style. The learning of place character was not easily found through video or filming. Students need feedback from



supervisor in order to correctly express sense of place perspective through filming (Varró, 2021).

Sarah discussed the method called Walking with video in the same article title. This method used to let people involved in experiencing the place using video or film making. Place-making can express through video and film production. The main benefit of video or film is to get people engaged in the empathetic way through experiencing and sensing with the subject in the moving image. The drawback, however, is the lack of knowledge in the subject matter. Developing both textual and visual in multimedia forms should be able to transmit knowledge and understanding from one person to another easily and effectively (Pink, 2007).

Video art is a moving image form of art that was established in early 1960's according to Britannica website (Britannica, 2021)

#### **2.10.6 Sense of Place in Place Identity**

Shukran Qazimi wrote "Sense of place and place identity" as the word "place" has been known and used since 1970. Proshansky also stated that ever since 1970, that the word "Place identity" was created. (Qazimi, 2014). Ashild Lappegard Hauge published "Identity and place: a critical comparison of three identity theories" that Hauge wrote an article in comparison of three identity theories - Place identity theory, social identity theory and identity process theory are three theories involved identity in term of environmental psychology. (Hauge, 2007) R. Bruce Hull IV and team wrote "Place identity: symbols of self in the urban fabric" that place identity theory discussed about physical environment that influence self-perception and identity of self. Self-identity that is influence from place attribute can also be referred as place identity. (Hull, 1994; Proshansky, 1987) In Ashild Lappegard Hauge with paper called "Identity and place: a critical comparison of three identity theories" again said that this theory has not received any support from the research. Social identity theory discussed about the identity that depends mainly on the group of people and other factors that we

belong to. (Hauge, 2007) Tajfel explain social identity as the belonging of oneself into a group or social which involves physically, emotionally, and values. Quality of the group is very important to the social identity. (Tajfel, 1982; Hogg & Abrams, 1998) Glynis M. Breakwell wrote "Social Representations and Social Identity" that one's behavior may be influenced by group member rather than the context of the group. In identity process theory respect fully to the build environment (Breakwell, 1993)

Zhang worked on the dissertation about Heritage, Identity and Sense of Place in Sichuan Province after the 12 May earthquake in China. The place in this dissertation is transformed from heritage into post-disaster heritage. The recovery of the heritage site with obvious identity has been discussed. Place transformation from heritage into post-disaster heritage needs to reconstruct both culture and identity. After the disaster, place, people and heritage become bonded together. In creating new identity after the disaster would need to walk through the process of heritage redevelopment once again. The sense of place in term of place identity need to reconstruct itself in the new and up-to-date situation having the earthquake disaster as a part of that identity. (Zhang, 2013)

Allison Stern published her work as "Sense of Place, Sense of Self" as wondered how sense of place can have influential on sense of self whether form, transform or create in individual or not. Six features of transformed experience -- nature related, belongingness related, liveliness related, adventurous related, mysterious related, and sacredness related. Experiences also divided into 5 categories from lowest to highest in specific name. In order to know how place identity and its form, Stern suggests further investigation more into the relationship of human and place. In reconnecting to the spiritual self with place can happen with experiencing through sacred place. In conclusion of Stern's dissertation, the stories had been told involving the relationship between people along the dissertation period that shaped the researcher's self in a holistic way (Stern, 2017).

### 2.10.7 Sense of Place in Urban Design

Alesia Hsiao wrote “Why Sense of Place is worth caring about” to explain that the sense of place of a city is the quality and characteristic that make the city unique to the outsider. Focusing on the income of the city would not make the city worth visiting. The distinctiveness of the city should be the answer. That is what make the sense of place of a city important (Hsiao, 2012).

Ric Stephen has published diagram for Sense of place in urban design that declares the different elements in developing sense of place in the city development. Researcher used this diagram as a guideline for virtual sense of place in tourism. The diagram has been recreated with permission from the owner. The original graphic diagram is included in the Appendix section of this thesis.

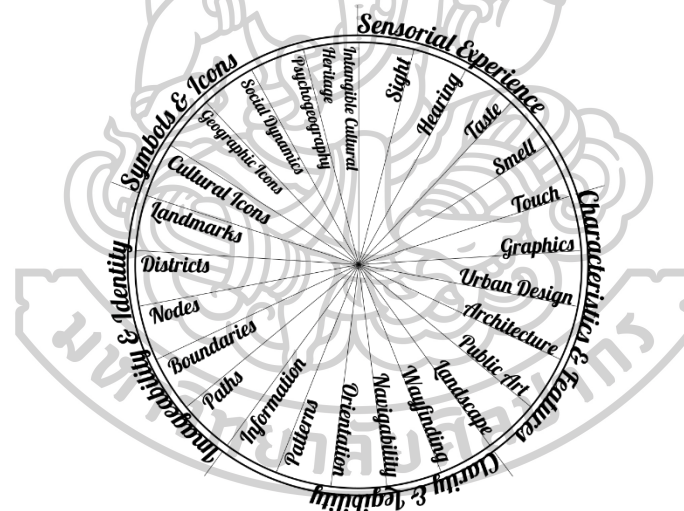


Figure 9 Urban Design Sense of Place

This diagram will be used as a reference for Sense of Place elements in working with Sense of Place for Virtual web (P and Stephens, 2011).

### 2.10.8 Sense of Place in Photography

Daniel Stainer published paper called ‘Using “Sense of Place” to build stronger photographic images’ that it is the feeling of people toward the geography and not the

geography itself that create sense of place. How people interpret photo depends on each individual. The photo should describe itself in the sense of the element in it. First, photographer needs to connect with the subject in that photograph? It is important in making the photo feel the way photographer needs it to be. Photographer can embrace the emotion in that photo based on story behind it. The story that needs to tell through photo, mood and tone of the photo, some elements in the photo, color, composition are among others that can impact sense of place in photographer's work. The visual clue is important for viewer to follow our intention in that photo. Each time taking photograph, the thought process needs to ponder about what this photograph will send across to the viewers. (Stainer, 2014)

Pinterest has a post about "The sense of place theory 1" that sense of place theory states that there are 3 essential elements when space can turn into place. There are Physical attributes, function, meaning. All 3 elements should connect with each other as gestalt. (Pinterest, 2020)

Sakhaeifar wrote in a paper called "Impact of Location-Behavior on Sense of Belonging to Place" that sense of belonging develops when people did some activities with local. Social interaction to the environment is specify sense of belonging toward the place. With all the parameters that sense of place has to offer, the two factors that can impact sense of place also are activity influence and location behavior toward place identity (Sakhaeifar, 2016).

Daniel Korzeniewski wrote an article "Travel Photography Tips - How to capture a sense of place" that it is important to capture the unique characteristic of the place. Mostly people will take photo when they travel without thinking about sense of place. Capturing unique characteristic of the place means communicating the emotion and feeling of the local interaction with others and their environment that traveler visited. In order to get the feeling right, immersed oneself into the culture or place can absorb the feeling of the place and its surrounding. Photograph can then turn the feeling on based on understanding of the environment. (KORZENIEWSKI, 2017).

Angela Martin published an article “Photographic Experiences Of Nostalgia & Sense Of Place” said that a place can have something or make someone feel something about it is called sense of place. A place that felt by people strongly creates lots of meaning and unique identity of its own. Sense of place in photography means expressing image with true identity and feeling. This depends on photographer of how each one interprets the place. Each photo can make people feel when they can relate to the element in the photo. (Martin, 2017)

ePhotozine published an article called “Learn To Convey A Sense Of Place And Culture With Your Travel Shots” described that in capturing culture shot to convey sense of place through photo has some steps as

1) Research, Research, Research - First of all, research about the culture and place is much needed in order to related to its environment.

2) Detail is the key - In taking the shot in culture, detail can express unique characteristic of the place and potential focus of its culture.

3) Multiple shoot? - Take lots of photo even if it is a return trip to the same spot. In multiple shooting, thinking about art composition before shooting as it can express the meaning in every single one of those shot.

4) Focus on landmark - Taking the shot of landmarks can be a bit of boredom but look at it in the different angle. The out-of-the-box shot can express different feeling of the landmark altogether.

5) Capture Culture - Get to where the culture of the city will be. There should be more interesting and apply different technique in conveying different meaning in the same photo.

6) Do the Portrait - Asking permission first and keeping eye contact are the key to taking portrait. Showing the result to your subject is also a polite way to do.

7) Day or Night? - Early morning and late evening light prove to be a good light for shooting architecture and landscape. Sometimes, busy place can be

interesting as the elements can add something to the photograph meaning. (ePhotozine, 2019)

### **2.10.9 Digital Sense of Place**

Shane Finan wrote “This must be the place: The important of place in portable digital media” that exploring the idea of place in digital media, Shane explored the concept of place using location map application and social media to determine the place concept how it changed and evolved through digital media. Shane found that it actually supported and interchangeably transformed how people interact with place. The idea of place that is the interaction between people and place can be transformed further with digital media in between. Digital media, on the other hands, can become a great tool for artist and designer to explore the possibility of interactivity pattern that can shape new meaning of place in the future. (Finan, 2013).

Gokce Kinayoglu stated in his dissertation title “The role of sound in making of a sense of place” that virtual place can have a benefit in current world. The limitation of its presentation and interactivity, on the other hands, are some drawbacks that was discovered in the research. In real world, the direct experience with place was obvious. Augmented reality gain both drawbacks. The AR sound system was installed in one of the cases studies and influence the experience with place. This research found out that architectural place should not think only visual sense but more also think about other new media aspect such as sound. (Kinayoglu, 2009)

D. Pocock and R. Hudson wrote an article “Images of the Urban Environment” explained that place image is important to the place, however it can change based on time and economy. (Pocock, 1978) E. L. Birch published “From Flames to Flowers: The role of planning in re-imagining the South Bronx” that the incrementing of image over time might be the right track of developing the image throughout the flow of event in the place, on the contrary (Birch, 2001). C. Clouse, C. And team wrote an article “Defining place image” that improvement of the city should go hand-in-hand with the



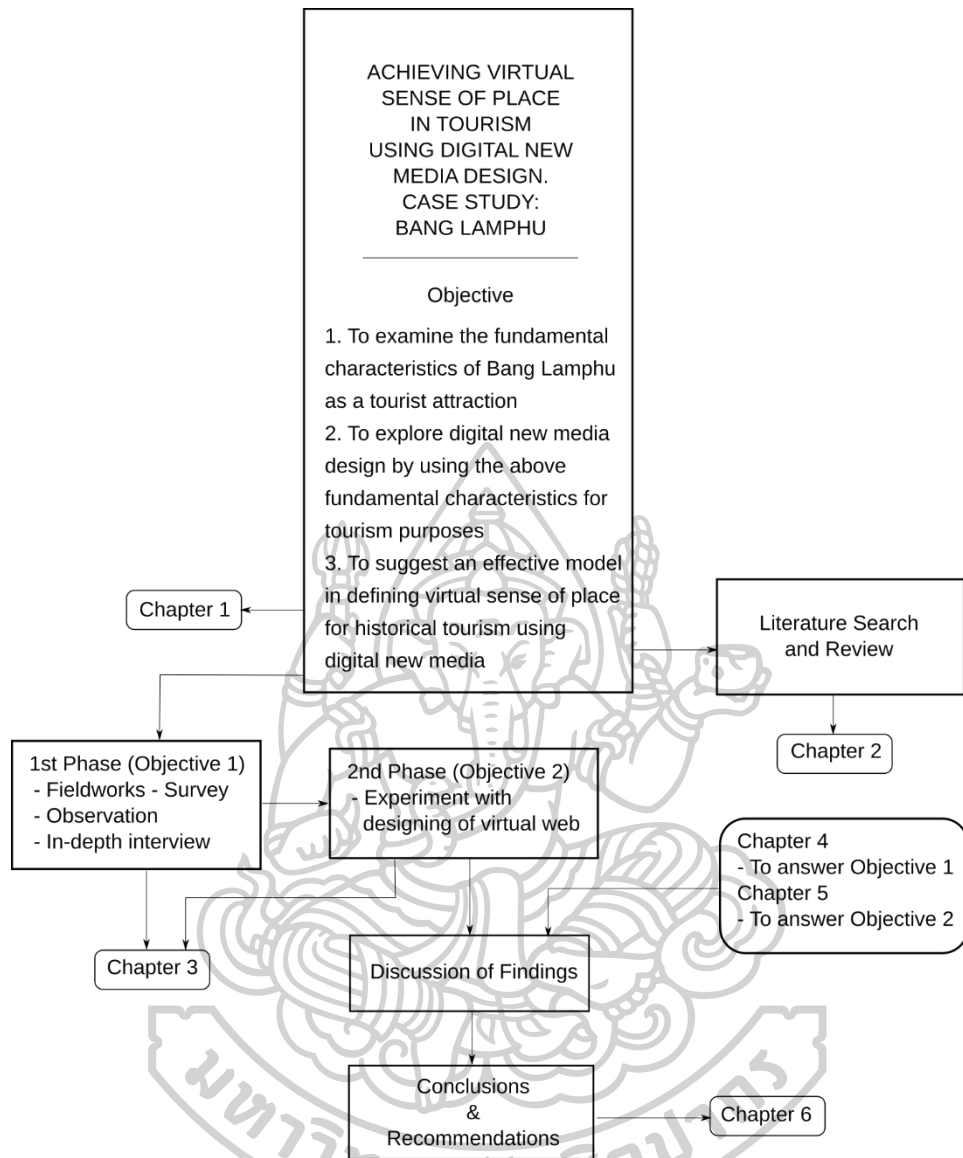
strong image that was selected by the business in order to maintain the competitiveness in the city market. (Clouse et al, 2017)

### **2.11 Chapter Summary**

Bang Lamphu is a part of Rattanakosin island. The island has been defined as historical area in Rattanakosin era due to its dominant places. Many historical places in Rattanakosin island have had its own history related to royal and city development at that time. The remaining of the historical place and it brings about are still progressing today. The sense of place currently can be tracing back to the history of our early King. Exploring the area for tourist places in multiple categories has been conducted. Four specific categories have been identified as potential identity identification for Bang Lamphu historical area due to its history and popularity. They are Historical architecture, Religion, Communities, and Gastronomy. All four categories have been synthesized and explored their existing literature. Historical architecture has 10 items in it. Religion has 19 items. Communities has 8 items. Gastronomic has 19 items. Each one of them has its history and story to tell.

In the next chapter, data collection will be discussed and explained as indicated in diagram of figure 2-4 below.

All map images in this chapter are from Google Map. Figure 3 has reference source below the figure. Figure 9 is from the reference in Appendix. Figure 10 had been created by researcher - Thirathep Chonmaitree through the recommendation from examiner.



*Figure 10 Data Collection diagram*

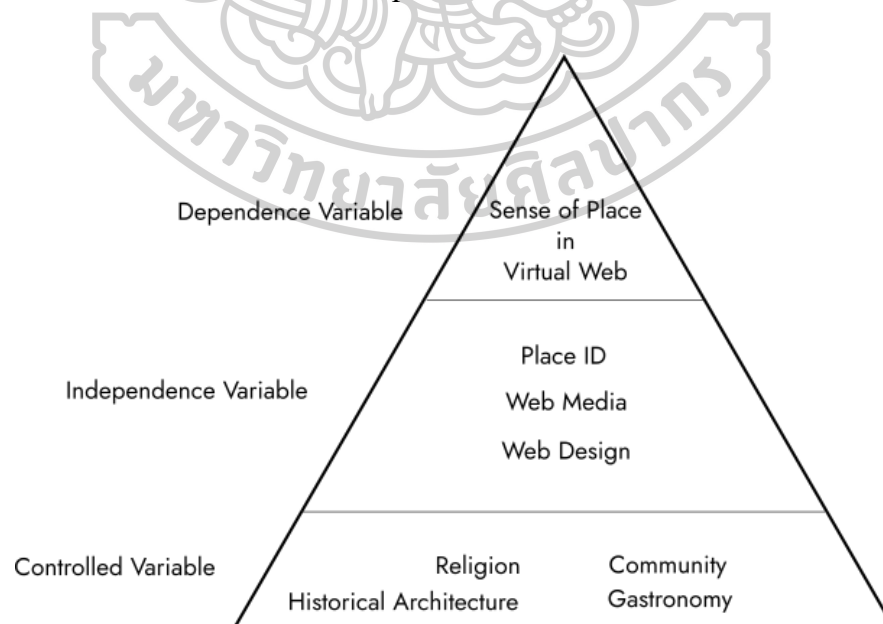
## Chapter 3 Methodology

### 3.1 Research Design and Process

This research is designed for experimental research using mainly qualitative method. Earl discussed about Experimental research as the scientific research involved with manipulating variable to get result based on hypothesis. Controlled environment has been set up to do this research (Babbie, 1998).

Mitchell said that experimental research design is to decide what and who to observe or experiment. The relationship of cause and effect is what construct the experimental research. There are 2 types of experiments -- quasi and randomized experiments (Mitchell, 2016).

As a part of experimental research, there are 3 types of variables - independence, dependence, and controlled variables. Independence is the one change in order to get the result based on hypothesis. Dependence is the one that is effected by the change of independence variable. Controlled variable is the one that is fixed and used in the research as data in the experiment (Bevans, 2019).



*Figure 11 Research Variables*

Methods of collecting data are site survey or photographic survey, in-depth interview and observation of the surrounding place. The design thinking process has been used in developing the process of solving this thesis problem. The research variable for this research is as in figure 11.

### **3.2 Qualitative Research Methodology**

In searching for in-depth information to examine sense of place for Bang Lamphu, qualitative method needs to be implemented. In-depth interview alongside photographic survey to capture the place, its surrounding, and other related elements in sense of place are necessary for this research. Literature review from Chapter 2 gives researcher some idea of how the area looks like physically in different layers. The following methods have been selected for this research in collecting primary contextual data from the area.

Stephen C. Behrendt wrote about contextual analysis in "Using Contextual Analysis to evaluate texts" that the contextual analysis is the process of analyzing different medium including multimedia the text within it. The medium including all kind of media, photo, video, moving image, can contain some text useful to the research such as audio from storytelling video clip. The content can lie within the story that can extract from it (Behrendt, 2008).

### **3.3 Design Thinking Process – Stanford d.School Process**

In solving the problem of this research, design thinking process has been implemented in defining the solution for this research. The design thinking process from Design School Stanford university is used to analyze the research problem in finding the best solution. User experience design process for web design is used for web design. The process step is as in diagram.

“Tutorial point” described in “Design Thinking” as design thinking process is the design methodology developed by Stanford university design School. It provides 5

steps process. Each step process does not rely on each other. It can be switch back and forth between them. The features of it are to make it simpler, develop an aesthetic product, improve experience of the user, create practical and innovative solution to the actual problems, lastly, reveal the real requirement of the user (Totutorialpoint, 2016).

Steps of Design Thinking from Stanford design School are 1) Empathize 2) Define 3) Ideate 4) Prototype 5) Test.

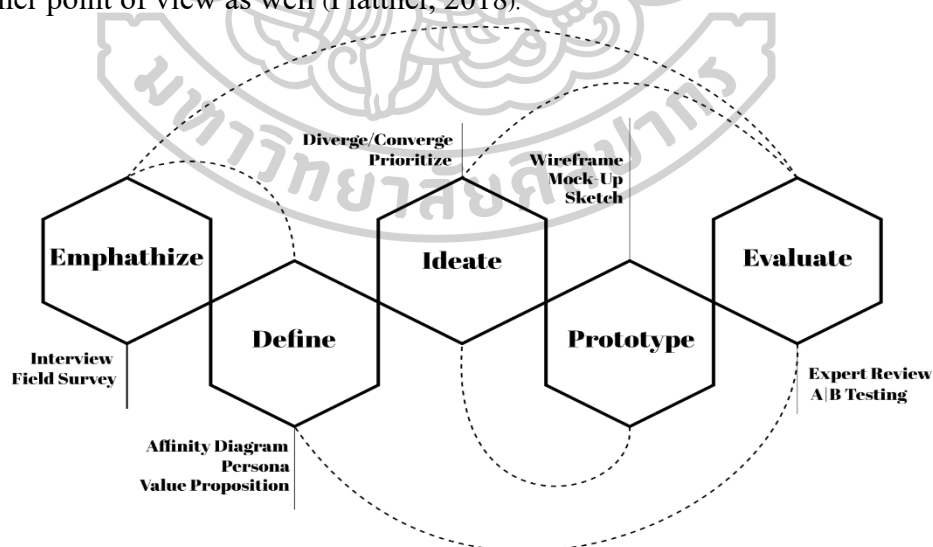
To Empathize you need to observe, engage and immerse

To define the problem, you need to decode the challenge using the empathy result which discover the insight of the problem

To Ideate you need to open up your mind and heart for any possibility that can occur

To prototype you need to frame it into suitable way of expressing idea from the ideate stage. It serves as empathy gaining, exploration, testing and inspiration.

To test you can gain feedback from your users and learn more about them. It helps to refine the solution and recreate the prototype. This can also refine the designer point of view as well (Plattner, 2018).



## Design Thinking & Process

Based on Stanford d.School

Figure 12 Design Thinking (Stanford d.School) Model

### 3.3.1 Empathize stage (Stage 1)

In this stage, the research is taking place to explore the area and gain insight about people in the area as much as possible for analysis later. The methods that are used for this research are in-depth interview and photographic survey or field study to gather information from the local people and understand the geographical situation of the area. The data gathered from this stage considers to be primary research (Primary Research). Data are shown in Chapter 2 under section Primary Research.

#### Method 1-1 : In-depth Interview Process

Interview process is an effective method in collecting data from the field. It is in qualitative research methodology. The step in achieving an effective interview is as follow

- 1) Identify interview goal
- 2) Determine the target group
- 3) Design the question for interview
- 4) Prepare for an interview
- 5) Conduct interview
- 6) Transcribe the interview recording
- 7) Analyze the transcription
- 8) Evaluate the interview process (Taylor, 2019).

Vaishnavi Batmanabane and Julia Kfoury wrote article “Qualitative Data Collection Interviews” that there are 3 types of interviews

- 1) Structured - This one is used in Quantitative research to collect quantitative data
- 2) Semi-Structured - This one can be used in both quantitative and qualitative research



3) Unstructured - or in-depth interview. this type is used in qualitative research to collect in-depth information about the research interest (Batmanabane and Kfour, 2017).

This method has been used to collect raw information from local people, tourist and resident of the area. It gives this research in-depth information how people related to the place and how some of the element in the place originated. It is an interview with objective in mind. That means the interviewees were given brief information about what to ask for from them. They had some time to think about the story related to the brief. When the interview process began, each interviewee with their own free mind spoke one story and the interviewer stopped them to ask question based on story they told. This way, they look more relax and feel natural throughout the interview process. There is also the continuous question from interviewee's answer earlier, however, all data needed has been collected. There are some specific issues that each community has differently.

### **Method 1-2 : Field Studies/Survey (Photographic)**

Priscilla A. Glasow wrote about survey in "Fundamentals of Survey Research Methodology" explained that survey the area uses photographic shooting and sampling the photograph data for sampling of the research data and categorizes them into group based on what promote the place identity the most. (Come up with 4 groups). Choose some sampling data based on each dominant identity of each group or sharing property in the sampling data based on local in-depth interview and literature review of different place in each group. The information can be obtaining from secondary research (Literature review) or in-depth interview or both. The review of the area is also done not only on literature (paper or digital data) but it can be obtained in the contextual basis. Mainly for this research, the data came from 2-3 main source -

literature review (mostly through online), information signage in front of the place, and in-depth interview.

Survey method is a quantitative method in collecting data and amount of sampling data in the research area. After collecting data from people or subjective things, some of the population collected are generalized for research (Glasow, 2005).

Joseph Check & Russell K. Schutt explained in “Research Methods in Education” that survey is one popular method in research due to its versatility, generalization and efficiency in collecting data. It is the most versatility in the survey method. Secondly, the large portion of sampling can be generalized into small sampling that is focused into the research goal. Lastly, it is efficient and effective to establish a sample group for the research variable measurement (Check and Schutt, 2012).

This method is to look at the current physical appearance of the place. This photographic survey is walking along the Bang Lamphu area. Photos have taken off the beautiful site of Bang Lamphu in 4 categories - Architecture, Religion, Communities and Gastronomic. It can capture the moment of interaction between local people and the place which will be used later on in the research. The place was captured in term of attraction and location of the place in general. The pin point of each place was also recorded as Information Architecture of this research.

### **3.3.2 Define (Analysis / Synthesis) Stage (Stage 2)**

Define is the step to identify the actual problem and seek the related partied surrounding the problem. The synthesis of this research after analysis of the current situation of the area can be shown as synthesis diagram. The result of this stage is shown in this chapter.

## Method 2-1 : Mind map

ThinkBuzan.com said in the article called "Mind Mapping: Scientific Research and Studies" that Mind map is a tool to organize idea and thought or anything in the defining level of the problem. It clearly helps visualize the relationship between each element (ThinkBuzan.com, 2010).

Ford said in "Mindmaps and how to use them" that a mindmap consists of keyword surrounding one main topic. All keywords have relationship one way or another with the main topic. It is used mainly for develop different ideas from one single topic (Ford I, 2019).

Mind map is used in organized the idea and topic useful that is related in this research. It visualizes the topic into hierarchical order and easy to understand.

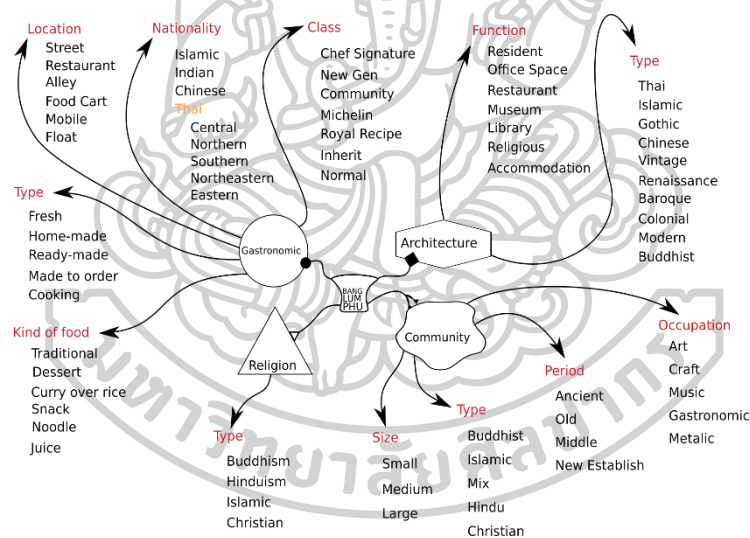


Figure 13 Mindmap

The above figure displays mind map diagram for all 4 categories of Bang Lamphu identity.

## Method 2-2 : Synthesis Diagram

This synthesis diagram is the summary of the idea and organization of this research. It sums up and conceptualize the main theme of the research.

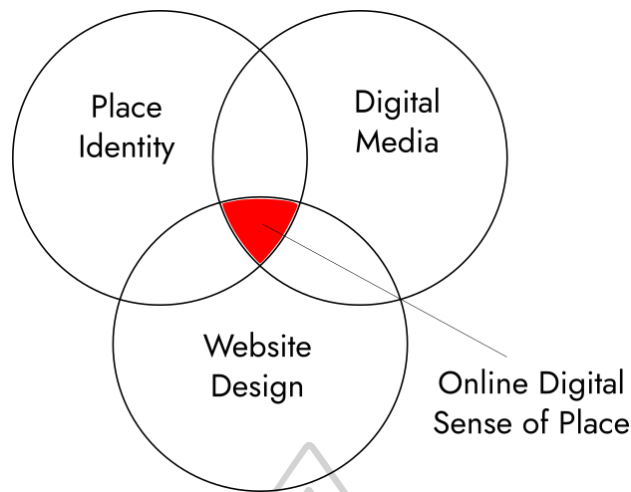


Figure 14 Synthesis Diagram

The figure 14 shows the synthesis process for this thesis.

This synthesis diagram shows the element in this research that develop the result of this thesis. Place ID, Digital (Web) Media and Web Design are combined to create online digital sense of place through virtual web platform. Each element contributes to the creation of virtual sense of place development.

The periodic table for Sense of Place in Bang Lamphu is as followed.

Attraction			Characteristic	Sensorial
Lm Landmark			Dv Diversity	Si Sight
Pa Public Art	Activities		Tr Traditional	Ts Taste
Fs Fashion	Ft Festival	Accessibility	In International	Sm Smell
Gt Gastronomy	Nl Nightlife	Wf Wayfinding	Mn Monarchy	To Touch
Ls Lifestyle	Cm Commerce	Sn Signage	Ht Historic	Hr Hear

Web Media

Place ID

Web Design

Figure 15 Periodic Table for Sense of Bang Lamphu and its Variable

The above figure shows the synthesis diagram for Sense of Bang Lamphu and its relationship with research variables – in this case independence variables.

### **Method 2-3 : Affinity Diagram**

Health Quality Ontario wrote an article called “Affinity Diagram” that it is the diagram in which gathering information from many sources and break them down into group or categorize them into the same category for a better analysis process (Health Quality Ontario, 2020).

Balanced Scorecard said in “Basic Tools for Process Improvement: Affinity Diagram” that affinity diagram is the process of grouping large amount of data in order to organize data for analyzing later (Balanced Scorecard Institute, 2020).

IEEE Long Island Section wrote an essay about Affinity diagram in the title of “Organizing ideas into common themes” that the affinity diagram is the process of gathering many different ideas and organize all those ideas into different theme (IEEE Long Island Section, 2020).

This hierarchical order diagram is to prioritize the information found in the primary research, in this case, photographic survey of the area and interview. The result of this diagram made it easier for decision making for the design process.

Affinity diagram is the process of grouping problems and issues from research. It organizes the problems into similar categories and draw as diagram easy to understand. Historical Architecture, Religion, Communities, and Gastronomy are categories that broke down in this Affinity Diagram which is the controlled variable for this research.

Historical Architecture	Religion		Community	Gastronomy	
Phra Sumeth Fort	Wat Bowonniwet	Phra Chao Taksin	Bowon Rangsi	Crispy Rice With Topping	Bowon Boiling Rice
Bangkok City Library	Wat Chanasongkram	Chao Mae Tubtim	Baan Phanthom	Bokekia	Patongkoo
Old City Gate	Wat Mai Ammatarod	Chao Por Nu	Kient Niwat & Trok Kaijae	Aar E. Sar	Kanomchin Namya
Museum & Library Of the Abbot	Wat Sangwej	Chao Por Kohtok	Wat Sangwej	Chilli Chill Indian Food	Aew Tai Kee
National Gallery	Wat Aim Worranuch	Luang Chakjessada Shrine	Wat Sam Phraya	Mae Ngamjit	Koe Pee
Pipit Banglumphu	Wat Sam Phraya	Trimollati Shrine	Wat Mai Ammatarod	Nopparat	Khun Dang Vietnamese Noodle
Old Row House	Wat Parinayok	Chao Mae Toranee	Chakkrapong Mosque	Cool Corner Smoothie	Jira Yentafoe
Baan Khun Cherd	Wat Tritossathep	Khaosan Shrine	Baan Tukdin Mosque	Tidbit	Roti Mataba
Siam House	Chakkrapong Mosque	Ganesha Shrine		Tossakan	Karim Roti Mataba
Democracy Monument	Baan Tukdin Mosque			Mae Siri	

Figure 16 Affinity Diagram

## Method 2-4 : Information Architecture (IA) in Survey area

This information architecture is the structure of information of the area. In this case, it is the street map and location of each attraction in each category. Information architecture is definitely the heart of the whole process. It indicates where the place is in the area and how the navigation can be around the case study area.

Defining the information architecture as the content structural design for any information gather and used for web site, communities, or in this research for that matter, map. Information architecture as defines by information architecture institutes is the way of organizing the surrounding so people can understand both on the web and in the real world (UX Booth, 2020).

As for website specifically, it is about organizing and ordering the information so it is easy to find and navigate through out the website. The guy who originated the Information Architecture field is Richard Saul Wurman (Tubix Studio, 2020).



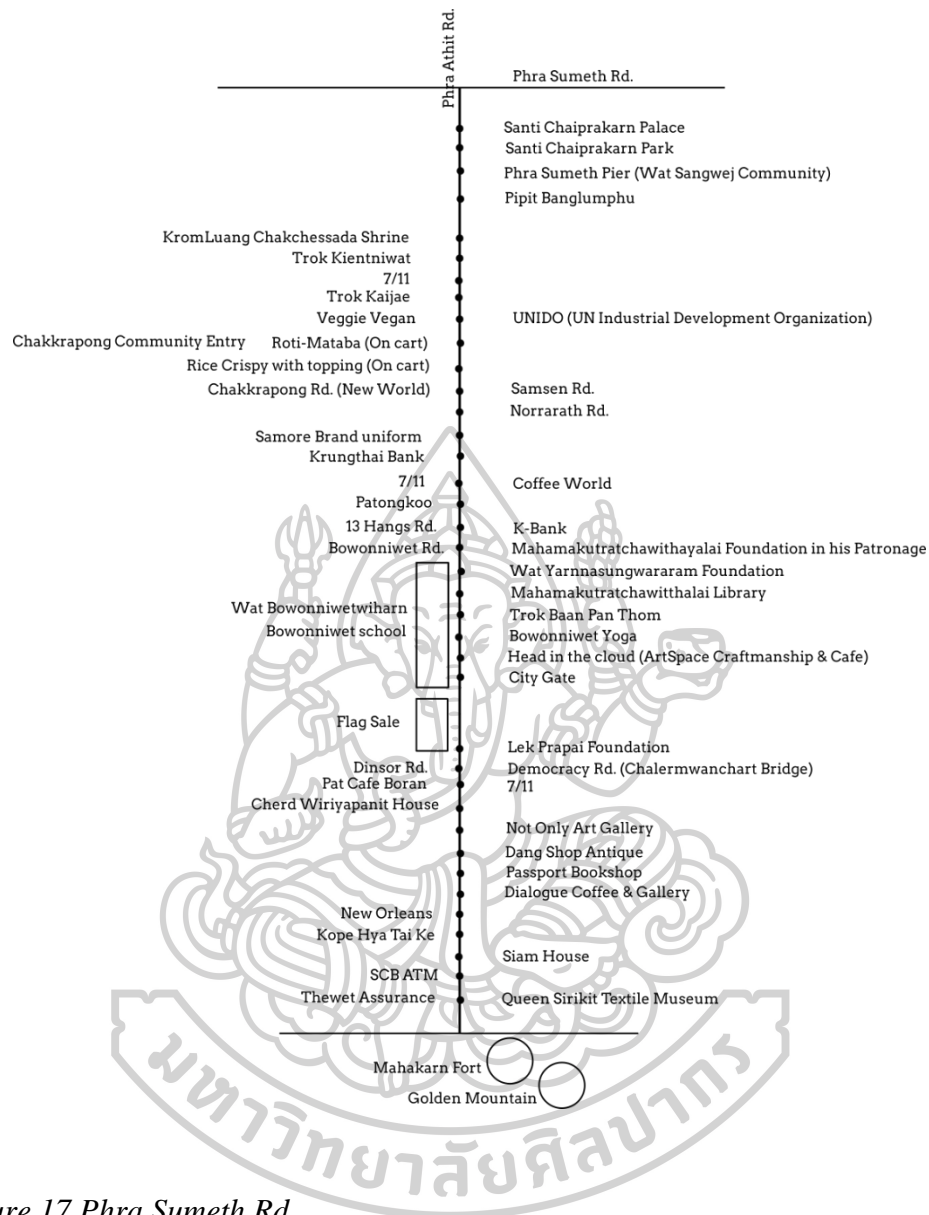
IA is the infrastructure of information driving the design process. In this sample results below, the diagrams are the result of survey the area and draw each location of place in the case study area. In figure 3-7 and 3-8 shows place location in one single road as indicated in black dot on a single line. The information in this information architecture can be used as main knowledge throughout the research translating into other design result.

### **Method 2-5 : Personas**

Rikke Friis Dam and Teo Yu Siang wrote “Personas - A Simple Introduction” as persona is a design method in user-centered design. It created avatar character for testing design that is developed in the design research. Persona actually mimic the actual personality of a person in real life (Dam and Siang, 2020).

Xin Wang published in “Personas in the User Interface Design” said that personas represent target audience the right and accurate way. It becomes a good tool for portraying actual user for the user interface design. Personas as a fictional character of the design method can transform into the actual user as the developer imagines (Wang, 2009).

Making a user characteristic who will be using the product or service for this research is what this method is. It describes the characteristic of the possible user for



*Figure 17 Phra Sumeth Rd*

the product or service of this research. The criteria depend on the product or service that need to measure later on at the testing stage.

Persona is the description of experimental group that would be effect by the design in this research. For this research, user persona is as shown in figure 19.

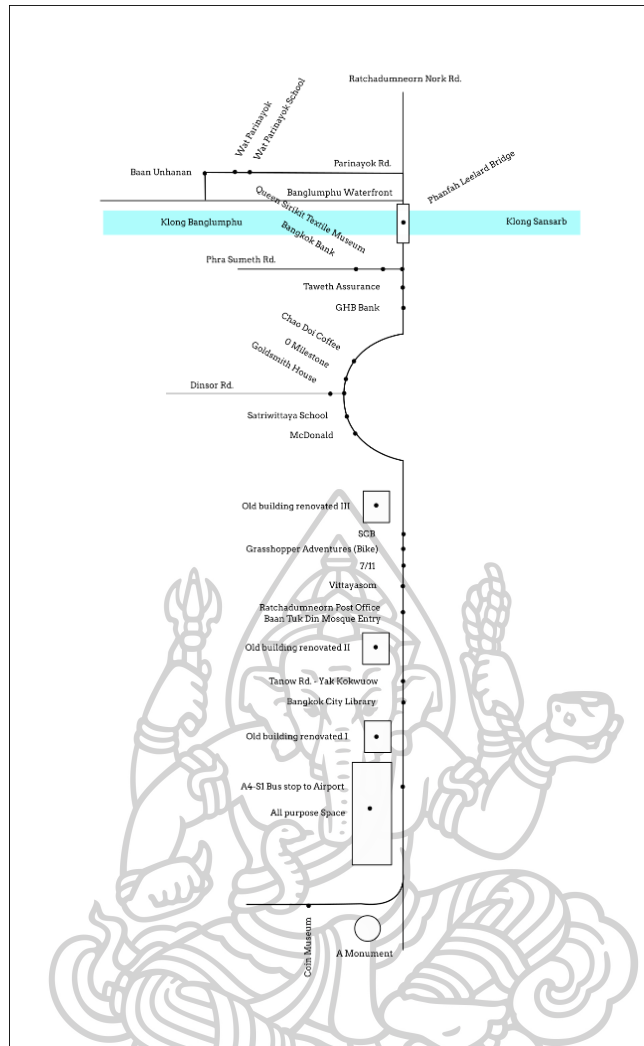


Figure 18 Ratchadumneon Rd


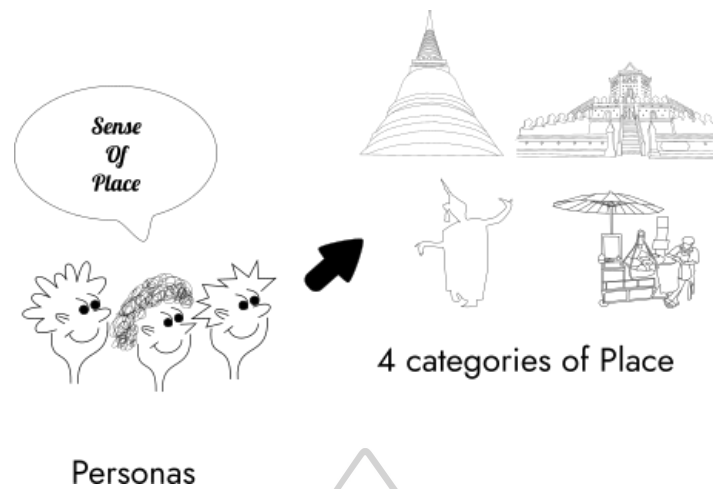
General			
	Age	Gender	Status
	Any	Any	Any
	Profession	Interest	
	Any	Traveling, IT	
<b>Motto</b>	<b>Health</b>		
" Explore and travel to new place every year with friends "	Heart	Knee	Eye
	Good	Good	Good
	<b>Skill</b>		
	IT, Reading, Exploring		

Figure 19 User Personas



*Figure 20 Relationship of User Personas and Places*

The above figure shows the relationship of user personas and places in affinity diagram.

### 3.3.3 Ideate Stage (Stage 3)

Mindtools Content team wrote a content called “Brainstorming Generating Many Radical, Creative Ideas” that brainstorming for Mindtools discussed about it that this method urges people to create ideas and better solution toward problem at hand. One study found that individual brainstorming gain much better result than group brainstorming due to the group participation problem avoiding the brainstorming rules (Mindtools Content team, 2020).

Interaction Design Foundation wrote a literature describing the rules of brainstorming in an article “Brainstorming” that there are 8 rules to follow. They are setting limited time, beginning with target problem, refraining from criticism, urging wild idea, targeting at quantity, building from each other ideas, keeping it visual, allowing only one conversation in a single round (Interaction Design Foundation, 2020).

UiO University of Oslo wrote “Idea Generation Techniques among Creative Professionals” that the meaning of active search is looking through design material

both traditional and digital for some creative idea and example of the previous work in gaining creative thought and idea for the solution (UiO University of Oslo, 2020).

Rana Abourizk wrote “What is Idea Generation? - Definition, Process & Techniques” that idea generation is the process of gaining multiple idea and pick out the best idea for the solution of the problem at hand (Abourizk, 2020).

Brainstorming is for the possible solution in this step called ideate stage, but it is not only method in ideate stage. In this step, many possible solutions to the problem can come up and spread out in searching for the best possible solution.

Due to the current COVID-19 virus pandemic situation, if tourism visited via online, the medium uses in delivering those elements should be effective. The most possible solution is to port the tourism business into the online web. In order to fit into the philosophy of this program of study, web design has been considered to be examined and designed further in this tentative study. Several design and creation for web design has been considered in order to be recognized as sense of place on the web – Web media content (main goal), Web design, and Place ID. Those are the 3 web elements that are considered designing in this research. All 3 elements need to be designed. The scope of web design is preparing the graphic element and design the interface of the web to fit the need or purpose of the design. Therefore, as for this research, the web design and all of its elements are designed as a recommendation to the future development and implementation later.

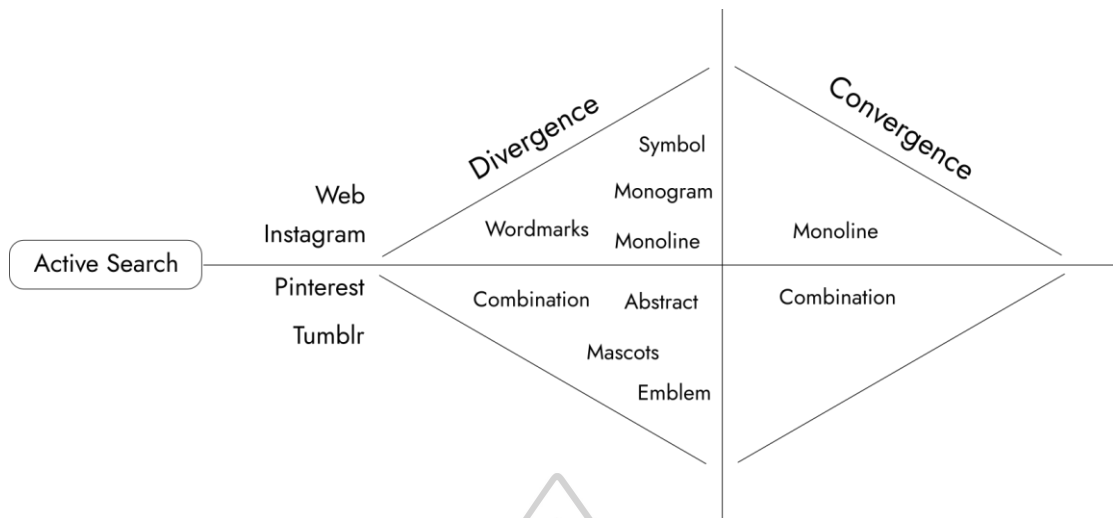


Figure 21 Logo Design in Diamond Diagram of Ideate Stage

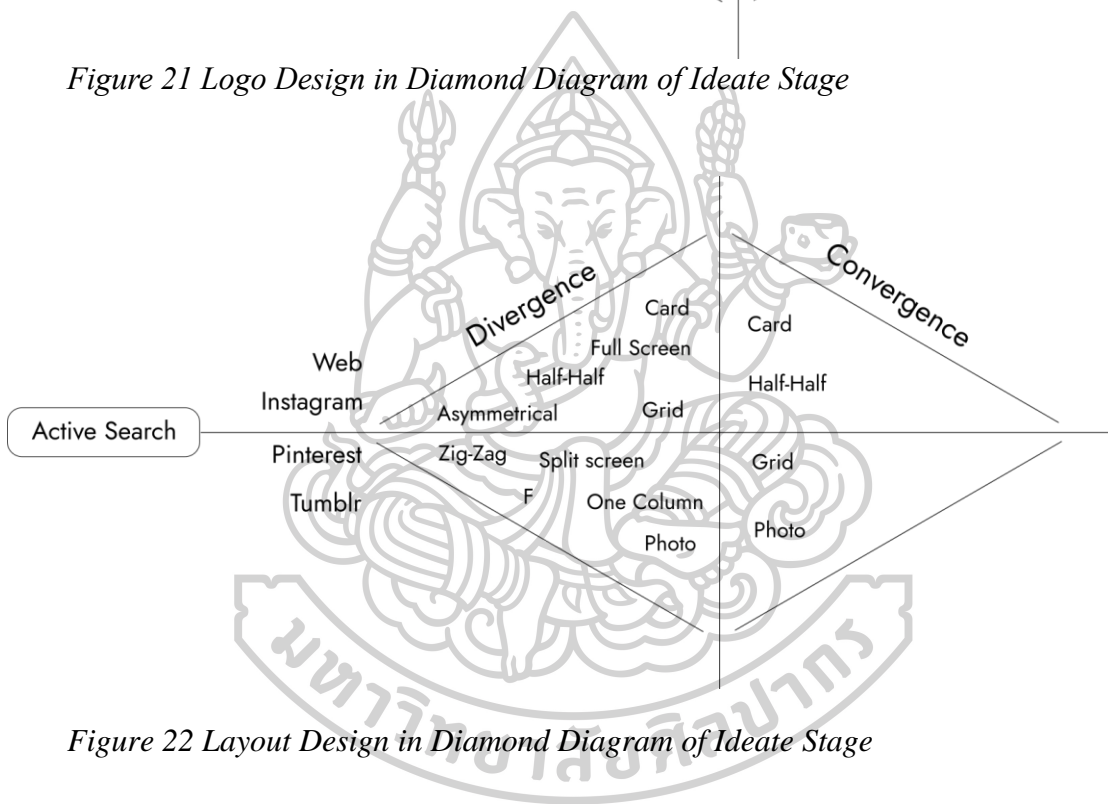
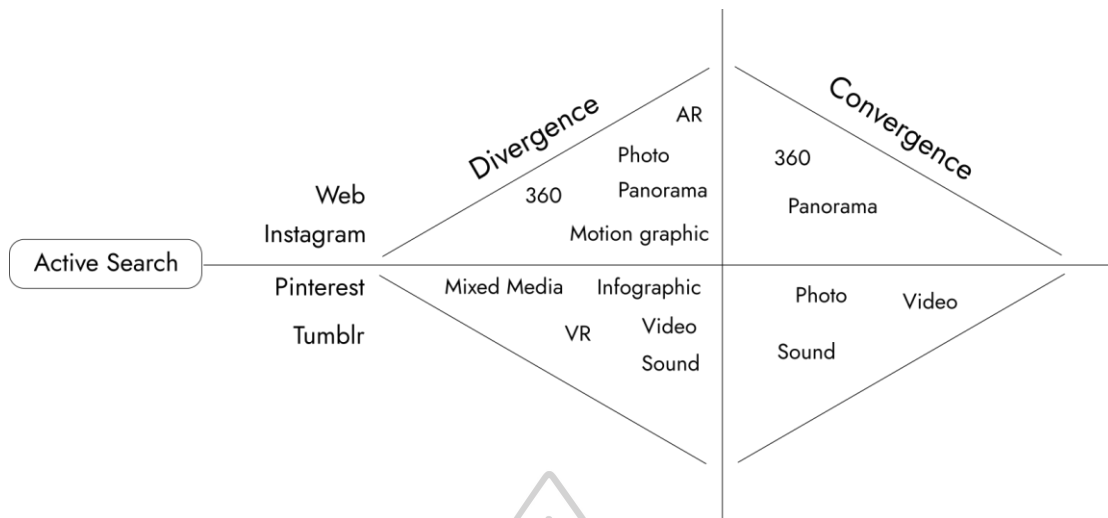


Figure 22 Layout Design in Diamond Diagram of Ideate Stage





*Figure 23 Web Media in Diamond Diagram of Ideate Stage*

A part of diamond diagram by Design Council's Framework for Innovation (Design Council, 2019) is used to display how to select the best possible solution for type of logo, web layout and web media to be used in this research. Active search method through the web, instagram, pinterest, and tumblr had been used in finding multiple ways of solution before focusing on one best possible way. For logo design, there are Combination and Monoline. Combination means the symbol mixed with wordmarks. Monoline is minimal concept of developing logo. As for Web Layout Design, card based, half-half, grid and photo design have been picked. In web media, 360. panorama, photo, video and sound have been picked.

UiO University of Oslo wrote "Idea Generation Techniques among Creative Professionals" that the meaning of active search is looking through design material both traditional and digital for some creative idea and example of the previous work in gaining creative thought and idea for the solution (UiO University of Oslo, 2020).

Rana Abourizk wrote "What is Idea Generation? - Definition, Process & Techniques" that idea generation is the process of gaining multiple idea and pick out the best idea for the solution of the problem at hand (Abourizk, 2020).

### 3.3.4 Prototype Stage (Design Development) (Stage 4)

In this stage, design process plays the main role to develop the design of web site based on the analysis in stage 2 and 3. The development of web site is also executed in this stage. Prototype should be designed in this step in perceiving as close to the actual product as possible or solution to the problem. The result of this stage will be presented in Chapter 4.

### Method 3-1 : Monoline (Place Identity Design)

Place identity can view as the representation of the place in this case mean the case study area. The place identity uses the same process as logo design only the subject is the tourism area. This representation can define the location identity of this research case study in order to trigger the memorable of the place easily. Monoline method is used to make the logo easy to represent the area and remain in minimal concept.

Les Kollegian written in "Designing Logos with a Grid System: The What, Why and How" that should we use logo grid in designing logo? Focused and organized, visual stability, design layout avoidance, polished and resizable design, design collaboration easily (Kollegian, 2018).

Kelly Morr wrote in "There are 7 types of logo designs: but which type of logo is right for you?" that there is letter marks (monogram), logotypes (wordmarks), logo symbols (pictorial marks), abstract logo marks, mascots, combination mark and emblem (Morr, 2018).

Monoline design is dominating the web in the trend of iconography design. Single weight line is used to draw geometric shape to form logo or one single line continuously form shape of logo (Liquified Creative, 2021).

The post in FreeLogoService described that the benefit of minimal logo design is memorable easily, simplicity, and brand valuable (FreeLogoService, 2018)

Zeynep Lokmanoglu wrote "The 6 key principles of logo design" that there is simplicity, originality, versatility, scalability, balance and proportion, and timelessness (Lokmanoglu, 2019).

### **Method 3-2 : Photography / Videography (Web Media)**

Photography is used in both still and 360 photos spheres. The photographic technique is mainly in black and white for historical site. Any other technique needs to be considered for other purpose. Videography is used to record the surrounding and the area in continuous style. It will use to collaborate with other method to form the next method.

### **Method 3-3 : Soundwalk (Web Media)**

Dietrich Henckel said in "Soundwalks as Sensewalks: The Case for Integrated Sensewalks" that sound walk in the combination of lightwalks and sound (Henckel, 2019).

Laura Estévez Mauriz said in the article titled "Soundwalks in Gothenburg" that soundwalk is the memory map of sound recording using as a tool for urban designer to analyze the cityscape (Mauriz, 2016).

Soundscape is the surrounding sound or noise that occurred within that area of place. The sound added different dimension to the sense of place. The depth of sound can define the mood and motion within that place. Soundwalk is the method used in recording the sound in the place that happening from point A to point B. It can record different interesting sound incorporate with the place.

### **Method 3-4 : Storytelling (Method in Videography)**

Videography alongside the narrative story can create the storytelling technique. The story is told from the local or people who relates to the place. Their

story collaborates with video graphic clip or photography of the place should add another dimension to the sense of place.

Rob Steffens lays down techniques for visual storytelling in "11 Visual Storytelling Techniques You should utilize In Your Content" as show don't tell, portray dynamic movement, tell a whole story, use heroes, remember visual hierarchy, use light to your advantage, build scenes with color psychology, use visual metaphors to make meaning, draw the reader's eye, close on your strongest image, and end with your takeaway (Steffens, 2018).

Ernesto Olivares wrote "10 Simple Rules of Visual Storytelling" also that to tell the story visually the following rules should be show don't tell, context is everything, show people, be personal and be true, show conflict, reveal hidden things, focus, keep moving, don't be obvious, and teach something (Olivares, 2016).

Sparkol published article called "8 Classic Storytelling Techniques for engaging presentations" to discuss the techniques that capture people's heart. There is monomyth, the mountain, nested loops, sparklines, in medias res, converging ideas, false start, and petal structure (Sparkol, 2018).

Samantha Lile discussed the rules of visual storytelling in "10 Visual Storytelling Rules Every Digital Marketer Needs to know." that there are 10 simple rules to follow in create storytelling. There is show don't tell, first impressions are everything, make your story move, follow an arc, conflict equal story, people love people, teach the audience, include eye-catchers and eye candy, hold your focus, and use Hitchcock rule (Lile, 2020).

Nayomi Chibana discussed the storytelling trick that there are "7 Storytelling Techniques Used by the Most Inspiring TED Presenters". There immerse your audience in the story, tell a personal story, create suspense, bring characters to life, show don't tell, build up to S.T.A.R. moment, and end with a positive takeaway (Chibana, 2015).

### **Method 3-5 : Web Design**

Web design is considered in 2 different aspects for this research. First is web design layout which is very important in presenting information and imagery throughout the web site. Feature image or media will be used as the media defines major role in this research. The single column layout is used for the information presented page of each place. Card based layout is used for the places listing page. Second is web design style. Minimal and Photo-based style are used for clean and clear design so the user can focus on what need to be as sense of place presented. Some of the methods that are used in this research are Responsive Web Design and Mobile-First Design, Gestalt design principle, Wireframing, and High-fidelity design method.

#### **Responsive Design and Mobile-First Design**

Responsive Web Design is the concept of developing web site that can adjust based on size and orientation of the screen that user uses (Kymin, 2015).

Responsive web design impacts accessibility and elevate user experience. Users with old version of web browser software, on the contrary, has difficulty in loading time. Despite the fact that responsive web design increases overall experience for user but it is not the same with IT professional and experience user/developers (Almeida and Monteiro, 2017).

The world of internet user has changed from desktop based to mobile based device. Responsive design concept was developed to support that trend as mobile usage sky-rocket in the past decade. 177 minutes is how long people used mobile device in a day in 2014. Mobile browsing in 2015 has increased into 2 billion (Hills, 2015).

In bachelor thesis of Otto Varrela describes mobile first design that the layout of the web page is flexible to any screen size and orientation. There will be no fix layout design. The responsive web design layout can be flexible based on device

screen size and its orientation that it displays. HTML and CSS will take control over the flexibility of the components on the page. Layout design has adopted into fluid grid layout in order to make it more flexible to any device screen specification (Verrelá, 2015).

### **Gestalt design principle**

Gestalt Institute of Cleveland gave the definition of gestalt in "What is Gestalt?" as the pattern of element in symbolic, physical or biological sense as all parts which its properties cannot be indicated (Gestalt Institute of Cleveland, 2016).

Cameron Chapman wrote about the gestalt principle in article "Exploring the Gestalt Principles of Design" that gestalt principles are proximity, similarity, closure, figure/ground, common fate, continuation, and symmetry and order (Chapman, 2020).

Vinci Palad discussed about Gestalt in "The Photographer's Guide to Gestalt Theory" that gestalt principles are used as effects in photography. There are the figure and ground relationship which can be identified from each other by size, blurriness, contrast of value and separation. Law of proximity, law of continuance, law of similarity, law of common fate, law of closure is all be use as effects in photography (Vinci, 2020).

Jordan from Flow wrote an article "How to use Gestalt principles to improve your website design" to suggest using gestalt principles in prioritizing elements from the most interesting to the least. Contrast, Color, framed text or imagery, shadows and focus are the suggested principles to be used to solve that problem of web design (Jordan, 2019).

### **Wireframing**

Neil Young discussed about wireframing in "What is wireframing? ExperienceUX" that it is the structure level of website design. The structure of the design lay down content and functionality of the website (Young, 2020).



Jaye Hannah discussed about wireframing in "What Exactly Is Wireframing? A Comprehensive Guide" that wireframing is the beginning stage of UX design to agree upon where to place content before actual development process. Types of wireframes are low-fidelity, mid-fidelity, and high-fidelity (Hannah, 2019).

### **High-Fidelity Prototyping**

Eleonora Ibragimova wrote the definition of high-fidelity in "High-fidelity prototyping: What, When, Why and How?" as the detail and functionality of computerized representative prototype of the product that closest to the end product (Ibragimova, 2016).

Summer Ye described in "High-Fidelity & Low-Fidelity Prototyping: What, How and Why?" the meaning of prototype as the first stage of the model in order to prove design concept. Summer also gave definition of high-fidelity prototype that is the high quality and closest to the final product for usability evaluation (Ye, 2017).

Nick Babich introduced the different type of prototype in "Prototyping 101: The Difference between Low-Fidelity and High-Fidelity Prototypes and When to Use Each" and discussed those types of prototypes are not only low-fidelity and high-fidelity but also included code prototype which means the actual prototype that act and behave like the real product or website. This type of prototype requires designer to code the high-fidelity and truly understand the actual behavior of the product or website itself (Babich, 2017).

### **Web Layout Principles**

Veronica Raducan wrote about web page layout in an article "19+ Website Layouts Users Won't Forget" to lay down the effective layout for web design. In the section called "Best Website Layouts with Proven Success", popular website layouts for designer are zig-zag layout, F layout, full screen photo, grid layout, one-column layout, featured image layout, asymmetrical layout, split screen layout, headline and

thumbnails gallery layout, modular layout (card layout / block layout), magazine layout, single page layout, radial symmetry layout (Raducan, 2018).

Paul Boag wrote also about Website layouts in an article "10 of the Best Website Layout Examples & Ideas" that there are some layouts to try in 2020. They are single column layout, content focused layout, magazine layout, grid breaking layout, full-screen layout, alternating layout, card-based layouts, hero layout, split screen layout, and asymmetrical layout (Boag, 2020).

Second is the navigation design on the web. In this research, this navigation design acts as directional or signage system on the virtual tourism in leading tourist to interact to digital new media.

In navigational design, Stephanie Lin published article "The Rules for Modern Navigation" said that the web navigation should have these 4 principles - Prioritize consistency, clearly design of interaction, omitted deep navigation, responsive design compatibility (Lin, 2017).

Material Design itemizes the type of navigation for an app in article "Understanding navigation" that there are 3 main types of navigation - lateral navigation, forward navigation, and reverse navigation. Lateral means moving in the same hierarchical level of page. Forward means moving one step downward in the consecutive level. Reverse on the other hands means moving upward to the consecutive level (Material Design, 2020).

Renee Chambers added "10 steps for better website navigation" article describing that there are 10 steps as followed - 1) Navigation planning, 2) User friendly language, 3) Don't re-invent the wheel (use web conventions), 4) Primary navigation, 5) Link the logo back to the home page, 6) Responsive navigation, 7) Fat footers, 8) Sticky navigation, 9) Indicate where you are, 10) When to use mega menus. (Chambers, 2020)

Ryan Gittings wrote to describe navigation design in article "3 essential rules for effective navigation design" as the way to find information or content in the

website or even the way to get around within the website. There are many different ways in looking at the navigation but it depends mainly on the problem of each website and its content.

There are 3 rules that Ryan said is essential to have an effective navigation design. One is to finalize the information architecture before doing navigation. Two is the KISS (Keep It Simple, Sometimes) rule. Three is to choose the orientation wisely. (Gittings, 2015).

Petter Silfver suggested the 6 guidelines for navigation design in article "The Elements of Navigation + 6 Design Guidelines" that it is clarity, simplicity, saliency, context, correlation, and tonality (Silfver, 2012).

Daria Veraskina published in "10 Great Examples of Website Navigation Design" to describe navigation that is the main feature of the website for searching content in the site easily. Types of navigation design are horizontal vs vertical, mega drop-downs, sticky/fixe, fat footers, responsive design navigation, link logo to home page, and primary/secondary (Veraskina, 2017).

As discussed earlier that tourist uses navigation system to find the digital new media to interact with. The interaction between tourist/user with digital new media rely on the interaction design of virtual tourism or web page in this case. The followings are the principles and methods for interaction design for better experience of user/tourist.

In interaction design, Mikhail Mitra with Mantra labs published article "10 Most Important Interaction Design Principles" that there are UX, Consistent design, Functional minimalism, Cognitive loads, Engagement, User control, Perceivability, Learnability, Error handling, and Affordability (Mitra, 2016).

Ian Gibbs wrote "The Five Principles of Interaction Design" that the five principles are consistency, perceivability, learnability, predictability, and feedback (Gibbs, 2014).

Sachin Rekhi actually broke down "Don Norman's Principles of Interaction Design" as visibility, feedback, constraints, mapping, consistency, and affordance (Rekhi, 2017).

On the other hands, Summer Ye discussed about interaction design in Mockplus through article called "10 Basic Interaction Design Principles to Boost the UX Design" that the basic principles are 1) Follow the user's mental model, 2) Meet the user's needs, 3) Consistency, 4) Less is More, 5) Use simple language instead of technical terms, 6) Design for functional than the aesthetic, 7) Don't make me think, 8) Intuitive, 9) Allow user making mistakes, 10) Provide feedback (Ye, 2017).

The definition of Interaction design based on "What is Interaction Design And How it works?" by Grace Jia is the interaction of user and digital media design to facilitate the experience of user. It does not facilitate only the design but also other web elements in achieving the best user experience. The five dimensions of interaction design is words, visual presentation, physical objects or space, time and behavior (Jia, 2017).

### **3.3.5 Evaluation Stage**

In this stage, the design development is tested in two methods - expert review and user testing. Expert in appropriate discipline evaluate the design and make some recommendation or suggestion. Researcher walks through all the comments and suggestions from all expert and make decision on change management to the web design. The concept of the design will take in consideration. User testing is the last step in letting the real user test on the web site and provide feedback through online form. Researcher summed up all the result and conclude the research. The result of this stage will be presented in Chapter 4.

Jeff Sauro published article title "5 steps to conducting an effective expert review" that there are 5 steps in conducting expert review. Understand the Method & Human Behavior, Have Some Idea of Common Tasks Users Will Perform, Conduct

the Review Methodically and Independently, Have Another Expert Perform an Independent Review, Categorize, Reconcile Differences, and Add Severity are the following steps to develop expert review (Sauro, 2016).

### **3.4 Thesis Design Process**

The whole design process for this thesis combines all three processes together merging at the beginning of the process with the same research and analysis steps. The design step is not quite the same as the output or outcome of each step is slightly difference. The same in name calling is the IA or Information Architecture. The Web IA means the structure of the web or the flow of the web page in each web site – Site map. The IA which is the outcome from analysis step creates a map of site-specific location. This IA is used in creating a map or cartographic design. This IA should lay down all the specific location based on the area survey in the research step as primary research.

### **3.5 Chapter Summary**

This chapter has delved into primary research – Photographic survey, in-depth interview with local people and alike. It also drew the analysis process diagram of the research data that occurred during the primary research. That information gathered and processed in the design thinking model. Initially, it started off with define stage in finding the empathy of the area and define problem area for further research as the second stage. The ideate stage is to diverge or converge the problem and process together and find the possibility for the solution. That should conclude for this chapter. The interview process with the local body indicates how the community related to the place and its history. The relationship and attachment between local and place have shown here. Each generation has different level of attachment toward the place. The history in this place also calls upon the action of local people toward the place. The decision of older generation has also effect toward the next generation action of the place as well. Words from different generation in this area let the researcher see the

change and movement of the population in the area. The remaining of the movement and the remaining of the culture are shown in the current stage of this area which express the identity of the area clearly.

All diagrams in this chapter has been created by researcher - Thirathep Chonmaitree.





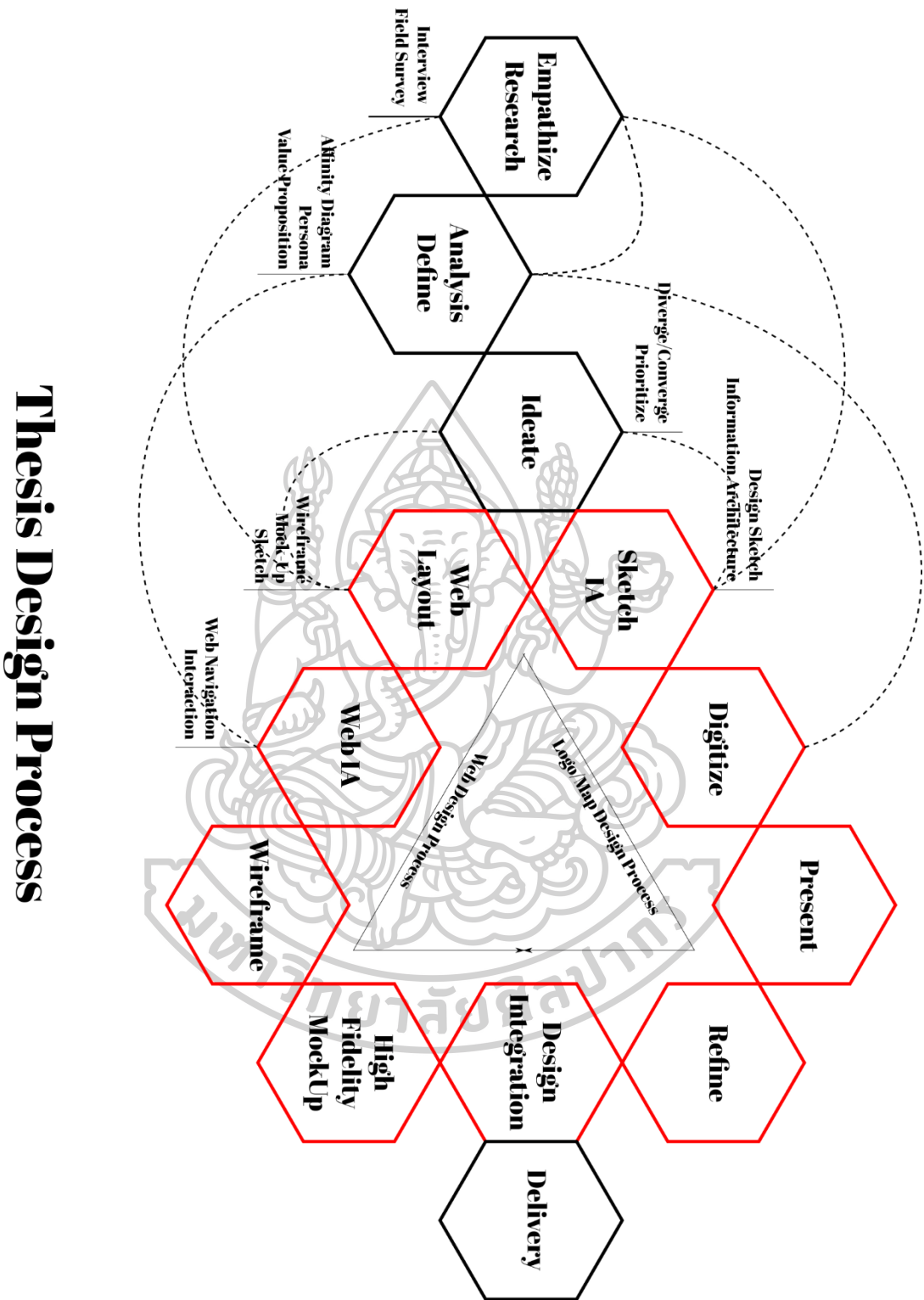
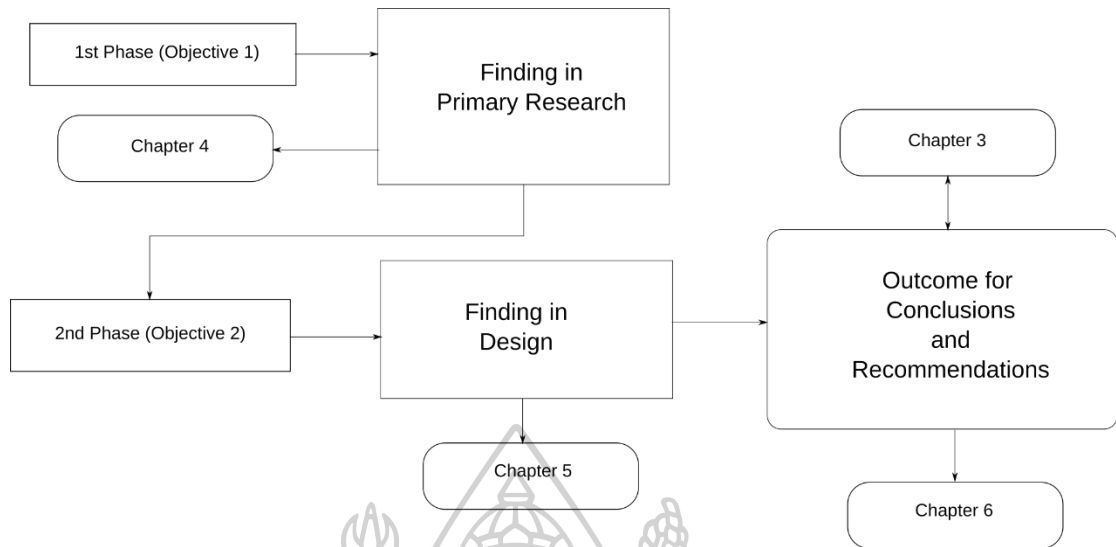
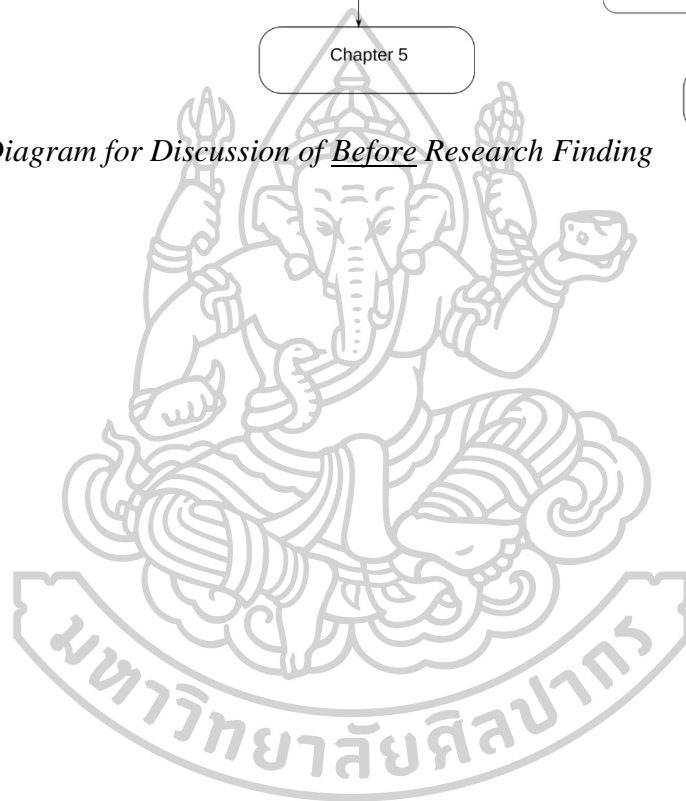


Figure 24 Thesis Design Process

In the next chapter, the finding of this research in the prototype or design part is displayed and discussed as shown in diagram of figure 25 below.



*Figure 25 Diagram for Discussion of Before Research Finding*



## Chapter 4 The Niche of Bang Lamphu

### 4.1 Primary Research

Below is the raw data from field study using 2 methods - Survey in photograph and in-depth interview.

#### 4.1.1 Survey in Photograph

There are 4 categories of illustration as

- |                            |               |
|----------------------------|---------------|
| 1) Historical Architecture | 2) Religion   |
| 3) Community               | 4) Gastronomy |

##### 1) Historical Architecture

In this category, It is about historical architecture in the area of Bang Lamphu. Each one has its own architectural style and history. The setting of each architecture also tells the story within this historical setting. Figure 26 shows sampling of photographs in this category.

##### 2) Religion

In this category, religion has been a sacred place for people all over the place. In Bang Lamphu, especially, has 3 religions with obvious sacred place. There are 2 sides of Buddhism though - Theravath (Thai temple) and Mahayana (Chinese shrine). Islamic and Hinduism are also in Bang Lamphu coming from migration and royal employment. Figure 27 shows sampling of photographs in this category.

##### 3) Communities

There are 8 communities in Bang Lamphu. One newest community is Baan Tuk Din. It splinted off from Bowon Rangsi communities. Both communities believe in different religion - one Buddhism, one Islam. Both communities are still working

together to improve the whole communities of Bang Lamphu better. Figure 28 shows sampling of photographs in this category.

#### 4) Gastronomy

In this category, the area of gastronomy in Bang Lamphu is around Rambuttri road and Phra Sumeth road. It is a variety of food. Mostly street, area in Bang Lamphu. Most people know Bang Lamphu only for this specific area, even though, Bang Lamphu covers a lot more as stated in the previous chapter. This research explored other area of Bang Lamphu as well.



*Figure 26 Historical Architecture Place Photographs*

In figure 26, there are 1) Phra Sumeth Fort 2) Old Building at District Office 3) Peth Palace at Wat Bowonniweth Vihara 4) National Gallery 5) World War II Bunker, currently as Public Toilet 6) Bangkok City Library 7) Bank of Thailand Building 8)



Coin Museum 9) Santi Chaiprakarn Pavillion 10) City Gate 11) Pipit Bang Lamphu 12) Democracy Monument



*Figure 27 Religion Place Photographs*

In figure 27, there are 1) Wat Bowonniwet Vihara 2) Chakkrapong Mosque 3) Buddha Footprint 4) Chao Mae Tubtim Shrine 5) Wat Sangwej (Inside) 6) Wat Mai Ammatarod 7) Wat Sangwej and Wat Sangwej school 8) Reclining Buddha 9) Chao Por Nu Shrine 10) Luang Puu Khao San 11) Ganesh shrine 12) Trimullati shrine 13) Community shrine 14) Baan Tuk Din Mosque 15) Chakkrapong Mosque 16) Phra Chao Taksin shrine.



*Figure 28 Community Place Photographs*

In figure 28, there are 1) Wat Sangwej community 2) Kientniwat - Trok Kaijae community 3) Baan Phanthom community 4) Lamphu tree 5) Wat Mai Ammatarod community 6) Baan Phanthom community entrance 7) Community center at Kientniwat Trok Kaijae community 8) Narcotic center 9) Public art #1 at Baan Phanthom community 10) Public art #2 at Baan Phanthom community 11) Public art at Wat Samphraya community 12) Bas Relief Sculpture 13) Chakkrapong Mosque Community.





Figure 29 Gastronomy Place Photographs

In figure 29, there are 1) Aim Tai Kee restaurant #1 2) Aim Tai Kee restaurant #2 3) Koh Pie Coffee house at Phan fah #1 4) Koh Pie Coffee house at Phan fah #2 5) Mae Siri Icy Rice 6) Khun Dang Vietnamese Noodle 7) Nopparat Restaurant 8) Curry over rice 9) Patongkoo 10) Mae Fame Icy Rice 11) Indian Restaurant 12) Banana Preserve Street food 13) Rice Crispy with 4 toppings 14) Rotee on cart 15) Puawkie Yentafoe 16) Bokekia dessert 17) Indian food restaurant 18) Karim Rotee Mataba.

### **4.1.2 In-Depth Interview**

There are 12 interview transcript results. Each interviewee does not display the name. They will be referred to as interviewee follow with number from 1 to 12. Summary of each interview transcripts are presented below. Full interview transcripts can be obtained upon request.

#### **Interviewee #1**

Baan Phan thom community is doing the nielloware earlier. Nowadays, those generations remained less and less in the community. The process in developing nielloware has been passed from generation to generation. The only place that nielloware can be found is at Thai Nakhon store. Department of treasury came to draw the attention to the tourist with Graffiti on the wall. Tourist like to walk along the community and take photo with local people and graffiti. Most tourist would like to see the Thai life style. The community itself need to have more merchant to raise community economic situation.

#### **Interviewee #2**

Two of interviewees are friends who exercise together at the park. One is local from the beginning. Another one came from Northeastern and become local ever since. They think that Bang Lamphu has long history of culture and tradition. Outsiders come to the area for income. Local gain more safety than before. They think that Bang Lamphu cultures lies within art and culture, silverware, golden ware, and gastronomy. Core competency can be lost in time if there is no inheritance. Outsiders can take over the area if there is no regulation for outsider. Songkran is the most popular event in Bang Lamphu.

### **Interviewee #3**

Most tourism in Bang Lamphu is cultural type. It is important for business and commerce. Entertainment hub is in progress in this area. Accommodation business changes people in the area for tourism business. Old house turns into guest house for tourists. Most local people move out and outsider move in. Tourist found communication and signage as major problem in the area. On the other hands, history, physical adjustment become strength of this area. The drawbacks are lack of PR, less community tourism promotion, no tourism development, no community support system, misconception of tourism research, no understanding of the area. Most foreign tourist travel alone more and more. Historical place has its own story to tell. More organization and institution work with Bang Lamphu more and more to help the area. Community itself should develop its own strength.

### **Interviewee #4**

Tuktuk and illegal guide will continue to be problem for tourists. Most foreign tourists still rely on paper map rather than google map. There are still increasing number of tourists who come to pick up the map at the tourist service booth. Khao san road still remains the most ask about place in Bang Lamphu by foreign tourist. Lonely planet is what most tourist believe in. All Thais should help tourist in need and learn to speak English.

### **Interviewee #5**

The land is quite old age. This community land is the royal property. It is the area of Chakjessada palace. There are 2 shrines of Luang Chakjessada. The main popularity in this community is Khon dress embroidery which will be lost with no inheritance to this neat work. The attraction point is the old-style house and the shrine. The main problem is stray dogs and cats.

### **Interviewee #6**

Most population came from northeastern part of Thailand. The highlight of this community is banana tree carving. The knowledge from previous generation has passed along. Dragon performance has also another highlight. New generation of management is working to develop a better community.

### **Interviewee #7**

The history of Wat Sangwej dated back in Krung Sri Ayutthaya era. It was alongside Wat Sraket in corpse cremation. Later, some part of this temple has turn into school and get rid of those bad things. There was fire broke out and destroy most of the wooden houses. The community was revived. Civilization came from Khao san road along with tourists. Tourists like to walk along community. Main characteristic is Thai Classical music. Garbage collection and canal cleaning are the main problems of this community that is fixed by negotiation between local community and community committees. Aging population has been active and love travel. Their travel relies on government support or community management group.

### **Interviewee #8**

Community leader volunteer to solve budget problem in community. This is the second Muslim community in the area. Most Muslim came from Pattanee province. They came to the area for gardening work. Chicken fight, Takraw maker and Kite maker are among their life style. The mosque was built later. One important career in this community is goldsmith. Gold leaf was produced from this community and spread throughout the area. Later they turn into Royal Regalia. Some strict rule in Islam has changed by head of this community for better opportunity. New generation has moved away from community. Muslim food has been preserved and sold. Leader of the mosque supports and promotes community tourism. Baan tuk din mosque gain



popularity around the world as Muslim from different countries comes to Baan tuk din mosque for pray and travel.

### **Interviewee #9**

It is the first Muslim community in Bang Lamphu. Most Muslim resident came from the southern part of Thailand - Pattanee. In Tani road, Muslim who came from Indonesia lives there and spoke Indonesian language. The language disappeared over time. Muslim in community worked in the palace as gardener. Goldsmith is their main career as of now. They produced gold leaf and distributed to the palace and in the area. Muslim food has sold in front of community. In the future, goldsmith will be gone from the community.

### **Interviewee #10**

This community settles at the center of Bang Lamphu. Wat Bowonwet supports this community since the beginning. It was built to block the expansion of Khaosan road. Goldsmith is an important career in this community. It produced gold leaf and distribute them. Kanom chan Mai udom has been community dessert for 100 years. There are also some other foods around community. Outsiders, unhealthy food, lots of stray cat, no resting area for elderly are some of the problems for tourists. This community located in the important road that lead to Thai Champ Elysée - Ratchadumneon Road. The new world building used to be the heart of business in Bang Lamphu. It should be renovated and upgraded toward current era. Most Bang Lamphu would help and support in whatever it can be.

### **Interviewee #11**

She has inherited from Phra Pinklao. Her memory of Bang Lamphu came from how her mom brought her to Bang Lamphu market. She saw fruit and vegetable

markets all around. In her vivid memory of Bang Lamphu at that time, it was a booming area for business and fashion. Most female shopper dressed very fashionable to date back then. She remembered that Mae Siri was the popular in Icy Water Rice along the side dishes. Food in Bang Lamphu almost diminished from the area. She doesn't know what to come for anymore. Even though the Icy Water Rice dish was really good, the history had tied to Mon and how she does not really sure where it came from exactly. She hopes that the area can get back into a popular place for people, a good place to hang out and an interesting cuisine to take home with.

### **Interviewee #12**

This interviewee came to this area from being a maid. She was also raising her grandchildren and knitting the Khon Embroidery. Old wooden houses were an attractive thing in the community. Her mother involved with Khon performance group. The old tradition for Thai family was selecting a man to married based on his career and financial reliability. Luang Chakjessada shrine has 2 sides – inside for female maid and outside for male guard. There is ceremony to celebrate this shrine for 3 days with Likae performance and city calling dance. She always misses New World Department store which was popular when she was young. She thinks that there will be lots of support from Local Bang Lamphu residents in order to revive New World Department store. That will make Bang Lamphu alive again.

## **4.2 Discussion of Finding**

Objective 1 - To examine the fundamental characteristics of Bang Lamphu



Bang Lamphu area housed diversity and culture from different part of the world.

Royal duty brought people from around the world to work and serve the royal. As they moved in, diversity came into the area. Four area in identifying the area are defining the Bang Lamphu. Bang Lamphu itself is the historical site within Rattanakosin island. Origin and their relationship are strong and outstandingly long within King Rama Reign. Palace work and city development originated the migration of people from different part of the world. Bang Lamphu became the resting place for those people and established diverse community within including lifestyle, religion, and gastronomy. Four distinguished places that can well-defined this area are historical architecture, religion, community and gastronomy. Each group related closely to each other without questions. As people came in to create distinctive community alongside their own religion, culture and gastronomy. Even in the present day, the old generation of people are still existing and the new generation are gone away from the area as shown in figure below. The trace of the civilization from the past exists through historical architecture, religion, and gastronomy. The comparison of historical architecture with artist

works.

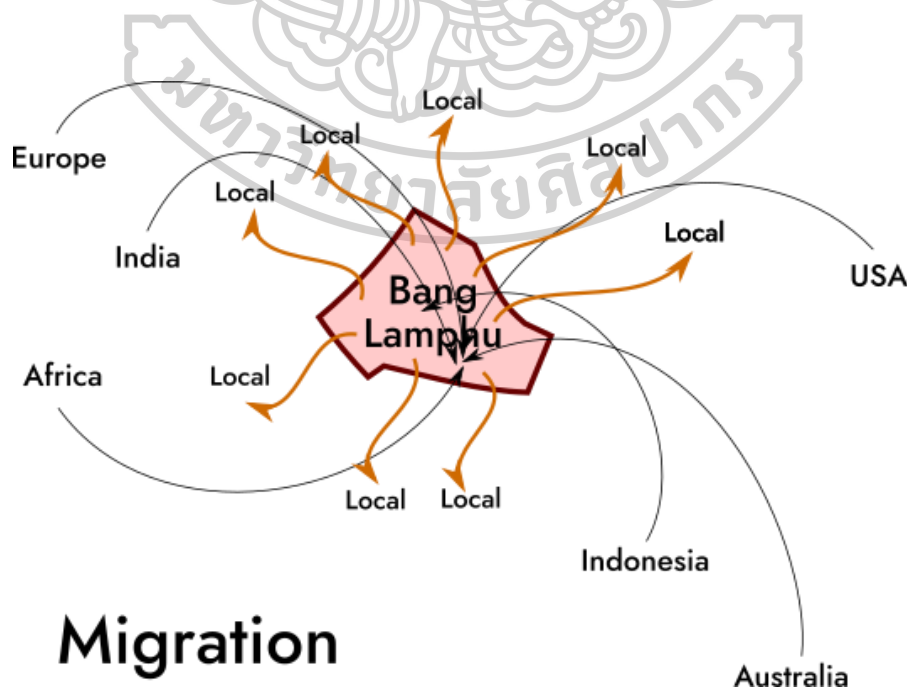
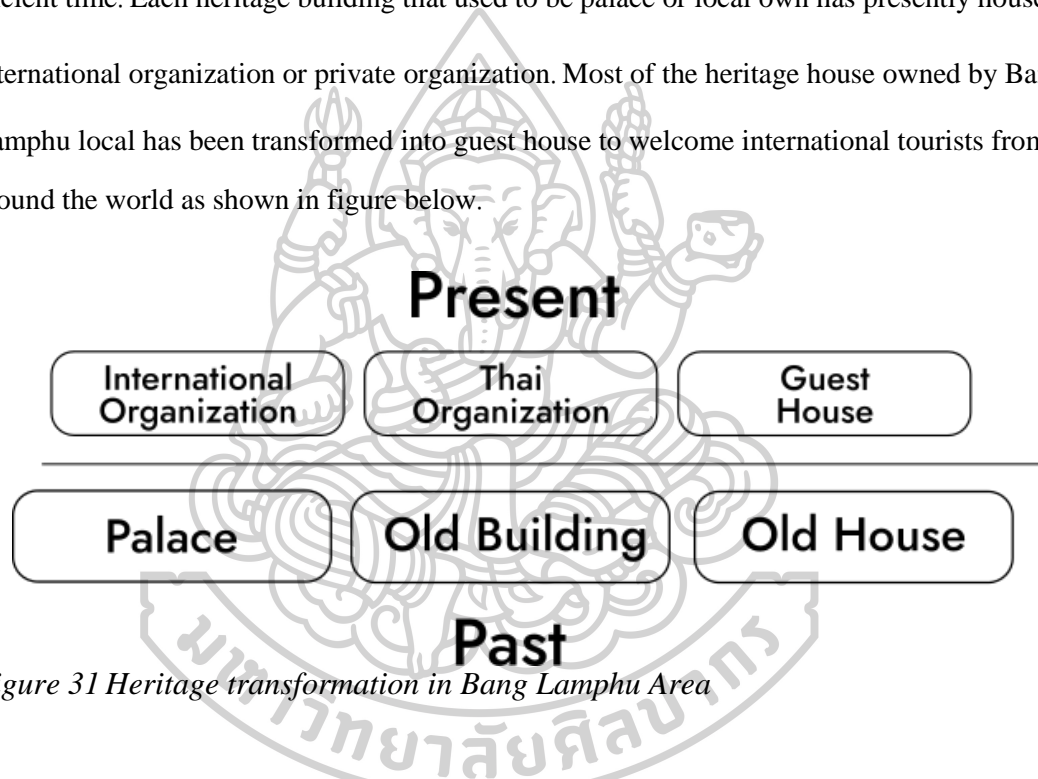


Figure 30 Display migration of people into and out of Bang Lamphu

The survey of Bang Lamphu area indicates that there are multicultural diversity of culture and interesting attraction places to explore. In historical sense, the transfer of culture depicted by architectural style in chronological sense. Western style architecture scattered around the area with long history of building development. Each community in itself contained ancient old house in Rattanakosin period that depicted life style and class of people within that time. Maintaining the previous lifestyle of elders bring the mood and tone of ancient time. Each heritage building that used to be palace or local own has presently housed international organization or private organization. Most of the heritage house owned by Bang Lamphu local has been transformed into guest house to welcome international tourists from around the world as shown in figure below.



*Figure 31 Heritage transformation in Bang Lamphu Area*

Walking along the alley of each community creates sense of old community brought back to the Rattanakosin's living. People living in each community still maintains the traditional sense and taste from one generation to the next. They inherited the style. In gastronomy, they bring their own taste to open restaurant within Bang Lamphu area. The taste and style are kept the same based on recipe formula. This indicates the uniqueness of Bang Lamphu well. Gastronomic region within Bang Lamphu area is well-known for food cart and street food that passed on its taste for generations. In the virtual web environment in this research, the gastronomic places are introduced and delivered visually. Some gastronomic

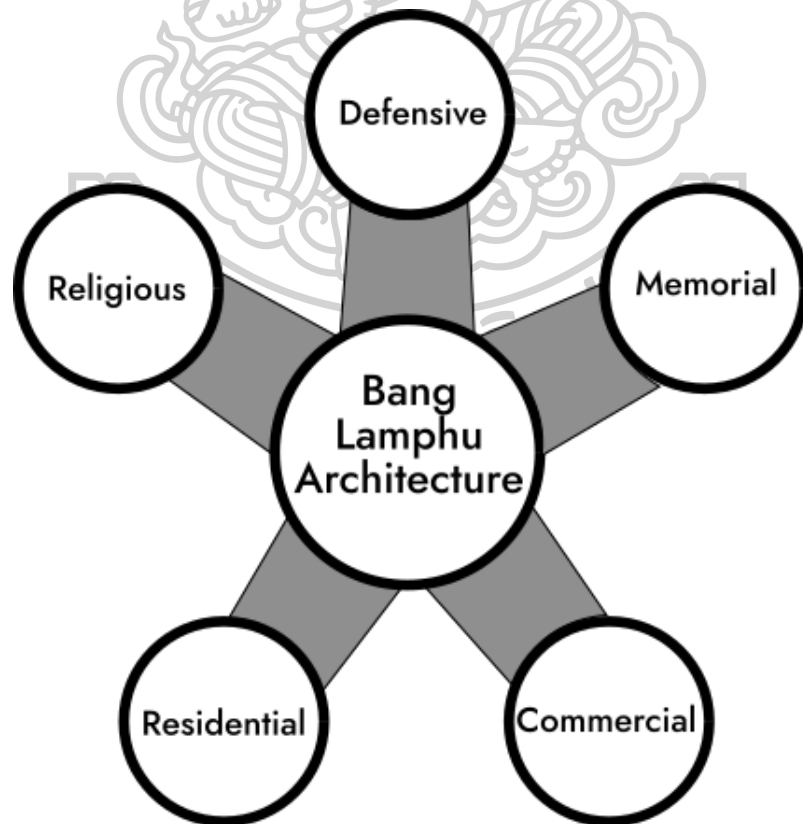
recipe has been brought in from migrating group and offered to the monk in the temple based on the history that has been told about Wat Chanasongkram.

Within the religious place, such as temple, mosque, and place of worship, has one unique quality - peacefulness and stillness within. As for Buddhist architecture, the style of religious architecture both Buddha figure and pagoda expressed the style in the past. It defined an exquisite and neat practice of building environment. The atmosphere of religious place in itself is tranquilized by the form of architecture and its layout. Sound of chanting from the Buddhist monk can also identify the religious place and bring peaceful feeling for the visitors. Mosque on the other hands offers the sound of chanting based on the number of traditional chanting for Islamic believe. The sense of peacefulness within the place of worship is also depended upon the selected location as well. One site in particular located near Bang Lamphu canal next to a big tree giving this architecture restful and interesting environment for worshipping place and activities.

Based on some examples for Sense of Place by John Spacey, there are Culture, Norms, Architecture, Public Space, Commerce, History, Heritage, Storytelling, Symbols, Tradition, Community, Adversity, Life style, Identity, Celebration, Visitors, Nature, Landscape, Infrastructure, Placelessness (Spacey, 2019) which can be divided into 3 aspects - architectural, society and resource aspects. In this thesis research with experimental research design, the focus is mainly on architectural aspect for the sense of place. Architectural aspect consists of Architecture, Public space, Community, Landscape, Infrastructure, Symbols, Commerce, History, and Heritage. Item in each aspect can be repeatable with overlapping of characteristic in each items.

In discussing about the architecture knowledge found in Bang Lamphu area. This research would like to divide into 5 types of architecture – Residential, Religious, Memorial, Commercial, Defense architectures as shown in figure below. Residential architecture can be

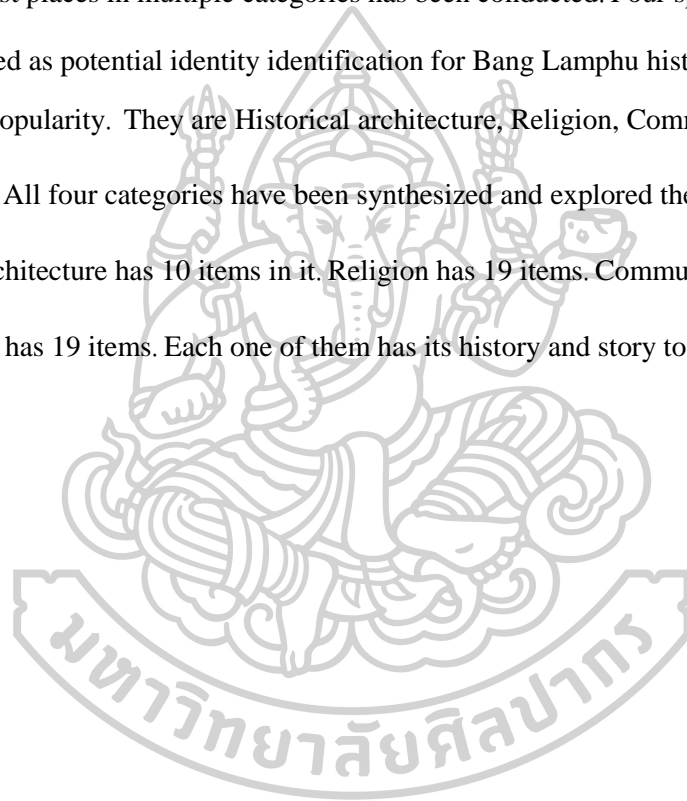
divided into both domestic and international residents. Religious architecture means the architecture that represent the religious believe and worship in each specific sect. Size of its architecture might be varied. Memorial architecture means one with historical background of fighting and memorizing a specific group of people or significant aspect in the history of this country. Commercial architecture or building could be divided from the whole building into a simple cart of food. Gastronomy as one of the category in this research uses cart as its architecture to represent food within. The cart represents mobile commercial architecture to deliver sense of heritage recipe. Defense architecture is the most vicious structure within Bang Lamphu. It is also a landmark in the history of Bang Lamphu and the gathering place for surrounding community in the present time. The iconic fortress with a great landscape to attract people transform the message from defending into welcoming landmark in the area.



*Figure 32 Type of Architecture found in Bang Lamphu*

### 4.3 Chapter Summary

Bang Lamphu is a part of Rattanakosin island. The island has been defined as historical area in Rattanakosin era due to its dominant places. Many historical places in Rattanakosin island have had its own history related to royal and city development at that time. The remaining of the historical place and it brings about are still progressing today. The sense of place currently can be tracing back to the history of our early King. Exploring the area for tourist places in multiple categories has been conducted. Four specific categories have been identified as potential identity identification for Bang Lamphu historical area due to its history and popularity. They are Historical architecture, Religion, Communities, and Gastronomy. All four categories have been synthesized and explored their existing literature. Historical architecture has 10 items in it. Religion has 19 items. Communities has 8 items. Gastronomic has 19 items. Each one of them has its history and story to tell.



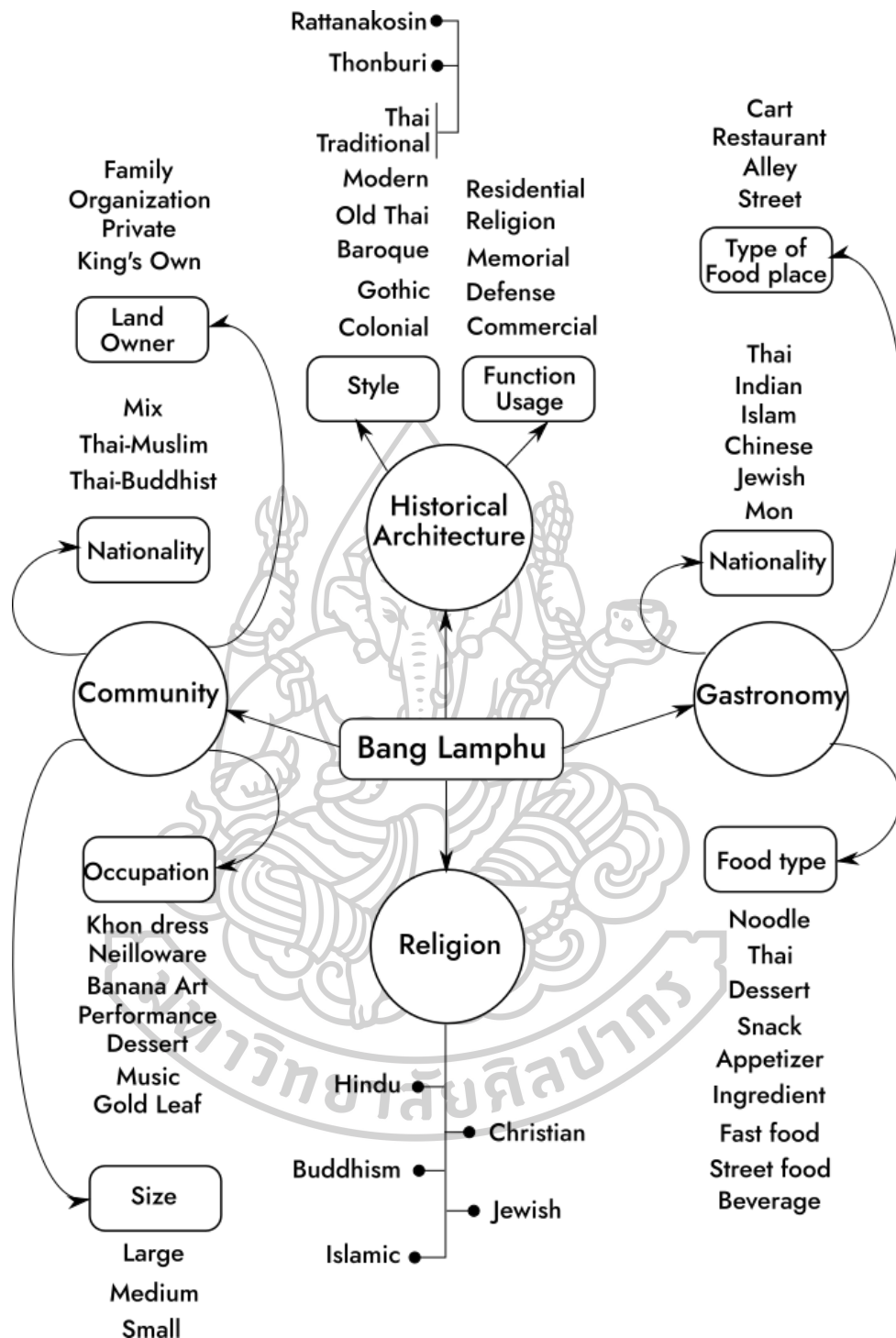
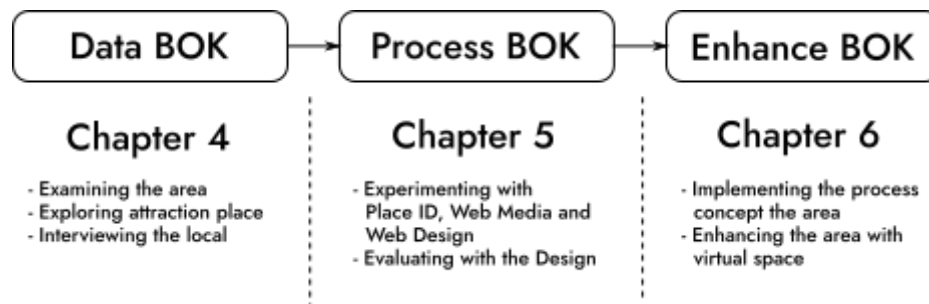


Figure 33 Whole Body of Knowledge from Data Variables

To summarize chapter 4 in figure, the figure above shows the body of knowledge gains from data variable in this experimental research methodology. This diagram separates 4 groups of data variable and distinguish all attribute found in each data variable as describe in research discussion in section 4.2.

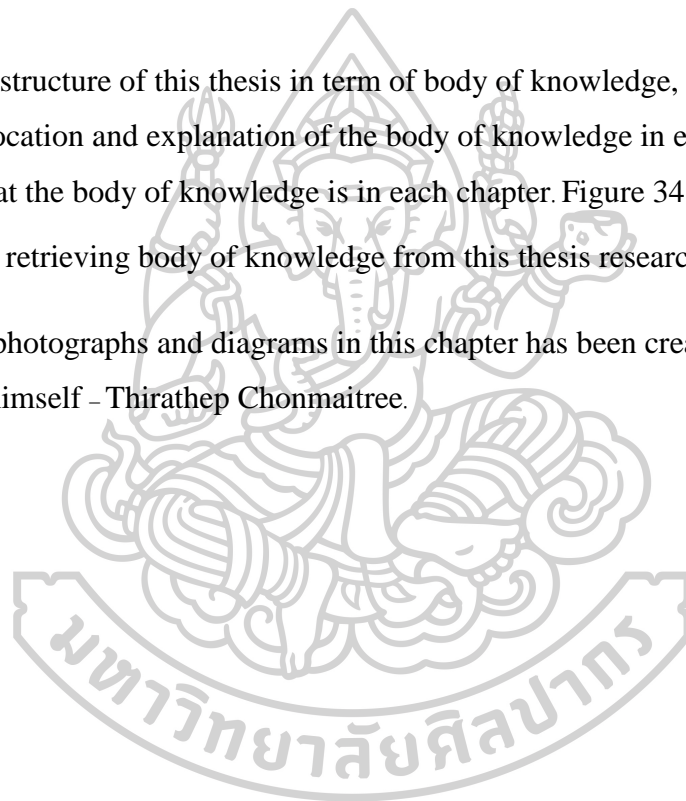




*Figure 34 Display the body of knowledge in each chapter*

The structure of this thesis in term of body of knowledge, the figure above shows the location and explanation of the body of knowledge in each chapter and indicate what the body of knowledge is in each chapter. Figure 34 can be used as a guideline in retrieving body of knowledge from this thesis research.

All photographs and diagrams in this chapter has been created and taken by researcher himself - Thirathep Chonmaitree.



## Chapter 5

### Developing Web Media for Bang Lamphu and Research Discussion

#### 5.1 Design Process

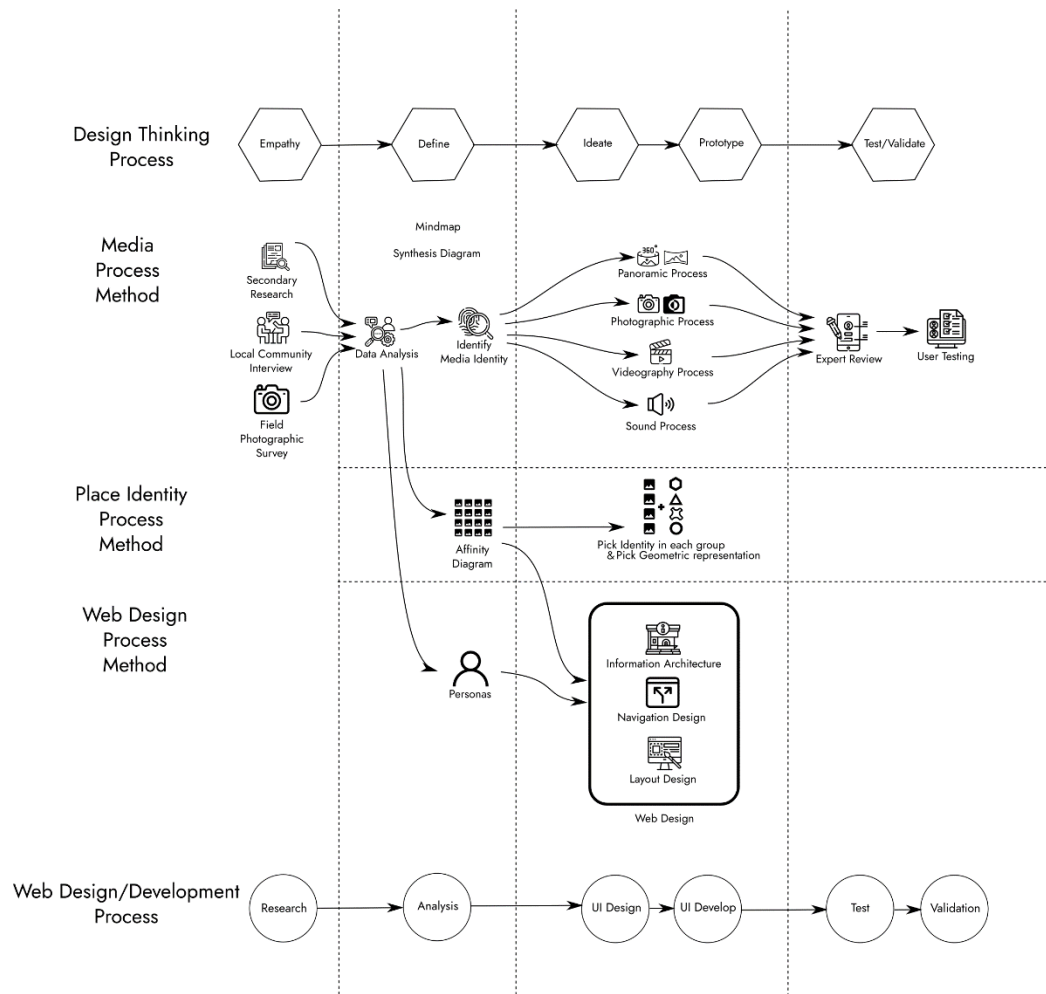


Figure 35 The expansion of Figure 24

Figure 35 design process diagram shows the relationship of each design process in this research. Each design process relates to each other. Beginning with design thinking process shares the first stage with other design process. The result of this stage can be used as input to other design process. The second stage defines the problem and analyze the problem. The ideate stage is to think of the possible solution to the problem and select the best one. The best possible solution has been developed

into prototype in prototype stage. Bringing the prototype to the test and getting the result are in the last stage – test/evaluation. In each stage of design thinking has its own methodology. Some of these methods have been described in Chapter 3.

## 5.2 Prototype Stage

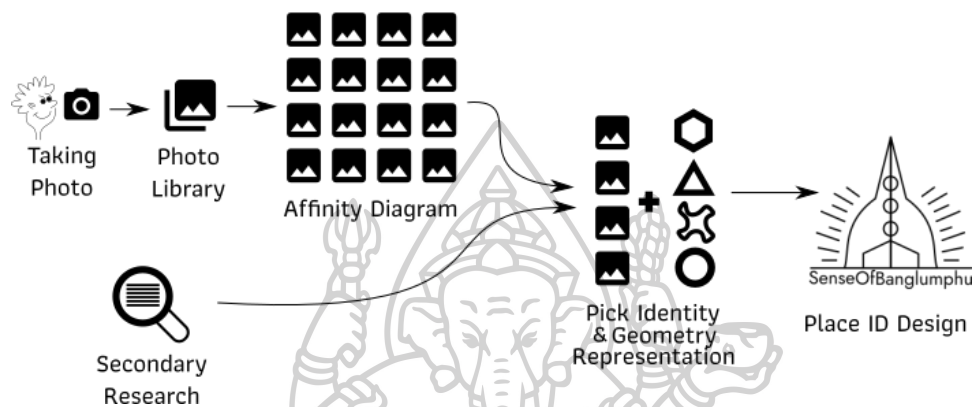


Figure 36 Place identity process

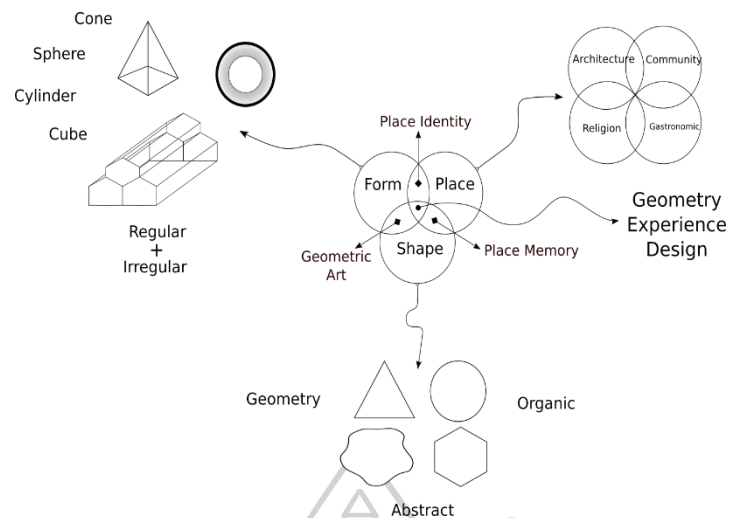
### 5.2.1 Place Identity Design

In figure 36 shows the process of developing place ID in Monoline. First, all photographs that were taken have been categorized and identify its own geometric shape to represent each category. The categorized process combines with the secondary research in literature to identify the unique and chronological significant of each place – Iconic IDentification process. Then, designing process of putting all geometric shapes together is another experimental design process. Figure 37 shows the iconic place in each category and its geometric shape that represents it.



*Figure 37 Place identity and its geometric shapes*

Based on Affinity diagram, each category has been picked the only one identical and most important based on historical data from interview and secondary research. Being the 1 out of 2 forts left in the area, Phra Sumeth fort is an iconic landmark in Bang Lamphu area for a historical reason. Its history and location deserve its place for identity in historical architecture of Bang Lamphu area. In 250 more years over the history of Rattanakosin era, Wat Bowonniweth Vihara stands in Bang Lamphu area ever since the area has known for its commercial dominant. It's important and relationship with the monarchy is well worth deserved its place for the identity in religion category. As in the name of the area "Bang Lamphu", the word Lumphu means the tree as said in Chapter 2. Lumphu tree becomes an iconic tree for the area and used to names the area itself. The tree is also the focal point for community to unite. That means the identity for community category must be Lumphu itself. In gastronomy category, street food is the identity for Bang Lamphu area. Even though there are a few Michelin's star restaurant in the area but street food on cart is still in demand and carry its own history from previous generation to the next. It also expresses its own culture of food within Bang Lamphu area well. Food cart then becomes an identity in gastronomy category. Geometric shapes that related to each category based on its identity are as follow: Phra Sumeth fort is hexagonal, Wat Bowonniweth is triangle point up, Lamphu tree is free form or Abstract form, and food cart is circle as with its wheel.



*Figure 38 Synthesis Concept of Place ID*

In figure 38, the concept of Place ID design shows the process of synthesized of Place ID. It is the combination of Form, Shape and Place in order to create Place identity, Place memory through Geometric art. The place comprised of Architecture, Religion, Communities, and Gastronomy. Form is the structure of architecture and place elements involved. The shape is itself representing 3 types - Geometry, Organic and Abstract shapes. Each place identity in each category can be represented in geometric shape as this - Hexagon or Octagon as in Architecture, Triangle as in Religion, Free form or Organic shape as Community, Circle as in Gastronomy. The design concept for this research is geometric design and Minimalism.

As for concept in design the whole experience in Minimal concept, this logo design used Monoline concept to create logo in representing the area using all geometric shapes from all 4 categories. This logo is in symbol and text logo. Text as the name of the place identity incorporate with the monoline symbol to identify the meaning of the logo. This logo used as representation of Historical Bang Lamphu with Minimalism concept.

## Anatomy of Logo Design

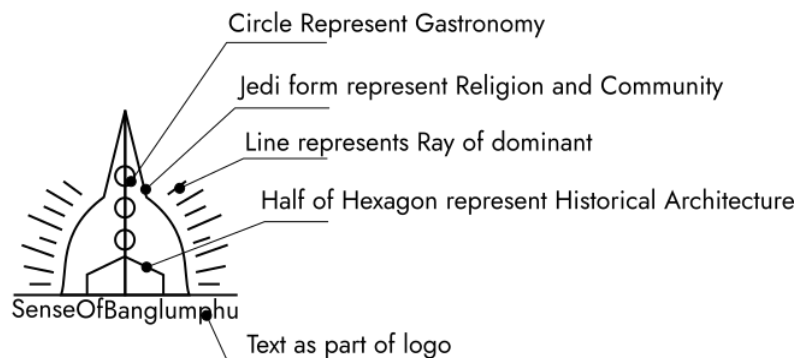


Figure 39 Anatomy of Monoline Logo

### 5.2.2 Web Media Design

In web media design, there are 4 groups of web media used in this experimental research. There are, 1) Photography, 2) Panorama, 3) Videography, 4) Sound. Each group has its own production process. Below is the process of web media production.

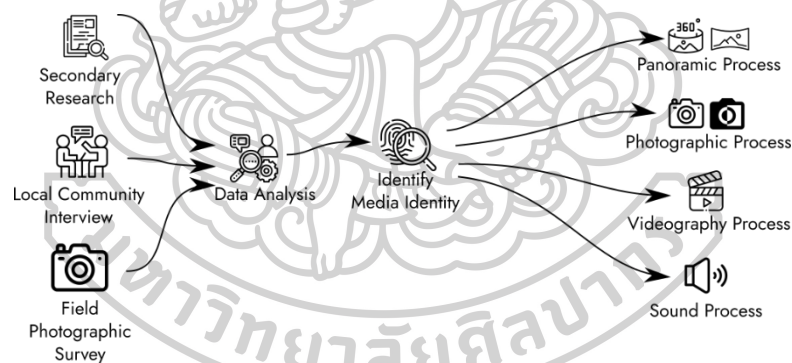


Figure 40 Web Media Production Process

Figure 40 shows web media production in all new media including photography, panoramic photography, videography, and sound production. Each media will have its own production process separately. At the pre-production process, all research information from primary and secondary research have been gathered and analyzed. Media identity has been identified for each media after that.

In define stage of design thinking process defines the media identification for each category of media in Bang Lamphu. In each category have different attribute that can identify the place as shown in the figure 41.



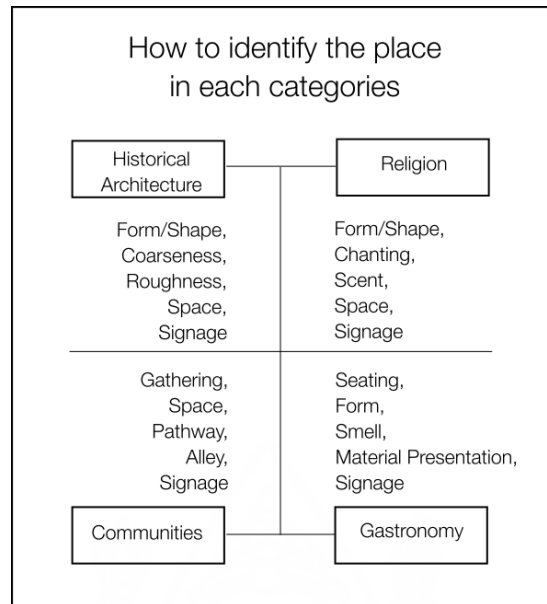


Figure 41 Define identity of place

Signage is the share attribute for all categories in displaying the place name.

Places under each categories possess different attribute as shown in table below.

#### Historical Architecture

		Shape/Form	Space (In/Out)	Signage	Coarseness	Roughness
1	National Gallery	X	X	X	X	X
2	Phra Sumeth Fort	X	X		X	X
3	Pipit Banglumphu	X	X	X	X	X
4	Old Row House Building	X	X		X	X
5	Museum & Library of Great Abbot of Wat Bowonniwet Vihara	X	X	X		
6	Ancient City Gate	X		X	X	X
7	Bangkok City Library	X	X	X		
8	Baan Khun Cherd	X				
9	Siam House Colonial Style	X	X	X		
10	Democracy Monument	X	X		X	X

Coarseness and Roughness are not presented if that architecture was renovated earlier.

Table 1 Historical Architecture Identity Table

## Religion

		Shape/Form	Chanting	Scent	Space	Signage
1	Wat Bowonniweth Vihara	X	X	X	X	X
2	Wat Chanasongkram	X	X	X	X	X
3	Wat Tritosathep	X		X	X	X
4	Wat Sam Phraya	X	X	X	X	X
5	Wat Sangwej	X			X	X
6	Wat Mai Ammatarod	X	X	X	X	X
7	Wat AimWorranuch	X	X	X	X	X
8	Wat Parinayok	X	X	X	X	X
9	Chakrapong Mosque	X	X		X	X
10	Baan Tuk Din Mosque	X	X		X (IN)	X
11	Luang Chakjessada Shrine	X		X		
12	Chao Por Nuu Shrine	X		X		
13	Chao Por Kow Tuk Shirne	X		X	X	X
14	Phra Chao Taksine Shrine	X			X	X
15	Trimullati Shrine	X				
16	Chao Mae Torranee Shrine	X				
17	Chao Mae Tubtim Shrine	X	X	X	X	X
18	Khao San Shrine	X				
19	Ganesha Shrine	X		X		

Table 2 Religion Identity Table

## Communities

		Gathering	Pathway	Signage	Alley	Space
1	Bowon Rangsi	X	X	X	X	
2	Baan Phan Thom	X	X	X	X	
3	Kient Niwart - Trok KaiJae	X	X	X	X	X
4	Chakrapong Mosque	X	X	X	X	X
5	Baan Tuk Din	X	X	X	X	X
6	Wat Sangwej	X	X	X	X	
7	Wat Sam Phraya	X	X	X	X	X
8	Wat Mai Ammatarod	X	X	X	X	X

Table 3 Community Identity Table

## Gastronomy

		Signage	Seating	Form/Decoration	Smell	Material Presentation
1	Crispy rice wih 4 Toppings	X		X		X
2	Thai Dessert Mae Ngamjit	X				X
3	Cool Corner Smoothie	X		X		
4	Nopparat	X	X	X		
5	Sane Dessert Cooking class	X	X	X	X	X
6	Tidbit @ Chor Tek Khung	X		X		X
7	Tossakan Thai Curry House	X	X	X		
8	Mae Siri Rice in Icy Water	X	X	X		X
9	Khanom Chin Namya	X	X	X	X	X
10	Pa Tong Kow	X	X	X		X
11	Bowon Boiling Rice	X	X	X	X	X
12	Boke Kia		X	X		X
13	Aew Tai Kie	X	X	X		X
14	Koh Pie at Phan Fah	X	X	X		X
15	Jira Yentafo	X	X	X	X	X
16	Rotee Mataba on Cart				X	X
17	Karim Rotee Mataba	X	X	X	X	X
18	Aar E Sar Islamic Food	X	X	X	X	X
19	Khun Dang Vietnamese Noodle	X	X	X	X	X
20	Chilli Chill Indian Food	X	X	X		

*Table 4 Gastronomy Identity Table*

As in all the table above, not all places in each category is created equal. It really depends on the space and time at the establishment of each place. This will affect how to portray web media and composition greatly. Among all the places, the lack of features in identification of place can be a uniquely verify by the different of location and how it was built in the past history. From features of place that can identify the place, there are suitable media that can be used to identify the place as in table 5 below.

	Panoramic		Photography		Videography		Sound
	360 Spherical	Cylindrical	B&W	Color	Video Story	Video Tour	
Historical Architecture	X	X	X		X	X	
Religion	X	X	X		X	X	X
Community				X		X	
Gastronomy	X			X		X	

*Table 5 Media that identify identity*

Based on table above, each media can express identity for each category differently. The table below shows suitable media uses for each category to express place identity for tourist to identify each place correctly.

### 5.2.2.1 Photography

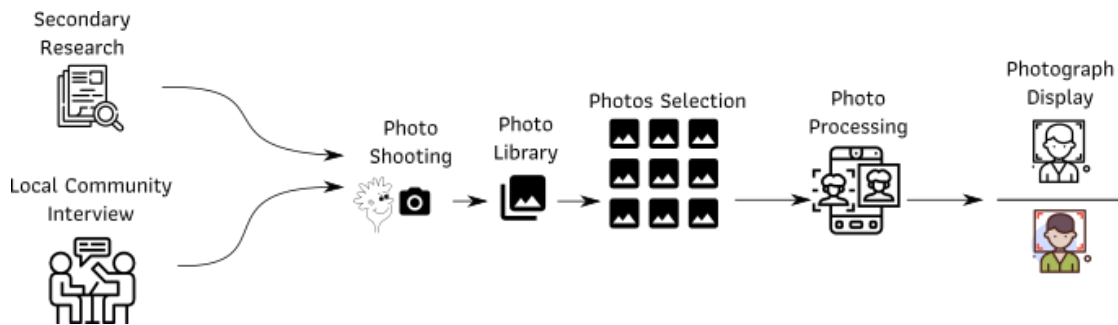


Figure 42 Digital Photography Production process in B&W and Color.

Figure 42 shows the photography production started off with gathering information from research and shot photographs. All photographs had been categorized into each category. At the end, photograph has been processed in order to represent each category based on researcher concept of place representation.

#### 1) B & W Photography



Figure 43 Historical Architecture B&W Photographs

Black and white photography expresses the gray scale in picture to eliminate the distraction from many colors in the photograph. It also definitely displays the coarseness and roughness well for historical site. In designing the composition of each photograph depends on the space around the architecture. Some historical architecture does not really have space around it. The definite theory in developing architecture is to have some surrounding space in order to elevate the architecture itself. In Thai historical architecture, on the contrary, develop each architecture without that concern.

1) The iconic landmark as Phra Sumeth fort has recreation park surrounding it after the renovation of the fort. 2) The Pipit Bang Lamphu building was renovate from the

old printing house. It was designed for different purpose and function. The renovate and readjust were quite not suitable for the initiation of the building. Photograph shows the entrance of the building and space within the building. 3) National gallery shows the building with space in front for some activities. The name of the building expresses the sense of welcoming to the visitor. 4) Democracy monument dominates the area in the middle of the street with its unique look. Its stand out in the middle of Ratchadumneon intersection is caught lots of attention from bypass pedestrian or international visitor.



*Figure 44 Religion B&W Photographs*

Religion expresses the mood and tone in black and white photograph as well to deliver calmness and cultivate sense of impression with its beauty in form. The shape and form of religious building has its unique and distinct look and feel for international visitor who have never seen Thai art. The other perspective of other religion also identify itself stunningly. 1) Wat Bowonniweth Vihara 2) Chakkrapong Mosque 3) Phra Chao Taksin Shrine 4) Chao Mae Tubtim.

## 2) Color Photograph



*Figure 45 Community Color Photographs*

In the community category, the graffiti art, resting area, and the signage of the community becomes the point of interest for sense of belonging in the community.



The feature for each community has been different and unique on its own. Graffiti art definitely deliberate identity definitions of each community.



Figure 46 Gastronomy Color Photographs

Variety of food carriers have been expressed in this series of gastronomy in Bang Lamphu. This variety has some impact in how to take photograph a bit with lack of some identification attribute.

### 5.2.2.2 Panoramic Photography

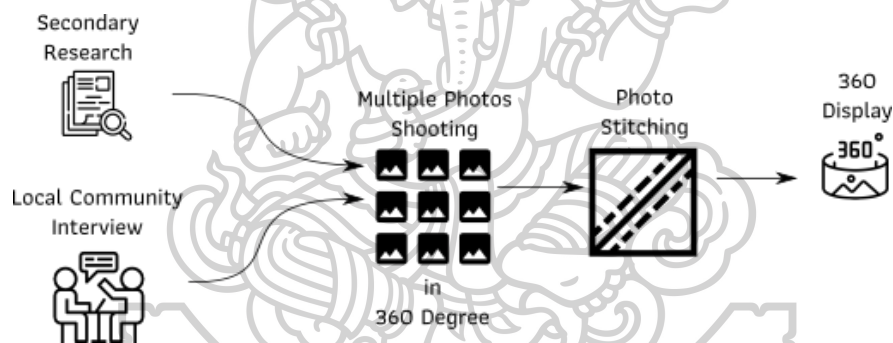


Figure 47 Panoramic Production Process

The process of spherical panoramic photograph as shown in figure 47 began with putting multiple photographs together and passing through stitching process in 360 Panoramic photography software.

#### 1) 360 Spherical Panorama



Figure 48 (Left) Phra Sumeth fort, (Right) Museum and Library of the Abbots.



Spherical panorama is the all-around area viewing through photo stitching process of spherical panorama. One spot surrounding environment embarks the actual experience of being at the place feeling the place at one single spot. On the other hands, cylindrical panorama panned the area at 180-degree angle creating panoramic effect of photography allowing viewer to experience the place in much wider angle. Fully viewing the area in this type of panorama can turn viewer's head side way to a much fully experience with the place in front of viewer. Figure 48 and 49 display flatten view of both spherical and cylindrical panoramas.

## 2) Cylindrical Panoramic



Figure 49 (Left) Chakkrapong Mosque, (Right) Chilli Chill Indian Restaurant

In cylindrical panoramic, on the other hands, shooting photograph with panorama feature in camera and produced panoramic photograph as in figure 49.

### 5.2.2.3 Videography

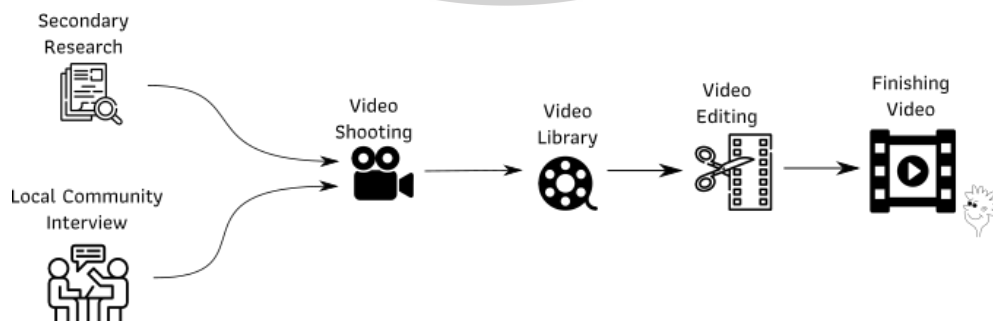


Figure 50 Videography Production Process

Videography process as shown in figure 50 started from gathering information and shooting video in each place. All footages are gathering in library and put together when in the video editing process. The final video was cut and rendered for viewing.

### Video tour



*Figure 51 Baan Tukdin Community*

In figure 51 to 54 depicts multiple still shots from video tour of 4 different communities. Each community has its own characteristic depend on its origin, work related, believe and geographical layout. All of them uses signage to identify the place with chronological household to define the historical period of each community.



*Figure 52 Baan Phanthom Community*

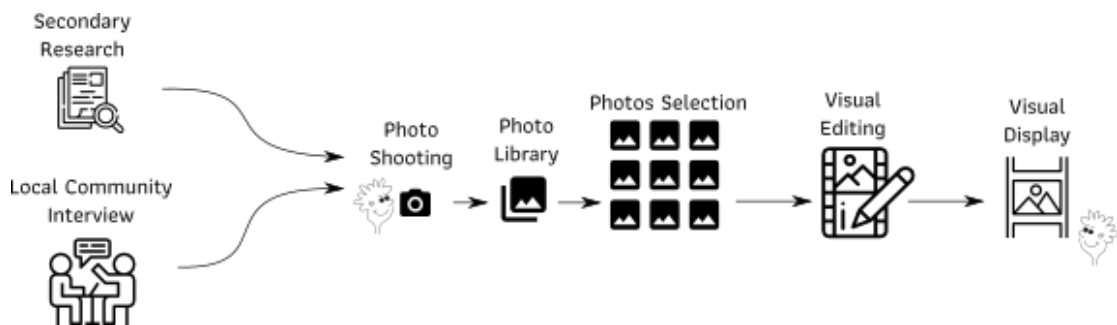


*Figure 53 Kient Niwat – Trok Kaijae Community*



*Figure 54 Bowon Rangsi Community*

## Visual Storytelling



*Figure 55 Visual Storytelling Production Process*

The production process in figure 55 above describes how visual storytelling was done in this research. Once information was gathered and analyzed (pre-production process), photographs were shot and categorized. Selection photographs process was done and put them together in the editing process until the finishing visual display of photograph sequence.



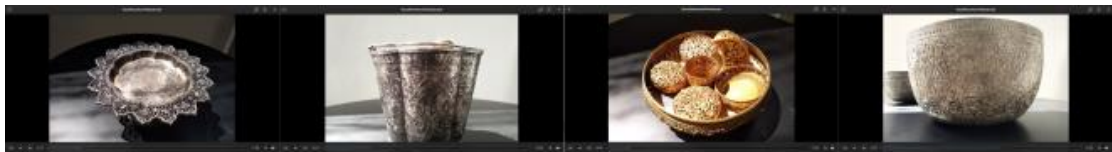
*Figure 56 Phra Sumeth Fort Story Snapshot.*

In figure 56 displayed Phra Sumeth fort video story panned through the whole area of Phra Sumeth fort and Santichaiprakarn Recreational park. The story began from the fort itself and moved along to the park area, passed through Pavilion and showed the Bang Lamphu's local life style in Bas-Relief settled in the beginning of the waterfront pathway opposite the Lumphu trees area. Passing the Lumphu trees area is the waterfront - pathway to the Pinklao bridge.



*Figure 57 City Wall and Democracy Monument Story Snapshot.*

In the far Left of figure 57, City wall or City gate showing multi-layer of bricks to building walls in ancient time. (Right) The following snapshots are showing different side of democracy monument that shade different light and story behind it. The brighter side is the front showing bright democracy era. The left and right side create a little silhouette in the monument before the darker side with crane construction showing the change in democracy and commencement for Thailand.



*Figure 58 Baan Phanthom story Snapshot.*

Explanation of figure 58 snapshot as the story developed based on Nielloware that this community used to produce in the past time. One woman walked us through the story of her house that produced Nielloware from the beginning through finish including her life story from childhood to her grown up in this community. The picture shown in some Nielloware expressed different meaning and create value to each Nielloware piece.



*Figure 59 Chao Mae Tubtim shirne story Snapshot.*

Behind the scene of figure 59 story is that this story took place within Wat Chanasonkram in the almost center of Bang Lamphu. This is the Chinese architecture shrine with a bit of area surrounding by parking lot. The art inside is no less than exquisite. Saturday afternoon can be a wonder with Chinese chanting rhythm from this shrine. A group of Thai Chinese nationality chanting inside the shrine. Started off with the sky as the Chinese god from above moves to the front on Chao Mae Tubtim and traverses through to the inside building behind. The chanting sound starts to get louder

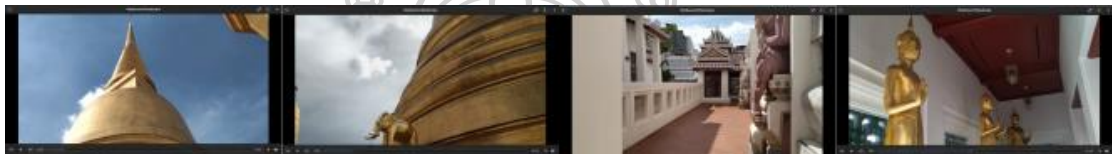


and pan through the building wall, then zoom out. Moving up the sky again is to send god back above.



*Figure 60 Wat Aim Worranuch Story snapshot.*

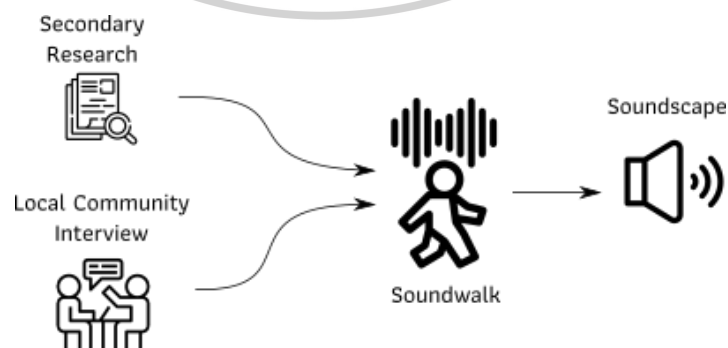
This story for figure 60 is to travel along the path of this temple. First through the garden on the side of the temple surrounding with sacred statues. Panning and zooming to each one of the sacred statues is to visit each one more closely.



*Figure 61 Wat Bowonniweth Vihara story snapshot.*

This temple story-line in figure 61 has many stories to tell. One of the stories is about statue in all 4 sides of an iconic Jedi. Each animal statue represents each country in the world. The focus is on elephant which is the representation of Thailand. Looking around this big Jedi.

#### 5.2.2.4 Soundscape / Soundwalk



*Figure 62 Soundscape production process (Soundwalk)*

Sound process is to have a soundwalk method along Bang Lamphu as shown in figure 62. Recording sound through walking is to capture surrounding sound, voice

and noise within each environment creating that area. Sound adds another interesting dimension to the story or media. Sound can tell the story itself through dialog or narrative method.

Sound for all 4 groups of this thesis can be found differently in each place in each category. Each place declare also permission in recording sound even though sound is simply common in the similar type of place. After recording the sound using smartphone, soundscape or sound clip was transfer to SoundCloud platform to store and simply access after.

### Sound Player (Soundcloud) Screen



Figure 63 Soundcloud window showing sound clip of Buddhist chanting

### 5.2.3 Web Design

In web design, there are 2 things to consider - Layout design and Navigation design. First, IA needs to be laid out.

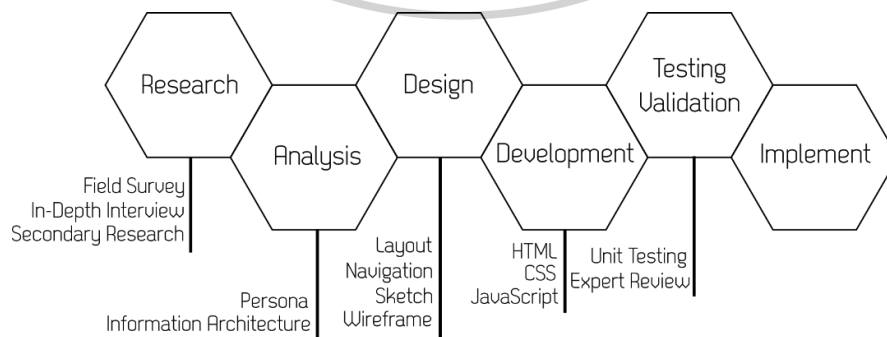


Figure 64 Web Design Process

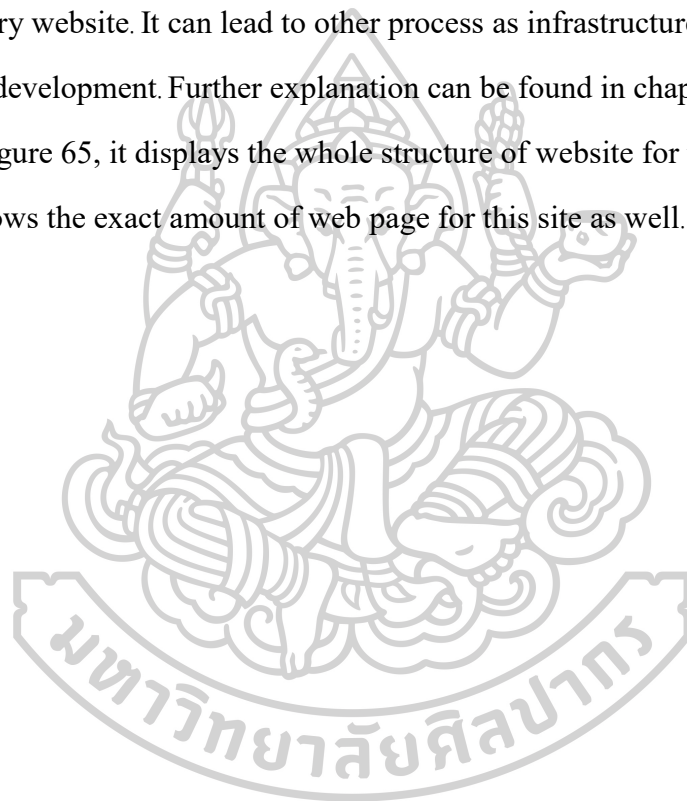


Web design has its own process that can combine with design thinking process in the first half of the cycle. The second half has different process to deliver the design and development as shown in figure 64.

### **5.2.3.1 Information Architecture (IA)**

Information Architecture for the web is overall structure of the whole website. It indicates how web page flow in each hierarchical level. This IA for website is the heart of every website. It can lead to other process as infrastructure for the entire web design and development. Further explanation can be found in chapter 1 and 3.

In figure 65, it displays the whole structure of website for this thesis. This diagram shows the exact amount of web page for this site as well.



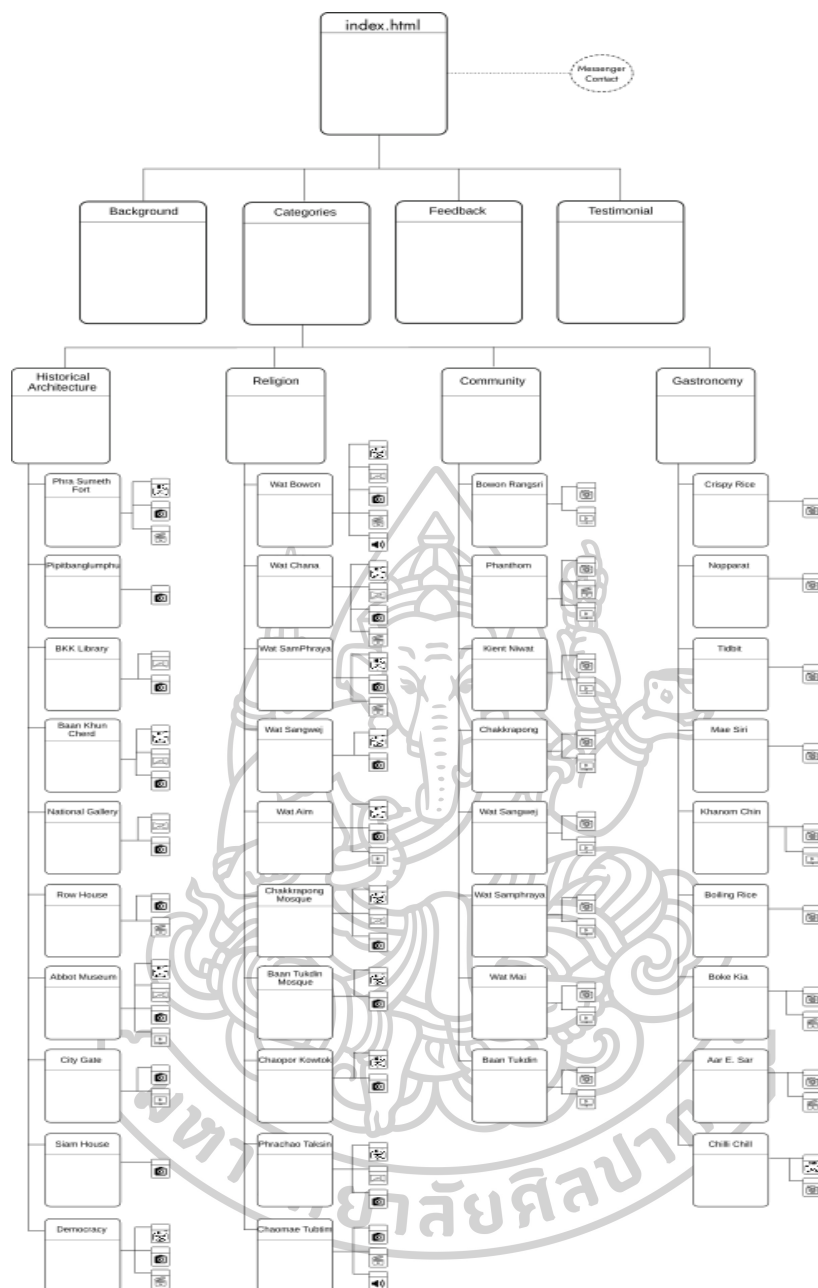
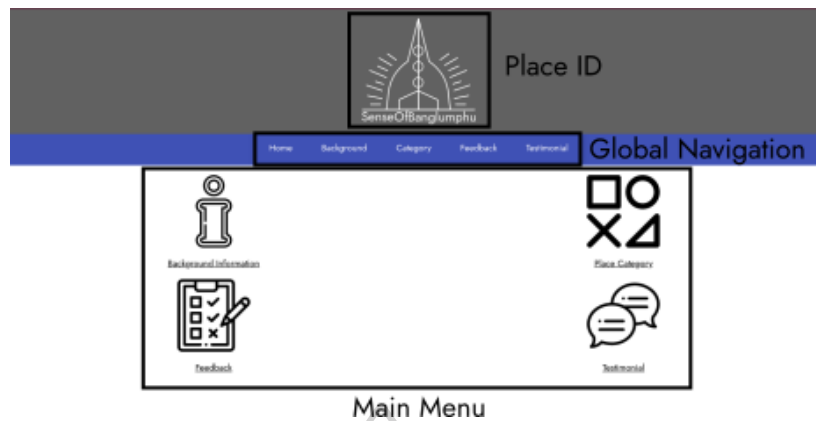


Figure 65 IA Structure for the website

### 5.2.3.2 Navigation Design

In this navigation design, there are 2 platforms to be considered - Desktop and Mobile.

## Desktop



*Figure 66 Desktop Navigation.*

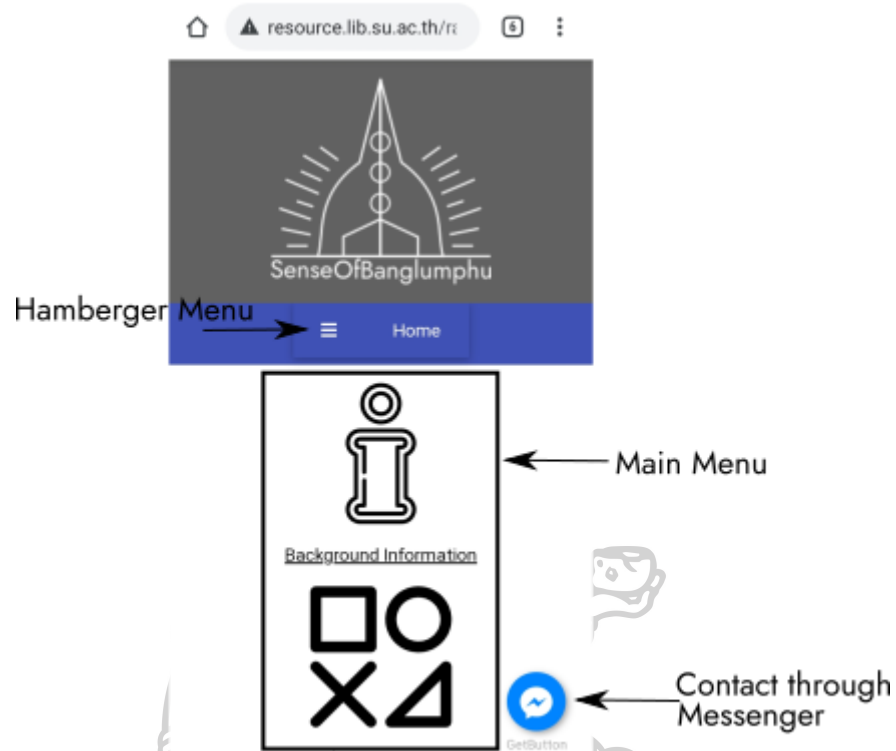
This figure 66 shows the blue area as global navigation where user can navigate through different hierarchical level throughout the site. The main menu of the site has been used as the main navigation.

In figure 67 shows the global navigation as explain in the previous figure. The horizontal hierarchical navigation is the navigation that let user traverse through the same level of hierarchy in the same brunch of its structure. The information card is the visual description of each place and available media of choice for each one. This card also provides location of each place through google map embedded.



*Figure 67 Type of Navigation.*

## Mobile design



*Figure 68 Mobile Navigation Design.*

This figure shows the different in navigation between desktop and mobile designs. Mobile itself with less space using Hamburger menu design to hide the menu item for global navigation. The main menu is also the same only in different orientation and layout that is easy for different platform and screen type to navigate.

### 5.2.3.3 Layout Design (High-Fidelity)

Layout design creates a different within the look and feel for user. It also defines how information arrangement within the web page. Layout of web page is the way to arrange the information within the page for ease of read (readability) and information finding. The layout design for this thesis is mobile-first and responsive design in order to automatically adjust into different screen size without losing the

same quality and characteristic of design layout. The color is definitely important in this layout design as it defines each category based on its own history – gray for historical architecture to represent the past and timeless mood, orange as main color for religion to represent Monk-hood; red to represent Chinese shrine; yellow to represent Muslim, purple for community to represent the place that each communities worked in the past (Royal Palace), and green for gastronomy to represent organic of fruit and vegetable as main ingredient in all types of food in Bang Lamphu.

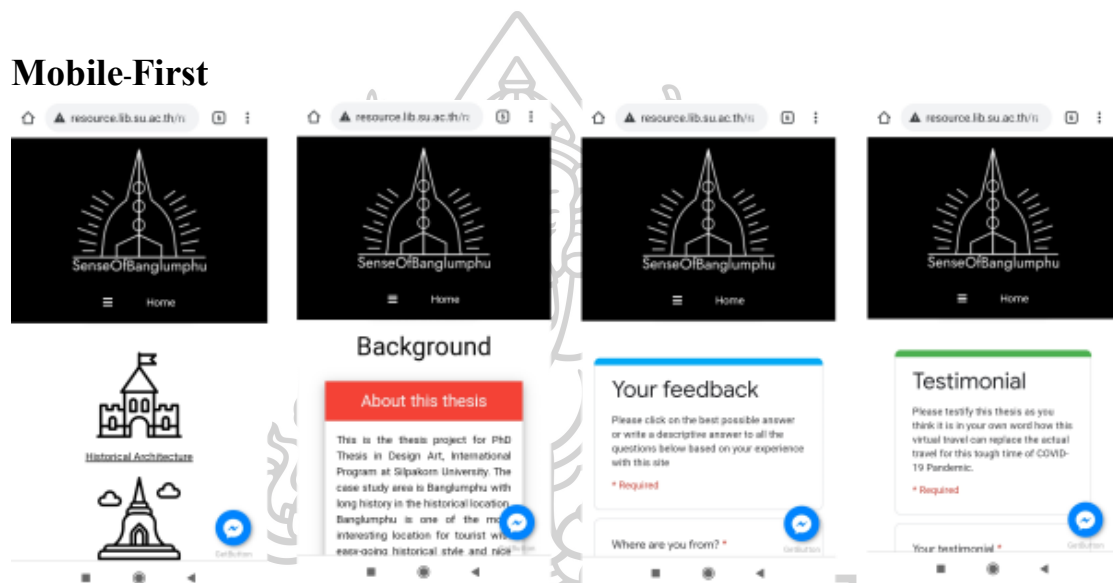


Figure 69 Mobile Layout Design.

Figure 69 through 71 shows Mobile design from the first through the fourth level of hierarchy. The top logo or icon can be indicated what level within the hierarchy user is located.

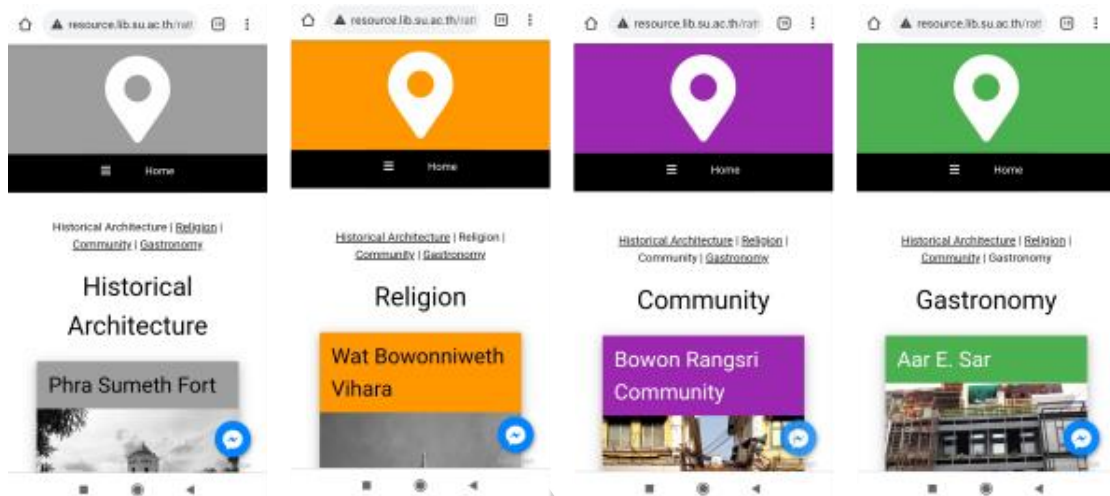


Figure 70 The third level of hierarchy

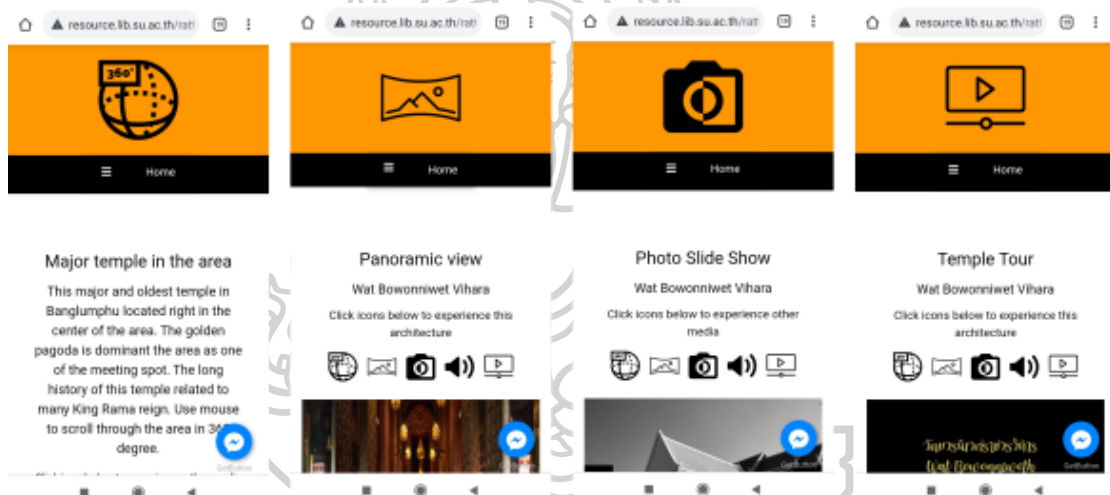


Figure 71 The fourth level of hierarchy

## Desktop

The desktop design has shown in figure 72. There are 1) Main window for desktop 2) Background page 3) Place Category page 4) Architecture page 5) Religion page 6) Community page 7) Gastronomy page 8) 360 Media page 9) Panorama page 10) Photography page 11) Videography and Sound page 12) Feedback page.





Figure 72 Desktop design

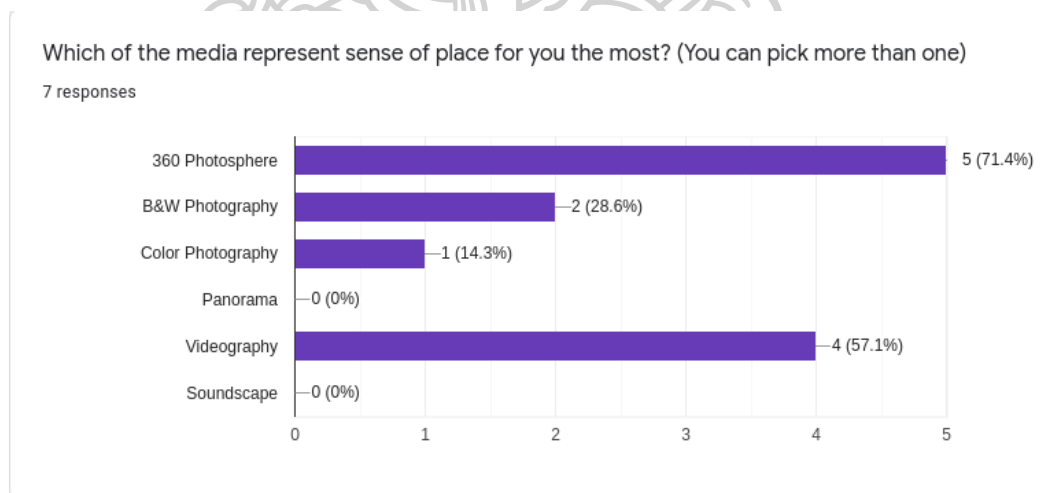
In the previous section, the design development has been done and implemented for production. In the next section, the live website production is in the validation process from both expert and user through expert review and user testing respectively.

### 5.3 Validation

This validation process consists of 2 parts - expert review and user testing.

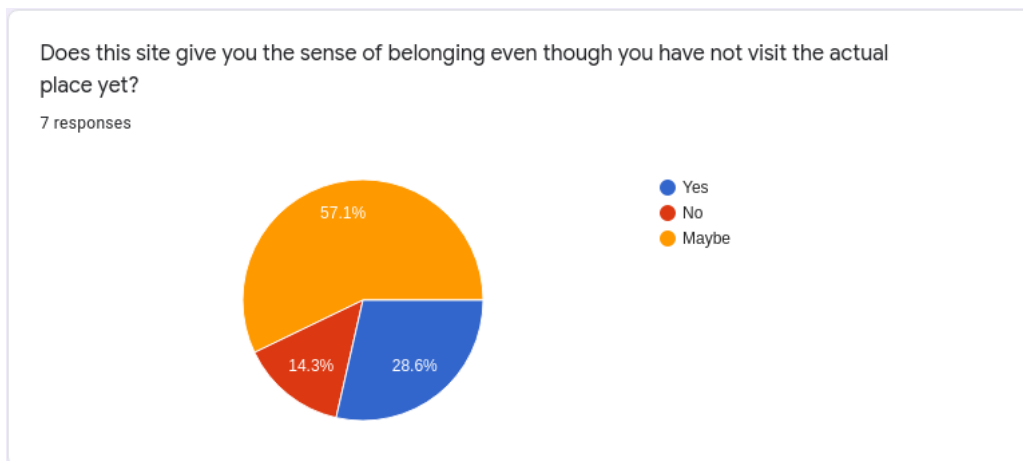
#### 5.3.1 Expert Review

One of the methods in evaluating a website is to let an expert review the site. The first question is to let them pick media that represent a sense of place the most. 360 spheres led at 71.4 percent. Videography came in second at 57.1 percent. Panorama and soundscape were not represented as a sense of place at all. B&W and color photographs were in at 28.6 and 14.3 percent. The result is shown below.



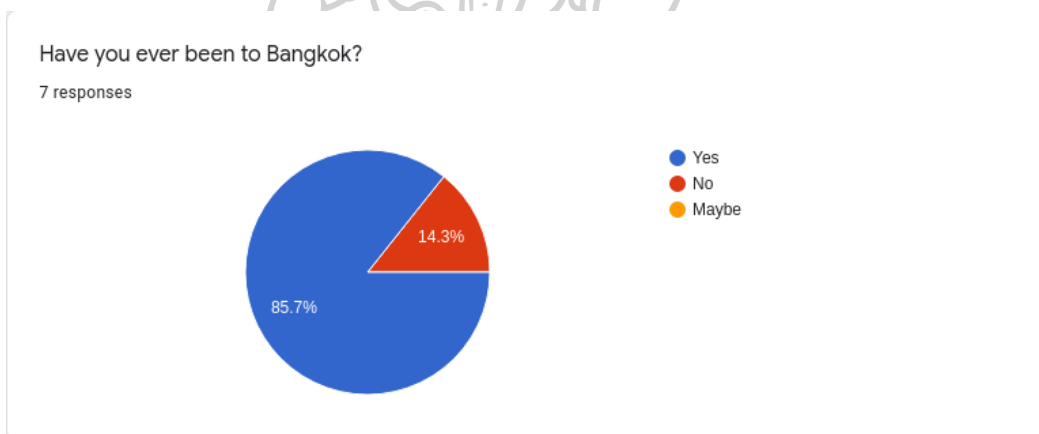
*Figure 73 The result of media representation for sense of place*

Secondly, asking whether the whole site represents the sense of place for them. All 9 of them, more than 50 percent of them thought that it might be possible that this site can represent a sense of place. About 28.6 percent (more than one quarter from all of them) thought that it is representing a sense of place. About 14.3 percent said that the site can not represent a sense of place at all. The result has shown in the figure below.



*Figure 74 The result of sense of Place for the site*

The third question is to ask whether they have ever been to Bangkok before. More than 85.7 percent has been to Bangkok or live in Bangkok recently. Less than 14.3 percent has not been to Bangkok before. The result is shown in figure below.



*Figure 75 The result of reviewer ever been to Bangkok*

Each expert reviews the site and gave recommendation for what and how to improve the site to achieve sense of place for virtual environment. Each comment has been examined and used to modify the site to be Responsive Web Design and Mobile First Design. All comments may not be used in modifying the site. The result is as shown in above result. All comment can be obtained upon requested.

### 5.3.2 User Testing

User testing for this research has been done through web site feedback in Google form. The result came in very interesting as follow.

The age group of this research user testing is in 31 –45 years old mostly at 47.8 percent. The second place is in 26.1 percent at the age of 18 to 30 years old. The 21.7 percent is at 46 to 60 years old. The rest is 61 to 80 years old. The result shows figure 76.

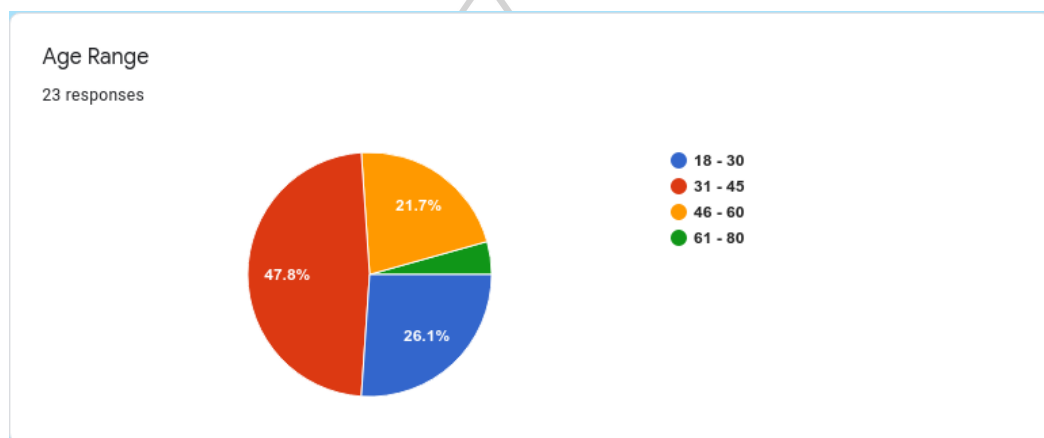


Figure 76 Age range in this user testing

Most of user preferred video tour media as medium of virtual travel at 26.1 percent. The second media is color photograph at 21.7 percent. The third is both visual story and 360 spheres at 17.4 percent. The figure 77 below shows the result in pie chart.

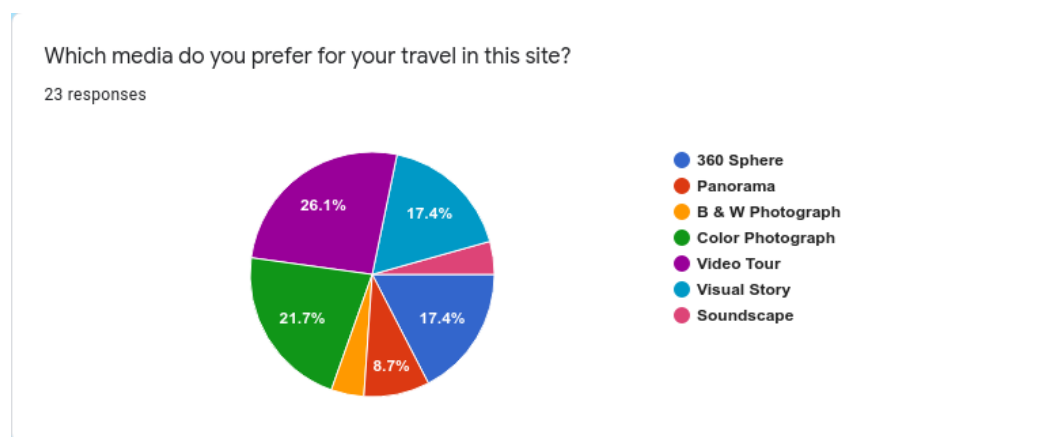


Figure 77 Prefer media to virtual travel

Users think that 360 Spherical let them actually travel to that place the most with 39.1 percent. The second one is video tour at 26.1 percent. The third is visual story at 17.4 percent. Figure 78 displayed the result in pie chart below.

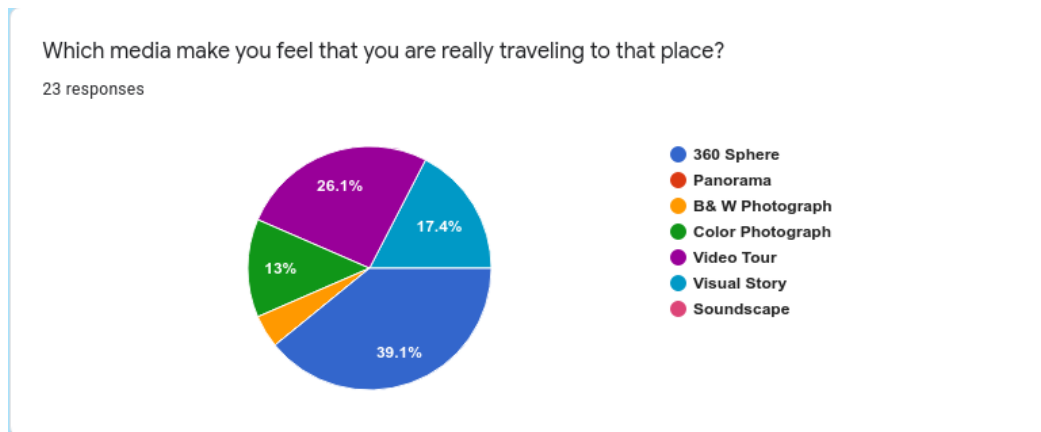


Figure 78 Media that make user right in the traveling place

Medias that can reflect the place user travels to the most has 4 equally measured with 21.7 percent - Color photograph, 360 spherical, video story and video tour. The result in pie chart is in figure 79.

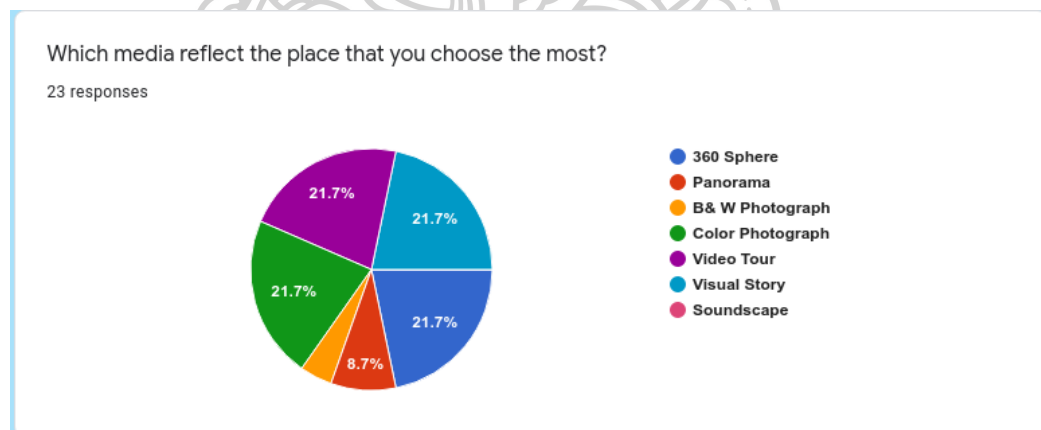
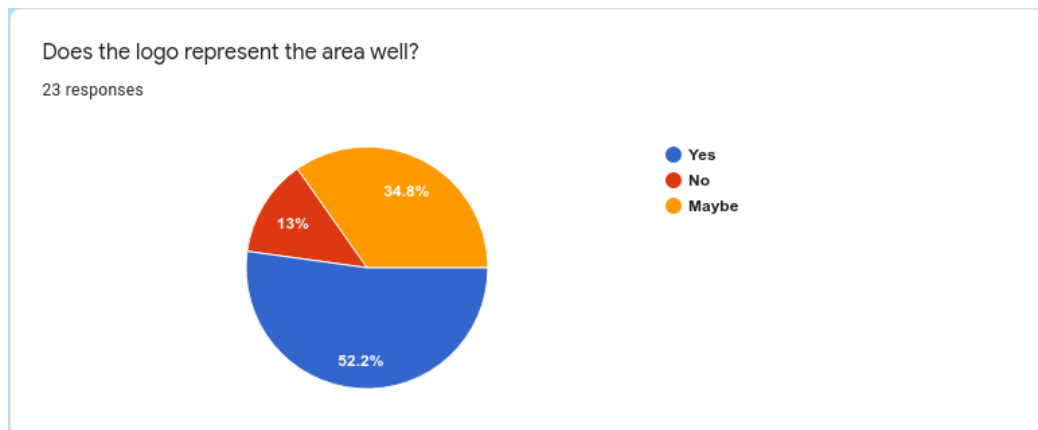


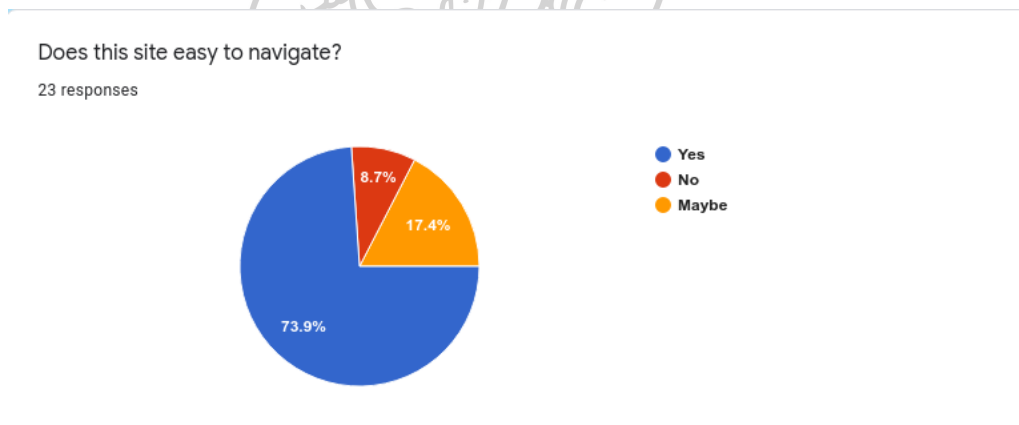
Figure 79 Medias that reflect the place

As this research used Minimalism as the main concept in the design, most users think that the logo can represent Bang Lamphu well at 52.2 percent. At 34.8 percent does neither agree nor disagree with the representation of this logo. The least of 13 percent does not agree that this logo can represent the area. The figure 80 shows the result in pie chart.



*Figure 80 How the logo represents the area*

Majority of the user think that this site is very easy to navigate throughout the site at 73.9 percent. At 17.4 percent think it may be easy enough to navigate. The least amount of user at 8.7 percent think that it is not easy at all. The result shows in figure 81.

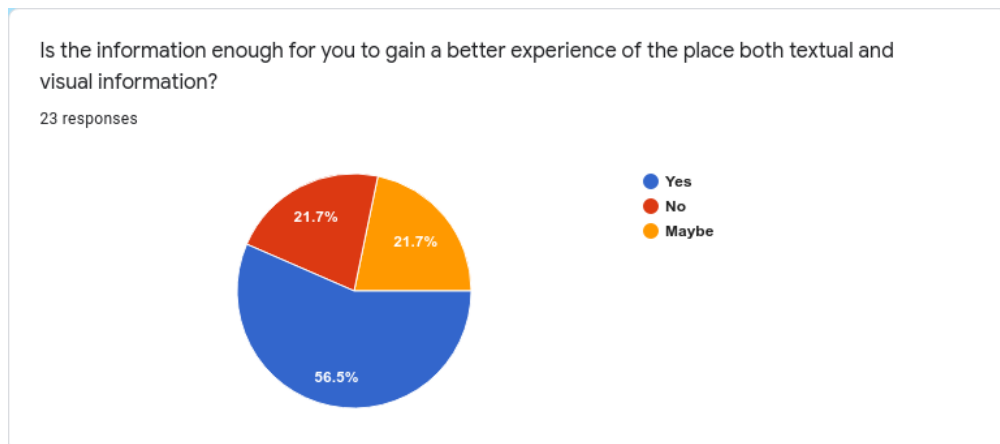


*Figure 81 How easy to navigate the site*

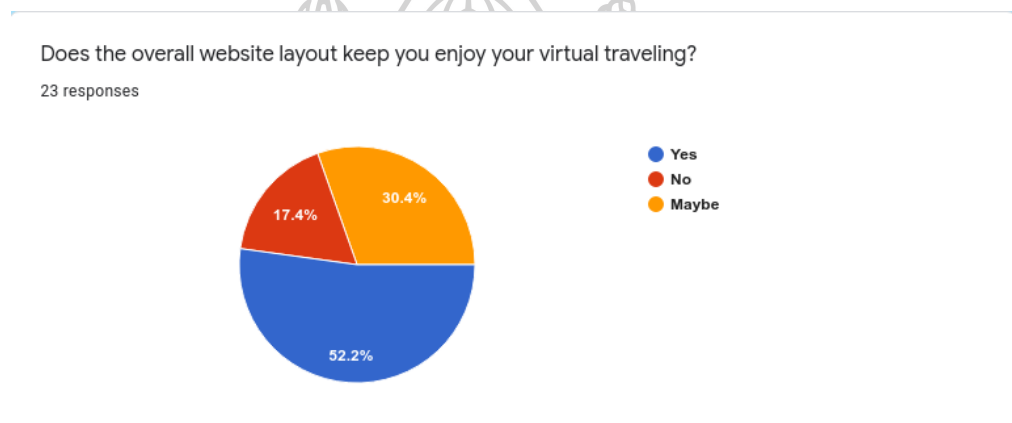
Most users think that both visual and textual information is more than enough for them to travel virtually in this site with over 56.5 percent. Users who do not agree with above assumption and in between are at the same amount with 21.7 percent. The figure 82 displays the result.

Website layout is one major important element contributing to overall experience for the user. More than half of users agree that website layout let them enjoy virtual traveling at 52.2 percent. At 30.4 percent think that it is somewhat agree, however, at 17.4 percent is disagree entirely. Figure 83 displays the result in pie chart.



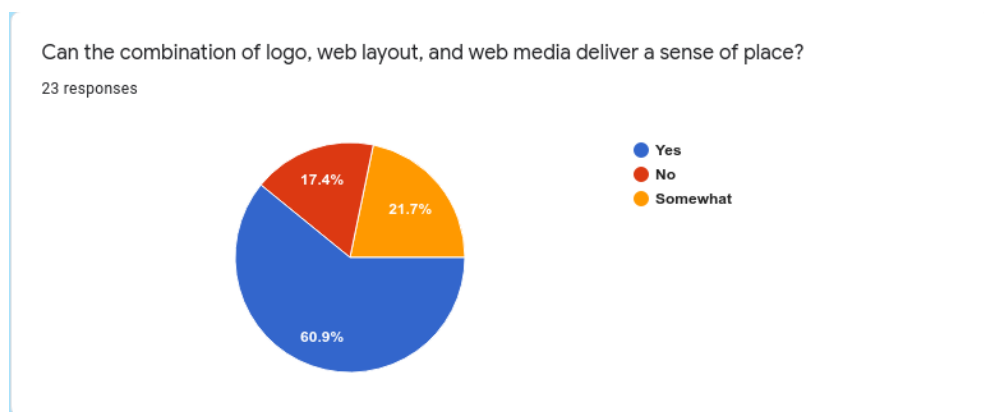


*Figure 82 Visual and textual information help gain better experience*



*Figure 83 Website layout helps user enjoy virtual travel*

Lastly, most users think that the combination of web media, place ID (Logo) and web layout can definitely deliver sense of place for them at 60.9 percent. At 17.4 percent does not think so. At 21.7 percent think that it can somewhat deliver at some point. The whole result in pie chart shows in figure 84.



*Figure 84 Logo, Web media and Web layout can represent sense of place*

#### **5.4 Discussion of Finding**

With the COVID situation for the Tourism industry in Thailand, the whole industry is suffering greatly. Finding the way to ease the industry is not as easy as it looks. Traveling has been limited especially international travel. At this point, traveling across the country needs to have vaccination license in order to eliminate from quarantine period which is not suitable and waste of time for traveler. Within country also limited in commuting, work from home (WFH) is another policy in prevent people from socializing at work. Online medium gains greater role in communicating and working in many industries across different sector including tourism. Online booking has been used in tourism industry for so many years now. Online or virtual tourism should be another solution in tourism to be used.

The background of tourists and past experience as their mental model can be the key ingredient in connecting their media experience with virtual media. Capturing characteristics of a place for all tourists might not be possible in both physical and virtual situations. Environmental factors and individual experience factors may contribute to the difference in virtual media experience. Using tourism model and urban design sense of place in developing and experimenting variant solution for web technology to deliver the best possible sense of tourist attraction place to the tourist around the world. Bang Lamphu is the case study area for this research. In this discussion, different section should answer research objectives as indicated in Chapter 1. Objective 1 will answer with the overall discussion of area survey and in-depth

interview. Objective 2 will answer by discussing the identity and how it can be defined through attraction categories. Objective 3 will be answered by discussing each media used in this research and how it represents sense of place through aesthetic theory. Web design is also discussed through web aesthetics in defining sense of place.

**5.4.1 Objective 2** - To explore digital new media design by using the above fundamental characteristics for sense of place purposes

#### 5.4.1.1 Place ID

Place ID can be divided into different type as indicate in chapter 2. The combination mark as Kelly Morr mentioned was selected in order to represent the whole area of study (Bang Lamphu). This type of logo is suitable for web experience as it saves space and easy to recognize. Minimalist style also adds value to simplicity choosing the recognizable place as the center of identification. The minimalist style represents simplicity through timelessness of iconic attraction place in the area. The place Id was created with SVG which is vector graphic format that can be scalable without losing its quality. Those three qualities are definitely the main concern in creating place ID. Geometric shape definitely creates an easy to identify form of attraction place. The combination of geometric shape can trigger the recognition of the area or place. Based on the research result, place memory and place recognition happen and initiate the experience of place further alongside different elements in the web design.

In choosing the identity for each category, Phra Sumeth fort has been picked for historical architecture as the major landmark of the area. This landmark is also a recreational location for Bang Lamphu local population and living within the historical site. The hexagon shape has been used to represent this landmark based on its architectural form side view. Wat Bowonniweth Vihara becomes dominant in religion category with hard-to-miss Golden pagoda in the middle of Bang Lamphu

area. With the form of pagoda, triangle point up has been used to represent in order to depict dominant for Buddhist community. The meaning of triangle points up portrayed the leading role of the place. With triangle pointing down portrait different meaning in shape psychology. Lamphu tree is the main highlight as in the name of the area. The shape of the tree can be represented with natural form or free form. The form of community is definitely free as the constantly change within the community population and life style changes. This is not included the historical housing preservation that still remain the same. The shape of dish has been used to represent gastronomy category. The circular plate has been used in most restaurant and food cart. The wheel of food cart is also in circular shape. Circle is the most popular shape in food container and cooking equipment around the world. Hexagon, triangle, abstract shape and circle has been used in combination to develop monoline logo design.

As Kelly Morr broke down each type of logo design. Combination is chosen for this research. Visual design only may not be enough unless cooperative with text to represent the focus of the research itself. This logo relies on minimalism and geometric concept to construct the logo in representing this research. As Les said that a good logo should be polished and resizable design. This logo was created with SVG (Scalable Vector Graphic). It was designed specifically for Web usage. The quality of SVG is able to scale without losing its quality. With monoline design, the overall look and feel is clean and clear to the user. The feedback from the user also thinks in the similar manner.

Based on logo design principles by Zepnep, there are only some principles that this logo applied. There is simplicity, scalability, balance and proportion, and timelessness. It can be scaled without losing any proportional as describe above. Monoline is the concept of logo design based on minimalism which is very simple and clean. Both side of the graphical logo is balanced as in symmetry and in good proportion. Timelessness principle might need some time to validate that.

When porting those physical sense identities into visual art imagery as photography, some photographic technique needs to apply in order to capture those identities in each specific category. One of them is composition with both photography and videography. Panoramic dimension of photography also need composition in order to portrait the overall theme of visual art in expressing the sense of each place well. Composition of photography creates point of view for visitor to focus on specific identity and recognize the place better. Surrounding environment of each place can be a main component in each photograph such as architectural photography in defining the dominant in each architecture within the area. Mood and tone can also trigger the mood and tone within the photograph itself in indicating the chronological period of the subject in each photograph. B&W and Color photograph develop different mood and tone for the subject alongside chronological indication of each place. Shape and form of the subject in each photograph stimulate the mental imagery within each visitor to recognize the place and recall its memory if once visited.

#### **5.4.1.2 Web Media**

##### **Panoramic Photography**

The viewing of real tourist in the physical tourist site can be viewed in both orthographic and perspective view. At the same time, tourist can view the place only what his/her eye sight can view which is around 45-degree or 60-degree angle. In some people, their eye sight can get wider than 180 degrees with some practice. In order to get into 360 degrees, one needs to rotate their eye sight around in one single spot. This 360-photo spherical panorama view provides exact the same effect as that. The logic is to receive the spherical view of the place in one single spot or one single stand. When one moves one step, there is another 360-degree viewing which is different than the previous one. Therefore, this 360-degree photo sphere web media can give the impression of the surrounding place in one single spot. This is how the sense of place with this photo sphere media can express the wholeness of the place. It captures the

single moment of the place in 360-degree sphere. Tourist can experience the place all around in one single spot. This can trigger vivid memory of the place for existing tourist or even present the new tourist in gaining new experience from the place as a whole.

As there are many types of panoramic photography, there are only 2 types chosen for this experimental research - Spherical and cylindrical panoramic photograph. Cylindrical panoramic is the outer photograph of the spreading cylinder, the spherical panoramic photograph obtained one spot of the viewing the place and circulate the view of a place in 360 degrees for viewing pleasure of the user. User then experienced the place and its surrounding in just one single spot of viewing, It is definitely a mimic of how each tourist view the place through much better overview rather than from other media. If the user moved from one spot to another spot, the new 360 degrees was drawn and receive a new view of that one spot of viewing. This kind of media can create viewing experience with endless spot, because each single spot can create different 360-degree surrounding for each tourist. Therefore, the different experience to that place can be drawn from each tourist differently.

Cylindrical panoramic on the other hand, gives the planar viewing pleasure and express longer image format for the panoramic viewing. There is no software at this point to express panoramic effect out of cylindrical panoramic. The idea for cylindrical is to view the area from a single spot but circle around in 180 degrees only. The surrounding of each place in one spot viewing can be different for each user. This web media does not gain popularity from the user as much. This media method can further explore into the viewing method that can satisfy the user much better.

### **Photography**

Even though 360-photo sphere consists of still photos around one single spot and process them into one spherical environment, it gives stunning viewing experience and gaining the sense of being there. Photograph, on the other hand, is one



single shot in front of the viewer, the expression of the photograph can give yet-another powerful expression based on the different kind and technique of photograph.

### **- Black & White**

Black and white photograph is one kind of photo that is powerful with only range of color limitation in black, white and in between. It yet develops a powerful expression in the ancient and historical site. In photographing historical site, the mood and tone of the black and white photograph expressed the best of roughness and coarseness of the place. It expresses powerful message of chronological stem of the place. This kind of photograph can also represent the ancient period as good as indicate the previous technology through time. Stepping back in time through technology, one need to step back through previous technology to indicate the past. Indicating the past establishes sense of place back in time by viewing this still photograph.

### **- Color**

Another new highlight technological change in photography with color can express new concept and also highlight the truism of the place even in the historical past. This color photography depends also on the range of color. The limit range of color as previously develop in color photography can indicate the depth and lower resolution of the photograph in different sense. Even though this technique might not be as powerful as the black and white counterpart, it obviously obtains different yet-another effect in the range of sense toward the historical past.

In Black and White photograph, the concept of this type of photograph is to eliminate the distraction and focus mainly on the subject itself. In the case of this research, it is the architecture both historical and religion. The architecture in B&W should express its texture that indicate the historical time of each architecture. The architectural form has also been an indication for the historical period for this

research. As for the result, user does not feel that B&W is suitable for expression of historical period. Other medium dominates how to express the historical time of the subject better than B&W.

The color photograph based on Nicole Price indicated develop good relationship between color hue and story behind it. Cutting off the color which eliminates the distraction of the surrounding and focus on the subject that express its own story through architectural form and its timeless texture.

Composition is an important factor in creating a well-rounded photograph to separate the subject from the surrounding. The subject has been exposed and expressed its own story based on its architectural form and its texture. Centralized architecture itself is to emphasize the subject in the minimized way.

### **Videography**

Video is the most popular form of moving image. It can be used in so many different style and form. The function it serves is wide variety to the extent of each purpose. Using photographs as visual story can definitely express the mood and tone of place. Connecting several photographs together can create story for the tourist site. This kind of storytelling method establish the sense of place through the historical story. If Oral history is expressing the historical story through telling in word, photo story is expressing historical story through connecting photographs. They create story in different interpretation of viewer or tourist from different experience in life. It develops a variety of story based on how each viewer or tourist think about the place. In fixing the story straight, the synopsis of the historical site might be given to the tourist first and guide them through the whole series of photographs with short description of each without limiting them to their imagination. In this research, series of photograph shows through the slide show of the web without guiding tourist anything else in between. As explain earlier, tourist can view the historical site

through series of photographs as photo story and develop their own experience through their viewing pleasure.

The videography media will involve with storytelling method both video tour and visual story. Based on the review in chapter 2 about storytelling, one principle that is similar from all authors is to show the story, but don't tell it. Most of the visual story does follow that principle to express the whole story through moving image or still image with narrative story. One story in particular shows a little bit of conflict in the image using light as an advantage in shooting. The video tour itself is simply walking along community pathway. Users mostly think that the video tour is the preferred choice for them to indicate sense of place. Video story follows at the third place. The video tour actually shows the audience or user walking through each community. What user can see and experience on both sides can be an interesting sight. The video does not stop at any particular spot. In video tour and visual story uses only some principle to follow in producing the content in expressing sense of place for the case study. The video tour definitely gives the mood and tone of actual travel for user.

### **Soundscape**

Soundscape, in short, can describe environment of the place through sound sensing. Noise and surrounding sound around the place are what soundscape represent. Different place has its own specific soundscape. This soundscape can elevate the sense of place. The moment of collecting sound of the places can have different effect on the listener; however, general experience may reflect anyone interested with that space or situated place. Soundscape can add another dimension for sense of place. Hearing sense delivers factual, increased the wholistic sense to the place itself.

Sound is accepting through hearing sense which can collaborate with photograph as seeing sense. The integration of senses can be yet another powerful in driving the sense of place for historical site. This sound clip media is actually the narrative of the place in explaining the definitive story related to the place. Sound clip

alone can define the imaginative story of the place based on each tourist imagination and experience with the place. Combining this media with photographs adds much more powerful multimedia combination expressing the historical site. The sense of place happens during the viewing and hearing the story throughout the online experience.

Sound can definitely create some impact in identifying the place. In this research, soundscape in the religious category and some community can uniquely specify the place. For example, chanting sound mostly hears from temple or mosque. Buddhist chant can be heard from Thai Temple depends on time and activities in that temple. Islamic chant can be heard from every mosque during the praying time 5 times a day. Chinese chant can be heard on Saturday afternoon from a few Chinese shrines. Chanting in different religion uses different language and rhythm in expressing the teaching in each belief. This uniqueness in chant can be used to identify the place amazing characteristics.

#### **5.4.1.3 Web Design**

Web page is the first front-end for virtual online web. Designing web page to fulfill the demand for each web site can engage web surfer to the site. In this research, tourist is attracted to view of place. Creating the sense of place for tourist place use web media to represent place. Each media type creates sense of place differently. Web design itself combines different elements to establish sense of place for tourist. Each element can also support each other for place identity further.

#### **Layout Design**

Layout of the web page plays an important role in managing and aligning different elements in the web page to create effective moment in browsing the web. Information alignment throughout the web page can distinguish human interaction with each element within the page. The layer of the element establishes the multi-

sensory of media on one single space. Sense of place can happen and emerge in the virtual space giving tourist experience of being at that place.

Layout design has been the main factor in this research as one factor in sense of place for urban design. Urban design maintains core structure of the city or area. Street, road, river or canal are channel of moving population through the city or area. Navigation design as discussed earlier is for the website. Information architecture lay down website architecture based on urban design layout. Website on the other hand use layout design to lay down information for easy to read and structure the information according to its categories. With the new technology as of today toward mobile technology, responsive web design has been a major concern in designing and developing website. Grid layout has influenced responsive design to achieve that goal. As this research use responsive grid and card-based layout to manage information on website, the website is easy to read and seek information. User responses mainly agree that the layout provides easy to read and navigate through information. The card-based applies similarity and carried the gestalt principles onto the design creating simple and structural data within the site. The notion of ‘quick to find’ might be another benefit of minimalism or less is more. Do less of design in gaining more control and more structure to the user is the key to this designed site.

### **Navigation Design**

In navigation design, the main objective of navigation is to have the shortage path in finding the right target information quickly. The same thing as in urban design where navigation is to have signage to point people to the right direction and find the target easily. Web navigation design will wonderfully do that direction navigating throughout the website. Responsiveness is the main quality as when user browse through the site using mobile device the hamburger menu appears. Most users would have already known the functionality of this menu item. User familiar with the item create friendly environment for user to navigate through. At the same time, the site looks simple on mobile. Logo on top of page especially categories page is used to

bring user back to home category page and homepage link in hypertext can also bring user back to home page. The icon is the indication of where you are. Following minimalism concept of design, this site keeps the navigation design simple and easy to follow. Before working in navigation design, Information architecture had been finalized and extract into pathway of navigation throughout the site. User responses are simply satisfied in navigating throughout the site. The navigation itself let user to find what they needed. User is simply comfortable to navigate along the site.

### **Interaction Design**

Interaction between user and elements in the website is designed based on consistent, minimalism, cognitive loads, user control, feedback, visibility less is more, concern functionality rather than aesthetic, and feedback. These principles attached to design elements and lay down the elements to stimulate interaction. With minimal design should provide less cognitive load, however, in this research visual presentation is the main key ingredient to the design and drive the result. User at the same time gain control over the usage of the site. Feedback form has been provided to the user for both designers' own questionnaire and user's own feedback toward designer or developer. The textual label helps user with less cognitive load without predicting the action of the site design. Therefore, the design increase user engagement to the site even though most user choose not to give feedback as provided. The follow-up discussion with some user gain insight that most users have English language eligibility. Some of them have not seen the questionnaire as something necessary to do.

### **Aesthetics**

In aesthetics point of view, each period can describe the phenomenon of visual art indicating sense of place with Clive Bell, R.G. Collingwood, and John Dewey theories.



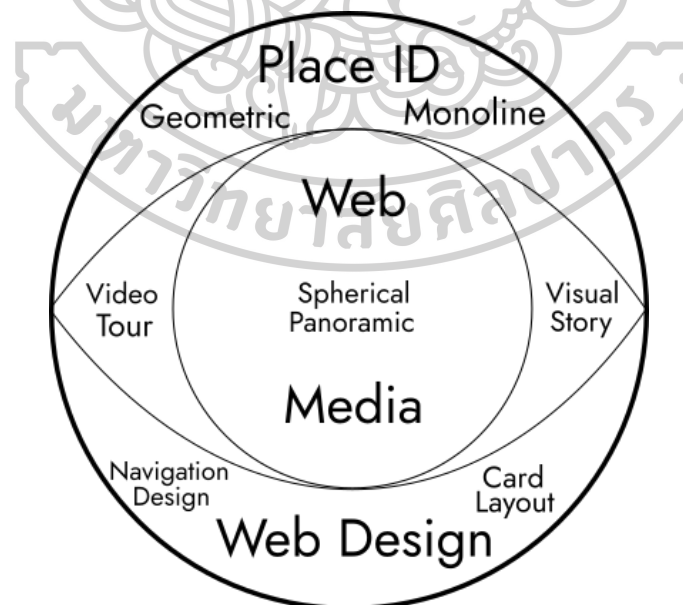
Art as Form with Clive Bell expressed the form in visual art under the architecture and its surrounding. The shape and form of architecture depicts the mood and tone of the place and radiates the sense of calmness toward the visitor. As showing through visual arts, the curve and line of the form stimulate the feeling of stillness for the place toward viewer. In each category have its own form and shape in related to the sense of each category through mental model of the viewer.

Artist expresses his/her own art in his/her own way. Technique in each type of art helps artist to develop the best way to express. How to express perspective in art which is vary based on artist's point of view can impact mood and emotion of viewer. Visual art also has the same idea in developing imagery to portrait subject matter. In this research, it is about attraction place and how artist see the place. Each tourist can be own artist in viewing the place in whatever angle one's preference. As Collingwood would say that the expression of artist comes from the mental part of artist rather than physical part. Visual art in this thesis research is mostly from researcher self in expressing point of view toward attraction place. It most definitely impacts user based on different type and technique of visual art. The impact of visual art definitely impact viewer, in this case, tourists in recognizing the place and mesmerize the relationship with the place. Specifying in this research earlier, the connection between tourist/viewer toward visual art that represent attraction place through artist expression is called sense of place. As for this research, it may define as sense of attraction place with or without past memory in traveling to the place earlier.

In most tourists' point of view, they travel to different places and enjoy the connection of each place as experience. Traveling to the place, seeing the place, stepping to the place can also be the first experience with each attraction place. Toward virtual tour in this research, clicking through the link of the web site and browsing through the site toward visual art expressing the place can be a different experience with the place. It can compare with traveling to the place with different transportation and connecting with the surrounding atmosphere during the course of

transportation. Until reaching the place, seeing the first sight of the place for the first time gain first impression of the attraction place. As virtual tour in this research, the traveling experience replaces with user experience with a few clicks on the mouse and flashing of icon on screen. Those user experience of web technology shortening the traveling through different transportation before reaching to the attraction place. Reaching the attraction place and interacting within the place through different activities can also develop the connection with the place and imprint memory of the place in each tourist. The virtual tour, on the other hand, use sensing in seeing, clicking, and responding of web technology to gain experience for user in touring through each place. As what Dewey said that the experience is about connection between things and how tourist react to the attraction place. The experience creates value for tourist based on each tourist perception to the attraction place. Activities for each attraction place is different for virtual aspect, which is not in focus of this research.

#### 5.4.2 Knowledge gain from this experimental research



*Figure 85 Sense of Place for Virtual Space*

The knowledge gains from this experiment as the result in the above model. This model for sense of place in virtual tourism as shown in figure 85 delivers through place ID,

web media and web design. Virtual web designs using navigation in searching for web content as signage in physical world. The card layout delivers easy to grasp information about each place and help tourist easily find information and experience web media. As in place ID using geometric and monoline methods to deliver the minimalism style on how tourist recognize the area. Icon is also used to represent each category of the place. Web media or digital medias best represented sense of place are spherical panoramic, video tour and video story. All of these components are combined and joined together to deliver the virtual tourism experience to tourist on the virtual web.

The combination of place id, web media and web design elements that can create virtual environment for tourism may be an initial stage of a revolutionized stage in virtual tourism for mankind. Human being is now working and surfing through online world and the online population is growing lightning fast. This ever-growing virtual community increases variety of activities along the line. Tourism could be one of it in the pandemic era. The key success or the heart of tourism alongside the pleasure and tourist experience could be sense of attraction place that can change its form into experiencing web media and creating virtual tourism with actual spending through electronic finance or crypto-currency. The future of virtual tourism community might include more than exploring the place and watching performance.

One important thing in tourism is not only for tourists to visit the place and go without receiving anything in return. Connecting with the place through virtual medium seems to create a much realism to the mimic of physical tourism the most. At the moment, online tourism or virtual tourism might need to be implemented as an alternative option for people to travel in different location without leaving their home country at all. Web technology has been evolved so much ever since it was established decade ago. The world is flat with this web technology and online communication

through desktop and mobile platform. Web technology platform, therefore, would be the best solution in solving tourism industry in pandemic world.

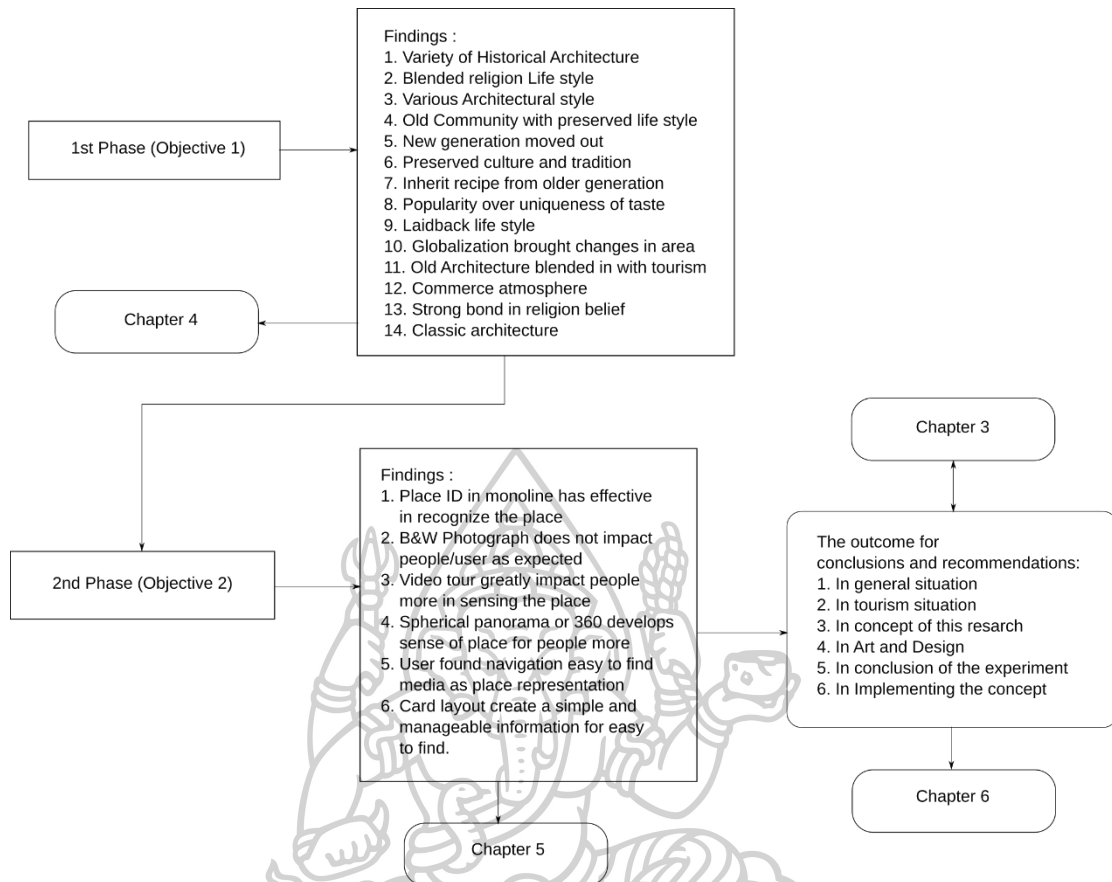
### **5.4.3 Objective 3** - To develop an effective medium by using web media in enhancing historical tourism

The model that was created in this experimental research can be used as common ground in developing virtual environment using digital new media in tourism. The explanation and conclusion of this experimental research is in the next chapter – Chapter 6 – to conclude this research and suggest implementation for the virtual environment.

## **5.5 Chapter Summary**

In this chapter, the design development for multiple elements for this experimental research has been laid out in different but related processes. Each process involved in-depth research into the area both physical and mental description of place. There are the following:

- 1) The explanation of meaning and hidden definition of place has been interpreted into geometric shape and visual representation in order to translate into suitable design with minimalist concept. The concept that extends the modern trend in delivering information across generation.
- 2) The critique and suggestion from expert have been carefully determined and examined for further adapted the design. Some of the comment or suggestion did not consider to manipulate into design style.
- 3) Choice based on the relationship of the urban design's sense of place and virtual web environment. Some elements might be left out for the scope of experiment as research variable scope. The result of the experimental research is interesting and urge for further investigative experimentation with other variable included.



*Figure 86 Diagram for Discussion of After Research Finding*

In figure 86 shows the result of research finding and some of its finding in chapter 4 and 5. What listed in the outcome of conclusion and recommendation is the topic that is concluded in Chapter 6. The detail of the conclusion is in the next chapter - Chapter 6.

All photographs, diagrams and tables in this chapter has been created and taken by researcher himself - Thirathep Chonmaitree.

## **Chapter 6**

### **Conclusions and Recommendations**

#### **6.1 Research Conclusion**

##### **In general**

COVID-19 virus has been spread around the world. As the world reveal its severity through medical research, vaccine for COVID-19 is still at an experimental stage. The stability of the vaccine is effective with the current strain of virus. COVID-19 itself evolves all the time. The new strain from different continent emerged stimulating new study of vaccine whether it is still effective. This causes instability of disease control. The effect impacts tourism industry greatly. Country that relies on tourism revenue such as Thailand has been swamp by this disease. Disease control has been difficult with new round of spreading from new strain. People discipline play significant role to this spreading greatly. Protecting themselves from others by wearing mask, washing hand frequently, and social distancing is very important to prevent spreading of this disease.

##### **In Tourism situation**

This research concerns the crisis of tourism industry in the world. As tourism become popular integrated business, the impact of the crisis takes it tolls on the whole industry. Online technology changes the face of many industries in delivering the solution throughout the industry. This research encounter that solution and discover design stage of the possible solution. Differentiate tourism based on case study, historical tourism stands out within the rest. The feeling of being at the historical place has arose the issue of developing the sense of being there. The interaction between tourist and the tourist location/environment (place) is the heart of Tourist experience. Online tourism can also develop sense of place for any tourism type, in this research as case study - historical tourism. There are 3 factors to consider for this research –

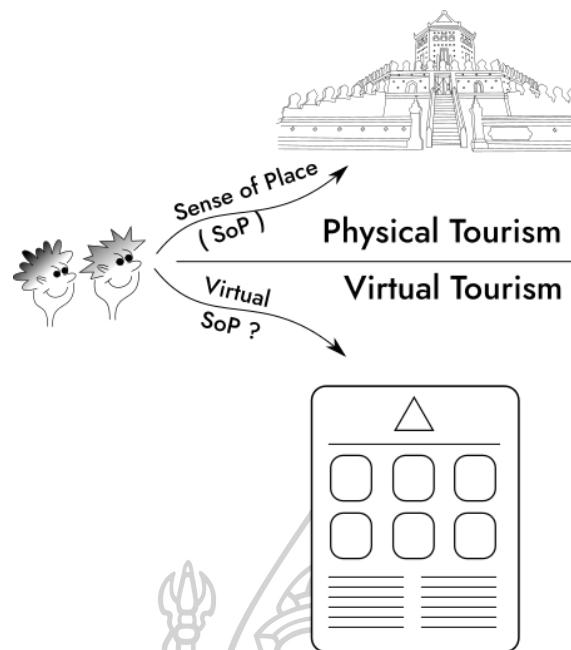


Place identity, Web Media, and Web Design – in order to create sense of place through online tourism.

The information in this research can be manipulated into something more useful for future research even COVID-19 virus pandemic is still going on. Online tourism using web design and web media can be representative of the new era in tourism. Tourism can be reached to many people around the world through new technology. People can access tourist attractions from all over the world through this web technology. In the near future, emerging technology can really change the face of tourism that can reach out to more people using the web. Tourists can travel without limit or travel without border through web technology.

#### **In Concept of this research**

Based on the overall concept of this thesis, figure 6-1 shows the whole concept of this research below. The combination for sense of place in minimal environment consisted of place ID, web media and web design can be expressed through the structure of virtual web. Web media as photography, panorama, videography and sound can mainly describe unique feature of place to identify the place in virtual environment.



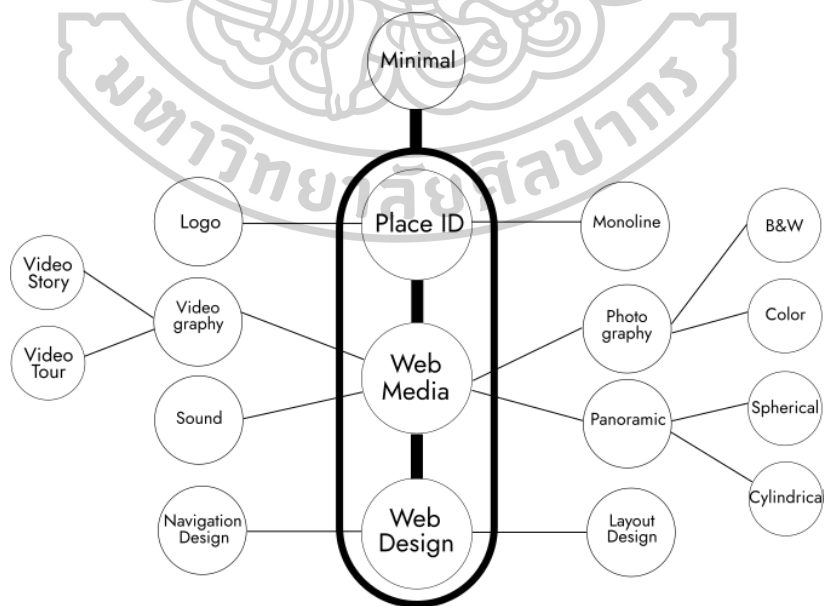
*Figure 87 Thesis Concept in Sense of Place*

The Media that is used to represent sense of place is 360 spherical panoramas, video tour and video story. Sound itself within soundscape scope based on user testing result does not represent sense of place. The combination of video story, 360 spherical panoramic and video tours can be used to represent sense of place for tourist to experience the place. Making a new interesting innovation from all 3 web medias might not represent sense of place for tourist as the individual web media present uniquely identify the place in its own characteristic way of each media. The combination of them can create another unique media that may add another dimension to the new media industry, however, it may not guarantee the characteristic and qualification of it in representing sense of place.

Different medias have different way to portrait the place and depict the identity of each place in each category. In order to represent sense of place well enough for tourist to gain the feel of the place, putting together each difference together can better illustrate sense of place deeper based on media creator's point of view. Monroe Beardsley discussed the organism of music as listening to one piece of music from conglomerating all musical instrument together. One whole song can be developed from not only one piece of musical instrument. It comes from different

piece playing different tones of sound putting together in harmony and rhythm. Sighting harmony can also be developed from different media to create one whole sense of place for this virtual tourism environment. In all 3 dependence variables - place ID, Web media and web design - needs to function within this virtual environment well enough in transporting tourist to experience place media and its virtual structure as a whole.

In developing a solution to the tourism industry for tourist to travel along and connecting with attraction place in different corner of the world, sense of place is the significant part of delivering the sense of tourism for physical visit in each place. Sense of place is the connection between tourists and the place they visit. In each place has its unique identification that can be identified and connected with tourists. Web media is one possible way to transmit the character of places through a virtual web environment. This research definitely experiments with web media in connecting tourist with the attraction place. Each media also has its own characteristic in expressing the identity of the subject differently. One media might capture its own characteristic toward a group of tourists but might not be for others.



*Figure 88 Overall concept of thesis*

Table 6 below shows the conclusion of result from experiment research. The red highlight indicates media that were picked the most from user in representing the place based on questionnaire above. Place ID and web design elements received the percentage of agreement higher than 50 percents. The last row shows the higher than 50 percents of user that the combination of place ID, web media and web design can establish sense of place for virtual space.

### In Art and Design

As in design art study, this research shows that web design supports media art or visual art to represent the place for tourism. In Dewey theory of the art, people can experience the art through photography, videography, and 360 spherical panoramic which are indeed the visual art representation. Collingwood, on the other hands, believes that people in this case tourist can express the meaning of the place through visual art. The expression of this visual art is through form and shape that represent meaning in each category which presently connected to the cognitive sense in experience.

Elements	Method	Result	Percentage		
Place ID	Monoline	Represent well	52.2		
			Prefer Media	Feel like travel there	Reflect the place
Panorama					
3D Spherical Panorama	Google Photo Sphere	<b>Most pick</b>	17.4	39.1	21.7
Cylindrical Panorama	Panorama Camera feature	Less pick			
Photography					
B&W Photograph	Camera	Less pick			
Color Photograph	Camera	Less Pick	21.7		21.7
Sound					
Soundscape	Soundwalk	Less pick			
Videography					
Visual Story	Photo-Video Editing	<b>Most pick</b>	17.4	17.4	21.7
Video Tour	Video shooting	<b>Most pick</b>	26.1	26.1	21.7
Web Design					
Web Navigation	Don't make me think	Easy to navigate	73.9		
Web Layout	Minimal Design	Easy to find information	56.5		
<b>Combination of Logo, Web Design, Web Media achieve Sense of Place for virtual space</b>			<b>60.9</b>		

*Table 6 Conclusion for Sense of Place elements*

Design is not art and art are not design, but in this research, design is used to manage art in order for people to experience the art in form that art can express itself

within the structure of design. Design also provides the way to experience art and develop structure so that art can create sense of place within the design properly. The development of design and art can therefore apply in any other future creative art and design development project.

Virtual tourism in this research, web design function as structure of tourist track in providing the accessibility to the place (web media). Web layout acts as city or area infrastructure in locating attraction place for tourist. It categorizes attraction place into group for easy accessibility and discoverability. Web media represents the attraction places based on different categories and provides visual information based on its characteristic and identity in each category. Place Identification provides recognition for the area of study to remind tourists where they are at the moment.

### **In Implementing the concept**

Mimicking the experience of tourism through the virtual environment can be achieved through the collaboration of multiple components in functioning the role of sensing the place successfully. As in this research, place id, web media and web design cooperate in constructing virtual atmosphere for sensing the place (Bang Lamphu and its attraction places) triumphantly. Collaborated in bringing tourists through each click and revealing textual or visual information for them to understand the place better elevate the tourist experience and yet connect them to place with visual art media. Redefining the experience from physical to virtual might not be even close to similar or the same at any cost, however, it might be a possible path to help and heal struggled tourism economy in this pandemic situation. Most features should be added in order to complete the cycle of tourism industry. That would be in the thought and mind of planning the future research. In implementing new media for Sense of place, the following principles should be applied based on the result of this research.

- 1) Present the fact – the fact of the area should be presented through the new media

2) Tell story through photograph or image – this kind of traditional media turns into digital new media with lots of benefit but still maintain the same quality of expressing and communicating message with its powerful light drawing

3) Focus on history – in the historical site, history should be at its heart of all communicating message through all new media

4) Keep it simple – along side the element and principles of each new media, constructing simple composition within new media can clearly deliver the right message to the audience

5) No arrangement – there should be no arrangement with the subject during interview or shooting.

6) Connect with real people in community – investigate throughout community should be conducted first before doing in-depth interview. Interviewee who gives information must be informative and genuine to the area.

7) Keep navigation of the web simple - as what most navigation rule said don't make me think about what to do through the web, the navigation should be clear and descriptive.

8) Logo should be simplified – most of effective logo are simple and communicate well about the area and its identity.

9) Communicate well through photograph and video – communicate through photograph well can effect the visual story later, therefore, the videography would definitely elaborate the message to the audience successfully.



## New Media Principle for Sense of Place

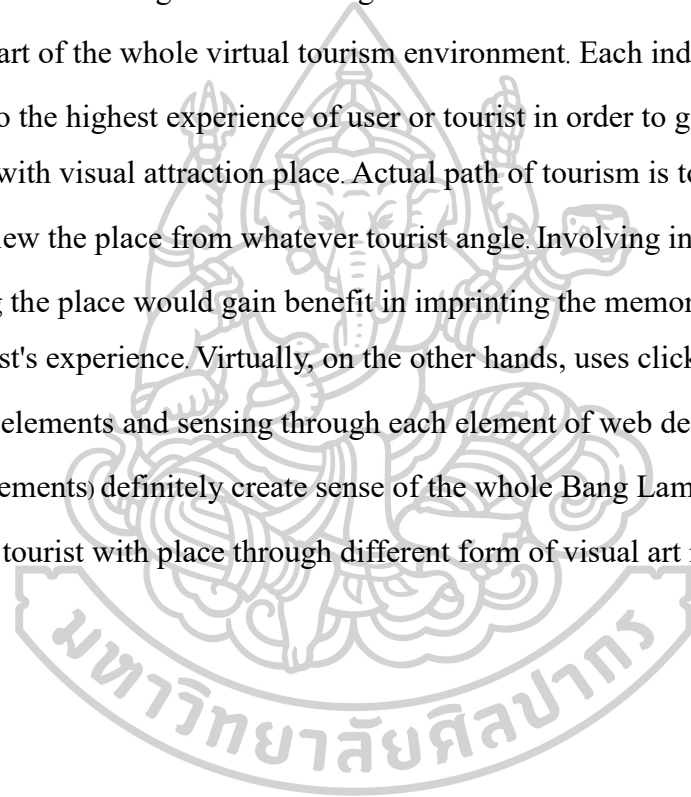


Figure 89 New Media Principles for Sense of Place in Historical Tourism

Implementing this model of this experimental research is to use it in promoting the place or area of historical sense. The model can be adapting to use with any other sense or aspect as well. In the follow up phase after the completion of this research degree, collecting the mood and feeling toward the place and place attachment will be recorded and discussed with user. User created content may be in another phase of development to extend the research with community involvement and expand into the global community.

**In Enhancing Bang Lamphu tourism in virtual space**

As one of the user testing question asking whether all elements develop sense of place for user, the result proved positive for most tourist sampling or participants in this research testing. In order to achieve the sense of place and traveling virtually, all of the elements in this virtual system needs to combine and develop a tourism experience for tourist or user who got into this web site for traveling and getting information. Comparing between actual physical traveling and virtual traveling through new media and visual art mimicking the actual environment through visual arts medium and new digital media design. Each individual elements becomes an important part of the whole virtual tourism environment. Each individual pieces contribute to the highest experience of user or tourist in order to gain wonderful experience with visual attraction place. Actual path of tourism is to transport to the place and view the place from whatever tourist angle. Involving in activities surrounding the place would gain benefit in imprinting the memory of the place within tourist's experience. Virtually, on the other hands, uses clicking through the virtual web elements and sensing through each element of web design (graphic and visual art elements) definitely create sense of the whole Bang Lamphu tourism and connect the tourist with place through different form of visual art media.





*Figure 90 Ways to enhance Bang Lamphu through Virtual Space*

To enhance Bang Lamphu using the virtual space tourism with the right sense of place can be awkward and difficult at first. There are some ways to improve tourism in this pandemic time.

1) Back to the past in Virtual Dramatic Story

This dramatic story can help tourists understand the area better through virtual space first and before they actually arrive to the physical area

2) Historical Story Tour

Historical story give tourist some background of the area and let them understand the area much better. The understanding of the area can lead to gamification concept or walking tour around the area physically.

3) Virtual Walking Tour

This let tourist traversal within virtual space just like in the real physical tourism. They can gain some perspective of the area and obtain the overview of the area before arriving to the area.

#### 4) Virtual Surrounding Tour

3D Spherical Panoramic photography is used to let soon-to-be tourist to the area watch through the area in 360 degrees and get the feel of watching within one specific spot navigation. This has been one of the most impressive new media for the user in this experimental research.

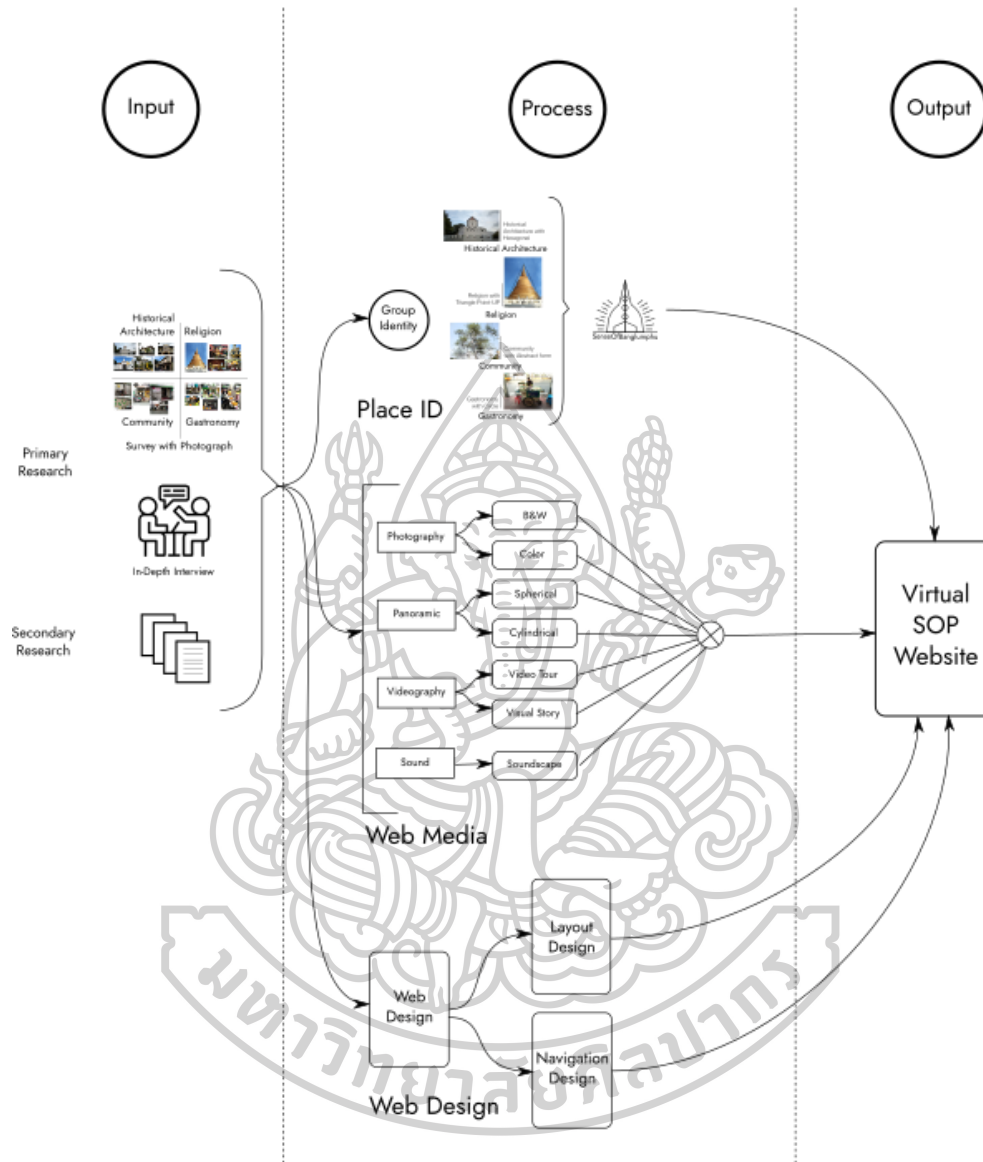
#### 5) Information Tour

Card based layout can give enough information for tourist to navigate within virtual space tourism. Some group of tourist such as educational tour would like to know enough or more about the area so that they understand the area well in advance. Connecting the dot within one place to the next give so much pleasure to education tourist rather than walking and photographing the place.

#### 6) Online Commerce for community

In this present time, when pandemic prevent people from leaving home, shopping online and doing most activities online are a valuable asset to their life. Online shopping is another one daily activity. Commerce is also a big part of tourism industry. Place souvenir and photograph integration or insertion can be a prove of actual tourism in which digital media can definitely succeed virtually as well.

# Thesis Conclusion Diagram



*Figure 91 Thesis Conclusion Diagram*

Lastly, in figure 91 expresses the whole thesis overview in order to conclude this experimental research in one single diagram. It shows the relationship between the data variable as input to this thesis with the process of the thesis. The process itemizes into rough detail of each independence variable. The result of the process combined into one single result as output of this thesis.

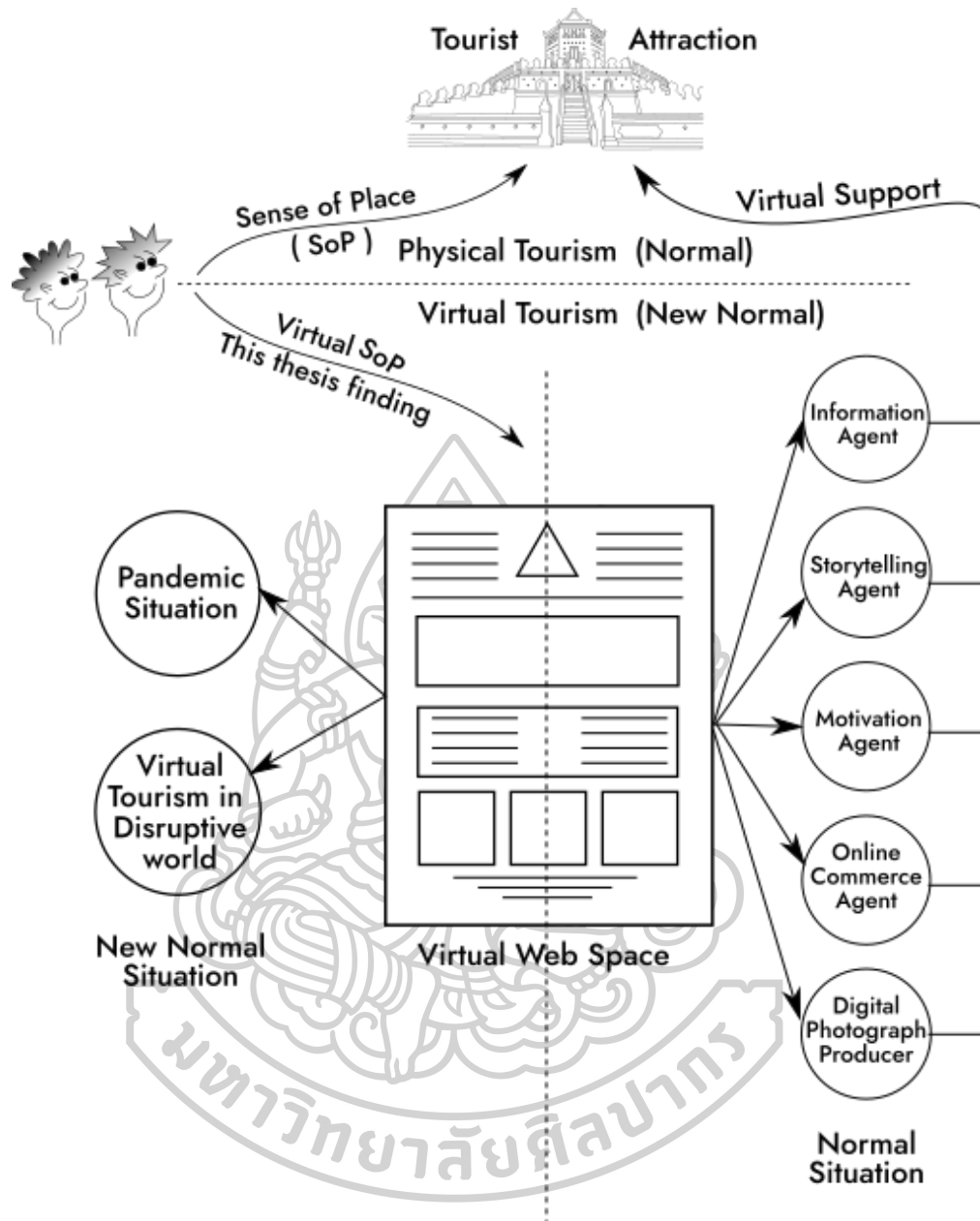


Figure 92 Thesis Conclusion Diagram since the beginning

### Final Conclusion

It is important to connect to the tourist attraction place in order to create connection between tourist and the place. Sense of place is one such element in dealing with that directly. In disrupting world of information technology, many industry or discipline have been transformed themselves into digital platform and stretching themselves further into a larger social enterprise - the internet. Tourism can be such industry that moved from physical



platform into digital one. Defining solution of digital tourism is to understand the heart of the relationship between tourist and attraction place through virtual place - Sense of place which is what this thesis research attempt to seek at the very core. Simplify logo, Videography, 3D panorama photography and descriptive web design proved to be effective way in delivering virtual sense of place.

Using and enhancing physical tourism in pandemic or tough tourism environment can be challenging in the real physical world. Virtual environment with sense of place would be another effective solution in the future of this ever-changing and disruptive world. The solution or the result of this research process can be at the core of other tourism discipline and concept. This experimental research may be the beginning of many different research explorations in the place concept to come. Virtual environment can definitely support the physical environment in both normal and new normal situation depends on how researcher and anybody involved see possible.

Physical environment has offered lots of possibility in connecting with tourists. Each one has different perspective in perceiving the place, therefore, sensing the place can be totally different feeling for each tourist experience. In the pandemic world of new normal, on the other hand, creating the exact same environment for tourist to experience such a physical tourist attraction mood and tone may need to collaborate variety of elements in establishing virtual environment to embark the connection with tourist. Going deeper into tourist emotion and engaging the tourist would possibly motivate and imprint the emotional footprint of attraction place virtually within each tourist's memory. Recognition of virtual sense of attraction place can trigger the motivational drive for tourist to visit the physical attraction place and create growth revenue afterwards.

## 6.2 Recommendation and Contribution

Different design layout can affect the sense of place based on other elements in the web page. This research can be extended into some more variable in sense of place from urban design. More feature gives the richness of the site in order to serve tourist better. More feature based on urban design's sense of place establishes wholeness of the tourism environment within virtual aspect.

One more important thing within tourism industry is commerce. E-Commerce system can be added into the design to deliver the buy and sell feature into the virtual sense of place design. The delivery or logistic is another key for future technology toward faster and outgrown industry. Even though future transportation technology might be witty fast but the cost will be too high for most tourist.

On the other hands, advance technology as the world wide web will cost less and less for highly accessible to the low income giving them access to the potentially high standard information at their fingertips.

## 6.3 Future Research

The future research in extending this research is to expand the historical tourism into different area of Rattanakosin island. Improving the Rattanakosin island information website of Silpakorn university is the main goal of implementing the knowledge gain from this research to the actual implementation toward presenting the result on the web. Due to the fast changing of improvement within Rattanakosin island nowadays, the update information of Rattanakosin island should be adapted and changed both venue and landscape.

Scoping of perception in accepting subject matter turns the table around. Sense acceptability toward diverse satisfaction in the process of experience validation must be further explored and focus on one specific group of the same traveling culture. This research marked the beginning of yet another group of future research toward virtual travel for the less fortunate traveler or unexpected situation as COVID today.

Media communication research will also be another area of extended exploration within this tourism industry. The evolving of tourism industry in developing country such as Thailand gain lots of potential to grow and stop or shy away from moving forward. Commercialize of place can be done within virtual environment. The possibility of tourist gaining the sense of being there should be possible and further explore within other collaborating area with advance technology.

All diagrams in this chapter has been created by researcher himself.



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## Appendix

### Expert Review Questionnaire

The screenshot shows a Google Form titled 'Expert Review Questionnaire'. The form is divided into several sections:

- Header:** 'Contact - Google Forms' and '2/18/2021'.
- Introduction:** 'Please evaluate this site' and 'Please evaluate this site based on your experience'.
- Form Fields:**
  - Email address:** A text field with a red asterisk and a 'Valid email address' error message.
  - Media Selection:** A question: 'Which of the media represent sense of place for you the most? (You can pick more than one)'. Options include: 360 Photosphere, 360 Photography, Color Photography, Panoramas, Videography, and Scanscape.
  - Belonging:** A question: 'Does this site give you the sense of belonging even though you have not visit the actual place?'. Options: Yes, No, Maybe.
  - Additional Comment:** A text area with a question: 'Do all 3 elements - place identity (logo), site navigation and layout, and web media - in this site successfully develop sense of place for you? If not, how to achieve that goal for you? Please give your suggestion.' Below it is a 'Long answer text' field.
  - Additional Comment:** A text area with a question: '1. My experience with this site', '2. Place Recommendation', and '3. Testimonial'. Below it is a 'Long answer text' field.
  - Detail:** A text area with a 'Long answer text' field.
  - Footer:** 'Thank you for your cooperation' and 'Description (optional)'.

Figure 93 Expert Review Questionnaire P1

### User Testing Questionnaire

The screenshot shows a Google Form titled 'User Testing Questionnaire'. The form is divided into several sections:

- Header:** 'Your thought and feedback - Google Forms' and '2/18/2021'.
- Introduction:** 'Your feedback' and 'Please click on the best possible answer or enter a descriptive answer to all the questions below based on your experience with this site'.
- Form Fields:**
  - Where are you from?:** A list of countries: 1. Afghanistan, 2. Albania, 3. Algeria, 4. Andorra, 5. Angola, 6. Antigua and Barbuda, 7. Argentina, 8. Armenia, 9. Australia, 10. Austria, 11. Azerbaijan, 12. Bahamas, 13. Bahrain.
  - Age Range:** A question with radio button options: 18-30, 31-45, 46-60, 61-80, and Other..
  - Media Preference:** A question: 'Which media do you prefer for your travel in this site?'. Options include: 360 Sphere, Panoramas, 360 Photography, Color Photography, Video Tour, Visual Story, and Scanscape.

Figure 94 User Testing Questionnaire 1

2/6/2021 Your thought and feedback - Google Forms

Does this site easy to navigate? \*

- Yes
- No
- Maybe

Is the information enough for you to gain a better experience of the place both textual and visual information? \*

- Yes
- No
- Maybe

Does the overall website layout keep you enjoy your virtual traveling? \*

- Yes
- No
- Maybe

Can the combination of logo, web layout, and web media deliver a sense of place? \*

- Yes
- No
- Somewhat

Which media reflect the place that you choose the most? \*

- 360 Sphere
- Panoramas
- 86 WP Photograph
- ColorP Photograph
- Video Tour
- Visual Story
- Soundscape

Does the logo represent the area well? \*

- Yes
- No

Figure 95 User Testing Questionnaire 2

### Google Analytic Result

During the production period, this research also used google analytic to collect basic information of user toward this site in better understand how user engage to this site. This information is proved the design in this research and will be used in the future research as well.

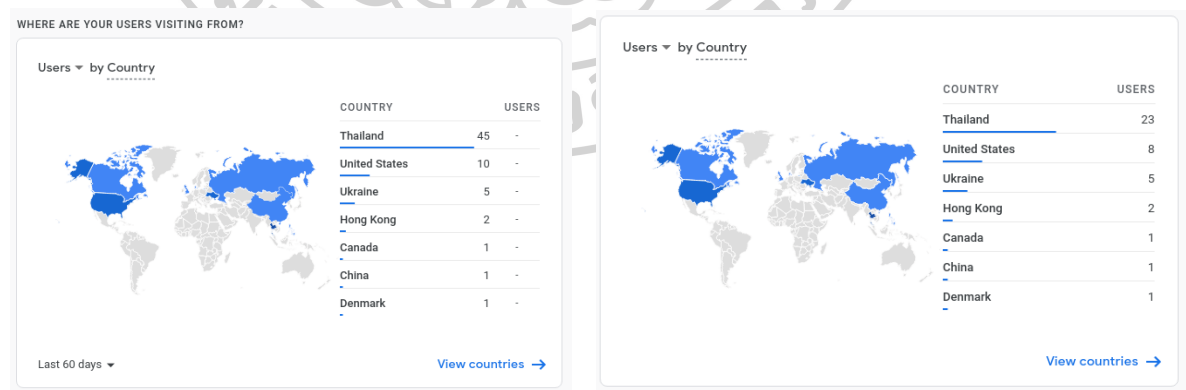


Figure 96 User Demographic

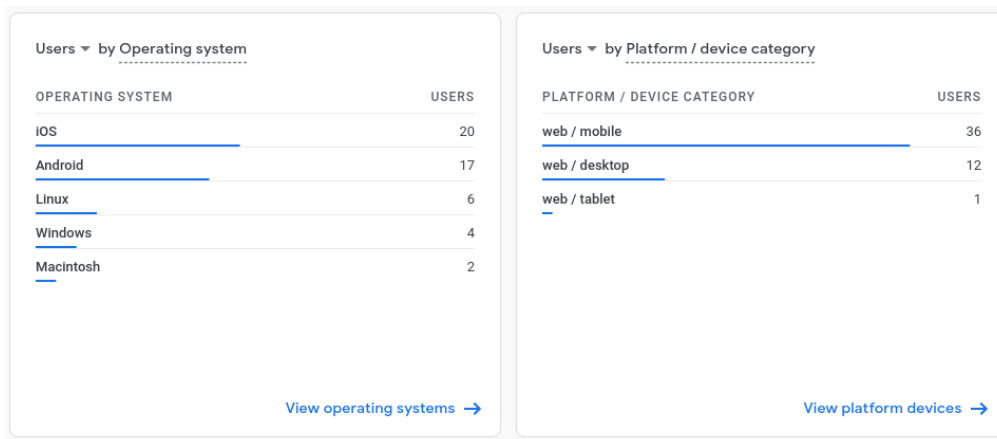


Figure 97 Device uses to access

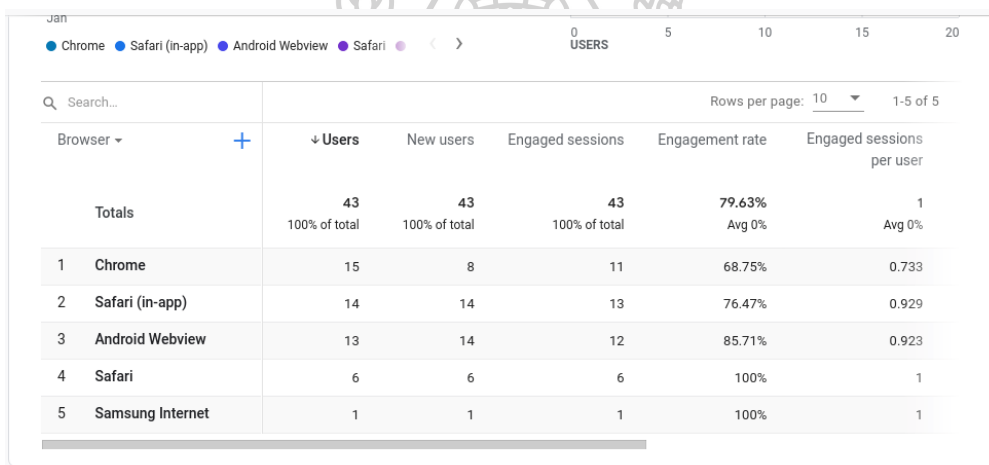


Figure 98 Browser uses to access

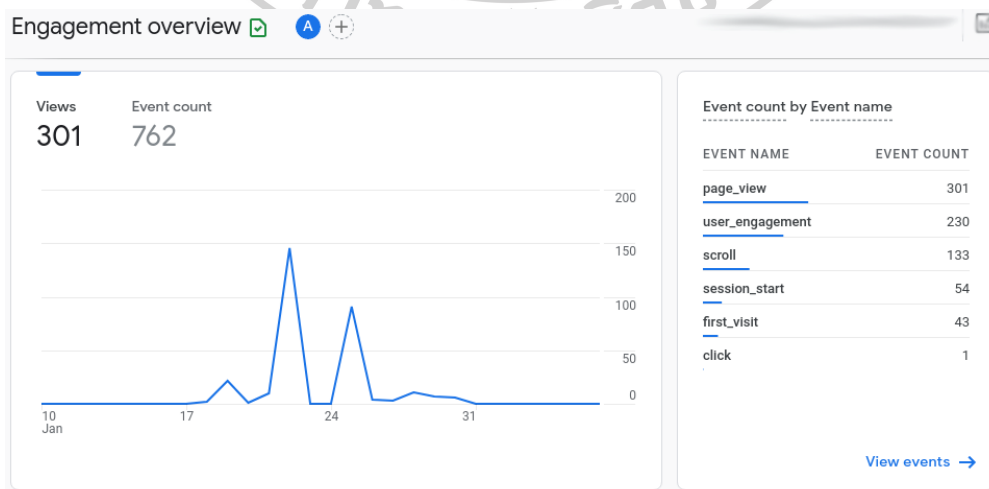


Figure 99 User Engagement 1



Based on Google Analytic result, there are lots of user who visited the site.

Some of them did not fill in the feedback form but browsing through the site for a tour. In figure G-5 shows that there were more than half of the user used mobile device for their browsing which supports the mobile-first design for this research. The longest time in user engagement is 2 minutes and 30 seconds as shown in figure G-9 which should be improved in the future research. The possible reason of low engagement can be different in each individual user depends on interest of each user.

Country	↓ Users	New users	Engaged sessions	Engagement rate	Engaged sessions per user
Totals	43 100% of total	43 100% of total	43 100% of total	79.63% Avg 0%	1 Avg 0%
1 Thailand	23	23	24	82.76%	1.043
2 United States	8	8	7	87.5%	0.875
3 Ukraine	5	5	4	57.14%	0.8
4 Hong Kong	2	2	1	50%	0.5
5 Canada	1	1	1	100%	1
6 China	1	1	1	100%	1
7 Denmark	1	1	1	100%	1

Figure 100 User Engagement 2

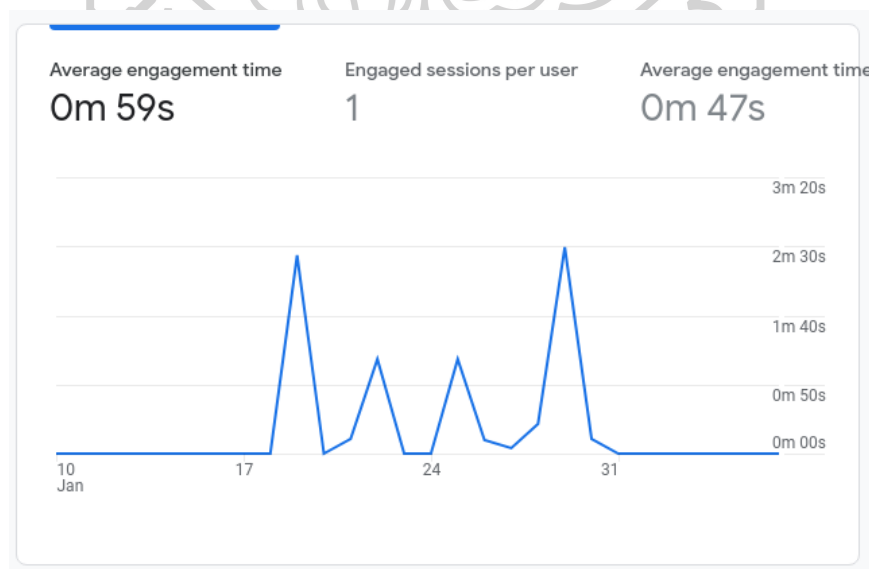


Figure 101 Engagement time

# SENSE OF PLACE

An approach to environmental perception/cognition and place-making

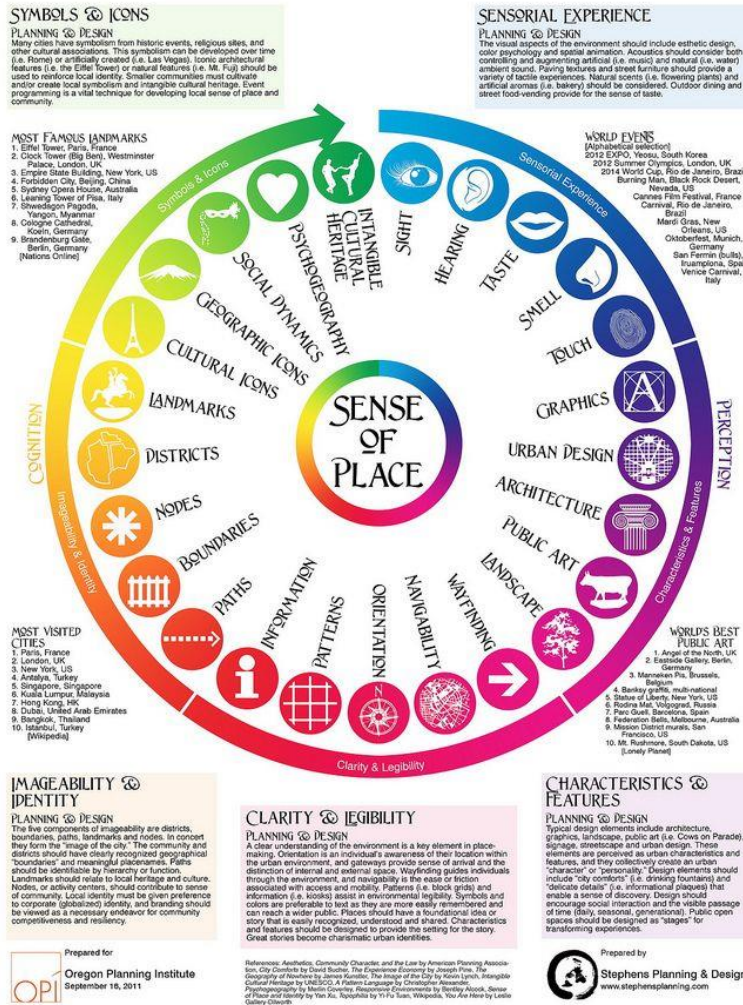


Figure 102 Sense of Place Urban Design



Thirathep Chonmaitree &lt;chonmaitree\_t@silpakorn.edu&gt;

## Ask for Permission

2 messages

Thirathep Chonmaitree <chonmaitree\_t@silpakorn.edu>  
To: ric@uoregon.edu

Wed, Aug 5, 2020 at 1:57 PM

Dear Mr. Stephens,

My name is Tom. I am a PhD Student in Bangkok Thailand. I would like to identify one graphic file from Oregon Planning Institute about Sense Of Place - An approach to Environmental perception/cognition and place-making. It is a Poster graphic file I found on google image. Stephens Planning and Design prepared this infographic for Oregon Planning Institute in 2001. I wonder if you have a high resolution one or not. If so, would you mind sending me or direct me to the download area? I would like to reference/use it for my Thesis. The graphic file I found is quite blurry. If not, I would like to ask for your permission to recreate it specifically for my thesis purpose.

Thank you very much for your kind support.

Best regards,  
Tom.

--

PhD Candidate  
Doctoral in Design Arts  
Department of Decorative Arts  
Silpakorn University

Ric Stephens <ric@uoregon.edu>  
To: Thirathep Chonmaitree <chonmaitree\_t@silpakorn.edu>

Fri, Aug 7, 2020 at 7:33 AM

Here you are, Tom.  
Best wishes for your thesis,  
Ric Stephens

From: Thirathep Chonmaitree <chonmaitree\_t@silpakorn.edu>  
Sent: Tuesday, August 4, 2020 11:57 PM  
To: Ric Stephens <ric@uoregon.edu>  
Subject: Ask for Permission

[Quoted text hidden]



2011-09-04 Sense of Place 24x36.jpg  
6394K

Figure 103 eMail asking permission to use Urban Design Sense of Place

## VITA

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**PLACE OF BIRTH** Bangkok, Thailand

**INSTITUTIONS  
ATTENDED** Silpakorn University

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